**(F/S)** 

			( <b>F/S</b> )	Compiled	Mar.1986
CS	SA ARG/S 3	01/79		Revised	Jul.2009
1.	COUNTRY	Argentina			
2	NAME OF STUDY	Deep Water Port Co	onstruction Project at Punta Medanos	<del></del>	<del></del>
	SECTOR	Transportation	/ Port 4. TYPE OF STUDY   F/S		
5.		Mı	nisterio de Economia, Secretaria de Estado de Intereses Maritimos (SEIM)		
	COUNTERPART AGEN	CY AT THE			
	TIME OF DEVELOPME	NT STUDY			
	PRESENT COUNTERPA	ART AGENCY			
		Technical Study on	the location of port and its planning.		
6.	OBJECTIVES OF THE STUDY				
٠.	STUDY				
7.	CONSULTANT(S)	The Overseas Coas	tal Area Development Institute		
		Apr.1979 ~	Jul.1979 3month(s)		
8.	STUDY PERIOD	Apr.1979 ~	Jul.1979 Simonui(8)		
		Horn Medenos, Pro	vince of Buenos Aires		
		110111 1/10 001100, 1 10	The of Business and		
0	SITE OR AREA				
۶.	SITE OR AREA				
10	MAJOR PROPOSED PR	OIFCT(S)			
	nning for a deep sea for g		and coal import		
			awater: 2 total length 800m		
Pie		2 x 400m for grain e			
Qu	ays : 500m for contain	ners, 500m for iron	ores exclusive quays for steel mill and industry		
Fis	hery related: freezing and	d cold storage facilit	ies, market, factories		

CSA ARG/S 301/79 F/S

	Completed or In Progress	Promoting
	Completed	
PRESENT STATUS	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

#### **Description:**

Reasons for Cancellation:

COPUAP (Deepsea Ports Construction Commission) was disbanded in 1987, and the construction of new ports has been frozen since then.

#### Situation

After the suspension of the construction project of new ports, emphasis was shifted to the strengthening of the existing ports, and it was decided to deepen Bahia Blanca and Quequen Ports. In late 1991, the dredging was completed to the depths of 40 - 45 feet at Bahia Blanca, while Quequen is being dredged to the depth of 40 feet. The Government has been promoting the decentralization of administration, and the port facilities have been gradually transferred from the national government to provincial or local authorities. According to the new Port Law now under parliamentary deliberations, only five ports (Buenos Aires, Quequen, Bahia Blanca, Santa Fe

and Ushuaia) will remain under AGP. The operation of the five ports will be eventually privatized in the future.

The economic policy of the present Government has been emphasizing the privatization of public enterprises, deregulation and decentralization. Investments in port facilities along Parana, Paraguay and La Plata Rivers will be undertaken increasingly by the private sector.

# STUDY SUMMARY SHEET (M/P)

Compiled Mar.1990 ADC/C 101/02

(i	9A AKG/S 101/6						
1.	COUNTRY	Argentina					
2.		Study on Economic Development					
3.	SECTOR	Development Plan / Integrated Regional Development Plan 4. TYPE OF STUDY M/P					
5.	COUNTERPART AGENORIME OF DEVELOPME	Planning Secretariat, Presidency of the Nation  CY AT THE					
	PRESENT COUNTERPA						
6.		To suggest development policies and measures concerning five sectors of macroeocnomic management, agriculture, industry, transportation and export.					
7.	CONSULTANT(S)	International Development Center of Japan					
8.	STUDY PERIOD	Aug.1985 ~ Jan.1987 17month(s) ~					
9.	SITE OR AREA	The entire country (2.78 million ha)					
10.	MAJOR PROPOSED PR	OJECT(S)					
[n 1	response to the specific re	quests from the Argentine side, the study examined the following five sectors and offered proposals which would be					

effective to reduce their constraints and to contribute to the reactivation of the Argentine economy.

- 1)Macroeconomy(macroeconomic policies, the role of economic development plans, etc.)
- 2)Agriculture(crops, livestock and fisheries)
- 3)Industry(general policy, petrochemical industry, electronics industry, agroindustry and small and medium industries)
- 4)Transportation(general policy, utilization of Parana and La Plata Rivers for grain transportation, containerization, cargo terminal in Buenos Aires, and alternative accesses toward the Pacific)
- 5)Export(export promotion policies and measures, role of international trading companies, etc.)

CSA ARG/S 101/86 M/P

	In Progress or In Use
PRESENT STATUS	Delayed
	Discontinued or Cancelled

#### Description:

Dispatch of Experts:

Based on the recommendations of the study, a number of Japanese experts in various fields of industry and fisheries have been sent to Argentina.

#### Subsequent Studies

1993~96 Economic Development II (M/P) which aims to conduct the examination in order to promote industry, trade and investment from the viewpoint of the reinforcement of economic relations with the East Asian Region.

#### Finance:

1988~92 Project-type technical cooperation for packaging technology.

#### Detail:

(FY1991 Oveseas Survey)

In Sep. 1991, the Planning Secretariat, the counterpart agency of the JICA study, was reorganized into the Economic Planning Secretariat under the Ministry of Economy. The functions of the new Secretariat are compilation and analysis of the economic trends rather than the identification and promotion of new projects / programs.

The improvement of administrative efficiency, privatization and other general policy measures, which were discussed in the JICA study, have been proceeding rapidly under the policy package adopted in accordance with the Currency Exchange Law of April 1991.

The Government has been pushing various measures of the fiscal reform and administative reorganization and rationalization in adherence to the IMF conditionality. Accordingly, specific recommendations of the study (such as institutional credit, infrastructural development and preferencial taxation) are yet to make impacts on policy makers.

The report of the study has been utilized extensively when and where various issues of long-term development are discussed.

#### (FY1995 Domestic Survey)

Taking into consideration that the political package since 1991 was very effective to stabilize the economy, 2nd phase of the study on Economic Development is requested for sake of the economic growth continuing much longer term. At present, the survey works are carried on two years by JICA since 1994. The counterpart is the Investment and Trading Secretariat, Ministry of Economy. The major object of the project is the exportation to and the investment from Eastern Asia.

#### (FY1995 Overseas Survey)

The fundamental targets of this project are to privatize the enterprises, to cut the state subsidy for the public enterprises and to improve the profit distribution system, in order to activate the national economy and to promote the exporting business, and try to create the economic atomosphere which is competitive in the world market by means of cost saving for production and improvement.

Based on the experiences obtained, final recommendations of the project report and the recent trends of economical growth, forcasting the situations at March, 1996, a part of the contents of the OKITA-I project has been changed, aiming at the maximum effects for the Government and the enterprises concerns.

<ul> <li>* Refer to Economic Development II (</li> </ul>	M/P) 1996 for further information.
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(F/S)

Compiled Mar.1990 **CSA** ARG/S 302/86 Revised Jul.2009

1.	COUNTRY	Argentina							
2.	NAME OF STUDY	Preliminary Des	Preliminary Design for the Amplification of an Inspection and Repairing Workshop for Electric Rolling Stock						
3.	SECTOR	Transportation	/ R	ailway		4.	TYPE OF ST	TUDY	F/S
5.			Argentine Railwa						
	PRESENT COUNTERPA								
6.	OBJECTIVES OF THE STUDY		ing a workshop fo a preliminary desi			etric railca	rs for AC-ele	ctrified	l sections on the General
7.	CONSULTANT(S)	Japan Railway	Technical Service						
8.	STUDY PERIOD	Feb.1985 ~	Sep.1986	19month(s)					
9.	SITE OR AREA	A site 10km aw	vay from Plaza Co	nstitucion alonș	g the General Roc	ca Line			
10	MA IOR PROPOSED PR	OTECT(S)							

Based on the experience of the first stage, a plan in the second stage of electrification of the general Roca Line was made up including reinforcing a workshop and introducing related facilities.

F/S on the expention of a existing workship.

The existing demand-expectation and transport-plan made up by Argentina Railway (F.A) was reexamined for the second stage.

Through the above work, the needed amount of electric rolling stock was caluclated. Then several plans for reinforcing a workshop was made up. At last the best plan was selected by technical and economical points of view.

<Pre><Preliminary design>

The amount of rolling stocks needed during the second stage was calculated 320. So the workshop should be expanded along with this scale. <Facilities for inspection and repairing> various sorts.

Construction; First and second workshops, related buildings, management building, railway truck and wiring. Railway truck in the yard consists of come-and-go line, test line, detention line and etc.

Facilities; light, signal, telecommunication, drainage, water-supply etc.

CSA ARG/S 302/86 F/S

|                 | Completed or In Progress | Promoting                 |
|-----------------|--------------------------|---------------------------|
| DDDGENE GEARNIG | Completed                |                           |
| PRESENT STATUS  | Partially Completed      | Delayed or Suspended      |
|                 | Implementing             |                           |
|                 | Processing               | Discontinued or Cancelled |

#### **Description:**

The electrification of the General Roca Line was commenced in 1981 and completed in 1985. The system (25kv. 50Hz) was new in Argentine Railways(FA), and there was no facility for inspection and repair of the introduced railcars. FA thus planned to establish a new inspection and repair facility by Japanese technical assistance. Owing to the worsening of the economic situation, the electrification program was scaled down and the construction of the new facility was de facto cancelled. The rehabilitation and improvement of the existing facilities was subsequently proposed as an alternative.

#### (FY1991 Overseas Survey)

In order to simplify the process of privatization, FA was divided in April 1991, and FEMESA was created for metropolitan railways. Subsequently, preparations have been going on for the privatization of each railway line. To date, tenders have been called for the Mitre, Urguiza and Sarmiento Lines. Preparation of the tender documents has not been completed for the Roca and San Martin Lines.

Therefore, it is yet hard to know what will happen to the inspection and repair functions after privatization. However, Escalada Plant still remains the center of inspection and repair and appears likely to remain as such in the future.

# STUDY SUMMARY SHEET (M/P)

Compiled Mar.1990 **CSA** ARG/S 102/87 Revised Jul.2009

| 1.  | COUNTRY                            | Argentina  |  |  |  |
|-----|------------------------------------|--|--|--|--|
| 2.  | NAME OF STUDY                      | Development Plan for the Telecommunication and Broadcasting Networks in the Province of Mendoza  |  |  |  |
| 3.  | SECTOR                             | Communications & Broadca / (Comms. & Broad. in) General  4. TYPE OF STUDY M/P  |  |  |  |
| 5.  | COUNTERPART AGENORIME OF DEVELOPME |  |  |  |  |
|     | PRESENT COUNTERPA                  |  |  |  |  |
| 6.  | OBJECTIVES OF THE STUDY            | Proposing a long-term development and improvement plan for the telecommunications networks and an outline for a long-term development and improvement plan for the broadcasting networks up to the year of 2005. |  |  |  |
| 7.  | CONSULTANT(S)                      | Japan Telecom. Eng. and Consulting Service   |  |  |  |
| 8.  | STUDY PERIOD                       | Jul.1986 ~ Mar.1987 8month(s)<br>Jun.1987 ~ Nov.1987 5month(s)   |  |  |  |
|     | SITE OR AREA                       | Province of Mendoza (about 150,000 sq.km)  |  |  |  |
| 10. | MAJOR PROPOSED PR                  | DIECT(S)   |  |  |  |

- 1. Long-term development and improvement plan for the telecommunications networks up to the year 2005.
- 1) Phase 1(1991-1995)(Total project cost US\$80.082 thousand)
- a)Subscriber telephone installation(STI)54,800, b)Public telephone installation (PTI) c)1,500 Rural telephone installation(RTI) 800, d)Local exchange installation(LEI) 79,144 terminals(t.), and e)Toll exchange installation (TEI) 2,200t.
- 2) Phase 2 (1996-2000) (Total project cost US\$81,602 thousand) a)STI 75,200, b)PTI 1,400, c)RTI 400, d)LEI 92,070t., and e)TEI 1,800t.
- 3) Phase 3 (2001-2005) (Total project cost US\$129,856 thousand) a)STI 106,100, b)PTI 1,500, c)RTI 800, d)LEI 161,081t., and e)TEI 3,000t.
- 2. Long-term development and improvement for the broadcasting networks up to the year 2005: 1)MF transmitter installation and renewal 13 sets; 2)FM transmitter installation 76 sets; 3)TV transmitter installation 67 sets; 4)Satellite relay construction 3 links; and 5)Terrestrial line addition for TV use 1 line.

CSA ARG/S 102/87 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

Subsequent Studies:

(FY 1991 Overseas Survey)

Based on the proposed M/P, the provincial government is planning to undertake F/S of the telephone network development.

#### Detail:

The provincial government of the Mendoza uses the study results as guidelines for the private sector.

In 1989, the provincial government requested for technical assistance on finance and demand forecasting, income and expenses forecasting for the local staffs of the study. Therefore, the cnical guidance had been conducted.

#### (FY 1991 Overseas Survey)

Telecommunication is still operated by CAT, but the negotiations have been going on between CAT and Telefonica. Before long, telecommunication will be transferred to Telefonica.

#### (FY 1995 Overseas Survey)

The result of similar survey works carried by the third country is also the same as the result of JICA's survey at the main points.

The plans and the recommendations of this survey works will be adopted as the political targets for long time at this province and also as the model of the development plan in the future.

#### (FY 1997 Overseas Survey)

Telecommunication in whole country including province of Mendoza was privatized in 1990, and supervising work has been transferred to the cental government. The report of the study was utilized as a reference for drawing speck of privatization. Thereafter, the final report has not been utilized.

# STUDY SUMMARY SHEET (M/P)

Compiled Mar 1000

|                                |   |                    | ()   |                  |                                | Compiled     | Wiai.1770 |
|--------------------------------|---|--------------------|--|------------------|--------------------------------|--------------|-----------|
| CS                             | SA ARG/A 101  | /88                |  |                  |                                | Revised      | Jul.2009  |
|                                | COUNTRY   | Argentina          |  |                  |                                |              |           |
| 2.                             | NAME OF STUDY   | The Agricultura    | al Development Project in the Adjacent   | Area to the Ya   | cyreta Dam in the Province of  | f Corrientes |           |
| 3.                             | SECTOR  | Agriculture        | / (Agriculture in) General   |                  | 4. TYPE OF STUDY M/F           | 2            |           |
| 5.                             | COUNTERPART AGEN<br>TIME OF DEVELOPMI   |                    | Government of the Province of Corrier  | ntes (Ministry o | of Agriculture and Animal Hu   | isbandry)    |           |
|                                | PRESENT COUNTERPA   | ART AGENCY         |  |                  |                                |              |           |
| 6.                             | OBJECTIVES OF THE STUDY   |                    | /P for the integrated agricultural developprox. 290,000ha in the north part of Co<br>Yacyreta dam. | •                |                                |              |           |
| 7.                             | CONSULTANT(S)   | Japan Agricultu    | ıral Land Development Agency   |                  |                                |              |           |
| 8.                             | STUDY PERIOD  | Feb.1987 ~         | Dec.1988 22month(s)  |                  |                                |              |           |
| 9.                             | SITE OR AREA  | Roreto and San     | Carlos Area located in North Part of Pr  | ovince of Corr   | ientes (Population: 660,000, A | Area 290,000 | ha)       |
| 10.                            | MAJOR PROPOSED PE   | ROJECT(S)          |  |                  |                                | -            |           |
| Dra<br>Irri<br>Roa<br>Ag<br>Ag | ainage Canal:258km,<br>gation Canal:256km,<br>ad:330km,<br>ricultural Land Reclamat<br>ricultural Facility:6 sets,<br>ricultural Technics cente | tion:119,800 ha,   |  |                  |                                |              |           |
| Piii                           | mn Facility which supplie   | es water by its pr | ressure 6sets  |                  |                                |              |           |

- 1. Irrigation project (37,000ha in the lower part of Yacyreta dam and 4,000ha in San Carlos area)
- 2. Drainage project (50km long of primary channel and 238km of main channel)
- 3. Farm road project (100km long of main road and 323km of branch road)
- 4. Agricultural land development project (100km long of main road and 323km of branch road)
- 4. Agricultural land development project (model projects for paddy field, dry field, horticulture under/without structure: 134,000ha of whole area)
- 5. Cultivation plan (promotion of rice production mainly and introduction of promising cereals, vegetables and fruits)
- 6. Farming programme
- 7. Livestock and grassland improvement
- 8. Afforestation programme
- 9. Agriculture supporting service
- 10. Establishment of agricultural training center
- 11. Food processing and storage facilities
- 12. Other social infrastructure improvement plan (electrification, telecommunication, water supply, education, medical service etc.)

CSA ARG/A 101/88 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

### **Description:**

Project Implemented:

(FY 1991 Overseas Survey)

Based on M/P, the provincial government of Corrientes implemented the projects as follows.

Drainage Project: For the expansion of the farmland, 12km drainage canal had been constructed jointly with a producers group in Roreto area.

Vegetable cultivation mini-project: JICA has been implementing technical cooperation at the vegetable cultivation center since 1990.

(FY 1996 Overseas Survey)

Farmers and technicians take part in the training course, and productivity has increased.

(FY 1997 Overseas Survey)

Ministry of Agriculture uses the agricultural models for production (rice-livestock rotation, rice, natural and artificial grassland, etc.)

Effects:

(FY 1996 Overseas Survey)

Sanitation improved at northern part of Corrientes.(approx.250000 ha)Improvement of drainage facility enabled the barren land to produce.

Subsequent Study:

(FY 1997 Overseas Survey)

Oct.1997~Mar.1998 Review

\*Contents of the study

Actualization of land distribution, drainage / irrigation channel, electricity system, roads survey.

Consultant / PALMEYRO Y ASOCIADOS

Cost / 0.06mil.US\$

Detail:

(FY 1991 Overseas Survey)

The provincial government desires keenly F/S on drainage canal project related to M/P, but lack of fund for implementation makes it difficult.

(FY 1995 Domestic Survey)

By the modification of the design and the completion of construction, it becomes necessary to reinvestigate the Yacyreta Dam.

(FY 1995 Overseas Survey)

The performances of this survey works such as maps and data are utilized widely for the other projects for the development of the Province of Corrientes. To continue this kind of survey work is very important to prove the activation of industrial economy and to make it easier to draw up various secondary plans.

(FY 1996 Overseas Survey)

F/S of irrigation, drainage and despatch of experts to CE.TE.PRO were requested to Japan.

(Basic Study)

Compiled Sep.1995

| <b>CSA</b>              |   |  | Jul.2009  |
|-------------------------|---|--|-----------|
|                         | COUNTRY   | Argentina  |           |
| 2. N                    | AME OF STUDY  | Topographic Mapping of North-East Region in Argentine Republic   |           |
| 3. SI<br>5.             | ECTOR   | Social Infrastructure / Survey & Mapping 4. TYPE OF STUDY Basic Study Instituto Geografico Militar (IGM)   |           |
|                         | OUNTERPART AGEN<br>IME OF DEVELOPME   |  |           |
| Pì                      | RESENT COUNTERPA  | RT AGENCY  |           |
| 6. S                    | BJECTIVES OF THE<br>IUDY  | Topographic mapping of North-east region of the country with a scale of 1:100,000, and to arrange digital mapp                                       | ing data. |
|                         |   | International Engineering Consultants Association  |           |
| 7. C                    | ONSULTANT(S)  | KOKUSAI KOGYO CO., LTD.  |           |
| 8. S                    | TUDY PERIOD   | Jan.1991 ~ Jan.1994 36month(s)<br>~ North-east region in Argentine, the area spread on Misiones State and Corrientes State with an area of 52,000sq. | 1         |
| 10. M<br>1)Sho<br>2)Top | IAJOR PROPOSED PR<br>oting aerial photograp<br>ographic mapping wit<br>arrange digital mappin | n with a scale of 1:60,000.<br>n a scale of 1:100,000.   |           |

**CSA** ARG/S 501/94 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Topographic maps with a scale of 1:100,000 and digital mapping data become available to use them for development planning and survey works of north-eastern border area of Argentine. Aerial photographs have been taken on the area of 100,000sq.km in Misiones State and Corrientes State. These photos will be able to use for various investigation, survey and planning works at this region. (FY 1995 Overseas Survey) The topographic maps drawn by this project are very useful to grasp the circumstances of this region. The maps are utilized widely for the various places such as the Geographical Research Center of the Army.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Jul.1996
CSA ARG/A 102/95
Revised Jul.2009

| 1.                       | COUNTRY   | Argentina   |
|--------------------------|---|---|
| 2.                       | NAME OF STUDY   | Forest Resources Management Study at Chaco  |
| 3.                       | SECTOR  | Forestry / Forestry & Forest Conservation 4. TYPE OF STUDY M/P  |
| 5.                       | COUNTERPART AGENO   | Ministry of Natural Resources, Department of Forest, Formosa State  CY AT THE   |
|                          | PRESENT COUNTERPA   | RT AGENCY   |
|                          |   | Implementation of Forest Resources Survey and elaboration of Sustainable Forest Management Plan to utilize forest resources effectively.    |
|                          | OBJECTIVES OF THE STUDY   |   |
| 7.                       | CONSULTANT(S)   | Japan Forest Technical Association  |
| 8.                       | STUDY PERIOD  | Feb.1994 ~ Jan.1996 23month(s)  |
| 9.                       | SITE OR AREA  | Northern part of Formosa State Bermejo Province, Ramon Lista Province, Matacos Province, approx.2.1million ha. (model area approx.32,500ha) |
| 10.                      | MAJOR PROPOSED PR   | OJECT(S)  |
| -Th<br>-Re<br>-Nu<br>-Fo | Forestry Operation Project<br>ne Maximum Permissible<br>enewal Area 204ha/year<br>arrsery 2.3 million<br>prest Road 358.8km<br>arm Forest 2,362ha | Tree Felling 503.5m3/year   |
|                          | Forest Conservation eserved Forest 317ha  |   |
|                          |   |   |
|                          |   |   |
|                          |   |   |
|                          |   |   |
|                          |   |   |
|                          |   |   |

CSA ARG/A 102/95 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### Description:

#### (FY 1996 Overseas Survey)

This study, carried out with LANDSAT, clarified the actual situation of land use and forestry resources at the range of 2.1 mil. ha.

Local government makes effort to reinforce local institution which is in charge of forest. Local Forest Law is being reviewed.

After the completion of study, pre-proposal for West Formosa Model Forest was submitted to Department of Natural Resources and Environment. In accordance with that, Department of Natural Resources at Formosa University started inventory work. In Sep.1995, dispatch of 2 experts for formulation of West Formosa Integrated Management Project was requested to JICA.

#### (FY 1997 Overseas Survey)

The intensive area(200ha) has still neither concessions nor forest licenses. Argentine side is waiting for the implementation of model area to have real experience.

#### (FY 2001 Overseas Survey)

Based on the study results, Formosa State realized the necessity of residents (most of them are native inhabitants) participation for endangered forest conservation and multi-purpose utilization, and set up 800,000ha of the study area as model forest.

Environmental Policy Department of the Central Government, Formosa State Government, National Formosa University and concerned municipalities formulated community participation sustainable forest management plan under the cooperation of residents organization. As a result, the model forest was certified as a member of International Model Forest Network, Canada.

Also, the south model area of the study area has become a part of Reserva Biosfera Riacho Teuquito, a natural life sanctuary selected by MAB (Man and Biosphere Program), UNESCO.

Concerning the management of the model forest, a request for expert dispatch and development welfare support project has been submitted. Also, the Ministry of Production is considering organic meat production as a sustainable production model as well as enphasizing the necessity of technical transfer by Japanese experts.

No information to be specifically mentioned.

(M/P)

Compiled

Jul.1997

**CSA** ARG/S 121/96 Revised Jul.2009 1. COUNTRY Argentina Economic Development (the Second Study) 2. NAME OF STUDY 3. SECTOR Development Plan / (Development Plan in) General TYPE OF STUDY M/P 5. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY 1) To analyze the situation of macro-economic/sectoral development and to make a proposal for sustainable economic growth. 2) To analyze the conditions necessary for industrial development and trade/investment promotion. 3) Technology transfer to the Argentine counterpart. **OBJECTIVES OF THE** STUDY International Development Center of Japan 7. CONSULTANT(S) Jul.1994 Jun.1996 23month(s) 8. STUDY PERIOD Argentina 9. SITE OR AREA

### 10. MAJOR PROPOSED PROJECT(S)

Following are the main 4 issues to be studied and Major Recommendations:

Issue 1: Strengthening institutional Support for the Expansion of Export to and the Promotion of Direct Investment from East Asia

- Formulate a targeted market intelligence strategy (TAMIS)
- Integrate information systems
- Upgrade the function of trade promotion organization
- Strengthen export finance, insurance and guarantee systems

Issue 2: Expansion of Export Capacity Through Improvement in Productivity and Quality Market Access

- Identify the real issue of market access problems
- For technical problems, organize a task force and avoid misunderstanding by involving technical professionals
- For non-technical problems, develop an approach based on a package deal

#### Marketing Strategies

- Emphasize the real value of Argentine products that are "healthy, safe, and environmentally-sound."
- Promote a whole product concept which stresses not only price and quality but also suppliers' reliability
- Differentiate products and seek a niche market

Productivity and quality

- Seek improvement though the whole process from production to export
- Strengthen the primary industry to supply high-quality raw materials to the processing industry

Issue 3: Development of Argentine Small-and Medium-sized Manufacturing Enterprises

- Strengthen the function of BICE and Banco de la Nacion
- Provide SMEs with readily understandable information on technical supporting programs
- Organize a specialist training program to improve the quality of advisors
- Develop practical programs in quality-control organizations
- Build a nation wide quality improvement service network

Issue 4: Transport Infrastructure improvement for Industrial Development and Trade Promotion

- Exploit existing facilities to the maximum extent by utilizing railway facilities for inland transportation

CSA ARG/S 121/96 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 1997 Domestic Survey)

In Argentina:

- The Ministry of Economy, the counterpart organization of this project, created a Japan Office, and a counterpart staff has been assigned to the post.
- Counterpart team has carried out several seminars in Argentine cities where the study team did not hold seminars in order to disseminate the study outcome by using Spanish materials made from the study report.
- -With the request from the counterpart team, the study report is now on a Homepage of Internet.
- In an effort to expand export to East Asia, Argentina's strategy is in line with the recommendations.

#### In Japan

- International Development Center of Japan held seminar in August 1996 on Argentina to the private sector to introduce the recent development of the Argentine Economy.

#### (FY 1998 Domestic Survey)

Export of beef for Japanese market, which was discussed in the issue 2 (Expansion of Export Capacity), will be realized.

ALIC (Agriculture & Livestock Industries Corporation) of Japan is preparing for establishing the local office in Argentina.

#### (FY 1998 Overseas Survey)

In accordance with the proposal of this study, Subsecretary of Commerce has been implementing a)formation of the program for promoting the export; b)fund provision by BICE to export industries; c)insurance for export loan; and d)development of comprehensive information system.

In addition, ADI was estabilished in Aug.1997 for promoting the foreign investment toward Argentina.

Regarding the sea transportaion and ports, the following activities have been conducted, in relation to the proposal by this study.

a)Buenos Aires Port Administration Company: preparing for the establishment;

- b)Coordination with other ports: categolization and registeration of other ports in whole Argentina.
- c)Canals and port space: dredging of canals. extension of port space, and development of land transportation.
- d)Promotion of trading of the port: staff were dispatched to several overseas ports for promoting the trade.
- e)Dredging of rivers: under implementation.

#### (FY 1999 Overseas Survey)

The report of this Study has been/is utilized by the companies, the chamber of commerce, and different domestic institutions/organizations both in public and private sectors which desire to expand the relations with other countries in the process of liberalizing the Argentine economy and establishing the new trade relation with other countries.

The recommendations of this Study on the participation in the market are utilized as the practical guideline for those institutions. Moreover, the recommendations for making Argentine products adjust to the requisitions of the overseas market have been implemented or are under implementation.

### (FY 2002 Domestic Survey)

- 1. Dispatch of senior volunteer.
- 2. JICA-JETRO Joint seminar on trade and investment in Argentina.

(F/S)

Compiled Mar.1986 **BOL/S 301/77** CSA

| CD  | A DOLIGO   | U1///                           |  |                   |                   |             |                       |          | IXC V ISCU  | Jui.2 | 507 |
|---|--|---------------------------------|--|-------------------|-------------------|-------------|-----------------------|----------|-------------|-------|-----|
| 1.  | COUNTRY  | Bolivia                         | Bolivia                                    |                   |                   |             |                       |          |             |       |     |
| 2.  | NAME OF STUDY  | Viru Viru Interr                | iru Viru International Airport Development |                   |                   |             |                       |          |             |       |     |
| 3.  | SECTOR   | Transportation                  | / A  | ir Transportation | a & Airport       | 4.          | TYPE OF STUDY         | F/S      |             |       |     |
| 5.  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |  | CY AT THE                       |  |                   |                   |             | rvices for Air Navi   |          |             |       |     |
|   | PRESENT COUNTERPA  |                                 |  |                   |                   |             |                       |          |             |       |     |
| 6.  | OBJECTIVES OF THE STUDY  | To forecast air t               | ransport demand a                          | and examine tech  | nical and econom  | nic feasibi | ility of the Project. |          |             |       |     |
| 7.  | CONSULTANT(S)  | Japan Airport Consultants, Inc. |  |                   |                   |             |                       |          |             |       |     |
| 8.  | STUDY PERIOD   | Apr.1977 ~ Dec.1977 8month(s) ~ |  |                   |                   |             |                       |          |             |       |     |
| 9.  | SITE OR AREA   | V                               | iru Viru in Santa (                        | Cruz, Bolivia     |                   |             |                       |          |             |       |     |
| 10.   | MAJOR PROPOSED PR  | OJECT(S)                        |  |                   |                   |             |                       |          |             |       |     |
|   |  |                                 | ew port proposed                           | by the Bolivian C | Government, and f | forecasted  | d the air traffic dem | and in t | he years 19 | 985.  |     |
|   | The Study reviewed the Master Plan of the new port proposed by the Bolivian Government, and forecasted the air traffic demand in the years 1985, 1995, and 2000. |                                 |  |                   |                   |             |                       |          |             |       |     |

1. Airfield facilities

Runway(3,200mx45m); parallel taxiway(720m in 1985, 3,500m in 2000); passenger apron(5 berths in 1985, 13 in 2000); and cargo apron(2 berths in 1985, 4 in 2000).

2.Buildings

Passenger terminal(11,000 sq.m in 1985, 23,000 in 2000); and cargo terminal(900 sq.m in 1985, 3,600 in 2000).

3. Navigational aids/telecommunications/Meteorological facilities

Aeronautical fixed service; aeronautical mobile service; and radio navigational aids(ILS Category 1, VOR/DME, NDB & locater).

- 4.Lighting (approach lighting system; visual approach slope indicator; and runway & taxiway lights; etc.).
- 5. Power supply and fuel supply facilities

 $\ast$  Cost: 1) is for two-stage construction, and 2) for four-stage construction.

CSA BOL/S 301/77 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

The reasons for implementing this project are as follows:

- 1)Relative advantage over the neighbouring countries in cargo handling capability provided by the international-standard airport;
- 2)Improvement was urgently needed because of the operational restrictions at the International airport of La Paz;
- 3) Joint Committee for the development was established with the strong support of Santa Cruz Development Authority; and
- 4)In competing with La Paz, citizens of Santa Cruz desired establishment of the high-level international airport.

#### Subsequent Studies:

Feb.1978 D/D completed (Japan Airport Consultants, Inc.)

#### Finance:

May.1979 L/A 10.8 bil.Yen

(Viru Viru International Airport Development Project)\*

Mar.1983 L/A 6,689 mil.Yen

(Viru Viru International Airport Development Project)\*

\*Contents of project

- 1. Airfield facilities(Runway 3,500mX45m, taxiway, apron).
- 2.Passanger terminal building(18,000sqm) and other facilities.
- 3. Navigation facilities, lighting facilities and power supply facilities.
- 4. Fuel supply facilities, urban facilities (water supply, drainage etc).

(loan for foreign currency for 1,2 and 4 above and a port of local currency)

#### Construction:

Jul.1984 Operation started

#### Situation:

- -There are about 11 to 12 daily flights leaving from and arriving at the airport, which is equivalent to El Alto Airport of the Capital.
- -The Passenger Terminal building has not been well maintained.

Cleaning service is not well performed.

- -The cost of maintenance and personnel are covered by airport charges.
- -The problem at this airport is the need of changing the Precision Approach Pass Indication (PAPI). However, the improvement has so far been postponed, because the improvement of La Paz Airpot has the current priority.

(FY1991 Overseas Survey)

The original design of the airport has turned out to have some problems: the terminal for cargos as well as aprons are too narrow; the parking area is too large, having an average occupancy rate of only 30% (owing to the fact that Lima Airport has still been the principal airport despite the expectation that Viru Viru would substitute it).

#### Related Project:

(FY1994 Domestic Survey)

The Government has a plan to modernize all air navigational facilities at its major four (4) airports, namely, ViruViru/Santa Cruz, La Paz, Cochabamba and Tarija. Under the plan, Wilcox of USA will install Instrument Landing System(ILS) equipment for difficult site, and aeronautical telecommunications facilities will be upgraded by Spanish assistance.

(Basic Study)

Compiled Mar.1990

| CS  | SA              | <b>BOL/S 501/</b> | <b>78</b>                                |  | Revised     | Jul.2009 |
|---|-----------------|-------------------|--|--|-------------|----------|
|   | COUNT           | TRY               | Bolivia                                  |  |             |          |
| 2.  | NAME            | OF STUDY          | Topographic Ma                           | apping Project for Chapare Area          |             |          |
|   | SECTO           |                   | Social Infrastruc                        | ture / Survey & Mapping 4. TYPE OF STUDY | Dagia Study |          |
| 5.<br>5.  | SECTO           | · ·               |  | Instituto Geographico Militar            | Dasic Study |          |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                 |                   | ICY AT THE                               | montatio Geographico Mintai              |             |          |
|   | PRESEN          | NT COUNTERPA      | ART AGENCY                               |  |             |          |
|   | <u> </u>        |                   | To prepare basic                         | e information for development planning.  |             |          |
| 6.  | OBJECT<br>STUDY | TIVES OF THE      |  |  |             |          |
|   |                 |                   | International En                         | gineering Consultants Association        |             |          |
| 7.  | CONSU           | LTANT(S)          |  |  |             |          |
| 8.  | STUDY           | PERIOD            | May.1975 ~                               | Mar.1978 34month(s)                      |             |          |
|   |                 |                   |  | Chapare Area(20,000 sq.m)                |             |          |
|   | SITE OI         |                   |  |  |             |          |
| 10.   | MAJOR           | PROPOSED PR       | ROJECT(S)                                |  |             |          |
|   |                 |                   | : 1/60,000: 25,000<br>/50,000; 44 plate: |  |             |          |
|   |                 |                   |  |  |             |          |
|   |                 |                   |  |  |             |          |
|   |                 |                   |  |  |             |          |
|   |                 |                   |  |  |             |          |
|   |                 |                   |  |  |             |          |
|   |                 |                   |  |  |             |          |

CSA BOL/S 501/78

In Progress or In Use

Basic Study

PRESENT STATUS

Delayed

Discontinued or Cancelled

### **Description:**

Utilization of the study:

(FY 1991 Overseas Survey)

Maps have been served as a basis to construct new roads in Chapare Area.

(FY 1995 Overseas Survey)

The results and performances of this study are utilized for

- -Planning the route of trunk roads,
- -Agricultural development plan,
- -Development plan of new coca farms, and
- -Provision of the land ledger of coca farms.

(FY 1996 Domestic Survey)

The produced maps have been widely utilized such as the forestry survey, the underground resources survey, etc.

Detail:

(FY 1991 Overseas Survey)

Equipments provided by the Japanese Government have been well utilized even after more than ten years, except for a part.

The IGM desires Japanese assistance for another topographic mapping project in the Northern La Paz area.

(Basic Study)

Compiled Mar.1991

| CS  | SA BOL/A 501/           | 79  |  |                           |                        | Revised               | Jul.2009 |
|---|-------------------------|---|--|---------------------------|------------------------|-----------------------|----------|
| 1.  | COUNTRY                 | Bolivia   |  |                           |                        |                       |          |
| 2.  | NAME OF STUDY           | Land Use Mapp                                       | and Use Mapping Project for Chapare Area |                           |                        |                       |          |
| 3.  | SECTOR                  | Agriculture   | / (Agriculture                           | in) General               | 4. TYPE OF STUDY       | Basic Study           |          |
| 5.  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                         |   | Department of Farmers, Ag                |                           |                        | ·                     |          |
|   | PRESENT COUNTERPA       | ART AGENCY  |  |                           |                        |                       |          |
| 6.  | OBJECTIVES OF THE STUDY | Evaluation and                                      | suggestion of Land Use map               | oping for Chapare Area (2 | million ha) managed by | Government of Bo      | livia.   |
| 7.  | CONSULTANT(S)           | Agricultural De<br>Nippon Koei Co<br>Sanyu Consulta |  | ociation                  |                        |                       |          |
| 8.  | STUDY PERIOD            | Feb.1980 ~  | Mar.1980                                 | 1month                    |                        |                       |          |
| 9.  | SITE OR AREA            | Chapare Distric                                     | t and surrounding regions in             | Cochabamba Province       |                        |                       |          |
| 10.   | MAJOR PROPOSED PR       | OJECT(S)  |  |                           |                        |                       |          |
| _   |                         |   | ata study necessary drawing              | a land use map in Chapare | e District. However a  | part of it has alread | dv       |
|   |                         |   | we changed the objective of              |                           |                        | -                     | -        |

We visited the project site to conduct basic data study necessary drawing a land use map in Chapare District. However a part of it has already completed in governmental sector, therefore we changed the objective of the study to giving technical comment and the evaluation of its results by the advice of Japanese embassy.

Main contents of the advices, as a result of field investigation and examination of materials, are:

- 1.To improve road infrastructure
- 2.To take consideration into improvement of farm land including preventing soil erosion.
- 3.To establish and manage distribution and process system of farm products
- 4.To investigate the possibility to produce Kenaf (ambari hemp) coconut palm and sago palm.
- 5.To put more importance on beef cattle than on milch cows.

CSA BOL/A 501/79 Basic Study

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

(FY1995 Domestic Survey)

On March, 1980, when the SW Mission and the Survey Team visited Bolivia simultaneously and commence the practical discussion with Bolivian side, it was disclosed that the project was already being carried on by the Government of Bolivia. Therefore, the Mission and the Survey Team quitted the planned survey works and made an evaluation and some of advice for the implementation of the project, and left back to Japan following to the instructions given by JICA's Headquarter.

(FY1995 Overseas Survey)

The results and performances of this study are utilized for:-

- to grant the state qualification for engineers,
- to grant the right to utilize the forest for private firms and to settle the rate of commission, and
- to settle the preventive measures for the transportation within the region.

The maps and the various tecnological data are utilized at various schools and enterprises.

(F/S)Compiled Mar.1990 **CSA BOL/S 302/82** Jul.2009 Revised 1. COUNTRY Bolivia Railway Construction/Rehabilitation Project (Eastern Line: Taperas-Robore and Ipias-Robore) 2. NAME OF STUDY 3. SECTOR / Railway TYPE OF STUDY F/S Transportation 5. Bolivian National Railways(ENFE) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY F/S for the rehabilitation of the Eastern and Western Lines and preparation of a detailed rehabilitation plan for the section between El Porton and Robore on the Eastern Line. **OBJECTIVES OF THE** STUDY Japan Railway Technical Service 7. CONSULTANT(S) Jun.1979 Mar.1982 33month(s) 8. STUDY PERIOD Between Taperas and Robore, and between Ipias and Robore on the Eastern Line 9. SITE OR AREA

10. MAJOR PROPOSED PROJECT(S)

Earthwork (cutting, embarking) 345,000cu.m Bridges 9 places 325m Culverts 7 places

Tracks (provisional and main tracks) 11.7km

国鉄復旧計画

CSA BOL/S 302/82 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

Subsequent Studies: Feb.1982 F/S completed May.1984 D/D completed

#### Finance:

Mar.1980 Application for a yen credit on Railway Rehabilitation Project

Mar.1982 Pledge

Jul.1982 E/N

Mar.1983 L/A 5,544 mil. Yen (Railway Rehabilitaion Project, )\*

\*Contents of project

Civil works main constructions(9 bridges, 6 culverts and other), rails and spair parts.(Loan for civil works, main constructions, some of consultant expenses) Jun.1984 OECF mission A/M

#### Construction:

Sep.1985 contracted, started

Mar.1989 completed

Rails and spare parts have been purchased and delivered to the sites in 1993. The rail laying works has been implementing since Sep.1994 and lasting in Dec.1994. The improved sections are in actual use without any problem, However, there are still many defective structures and inferior roadbed portions on other sections, and capacities of these sections are not being sufficiently utilized. To cope with this situation, OECF conducted SAPS survey and is now in the midst of monitoring.

#### Effect:

| The rehabilitation of the | he national railway ensure | the safe and reliable tran | isportation of agricultu | iral products, and | the farmers living alo | ng the railway | line have been |
|---------------------------|----------------------------|----------------------------|--------------------------|--------------------|------------------------|----------------|----------------|
| increasing agricultural p | production.                |                            |                          |                    |                        |                |                |

**(F/S)** 

Compiled Mar.1986

| COUNTRY NAME OF STUDY  | Bolivia  |  |  |   |   |  |  |  |   |
|--|--|--|--|---|---|--|--|--|---|
| NAME OF STUDY  | National Tales   |  |  |   |   |  |  |  |   |
|  | , Ivational Telec  | National Telecommunication Network Project   |  |   |   |  |  |  |   |
| SECTOR   | Communicatio   | Communications & Broadcasti / Telecommunication 4. TYPE OF STUDY F/S   |  |   |   |  |  |  |   |
| COUNTERPART A  | GENCY AT THE   | ENTEL  |  |   |   |  |  |  |   |
| PRESENT COUNT  |  |  |  |   |   |  |  |  |   |
|  | Telecommunio Bolivia.  | ations network impro   | ovement and expansi  | on in medium a  | nd sn   | nall cities mainly in th   | e southw   | estern   | region of   |
|  |  |  |  |   |   |  |  |  |   |
| CONSULTANT(S)  | Nippon Teleco  | mmunication Consul   | ting Co., Ltd.   |   |   |  |  |  |   |
| TUDY PERIOD  | Jan.1982 ~   | Sep.1982   | 8month(s)  |   |   |  |  |  |   |
| SITE OR AREA   |  | Whole country  |  |   |   |  |  |  |   |
| MAJOR PROPOSI  | ED PROJECT(S)  |  |  |   |   |  |  |  |   |
| nstruction of micricrowave system: HF system: 19 se HF system: 69 se ablishment of tolioll public telephor enstruction of loca otal number of line | owave network syste 21 sections ctions public telephone fac e facilities: 59 telephone offices and e units: 13,900   | ilities in remote area;<br>d outside plants;   |  |   |   |  |  |  |   |
|  | PRESENT COUNT  DBJECTIVES OF TOTOL  CONSULTANT(S)  STUDY PERIOD  STEE OR AREA  MAJOR PROPOSE Instruction of micricrowave system:  HF system: 19 see HF system: 69 see tablishment of toll oll public telephon instruction of local otal number of line otal number otal nu | Telecommunic Bolivia.  PRESENT COUNTERPART AGENCY  Telecommunic Bolivia.  PRESENT COUNTERPART AGENCY  Telecommunic Bolivia.  Nippon Telecommunic Bolivia.  STUDY PERIOD  Jan. 1982  AMAJOR PROPOSED PROJECT(S)  Instruction of microwave network systemicrowave system: 21 sections HF system: 19 sections HF system: 19 sections HF system: 69 sections | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  Telecommunications network improbabilities.  DBJECTIVES OF THE STUDY  Nippon Telecommunication Consultant(s)  Jan.1982 ~ Sep.1982  Whole country  Whole country  STE OR AREA  MAJOR PROPOSED PROJECT(S) Instruction of microwave network system; icrowave system: 21 sections HF system: 19 sections HF system: 19 sections HF system: 69 sections Jablishment of toll public telephone facilities in remote area; oll public telephone facilities: 59 Instruction of local telephone offices and outside plants; otal number of line units: 13,900 | Telecommunications network improvement and expansi Bolivia.  PRESENT COUNTERPART AGENCY  Telecommunications network improvement and expansi Bolivia.  PRESENT COUNTERPART AGENCY  Telecommunication Consulting Co., Ltd.  PRESENT COUNTERPART AGENCY  Telecommunication Consulting Co., Ltd.  PRESENT COUNTERPART AGENCY  Telecommunication Consulting Co., Ltd.  Whole country  Telecommunication Consulting Co., Ltd.  Telecommunications network improvement and expansi Bolivia. | Telecommunications network improvement and expansion in medium a Bolivia.  DEJECTIVES OF THE STUDY  Nippon Telecommunication Consulting Co., Ltd.  CONSULTANT(S)  Jan. 1982 ~ Sep. 1982 & month(s)  Whole country  STE OR AREA  MAJOR PROPOSED PROJECT(S)  Instruction of microwave network system; icrowave system; 21 sections HF system: 19 sections HF system: 69 sections HF system: 69 sections ablishment of toll public telephone facilities: 59 Instruction of local telephone affices and outside plants; stal number of line units: 13,900 | Telecommunications network improvement and expansion in medium and sr Bolivia.  PRESENT COUNTERPART AGENCY  Telecommunications network improvement and expansion in medium and sr Bolivia.  Nippon Telecommunication Consulting Co., Ltd.  CONSULTANT(S)  Jan. 1982 ~ Sep. 1982 & Bmonth(s)  Whole country  Whole country  STE OR AREA  MAJOR PROPOSED PROJECT(S) Instruction of microwave network system; icrowave system: 21 sections HF system: 19 sections HF system: 69 sections HF system: 69 sections HS system: 69 sections HS system: 60 sections | ENTEL  COUNTERPART AGENCY AT THE IMPORT STUDY  Telecommunications network improvement and expansion in medium and small cities mainly in the Bolivia.  Telecommunications network improvement and expansion in medium and small cities mainly in the Bolivia.  Nippon Telecommunication Consulting Co., Ltd.  CONSULTANT(8)  Sep. 1982 Smonth(s)  Whole country  Whole country  Whole country  Whole country  Wajor Proposed Project(s)  Instruction of microwave network system; icrowave system: 21 sections HF system: 9 sections  HF system: 9 sections  HF system: 9 sections  HF system: 10 sections  HF system: 10 sections  HF system: 10 sections  HF system: 10 sections  HF system: 11 sections  HF system: 12 sections  HF system: 13 sections  HF system: 13 sections  HF system: 14 sections  HF system: 15 sections | ENTEL  COUNTERPART AGENCY AT THE IME OF DEVELOPMENT STUDY  Telecommunications network improvement and expansion in medium and small cities mainly in the southwe Bolivia.  DEJUCTIVES OF THE SOUTH STUDY  Nippon Telecommunication Consulting Co., Ltd.  CONSULTANT(S)  STUDY PERIOD Jan.1982 Sep.1982 Smonth(s)  Whole country  SITE OR AREA  MAJOR PROPOSED PROJECT(S)  Instruction of microwave network system; icrowave system: 21 sections HF system: 19 sections HF system: 99 sections HF system: 99 sections HF system: 99 sections HF system: 99 sections HF system: 19 sections | ENTEL  COUNTERPART AGENCY AT THE IMB OF DEVELOPMENT STUDY  TRESENT COUNTERPART AGENCY  Telecommunications network improvement and expansion in medium and small cities mainly in the southwestern Bolivia.  DBJECTIVES OF THE  TUDY  Nippon Telecommunication Consulting Co., Ltd.  TUDY PERIOD  Jan. 1982 ~ Sep. 1982 & Bmonth(s)  Whole country  STIE OR AREA  ALJOR PROPOSED PROJECT(S)  Instruction of microwave network system; icrowave system: 21 sections HF system: 29 sections HF system: 99 sections HF system: 99 sections HF system: 99 sections HF system: 19 sections |

The analog system will be adopted. Existing automated switching system will be converted to the manual non-delay service switching system.

5)Set up the long distance toll public telephones:

The service be automated by settling the VHF circuits. Charging work and line status supervision will be entrusted to each toll public telephone offices. 6)Establishment of the telephone offices in the medium sized cities:

The digital electronic switching system(expandable upto  $4,\!000$  terminals).

**CSA BOL/S 303/82** F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |
| Description :  |                          |                           |

The Government of Bolivia requested for a yen credit on March 1988. Because of the deterioration of the economic conditions, the OECF loan was approved for structural adjustment, and the project implementation was postponed.

(FY1991 Overseas Survey)

The technologies suggested by the study became somewhat outdated during the postponement, and the proposals of the study were dropped.

(FY1994 Domestic Survey)

No information.

(M/P+F/S)

Compiled Mar.1990

| CS         | SA BOL/S 2   | 01B/87  | Revised       | Jul.2009  |  |  |
|------------|--|---|---------------|-----------|--|--|
| 1.         | COUNTRY  | Bolivia   |               |           |  |  |
| 2.         | NAME OF STUDY  | El Alto Airport Modernization Project   |               |           |  |  |
| 3.         | SECTOR   | Transportation / Air Transportation & Airport 4. TYPE OF STUDY M/P+F Administracion de Aeropuertos y Servicios Auxiliares a la Navegacion Aerea   | F/S           |           |  |  |
|            | COUNTERPART AGEN<br>TIME OF DEVELOPME  |   |               |           |  |  |
| 5.         |  |   |               |           |  |  |
|            | PRESENT COUNTERPA  | ART AGENCY  |               |           |  |  |
|            |  | Improvement of airport facilities.  |               |           |  |  |
| 6.         | OBJECTIVES OF THE STUDY  |   |               |           |  |  |
|            | Pacific Consultants International  |   |               |           |  |  |
| 7.         | CONSULTANT(S)  | a define Constitution and the |               |           |  |  |
| 8.         | STUDY PERIOD   | Jan.1987 ~ Feb.1988 13month(s) ~  |               |           |  |  |
| 9.         | SITE OR AREA   | El Alto Airport, La Paz   |               |           |  |  |
|            | MAJOR PROPOSED PR  |   |               |           |  |  |
|            | I/P>Development Phases<br>mmediate Improvement V   | s of Airport Master Plan:<br>Work(1988 -1933) : Total project cost US\$679,000  |               |           |  |  |
| 1          | )Improvement of runway   | pavement and construction of runway shoulders and blast pads  |               |           |  |  |
|            |  | ng passenger terminal building<br>ect(1994 -1997) : Total project cost US\$138,000,000  |               |           |  |  |
|            | )Pavement overlay of the   |   |               |           |  |  |
|            | )Construction of taxiway<br>ntrol tower  | s, aprons, roads and a car park, a new passenger terminal building, a new cargo building, a new adminis   | stration buil | lding and |  |  |
| 3          | )Improvement of air navi   |   |               |           |  |  |
| 1          | 3.Phase 2 Development Project(1998 -2005)(Total project cost US\$53,000,000)  1)Pavement overlay of the existing runway;  2)Expansion of appens:   |   |               |           |  |  |
|            | 2)Expansion of aprons;<br>3)Expansion of car park, passenger terminal building and cargo terminal building; 4)Replacement of air navigation systems  |   |               |           |  |  |
| 4,0<br>sur | <f s=""> Major First Stage Construction Works: a)Pavement overlay of the existing runway 4,000m x 46m, 14cm thick b)Construction of taxiways 4,000m x 23m c)Passenger terminal apron (324.5m x 131m) d)Freight terminal apron (97.5m x 131m) e)Construction of roads and a car park 1 lump sum f)Passenger terminal building (total floor area 16,500 sq.m) g)Freight terminal building(total floor area 5,000 sq.m) h)Administration buildings and control tower(Total floor area 4,000 sq.m) i)Improvement of air navigation systems 1 lump sum j)Other related facilities</f> |   |               |           |  |  |
|            |  |   |               |           |  |  |
|            |  |   |               |           |  |  |
|            |  |   |               |           |  |  |
|            |  |   |               |           |  |  |

CSA BOL/S 201B/87 M/P+F/S

| PRESENT STATUS | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

<M/P> High priority is placed in the national development plan as important and urgent.

<F/S> The project has been partialy completed (improvement of runway and rehabilitation of navigation aid facility, etc.).

#### Subsequent Study:

Jan.1994 E/N 130 mil.Yen

(Project to Modernize El Alto International Airport of La Paz D/D)

\*Contents of project:Renovation of Air Security facility and construction of control Tower

Jun.1994 D/D completed.

#### Finance:

Sep.1994 E/N 893 mil.Yen

(Project to Modernize El Alto International Airport of La Paz-1/3)

Sep.1995 E/N 2,374 mil.Yen

(Project to Modernize El Alto International Airport of La Paz-2/3)

\*Contents of project

Improvement of runway, construction of control tower, improvement of navigation aid facilities, communication facilities, etc.and procurement of communication equipment and landing aid equipment.

FY 1996 F/N 278mil ven

(Project to Modernize El Alto International Airport of La Paz-3/3)

#### Construction:

Mar.1995~Feb.1997 Completed.

Construction Trader/ Consortium (Marubeni-CHIZAKI)

#### Perspective for Remaining Project:

(FY 1997 Domestic Survey)

There is no perspective for procuring fund for improvement of international terminal building, apron and so on.

#### Situation:

The initial estimated cost for the complete reconstruction of the airport was US\$ 149 mil., therefore the project was reviewed several times.

The Airport Development Policy was formulated, based on this Study result, to undertaken project with the least construction work.

#### (FY 1996 Domestic Survey)

As a part of privatization policy of Bolivia, El Alto Airport has been on tender. However, the facilities relating to the airport safety, which have been constructed with the Japanese grant aid assistance, will not be privatized but be directly administered by the counterpart.

#### (FY 1997 Domestic Survey)

SBASA Co. Ltd got concession of main facilities as runway, taxiway, apron, passenger terminal for 25 years as a result of international tender. Conceded parts were privatized in March 1997. Conditions of the contract are payment for AASANA of 20% of total income and 25% of landing charge, 200 mil.US\$ investment for 3 airports including Santa Cruz and Cochabamba, shouldering AASANA's debts and so forth.

#### (FY 1998 Domestic Survey)

A private company is in charge of operation and management of some airport facilities (e.g. runway, taxiway, apron, and passenger building). The prospect of constructing those facilities is vague.

**(F/S)** 

|     |                          |                    | ( <b>F/S</b> )   | Compiled |          |
|-----|--------------------------|--------------------|--|----------|----------|
|     | SA BOL/S 3               |                    |  | Revised  | Jul.2009 |
| 1.  | COUNTRY                  | Bolivia            | Dead Incomment between Company and Trivided                      |          |          |
| 2.  | NAME OF STUDY            | Survey for the F   | Road Improvement between San Borja and Trinidad                  |          |          |
| 3.  | SECTOR                   | Transportation     | / Road 4. TYPE OF STUDY F/S                                      |          |          |
| 5.  |                          | 1                  | Servicio Nacional de Caminos                                     |          |          |
|     | COUNTERPART AGEN         | ICY AT THE         |  |          |          |
|     | TIME OF DEVELOPMI        |                    |  |          |          |
|     |                          |                    |  |          |          |
|     |                          |                    |  |          |          |
|     |                          |                    |  |          |          |
|     | PRESENT COUNTERP.        | ART AGENCY         |  |          |          |
|     |                          |                    |  |          |          |
|     |                          | Technical surve    | y, preliminary design and evaluation of socio-economic impacts   |          |          |
|     |                          | Toommour surve     | j, p. commun. j design and conduction of soots desired an partie |          |          |
|     |                          |                    |  |          |          |
| _   | OBJECTIVES OF THE        |                    |  |          |          |
| 0.  | OBJECTIVES OF THE STUDY  |                    |  |          |          |
|     |                          |                    |  |          |          |
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|     |                          |                    |  |          |          |
| 7   | CONCLIT TANTES           | Central Consult    |  |          |          |
| 7.  | CONSULTANT(S)            | CTI Engineerin     | g Co., Liu.  |          |          |
|     | CIPLIDA DEDIOD           | Nov.1985 ~         | Jul.1987 20month(s)  |          |          |
| δ.  | STUDY PERIOD             | ~                  |  |          |          |
|     |                          |                    |  |          |          |
|     |                          | Ro                 | oad between San Borja and Trinidad                               |          |          |
|     |                          |                    |  |          |          |
| 9.  | SITE OR AREA             |                    |  |          |          |
|     |                          |                    |  |          |          |
|     |                          |                    |  |          |          |
| 10  | MAJOR PROPOSED PI        | DOTECT(C)          |  |          |          |
|     | First Phase              | XOJECT(S)          |  |          |          |
|     |                          | m, related structu | ires, preparation of pavement sub base, etc.                     |          |          |
| 2)  | Asphalt pavement between | een San Borja and  | Puerto Barrador  |          |          |
| 3)  | A ferry terminal         |                    |  |          |          |
| 2)5 | Second Phase             |                    |  |          |          |
|     | sphalt pavement over 21  | 2 km from San B    | orja to Puerto Ganadero  |          |          |
|     | •                        |                    |  |          |          |
|     |                          |                    |  |          |          |
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|     |                          |                    |  |          |          |

CSA BOL/S 304/87 F/S

PRESENT STATUS

Completed or In Progress
Completed
Partially Completed
Partially Completed
Implementing
Processing
Discontinued or Cancelled

### **Description:**

(1)First Phase

Subsequent Studies:

Jan. 1989 D/D completed (Consulting firm: Central Consultant)

Finance:

Dec.1989 Request was submitted to IDB for the construction of road.

IDB has been providing the fund for the improvement of Route 3, which includes the San Borja-Trinidad section. It is planned that the construction of the Cotapata-Santa Barbara section will be commenced in 1991 and the construction of the San-Borja-Trinidad section is expected to commence after this project. IDB requires EIA as a condition for its loan approval.

#### (FY 1991 Overseas Survey)

SENAC expects to commence the project sometime during 1995-1998.

The total project cost is estimated to be US\$ 89 mil., 80% of which will be funded by IDB (US\$ 57 mil.) and 20% from the government fund (US\$ 32 mil.). The project will be implemented as proposed by F/S and D/D of JICA.

#### (FY 1993 Overseas Survey)

Hereafter, refer to the Improvement of San Borja-Trinidad Section (D/D).

#### 1.Road

Finance:

(FY 1997 Overseas Survey)

Government budget (approved in 5-years Investment Plan) and credit from international organization. (schedule)

Total Cost -- 74.3mil.US\$

(Local -- 59.44mil.US\$, Foreign -- 14.86mil.US\$)

(FY 1998 Domestic Survey)

Funds for pavement for up-raising: FNDR 80%, TGN 20%.

Construction:

(FY 1998 Domestic Survey)

Aug. 1997 Paving for up-raising of Trinida-Mamore was completed.

#### 2.Bridge

(FY 1997 Overseas Survey)

San borja ~ Puerto Ganadero

Finance:

IDB, TGN

Construction:

Maniaui, Matos, Chevejecure, Museruna, Apere, Cuberene, Ibare ---- constructed.

San Borja ~ Puerto Almacen

Construction:

Amistad, Sicuri, Tajibo, Tigre, Mururita ---- constructed

Curiraba, Curirabita ---- bid in 1999 (planned).

(2)Second Phase

(FY 1997 Domestic Survey)

Financial source is BID, but detail is not clear yet because First Phase is still going on. Review of F/S will be necessary to implement.

(F/S)

Compiled Mar.1992 **BOL/S 305/87 CSA** Revised Jul.2009 1. COUNTRY Bolivia Groundwater Development Project on El Alto District in La Paz City NAME OF STUDY SECTOR Public Utilities / Water Supply TYPE OF STUDY F/S 3. 5. Servicio Autonomo Municipal de Agua Potable y Alcantarillada (SAMAPA) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Water supply for El Alto District, by utilizing underground water. **OBJECTIVES OF THE** STUDY Kyowa Engineering Consultants Co., Ltd. 7. CONSULTANT(S) Jan.1987 Jan.1988 12month(s) 8. STUDY PERIOD El Alto District, excluding the airport area (71.5 sq.km) (The District was upgraded to El Alto City during the present study) 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) 1.Potentials of groundwater development - Southeastern side of Rio Seco (12km, intake of 30,000 cu.m/day - Northwestern side (10km, intake of 20,000 cu.m/day) 2. Major facilities 1) by 1995 2) by 2000 - Water intake wells: 42 cu.m/h x 155m x 3000 x 37km 6 sets 42 cu.m/h x 120m x 3000 x 30km 6 sets 2 sets 42 cu.m/h x 95m x 3000 x 22km 12 sets 12 sets 42 cu.m/h x 72m x 3000 x 15km 6 sets 6 sets - Water conveyance facilities (Main pipeline 58km) - A junction well, a puping well and related facilities \* Costs shown above pertain to water intake facilities only.

ラパス市エル・アルト地区地下水開発計画

CSA BOL/S 305/87 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

Subsequent Studies: Mar.~Aug.1988 B/D

Finance:

Oct.19.1988 E/N 1, 1,693 mil.Yen

(Project for Development of Groundwater in El Alto City-Phase1)

Feb.1989 Bidding (Successful bidder:Taisei Kensetsu)

Jun.22.

1989 E/N 2, 691 mil. Yen

(Project for Development of Groundwater in El Alto city-Phase2)

Oct.1989 Bidding (Successful bidder:Taisei Kensetsu)

#### Construction:

Phase 1

Apr.1989 started

Feb.1990 completed

Phase 2

Dec.1989 started

Jun.1990 completed

Main Constructed Facilities:

 $Phase \ 1-16\ intake\ wells, conveyance\ pipelines\ 27.6km,\ 5\ pumps,\ 1\ distribution\ pond,\ distribution\ pipes\ 9.35km,\ etc.$ 

Phase 2 - 14 intake wells, conveyance pipelines 11.2km, distribution pipes 9.6km, etc.

Situation:

(FY 1994 Domestic Survey)

Nowadays, SAMAPA is continuing the construction works of water service pipelines by its own budget, and the number of population served and the required amount of water supply are gradually increasing. The planned water supply amount in 2009, the year of target, is 30,000 cubic meter a day, compared with 5,800 in 1994.

However, at present, actual supply amount is only about 3,000 cubic meter a day, equivalent to only 50 percent of planned figure and it seems to be very hard to improve. As the result of the operation of this facility, the stringent situation of the water supply for the City of El Alto has been rather mitigated. But, it would be still necessary to improve furthermore by means of extension of service pipelines to increase the water supply amount and to dessolve the non-service area in the City.

On the other hand, the Cities of La Paz and El Alto, which are with SAMAPA's service, are still suffering from the serious water shortage due to the delay of development of the water resources, except for this project area.

Therefore, it is considered that it may be about the time to establish supporting water supply facilities in the other areas, which has been recommended by the F/S, in order to increase the water supply amount.

#### (FY 1997 Overseas Survey)

The lack of water in La Paz city and El Alto city is continuing mainly because of the rapid population growth. Therefore, the request for aftercare study was submitted and JICA accepted it. But soon after that, SAMAPA in El Alto was privatized and implementation of the aftercare study has been suspended.

**(D/D)** 

Compiled Mar.1990

| CS |  |  |   | Revised | Jul.2009 |
|----|--|--|---|---------|----------|
|    | COUNTRY                                | Bolivia Survey for the Ro  | ad Improvement between San Boria and Trinidad |         |          |
| 2. | NAME OF STUDY                          | AME OF STUDY  Survey for the Road Improvement between San Borja and Trinidad |   |         |          |
|    | SECTOR                                 | Transportation   | / Road 4. TYPE OF STUDY D/D                   |         |          |
| 5. |  | S  | ervicio Nacional de Caminos                   |         |          |
|    | COUNTERPART AGEN                       |  |   |         |          |
|    | TIME OF DEVELOPME                      | ENT STUDY  |   |         |          |
|    |  |  |   |         |          |
|    |  |  |   |         |          |
|    | PRESENT COUNTERPART AGENCY             |  |   |         |          |
|    | THESE IT COUNTY I                      |  |   |         |          |
|    |  |  |   |         |          |
|    |  | Basic design   |   |         |          |
|    |  |  |   |         |          |
|    |  |  |   |         |          |
| 6. | OBJECTIVES OF THE STUDY                |  |   |         |          |
|    |  |  |   |         |          |
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| _  | CONCLIP TO A NUTS CO.                  | Central Consultan  |   |         |          |
| 7. | CONSULTANT(S)                          | KOKUSAI KOGʻ   | YO CO., LID.                                  |         |          |
| 0  | CELEDY DEDICE                          | Sep.1987 ~   | Jan.1989 16month(s)                           |         |          |
| 8. | STUDY PERIOD                           | ~  |   |         |          |
|    |  | Doo  | d hoterson Con Donio and Trinidad             |         |          |
|    |  | Roa  | d between San Borja and Trinidad              |         |          |
| 0  | SITE OR AREA                           |  |   |         |          |
| 9. | SITE OR AREA                           |  |   |         |          |
|    |  |  |   |         |          |
|    |  |  |   |         |          |
|    | MAJOR PROPOSED PR                      | ROJECT(S)  |   |         |          |
|    | st Phase Construction:                 |  |   |         |          |
|    | Road improvement<br>ridge construction |  |   |         |          |
|    |  | ent 229 km (includ   | ing the ferry-serviced 7 km), 9 bridges)      |         |          |
|    |  |  |   |         |          |
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CSA BOL/S 401/88 D/D

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

#### Description:

Refer to the Improvement of San Borja-Trinidad section (F/S BOL/S 304/87) for the surveys before 1991.

#### EIA:

1994 Implemented by JICA

Aug.1995 Completed and revision of the final report

(FY 1995 Overseas Survey)

#### Results of EIA:

(FY 1996 Domestic Survey)

The implementation of this project is likely to influence adversely on wild life, plants, water quality and surrounding views. Thus, the Study proposed several countermeasures such as the construction of eco-roads, preservation of artificial ponds and prohibition of logging. Also, it proposed to strengthen the watch-system against the illegal logging and to conduct a survey on ruins.

(1)Road Trinidad-Pto.Varador(10.5km)

(FY 1996 Overseas Survey)(FY 1997 Overseas Survey)

Finance: Fondo Nacional de Desarrollo Regional (National Fund for Regional Development), TGN

Construction: Apr.~Dec.1996 Jun.1997 Handing over

Cost / 5 mil.US\$

Trinidad - Puente Ibare (8.5km) Pavement

Puente Ibare - Loma de Cachipere(2km) Surface treatment

Contractor / APOLO-IASA Construction Cost / 5,639,448 US\$

Consulting Firm / Oscar Crimaux, Asociados S.A.T.

Consulting Cost / 482,256 US\$

#### (2)Bridge

#### Construction:

San Juan, San Gregorio, Puerto Almacen --- constructed Curiraba, Curirabita --- bid in 1999 (FY 1998 Domestic Survey)

Tijamuchi --- not started

#### (3)Unimplemented Project

(FY 1996 Overseas Survey)

The financial source has been sought.

#### Effect

Development of agriculture and livestock-farming. Smooth transportation of agricultural and livestock products. Development of regional economy. Improvement of living standard.

#### Related Project:

The construction of two bridges was started with the investment of US\$ 964,000 from the government fund. The construction of five bridges were just completed and the widening of another bridge is now in progress (USAID Fund).

Three other sections in Route 3 (156km) have been already constructed (IBD Fund).

(F/S)

Compiled Mar.1992

BOL/A 301/90 **CSA** Jul.2009 Revised 1. COUNTRY Bolivia Agricultural and Rural Development Project in Santa Ana 2. NAME OF STUDY 3. SECTOR / (Agriculture in) General TYPE OF STUDY F/S Agriculture 5. Regional Development Corporation of Tarija COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Formulation of irrigated agriculture and rural development plans. OBJECTIVES OF THE STUDY Naigai Engineering Co., Ltd. 7. CONSULTANT(S) Jul.1989 Aug.1990 13month(s) 8. STUDY PERIOD Santa Ana in Tarija Dept. 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Beneficial area (irrigation); 1,090 ha Proposed facilities; - Water source (concrete gravity dam) - Sedimentation dam - Irrigation canals Main 5.4km Secondary 24.8km Reservoirs 14 nos. - Road improvement 20.2km - Rural water supply (shallow wells) 15 nos. - Rural electrification 20.0km - Public health center 3 places - Educational facilities (school houses, etc.) 2 places - O/M equipment 3 places Beneficial household; 171 Beneficiary ; 1,056

サンタアナ農業農村開発計画

CSA BOL/A 301/90 F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Delayed or Suspended

Implementing

Discontinued or Cancelled

#### Description:

(FY 1997 Overseas Survey)

Projects as shown below were implemented.

(1)Rural Electrification

Completed in Santa Ana, Disel, etc.

(2)Road Improvement

Finance:

Provision of machinery from JICA.

Several roads have been improved at Santa Ana area.

(3)Improvement of Educational Facility

Finance:

Social Investment Fund.

The priority of Tarija province is put to the areas of road, irrigation and energy.

#### Situation by Now:

(FY 1991 Overseas Survey)

The part of the infrastructures such as electric facilities, and health organization will be implemented by the Government of Bolivia reducing the scale of the project. It was learnt by another survey that the number of beneficiary is only 400 families, 2000persons.

Since the original plan seemed to be too big, as the result of the study, the plan has been scaled down to reduce the irrigation area 650ha from 1,100ha, and the costs for project becomes from \$15 million to \$6 million.

#### (FY 1992 Overseas Survey)

CODETAR is paving the road Tarija-Santa Ana, which is the main access to the project area.

CODETAR expect dispatch of study mission from Japan (for 1~2 months), and will request to Japan repeatedly.

CODETAR has the necessary domestic resources for the counterpart of the Final Project.

Before the implementation of the project, technical training of counterpart financed by JICA is expectd.

#### (FY 1993 Overseas Survey)

Hoping to earn the grant aid from JICA, revised final design has been submitted to Japanese side. The cost for project becomes less than \$3 million.

#### (FY 1996 Overseas Survey)

As the enactment of decentralization act, the Regional Development Corporation of Tarija was resolved and the Municipality of Tarija has taken over its works. Due to the above-mentioned reason, no step has been taken for the finance procurement. The priority order of the development project in this region is (1)Road, (2)Irrigation and (3)Electrification.

#### (FY 1997 Domestic Survey)

Tarija Development Corporation had submitted request every year until it was dissolved. No request was made after the works had been taken over to Tarija Province.

#### (4)Agricultural and Rural Development

Perspective:

(FY 1997 Domestic Survey)

The new political power puts high priority on agriculture and rural development through decentralization of authority. For that purpose, Ministry of Agriculture, Livestock and Rural Development has been established.

#### (FY 1997 Overseas Survey)

Up-date study and modification of target area scale are scheduled.

Italia is implementing Agricultural Development Study in the area including a part of target area of this study. Study is in the second or the third phase at present.

#### (FY 1997 Overseas Survey)

\*Related Project "San Jacinto Dam"

Definition of the areas to be irrigated by water taken from the San Jacinto Dam, was started in parallel with this study and the areas were selected after the completion of the study. As a result, out of 1,000 ha of recommended area by the study, 500 ha was included into the irrigation area. (Irrigation area-3,600 ha, 1,000 households) Finance:

Argentine government

Construction:

Phase I 1981~1982

Phase II May.1990~mid.1992

Phase III mid.1992~1998

#### Situation after completion:

(FY 1998 Domestic Survey)

Consturuction of the dam was completed. Part of the project area has been irrigated.

### Perspective for the remaining project :

(FY 1998 Domestic Survey)

There has not been any progress and has no exact plan to realize the project.

(F/S)

Compiled Mar.1992 BOL/S 306/90 **CSA** Jul.2009 Revised COUNTRY Bolivia Road Improvement between Santa Barbara and Bella Vista 2. NAME OF STUDY 3. SECTOR / Road TYPE OF STUDY F/S Transportation 5. National Road Service Ministry of Transportation and Communication COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Feasibility Study on the road improvement between Santa Barbara and Bella Vista. **OBJECTIVES OF THE** STUDY Central Consultant, Inc. 7. CONSULTANT(S) Nippon Koei Co., Ltd. KOKUSAI KOGYO CO., LTD. Aug.1989 ~ Mar.1991 19month(s) 8. STUDY PERIOD Road Section between Santa Barbara and Bella Vista on the National Road 3 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) 1. Total length of the projected road: 108.63km (Current road: 115.5km) 2. Length of the widened road: 92.29km (85%) 3. Length of the rerouted road: 16.34km (15%) 4. Number of bridges: 13 5. Number of tunnels: 2 6. Pavement: asphalt and concrete pavement

CSA BOL/S 306/90 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENIE GELATING | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

### **Description:**

The Background of the project:

The project section is a part of the National Road 3 which connects La Paz and the province of Ben, the province of Bando which are lowlands and have great potential for development.

On the National Road 3, except the section between Santa Barbara and Bella Vista, all other road sections have already improved or are just about to start the improvement works. Once these road sections will have improved, the road section between Santa Barbara and Bella Vista will obviously become the severe bottleneck for traffic. On the other hand, this road section is very notorious for its disaster occurrence and risky road section in Bolivia.

### Subsequent Studies:

(FY 1996 Domestic Survey)

Jan.1993 Bolivian Government requested to the Japanese Government to conduct D/D on the road and technical assistance for EIA.

1997 Implementation of D/D is said to be mentioned at the Bolivian IBD Project. However, it has been unconfirmed.

(FY 1997 Overseas Survey)

As of the end of 1997 F/S review, final design, EIA are being carried out for Santa Barbara ~ Bella Vista ~ Quiquibey (118km)

Study Period / 15 months

Consulting Firm / Contegral-Grimaux

Study Cost / 1.05mil.US\$

### Finance:

(FY 1997 Overseas Survey)

Estimated Cost / 200mil.US\$

IBD 700mil.US\$

Another financial resource is being procured.

#### Construction:

1998 - 2000 Scheduled to be implemented (FY1996 Overseas Survey)

### (FY 1997 Domestic Survey)

BID puts higher priority to San Borja~Trinidad and considers that starting a construction on Santa Barbara~Bella Vista is difficult unless Cotapata~Santa Barbara section is not completed.

### (FY 1997 Overseas Survey)

The road was divided into two sections.

The first section is Santa Barbara - Caranabi (66km) and its construction cost is 112mil.US\$. The second section is Caranabi - Bella Vista (52km).

### (FY 2000 Domestic Survey)

Contegral Selaya Jhonson, one of the local consultants, conducted F/S and D/D for the two sections and the provincial agency is considering the result of studies.

### Maintenance & Operation:

The provincial road service agency will be assigned M&O.

### Situation:

### (FY1996 Overseas Survey)

The machinery provided by the Japanese Government has been utilized for the road maintenance of this section.

# STUDY SUMMARY SHEET (M/P)

 CSA
 BOL/S 101/91
 Compiled Mar.1993

 Revised
 Jul.2009

| 1. | COUNTRY  | Bolivia           |   |                    |                       |  |  |  |
|----|--|-------------------|---|--------------------|-----------------------|--|--|--|
| 2. | NAME OF STUDY  |                   | odernization and Rehabilitation of Bolivian National Railways |                    |                       |  |  |  |
| 3. | SECTOR   | Transportation    | / Railway   |                    | 4. TYPE OF STUDY M/P  |  |  |  |
| 5. |  |                   | Bolivian National Railways                                    |                    |                       |  |  |  |
|    | COUNTERPART AGEN                                       |                   |   |                    |                       |  |  |  |
|    | TIME OF DEVELOPME                                      | ENTSTUDY          |   |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
|    | PRESENT COUNTERPA                                      | ART AGENCY        |   |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
|    |  | To draw up a M    | <br>I/P and a plan with stages on moderniza                   | ation of the Roliv | ian National Pailways |  |  |  |
|    |  | To draw up a W    | 71 and a plan with stages on moderniza                        | ation of the Bonv  | ian National Kanways. |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
|    | OBJECTIVES OF THE                                      |                   |   |                    |                       |  |  |  |
| 6. | STUDY  |                   |   |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
|    |  | Ianan Pailway     | Fechnical Service   |                    |                       |  |  |  |
| 7. | CONSULTANT(S)  |                   | taion Consultants, Inc.                                       |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
| 8. | STUDY PERIOD   | Mar.1990 ~        | Nov.1991 20month(s)   |                    |                       |  |  |  |
|    |  | ~                 |   |                    |                       |  |  |  |
|    |  | Bolivi            | a: Total railway length about 3,600k                          | am                 |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
| 9. | SITE OR AREA   |                   |   |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
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|    |  |                   | Г   |                    |                       |  |  |  |
|    | MAJOR PROPOSED PR                                      |                   | zay reinforcement plans by stage                              |                    |                       |  |  |  |
|    | Short-term plan (1991 - 20                             |                   |   |                    |                       |  |  |  |
|    | ) Track improvement, 4 l                               |                   |   |                    |                       |  |  |  |
|    | ) Rolling stock reinforcer                             |                   |   |                    |                       |  |  |  |
|    | ) Improvement of rolling<br>) reinforcement of telecon |                   |   |                    |                       |  |  |  |
|    |  |                   | evestment, US\$ 485 million                                   |                    |                       |  |  |  |
|    | Track improvement, 21                                  |                   |   |                    |                       |  |  |  |
|    | ) Rolling stock reinforcer<br>) Improvement of rolling |                   |   |                    |                       |  |  |  |
|    | ) Reinforcement of teleco                              |                   |   |                    |                       |  |  |  |
| 5  | ) Computer utilization                                 |                   |   |                    |                       |  |  |  |
|    | New line construction, a                               |                   | ntmant LIC\$ 251 mill:  |                    |                       |  |  |  |
|    | Long-term plan (2011 - 20<br>) Track improvement, 4 l  |                   | ынын, ӨЗФ 231 нипоп   |                    |                       |  |  |  |
| 2  | Rolling stock reinforcer                               | ment              |   |                    |                       |  |  |  |
| 3  | Reinforcement of the ra                                | ilway training sc | hool  |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |
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|    |  |                   |   |                    |                       |  |  |  |
|    |  |                   |   |                    |                       |  |  |  |

CSA BOL/S 101/91 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### Description:

Subsequent Studies:

Railway Improvement between Oruro and Cochabamba, F/S

Oct.1995 the final report to be submitted

Major points of the planned improvement are the route change for about 33km which should be done urgently, the improvement of the railway for about 69km where many derailed accidents had been happened, and a section between Aguas-Calientes - Irpa-Irpa with a distance of about 55km, the major disastrous segment.

### Other implementations:

(FY 1992 Overseas Survey)

The M/P is being executed by ENFE according to the possible economic resources. The maintenance of the whole railway line is kept up. In several sections the track has been improved. Four new stations have been constructed. The repair of locomotive engines and equipment of workshops are being carried on.

#### Others:

The master plan should be implemented as early as possible, since its implementation is considered significant from the standpoint of national economy. As for the urgent projects, it is necessary to draw up an optimum plan by comparing various alternative plans through feasibility studies and the like. It is also necessary to promote railway reinforcement in terms of both hardware and software.

### (FY 1992 Overseas Survey)

\$500 million will be needed for the equipment investment from now on. Dispatch of Japanese long term expert for the management plan is required.

### (FY 1993 Overseas Survey)

Bolivian National Railways wishes to make a Master Plan including construction of railway network connecting Aiquile and Santa Cruz.

|     |              | (NI/P) | Compiled | Mar.1993 |
|-----|--------------|--------|----------|----------|
| CSA | BOL/A 101/91 |        | Revised  | Jul.2009 |

| 1.   | COUNTRY   | Bolivia                                  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|
| 2.   | NAME OF STUDY   | Forest Resource                          | est Resources Management   |  |  |  |  |  |
| 3.   | SECTOR  | Forestry                                 | / Forestry & Forest Conservation   | 4. TYPE OF STUDY M/P                     |  |  |  |  |
| 5. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |   |  | Ministerio de Asuntos Campesinos y Agropecuarios,                                | y Centro de Desarrollo Forestal          |  |  |  |  |
|  | PRESENT COUNTERPA   |  |  |  |  |  |  |  |
| 6.   | OBJECTIVES OF THE STUDY   |  | survey and formulation of a Forest Management Plan                               | compatible with the environment.         |  |  |  |  |
| 7.   | CONSULTANT(S)   | Japan Forest Tec<br>KOKUSAI KOO          | chnical Association<br>GYO CO., LTD.   |  |  |  |  |  |
| 8.   | STUDY PERIOD  | Feb.1990 ~                               | Mar.1992 25month(s)<br>50,000ha within a Study Area of 300,000ha in Iturralde    |  |  |  |  |  |
| 9.   | SITE OR AREA  |  |  |  |  |  |  |  |
| The  | ironmental impact assess  | n for the model a                        |  | sources, soils, land use and vegetation, |  |  |  |  |
| 1. N   | Nos. of Forest Compartme  | ents 30                                  | 29   |  |  |  |  |  |
| Pr<br>Ir<br>Pr<br>O                                    | nstallations & Nurseries<br>rotection Areas 4,7<br>Others (forest roads, grazin | 41.15ha<br>193.55ha<br>ng areas, abandor |  |  |  |  |  |  |
|  | lanting plan; and Plans fo  |  | dolago) and the timber exploitation plan; Selection of 2 d timber transportation | 2 species(Mara & Cedro) and the re-      |  |  |  |  |
| 4. F   | Forest Protection Plan  |  |  |  |  |  |  |  |
| 5. S   | Suggestions on the organi   | zation of mainter                        | nance and operation  |  |  |  |  |  |

CSA BOL/A 101/91 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

Utilization of the study:

The basic idea of this study would be applied to formulate the Master Plan and to conduct feasibility study in other area in Bolivia.

(FY 1993 Overseas Survey)

The results of JICA's study are very useful for the establishment of new plan and the settlement of new areas for borrowing as the basic data of afforestation.

### Others:

(FY 1992 Overseas Survey)

The deterioration and loss of resources are steadily increasing in the tropical zones or areas.

On the forest field, project formation study is planned considering grant aid and project technical cooperation.

(FY 1993 Overseas Survey)

Looking for the financial resources to conduct survey works, GOB has requested the fund for Phase 2 survey to JICA.

In order to implement the recommended items, further technical and financial cooperations are requested.

(FY 1996 Overseas Survey)

\*Sustainable Forest Management Project for Tropical Forest in the

Northern La Paz

This project was formulated in order to address the rapid deterioration of resources in the tropical zone covering more than one million ha in the northern La Paz, based on this study result. The financing from the International Organization of Tropical Forest is desired.

(FY 1997 Overseas Survey)

Based on the study, Ministry of Agriculture formulated "Nothern La Paz Sustainable Forest Management Project". OIMT has pledged 50,000 US\$ for the project but not disbursed yet.

(M/P+F/S)

Compiled Mar.1995

| CSA BOL/S 2   |                         |  | R                                   | evised Jul.2009     |
|---|-------------------------|--|-------------------------------------|---------------------|
| 1. COUNTRY  | Bolivia                 |  |                                     |                     |
| 2. NAME OF STUDY  | Control of Wate         | r Contamination of the Rivers in the City of La Paz    |                                     |                     |
| 3. SECTOR   | Administration          | / Environmental Problems                               | 4. TYPE OF STUDY M/P+F/             | S                   |
| COUNTERPART AGENTIME OF DEVELOPME   |                         | HAM, SAMAPA  |                                     |                     |
| PRESENT COUNTERPA   | ART AGENCY              |  |                                     |                     |
| OBJECTIVES OF THE   | To draw up the          | basic plan of the measures to protect the water contam | ination, and the F/S of the project | with high priority. |
| 6. OBJECTIVES OF THE STUDY  |                         |  |                                     |                     |
| 7. CONSULTANT(S)  | Pacific Consulta        | ints International                                     |                                     |                     |
| 8. STUDY PERIOD   | Feb.1992 ~              | May.1993 15month(s)                                    |                                     |                     |
|   | ~                       |  |                                     |                     |
|   | Basin                   | n of the Choqueyapu River(535km2)                      |                                     |                     |
| 9. SITE OR AREA   |                         |  |                                     |                     |
| 10. MAJOR PROPOSED PR -Intake of the Choqueyapu F -Transmission of the river w -Construction of oxidation p | River water at the ater | downstream of city center                              |                                     |                     |

CSA BOL/S 212/93 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

### (FY1994 Domestic Survey)

In order to implement the project, it is required to arrange budget enough to maintain the facilities. At present it seems not to be promoted from the standpoint of cost/benefit.

#### (FY1995 Overseas Survey)

The regulations regarding to the quality of residual water drained into river have been proclaimed. No other particular progress.

### (FY 1996 Overseas Survey)

Because this study proposed the water treatment project, which targetted only the rivers in the suburb, the residents in the urban area would be unable to benefit from the project. Thus, the city of La Paz has an intention to implement a water quality improvement measure with the construction of small-scale waste water treatment plants which can be applicable to various areas in the city in order to increase the number of beneficiaries. Presently, the City of La Paz considers the implementation of the Phase II Study for it. The construction of the Small-scale plants will be easier to be implemented than that of the large-scale central treatment plan, which was proposed in this study, because of the small initial investment.

### (FY 1997 Overseas Survey)

Election of a mayor was held in 1997 in La Paz where the former mayor was positive to adopt a module-type plant. As a result of election, no officers who is acquainted with the matter remained in the city hall of La Paz.

\*Module type --- The small-scale plant to distill waste water in place of draining to river directly.

SAMAPA (Aqua dil Illimani: JV of French, Argentina, and Bolivian companies), a counterpart of the project, was privatized into a consession company in 1997. This company will be responsible for operation and management of water supply after July 1997 and be responsible for sewerage treatment after 2001. SAMAPA, consisting of seven staff, is in charge of managing the lease fee.

### (FY 1998 Domestic Survey)

Since the site for the water treatment plant was unable to be acquired in and around the city area, it will be high if waste water is transported to 10 km downstream. Therefore, it becomes difficult to implement the proposed project. Regarding the module-type plant, it is difficult to treat the large amount of waste water due to the constraint of the site. Although it is possible to partially install this module-type, there is little impact on Choqueyapu River. The installation of the waste water treatment plant was conditioned in the concession contract when the SAMAPA was privatized. However, it will be unable to be implemented unless a large amount of subsidies is provided.

### (FY 1998 Overseas Survey)

The cost of the proposed project is approx. 46 million dollars and cannot covered by the budget of city. It is also in the difficult situation to be financially assisted by Japan and other donor countries.

When JICA follow-up study team visited to Lapaz City in March 1998, the city submitted the request for the additional study for construction of the module-type sewerage treatment plant.

### STUDY SUMMARY SHEET (M/P)

Compiled Jul.1996 CSA BOL/A 102/95 Revised Jul.2009

| $\sim$ | DODITION,               | , .                             |   |                                |        |                     |             |  |
|--------|-------------------------|---------------------------------|---|--------------------------------|--------|---------------------|-------------|--|
| 1.     | COUNTRY                 | Bolivia                         |   |                                |        |                     |             |  |
| 2.     | NAME OF STUDY           | Agricultural Ma                 | rketing Systems in Sant   | a Cruz                         |        |                     |             |  |
| 3.     | SECTOR                  | Agriculture                     | / (Agricult   | ure in) General                | 4.     | TYPE OF STUDY       | M/P         |  |
| 5.     | COUNTERPART AGENO       |                                 | -During the survey:Santa Cruz Regional Development Association -After the survey:Province of Santa Cruz |                                |        |                     |             |  |
|        | PRESENT COUNTERPA       |                                 |   |                                |        |                     |             |  |
| 6.     | OBJECTIVES OF THE STUDY | 1)To formulate (2)Technology tr |   | n the distribution system of g | reen g | rocery in Santa Cru | z Province. |  |
| 7.     | CONSULTANT(S)           | •                               | Consultants Inc.<br>GYO CO., LTD.   |                                |        |                     |             |  |
| 8.     | STUDY PERIOD            | Jan.1994 ~                      | Jan.1995  | 12month(s)                     |        |                     |             |  |
| 9.     | SITE OR AREA            |                                 | (Santa Cruz Province)<br>d La Paz, greengrocery   | -producting district           |        |                     |             |  |
| 10.    | MAJOR PROPOSED PR       | OJECT(S)                        |   |                                |        |                     |             |  |

1.Short-term plan 1)Improvement in related organization and legislation system. This plan includes various plans as organization/legislation improvement, facility service. To implement the project, development committees at central level and regional level will be established. And also gathering and forwarding association and greengrocery corporation are to be founded to administrate the Distribution Centers in producting/consuming districts. 2)Test improvement plan for existing distribution facilities. As a preparatory phase to establish association and corporation, association establishment preparation committee will be founded at producing district and elaborate the management plan and outcome report. At consuming district, market management council will be established in existing Abasto market to make improvement plan about market management and its implementation outcome report. 3)F/S on distribution center in producting/consuming districts. 2. Medium-long-term plan 1)Construction of gathering and forwarding facility and market facility in consuming district. Establishment of management system, Distribution center at Producing District:3 main center, 4 sub centers. Gathering and forwarding association: management system. 2)Stabilization of improved distribution system at wide area of Santa Cruz Province. 3) Nationwide promotion of distribution improvement model case: Distribution center at Consuming District, Greengrocery corporation.

CSA BOL/A 102/95 M/P

In Progress or In Use

PRESENT STATUS

Delayed

Discontinued or Cancelled

### Description:

ubsequent study:

(FY 1998 Domestic Survey)

June 1998~June 1999 JICA F/S

Backgrounds:

(FY 1995 Domestic Survey)

The Govt. of Bolivia recognizes the importance of the project plan and considers the F/S as the first phase of implementation.

(FY 1996 Domestic Survey)

The Govt. of Bolivia has requested for F/S to the Govt. of Japan in 1996 based on the proposal and conclusion of M/P.

(FY 1996 Overseas Survey)

1.Short-Term Plan

In July 1995, the Master Plan Follow-Up Regional Committee was organized in the urban area and promoted the improvement of infrastructure in the wholesale market. Compared with the condition of 1994, the present market condition is better in sanitation. The legislation is expected to be announced officially next year. Also, the ordinance will be put into force to promote the decentralization of the wholesale market. In order to commence the operation of new marketing system, F/S and the construction of main facilities are to be implemented from 1996 to 2000.

### 2.Medium and Long Term Plan

The expansion of the marketing system at the regional level will be undertaken between 2000 and 2010.

The technical cooperation is requested for the reinforcement of organizations and the improvement of the marketing system.

(FY 1997 Domestic Survey)

D/D will be conducted next year.

(FY 1997 Overseas Survey)

JICA is to carry out F/S from FY 1998. To materialize the projects to be proposed by F/S, grant aid assistance from Japan and fund from FDC are expected. The results of the study have been utilized for elaboration of Metropolitan Plan, Market Improvement Plan and so on.

(FY 1998 Domestic Survey)

Jul.1998 - Jun.1996 JICA Development Study (F/S) 'Agricultural Marketing Systems in Santa Cruz'.

(FY 1998 Overseas Survey)

The request for dispatch of two technical experts (one from the third country) in 2000 and procurement of a grant aid was submitted in 1999.

\* Refer to BOL/A 316/99 'Improvement of Agricultural Marketing System in Santa Cruz' (F/S)

(FY 2001 Overseas Survey)

Present Situation: Preparing for implementation of the project.

Puroduction Zone:

- 1, Commitee (organized by the government organization in the targeted area.) was established at every collection center.
- 2, Farmars organization which maintain and operate the pilot colletion center, was established and offer seminars with INALCO on farmars organization activities to the organization officers and all the producers in each municipalities. The topics of the seminar includes bale package works and the Center's role, etc.

  Urban Zone:
- 1, Land for wholeale market construction is being prepared.
- 2, Offered seminer two times for wholesale dealers in the supply market.
- 3, Tried exams on wholesale market and circulation.
- 4, Finished bidding for yard of the construction site

Priority among the projects was unanimously determined as follows by the seminer participant organizations.

First Priority: Market System Improvement in Santa Cruz Province.

Second Priority: Establishment of a coordination committee among organizations

Third Priority: Establishment of experimental wholesale market.

Japan's Technical Cooperation:

(FY 1999 Overseas Survey)

A request of two exparts (including one from third country) and Japan's Grand Aid for 2000 was submitted in 1999.

(FY 2001 Overseas Survey)

Oct. 2000~ Short term expert.

Nov. 2000~ Long term expert.

(FY 2005 domestic survey)

Although a request for the Yen Grant was submitted, it has not been selected.

**(F/S)** 

Compiled Jul.1996

| CS   | SA BOL/S 3                                | U//95               |   |                      | Revised | Jul.2009 |
|--|---|---------------------|---|----------------------|---------|----------|
| 1.   | COUNTRY                                   | Bolivia             |   |                      |         |          |
| Improvement Project of the Orugo Cochahamba Line |   |                     |   |                      |         |          |
| 2. NAME OF STUDY                                 |   |                     |   |                      |         |          |
| L <sup>-</sup>                                   |   | <u> </u>            |   |                      |         |          |
| 3  | SECTOR                                    | Transportation      | / Railway                                   | 4. TYPE OF STUDY F/S |         |          |
| 5.   |   | Tunoportunon        | , Italinaj                                  | " III OF STODI       |         |          |
| э.   |   |                     |   |                      |         |          |
|  | COLD THE PROPERTY OF A CENTRAL CONTRACTOR |                     |   |                      |         |          |
|  | COUNTERPART AGEN                          |                     |   |                      |         |          |
|  | TIME OF DEVELOPME                         | ENT STUDY           |   |                      |         |          |
|  |   |                     |   |                      |         |          |
|  |   |                     |   |                      |         |          |
|  |   |                     |   |                      | -       |          |
|  |   |                     |   |                      |         |          |
|  |   |                     |   |                      |         |          |
|  | PRESENT COUNTERPA                         | ART AGENCY          |   |                      |         |          |
|  |   |                     |   |                      |         |          |
|  |   |                     |   |                      |         |          |
|  |   |                     |   |                      |         |          |
|  |   | To assure the sta   | ble transportation between Oruro-Cochabamba | ન                    |         |          |
|  |   | To assure the sta   | sie transportation between Graro Coenabamot | 4.                   |         |          |
|  |   |                     |   |                      |         |          |
|  |   |                     |   |                      |         |          |
|  |   |                     |   |                      |         |          |
|  | <b>OBJECTIVES OF THE</b>                  |                     |   |                      |         |          |
| 6.   | STUDY                                     |                     |   |                      |         |          |
|  | SIUDI                                     |                     |   |                      |         |          |
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| -  |   | I D " "             | 1 : 10 :                                    |                      |         |          |
|  |   | Japan Railway T     |   |                      |         |          |
| 7.   | CONSULTANT(S)                             | KOKUSAI KOC         | YO CO., LTD.                                |                      |         |          |
|  | • •                                       | Oriental Consult    |   |                      |         |          |
| -  |   |                     |   |                      |         |          |
| Q  | STUDY PERIOD                              | Mar.1993 ~          | Oct.1995 31month(s)                         |                      |         |          |
| 0.   | STODITERIOD                               | ~                   |   |                      |         |          |
|  |   | 204km of Oruro-     | Cochahamba                                  |                      | -       |          |
|  |   | 204KIII OI OI IIIO- | Cochabaniba                                 |                      |         |          |
|  |   |                     |   |                      |         |          |
|  |   |                     |   |                      |         |          |
|  |   |                     |   |                      |         |          |
| 9.   | SITE OR AREA                              |                     |   |                      |         |          |
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|  |   |                     |   |                      |         |          |
| 10   | MAJOR PROPOSED PR                         | OIFCT(S)            |   |                      |         |          |
|  |   |                     |   |                      |         |          |
|  | aguas Calientes-Irpa Irpa                 |                     |   |                      |         |          |
| (A   | area where frequent occur                 | rrence of disaster  | s observed:55km)                            |                      |         |          |
|  | Change of route (33km) a                  |                     |   |                      |         |          |
|  |   |                     | of stations thereof                         |                      |         |          |
| [2)]   | Raising of ground level                   |                     |   |                      |         |          |
|  | Construction of bridges a                 |                     |   |                      |         |          |
|  | mprovement of railroads                   |                     | o (221m)                                    |                      |         |          |
| 4)1  | improvement of famouds                    | or the existing III | (22MII)                                     |                      |         |          |
|  |   |                     |   |                      |         |          |
| 2)I  | mprovement of other sect                  | tions (other than 1 | ))  |                      |         |          |
|  |   |                     | derailment accidents occur frequently       |                      |         |          |
|  |   |                     |   |                      |         |          |
|  |   |                     | ns to pass each other, at Cona Cona station |                      |         |          |
| 3)1  | increase of the number of                 | flocomotives        |   |                      |         |          |
| '  |   |                     |   |                      |         |          |
|  |   |                     |   |                      |         |          |
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|  |   |                     |   |                      |         |          |

CSA BOL/S 307/95 F/S

|                    | Completed or In Progress | Promoting                 |
|--------------------|--------------------------|---------------------------|
| DDECENTE COLATERIO | Completed                |                           |
| PRESENT STATUS     | Partially Completed      | Delayed or Suspended      |
|                    | Implementing             |                           |
|                    | Processing               | Discontinued or Cancelled |

### **Description:**

(FY 1997 Overseas Survey)

Bolivian government has decided that the government be in charge of improvement of infrastructure and private company be in charge of operation.

In consequence, Chilean company became successful-bidder for operation of national railway. Soon after that, the government decided to defer external debt unavoidably and financial assistance including for this project has been suspended. Under the circumstances, Chilean company plans to withdraw from management because it is not profitable.

(FY 1999 Overseas Survey)

Chilean company is continuing the management. Management of the railway of this section will be done by the Chilean company by June 2000 and be transferred to Bolivia afterward.

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

(FY 2005 Overseas Survey)

There exists a possibility of nationalising Orubo-Cochabamba railway in the future. There is a plan to make action with experts from private institutions and new governments to implement the project.

(Basic Study)

Compiled Jul.1996

| CS  | SA BOL/S 502               | 2/95  |                            |            |              |   |    |               | Revised     | Jul.2009 |
|-----|----------------------------|---|----------------------------|------------|--------------|---|----|---------------|-------------|----------|
|     | COUNTRY                    | Bolivia   |                            |            |              |   |    |               |             |          |
| 2.  | NAME OF STUDY              | Topographic M                                       | apping of La               | Paz-Beni   | Region       |   |    |               |             |          |
| 3.  | SECTOR                     | Social Infrastru                                    |                            | / Survey & | & Mapping    | 4 | 4. | TYPE OF STUDY | Basic Study |          |
| 5.  |                            |   | Department                 | of Map ar  | nd Measuring |   |    |               |             |          |
|     |                            | DUNTERPART AGENCY AT THE<br>ME OF DEVELOPMENT STUDY |                            |            |              |   |    |               |             |          |
|     | PRESENT COUNTER            | PART AGENCY   |                            |            |              |   |    |               |             |          |
|     | I                          | 1.Drawing of B<br>2.Technology T                    | asic Map 1:50<br>Transfer. | 0,000 (64  | sheets).     |   |    |               |             |          |
| 6.  | OBJECTIVES OF THI<br>STUDY | E   |                            |            |              |   |    |               |             |          |
| 7.  | CONSULTANT(S)              | International En<br>KOKUSAI KO<br>Mar.1993 ~        | GYO CO., L                 | ΓD.        |              |   |    |               |             |          |
| 8.  | STUDY PERIOD               | Mar.199   | 96                         | 36month(s) |              |   |    |               |             |          |
|     |                            | La Paz, Provinc                                     | ria de Beni                |            |              |   |    |               |             |          |
| 9.  | SITE OR AREA               |   |                            |            |              |   |    |               |             |          |
| 10  | MA YOR PROPOSED A          |   | T                          |            |              |   |    |               |             |          |
| 10. | MAJOR PROPOSED I           | PROJECT(S)  | ]                          |            |              |   |    |               |             |          |
|     |                            |   |                            |            |              |   |    |               |             |          |
|     |                            |   |                            |            |              |   |    |               |             |          |
|     |                            |   |                            |            |              |   |    |               |             |          |
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|     |                            |   |                            |            |              |   |    |               |             |          |
|     |                            |   |                            |            |              |   |    |               |             |          |
|     |                            |   |                            |            |              |   |    |               |             |          |

CSA BOL/S 502/95 Basic Study

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

Beni Province of La Paz is essential area to proceed the new economic policy based on natural resources exploitation and agriculture promotion. Therefore, the Bolivian Govt. seems to utilize the study to establish the Social Infrastructure Installation Project (road, electricity, water supply, drainage, irrigation canal, etc.) to step up the regional development of this area.

### (FY 1996 Overseas Survey)

This Study was completed and the produced maps were handed over to the Bolivian Government from JICA on Sep.26.1996. These maps are sold at present, 30% of which have been purchased by agencies in charge of the development of this region.

### (FY 1999 Overseas Survey)

40% of the maps were delivered by JICA to S.G.M and to private enterprizes in the fields of mining, electric power, timber processing, telecommunications, exploration of oil wells.

### (FY 2005 Overseas Survey)

Technical cooperation: Dispatching 12 experts for 4 months.

Description: Preparation of La Paz, Provincia de Beni topographical maps from 1992 to 1993. 64 1:50,000 scale maps were prepared.

### Others:

Beneficiaries are 1,500 square kilo metres of Alto, Provincia Beni and 100,000 residents. Of 50,000 people resides in rural area.

Construction of neighbouring roads and improvements in agricultural productivity. Supply of basic services such as electricity and water. However, these benefits can not be quantified due to financial constraints.

## STUDY SUMMARY SHEET (Other Studies)

(Other Studies)

Compiled Aug.1996

Revised Jul.2009

| 3. SECTOR Transportation / Road 4. TYPE OF STUDY Other Studies    COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY   | 1.                                 |  | Bolivia  |                                    |                                |
|---|------------------------------------|--|--|------------------------------------|--------------------------------|
| San Borja - Trinidad Road Improvement (F/S, D/D).  Evaluation of environment impact.  San Borja - Trinidad Road Improvement (F/S, D/D).  Evaluation of environment impact.  Central Consultant, Inc.  Central Consultant, Inc.  Central Consultant, Inc.  San Borja-Trinidad Road (220km)  San Borja-Trinidad Road (220km)  San Borja-Trinidad Road (220km)  San Borja-Trinidad Road (220km)                            | 2.                                 | NAME OF STUDY  | Environmental Impact Assessment of Road Improvement between San Borja and Trinidad |                                    |                                |
| Evaluation of environment impact.  6. OBJECTIVES OF THE STUDY  Central Consultant, Inc.  7. CONSULTANT(S)  Dec.1994 ~ Oct.1995 10month(s)  San Borja-Trinidad Road (220km)  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S)  -Plant operation (slope protection) -Tree felling control (protection of forest, animal and plant) -Installation of Eco-Road (tunnel) -Ruins Survey -Monitoring (animal, plant, air, noise) | 5.                                 | COUNTERPART AGEN<br>TIME OF DEVELOPME  | CY AT THE<br>NT STUDY  | Ministerio de Desarrollo Economica | 4. TYPE OF STUDY Other Studies |
| 7. CONSULTANT(S)  8. STUDY PERIOD  Dec. 1994 ~ Oct. 1995 10month(s)  San Borja-Trinidad Road (220km)  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S)  -Plant operation (slope protection) -Tree felling control (protection of forest, animal and plant) -Installation of Eco-Road (tunnel) -Ruins Survey -Monitoring (animal, plant, air, noise)   | 6.                                 | OBJECTIVES OF THE  | Evaluation of en   | nvironment impact.                 |                                |
| San Borja-Trinidad Road (220km)  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S)  -Plant operation (slope protection) -Tree felling control (protection of forest, animal and plant) -Installation of Eco-Road (tunnel) -Ruins Survey -Monitoring (animal, plant, air, noise)  | 7.                                 |  |  |                                    |                                |
| 9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S)  -Plant operation (slope protection) -Tree felling control (protection of forest, animal and plant) -Installation of Eco-Road (tunnel) -Ruins Survey -Monitoring (animal, plant, air, noise)   | 8.                                 | STUDY PERIOD   | Dec.1994 ~   | Oct.1995 10month(s)                |                                |
| -Plant operation (slope protection) -Tree felling control (protection of forest, animal and plant) -Installation of Eco-Road (tunnel) -Ruins Survey -Monitoring (animal, plant, air, noise)   | 9.                                 | SITE OR AREA   | San Borja-1 rini   | dad Road (220km)                   |                                |
|   | -Pla<br>-Tre<br>-Ins<br>-Ru<br>-Mo | nt operation (slope prote<br>be felling control (protect<br>tallation of Eco-Road (tu<br>ins Survey<br>onitoring (animal, plant, a | ction) ion of forest, ani nnel) air, noise)  | mal and plant)                     |                                |
|   |                                    |  |  |                                    |                                |

**CSA** 

BOL/S 601/95

CSA BOL/S 601/95 Other Studies

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

### (FY 1996 Domestic Survey)

A part of segments are under construction and it is expected to commence the construction of the rests utilizing this study.

But, the implementation is not scheduled as yet because of large-scale reorganization of SNC this year.

### (FY 1997 Domestic Survey)

Rehabilitation of this road is to be funded by IDB. IDB is now reconstructing the section of National road Cotapata~Santa Barbara, but the progress is very slow, and cost will exceed the allocated amount. Construction of this section must be started after completion of Catapata~Santa Barbara anyway.

SNC is repairing damaged sections little by little with own fund, based on the proposal of this study.

### (FY 1998 Overseas Survey)

F/S on the Rurrenabaque - Yucumo - Trinidad section was reviewed by CAF(Cooperacion de Fomento). The Trinidad - Puerto Varador section was paved by BENI - ENDR Department.

### (FY 2000 Domestic Survey)

The local private sector is operating the maintenance for the road of San Borja - Puerto Ganaderc, however, the full-scale construction has not been conducted. It is said that IDB has no intention to fund this section and instead of IDB, World Bank will finance this construction. World Bank considers,

- 1) F/S, EIA, Final Design for the section of Rurrenabaque-Yucuno-San Borja: 200 mil\$
- 2) Review for F/S and D/D for the section of San Borja-Trinidad: 200 mil\$.

### (FY 2001 Domestic Survey)

The organization in charge for this Study, SNC requested the survey expense amounting about 2 million US\$ to the WB for the purpose of the F/S, D/D and EIA on the area of Rurrenabaque, Yucumo, San Borji, Trinidad (Pueto Ganadero) as a link in the road construction between San Borja and Trinidad, however, the answer by the WB was that it was impossible to finance to the new project in road sector due to the following reasons:

# STUDY SUMMARY SHEET (M/P)

(M/P) Compiled Jun.1997
CSA BOL/S 117/96 Revised Jul.2009

| 1.   | COUNTRY  | Bolivia  |                        |                          |                     |              |     |
|--|--|--|------------------------|--------------------------|---------------------|--------------|-----|
| 2.   | NAME OF STUDY  | Flood Control in   | the Northern Rural R   | legion of Santa Cruz     |                     |              |     |
| 3.   | SECTOR   | Social Infrastruc  | cture / River &        | Erosion Control          | 4. T                | YPE OF STUDY | M/P |
| 5.   | COUNTERPART AGEN TIME OF DEVELOPME PRESENT COUNTERP  | CY AT THE<br>ENT STUDY   |                        |                          |                     |              |     |
|  |  | To formulate a N   | M/P on flood control i | n the northern region of | Santa Cruz.         |              |     |
| 6.   | OBJECTIVES OF THE STUDY  |  |                        |                          |                     |              |     |
|  |  | Pacific Consulta   | nts International      |                          |                     |              |     |
| 7.   | CONSULTANT(S)  |  |                        |                          |                     |              |     |
| 8.   | STUDY PERIOD   | Mar.1995 ~   | Jun.1996               | 15month(s)               |                     |              |     |
| 9.   | SITE OR AREA   | Two turns a  | rea of Santa Cruz City | (7,000km2) in the depa   | artificial of Santa | Cluz         |     |
| 10.  | MAJOR PROPOSED PR  | OJECT(S)   |                        |                          |                     |              |     |
| 1.C<br>- R<br>- N<br>- S<br>2.S:<br>- R<br>- N<br>- S<br>- R<br>3.N<br>- F | hane-Pailon Area: River in iver improvement: 129.5 Iain drainage improvement: 129.5 Iain drainage improvement: 34.4k Iain drainage i | r and drainage implication of the control of the co | n2<br>nage improvement |                          |                     |              |     |
|  |  |  |                        |                          |                     |              |     |

CSA BOL/S 117/96 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

(FY 1997 Domestic Survey)

- 1. Action of the Department of Santa Cruz and the Government of Bolivia.
- 1) An organization was established for the preparation of implementation for the master plan.
- 2) Budget was once acquired for the improvement of the existing hydrological observation network which was proposed in the M/P. However, this budget was used for some other purpose.
- 3) Request for implementing F/S was submitted to the Japanese Government.
- 2. JICA S/W mission visited Bolivia for the implementation of F/S in November, 1997.

(FY 1998 Domestic Survey)(FY 1998 Overseas Survey)

1998/Jul - 1999/May JICA Development Study (F/S) "Flood Control in the Northern Rural Region of Santa Cruz".

Difference from the proposal of this study:

The target area of F/S was schrinchen at the stage of S/W, and the formation of topographic maps was excluded.

(FY 1998 Domestic Survey)

The request for a grant aid assistance for river and drainage improvement is to be submitted.

(FY 1999 Overseas Survey)(FY 2000 Domestic Survey)(FY 2001 Domestic Survey)

Request for a grant aid assistance (US\$17mil.) for the construction of the road cum embankment and bridge and the improvement of drainage was submitted in Aug. 1999.

(M/P+F/S)

Compiled Jun.1997

| NAME OF STUDY   Provincial Groundwater Development   |  | A BOL/S 2               | 218/96 Revised  | Jul.2009 |
|--|--|-------------------------|---|----------|
| 3. SECTOR  Social Infrastructure / Water Resources Development 4. TYPE OF STUDY M/P+F/S  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  1) To plan a groundwater development strategy for 4 prefectures (Chuquisaca, Oruro, Tarija, Santa Cruz) and the south part of La Paz. 2) To formulate a water supply plan in one water-supply block selected in respective prefectures except La Paz.  7. CONSULTANT(S)  Environmental Technologic Consultants Co., Ltd.  Sumiko Consultants Co., Ltd.  Sumiko Consultants Co., Ltd.  Four prefecture (Chuquisaca, Oruro, Tarija, Santa Cruz) and four districts in south of La Paz of Bolivia.  9. SITE OR AREA | 1.   | COUNTRY                 |   |          |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  1) To plan a groundwater development strategy for 4 prefectures (Chuquisaca, Oruro, Tarija, Santa Cruz) and the south part of La Paz. 2) To formulate a water supply plan in one water-supply block selected in respective prefectures except La Paz.  7. CONSULTANT(S)  Environmental Technologic Consultants Co., Ltd. Sumiko Consultants Co., Ltd. Sumiko Consultants Co., Ltd.  Four prefecture (Chuquisaca, Oruro, Tarija, Santa Cruz) and four districts in south of La Paz of Bolivia.   | 2.   | NAME OF STUDY           | Provincial Groundwater Development  |          |
| TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  PRESENT COUNTERPART AGENCY  1) To plan a groundwater development strategy for 4 prefectures (Chuquisaca, Oruro, Tarija, Santa Cruz) and the south part of La Paz. 2) To formulate a water supply plan in one water-supply block selected in respective prefectures except La Paz.  7. CONSULTANT(S)  8. STUDY PERIOD  Oct. 1994 ~ Aug. 1996 22month(s)  Four prefecture (Chuquisaca, Oruro, Tarija, Santa Cruz) and four districts in south of La Paz of Bolivia.  10. MAJOR PROPOSED PROJECT(S)  | 3.   | SECTOR                  | Social Infrastructure / Water Resources Development 4. TYPE OF STUDY M/P+F/S  |          |
| 1) To plan a groundwater development strategy for 4 prefectures (Chuquisaca, Oruro, Tarija, Santa Cruz) and the south part of La Paz. 2) To formulate a water supply plan in one water-supply block selected in respective prefectures except La Paz.  7. CONSULTANT(S)  Environmental Technologic Consultants Co., Ltd.  Sumiko Consultants Co., Ltd.  Sumiko Consultants Co., Ltd.  7. CONSULTANT(S)  Oct.1994 ~ Aug.1996 22month(s)  Four prefecture (Chuquisaca, Oruro, Tarija, Santa Cruz) and four districts in south of La Paz of Bolivia.  9. SITE OR AREA   |  |                         |   |          |
| part of La Paz. 2) To formulate a water supply plan in one water-supply block selected in respective prefectures except La Paz.  7. CONSULTANT(S)  Environmental Technologic Consultants Co., Ltd. Sumiko Consultants Co., Ltd.  Sumiko Consultants Co., Ltd.  Oct. 1994 ~ Aug. 1996 22month(s)  Four prefecture (Chuquisaca, Oruro, Tarija, Santa Cruz) and four districts in south of La Paz of Bolivia.  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S)   |  | PRESENT COUNTERPA       | PART AGENCY   |          |
| 7. CONSULTANT(S)  Sumiko Consultants Co., Ltd.  8. STUDY PERIOD  Oct.1994 ~ Aug.1996 22month(s)  Four prefecture (Chuquisaca, Oruro, Tarija, Santa Cruz) and four districts in south of La Paz of Bolivia.  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S) <f s=""></f>  |  |                         | part of La Paz. 2) To formulate a water supply plan in one water-supply block selected in respective prefectures Paz. |          |
| Four prefecture (Chuquisaca, Oruro, Tarija, Santa Cruz) and four districts in south of La Paz of Bolivia.  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S) <f s=""></f>   | 7.   | CONSULTANT(S)           |   |          |
| 9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S) <f s=""></f>  | 8.   | STUDY PERIOD            | Oct.1994 ~ Aug.1996 22month(s)  |          |
|  | 10.<br><f 3<="" th=""><th>MAJOR PROPOSED PR<br/>S&gt;</th><th></th><th></th></f> | MAJOR PROPOSED PR<br>S> |   |          |

CSA BOL/S 218/96 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### Description:

(FY 1997 Domestic Survey)

1. Average water supply coverage in the Study Area, in the urban area with a population of 2,000 or more, amounts to 87.7%, while the level of water supply service availability is only 23.3% in the rural communities with a population of 2,000 or fewer inhabitants.

There are as many as 3,023 blocks totally without water supply, a level equivalent to 71% of all 4,269 water blocks in the Study Area.

- 2. Safe potable water is seriously short, and the available water sources are dug wells, springs, reservoirs and rain water. In most cases, the water is not suitable for drinking.
- 3. This lack of water supply service is due to a)the natural-geographic conditions, b)the lag in the water resources development c)shortage of technology, manpower, and funds for the water supply and the water resources development d)the lack of operation and maintenance for the existing facilities.
- 4. The authority responsible for water supply service projects in Bolivia at national level is DINASBA, the National Direction of Basic Sanitation of the National Secretariat of Urban Affairs at the Ministry of Human Resources Development. In the rural areas, each Regional Development Corporations (CORDES), municipalities, municipal enterprises, international cooperation agencies of various countries and NGOs have been promoting projects. These projects have included shallow wells, springs, and surface water. In view of sporadic development efforts, service volume is deficient in absolute terms.
- 5. Prefecture of Oruro and Chuquisaca own Well drilling equipment, which is of an obsolete type.
- 6. Following to Popular Participation Law promulgated in 1994, the Decentralization Law was promulgated in July, 1995, by which CORDES were dissolved and all assets and staff were transferred to each Prefecture. The financial resources were shifted from central government to rural authorities in proportion to the size of population, which is promoting the activation of rural communities.
- 7. Bolivian side declared that the on-going foreign aid projects will be taken over without change by the Prefectures which already indicated their intention to give priority to the implementation of ground water development projects.

### (FY 1998 Overseas Survey)

A grant aid assistance for La Paz was requested, however, it was not accepted. Since there are no other donors which can be expected to provide the excavators, the government of Bolivia is still expecting the implementation of Japanese grant aid assistance.

The counterpart agency of development study was reorganized to Department of Basic Sanitation, Ministry of Housing and Social Infrastructure due to the change of the government. This ministry is the major counterpart agency for the implementation of a grant aid assistance and the respective provincial governments are the implementing agencies.

### (FY 1998 Domestic Survey)

Grant aid assistance ("Provincial Groundwater Development")

April 1997 E/N 1,777 million yen

Sep. 1997 E/N 1,325 million yen

- Contents of the project: provision of excavators and equipments for examination, and construction of model water supply facilities in Chuquisaca and Santa Cruz.

### (FY 1998 Overseas Survey)

1998 B/D for a grant aid assistance (Provincial Groundwater Development II) is underway in Oruro and Tarija.

1999/Mar/25: E/N 1,173 million JPY, "Provincial Groundwater Development (II), Phase 1"

1999/Aug/26: E/N 700 million JPY, "Provincial Groundwater Development (II), Phase 2"

- Contents: provision of excavators and equipment for examination, and construction of model water supply facilities in Oruro and Tarija.

(FY 1999 Domestic Survey) Completed.

### (FY 2001 Overseas Survey)

The water resource under the four site, where water supply systems were constructed, was evaluated as the best in quality and quantitiy and has enough amount of water to cover the present and future water demand.

Public health education program and system maintenance/operation/upgrading training contributed significantly to improve the residents' health and life standard. Hygenic environment including toilet facilities has been improved significantly. The water supply rate of the area highly exceeded the ratio of neibor provinces. Childrens are in good health after the epidemic desease was terminated completely.

**(F/S)** 

Compiled Jul.1998

| CS   | SA BOL/A 3  | 17/97   |  | Revised     | Jul.2009                   |  |
|--|---|---|--|-------------|----------------------------|--|
| 1.   | COUNTRY   | Bolivia   |  |             |                            |  |
| 2.   | NAME OF STUDY   | Agricultural Development Study of Achacachi Area                |  |             |                            |  |
| 3.<br>5.   | · · · · · · · · · · · · · · · · · · ·   |   |  | c Developme | ent                        |  |
|  | PRESENT COUNTERPA   | RT AGENCY   |  |             |                            |  |
| 6.   | OBJECTIVES OF THE STUDY   | development plan targ<br>approximately 8,000 h                  | the government of Bolivia, conduct a feasibility study on the making of a rural a geted at Achacachi Municipality and surrounding communities (middle and lower na) to increase agricultural productivity and farm income. |             | ral                        |  |
| 7.   | CONSULTANT(S)   | Naigai Engineering C<br>Pacific Consultants In<br>KOKUSAI KOGYO | ternational  |             |                            |  |
| 8.   | 8. STUDY PERIOD Oct.1996 ~ Dec.1997 14month(s) Achacachi Municipality and its peripheral rural areas (middle and lower stream of Keka River) in La Paz Province ab 8,000 ha |   |  |             | about                      |  |
| 9.   | 9. SITE OR AREA   |   |  |             |                            |  |
| 10. MAJOR PROPOSED PROJECT(S) (1) Short-term Development Rehabilitation of a main irrigation canal (57.3km), Improvement of a secondary irrigation canal (11.4km), Improvement of intake structure (1 site), Improvement of reservoirs (2 sites), Improvement of main roads (56.8km), Improvement of connection roads (7.2km), CRC garages/Exhibition farm sites), AC garages (3 sites), O& M machinery, Equipment (1 unit) (2) Mid-term Development Rehabilitation of a main irrigation canal (60.3km), Improvement of a secondary irrigation canal (13.3km), Improvement of intake structure (1 site), Improvement of reservoirs (1 sites), Improvement of connection roads (31.3km), Improvement of community and farm roads (40.8km), CR management draining buildings (3 sites), AC management and training buildings/garages (3 sites) O&M machinery (5 sites), Equipment (1 unit)  (3) Long-term Development Rehabilitation of a main irrigation canal (59.1km), Improvement of a secondary irrigation canal (10.0km), Improvement of intake structure (1 site), Improvement of connection roads (33.5km), Improvement of community and connection roads (33.7km), MC management and training buildings (16 sites)  *CR: Community Revitalization Center, AC: Area Center, MH: Meeting Hall |   |   |  |             | farms (3 site), magement ( |  |
|  |   |   |  |             |                            |  |

ラパス県アチャカチ地区・農村農業開発計画

CSA BOL/A 317/97 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
| TRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

(FY 1998 Domestic Survey)

Since December 1997, a coordination institution for rural and agricultural development in Achachachi area (Alias; "Project Achacachi") has been established at La Paz Economic Development Bureau. The institution has carried out the following works with JICA experts: 1) Requested for grant aid for a short-term development plan of the project to the government of Japan; 2) Secured budget for officially establishing the institution at the Department of La Paz Office (since fourth quarter of 1998); 3) Fund raised to construct the Community Revitalization Center (CRC) and the Area Center (AC), which was proposed in a mid-term development plan, because their construction was effective for the project in the short-term development plan; 4) Concluded an agreement between Achachachi City and Batallas City on the implementation of the project: 5) Concluded an agreement on cooperation with technical and financial support institutions for implementing of the project; 6) Promoted activities for farmers in the target area and established a CRC steering committee represented by communities; 7) Held seminars for farmers in the target area.

Thus, JICA dispatched short term experts from May 15 to August 15, 1998. Activities of the experts in Bolivia were as follows: 1) Grant aid was requested to the embassy of Japan by the government of Bolivia in August, after making a sustainable O&M plan on agriculture, rural infrastructure, CRC, AC, and technical transfer; 2) For securing budget for the coordination institution in the Department of La Paz, effectiveness of the project, support system for implementation, required staff, and their costs were explained. Accordingly, the budget was approved during the fourth quarter period in 1998; 3) Regarding the construction fund of CRC and AC, construction by Farmers Development Fund (FDC) which receives 2KP fund was basically agreed with support of the embassy of Japan and a JICA office in Bolivia; 4) Achacachi City and Batallas City concluded an agreement on cooperation in agriculture, the rental of machinery for construction, and the entire plan with a governor; 5) As a technical support institution of the project, the Department of Agriculture, San Andres University (UMSA) concluded an agreement with a governor on cooperation in the utilization of its staff and facilities of the Belen experiment station in the target area and technical instruction and transfer for farmers. The fund will be raised by FDC and the university; 6) Members of a steering committee of CRC were officially selected from 30 communities in the target area and participated in an oath-taking ceremony in July, and a seminar for the implementation of the plan for the members was held at the end of July; 7) Seminars for farmers was held in April with supports from Japanese experts.

Agricultural infrastructure development (rehabilitation of a main irrigation canal), improvement of main roads (roads, bridges, maintenance equipment for infrastructures, agricultural equipment), technology transferring infrastructures (by Agricultural Development Fund) will be handed over to CRS in downstream, middle stream and upstream.

FDC (USD 512,000) was agreed in November 1999 for the construction of CRC and CA as well as for the implementation of an agricultural support project. Construction will start in April 2000.

Subsequent study: Achacachi Area Agricultural Development Plan: Basic Design Study

Implementing period: September - October, 1999

Implemented project: Achacachi Area Agricultural Development Plan (Phase 1/2)

Funding:

Funding party: Japan's grant aid (submitted in August 1998, E/N concluded in June 2000)

Funding amount: 817 million JPY

Implementing period: 8 October, 2001 .  $20\ January\ 2002$ 

Contents: Irrigation facilities (sluice gate, water channel, division works, crossing works), Machinery and materials (for supporting a center, for training, for supporting agricultural management, for demonstration paddy fields)

Operation and maintenance body: Achacachi Project User Cooperative (APUC) will implement through the cooperation from UCPA Progress:

(FY 1999 Overseas Survey) Construction will be started on April 2000

(FY 2001 Overseas Survey) Chachacomani Community Activation Center 73.5%, Kelani Area Center 72.2% Kela Kala Community Activation Center 70.47%, Ptuni Area Center 72.63%, Belen Community Activation Center 72.72%, Haueritaka Area Center 72.66%

(FY 2002 Domestic Survey) Constructing period was extended to March 2002

(FY 2003 Domestic Survey) Defect tests were conducted for construction in Phase 1 on March 2003.

### (FY 2001 Overseas Survey)

Technology generation (development) and transfer project (training and infrastructure construction): April 2002- (12 months). Various activities are in progress with the cooperation of NGOs in order to operate the community center properly and to assist members of a AUPA user organization in project operation, accounting, document processing, and machinery operation. The community center is expected to play an important role in the enhancement process of AUPA.

(FY 2002 Domestic Survey)

Concerning the construction in Phase 2, the Ministry of Foreign Affairs of Bolivia submitted a formal request for grant aid to the embassy of Japan in Bolivia. The Ministry of Foreign Affairs of Japan is examining a possibility to provide grant aid, taking into consideration the use situation of facilities constructed in Phase 1 and security situation.

(FY 2003 Domestic Survey)

There is no prospect for the implementation of the second phase as of October 2003 because of the deterioration of security situation. A possibility for new grant aid cooperation will be examined by conducting a feasibility study, including an improvement of machinery for social development in the region

(FY 2007 Domestic Survey)

Implemented project: Project for Development Plan in Achacachi Area

Implementing period: June 2005 - May 2008

Implementing institution: JICA (Technical Cooperation Project)

Funding party: The Government of Japan (S/W concluded: 1 June, 2005)

Implemented project: Project for procuring equipment for village development in La Paz

Funding party: Japan's Grant Aid (E/N concluded: 7 July, 2005)

Funding amount: 683 million JPY

APC accepted two irrigation system constructions (La Pas, GM Achacachi, APC Fund), which have been implemented been FY 2007 -2008.

(F/S)

Compiled Jun.2000

**BOL/S 309/99 CSA** Jul.2009 Revised 1. COUNTRY Bolivia The Feasibility Study on Flood Control in the Northern Rural Region of Santa Cruz NAME OF STUDY 3. SECTOR Social Infrastructure / River & Erosion Control TYPE OF STUDY F/S 5. Department of Santa Cruz COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY 1) To conduct a Feasibility Study on the flood control for 1,207 km2 of the Northern Rural Region of Santa Cruz, consisting of the Chane-Pailon and San Juan-Antofagsta areas. 2) To pursue a technology transfer to the counterpart personnel through the Study. OBJECTIVES OF THE STUDY Pacific Consultants International 7. CONSULTANT(S) Jul.1998 Jul.1999 12month(s) 8. STUDY PERIOD River improvement 92.72km, Drainage improvement 83.92km, Road 9.83km 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Planner structural measures are as follows; Area River Drainage Road(km) improvement(km) Improvement(km) Chane-Pailon area Rio Ehame area 26.35 0.0 0.0 Rio Pailon area 31.41 10.36 0.0 Okinawa drainage 0.0 21.65 0.0 Sub-total 57.76 32.01 0.0 San Juan-Antofagasta area San Juan area 17.36 43.11 0.0 Antofagasta area 17.60 8.80 9.83 Sub-total 34.96 51.91 9.83 Total 92.72 9.83 83.92

CSA BOL/S 309/99 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

### (FY 2000 Domestic Survey)

The Bolivian Government requested grant aid of the project to Japanese Governemt.

Request for a grant aid assistance (US\$17mil.) for the construction of the road cum embankment and bridge and the improvement of drainage was submitted in Aug. 1999.

### (FY 2003 Domestic Survey)

The grant aid requested in 1999 has not been determined yet.

While the measures for structures proposed in the M/P have made little headway, Santa Cruz Province has been pushing forward with what it could such as new construction of the "organization in relation to improvement of flood and drainage", proposed as measures for structures, and preparation for water level designing in terms of the "flood prediction and warning system".

### (FY 2004 Domestic Survey)

Although the requests have been made for flood control in Okinawa area and San Juan, Antofagsta area, it has not been implemented.

#### (FY 2004 Overseas Survey)

In 2003 and 2004, Department of Santa Cruz has submitted an application, described below, to the Bolivian Gov. regarding implementation of the Japanese corporation project.

- 1) Grande River Disaster Prevention Project
- 2) Study on Flood Control and Basis Management of Grande River in the Republic of Bolivia

In addition, draft of structured and unstructured measure plans were submitted by the study conducted with Japanese corporation. Along with the study results and comments, hydrological, field information, and socio-economic data are mainly used for the promotion of unstructured measures. Structured measures will be started in 2005 or after 2006 as the project to improve both Chane and Pirai river conducted by SEAPRI, by responding to overseas investment.

### (FY 2005 Domestic Survey)

Project has been implemented focusing on institutional preparation and soft component measures, such as disaster prevention system. In addition, request has been made for Lio Grande river basin development.

### (FY 2005 Overseas Survey)

Hydrological data gathering and analysis has been conducted in 19 observation sites of SENAMHI with own funds. The objectives of the study are to predict El Nino and La Nina, and to establish early prevention networks for annually and suddenly occurring floods in target areas.

In addition, hazard maps were prepared by identifying flood prone areas with satellite pictures acquired during the year 2001 and 2004.

Furthermore, observation sites have been established at several water level observation sites.

**(F/S)** 

Compiled Jun.2000

| CS<br>1.   | SA BOL/A 3<br>COUNTRY   | Bolivia   F   | Revised     | Jul.2009  |
|------------|---|---|-------------|-----------|
|            | NAME OF STUDY   | Improvement of Agricultural Marketing System in Santa Cruz  |             |           |
| 3.         | SECTOR SECTOR   | Agriculture / Agricultural Processing 4. TYPE OF STUDY F/S  |             |           |
| <u>5.</u>  | COUNTERPART AGEN<br>TIME OF DEVELOPME   | Prefecture of Santa Cruz, Department of Sustainable Development  NCY AT THE   |             |           |
|            | PRESENT COUNTERPA   | ART AGENCY  |             |           |
| 6.         | OBJECTIVES OF THE STUDY   | Targeting the Department of Santa Cruz, a feasible and appropriate improvement plan of the fruit and ve system will be formulated. Also, technology transfer to the Bolivian counterparts on the procedure and a planning, survey method, etc. will be implemented. |             |           |
| 7.         | CONSULTANT(S)   | System Science Consultants Inc. Nippon Koei Co., Ltd.   |             |           |
| 8.         | STUDY PERIOD  | Jun.1998 ~ Jul.1999 13month(s)<br>~  Santa Cruz City, valley area and low land in the Departmenet of Santa Cruz   |             |           |
| 9.         | SITE OR AREA  |   |             |           |
| 1) (<br>Co | MAJOR PROPOSED PR<br>Consumption Area<br>construction of New Whol<br>Institution. | ROJECT(S)  Polesale Market for Fruits & Vegetabeles, Conversion of Existing Market into Retail Market, Provision of Ro  | elated Legi | istlation |
|            | Production Area<br>reation of New Collective                                      | re Shipping Place, , Provision of Related Legislation and Institution.  |             |           |
|            | Fraining and Tech-transferainning for Logistic Syst                               | Fer<br>stem, Legislation and Insttitution   |             |           |
|            |   |   |             |           |

CSA BOL/A 316/99 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

(FY2000 Domestic Survey)

Japanese and Paragway experts were dispatched and three technical assistances are on going.

### (FY 2003 Domestic Survey)

Although there has been no progress, due to administrative factors, it is intending to implement it within 1 or 2 years time.

### (FY 2004 Overseas Survey)

Following activities were conducted for agricultural market development project through local initiatives.

- 1) Training and practical seminars in San Isidro and Saipina for developing organised producers with the awareness of improving marketing system of the product.
- 2) Establishment of the first cooperative society in San Isidro pilot centre
- 3) Marketing of crops sent from San Isidro Logistics Pilot Centre
- 4) Continuous assistance to local agricultural producers
- 5) Selection of wholesale and supermarkets for starting group marketing from San Isidro
- 6) Assistance to wholesales related to the project
- 7) Preparation of diverse production plan to maintain the market throughout the year
- 8) Establishment of logistics centre in Saipina and Bhaje Grande for supplying the market and supermarkets in the future
- 9) Preparation in establishing experimental wholesale market in Santa Cruz
- 10) Construction and preparation of 7 Santa Cruz wholesale market system proposed in F/S.

However, there were problems of funding source to establish the wholesale market. Therefore, organisation, producer training, and preparation for establishing logistics centres in 7 location are conducted at this point.

In addition, technical corporation by agricultural marketing and logistics system improvement project was requested to the Japanese Gov.

### (FY 2005 Domestic Survey)

Although a request for a Grant Aid was submitted, it has not been selected.

### (FY 2005 Overseas Survey)

Technical assistance:

Dispatch or experts:

Long-term experts: Greengrocery logistical functionality improvement guidance, 23 October 2000-22 October 2002

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Sep.2003
CSA BOL/S 125/01
Revised Jul.2009

| 1. | COUNTRY                 | Bolivia   |  |  |  |
|----|-------------------------|---|--|--|--|
| 2. | NAME OF STUDY           | The Study on Enhancement of District Health System for Beni Prefecture in the Republic of Bolivia   |  |  |  |
| 3. | SECTOR                  | Public Health and Medicine / Public Health and Medicine  4. TYPE OF STUDY M/P   |  |  |  |
| 5. | COUNTERPART AGENO       |   |  |  |  |
|    | PRESENT COUNTERPA       |   |  |  |  |
| 6. | OBJECTIVES OF THE STUDY | 1) To formulate a Master Plan on the enhancement of district health system for Beni Prefecture for the target year 2010, and to formulate priority program(s) identified in the Master Plan, which will be able to contribute to the development of the health decentralisation process.  2) To pursue technology transfer to the counterpart personnel in the course of the study. |  |  |  |
| 7. | CONSULTANT(S)           | System Science Consultants Inc.   |  |  |  |
| 8. | STUDY PERIOD            | Apr.2001 ~ Mar.2002 11month(s) ~  |  |  |  |
| 9. | SITE OR AREA            |   |  |  |  |

### 10. MAJOR PROPOSED PROJECT(S)

- 1) Programme in Northern Area
- Establishing the key part of local health service at Riberalta
- Enhancing the hospital service at Baca Dies and Riberalta and public health centres at neighbouring areas.
- Introducing a medical boat system to riverside communities along Beni River
- Establishing a local health system coupled with hospital services and health centre services
- Enhancing education systems for auxiliary nurses and licensed nurses
- Since he area is suffered from Malaria and other infectious diseases, and the project aims to enhance the measurement (research, prevention and treatment) against these tropical infectious diseases with cooperation with Centro Amazonico de Enfermedades Tropicales (CAMETROP).

### 2) Programme in Central Area

Trinidad is the key part of local health service at central area of Beni with the Hospital Presidente German Busch Hospital Materno Infantil, covering Cercad, Mamore and Yacuma provinces. Medical boats, used for the demonstration experiment of the development study, have been already operated at Mamore River, covering riverside communities and remote CS/PS.

Trinidad has nurse education programs of auxiliary nurses and licensed nurses, and the programme intends to enhance the nurse education system. It promotes long-term education and training structure with cooperating those institution, Hospital Universitario Japones and CENETROP for enhancing managing hospitals and health centres.

### 3) Programme in South Area

The target area is Moxos and Marban Provinces, and medical boats will be operated at Isiboro River whose service area includes Santisima Trinidad, the demonstrating experiment site. Some CS is required to play the role of the transfer point among top referral hospital in the two provinces due to the fact that emergency cases refer Cochabamba and Santa Cruz.

CSA BOL/S 125/01 M/P

PRESENT STATUS
Delayed
Discontinued or Cancelled

### **Description:**

(FY 2003 Domestic Survey)

There is no information available on the current situations of this project.

(FY 2004 Overseas Survey)

1. Cause of delay

Since Bolivia has faced economic crisis, it is difficult to allocate the national budget of health sector to rural areas in the country. In addition, it is impossible to adopt design adjustment to M/P since it has own principles and policies.

2. Other status

- 1) Dispatch of Japan's Senior Volunteer (SV) and Japan Overseas Cooperation Volunteers (JOCV)
- One SV specialised in hospital management (December 2003 December 2005)

For improving management capability of 2 hospital and medical centre in Trinidad.

- Two JOCV members (- 2006)

For regional development and maternity medical affairs at obstetrics departments, medical centre in Nueva Trinidad.

- 2) Approval of the grant of medical equipment to Trinidad city
- The request wasw approved in September 2004
- Procurement for installation aiming to complete in 2005 is now in progress.
- 3) Approval for Economic Grant aid for the improvement in health team in southern Beni region.
- The B/D team was dispatched in January 2005.
- There is a possibility of coordinating with other international agencies to cover southern area extensively.

(FY 2005 Domestic Survey)

Currently, the grant aid project, SV and JOCV programmes are conducted, and the dispatch of JOCV teams is also planned.

(FY 2005 Overseas Survey)

Following activities has been conducted.

- 1. Cooperation from provinces, municipalities, SEDES (Provincial health service department), local residential organizations, and local residents 2. Improvement of health management system, hospital management, maintenance of medical facilities, and capacity development of families and local medics. 3. Implementation of sustainable P/S
- 4. Establishment of offices for survey and research 6. Improvement of following targets: local authorities at municipalities which have responsibilities for rehabilitating medical infrastructure and building capacities of the staff that are covered by the development study; basic services towards local residents such as electricity; neighborhood roads.

(FY 2006 Domestic and Overseas Survey) (FY 2007 Domestic Survey)

Implemented project: Planning of the improvement of medical and health facilities in the south of Beni Department (Proyecto de Mejoramiento para las Unidades de Salud en la Zona Sur de la Prefectura del Beni)

Implementing period: September 2005 - August 2007

Implementing body: JICA (grant aid)

Funding:

Funding party: JICA (E/N concluded: 24 August 2005)

Funding amount: 847 million JPY (Constructing cost: 508.7 million JPY, equipment cost: 216.8 million JPY, design supervision: 122.2 million JPY)

Purpose: Based on the survey of the study, the Government of Bolivia constructed hospitals, health centres and clinics and purchased medical equipment in order to establishing the district health and medical network for 3 provinces of Cercado, Moxos and Mamore in the south of Beni Department in June 2003.

Contents: Targeting 25 facilities (1 auxiliary nurse school, 7 health centres, 14 clinics and 3 hospitals) in the three provinces

Building planning:

1) 1 auxiliary nurse school (RC two-stories, 780sq. m), 2) 5 health centres (RC one-story, 324sq. m), and 1 clinic, 3) 2 new clinics (RC one-story, 182sq. m) 4) Building extension: 2 hospitals (RC one-story, 283.5sq. m)

Equipment planning:

- 1) To auxiliary nurse school: nursing practicing equipment, treatment practicing equipment, and general equipment
- 2) To health centre: general diagnostic equipment
- 3) To 14 clinics: general treatment, medical checkup equipment, dental procedure equipment, communication equipment, and general equipment
- 4) To 3 hospitals: general treatment equipment, medical checkup equipment, special examination, transporting devices equipment, and general equipment

Beneficiary: local residents in 3 provinces of Cercado, Moxos and Mamore in the south of Beni Department.

Technical cooperation

Trainings: medical checkup and nursing (37 people, 21-25 September 2006, 4-18 February 2007)

Other: Dispatching JOCV team (nursery staff, nurses and teachers of Japanese language)

Progress:

(FY 2006 Domestic and Overseas Survey) 49.6% as of September 2006 (projected: 54.29%)

(FY 2007 Domestic Survey) While the project supposed to finish in March 2007, the flood on February had cut off equipment distribution channel for 5 facilities, and one facility was flooded above water level. The project was approved by Ministry of Foreign Affairs as incidental carryover till August with waiting period from March to June. The project completed on July 2007, and facilities are now in operation. After the project implementation, necessity of implementing the project at Vaca Diez was became clear.

### Others:

The request of contributing medical equipment to Trinidad City was approved in September 2004.

On September 9, 2005, the medical equipment (maternal medical devices, basic medical devices for maternal health, medical devices for house visit, medical devices used in treatment and examination rooms and inspection devices for throat: 128,938.48 USD) were delivered to following hospitals: German Busch Hospital; Infantile Bolivian-Japanese Maternal Hospital; Pedro Marban Healthecare Center; San Vicente Healthecare Center; and Pompeii Healthecare Center.

On May, 2006, condition of medical equipment were checked, reported to JICA for problems, and have been repaired by the supplier.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Jun.2009
CSA BOL/S 101/07
Revised Jul.2009

|    | DODING TOTAL  | , ,  |  | Tte ( isea                                |  |  |
|----|---|--|--|---|--|--|
| 1. | COUNTRY   | Bolivia  |  |   |  |  |
| 2. | NAME OF STUDY                                       | The Study on Pr  | reventive Measures Against Road Disasters on Main N  | lational Roads in the Republic of Bolivia |  |  |
| 3. | SECTOR  | Transportation   | / Road   | 4. TYPE OF STUDY M/P                      |  |  |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |  | ADMINISTRADORA BOLIVIANA DE CARRETE  | RAS (ABC)                                 |  |  |
|    | PRESENT COUNTERPA                                   | ART AGENCY   |  |   |  |  |
| 6. | OBJECTIVES OF THE STUDY                             | 1) Building an appropriate road inspection and maintenance system 2) Cultivating the necessary human resources through the following activities: a) road disaster hazard diagnosis, b) formulation of slope repair and disaster countermeasure works, c) design supervision, estimation and construction supervision of slope countermeasure works and road structures |  |   |  |  |
| 7. | CONSULTANT(S)                                       | Central Consultant, Inc. Earth System Science Co.,LTD  |  |   |  |  |
| 8. | STUDY PERIOD  | Oct.2005 ~   | Oct.2007 24month(s)  |   |  |  |
| 9. | SITE OR AREA  |  | s located in mountainous and hilly terrain, and covers oute 16, 275km along Route 3, 172km along Route 4 |   |  |  |

### 10. MAJOR PROPOSED PROJECT(S)

- <Project-1: Project on Establishment of Road Disaster Preventive Department (unit)> The department or the unit is chiefly expected to play an important role as a leader in execution and one of the information centers for disaster preventive management in ABC. It is necessary that some experts and engineers including project manager, geological/geotechnical engineers, and hydrologist, and design/cost evaluation engineers, financial and judicial experts participate in the project.
- <Project-2: Project on Road Disaster Preventive Technology Improvement> The main activities of the project are technology transfer, provision of basic information and building up database in road disaster preventive management to ABC personnel concerned.
- <Project-3: Project on Establishment of Road Disaster Preventive Management System> After completion of the system building, risk sections along all national highways will be identified and proper countermeasures against road disasters will be clarified and carried out before occurrence of disasters. Moreover, disaster records and inspected information on road slopes will be compiled as a database in the project.
- <Project-4:Project on Improvement of Emergency Response in Disaster Prevention> In establishing the warning / evacuation system, it is considered that introduction of early warning system and setting up cooperative relation with military, police and local entities concerned, etc. are the most important matters to do immediately. On the other hand, emergency response includes quick adoption of the private sectors, selection and proposal of proper measures, strengthening relation with SEPCOM, and development of legal system on declare of disaster emergency.
- <Project-5: Project on Road Information Enhancement and Discloser> The major tasks are wide dissemination of information to the public through the bulletin and Website of ABC, holding seminars and training courses in cooperation of societies and universities, and communication with stakeholders, and so on.
- <Project-6: Project on Improvement of Tender Procedures in Road Disaster Prevention> At present, owing to some overseas technical assistant projects, such as the ISO9000 achievement project by WB and the administrative improvement project by CIDA, the part of the above .mentioned problems have been improved gradually rather than before.
- <Project-7: Project on formulation of Strategy Program of Disaster Prevention Budget> National Annual Budget (TGN), National Road Maintenance Budget (CNCV), Local Contribution Budget, and Overseas Assistance Fund, etc. are considered as target budgets and funds. On the other hand, new additional financial resource, for example, "Road Disaster Preventive Fund" is conceivable to be one of the promising funds to be obtained. In promoting the project, adequate judgment and proper action taking into account political and social conditions are strongly required.

CSA BOL/S 101/07 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

(FY 2008 Domestic Survey)

Implemented project: The Project for Capacity Development for Road Disaster Prevention and Bridge Management and Maintenance (Technical cooperation project) Cooperation period: 1 January, 2009 - 31 March, 2012

Counterpart body: Bolivian Administrator of Highways (ABC)

Project Purpose: ABC improves its technical capability of road disaster prevention and management and maintenance of bridges.

Background: The development study proposed 1) "capacity development plan," which indicated various measures that Bolivian government must take, specially for disaster prevention, and 2) an appropriate institutional arrangement to implement those measures. Based on these proposals, the Disaster Prevention Office was established in the implementing body (ABC) to enhance its operational capacity. However, it is still difficult for the government to implement its policies due to lack of experience and technical knowledge regarding disaster prevention. Hence technical cooperation was requested to assist the government in attaining self-sustained management and maintenance skills.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1988
CSA BRA/S 101/75 Revised Jul.2009

| 1.  | COUNTRY  | Brazil   |  |  |  |
|---|--|--|--|--|--|
| 2.  | NAME OF STUDY  | Plano de Construcao da Nova Ligacao Ferroviao Ferroviaria                                      |  |  |  |
| 3.  | SECTOR   | Transportation / Railway 4. TYPE OF STUDY M/P  |  |  |  |
| 5.  | COUNTERPART AGENORME TIME OF DEVELOPME PRESENT COUNTERPA | REFFSA, and ENGEEER  CY AT THE NT STUDY  RT AGENCY   |  |  |  |
| 6.  | OBJECTIVES OF THE<br>STUDY                               | Plan for the construction of a new electrified railway line to carry iron ores.                |  |  |  |
| 7.  | CONSULTANT(S)  | The Japan Electrical Consulting Co., Ltd. Pacific Consultants International                    |  |  |  |
| 8.  | STUDY PERIOD   | May.1975 ~ Dec.1975 7month(s) ~  Belo Horizonte-Itutinga-Sao Paulo; and Itutinga-Volta Redonda |  |  |  |
|   | SITE OR AREA   |  |  |  |  |
| 10. MAJOR PROPOSED PROJECT(S)  Plan for constructing a new electrified railway line: the first phase, a 389km-section between Belo Horizonte and Volta Redonda; and the second phase, a 432km-section between Itutinga and Sao Paulo. The features of the first phase are: preration and rolling stock: max. speed of 60km/h; 9,000-ton hauling capacity per train; 18 trains per day in each direction when opened to traffic, and 105 in 2002  Structures and track: 171 tunnels, 86.9km; 124 bridges, 40.5km; track, broad gauge Electrification: 2 x 25kv, AT feeding system  Signalling and operation control: Automatic blocking, CTC |  |  |  |  |  |
|   |  |  |  |  |  |

**CSA BRA/S 101/75** M/P In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Construction: A U.K. firm was appointed at the international tender in 1976. However, the financial constraints caused the project a long delay. The project was completed and the operation started in 1989. Revised point: The initial plan to construct the 900km-long double-track line connecting Belo Horizonte and Rio de Janeiro was modified to the 320km-long single-track line connenting Jeceaba and Barra Mansa. Effects: Upon the completion of the project, the capability to transfer cargo between Belo Horizonte and Rio de Janeiro has increased by 70%.

(F/S)

Compiled Mar.1986

**CSA** BRA/S 301/77 Revised Jul.2009 1. COUNTRY Brazil Praia Mole Port Construction Project 2. NAME OF STUDY 3. SECTOR / Port TYPE OF STUDY F/S Transportation 5. **PORTOBRAS** COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY To study the feasibility on Praia Mole Port Construction Project. **OBJECTIVES OF THE** STUDY The Overseas Coastal Area Development Institute 7. CONSULTANT(S) Oct.1976 Aug.1977 10month(s) 8. STUDY PERIOD The State of Espirito Santo 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) The construction of a seaport, Praia Mole was planned about 600 km north of Rio des Janeiro Port. Breakwater 7,100m Timber Berth 960m Coal Berth 590m Oil Berth 1set Small Size Ship Berth 350m

プライアモーレ港建設計画

CSA BRA/S 301/77 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |
|                |                          |                           |

### **Description:**

Reasons for Cancellation of the project:

Based on the proposals of the JICA study, OECF pledged a loan of about US\$100 million for the construction of Praia Mole Port. However, at the 2nd Brazil-Japan Ministerial Meeting held in August 1979, the Brazilian Government requested that the loan be used for the construction of Tubarao Port, and the request was accepted. The loan agreement (11,985 million yen) was duly signed in Dec. 1981.

### Situation:

(FY 1991 Overseas Survey)

The Brazilian Government realizes that the construction of Praia Mole Port will be necessary in the future, but that it will be implemented by the private sector participation in accordance with the policy of privatization.

### STUDY SUMMARY SHEET (M/P)

Compiled Mar.1986 **CSA** BRA/S 102/79 Revised Jul.2009

| 1.                            | COUNTRY                            | Brazil   |                     |                              |                  |                         |     |
|-------------------------------|------------------------------------|--|---------------------|------------------------------|------------------|-------------------------|-----|
| 2.                            | NAME OF STUDY                      | Regional Development of the Three States: Espirito Santo, Minas Gerais and Goias |                     |                              |                  |                         |     |
| 3.                            | SECTOR                             | Development Pla  | an / Int            | egrated Regional Developm    | nent Plan 4.     | TYPE OF STUDY N         | M/P |
| 5.                            | COUNTERPART AGENORIES OF DEVELOPME | CY AT THE  | Committee of Th     | aree States                  | ·                |                         |     |
|                               | PRESENT COUNTERPART AGENCY         |  |                     |                              |                  |                         |     |
| 6.                            | OBJECTIVES OF THE STUDY            | Identification of  | export crop deve    | elopment potentials and of a | a related surfac | ce transportation syste | m.  |
| 7.                            | CONSULTANT(S)                      | International Development Center of Japan  |                     |                              |                  |                         |     |
| 8.                            | STUDY PERIOD                       | Jul.1978 ~   | Jul.1979            | 12month(s)                   |                  |                         |     |
|                               | SITE OR AREA                       |  | ea of half a millio | n square kilometers in the s | tates of Minas   | Gerais and Goias.       |     |
| 10. MAJOR PROPOSED PROJECT(S) |                                    |  |                     |                              |                  |                         |     |

The study proposed a transportation system for exporting crops grown in inland areas. The major components are as follows. Railway:

- Anapolis Vitoria 1,819km (some section to be newly constructed)
- Pirapora Vitoria 1,113km (some section to be newly constructed)
- Lengthening(490m) of crossing tracks at stations, installa-

tion of new train-crossing stations, and modernization of the train blocking system

Road: Construction of new feeder roads of 49,000km (1977-85 23,000km, 1985-90 26,000km)

- Port: Expansion of port-head silos at Port Capuaba
  - Installation of additional belt conveyers Storage
  - Production-area warehouses(9.83 million tons)
  - Silos excluding port-head silos (1.05 million tons)
  - Distribution-warehouses(1.92 million tons)

**CSA** BRA/S 102/79 M/P In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Utilization of the Study: Based on the findings of the study, the improvement and development of inland transportation facilities and the port facilities are under way in order to facilitate the agricultural development in the central region. For instance, the production of soybean in Brazil reached 20 million tons in 1989, and the contribution of the Cerrado Area has been growing. As of August 1990, the staff of Rio Doce is following up the improvement of the export corridor to transport soybean and other agricultural products to Vitoria Port.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1988
CSA BRA/S 103/80 Revised Jul.2009

| 1.   | COUNTRY                     | Brazil   |
|------|-----------------------------|--|
| 2.   | NAME OF STUDY               | Establishment of the Fire Fighting Training Center in Brasilia D.F.  |
|      |                             |  |
|      | SECTOR                      | Social Infrastructure / Architecture & Housing 4. TYPE OF STUDY M/P  |
| 5.   |                             | Fire Headquaters of Federal District (CBDF)  |
|      | COUNTERPART AGEN            | CY AT THE  |
|      | TIME OF DEVELOPME           | ENT STUDY  |
|      |                             |  |
|      |                             |  |
|      |                             |  |
|      | DDECENT COLUMN              | DEL A CIPNOSI  |
|      | PRESENT COUNTERPA           | AKI AGENCY   |
|      |                             |  |
|      |                             |  |
|      |                             | Study and training for fire-fighting activities.   |
|      |                             |  |
|      |                             |  |
| _    | OBJECTIVES OF THE           |  |
| 6.   | STUDY                       |  |
|      |                             |  |
|      |                             |  |
|      |                             |  |
|      |                             | Nikken Sekkei Ltd.   |
| 7    | CONCILITANT(C)              | Nikkeli Sekkel Liu.  |
| 7.   | CONSULTANT(S)               |  |
|      |                             | Nov.1980 ~ Mar.1981 4month(s)  |
| 8.   | STUDY PERIOD                | 110V.1900 ~ IVIdi.1901 4IIIOIIIII(8)   |
|      |                             | Brasilia   |
|      |                             | Diasilia   |
|      |                             |  |
|      |                             |  |
| 9.   | SITE OR AREA                |  |
|      |                             |  |
|      |                             |  |
|      |                             |  |
| 10   | MAJOR PROPOSED PR           | OFCT(S)  |
|      |                             | shment of the Fire-Fighting Training Center in Brasilia, the basic design of the facilities and a manual for training programs |
|      | to be compiled.             | islanded of the fire-fighting framing center in brasina, the basic design of the facilities and a mandal for training programs |
|      | asic design of the faciliti | es: Site: 500m x 500m  |
| - 10 | asic design of the faciliti | cs. Site, 300iii x 300iii  |
| Tra  | ining Bldg Indoor Train     | ning Ground, Fire-Fighting Training Bldg. for fires caused by oil, Outdoor Fire-Fighting Training Ground, Water Storage        |
|      |                             | um, Outdoor Circuit Training Ground and research facilities  |
|      | raining program A manu      |  |
| •    | ranning program 71 man      | au for duning modious  |
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CSA BRA/S 103/80 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

On the basis of this study made by the JICA team, the Brazilian Government undertook D/D and completed the construction of the training building, the annex training building and the diving pool.

#### (FY 1995 Overseas Survey)

A laboratory, a complex for oil fire fighting, an auditorium and a gymnasium are to be constructed (A complex for oil fire fighting will be constructed during 1996).

#### Effect

#### (FY 1991 Overseas Survey)

The Training Center was inaugurated in 1985, and the training of fire fighting squads commenced in 1986, utilizing the curriculum suggested by the JICA study. By 1991, 536 professional firemen were graduated from the Center.

During the period of 1987 - 1991, JICA sponsored the third-country training program, inviting a total of 125 trainees from other Latin American countries and Portuguese-speaking African countries.

The training courses have been highly acclaimed by the participants, especially with respect to its primary emphasis on preparedness rather than fire-fighting techniques and its safety precaution during the training sessions.

#### (FY 1997 Overseas Survey)

After the completion of the project, courses for training of trainers are held at new center.

#### (FY 1998 Overseas Survey)

The construction of the facilities proposed by this study have almost completed. In addition, the project have contributed to the enhancement of the fire-fighting skills of the firemen in Brazil as well as those in other country who participated in the third-country training course.

## STUDY SUMMARY SHEET (M/P)

|     |             | Compiled Compiled | Mar.1990 |
|-----|-------------|-------------------|----------|
| CSA | BRA/S 104/8 | Revised Revised   | Jul.2009 |
|     |             |                   |          |

| 1.  | COUNTRY                    | Brazil   |
|-----|----------------------------|--|
| 2   | NAME OF STUDY              | Regional Development Plan of the Greater Carajas Program   |
| ۷.  | NAME OF STUDY              |  |
| 3.  | SECTOR                     | Development Plan / Integrated Regional Development Plan 4. TYPE OF STUDY M/P   |
| 5.  |                            | SEPRE/MPO  |
|     |                            |  |
|     | COUNTERPART AGEN           |  |
|     | TIME OF DEVELOPME          | ENT STUDY  |
|     |                            |  |
|     |                            |  |
|     |                            |  |
|     |                            |  |
|     | PRESENT COUNTERPA          | ART AGENCY   |
|     |                            |  |
|     |                            |  |
|     |                            | Estimation of the export possibilities of products in the greater Carajas area and identification of regional development  |
|     |                            | potentials   |
|     |                            | •  |
|     |                            |  |
| 6.  | OBJECTIVES OF THE          |  |
| ٠.  | STUDY                      |  |
|     |                            |  |
|     |                            |  |
|     |                            |  |
|     |                            |  |
|     |                            | International Development Center of Japan  |
| 7.  | CONSULTANT(S)              |  |
|     |                            |  |
| _   |                            | Sep.1982 ~ Jul.1985 34month(s)   |
| 8.  | STUDY PERIOD               | ~  |
|     |                            | Three states of Para, Maranhao and Goias (a total area of 0.9 million ha and a total population of 7.12 million)   |
|     |                            | Times states of 1 and, Wastanniao and Goras (a total area of 0.9 minion ha and a total population of 7.12 minion)  |
|     |                            |  |
|     |                            |  |
| 9.  | SITE OR AREA               |  |
| ٠.  | SITE ON THEE               |  |
|     |                            |  |
|     |                            |  |
|     |                            |  |
| 10. | MAJOR PROPOSED PR          | OJECT(S)   |
|     | e study was undertaken in  |  |
|     |                            | amined the supply and demand trends in the world market up to the year 2000 over twenty-eight agricultural, livestock and  |
|     |                            | en mining and manufacturing products which were considered to have high production potentials in the Greater Carajas   |
|     |                            | an mining and manufacturing products which were considered to have high production potentials in the Greater Carajas   |
|     | gram Area.                 | And the state of t |
| ın  | the Phase II, the study as | certained development potentials of the selected commodities and products in the priority sub-regions of the Program Area.   |
|     |                            |  |
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CSA BRA/S 104/85 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### Description:

The findings of the Phase 1 study were utilized as basic data for policy formulation by the Ministries of Planning, Mining and Energy and Agriculture.

The private sector has been active in the development of mineral resources (e.g. iron ores), and of agricultural potentials (e.g. cereals, oilseeds and beef cattle). JICA financed the afforestation project along the Carrajas railway.

Valle de Rio Dose, the counterpart company of the study, has been active in environmental conservation and is promoting eucalyptus planting and other measures.

#### (FY 1991 Overseas Survey)

The master plan was incorporated into the National Development Plan, and the following studies were undertaken.

- 1) Carajas Railway Development
- 2) Integrated Development in the Northern and Eastern Carajas

External assistance is needed in the following areas.

- 1) Industrial development (metallurgy & wood processing)
- 2) Agricultural development (tropical forests and cereals in serrado)
- 3) Social development for low-income households (small-scale agriculture and labor-intensive industries)

#### (FY 1995 Overseas Survey)

Agriculture: Cereal Production at Balsas and Pedro Afonso.

Mineral Development: Development of iron ore, manganese and copper in the near future.

Paper Industry (Forest Development): CELMAR will be running by the year 2001.

#### (FY 1997 Overseas Survey)

Studies as follows have been conducted by SEPRE / MPO at the region.

1986~1990 Carajas ~ Sao Luis Region along the Railway Line M/P

Components / Regional infrastructure, Agriculture, Steel manufacture

Cost / 2mil.US\$

1993~1994 Study of Alternative Energy for Metallurgical Industry

Components / Metallurgy, Reforestation, Charcoal, EIA (special emphasize on EIA)

Cost / 0.6mil.US\$

1990~1993 Serrado Grain, Pole Study

Components / Investment promotion for grains for export

Cost / 0.1mil.US\$

### Situation:

(FY 1997 Overseas Survey)

The economic crisis in 1985~1995 had caused decline in public sector investment.

Rising concern to environmental problem in Amazon area has prejudiced against investment for export-oriented private projects.

(M/P+F/S)

Compiled Mar.1990 **CSA BRA/S 201B/87** Revised Jul.2009

| 1.  | COUNTRY                               | azii   |            |  |  |  |  |  |
|-----|---------------------------------------|--|------------|--|--|--|--|--|
| 2.  | NAME OF STUDY                         | ajai River Basin Flood Control Project   |            |  |  |  |  |  |
| 3.  | SECTOR                                | cial Infrastructure / River & Erosion Control 4. TYPE OF STU   | DY M/P+F/S |  |  |  |  |  |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME |  |            |  |  |  |  |  |
|     | PRESENT COUNTERPA                     | AGENCY   |            |  |  |  |  |  |
|     | OBJECTIVES OF THE STUDY               | asibility study on the river improvement project in Blumenau-Gaspar stretch  |            |  |  |  |  |  |
| 7.  | CONSULTANT(S)                         | ppon Koei Co., Ltd.<br>cific Consultants International   |            |  |  |  |  |  |
| 8.  | STUDY PERIOD                          | or.1986 ~ Jan.1988 21month(s)<br>~   |            |  |  |  |  |  |
| 9.  | SITE OR AREA                          | M/P> Itajai river basin with a catchment area of 15,220 sq.km TSS> Blumenau-Gaspar river stretch located at 70km upstream from the river mouth |            |  |  |  |  |  |
| 10. | MAJOR PROPOSED PR                     | ECT(S)   |            |  |  |  |  |  |

<M/P>

River improvement of 73km out of the total river course of 250km, in order to protect urban centers along the river.

| Promising Project                              | Provisional plan | Mid-term plan | Long-term plan |
|--|------------------|---------------|----------------|
| Design Flood                                   | 10-year          | 25-year       | 50-year        |
| River Improvement                              |                  |               |                |
| - Blumenau-Gaspar stretch                      | 24.5km (E)       | 24.5km (E)    | 24.5km (E)     |
| - Floodway and downstream of Itajai Mirim      | 14.5km           | 14.5km (E)    | 14.5km (E)     |
| - Rio do Sul-Lontras and, Ituporanga stretches | 17.4km (E)       | 17.4km (E)    | 17.4km (E)     |
| - Brusque stretch                              | 9.0km (E)        | 9.0km (E)     | 9.0km (E)      |
| - Ilhota stretch                               |                  |               | 3.7km (E)      |
| - Ascurra stretch                              |                  |               | 4.0km (E)      |
|  |                  |               |                |

Note; "E" means enlargement of channel.

<F/S>

River improvement by river channel widening and river dredging, and urban drainage works were proposed in the following area:

- River improvement for main Itajai river (32km) and major tributaries (18km in total)
- Urban drainage in Blumenau (drainage area; 19.24sq.km)

CSA BRA/S 201B/87 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

Subsequent Studies:

D/D implemented by the Brazilian government

Finance:

the government fund

Construction:

80% of construction was completed by 1990. However, due to the economic difficulties, the construction was suspended.

Progress after 1990:

1990 The implementing agency was changed from DNOS to SDR.

Jan, 1994 The development right of Itajai River now belongs to the Santa Catarina provincial government, which is also the implementing agency of this project.

(FY 1991 Overseas Survey)

The project was initially given high priority in the national development strategy and is still high priority project.

(FY 1994 Domestic Survey)

While taking into account the domestic economic situation, the Santa Catarina provincial government expects to receive the financial assistance of the Japanese government.

\* Refer to "Flood Control Project in the Lower Itajai River Basin (BRA/S 302/89)"

(F/S)

|     |              | (F/S) Compiled | Mar.1991 |
|-----|--------------|----------------|----------|
| CSA | BRA/S 302/89 | Revised        | Jul.2009 |

| CS   | SA   | BRA/S 3               | 02/89                              |                   |                       |                        |        |               |     | Revised | Jul.2009 |
|------|--|-----------------------|------------------------------------|-------------------|-----------------------|------------------------|--------|---------------|-----|---------|----------|
| 1.   | COUNTRY  |                       | Brazil                             |                   |                       |                        |        |               |     |         |          |
| 2.   | NAME OF  | STUDY                 | Flood Control P                    | roject in the Lov | wer Itajai River Basi | n                      |        |               |     |         |          |
| 3.   | SECTOR   |                       | Social Infrastruc                  | eture /           | River & Erosion Co    | ntrol                  | 4.     | TYPE OF STUDY | F/S |         |          |
| 5.   | COUNTERI   | PART AGEN<br>EVELOPME |                                    | Ministerio da aş  | gricultura, departame | ento nacional de obr   | as de  | saneanment    |     |         |          |
|      | PRESENT (  | COUNTERPA             | ART AGENCY                         |                   |                       |                        |        |               |     |         |          |
| 6.   | OBJECTIVI<br>STUDY   | ES OF THE             | To carry out fear                  | sibility study on | flood control projec  | t in lower Itajai Rive | er bas | sin.          |     |         |          |
| 7.   | CONSULTA   | NT(S)                 | Nippon Koei Co<br>Pacific Consulta |                   | 1                     |                        |        |               |     |         |          |
| 8.   | STUDY PER  | RIOD                  | Oct.1988 ~                         | Mar.1990          | 17month(s)            |                        |        |               |     |         |          |
| 9.   | SITE OR AI   | REA                   | Lower Itajai rive                  | er basin with cat | chment area of 601s   | q.km and populatior    | of 14  | 47,000        |     |         |          |
| 10.  | MAJOR PR   | OPOSED PR             | OJECT(S)                           |                   |                       |                        |        |               |     |         |          |
|      |  |                       | 9km in length, de                  | esign flood of 12 | 230cu.m/s)            |                        |        |               |     |         |          |
|      | tiver improvement work in Itajai river (23km in length, design flood of 2770cu.m/s)      |                       |                                    |                   |                       |                        |        |               |     |         |          |
|      | River improvement work in Itajai Mirim river (8km in length, design flood of 65cu.m/s)   |                       |                                    |                   |                       |                        |        |               |     |         |          |
| 4.Iı | mprovement work of existing short-cut channel (4km in length, design flood of 670cu.m/s) |                       |                                    |                   |                       |                        |        |               |     |         |          |

- 5.Urban drainage works (construction of regulating ponds, pump stations, etc.)

CSA BRA/S 302/89 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### Description:

Reasons why the project has come in to practice:

(FY 1998 Overseas FU Survey)

- 1. The government has shown a clear policy toward flood control.
- 2.Itajai River Channel Committee was established.
- 3.An environment was developed for implementation of the project due to the organizational reform inside executive of Santa Catarina State Government.

#### Subsequent Studies:

(FY 1997 Domestic Survey)

Aug.1997~Feb.1998 EIA

Fund of Santa Catarina State Government approx. 1.5 mil.US\$

#### Finance:

(FY 1997 Domestic Survey)

26 Aug. 1996 E/N Japan's ODA Loan 17,596 mil.yen (Flood Control Project in the Lower Itajai River Basin)

(FY 1997 Overseas Survey)

Government budget R. 129.970 mil

\* Contents: Construction works for rehabilitating Itajai River.

#### Construction:

(FY 1999 Domestic Survey)

Construction has not been commenced yet.

#### Detail:

(FY 1991 Overseas Survey)

The project implementation is somewhat delayed owing to the on-going reorganization of the Federal Government. The priority of the project remains high and the urgent need of implementation is recognized. The Government is working on the budget allocation to facilitate the implementation.

(FY 1994 Overseas Survey)

The Santa Catarina provincial government has been expecting the financial assistance by the Gov't of Japan, and examining the request taking into account the domestic economic and political situations.

(FY 1995 Overseas Survey)

The priority of this project remains high among Federal Government and the provincial government. The negotiation between the provincial government and related NGO has been started.

(FY 1997 Overseas Survey)

Some proposed countermeasures have been taken through projects of Santa Catarina State.

(FY 1998 Domestic Survey)

It is planned to decide the implementation of the project, on a basis of the results of EIA.

(FY 1999 Overseas Survey)

The new state government that took place in Jan. 1999 has clearly manifested its political will on project implementation.

(M/P+F/S)

Compiled Mar.1992 **CSA** BRA/S 202B/90 Revised Jul.2009

| 1.  | COUNTRY                           | Brazıl                         |                |                               |                 |               |                    |                 |              |
|-----|-----------------------------------|--------------------------------|----------------|-------------------------------|-----------------|---------------|--------------------|-----------------|--------------|
| 2.  | NAME OF STUDY                     | Disaster Prevent               | ion and Restor | ration Project in             | Serra do Mar, C | Cubatao Regio | on                 |                 |              |
| 3.  | SECTOR                            | Social Infrastruc              | cture /        | River & Erosion               | Control         | 4.            | TYPE OF STUDY      | M/P+F/S         |              |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME | CY AT THE                      | Secretaria de  | Meio Ambiente<br>ETESB, DAEE, |                 | o de Pesquisa | as Tecnologicas do | Estado de Sao l | Paulo (IPT), |
|     | PRESENT COUNTERPART AGENCY        |                                |                |                               |                 |               |                    |                 |              |
| 6.  | OBJECTIVES OF THE<br>STUDY        | To formulate     To conduct fe |                |                               |                 |               | ects.              |                 |              |
| 7.  | CONSULTANT(S)                     | Nippon Koei Co<br>NIKKEN Consu |                |                               |                 |               |                    |                 |              |
| 8.  | STUDY PERIOD                      | Nov.1989 ~                     | Jan.1991       | 14month(s)                    |                 |               |                    |                 |              |
|     | SITE OR AREA                      |                                | Cubatao Regio  | n (252 sq.km) in              | the State of Sa | o Paulo       |                    |                 |              |
| 10. | MAJOR PROPOSED PR                 | OJECT(S)                       |                |                               |                 |               |                    |                 |              |

<M/P>

- 1) Sediment Run-off Prevention Plan...32 sabo dams, 11 channel works with total length of 5.7 km.
- 2) Flood Prevention Plan
- 1. Cubatao River Improvement.. discharge tunnel 600m, river improvement 6.7km.
- 2.Moji River Improvement...river improvement 9.5m
- 3) Forest Restoration Plan...20,000 seedlings plant in 20 replantation areas. (target year 2000)
- 4) Non-structural Measures...hazard maps, etc.

- 1) Sediments Run-off Prevention Plan...9 sabo dams, designed for the probable sediment discharge of about a 25-year return period, which is approximately equal to the post maximum discharge of 1985.
- Six (6) channel works including ground (downstream from Sabo damsite with a length of about 3km in total)
- 2) Moji River Improvement Plan...river/improvement of 4.5km for 10-year probable flood
- 3) Forest restoration plan...20,000 seedlings (height 0.4-1.0m)

CSA BRA/S 202B/90 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Promoting

Completed

Delayed or Suspended

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

Finance:

(FY 1999 Overseas Survey)

1.6 mil. US\$ were spent from 1994 to 1998 for dredging works.

M/P

(1)Non-structural Measures such as hazard maps development

(FY 1998 Overseas Survey)

Implemented

(2)Sediment Run-Off Prevention Plan

The Brazilian government is now considering the possibility to receive the financial assistance from either the World Bank or the Japanese government.

(3) Flood Prevention Plan

The Brazilian government is planning to implement the project with own fund.

(FY 1998 Overseas FU Survey)

Improvement of Moji River is proceeding faster then as scheduled.

(FY 1999 Overseas Survey)

Dredging of 739,000m3 of Moji River, Piacaguera River and Cubatao River were implemented from 1994 to 1998.

(4) Forest Restoration Plan

(FY 1998 Overseas FU Survey)

Afforestation works are proceeding as scheduled, however, landslide prevention measures are still important as current measures are not prudential.

(FY 1999 Overseas Survey)

Implantation of 3 experimental forests are implemented for research and studies(1992-2004) on atmospheric pollution influence.

Detail

(FY 1991 Overseas Survey)

Secretaria de Meio Ambiente (SMA) and relating agencies have been making efforts to implement the projects proposed by M/P.

Although priority of this project is high, the financial arrangement for the implementation has been delayed due to the political and administrative reasons.

# STUDY SUMMARY SHEET (M/P)

 CSA
 BRA/S 105/91
 Compiled Mar.1992

 Revised
 Jul.2009

| 1.  | COUNTRY   | Brazil  |   |            |                 |       |
|---|---|---|---|------------|-----------------|-------|
|   | NAME OF STUDY   | Urban Transport   |   |            |                 |       |
| 3.<br>5.  | SECTOR  COUNTERPART AGENTIME OF DEVELOPME  PRESENT COUNTERPA  | CY AT THE<br>NT STUDY   | / Urban Tran  | sportation | 4. TYPE OF STUD | Y M/P |
| 6.  | OBJECTIVES OF THE STUDY   |   | ly on urban transport.                                  |            |                 |       |
| 7.  | CONSULTANT(S)   | Chodai Co., Ltd<br>Yachiyo Engine   | ering Co., Ltd.   |            |                 |       |
| 8.  | STUDY PERIOD  | Oct.1989 ~  | Jun.1991  | 20month(s) |                 |       |
| 9.  | SITE OR AREA  | ]   | Belem/Ananindeua  |            |                 |       |
| 10  | MAJOR PROPOSED PR   | OIFCT(S)  |   |            |                 |       |
| (1)N<br>1) T<br>2) C<br>3) I<br>(2)<br>1) T<br>2) C | Medium Term Plan(1990-<br>Frunk Road Construction<br>Construction of Public Bu<br>mprovement of Intersecti<br>Long term Plan (2001-20 | -2000) & Improvement: as Facilities: 21 p ion, Road Width 210) & Improvement: as Facilities: 10 p | Widening, US\$1.5 million  10 projects, US\$160 million | 1          |                 |       |
|   |   |   |   |            |                 |       |
|   |   |   |   |            |                 |       |

CSA BRA/S 105/91 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

#### (FY 1997 Overseas Survey)

Review study is necessary because seven years have passed since the completion of the study and territory composition of RMB Belem Metropolitan Region has been changed in 1996.

Data and information obtained through the study have been utilized for formulation of RMB strategy and so on.

The urban transport is one of the top priority matters of the Government because of aggravation of traffic problem in big cities.

Reasons that F/S has not been carried out are 1- extinguishment of EBTU which was responsible for urban transport at national level, by administrative reform, 2- CTBel was established when administration of RMB transport system was transferred to Belem Municipality, but CTBel did not incorporate the projects proposed by the study into its action plan.

#### (FY 1998 Overseas FU Survey)

Although the finance of Para State is stable at present(as of May 1999), it is impossible to implement the project with only the urban development fund and CTBel fund. Therefore, financial assistance by BINDES(Social and Economic Development Bank) is required. However, as a measure against recent economic crisis, the budget for plant and equipment investment in public sector is tighten and as a effect the possibility of implementing the project is low in medium term. At present, BINDES is considering to implement this project as a loan by private initiative. In order to realize an early implementation of main projects, the Brazil Cooperation Agency is requesting JICA to conduct a review survey on PDTU.

#### (FY 2000 Domestic Survey)

It is expected that the Review Study by JICA (Jun. 2000- Mar. 2001) will promote new development.

#### Construction:

#### 1. Trunk Road Construction & Improvement

The Construction of Belem Highway was started after its name was changed to "Workers Highway" and a little modification was made to the initial plan like the utilization of the existing stretches.

#### (FY1994 Domestic Survey)

The movement for implementation of the study is not yet realized, although the improvement of some road sections, that the M/P recommended, were carried out by the Local Government's efforts.

#### (FY 1998 Overseas FU Survey)

The construction of flyover in Almirante is about to start at last after the discussion with state government.

The extension project of Purimeiroddzenburo Street is under construction by CTBel under FY 98 budget.

#### (FY 1999 Overseas Survey)

A Part of Belem Highway was developed.

Pedro Miranda Road(Pedro Alvares Cabral-Mendara residential area): implementing

Coqueiro Road, Tapana Road, Bengui Road: implemented

#### 2. Construction of Public Bus Facilities

It is considered difficult to implement the proposed Terminal projects due to financial/political reasons. There is a perspective that a private firm will establish a terminal at the place near one proposed in this Study.

The first Terminal is located on BR-316 Highway and will be operated by Marituba Enterprise.

The assistance of JICA is desired for the smooth implementation of the project.

#### (FY 1999 Overseas Survey)

- 4 integrated bus terminals were constructed by bus company.
- 1.Two platforms were constructed on both sides of Ananindeua City and BR316 Highway.
- 2. Coqueiro station was constructed near 40HORA Road in Ananindeua City.
- 3.Marex station was constructed on Julio Cesar Ave., which is near to Belem Airport.

#### Background:

Para State and Belem Municipality are anxious to execute the feasibility study continously. However, the Department of the Central Government as for the urban transport is not yet determined. The request for feasibility study has not arrived at the ABC, the window for technical cooperation.

Because of the change of the Brazilian Central Gorvernment Adiministration, the Government policy for technical cooperation might change. However, no movements are observed until now.

#### (FY 1995 Overseas Survey)

The executing agency has been changed to CTBel (Urban Transport Company of Belem). However, due to the improper Transferrence of the duties concerning this project, there are some difficulties to continue the project.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1995
CSA BRA/S 101/93 Revised Jul.2009

| 1.  | COUNTRY                     | Brazil                                      |  |  |
|-----|-----------------------------|---|--|--|
| 2.  | NAME OF STUDY               | Recuperation of the Guanabara Bay Ecosystem |  |  |
| 3.  | SECTOR                      | Administration                              | / Environmental Problems 4. TYPE OF STUDY M/P  |  |
| 5.  |                             | •   | FEEMA(Fundacao Estadual de Engenharia do Meio Ambiente)  |  |
|     | COUNTERPART AGENO           |   |  |  |
|     | PRESENT COUNTERPA           | ART AGENCY                                  |  |  |
| 6.  | OBJECTIVES OF THE STUDY     |   | master plan for the water pollution control and the recuperation of Guanabara Bay's ecosystem. |  |
|     |                             | KOKUSAI KO                                  | GYO CO., LTD.  |  |
| 7.  | CONSULTANT(S)               |   |  |  |
| 8.  | STUDY PERIOD                | Mar.1992 ~                                  | Mar.1994 24month(s)  |  |
| 9.  | SITE OR AREA                | Guanabara bay                               | (400 km2) and its basin(4,000km2)  |  |
| 10. | MAJOR PROPOSED PR           | OJECT(S)                                    |  |  |
|     |                             |   | Joint TP for Sea-product processing factory  |  |
| Noi | rtheastern Basin: Stabiliza | ation Pond, Land                            | d use control  |  |
| Noi | rthwestern Basin: Primary   | y STP + Stabiliza                           | tion Pond, Land use control, Joint TP for Petrochemical factories                              |  |
| We  | stern Basin: Primary STF    | P + Ocean outfall                           | system, Imp. of Sanitary services in Favela  |  |
|     |                             |   |  |  |

**CSA BRA/S 101/93** M/P

In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled

#### **Description:**

(1) Pre-condition project: Sewerage System Construction (IDB/OECF)

1.Western Basin

Finance: Mar.1994 L/A 31,475 mil. Yen (Guanabara Basin Sewerage System Construction Project)

Construction:

(FY 1996 Domestic Survey) Jun.1994~1999 Construction of three primary STP. Consultant / PCI

2.Eastern Basin

(FY 1997 Domestic Survey)

Finance:IDB

Construction: under construction. (IDB plants to fund Phase II. OECF has not decided yet to fund Phase II.)

Effect:

(FY 1996 Domestic Survey)

1) Improvement of sanitary condition in the target area. 2) Recuperation of ecosystem inside the Bay 3) Upgrade of the value of target area as tourist and recreation

Impact on Surrounding Area:

(FY 1996 Domestic Survey)

If this project is concluded with the improvement of Sewerage system and the primary treatment, the sewage will be released to the Bay. As a result, the worsening of water quality will not be halted. Thus, it is predicted to be difficult to recuperate the ecosystem, which was the primary aim of this Project. Remaining Project:

(FY 1997 Domestic Survey) Primary STP in the north-western basin will be constructed within Sewerage System Construction Phase II.

#### (2)JICA proposed projects

Subsequent Study:

The Study Team recommended to FEEMA to implement the F/S for the countermeasure examination to reduce inflow load and stored load of the Eastern Basin. FEEMA presented the planning form of F/S based on the recommendations in June, 1994 to ABC (Brazilian Cooperation Agency). ABC requested to JICA to implement the F/S planned by FEEMA in July, 1994.

(FY 1995 Domestic Survey)

The Embassy of Japan in Brazil conveyed above-mentioned official request to the Ministry of Foreign Affairs of Japan. However, the Ministry has not taken up this project as yet as the Ministry worries about some conflict with the Sewerage Project of IDB which is implementing at the eastern basin of the Guanabara Bay. Kokusai Kougyo Co., Ltd. have explained to JICA that there is no such a kind of problem about the coflict on the occasion of JICA's hearing held on May, 1995. On the other hand, the Local Government of Rio de Janeiro had requested to Japanese side to implement the project in early stage.

(FY 1997 Domestic Survey)

Department of Construction, Rio de Janeiro State has submitted a request to Japanese Government for a subsequent study. Target area has been enlarged from eastern basin to the whole basin.

(FY 1998 Domestic Survey)

The request for F/S by JICA has not been approved since it is afraid that this F/S will compete with the phase I of the IDB/OECF project which is under implementation.

#### Background:

The Province of Rio de Janeiro plans to become a candidate of the 2004 Olympic. At present, it gives the first priority to the improvement of the sewerage system in Rio and the surrounding area and desires to realize it in Phase II of IDB/OECF Project. Phase II is planned to be commenced in 2000. Therefore, a development Study to determine the project content in Phase II must be implemented in 1998~1999. The Provincial government is presently examining possibilities to implement it with the JICA assistance. While IDB plans to finance the Phase II, OECF has undecided.

#### (FY 1995 Overseas Survey)

This Study was utilized to establish the strategy plan for recuperation of the Guanabara Bay ecosystem. Especially the result which says the control of insolubility is important for water improvement suggests the review of the project. In the Phase I of IDB project, removal of Phosphours has been considered, then removal of insoluble material will surely be included in the Phase II.

(FY 1997 Domestic Survey)

Even though the Phase I of Sewerage System Construction (IDB/OECF) is completed, 39% of sewerage will be primary treated and 17% will be secondary treated out of whole sewerage produced in the basin, leaving 44% untreated.

Moreover, both primary and secondary treated sewerage will be discharged into the bay causing rather deterioration of quality of water.

Therefore, Phase II to reduce the area where sewerage is not treated and raise the ratio of second and third treatment is necessary.

JICA study (M/P) team recommended that treated sewerage must be discharged into out of the bays and examined about construction of facilities. In addition to these recommendations, measures against the sources of emission such as factory, slums and so on must be examined by F/S

IDB understands the effectiveness of the pollution simulation model used by JICA M/P survey and requested to prepare the Phase II plan utilizing the model. (FY 1997 Overseas Survey)

The state government of Rio has started negotiation with international financial organizations, especially IDB and OECF, for the implementation of the Phase 2. (FY 1998 Overseas Survey)

The outputs of this study is utilized since it corresponds the policy of the government of Rio de Janeiro.

**(F/S)** 

Compiled Sep.1995

| CS                                   |  | _  |  | I                                 | Revised | Jul.2009 |
|--------------------------------------|--|--|--|-----------------------------------|---------|----------|
| 1.                                   | COUNTRY  | Brazil   | D " D '  |                                   |         |          |
| 2.                                   | NAME OF STUDY  | Navigation of th   | ne Parnaiba River Basin                                    |                                   |         |          |
| 3.                                   | SECTOR   | Transportation   | / Port   | 4. TYPE OF STUDY F/S              |         |          |
| 5.                                   |  | 1  | Secretaria de Planejament do Estado do Piaui (SEPLA)       |                                   |         |          |
|                                      | COUNTERPART AGEN<br>TIME OF DEVELOPME  |  |  |                                   |         |          |
|                                      | PRESENT COUNTERPA  | ART AGENCY   |  |                                   |         |          |
|                                      | I  | To investigate t   | he possibility of ship transportation along the Parnaiba F | River.                            |         |          |
| 6.                                   | OBJECTIVES OF THE STUDY  |  |  |                                   |         |          |
| 7.                                   | CONSULTANT(S)  | Pacific Consulta   | ants International   |                                   |         |          |
| 8.                                   | STUDY PERIOD   | Dec.1992 ~   | Mar.1995 27month(s)  |                                   |         |          |
|                                      |  | Upper reaches t  | o lower reaches of the Parnaiba River (approx. 1,400m)     |                                   | -       | -        |
| 9.                                   | SITE OR AREA   |  |  |                                   |         |          |
| Wa dur as f (1)! (2)! (3)! (4). (5)! | ing the rainy season and<br>for the major works, the f<br>Renovate the lock at Boa | River changes 1. in between upper followings will be Esperanca. (7 to 8 ports from X 30 ships) ng the routes. ortation administr | Sta. Filomena in upper reaches to Teresina in middle re    | nded respectively. In order to ma |         |          |
|                                      |  |  |  |                                   |         |          |

CSA BRA/S 306/94 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### Description:

#### 1. The Pilot Project

On March, 1995, when this survey work completed, it has been requested to implement the pilotage works, which was recommended by the survey report, before the commencement of full-scaled ship transportation. In order to implement the pilotage works, an organization for the ship-transportation along the Parnaiba River is going to be established. A VIP, who has been interested in this ship-transportation, has been elected and established a good connection with the Central Government. According to some information, he already got some of budget allocation for this project. However, more details are not available.

#### (FY 1995 Overseas Survey)

The Pilot Project is on approval stage by the Federal Government.

#### (FY 1996 Domestic Survey)

The Brazilian government has approved the implementation of the pilot project. The counterpart has an intention to request a loan to the Japan Export and Import Bank.

#### (FY 1996 Overseas Survey)

The request was submitted to JICA to implement a study to determine ships suitable to the operation in the Parnaiba River Basin.

#### (FY 1997 Domestic Survey)

Federal Government considers that the project is indispensable for Serrado agricultural development. Therefore, the project will be implemented under cooperation of Piaui State, Maranhao State and Tocantin State.

The Government has requested a loan to Japan's Ex.Im.Bank for the pilot project (construction of a pilot vessel)

#### (FY 1997 Overseas Survey)

Request for loan with amount of 14.8mil.yen for Pilot Project was submitted to EXIM.Bank. of Japan in Sep.1996.

0.5mil.US\$ will be allocated from the government budget. Implementation period is 2 years.

#### (FY 1998 Overseas FU Survey)

Not only the economic development of Piaui State can be expected but also cost reduction in transportation by water, and improvement of social environment in the area of approx.1,500km2 are expected. However, the project has not proceeded as state budget is not allocated yet.

#### (FY 1999 Overseas Survey)

In Sep. of 1999, the government of Brazil has decided to appropriate the pilot project expenditure in the national budget of 2000.

The government of Brazil has not yet received an answer of financing from Japan's Ex.Im. bank.

### 2 The Rout Arrange in River Basin

(2000 Domestic Survey)

Piaui State requested the governmental budget (395mil US \$).

(M/P)

Compiled Jul.1996

|   | SA BRA/S 106/<br>COUNTRY   |  | Revised | Jul.2009 |
|---|--|--|---------|----------|
| 1.  |  | Brazil The Utilization of Water Resources in Parana State  |         |          |
| 2.  | NAME OF STUDY  |  |         |          |
| <u>3.</u> <u>5.</u>                           | COUNTERPART AGEN TIME OF DEVELOPMI   |  |         |          |
|   | PRESENT COUNTERPA  | ART AGENCY   |         |          |
|   |  | Elaboration of Integrated Water Resources Development Plan on each water use fields (target year:      | 2015).  |          |
| 6.  | OBJECTIVES OF THE STUDY  | Proposal on legislation of organization and improvement of water maintenance.                          |         |          |
| 7.  | CONSULTANT(S)  | Yachiyo Engineering Co., Ltd. Nippon Koei Co., Ltd.  |         |          |
| 8.  | STUDY PERIOD   | Mar.1994 ~ Dec.1995 21month(s)  Throughout Parana State (strategy) Iguacu and Tibagi river basin (M/P) |         |          |
| 9.  | SITE OR AREA   |  |         |          |
| 10.   | MAJOR PROPOSED PR  | ROJECT(S)  |         |          |
| 1)(<br>2)(<br>3)(<br>4)(<br>5)(<br>2.N<br>3.E | Uniao da Vitoria Flood P<br>Londorina Water Supply<br>Cascavel Water Supply //<br>Ponta Grossa Water Supp<br>//P on main rivers' basin<br>Elaboration or review on s | /Drainage, F/S Drainage, F/S oly /Drainage, F/S  |         |          |
| 1)  | ROJECT COST<br>Parana US\$ 6,536 mil. 2<br>Tibagi US\$ 1,610.9 mil.  | )Iguacu US\$ 2,919.9 mil.  |         |          |
|   |  |  |         |          |
|   |  |  |         |          |

CSA BRA/S 106/95 M/P

PRESENT STATUS

In Progress or In Use

Delayed

Discontinued or Cancelled

#### Description :

Subsequent Study:

(FY 1998 Domestic Survey)

Although "Londorina Water Supply/Drainage (F/S)" was requested as a JICA development study project that was given first priority by Brazilian government, it was not adopted. After that, there has not been any concrete progress.

#### Utilization of the Outputs:

(FY 1997 Overseas Survey)

This M/P will be referred for new model of water resources management. Moreover, the results of the study have been incorporated into Critiba Metropolitan Regional Plan.

#### (FY 1998 Overseas FU Survey)

Many organizations are related to this project as it is a large-scale project that includes various water resources utilization plans. The project is proceeding in good order and the followings are the main reasons for that:

- 1. The current policy of Parana State government will be contined until 2002.
- 2. The positive correspondance of Parana State government's staffs.
- 3. The existence of CCPG
- 4. The state government's positive policy toward industrialization and its effects.

#### (FY 1999 Overseas Survey)

The study results are utilized as a basic reference for water resources related activities with high credibility.

#### Other:

(FY 1997 Overseas Survey)

Re-evaluation of the project and continuous technical cooperation are necessary to elaborate plans in other areas. The experience obtained through this project will be utilized by other states that have requested for similar project.

(FY 2001 Domestic Survey)

The government of Brazil submitted the request on "Londorina Water Supply/Drainage (F/S)" which was the proposed project by the Study, as the Development Study by JICA in 1998, however, the Japanese government did not adopted.

#### Related project:

Parana State Environment Improvement Plan (PARANASAN)

#### Finance

8 Jan.1998 L/A 23.7 bil yen (Parana State Environment Improvement Plan (PARANASAN))based on M/P formulated by Parana State.

\*Contents of projec

- 1. Water Supply/Drainage Improvement at Critiba Metropolitan and its suburb
- 2. Construction of noxious agricultural chemicals waste disposal facility

#### Construction:

(FY 1998 Domestic Survey)

Oct.1998 Consultant contract was concluded.

Oct.1999 Contractors are to be selected.

#### (FY 2005 Domestic Survey)

Consideration for an implementation of the project is planed, taking into account the result of an election of provincial governor scheduled on Oct. 2006.

L/A has been concluded on January 1998 for a project related to the project proposed in the study.

PARANASAN implemented by a Yen loan from JBIC is still in progress.

### STUDY SUMMARY SHEET (M/P)

Compiled Dec.1999

| CS       | <u>SA BRA/A 120/</u>      | <u>98</u>  |   |   |              |                      | Revised              | Jul.2009  |
|----------|---------------------------|--|---|---|--------------|----------------------|----------------------|-----------|
| 1.       | COUNTRY                   | Brazil   |   |   |              |                      |                      |           |
| 2.       | NAME OF STUDY             | Integrated Deve  | Integrated Development Study for Agriculture and Livestock in Tocantins State |   |              |                      |                      |           |
| 3.       | SECTOR                    | Agriculture  | / (Agrica   | ulture in) General                                      | 4.           | TYPE OF STUDY        | M/P                  |           |
| 5.       |                           | COUNTERPART AGENCY AT THE<br>TIME OF DEVELOPMENT STUDY |   | Agriculture   |              |                      |                      |           |
|          | PRESENT COUNTERPA         | ART AGENCY   |   |   |              |                      |                      |           |
| 6.       | OBJECTIVES OF THE STUDY   |  |   | ent Master Plan of Agricu<br>the Brazilian counterpart. | lture and L  | ivestock with a targ | get year of 2015.    |           |
| 7.       | CONSULTANT(S)             | Pacific Consult  | ants International  |   |              |                      |                      |           |
| 8.       | STUDY PERIOD              | Feb.1997 ~   | May.1998  | 15month(s)  |              |                      |                      |           |
| 9.       | SITE OR AREA              | Entire area of the                                     | ne state of Tocantins(2   | (78,000km2)   |              |                      |                      |           |
| 10.      | MAJOR PROPOSED PR         | OJECT(S)   |   |   |              |                      |                      |           |
| 1.N<br>T | North Region Agricultural | and Rural Deve<br>and to formulate                     | e agricultural production   | on diversification plan incl                            | luding susta | inable grains produ  | action plan, livesto | ck sector |

2.Sustainable Agriculture Promotion Program

Development of environmental monitoring technologies, technologies development related with sustainable agricultural activities

3. Environmental Conservation Program

Environmental Conservation, Green Village

CSA BRA/A 120/98 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

1. Development Plan for Agriculture and Livestock Development in Northern Area

Subsequent Study:

(FY 1999 Domestic Survey) (FY 1999 Overseas Survey)

The state government of Tocantins requested the government of Japan for the implementation of M/P and F/S(Oct.15,1998). In response to this request, a preliminary mission was dispatched by JICA at the end of November, 1999 to conclude the Scope of Services for the study.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2008 Domestic Survey)

Subsequent Studies: Study on Development Plan for Agriculture and Livestock in Northern Tocantins (Development Study)

Cooperation period: 1999 - 2001

Subsequent Studies: Basic survey on industrial unions in Tocantins State (Overseas Development Study)

Cooperation period: 2002 - 2002

There is no progress for "Sustainable Agriculture Promotion Program" and "Environmental Conservation Program".

(Basic Study)

Compiled Dec.1999

|   | SA BRA/A 502            |                  | Revised Jul.2009   |
|---|-------------------------|------------------|--|
| 1.  | COUNTRY                 | Brazil           |  |
| 2.  | NAME OF STUDY           | The Fishery R    | esources Study of the Amazon and Tocnantins River Mouth Areas  |
|   | SECTOR                  | Fishery          | / Fishery 4. TYPE OF STUDY Basic Study   |
| }.<br>•   | DECION                  | 1 15HCI y        | Museu Paraense Emilio Goeldi (MPEG), Instituto Brasileiro do Meio Anbiente edos Recursos Naturas   |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                         |                  | Renovaveis (IBAMA).  |
|   | PRESENT COUNTERP        | ART AGENCY       |  |
|   |                         |                  | e present status of the fishery resources in the Amazon and Tocnantins River Mouth Areas, where hing takes place. 2)To provide a management policy of the fishery resources. |
| í.  | OBJECTIVES OF THE STUDY |                  |  |
|   |                         | Sanyo Techno     | Marine,Inc.  |
| 7.  | CONSULTANT(S)           |                  |  |
| 8.  | STUDY PERIOD            | Mar.1996 ~       | (-)  |
|   |                         | Amazon and T     | Cocnantins River Mouth Areas.  |
| ).  | SITE OR AREA            |                  |  |
|   |                         |                  |  |
| 0.  | MAJOR PROPOSED PI       | ROJECT(S)        |  |
| lec   | commended re-study of t | he fishery resou | rces to obtain accurate data.  |
|   |                         |                  |  |
|   |                         |                  |  |
|   |                         |                  |  |
|   |                         |                  |  |
|   |                         |                  |  |
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|   |                         |                  |  |
|   |                         |                  |  |

CSA BRA/A 502/98 Basic Study

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 1999 Overseas Survey)

Three-month prohibition of commercial fishing during the summer where was proposed by this Study is under discussing in IBAMA. Studies on growth and fisheries of other species besides the seven species of this Study are on-going.

#### (FY 2000 Overseas Survey)

Based on proposal in the study, the following issues are exmained for ministerial ordinances. After a discussion with CONEPE, these ordinances would be proclamated.

- 1. Three-month prohibition of commercial fishing during the summer
- 2. Prohibition of commercial fishing beyond 15,000 ton of fish catch

As to researches, CEPNOR has been monitored commericial fishing in the estuaries of Amazon and Para River. In 2000, 8 field surveys were carried out to check volume of fish catch, waste volume, and fish length. In 2001, CEPTOR will enforce its research activities focusing on piramutaba fishing.

#### (FY 2001 Domestic Survey)

The Study has been implementing continuously. The proposed contents were the promotion of fisheries education, the education and management of fisheries community, the organization and management of fisheries administration and the socio-economic infrastructure improvement on the fisheries industry. However, the progress situation is not known.

(M/P+F/S)

Compiled Jun.2000 **CSA** BRA/S 216/99 Revised Jul.2009

| 1.  | COUNTRY                           | STAZII   |  |  |  |  |
|-----|-----------------------------------|--|--|--|--|--|
| 2.  | NAME OF STUDY                     | he Study on Water Resources Development at the State of Sergipe  |  |  |  |  |
| 3.  | SECTOR                            | Social Infrastructure / Water Resources Development 4. TYPE OF STUDY   M/P+F/S   |  |  |  |  |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME |  |  |  |  |  |
|     | PRESENT COUNTERPA                 | T AGENCY   |  |  |  |  |
| 6.  | OBJECTIVES OF THE STUDY           | <ol> <li>To formulate the Master Plan for Water Resources Development.</li> <li>To conduct the Feasibility Study for the implementation of the priority projects.</li> </ol> |  |  |  |  |
| 7.  | CONSULTANT(S)                     | Yachiyo Engineering Co., Ltd.  |  |  |  |  |
| 8.  | STUDY PERIOD                      | un.1998 ~ Mar.2000 21month(s)<br>~   |  |  |  |  |
|     | SITE OR AREA                      | M/P: The State of Sergipe 6/S: Around Largart City and Itabaiana City in the State of Serigipe   |  |  |  |  |
| 10. | MAJOR PROPOSED PR                 | JECT(S)  |  |  |  |  |

M/P: (Implementation period: Jan. 2000-Dec.2019)

- 1. Water resources Development Project
- 1) Industrial and Municipal Water Supply Project: Integrated System(10 systems, Water Amount Developed 379,399 m3/day)
- 2) Industrial and Municipal Water Supply Project: Integrated System(35 systems, Water Amount Developed 158,351 m3/day)
- 3) Small Rural Water Supply Project(Water Amount Developed 9,353m3/day)
- 4) Irrigation Water Supply Project(Irrigation Area 4,553ha)
- 2. Water Resources Management Program

Institution Plan, Operation and Management, Management Improvement of Water Supply, Operation against Drought

F/S: (Implementation period: Jan. 2002-Dec.2006)

- 1) Vaza Barris Multi-purpose Dam
- 2) Domestic/ Industrial Water Supply Facilities(Itabaiana City Area)
- 3) Domestic/Industrial Water Supply Facilities(Lagarto City Area)
- 4) Irrigation Water Supply Facilities

CSA BRA/S 216/99 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY 2000 Domestic Survey)

The State of Sergipe submitted a consultation letter to SEAIN (Secretariat of International Affairs, the Federative Republic of Brazil) to promote the implementation of the F/S project. At Jan. 2000, the State has not yet accepted the approval from SEAIN. The PROAGUA project (Improvement Project of Water Supply Facilities) loaned by World Bank has been implemented in Itabaiana and Lagarto areas. Besides, the State also plans to promote Xingo Dam Pipeline Project, which was listed up as priority project in the Master Plan but does not included in the F/S project.

#### (FY 2001 Domestic Survey)(FY 2002 Domestic Survey)

Although the State Government established the organization to promote the project and commenced to take the necessary procedures for loan by OECF (present JBIC), the Federal Government denied the loan because of the financial situation of the State.

#### (FY 2003 Domestic Survey)

Application procedure for the JBIC Loan, which had been launched by the Sergipe State government in FY 2001, was rejected by the federal government on the ground of the poor financial condition of the state. On the other hand, there are moves for construction of the San Francisco Pipeline (a project proposed in the master plan) with the objective of water supply in Aracaju City, the state capital, with the change of governor of Sergipe State in 2003 as a turning point.

While the need of the project is large, improvement of the financial condition of the Sergipe State government is the first prerequisite for the implementation. The PROAGUA project implemented by the financing by the World Bank is expected to improve the water shortage condition in Itabaiana - Lagarto region slightly but it will not bring about a radical improvement of a water shortage condition. Therefore priorities of the Vaza Barris Water Resources Development Project" and the Sinngo Dam Pipeline Project", which are JICA's proposed projects, are extremely high. However, when considering the financial condition of the state, continuance of smaller scale projects such as the "municipal independent water supply system improvement project", which has been proposed in the JICA's study, needs to be considered.

#### (FY 2005 Domestic Survey) (FY 2005 Overseas Survey)1

According to the project report, projects mentioned below are being implemented for water resource planning, proposal for basin areas, river scheme, and etc.

- 1. Water resource plan by the state, January 2006-July 2007
- 2. River scheme by the state in the CONAMA resolution 20/97, January 2006-January 2008
- 3. Basin plan of the Piaui, Sergipe, and Japaratuba river, July 2001-May 2006
- 4. Renewal of water balance of the state, May 2001-December 2002
- 5. Instalment of water resource information system, March 2001-December 2007

Part of the projects has been financed by the IBRD.

## STUDY SUMMARY SHEET (M/P)

|              | $(\mathbf{M}\mathbf{P})$ | Compiled May.2001 |
|--------------|--------------------------|-------------------|
| RRA/S 104/00 |                          | Revised Jul 2009  |

| CD   | DA DNA/S 104/0          |                 |   |                 |                       | Reviseu             | Jul.2009 |
|------|-------------------------|-----------------|---|-----------------|-----------------------|---------------------|----------|
| 1.   | COUNTRY                 | Brazil          |   |                 |                       |                     |          |
| 2.   | NAME OF STUDY           | The Study on th | e Environmental Management of the Hydr                                      | rographic Basin | Patos and Mirim in    | Republic of Brazil  |          |
| 3.   | SECTOR                  | Administration  | / Environmental Problems  | 4.              | TYPE OF STUDY         | M/P                 |          |
| 5.   | COUNTERPART AGENO       |                 | SCP (Secretario da Coordinacao e do Pla                                     | nejamento)      |                       |                     |          |
|      | PRESENT COUNTERPA       |                 |   |                 |                       |                     |          |
| 6.   | OBJECTIVES OF THE STUDY |                 | vater quality control plan that underscores the Patos adn Mirim lake areas. | strengthened w  | ater quality monitori | ng activities and w | etland   |
| 7.   | CONSULTANT(S)           |                 | GYO CO., LTD.<br>nts International  |                 |                       |                     |          |
| 8.   | STUDY PERIOD            | Oct.1998 ~      | Sep.2000 23month(s)   |                 |                       |                     |          |
|      | SITE OR AREA            |                 | atos and Mirim Lakes Basin in Rio Grand                                     | e de Sul        |                       |                     |          |
| 10.  | MAJOR PROPOSED PR       | OJECT(S)        |   |                 |                       |                     |          |
| 1) ( | Corrigo Transmant Durit | (E              | I.::4:-1 C4 20 470 000 IICC I1 C4   | M-:             | (4).                  |                     |          |

1) Sewage Treatment Project (Foreign Cost - Initial Cost 30,470,000 US\$, Local Cost-Maintenance Cost):

Construction of Domestic Wastewater Collection and Treatment Facilities for Five Cities: Pelotas, Rio Grande, Sao Lourenco Do Sul, Camaqua, Tapes 2) Solid Waste Disposal Project (Foreign Cost - Initial Cost 8,793,000 US\$ Local Cost-Maintenance Cost)

Construction of Domestic Solild Waste Collection and Disposal Facilities for Five Cities: Pelotas, Rio Grande, Sao Lourenco Do Sul, Camaqua, Tapes

3) Basin Conservation Project (Foreign Cost - Initial Cost 12,040,000 US\$, Local Cost-Maintenance Cost)

Introduction of Environmental Conservation Oriented Agriculture to Cangucu Area.

Prevention of Soil Erosion and Soil Runoff in Sutil and Duro Rivees.

CCA

CSA BRA/S 104/00 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 2001 Domestic Survey)

Rio Grande de Sul State submitted the terms of reference for F/S of the said project to ABC/Brazil in March 2001. The F/S was nominated by ABC to Embassy of Japan at the fourth rank in the priority order. However, it was not adopted by the Government of Japan in 2001.

Rio Grande de Sul State changed its organization structure and Mar de Dentro Project Office, the receiving agency of the study, was dissolved.

As a result, there is no special agency for Mar de Dentro Project in Rio Grande de Sul State.

Incidentally, the governor of Rio Grande de Sul State visited Japan after submission of the terms of reference for the F/S and requested its implementation to JICA and JBIC by himself.

(FY 2003 Domestic Survey) Planning overseas D/S..

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(M/P+F/S)

Compiled May.2001

| CS   | SA BRA/S 2                                       | 05/00                             |                |                 |                       |         |                    | Revised             | Jul.2009   |
|--|--|-----------------------------------|----------------|-----------------|-----------------------|---------|--------------------|---------------------|------------|
| 1.   | COUNTRY  | Brazil                            |                |                 |                       |         |                    |                     |            |
| 2.   | NAME OF STUDY                                    | Study on Storm<br>of Brazil       | -water Drainag | e and Sewerage  | Management plan for   | r Recif | e Metropolitan Are | ea in the Federativ | e Republic |
| 3.   | SECTOR   | Public Utilities                  | /;             | Sewerage        |                       | 4.      | TYPE OF STUDY      | M/P+F/S             |            |
| 5.   | COUNTERPART AGEN<br>TIME OF DEVELOPME            |                                   | SEPLANDES      | (Secretariat of | Planning and Social C | Develop | pment)             |                     |            |
|  | PRESENT COUNTERP                                 | ART AGENCY                        |                |                 |                       |         |                    |                     |            |
| 1. To formulate a Master Plan for Stormwater Drainage and Sewerage Management in Recife Maraget year of 2020 in ordere to improve the urban environment.  2. To conduct a Feasibility Study on the urgent and /or priority projects from the Master Plan.  3. To carry out technical transfer to the counterpart personnel in the course of the Study. |  |                                   |                | -               | a for the             |         |                    |                     |            |
| 7.   | Pacific Consultants International  CONSULTANT(S) |                                   |                |                 |                       |         |                    |                     |            |
| 8.   | STUDY PERIOD                                     | Oct.1999 ~ Jan.2001 15month(s)    |                |                 |                       |         |                    |                     |            |
| 9.   | SITE OR AREA                                     | M/P: 55 Sewage<br>F/S: 7 Sewage S |                |                 |                       |         |                    |                     |            |

### 10. MAJOR PROPOSED PROJECT(S)

M/P:

The 86 sewerage systems proposed for the RMR in the PQA were reviewed and 55 sewerage systems were selected for the Master Plan. By completion of the 55 sewerage systems, the percentage of sewer population will be 91%. The Master Plan was planned to be executed in the following two phases.

- 1. Phase 1 (2001-2010): Improvement of sewerage facilities for the 25 sewerage systems.
- 2. Phase 1 (2011-2020): Improvement of sewerage facilities for the 30 sewerage systems.

F/S:

The 7 sewerage systems proposed as priority projects in the Master Plan were executed. The proposed facilities are summarized as follows,

Trunk Sewer: 125.4km

Pumping Station 81 stations (Rehabilitation: 38 stations, Construction: 43 stations)

Sewerage Treatment Plant 7 plants (Rehabilitation: 2 plants, Construction: 5 plants)

Up-flow anaerobic Sludge Blanket (RAFA) + lagoon and RAFA + biofiltration process were recommended as promising treatment methods in the RMR.

The mechanical dehydration process and the sludge drying bed were applied as the sludge treatment system in the RMR.

CSA BRA/S 205/00 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 2001 Domestic Survey)(FY 2003 Domestic Survey)

SEPLANDES (Secretariat of Planning and Social Development), State of Pernambuco intended to submit the request for Japanese Yen Loan to the SEIN (State Secretariat of Infrastructure), however, it was delayed because the Government of Brazil was very strict against the debt.

(FY 2001 Domestic Survey)(FY 2003 Domestic Survey)

The request for the coordinated D/D supported financially by JICA has been submitted to the Japanese embassy by ABC. However, due to the condition that the execution of the D/D supported financially by JICA requires the submission of request for Yen Loan, it will also be delayed.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2005 Domestic Survey)

Provincial government of Pernambuco has requested the Japanese government for a coordinated D/D on Recife Metropolitan Area waste water treatment facility construction proposed in the F/S conducted in 2001 and 2002. However, request has not been progressed due to unmade coordination between regional and central government.

SEPLANDES has shown its intention to implement the program.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Dec.2007
CSA BRA/S 101/01 Revised Jul.2009

| 1. | COUNTRY                           | Brazil  |  |  |  |  |  |
|----|-----------------------------------|---|--|--|--|--|--|
| 2. | NAME OF STUDY                     | Master Plan Study on Degraded Land Restoration in the State of Para in the Federative Republic of Brazil  |  |  |  |  |  |
| 3. | SECTOR                            | evelopment Plan / Integrated Regional Development Plan 4. TYPE OF STUDY M/P   |  |  |  |  |  |
| 5. | COUNTERPART AGENTIME OF DEVELOPME | Secretaria de Estado de Ciencia, Tecnologia e Meio Ambiente  ( AT THE   |  |  |  |  |  |
|    | PRESENT COUNTERPA                 | T AGENCY  |  |  |  |  |  |
| 6. | OBJECTIVES OF THE STUDY           | Prepare a Master Plan for the Recuperation Plan of Degraded Areas in the target area consisting from: 1) Recuperation f Natural Forests; 2) Reforestation for the Utilization of Forest Products; 3) Introduction of Agroforestry Activities, etc. Technical Transfer of the Methodology applied in the Study and in Planning to the Brazilian Counterpart personnel. |  |  |  |  |  |
| 7. | CONSULTANT(S)                     | acific Consultants International sia Air Survey Co., Ltd.   |  |  |  |  |  |
| 8. | STUDY PERIOD                      | far.2000 ~ Jan.2002 22month(s)<br>~   |  |  |  |  |  |
| 9. | SITE OR AREA                      |   |  |  |  |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

The duration of the Master Plan is established in 30 years, from 2002 to 2031.

Contents:

1. Policy and Supporting Programs

- 1) Project for designating Conservation are in the Basins of Araguaia and Tocantins Rivers
- 2) Project for the Study of Natural Resources and Socioeconomic Conditions for the Conservation of Northwestern basin of Itacaiunas River
- 3) Program strengthening Environmental instituting of the State and Municipalities
- 4) Project for supporting Land Ownership Survey, Registration and Mapping
- 5) Environmental Education and Technical Training Program
- 2. Entrepreneurial Projects
- (1)Main Projects
- 1)Project for Seed Collection and Seedling Production of Forest and Fruit Trees: To collect seeds and produce seedlings of species necessary for reforestation, enrichment and agroforestry.
- 2). Project for development and improvement of agroforestry: To introduce technology for agroforestry in order to restore degraded area to create employment adequate opportunity and improve income status.
- 3)Project for reforestation and enrichment by native and exotic species: To conduct reforestation, timber production forest enrichment and stock live-stock farming in order to restore degraded area and to improve productivity.
- (2)Others
- 1) Project of Utilization of Organic Manure made of Sawdust, Manure and ark of Trees: To produce organic manure, recycling sawdust and trees bark, aiming at the efficient execution of reforestation, enrichment, agroforestry and silvopastoral projects.
- 2) Project of Agroindustrial Development: To strengthen and promote the existing agro industries, improving the aggregated value of agricultural products such as fruits, castanha, babacu, etc. produced in degraded areas.

**CSA BRA/S 101/01** M/P In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** (FY 2007 Oversea Survey) The Executive Secretariat of Science, Technology and Environment (SECTAM) was divided into Special Secretariat of Environment (SEMA) and the secretariat of science and technology. A staff of the SECTAM is now the director of the department in charge of protective zones in SEMA. Since the organization has been recently reformed, it is unclear which department will be following-up the study. One of the potential candidate is the department of forest development, consisting of 42 staff which conducts restoration of degraded land and reforestation. Mine companies are responsible for degraded land restoration from judicial point of view. In fact, the major mine companies in the State of Para and other municipalities have been implementing restoration of degraded land.

### STUDY SUMMARY SHEET (M/P)

Compiled Oct.2002 **CSA** BRA/A 128/01 Revised Jul.2009

| 1. | COUNTRY   | Brazil            |  |                              |        |                   |     |  |
|----|---|-------------------|--|------------------------------|--------|-------------------|-----|--|
| 2. | NAME OF STUDY                                       | The Study on Ag   | gricultural Sector Devel   | opment for Amazonas State    |        |                   |     |  |
| 3. | SECTOR  | Agriculture       | / (Agricult  | are in) General              | 4.     | TYPE OF STUDY     | M/P |  |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                   | Institute of Agricultura   | and Livestock Development of | of the | State of Amazonas |     |  |
|    | PRESENT COUNTERPA                                   |                   |  |                              |        |                   |     |  |
| 6. | OBJECTIVES OF THE STUDY                             | of target habitan | Formulating a master plan which contributes to nature conservation and intending employment creation and income growth of target habitants which make a living as family-operated agricultures and extraction of natural resources in Amazonas hrough rational use of natural resources. |                              |        |                   |     |  |
| 7. | CONSULTANT(S)                                       | Nippon Koei Co    | o., Ltd.   |                              |        |                   |     |  |
| 8. | STUDY PERIOD  | Mar.2000 ~        | Dec.2001   | 21month(s)                   |        |                   |     |  |
|    | SITE OR AREA  MAJOR PROPOSED PR                     |                   | Three provinces, MAUES, ITACOATIARA and IRANDUBA in Amazonas(51,000Km)   |                              |        |                   |     |  |

The project can be broadly divided into seven key component areas:

- 1. IDAM Capacity Building
- 2. Support of Farmers' Organizations
- 3. Environmental Support
- 4. Technical Production Support (Environmentally Friendly Agriculture, Guarana, Tropical Fruits, Vegetables, Aquaculture)
- 5. Processing and Distribution Support
- 6. Marketing Support
- 7. Overall Project Monitoring and Evaluation

The key activities proposed in each component above are designed to support the following three development strategies/basic approaches in an integrated manner.

- 1. Agricultural Productivity and Quality Improvement
- 2. Marketing/Market Distribution Improvement
- 3. Social/Living Environment Improvement

CSA BRA/A 128/01 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

(FY2002 Domestic Survey)

There is no information after this project.

(FY2002 Overseas Survey)

After the study, followings were selected as a priority project to be implemented by IDAM, the organization in charge

- 1. Setting up information networks for keeping in close touch between IDAM and each region,
- 2. Building system of aqua farming production (to be dealt by expert),
- 3. Supporting commercial center in Manaus (to be dealt by expert),
- 4. Promoting environmentally sustainable agricultural technology,
- 5.Introducing and producing new variety of a vegetable in Iranduva City,
- 6.Supporting agricultural cooperatives,
- 7.Implementing trainings for farmers and technicians through IDAM, and
- 8. Procuring material and equipment for evaluation.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2004 Overseas Survey)

No information to be specifically mentioned.

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

(FY 2006 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2006 Overseas Survey)

The proposal is not implemented despite the subjected research paper is useful for an operational plan of IDAM from 2003 - 2006. Reasons for that, because of 2002 newly elected administrative agencies prioritize governmental project implementations which cover whole state, and therefore governmental project is partly opposed to proposals of the subjected research which concentrate on Manaus "Itacoatiara and Iranduva as target areas. Also, 6 elements of the subjected study(Training for engineers of IDAM, Assistance to producers agencies, Environmental support, Support for establishment of scientific technology targeting environmentally sustainable agricultures such as guarana, tropical fruits/ vegetable /aquacultures, Assistance for process/logistics of products, Supports for monitoring/assessment project and market) comprise a part of action plans of present government for agricultural/graziery fields therefore IDAM get involved in monitoring, implementing and planning the proposed projects as a SEPROR related agency. At the same time, IDAM has 64 regional organizations as a result of expanded nationwide activities of IDAM. Doubled state government budget for agricultural/graziery fields compared to former state government, a reason of those IDAM's comprehensive activities in terms of implementation of agreed activities with NGOs, City/ municipal/ communal agencies, other federative agencies and government agencies, and implementation of governmental programs.

(FY2007 Domestic Survey)

No information to be specially mentioned.

#### (FY2007 Overseas Survey)

Proposed project in the mentioned study has not been implemented. Agricultural product agency was established in 2003, with ministry of rural development. 1,225 technicians and 13,663 farmers were trained between 2003 and 2007. Discussions about IDAM activities and digitalization of the plan are in progress.

## STUDY SUMMARY SHEET (M/P+F/S)

CSA BRA/A 221/01 Compiled Oct. 2002
Revised Jul. 2009

| 1. | COUNTRY                                | Brazil  |   |                         |   |  |  |  |
|----|--|---|---|-------------------------|---|--|--|--|
| 2. | NAME OF STUDY                          | Integrated Deve   | lopment Master Plan Study in the no   | rthern region for Agric | culture and Livestock of the State of Tocantins |  |  |  |
| 3. | SECTOR                                 | Agriculture   | / (Agriculture in) Gener  | ral <b>4.</b>           | TYPE OF STUDY M/P+F/S                           |  |  |  |
| 5. | COUNTERPART AGENO<br>TIME OF DEVELOPME | CY AT THE   | State Secretariat of Agriculture  |                         |   |  |  |  |
|    | PRESENT COUNTERPART AGENCY             |   |   |                         |   |  |  |  |
| 6. | OBJECTIVES OF THE STUDY                | region of Tocant<br>M/P of agricultu<br>plans, developm<br>Implementing F | <ol> <li>Formulating specific plan of sustainable agriculture/graziery targeting peasants in 370 thousands square Km north region of Tocantins. Developing eco-friendly farming methods in a process of the agriculture/graziery project. Formulating M/P of agriculture and graziery sectors with high value of consideration about compliance with other sectoral developmen plans, development of agriculture and graziery, environment conservation and development of small scale agriculture. Implementing F/S in prioritized areas.</li> <li>Implementing technical transfer and guidance with engineers of C/P</li> </ol> |                         |   |  |  |  |
| 7. | CONSULTANT(S)                          | Pacific Consulta  | Pacific Consultants International   |                         |   |  |  |  |
| 8. | STUDY PERIOD                           | Mar.2000 ~  | Sep.2001 18month(s)   |                         |   |  |  |  |
|    | SITE OR AREA                           | F/S: Araguaina a  | hern Region of Tocantins State.  uaina and Araguatins Municipalities.   |                         |   |  |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

M/P:

- 1. Agricultural Plan: plans of introducing crops, intensification of livestock farming, and organizing small-medium scale farmers, and etc.
- 2. Environmental Conservation Plan: promotion of afforestation, technical transfer program, and financial assistance program.

The feasibility Study was conducted for priority areas concerning following plans.

- 1. Land use plan: Plan of land use drawn out with full understanding of environmental law and land use potential, as environment standards for Legal Amazon will be applied to the targeted area.
- 2. Grain introduction plan: Plan to recover pasturelands that support livestock farming, the area's important industry, and to introduce rotational grazing (of grains and pastures) to improve farmers' incomes.
- 3. Diversification and strengthening of livestock production: Besides cattle raising, water buffalos were introduced and pork raising was revitalized, and not only processing factories for meat, but also processing factories for dairy products and etc. were planned. Also, development of regional speciality and eradication of livestock illness were planned.
- 4. Promotion of intensive agriculture: Plan was drawn out to reduce production costs, increase productivity and diversify crops by introducing intensive farming in the areas where numbers of individual farmers are large. This will enable poor farmers to exit from self-sufficing farming and improve their living standards.
- 5. Road development plan : Plan to develop transportation network that is essential for distribution, technical assistance and etc.
- 6. Silo enhancing plan: Plan to develop/enhance silo network for distribution of grains (especially soya beans) that are the region's main crops.
- 7. Cheese factory establishment plan: Plan to enable production of regional specific product (mozzarella cheese) using milk of buffalo and etc.

CSA BRA/A 221/01 M/P+F/S

PRESENT STATUS

Completed

Partially Completed

Delayed or Suspended

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

(FY 2002 Domestic Survey)

Japanese Technical Cooperation (project-type) is on going.

(FY 2005 Domestic Survey)

Applying for a project including part of the study results to IADB.

(FY 2006 Domestic Survey)

The World Bank is funding for road construction and basin plans by each basin.

Subsequent study: Basin development plan for Araguatins Municipalities.

Implementing body: World Bank

Implementing period:

Construction: 9 months from 2005 - 2006

Objective: Formulation of a sustainable development plan for Araguatins Municipalities.

Content: F/S study for regions which were indicated at the subjected study

Other: Homeo-studies are scheduled to be conducted in other area (Araguaina) using the World Bank accommodation loan.

(FY 2006 Domestic Survey)

No information to be specifically mentioned.

(F/S)

CSA BRA/S 301/03 Compiled Mar.2005
Revised Jul.2009

| 1. | COUNTRY                           | Brazil  |   |                                       |  |  |  |       |        |     |     |  |  |
|----|-----------------------------------|---|---|---------------------------------------|--|--|--|-------|--------|-----|-----|--|--|
| 2. | NAME OF STUDY                     | The Feasibility   | The Feasibility Study on the Improvement of Transportation System in the Metropolitan Area of Belem |                                       |  |  |  |       |        |     |     |  |  |
| 3. | SECTOR                            | Transportation  | on / Urban Transportation 4.  |                                       |  |  |  | TYPE  | OF STU | JDY | F/S |  |  |
| 5. | COUNTERPART AGENTIME OF DEVELOPME | СҮ АТ ТНЕ   | СОНАВ   | , , , , , , , , , , , , , , , , , , , |  |  |  |       |        |     |     |  |  |
|    | PRESENT COUNTERPA                 |   |   |                                       |  |  |  |       |        |     |     |  |  |
| 6. | OBJECTIVES OF THE STUDY           | I) Implementing the F/S of traffic and road system and bus system based on commercialization in the Greater Belem Metropolitan Area.  2) Implementing technical transfer to Brazilian counterparts. |   |                                       |  |  |  | Belem |        |     |     |  |  |
| 7. | CONSULTANT(S)                     | Chodai Co., Ltc<br>Yachiyo Engine   |   |                                       |  |  |  |       |        |     |     |  |  |
| 8. | STUDY PERIOD                      | May.2002 ~ ~  | Aug.2003  | 15month(s)                            |  |  |  |       |        |     |     |  |  |
| 9. | SITE OR AREA                      | Belem Metropolitan Area (1820km2)   |   |                                       |  |  |  |       |        |     |     |  |  |
| 10 | MA IOD DDODOSED DD                | OTECT(C)  |   |                                       |  |  |  |       |        |     |     |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

- 1. Artery bus road maintenance scheme
- 1) To construct bus only arterial road through three arterial roads. In parallel with the construction, three roads as well as roadways, cycling roads and sidewalks will be improved
- 2) To expand Avenue Independencia to six lanes. Bus only arterial lane will be constructed on both sides of central reserve
- 3) To construct bus only arterial lane on the outermost lanes of roads in Belem City and Icoaraci City, as well as on Avenue Mario Kobas in Cidade Nova, which will be differentiated by color paintings
- 4) To convert Avenue Pedro Cabral and Avenue Senador Lemos to one-way three lane road with bus only arterial lane, which is currently two-way four lane road. The bus only lane will be differentiated with color painting
- 5) To construct 8 new bus terminals
- 6) To construct 8 new bus stops beside the bus only arterial lanes and bus exclusive lanes.
- 2. Road maintenance scheme
- 1) Avenue Independencia Plan
- 2) Avenue Primeiro de Dezembro construction/expansion plan
- 3) Avenue Yamada improvement plan
- 4) Rua da Marina improvement plan

CSA BRA/S 301/03 F/S

|                    | Completed or In Progress | Promoting                 |
|--------------------|--------------------------|---------------------------|
| DDECENTE COLATOLIC | Completed                |                           |
| PRESENT STATUS     | Partially Completed      | Delayed or Suspended      |
|                    | Implementing             |                           |
|                    | Processing               | Discontinued or Cancelled |

#### Description:

(FY 2004 Overseas Survey)

Counterpart is preparing for getting fund from JBIC to undertake the schemes suggested in this study.

#### (FY 2004 Domestic Survey)

After completion of this study, although preparation of this project was proceeded by COHAB, Para province's governor and mayor of Belem were antagonistic, it was difficult to receive cooperation from the mayor of Belem. However, after the city's mayoral election in November 2004, the mayor belongs to the same political party as Para province's governor was elected so this project would be transferred for implementation in coming days. Para province wishes to receive yen loan, the procedure will be planned to concrete.

#### (FY 2005 Domestic Survey)

Implemented project: Pedro Cabral - Senador Lemos road improvement project

Implementing period: In progress in FY 2005

Implementing body: Belem city

Contents: Expansion and improvement of road and improvement of paths are in progress in order to introduce trunk line bus system.

Funding:

Funding party: BNDES

Status: Belem city and the bus association are discussing on establishment of the consortium for bus association in order to introduce trunk line bus system.

#### (FY 2005 Overseas Survey)

Subsequent study: Via Metropole (EVDTU corporation) complementary road project

Implementing period: June 2005 - December 2005

Implementing body: Belem city hall

Objective: Draw up basic design of Via Metropole (EVDTU corporation) complementary road.

Status: Completed in December 2005.

#### (FY 2006 Domestic Survey)

Projects proposed in the study have not been realized, although actions have been taken for implementation.

#### (FY 2006 Overseas Survey)

Within the proposed projects, part of the project for Indipendencia street between Quarenta Olas street and August Montenegro street has been implemented by budgets of Para region.

#### (FY 2007 Domestic Survey)

There are no specific activities on the bus system. Among the projects of road system, Avenue Primeiro de Dezembro construction/expansion plan has been implemented.

#### (FY 2007 Overseas Survey)

The Government of Para Province has strong interest on the project recommended in the mentioned study, and are considering it for the implementation during the current regime (The Labor Party took over the government on January 2007, and the tenure is till the end of 2010). Although JBIC is considered as a candidate of the loan, other methods have been planned.

#### (FY 2008 Overseas Survey)

Implement project: A portion of the civil engineering work for the trunk bus system of the Belem City (introducing an integrated public transportation network with adoption of trunk bus system centering on articulated buses in priority lanes)

Funding: State counterpart resources through the "Banco do Brasil" funds

\*The remaining portion is expected to be funded by JBIC. Basically, this project has been classified into "Part I" for the State counterpart, and remaining "Part II" for JBIC. The works for the "Part I" might be started up separately from the "Part II" scheduling process.

Subsequent study: Review of the feasibility study

Implementing body: JICA

Implementing period: from April, 2009

**(F/S)** 

CSA BRA/S 302/03 Compiled Mar.2005
Revised Jul.2009

| 1.               | COUNTRY                         | Brazil                             |   |                |   |         |               |        |                        |
|------------------|---------------------------------|------------------------------------|---|----------------|---|---------|---------------|--------|------------------------|
| 2                | NAME OF STUDY                   |                                    |   | ement of the E | Environmental Condition                       | ons of  | the Guanaba   | ra Bay | in Rio de Janeiro, the |
| 2. NAME OF STUDY | Federative Repu                 | blic of Brazil                     |   |                |   |         |               |        |                        |
| 3.               | SECTOR                          | Transportation                     | / Po                                      | ort            |   | 4.      | TYPE OF ST    | TUDY   | F/S                    |
| 5.               | COUNTERPART AGENO               |                                    |   |                |   |         |               |        |                        |
|                  | PRESENT COUNTERPA               |                                    |   |                |   |         |               |        |                        |
| 6.               | OBJECTIVES OF THE STUDY         |                                    | f "the study for Gu<br>tio de Janeiro mun |                | vater pollution preventi<br>age master plan". | ion pla | an" aiming to | impro  | ve environmental       |
| 7.               | CONSULTANT(S)                   | Pacific Consulta<br>Nihon Suido Co | nts International<br>Insultants Co., Ltd. |                |   |         |               |        |                        |
| 8.               | STUDY PERIOD                    | Mar.2002 ~ ~                       | Aug.2003                                  | 17month(s)     |   |         |               |        |                        |
|                  | SITE OR AREA  MAJOR PROPOSED PR | Guanabara Bay                      |   |                |   |         |               |        |                        |
| LU.              | MAJOK PKUPUSED PK               | OJECI(S)                           |   |                |   |         |               |        |                        |

### Review of JICA M/P

- 1. Improvement objective will be met by sewage development.
- 2. To reset an objective to a technically achievable one, on condition that water quality improvement will be achieved by sewage development.

### Review of CEDAE M/P

- 1. Conventional activated sludge process applied by CEDAE is an appropriate way to reduce pollutional load to the bay that utilizes a method with high elimination rate stability.
- 2. Sewage pipe will be laid in underground below roadways. In the CEDAE M/P, it is planned that in situations where there are no roads, main line will be laid in rivers, however, this must be avoided upon implementation by using measures such as to change drainage district boundary.
- 3. Several of planned sites for treatment plants have been urbanized, of which some cannot even be identified. It is essential to find alternative sites.

CSA BRA/S 302/03 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### Description:

### (FY 2004 Survey)

Since the study was completed only short while ago, it is unknown if the government has implemented a project, though the reaction to recommendation seems to be considered.

### (FY 2005 Domestic Survey)(FY 2005 Overseas Survey)

In October 2003, the "Study on Management and Improvement of the Environmental Conditions of the Guanabara Bay in Rio de Janeiro" was proposed as a short-term prioritized measure.

In May 2005, Rio de Janeiro province has requested SEAIN of the Federal Government through ABC for the implementation of second period of PDBG (previously requested in 2004). The request aims to obtain 10,000 million JPY worth loan from JBIC and IDB for drinking water, solid waste, as well as waste water proposed in the study. The request will be decided after being considered deliberation in COFIEX.

### (FY 2006 Domestic Survey)

Regarding a priority project for sewage treatment plants in additional districts in Pavuna and Sarapui and in Acre and Bangu basins proposed by the mentioned study, a request for Detailed Design (D/D) for implementation toward the second phase of the purification plan in Guanabara Bay was submitted to the Japanese government/JICA via Brazilian Cooperation Agency (ABC: Agencia Brasileira de Cooperacao). A project in the next phase will be possible if the first phase of the purification plan in Guanabara Bay which is implemented under yen loan at present is in progress in the fiscal year 2007 and 2008.

### (FY 2008 Overseas Survey)

"Sewerage facility projects in priority areas: Pavuna additional area, Acari, Sarapui additional area, and Bangu", will be implemented after the completion of the phase I of PDBG.

The Government of Rio de Janeiro State has requested, in March 2004, through ABC - Agencia Brasileira de Cooperacao, that JICA prepare the Detailed Design (D/D) for the recommended sewerage systems in the report "The Study on Management and Improvement of the Environmental Conditions of Guanabara Bay". A confirmation from JICA has been expected.

As for the urgent measures, the rehabilitation and extension of the 7 sewerage systems have been identified in the JICA Study as priority projects and expected to be implemented as early as possible.

\* The first phase of Guanabara Program has been implemented through JBIC and IDB loans. The remaining are to be implemented through local funds step by step, due to the economic conditions of the State.

### (FY 2008 Domestic Survey)

No information to be specifically mentioned.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Feb.2007
CSA BRA/S 101/05
Revised Jul.2009

| COUNTRY                 | Brazil  |  |   |   |  |
|-------------------------|---|--|---|---|--|
| NAME OF STUDY           | Pecem Industria   | l and Port Complex dev   | velopment plan in the Federative  | Republic of Brazil  |  |
| SECTOR                  | Transportation  | / Port   |   | 4. TYPE OF STUDY  | M/P  |
|                         | CY AT THE   | Cearaportos  |   |   |  |
| PRESENT COUNTERPA       | RT AGENCY   |  |   |   |  |
| OBJECTIVES OF THE STUDY | <ol> <li>Formulating Pecem port long term development plan for target year 2022.</li> <li>Formulating short-term development plan for target year 2012</li> <li>Formulating harbor management plan</li> </ol> |  |   |   |  |
| CONSULTANT(S)           | Nippon Koei Co  | ., Ltd.  |   |   |  |
| STUDY PERIOD            | Feb.2005 ~  | Mar.2006   | 13month(s)  |   |  |
| SITE OR AREA            | harbors   | trial region, agricultura  | al region and related harbors of 0  | Ceara state which are re  | lated to Pecem port and  |
|                         | NAME OF STUDY SECTOR  COUNTERPART AGENTIME OF DEVELOPME  PRESENT COUNTERPA  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD  | Pecem Industria  SECTOR  Transportation  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  1) Formulating 1 2) Formulating 1 3) Formulating 1 5 Formulating 1 7 Formulating 1 7 Formulating 1 8 Nippon Koei Coe 8 STUDY PERIOD  Feb.2005 North east indus harbors | Pecem Industrial and Port Complex devices  SECTOR Transportation COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  1) Formulating Pecem port long term of 2) Formulating short-term developmen 3) Formulating harbor management plates and part of the STUDY  CONSULTANT(S) Nippon Koei Co., Ltd.  STUDY PERIOD  Feb.2005 North east industrial region, agricultural harbors  SITE OR AREA | Pecem Industrial and Port Complex development plan in the Federative   SECTOR | Pecem Industrial and Port Complex development plan in the Federative Republic of Brazil   SECTOR |

### 10. MAJOR PROPOSED PROJECT(S)

Proposed projects budget:

1) Long-term development project. 2) Short-term development project

1st phase of the project:

- 1. 1st phase project:
- 1.1 Breakwater construction: (1) main breakwater(north): 1,220m. (2) Main breakwater(east): 570m. (3) Sub breakwater: 629m. (4) existing west breakwater(expansion): 300m. Gross site: 2,710m
- 1.2 Full-scale container terminal construction: (1) berths extension: 540m. (2) berth water depth: 16m. (3) container gantry crane:
- 2nits(Outreach(Handling 18 lanes): 50m/ crane rail span: 30m) (4) Tire type gantry crane(RTG): 4. (5) Terminal Spec (expansion to waterfront line direction:540m, depth:300m), (6) Container dedicated railway yard(on ground)
- 1.3: Multipurpose terminal construction: (1) Berth exptension:520m. (2) Berth water depth:16m. (3) Shed(floorage): 1(7,500m2), (4) Terminal spec(expansion to waterfront line direction:520m, depth:100m)
- 1.4: Fruits terminal construction: (1) Berth expansion: 160m, (2) Berth water depth: 16m (3) refrigerated shed(floorage): 1(5,500m2), (4) Terminal spec(expansion to waterfront line direction: 160m Depths: 100m)
- 1.5: New gate construction: (1) Ingate:1 (2) Outgate:1
- 2. 2nd phase project
- 2.1 Breakwater construction: (1) main breakwater(north):300m, (2) main breakwater(east):670m(Gross site: 970)
- 2.2 Full scale container terminal construction: (1) Berth extension:360m, (2)Berth water depths:16m, (3) Container gantry crane: 4(outreach(handling 18 lanes):50m, crane rail span:30m), (4) Tire type gantry crane(RTG):11, (5) Rail type gantry crane(RMG):1
- 2.3 Multipurpose terminal construction: (1) Shed(floorage): 1(7,500m2)
- 2.4 Cereals/fertilizer terminal construction: (1) Berth extension: 320m, (2) Berth water depth: 16m, (3) Ship loader/unloader(reversible): 2, (4) Cereal silo(storage capacity): 230 thousands tons(recommendation Pecem Industrial and Port Complex development plan in the Federative Republic of Brazil: final report summary), (5) Manurial flat shed:(Storage capacity): 76 thousands tons
- 2.5 New connecting bridge construction: (1) Entension: 1,510m, (2) Lanes: 2 lanes

CSA BRA/S 101/05 M/P

| PRESENT STATUS | In Progress or In Use     |
|----------------|---------------------------|
|                | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

(FY 2006 Domestic Survey)

No information to be specifically mentioned.

### (FY 2006 Overseas Survey)

Construction works for the multipurpose terminal will be implemented with finance from BNDES and budget funds of the National Financial Department and the Federal Department of Finance. A source of funds in subsequent phases has not been decided yet.

### (FY 2007 Domestic and Overseas Survey)

For construction of multipurpose terminal (Dock 3) and breakwater extension work, which were in the mentioned development study and need urgent maintenance, its detailed design study will be implemented between July, 2008 and July, 2010 by CERAPORTOS and SEINFRA (Funding for dock construction project will be raised by BNDES (80%) and Ceara local government (20%)). This project is currently evaluating construction of multipurpose terminal and breakwater extension work.

The recipients of the benefits from this project are; industrial estate behind Pecen port, citizens of Ceara province (new employment), light industrial companies in Ceara state, export promotion of agricultural produce e.g. soya, fruits in Ceara state and neighboring states (entire states located in north east). (Population of the north east of Brazil is 47million (28% of Brazilian population), area is 1.55 million km/sq (18% of Brazil), expected cargo handling amount is 6.9 million ton).

### (FY 2008 Overseas Survey)

After the completion of the study, new projects on iron mills, refineries and ZEP in the State of Ceara have been resolved. However, some adjustments were made on the layout because cargo needs a different kind of infrastructure from containers.

Currently, CEARAPORTOS is preparing for the tender of the engineering projects for installation of the new facilities which were adjusted from the ones once suggested in the mentioned study.

The urgent project contemplating the short term development plan has currently been implemented with own funds. Financing by the Brazilian Development Bank (BNDES) was authorized in the end of 2008 and the works started in January 2009, after the biding process.

The expansion of the Pecem Port Complex began in January 2009, divided into three steps:

- (1) Breakwater extension (1,220m) length of the breakwater extension was changed from 300m to 1,000m
- (2) Mooring pier construction
- (3) Elongation of the access bridge

\* The works of breakwater extension and the construction of the mooring pier will be implemented simultaneously. The last phase work of elongation of the access bridge will be started according to the condition and progress of phases one and two works.

Dimensions of the multipurpose terminal have been changed to 760m x 115m, and the work will be completed by December, 2010.

## STUDY SUMMARY SHEET (M/P+F/S)

CSA BRA/S 201/06 Compiled Dec.2007
Revised Jul.2009

| 1. | COUNTRY   | Brazil   |   |                       |      |    |           |      |         |
|----|---|--|---|-----------------------|------|----|-----------|------|---------|
| 2. | NAME OF STUDY   |  | Study on Intergrated Plan of Environmental Improvement in the Catchment Area of Lake Billings in Sao Bernardo do Campo  |                       |      |    |           |      |         |
| 3. | SECTOR  | Administration                                   | / <b>E</b>  | Environmental Problem | ns . | 4. | TYPE OF S | TUDY | M/P+F/S |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  5.  PRESENT COUNTERPART AGENCY |  | Sao Bernardo o  | lo Campo City         |      |    |           |      |         |
| 6. | OBJECTIVES OF THE STUDY   |  | o formulate the Master Plan by effective drainage and sewage treatment of the Lake Billings basin in Sao Bernardo do lampo, and implement the Feasibility Study of the priority projects of the project plan. |                       |      |    |           |      |         |
| 7. | CONSULTANT(S)   | NJS CONSULT<br>Yachiyo Engine                    | ,   | D                     |      |    |           |      |         |
| 8. | STUDY PERIOD  | Jun.2005 ~                                       | Dec.2006  | 18month(s)            |      |    |           |      |         |
|    | SITE OR AREA  | The Lake Billings basin in Sao Bernardo do Campo |   |                       |      |    |           |      |         |

### 10. MAJOR PROPOSED PROJECT(S)

M/P

### 1. Engineering Measures:

- (1) Sewerage maintenance (urban areas), (2) Sewerage maintenance (isolated communities), (3) road maintenance for water permeation, (4) Dark maintenance (5) Safety improvement for specific contamination source, (6) Dredging of lake sediments, (7) flora purification, (8) Construction of environment for understanding and experiencing environmental issues, (9) Construction of the Water Quality Management Center.

  2. Software Measures:
- (1) Concerned with the life style/business style of the people/entrepreneurs: Proper use of groundwater; Reduction of water consumption; Reduction pollutant loads by household sewage, (2) Concerned with the participation in the activities for the basin environment improvement: Restoration of natural forest; Cleaning of the lakeside; Cleaning of the streams; Removal of water bloom and algae, (3) Concerned with legal compliance or administrative guide: Proper land use; Improvement of fertilizer application; Soil erosion from firms

### F/S

- (1) Sewerage construction in the urban areas: Domestic sewage generated from densely inhabited Alvarenga and Lavras in the northern basin of the Lake Billings is collected for conveyance to the ABC Sewage Treatment Plant (hereinafter STP) outside the basin by pumping to Estrada Takagi Sub-trunk? Couros Trunk running in the Couros River basin which have not yet been constructed.
- (2)Sewerage construction in the isolated communities: The existing Riacho Grande Sewage Treatment Plant shall be reconstructed using the oxidation ditch process with phosphorous removal and its service area shall be expanded to the surrounding area, Caperinha, Areiao and Jussara Areas.
- (3) Permeable road
- (4) Construction of Alvarenga Park: The Alvarenga sub-trunk main in the Alvarenga Area is installed along the Alvarenga Stream, and the park along the Alvarenga Stream will be constructed.
- (5) Remediation of the former Alvarenga solid waster dumping site: The remediation work such as embankment, drainage and grass-planting is planned after slope stabilization work will be done.
- (6) Construction of the Environmental Center: Integrating Experimental Environment Learning Center and Water Quality Management Center, proposed in the M/P.
- (7) Installation of a pilot plant for lake purification using aquatic plants: To collect technical know-how for lake purification based on the natural-purification capability by aquatic plants, a pilot plant shall be installed.

CSA BRA/S 201/06 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |
| Description :  |                          |                           |

(FY 2007 Overseas Survey)

Among the recommendations in the mentioned study, the Companhia de Saneamento Basico do Estado de Sao Paulo (SABESP) requested the Yen Loan for implementing the following projects has been done by: 1) Consulting services, 2) Sewerage construction in the urban areas, 3) Sewerage construction in the isolated communities.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1986
CSA CHL/S 101/83
Revised Jul.2009

|   |   | Chile               |                          |                  |   | Revised Jui          | .2009 |
|---|---|---------------------|--------------------------|------------------|---|----------------------|-------|
| 1.  | COUNTRY   |                     | Modernization Project    |                  |   |                      |       |
| 2.  | NAME OF STUDY   | State Kanways I     | viouernization i roject  |                  |   |                      |       |
| 3.  | SECTOR  | Transportation      | / Railway                |                  | 4. TYPE OF STUDY M/F                        | )                    | -     |
| 5.  | DECTOR  | Transportation      | Chilean State Railways   |                  | 1112 01 01021                               |                      |       |
|   | COUNTERPART AGENORIES OF DEVELOPME  |                     |                          |                  |   |                      |       |
| PRESENT COUNTERPART AGENCY                      |   |                     |                          |                  |   |                      |       |
| 6.  | OBJECTIVES OF THE STUDY   | business activition | es dealing with passeng  |                  | rnization of freight car operation, freight | transport system, ar | nd    |
| 7.  | CONSULTANT(S)   | Japan Railway T     | Technical Service        |                  |   |                      |       |
| Q   | STUDY PERIOD  | Jul.1982 ~          | Jun.1983                 | 11month(s)       |   |                      |       |
| δ.  | STUDY PERIOD  | ~                   |                          |                  |   |                      |       |
| 9.  | SITE OR AREA  | All of              | the lines of the Chilean | n State Railways |   |                      |       |
|   |   |                     |                          |                  |   |                      |       |
| In p<br>wer<br>Ma<br>For<br>3) p<br>For<br>etc. | 10. MAJOR PROPOSED PROJECT(S) In project 1, recommendations were made mainly on the improvement of freight car operation and information systems. In project 2, recommendations were made mainly on the basis of drawing up commercial policies.  Main recommendations: For freight service 1) Reinforcement of a transport setup between main base stations; 2) introduction of an administration system for revenue targets; 3) promotion of individual contract systems with influencial forwarders; 4) increase in marine container transport; and 5) efficient freight car operation. For passenger service 1) Reinforcement of long-distance truck line transport and intercity transport; 2) improvement of the seat reservation system, etc.  For the telecommunications sector Immediate improvement of superannuated facilities |                     |                          |                  |   |                      |       |
|   |   |                     |                          |                  |   |                      |       |
|   |   |                     |                          |                  |   |                      |       |
|   |   |                     |                          |                  |   |                      |       |

CSA CHL/S 101/83 M/P

| PRESENT STATUS | In Progress or In Use     |
|----------------|---------------------------|
|                | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

The proposal made by this Study was utilized to formulate the operational policy of the Chilean State Railways.

#### Background

The financial constraints prevented the improvement of trains and infrastructure, which resulted in the weakening of the competitive power of the State Railways. As a consequence of the reduction of passengers caused by inferior facilities, the total revenue was slashed by 50% during FY 1993 to 1994.

#### Finance:

Nov.1992 L/A 6,412 mil.Yen

\*Components of project

rehabilitation of railway facilities and vehicles

#### Construction:

1994 Phase I commenced (focused on the improvement of the infrastructure) (estimated cost was US\$ 70 mil., 75% of which will be provided by OECF)

Phase II will cover wider area and make it possible to run the passenger's trains between Santiago and Puerto Monto with an average velocity of 100km/hour. Quick assistance from Japan is eagerly expected.

### Detail:

(FY 1991 Overseas Survey)

The proposal made by this study was also utilized to formulate the Rehabilitation Plan for the State Railways. The State Railways have been implementing the improvement of the Communication facilities, etc. with the own fund. The Railway Reconstruction Plan (estimated cost of US\$ 48 mil.) is under deliberation at the lagislature.

## STUDY SUMMARY SHEET (M/P)

|    |                | ( <b>M/P</b> )  |   |               |     | Compiled | Mar.1990 |
|----|----------------|---|---|---------------|-----|----------|----------|
| CS | SA CHL/S 102/8 | 36  |   |               |     | Revised  | Jul.2009 |
| 1. | COUNTRY        | Chile   |   |               |     |          |          |
| 2. | NAME OF STUDY  | Development Plan of the Ports of Valparaiso and San Antonio |   |               |     |          |          |
| 3  | SECTOR         | Transportation / Port                                       | 1 | TVPF OF STUDY | M/P |          |          |

| 2.   | NAME OF STUDY   | Development Plan of the Ports of Valparaiso and San Antonio   |  |
|------|---|---|--|
| 3.   | SECTOR  | Transportation / Port 4. TYPE OF STUDY M/P  |  |
| 5.   | COUNTERPART AGEN<br>TIME OF DEVELOPME   | Ministry of Transport and Telecommunication  Y AT THE   |  |
|      | PRESENT COUNTERPA   |   |  |
| 6.   | OBJECTIVES OF THE STUDY   | -Master Plan for 2010 -Reconstruction Plan after the earthquake damage (Both Ports) -Improvement Plan (Valparaiso Port) |  |
| 7.   | CONSULTANT(S)   | The Overseas Coastal Area Development Institute   |  |
| 8.   | STUDY PERIOD  | Mar.1986 ~ Aug.1986 5month(s) ~   |  |
|      | SITE OR AREA  | Valparaiso Port, San Antonio Port   |  |
|      | MAJOR PROPOSED PR   |   |  |
|      |   | to handle general cargo including container. San Antonio Port will be handling bulk cargo.                              |  |
| (2)S | Valparaiso Port Container berth 300r General Cargo berth San Antonio Port Multi purpose berth General Cargo berth | , -12m, 3 berths<br>-11m, 5 berths<br>-12m<br>-11m, 3 berths etc.   |  |
|      |   |   |  |

CSA CHL/S 102/86 M/P

PRESENT STATUS

Delayed

Discontinued or Cancelled

### **Description:**

(FY 1998 Overseas Survey)

The implementation of proposed projects is situated as a matter of first importance, as transportation means especially such as infrastructure development of port is considered essential for Chili's economic development.

Subsequent Study

F/S on The 5th area, Port Improvement Project Phase I (WB fund)

Finance:

WB

(FY 1991 Overseas Survey)

The phase I construction at San Antonio and Valparaiso are respectively costed at US\$36 million and US\$19 million. Phase III construction is expected to end in 2015.

(1)Valparaiso Port

(FY 1997 Overseas Survey)

Finance:

Government budget 52% World Bank loan 48%

Jan.21.1992 World Bank L/A 44,512,785US\$

Construction: 1990~1998

<Completed> Contractor Repair of Baron Wharf Hartley, Precon

Rehabilitation of Storage A, B Consorcio Vecoval-ingecol

Baron Wharf Crane Transformation Asmar Construction of Maintenance Facility Hartley DSD

<Implementing>

Reconstruction of site 1, 2, 3 Belfi

<Preparing>

Reconstruction of site 4, 5 (Basic and detailed design study is in process)

### Others

The transferred techniques during the JICA study have been utilized for the development planning of other ports. The Japanese regulations on port constructions works are officially applied.

(FY 1995 Overseas Survey)

The recipient country highly appreciates this survey work and wishes to extend these kind of works for the other similar projects.

(FY 1998 Overseas Survey)

Financial assistance as well as technical cooperation on port rehabilitation is required to promote the implementation of the project.

(F/S)

Compiled Mar.1990

**CHL/A 301/86 CSA** Revised Jul.2009 1. COUNTRY Chile Mapocho River Basin Agricultural Development Project 2. NAME OF STUDY 3. SECTOR / (Agriculture in) General TYPE OF STUDY F/S Agriculture 5. Ministry of Agriculture, Ministry of Public Works (Directorate general of water) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY F/S on agricultural development project by utilizing the water resource of Mapocho River. **OBJECTIVES OF THE** STUDY Pacific Consultants International 7. CONSULTANT(S) Chuo Kaihatsu Corporation Naigai Engineering Co., Ltd. Dec.1984 Jul.1986 19month(s) 8. STUDY PERIOD Mapocho Central River Basin next to the capital Santiago and Lampa and Colina Basins(36,000ha chosen from 61,000ha from the 1st development study) 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Irrigation area: 17,340 ha Check dam: Height 28m, Length 48m, Capacity 13,000 cu.m Headworks: Height 1.5m, Length 200m Syphon: Width 2.3m, Height 2.3m, Length 240m, 10.3 cu.m/s Water treatment stations: 5 River improvement: 40.7 km San Carlos: 17 km Improvement of waterway

CSA CHL/A 301/86 F/S

|                    | Completed or In Progress | Promoting                 |
|--------------------|--------------------------|---------------------------|
| DDECENTE COLATOLIC | Completed                |                           |
| PRESENT STATUS     | Partially Completed      | Delayed or Suspended      |
|                    | Implementing             |                           |
|                    | Processing               | Discontinued or Cancelled |

### **Description:**

Sewage Treatment Pilot Plant (FY 1998 Domestic Survey)

Finance:

Source of fund is unknown.

### Construction:

May 1994 ~ 1999

\*Contents: construction of a full-scale sewage treatment plant.

### Japanese technical cooperation:

Project-type technical cooperation ("Environmental center project")

#### \*Related Study:

June 1998 ~ JICA Development Study "Agricultural development project in the suburban area with consideration of the environment".

### Situation:

### (FY 1991 Overseas Survey)

It is reported that the quality of water has deteriorated three-fold after the completion of the JICA study, and it will be necessary to update basic data and review the design, and also to clarify the issue of hygiene.

The outbreak of cholera in 1991 served to highlight the importance of the project, and the follow up for drainge management has been requested.

### (FY 1991 Overseas Survey)

Another feasibility study was undertaken by the EMOS, but it was found out that the proposals of the JICA study were more economical and could be implemented in the shorter period of time. The Ministry of Agriculture wishes to start the implementation as early as possible because of the importance and urgency of the project.

### (FY 1997 Domestic Survey)

The Government of Chile was going to request grant aid assistance for the sewage treatment project but requested to other donor due to the several reasons.

### (FY 1998 Domestic Survey)

Since the proposed projects included not only agricultural development project as the major objective but also sewage treatment project to be implemented by a different agency, there was difficulty in coordinating the different agencies and project implementation was delayed. Regarding the agricultural development, it is required to coordinate with the on-going JICA Development Study.

### (FY 1998 Overseas Survey)

A part of water quality improvement, San Carlos Channel improvement, and El Carmen Channel improvement were implemented. However, since the priority of the government's policy has changed to industrialization, the implementation of other projects is interfered. In order to put the project into practice, several works such as soil survey, drawing of farmers' support plan, development of agricultural production method in view of environment, diffusion of product's quality and its security are required.

(F/S)

Compiled Mar.1990

CHL/A 302/88 **CSA** Revised Jul.2009 1. COUNTRY Chile Survey for the Tololo Pampa Area Groundwater-Used Agricultural Development Project 2. NAME OF STUDY 3. SECTOR / (Agriculture in) General TYPE OF STUDY F/S Agriculture 5. The Government of Atacama Region COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY To study the land and water resources and to make an agricultural development plan. OBJECTIVES OF THE STUDY Nippon Koei Co., Ltd. 7. CONSULTANT(S) KOKUSAI KOGYO CO., LTD. Taiyo Consultants Co., Ltd. Feb.1987 ~ Sep.1988 19month(s) 8. STUDY PERIOD Between Copiapo and Vallenar City in Atacama Region with an area of about 33,000ha 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Alternative Cropping Pattern Kiwi Grape Peach Kiwi/Tuna Grape/Tuna Development Area(ha) 76.8 85.8 76.8 64.0/171 71.5/191 Nos. of wells 6 6 6 5/1 5/1 Irrigation Method Drip Drip Drip Drip Drip 1,920 2,010 1,920 1,920/5,820 2,010/5,820 Drainage length(m) Road Const./ 57.2 60.9 57.2 83.4 86.5 Improvement(km) Note: The project cost above ranges depending on the cropping pattern as follows. (in US \$1000) 1. Kiwi 1,275.5 2. Grape 1,475.8 3. Peach 1,260.6 4. Kiwi/Tuna 1,940.7 5. Grape/Tuna 2,184.4

トロロ·パンパ地下水農業開発計画

CSA CHL/A 302/88 F/S

|                    | Completed or In Progress | Promoting                 |
|--------------------|--------------------------|---------------------------|
| DDECENTE COLATERIO | Completed                |                           |
| PRESENT STATUS     | Partially Completed      | Delayed or Suspended      |
|                    | Implementing             |                           |
|                    | Processing               | Discontinued or Cancelled |

### **Description:**

Subsequent Studies:

### (FY 1991 Overseas Survey)

The proposed project is expected to be implemented by the private sector. A private firm has undertaken a feasibility study, which proposes the development of 200ha for igerilla (oilseed) production at the cost of US\$1 million. Another proposal suggests 500ha for tuna production.

Concerning the sale of the land, the Ministry of National Assets is currently reviewing the related laws. The Government expects to implement the projects after legal issue are cleared. A part of national land has sold and the farmer who bought the land will start to produce grape and tuna.

### (FY 1998 Domestic Survey)

There is no information regarding the implementation of the projects by private sector.

### (FY 1998 Overseas Survey)

The study results were utilized in establishment plan of afforestation center in Canto del Agua area(Tololo Pamp), Asuko Province, and Atacama River area. The production of high quality lumbers will be possible if the proposed project, which is the afforestation of trees that adjust arid region, is done. At the present, the government is promoting the review of land selling law. A part of national land was sold for the use of grape planting.

The study results are very effective not only in utilizing the lands that aren't practically used for the time being but also to restore the deteriorated environment that are damaged by drought in the nothern region and over-exploitation of natural resources

### STUDY SUMMARY SHEET (M/P)

Compiled Mar.1994 **CSA** CHL/S 103/92 Jul.2009 Revised

| 1.  | COUNTRY                            | Chile                             |                            |                            |               |               |     |
|-----|------------------------------------|-----------------------------------|----------------------------|----------------------------|---------------|---------------|-----|
| 2.  | NAME OF STUDY                      | Rehabilitation a                  | and Conservation Programme | ram of Bridges             |               |               |     |
| 3.  | SECTOR                             | Transportation                    | / Road                     |                            | 4.            | TYPE OF STUDY | M/P |
| 5.  | COUNTERPART AGENORIME OF DEVELOPME | CY AT THE                         | Ministry of Public W       | orks, Road Bureau          |               |               |     |
|     | PRESENT COUNTERPA                  | RT AGENCY                         |                            |                            |               |               |     |
| 6.  | OBJECTIVES OF THE STUDY            | To establish a b                  | ridge maintenance and      | rehabilitation plan on tl  | he national h | iighway No.5. |     |
| 7.  | CONSULTANT(S)                      | Chodai Co., Ltd<br>Nippon Koei Co |                            |                            |               |               |     |
| 8.  | STUDY PERIOD                       | Oct.1991 ~                        | Mar.1993                   | 17month(s)                 |               |               |     |
|     | SITE OR AREA                       |                                   | ay No.5 on the state N     | o.4 to No.10 in the Repu   | ublic of CHII | LE            |     |
| 10. | MAJOR PROPOSED PR                  | OJECT(S)                          |                            |                            |               |               |     |
| 1.P | ropose rehabilitation plan         | for detail surve                  | ved bridges(Total reha     | bilitation cost 577 millio | on pesos).    |               |     |

- 2. Propose rehabilitation plan for 17 bridges being necessary urgent repair on route 5(Rehabilitation cost 93 million pesos).
- 3. Propose a guideline for Bridge maintenance and Inspection.
- 4. Propose a bridge management system which includes inspection item, evaluation of deficiency, standard repair method, standard repairing cost and the system could apply to administration of bridge maintenance.

CSA CHL/S 103/92 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

### **Description:**

In "The Study on the Rehabilitation and Conservation Program of Bridges in the Republic of Chile", the detailed survey was conducted on 10 bridges and their renovation plan was proposed.

(1) Rehabilitation of Bio-Bio Antiguo Bridge (constructed in 1930)

Subsequent Studies:

Oct.1993 F/S conducted by JICA upon the request from the Chilean government

1995 D/D scheduled to be implemented with the government fund

(FY 1999 Overseas Survey)

Construction was completed.

(2) Claro Bridge

The new bridge was constructed with the government fund.

(FY 1999 Overseas Survey)

Old bridge was rehabilitated and the new bridge was constructed on the Second Road.

(3) Amolanas Bridge, Pullally Bridge, etc.

Subsequent Studies:

D/D implemented for repair and reconstruction (the government fund).

(FY 1999 Overseas Survey)

Old bridge was rehabilitated and the new modern bridge was under construction on the Second Road.

(4) Other bridges

(FY 1999 Overseas Survey)

Pullally: Old bridge was rehabilitated and the new bridge was constructed on the Second Road.

Maipo: rehabilitated. Peuco: reconstructed.

Loncomilla: A modern bridge was constructed.

Ramadillas: reconstructed. Malleco: rehabilitated. Pichoy: reconstructed. Cayumapu: reconstructed.

Detail:

(FY 1995 Overseas Survey)

In total, 250bridges throughout the nation were investigated and were registered with photographs. Among them eleven bridges need to be repaired immediately. It is planned to repair them with the equipment provided by Japan and some of them have been already implemented.

(FY 1998 Overseas Survey)

The study results are utilized in the national development plan. This is because the government of Chili considers the development of national road network as well as the development of regional economy essential for the solution of poverty. Also, as Chili is often damaged by natural disasters, bridge improvement is necessary. In case of bridge improvement the utmost cost effect must be considered.

(Basic Study)

Compiled Mar.1994

| CS  | SA CHL/A 501/                         | /92             |  |  |          |               | Revised           | Jul.2009 |
|-----|---------------------------------------|-----------------|--|--|----------|---------------|-------------------|----------|
| 1.  | COUNTRY                               | Chile           |  |  |          |               |                   |          |
| 2.  | NAME OF STUDY                         | Forest Resource | es Management                              |  |          |               |                   |          |
| 3.  | SECTOR                                | Forestry        | / Forest                                   | ry & Forest Conservation   | 4.       | TYPE OF STUDY | Basic Study       |          |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME |                 | CORFO (Corporacio                          | on de Fomento de la Produccio  | on)      |               |                   |          |
|     | PRESENT COUNTERPA                     | ART AGENCY      |  |  |          |               |                   |          |
| 6.  | OBJECTIVES OF THE STUDY               |                 |  | ncrease and degradation of natu<br>tion and utilization of forest re |          |               | gement plan shoul | d be     |
| 7.  | CONSULTANT(S)                         | Japan Forest Te | echnical Association                       |  |          |               |                   |          |
| 8.  | STUDY PERIOD                          | Dec.1990 ~      | Mar.1993                                   | 27month(s)   |          |               |                   |          |
|     | SITE OR AREA                          | Administrative  | ween the VIII Admini<br>Region (Araucania) | stration Region (BIO BIO) and  | d the IX | <b>.</b>      |                   |          |
| 10. | MAJOR PROPOSED PR                     | KOJECT(S)       |  |  |          |               |                   |          |

- Study Area: approx. 550,000 ha - Model Area: approx. 64,000 ha

Forest areas in the Model Areas were classified into Protection Area and Production Area based on the land use plan prepared. Those two Areas were categorized according to the forest management criteria and the forest management plan was formulated. The management activities include cutting, regeneration, nursery practice, forest road establishment, site conservation and forest protection. In Production Area, Grazing Forest was proposed: while Experiment Forest was proposed in order to develop management system of natural forest and grazing forest.

**CSA** CHL/A 501/92 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Utilization of the study: (FY 1995 Overseas Survey) Various maps, basic data, criteria, etc. come out as the performance of this survey works are widely utilized for the research works of natural forest not only in the model area but in the other areas, for the land use and vegetation analysis of the satellite images and for the environmental improvement. Experimental works to promote the production of the edible fungus are also carrying on with supports by the experts concerned with the model area. (FY 1999 Overseas Survey) Data base made by this Study has been utilized for formulating the regional action plans such as Melleco National Reserve Management Plan. Dispatch of the experts: (FY 1995 Overseas Survey) The government of Chile requested to dispatch the Japanese expert on the forest policy who also coordinates the project. Receiving this request, the Government of Japan dispatched one expert to Chile in 1994.

(M/P+F/S)

Compiled Sep.1995

| CS  | SA CHL/S 20             | 01/94             |   |                 |               |              |        |        |        |        | Revised | J | ul.2009 |
|-----|-------------------------|-------------------|---|-----------------|---------------|--------------|--------|--------|--------|--------|---------|---|---------|
| 1.  | COUNTRY                 | Chile             |   |                 |               |              |        |        |        |        |         |   |         |
| 2.  | NAME OF STUDY           | Development of    | elopment of Water Resources in Northern Chile   |                 |               |              |        |        |        |        |         |   |         |
| 3.  | SECTOR                  | Social Infrastruc | ture  | / Water Resou   | rces Developr | ment         | 4.     | TYPE O | F STUD | Y M/P+ | F/S     |   |         |
| 5.  | COUNTERPART AGENO       | CY AT THE         | Ministry o  | f Public Works  |               |              |        |        |        |        |         |   |         |
|     | PRESENT COUNTERPA       |                   |   |                 |               |              |        |        |        |        |         |   |         |
| 6.  | OBJECTIVES OF THE STUDY |                   | To draw up the plan of underground water resources development to supply water for the cities of Arica and Iquique in Nothern Chile, and carry out the feasibility study to research the priority among them. |                 |               |              |        |        |        |        |         |   |         |
| 7.  | CONSULTANT(S)           | Pacific Consulta  | nts Interna   | tional          |               |              |        |        |        |        |         |   |         |
| 8.  | STUDY PERIOD            | Mar.1993 ~        | Mar.19  |                 |               |              |        |        |        |        |         |   |         |
|     | SITE OR AREA            | San Jose and Yu   | da river ba   | sins, Pampa del | Tamargal and  | Salar de Hua | asco A | Area   |        |        |         |   |         |
| 10. | MAJOR PROPOSED PR       | OJECI(S)          |   |                 |               |              |        |        |        |        |         |   |         |

1) Water supply for city of Iquique (estimated population on 2015: 273,000):

Develop underground water at Pampa del Tamargal basin by 16 wells, supply the water from the filtration plant at the basin to the city through pipeline with a length of 68km and the water distribution tank which will be constructed at the city. This project will be implemented by two(2) stages, first one is up to 2005 and second one is up to 2015. Facilities will be constructed half and half for each stage.

2) Water supply for city of Arica (estimated population on 2015: 215,000):

Develop underground water at Yuda River basin by 26 wells, supply the water to the city through water filtration facility utilizing the reservedly permeating film (RO).

3)Investigation for development the underground water at Lauca River basin:

The water supplying capacity of Yuda River basin will be only good for the demand until 2005. Therefore, another water resources are necessary to develop. So, neighboring Lauca River basin should be investigated from the points of view of hydrogy, hydrogeology, physical exploration, trial boring and pumping tests.

CSA CHL/S 201/94 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| Completed      | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### Description:

These projects should be carried out by the water supply and sewage service corporation (ESSAT) of Tarapaca State. At present, the corporation is studying how to realize these projects.

### (FY 1996 Domestic Survey)

The request has been made to implement a project which aims to formulate a groundwater development plan of Lauca River.

ESSAT has been implementing small scale development projects with own fund. It is not planned to procure fund from the Japanese Government.

It is reported that the water shortage in the target area is getting severe, however, there is no plan to implement effective measures immediately to solve the problem.

### (FY 1998 Domestic Survey)

Proposed projects were to be implemented with OECF loan. However, since there has been the tendency toward a strong yen, the projects are being implemented with their own fund.

### (FY 1998 Overseas FU Survey)

ESSAT conducted the additional survey on water resources development in accordance with the present and future demands for water. Ministry of Public Works implemented the water resources management plan for San Jose River Basin. Ministry of National Planning conducted the comprehensive survey on six river basins including San Jose in the critical situation.

### (FY 1999 Overseas Survey)

- (1)Iquique City: 8 pumped wells, distribution channel, pumping station were constructed. Under operation.
- (2)Arica City: 11 pumped wells, water treatment plant, water transmission system were constructed. Under operation.
- (3)Development of the underground water at Lauca River Basin: F/S is being implemented by ESSAT.

### (FY 2000 Domestic Survey)

The feasibility study for the development of the underground water at Lauca River Basin has not been implemented. Contents of F/S:

- 1) To evaluate the potentiality of the groundwater and the surface water development of the Lauca River Basin
- 2) To consider the quantity of the supply water for the Arica City based on the evaluation

Situation in progress:

At the completion of the Study, both the counterpart and JICA expected to implement the proposal by Yen Loan, however, Chile Government showed their policy not to compensate for the Loan because of the exchange risk. Therefore, Ministry of Public Works had not submitted the request and ESSAT dug some wells on the outskirts of Arica City to increase the quantity of the pumping water.

**(F/S)** 

Compiled Aug.1995

| CS | A CHL/S 3                             | 801/94                            |  |         |                       | Revised            | Jul.2009 |
|----|---------------------------------------|-----------------------------------|--|---------|-----------------------|--------------------|----------|
| 1. | COUNTRY                               | Chile                             |  |         |                       |                    |          |
|    | NAME OF STUDY                         |                                   | y on the New Biobio Bridge                             |         |                       |                    |          |
|    | SECTOR                                | Transportation                    | / Road   | 4.      | TYPE OF STUDY         | F/S                |          |
| 5. | COUNTERPART AGEN<br>TIME OF DEVELOPMI | ICY AT THE                        | Ministry of Public Works, Road Bureau                  |         |                       |                    |          |
|    | PRESENT COUNTERPA                     | ART AGENCY                        |  |         |                       |                    |          |
|    | OBJECTIVES OF THE<br>STUDY            | most appropriate                  |  | ssibili | ity to construct a Ne | ew Bridge includir | ng the   |
| 7. | CONSULTANT(S)                         | Chodai Co., Ltd<br>Nippon Koei Co | o., Ltd.   |         |                       |                    |          |
| 8. | STUDY PERIOD                          | Jan.1993 ~                        | Jan.1994 12month(s)                                    |         |                       |                    |          |
|    | SITE OR AREA  MAJOR PROPOSED PE       | Concepcion City  ROJECT(S)        | y  |         |                       |                    |          |
|    |                                       |                                   | 55m and a width of 24.4m in type of post-tensioning ho | llowe   | ed slab bridge.       |                    |          |

新ビオビオ橋建設計画調査

CSA CHL/S 301/94 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| Completed      |                          |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

Reasons why the projects were implemented:

(FY 1998 Overseas Survey)

- 1. High priority is given over the development of national roads in Chili as it supports the advancement of export industry.
- 2. The permanence of Biobio Bridge has come to its limit.

#### Finance:

(FY 1999 Domestic Survey)

Chile government fund: US\$45mil. (23,150,222 pesos)

Components: construction of the bridge (2,157m in length), Los Carrera Road and the access road, development of six intersections.

### Construction:

(FY 1999 Domestic Survey)

29 May 1998 commenced. Construction of the bridge was completed in Jan. 2000.

(FY 1999 Overseas Survey)

Completed. 2,156.37m in total length, 4 lanes, lightenings on the prestrest concrete girder.

#### Detail:

The Ministry of Public Works is calling for a tender to appoint a contractor for the bridge construction works planned to be commenced in July, 1995.

### (FY 1995 Overseas Survey)

The estimated costs for designing is US\$ 1.5 mil. and for construction is US\$ 70 mil. It is scheduled to be commenced in 1996 and to be completed in a year.

### (FY 1998 Domestic Survey)

The Presidential Order declared the implementation of the proposed project after the completion of F/S. Although it was decided that the project would be implemented by BOT scheme, fund has not been procured and the prospect of implementing the project is vague.

## STUDY SUMMARY SHEET (M/P)

|     |              | (M/P) | Compiled | Jul.1996 |
|-----|--------------|-------|----------|----------|
| CSA | CHL/S 104/95 |       | Revised  | Jul.2009 |

| 1.             | COUNTRY  | Chile   |  |                        |                     |         |
|----------------|--|---|--|------------------------|---------------------|---------|
| 2.             | NAME OF STUDY  | Industrial Solid  | Waste Management i                               | n the Metropolitan Reg | ion                 |         |
|                | SECTOR   | Public Utilities  | / Hebon  | Sanitation             | 4. TYPE OF STUI     | ov M/P  |
| <i>5</i> .     | SECIUK   | i ublic Otilities   | National Environmen                              |                        | 4. 111E OF SIUI     | OI MILE |
| ٥.             | COUNTERPART AGEN<br>TIME OF DEVELOPME  |   | Translat Environmen                              | i Connice              |                     |         |
|                | PRESENT COUNTERPA  | ART AGENCY  |  |                        |                     |         |
| 6.             | OBJECTIVES OF THE STUDY  |   | rial/medical waste dis<br>ne most preferred proj |                        |                     |         |
| 7.             | CONSULTANT(S)  |   | GYO CO., LTD.<br>TION Urban & Envir              | onment Planning, Rese  | arch and Consulting |         |
| 8.             | STUDY PERIOD   | Jan.1995 ~  | Feb.1996   | 13month(s)             |                     |         |
| 9.             | SITE OR AREA   |   |  |                        |                     |         |
| Ma<br>1)<br>2) | major proposed proposed proposed arket scale of industrial was Gathering/transportation Intermediate disposal incustry - (control of the control of the cont | vaste disposal ind<br>industry -(Projec<br>lustry -(Project C | et Cost: 13,590 US\$/y<br>lost: 2,202 US\$/year) | ear)                   |                     |         |
|                | ROJECT COST (US\$ 1,0<br>/P 1) 13,590 2) 2,202   |   |  |                        |                     |         |
|                |  |   |  |                        |                     |         |
|                |  |   |  |                        |                     |         |

CSA CHL/S 104/95 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

Utilization of Outputs:

(FY 1997 Overseas Survey)

The results of the study have been utilized for elaboration of National Plan for Industrial Solid Waste Management (1997~).

Moreover, National Environment Committee (CONAMA) and National Environment Center (CENMA) are using the data and so forth obtained by the study.

Out of the priority projects proposed in the study, institution system will be in charge of public organization and technology system (gathering transportation facility, intermediate/final disposal plant) will be handled by private sector including F/S.

(FY 2001 Overseas Survey)

The study results with an analysis of industrial solid waste management in the metropolitan area, enabled the government to formulate waste management policies.

Subsequent study:

(FY 1997 Domestic Survey)

F/S and construction are to be implemented by private sector including investment from foreign companies.

Situation:

(FY 1997 Domestic Survey)

The study introduces adequate means for administrative organs to guide and administer industrial solid waste disposal by private sector.

The Government of Chile is establishing the system to implement the projects.

Related Project:

(FY 1997 Domestic Survey)

Construction of poisonous solid waste disposal plants is in process by European and North American companies.

(FY 2005 Domestic Survey)

No subsequent study has been conducted since the M/P. However, proposal made in the study has been adapted and referenced in various occasions.

## STUDY SUMMARY SHEET (M/P)

|                         |   | (M/P)  |   |   | Compiled   | Dec.1999  |
|-------------------------|---|--|---|---|--|---|
| SA CHL/S 107/           | 98  |  |   |   | Revised  | Jul.2009  |
| COUNTRY                 | Chile   |  |   |   |  |   |
| NAME OF STUDY           | The Rehabilitati  |  | (Phase 2)   |   |  |   |
| SECTOR                  | Transportation  | / Road<br>Ministry of Public Works (MOP).  |   | 4. TYPE OF STUDY M/F  | )  |   |
|                         |   |  |   |   |  |   |
| PRESENT COUNTERPA       |   |  |   |   |  |   |
| OBJECTIVES OF THE STUDY | rehabilitation; a   | nd 3)To make the system of bridge de   | m; 2)To make the<br>sign by CADD an   | manual for bridge maintena<br>d compile design standard.  | nce work and   |   |
| CONSULTANT(S)           | Pacific Consulta  | nts International  |   |   |  |   |
| STUDY PERIOD            | Sep.1996 ~  | Mar.1998 18month(s)  |   |   |  |   |
| SITE OR AREA            |   | cross the country. The samples are in  | the Minth State.  |   |  |   |
|                         | ROJECT(S)   |  |   |   |  |   |
| hing in particular.     |   | ave been made the priority for the im  | plementation.   |   |  |   |
|                         | COUNTRY  NAME OF STUDY  SECTOR  COUNTERPART AGENTIME OF DEVELOPMINE  PRESENT COUNTERPART AGENTIME OF DEVELOPMINE  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD  MAJOR PROPOSED PRING in particular. | COUNTRY NAME OF STUDY  SECTOR  Transportation  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  1)To formulate of rehabilitation; and rehabilitation; and study  CONSULTANT(S)  STUDY PERIOD  Pacific Consultant C | COUNTRY COUNTRY COUNTRY COUNTRY COUNTRY The Rehabilitation Conservation Program on Bridges  SECTOR Transportation Aministry of Public Works (MOP).  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  1)To formulate the rural bridges rehabilitation progra rehabilitation; and 3)To make the system of bridge de  OBJECTIVES OF THE STUDY  Pacific Consultants International  CONSULTANT(S)  SEP. 1996 Amr. 1998 18month(s) COBJECTIVES are across the country. The samples are in  MAJOR PROPOSED PROJECT(S) thing in particular. | COUNTRY NAME OF STUDY  SECTOR  Transportation  Transportation | COUNTEY Chile NAME OF STUDY  The Rehabilitation Conservation Program on Bridges (Phase 2)  SECTOR  Transportation  / Road  4. TYPE OF STUDY MATE OF STUDY MATE OF DEVELOPMENT STUDY    PRESENT COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY | COUNTRY Chile NAME OF STUDY SECTOR Transportation / Road Transportation / Road Tourist of Public Works (MOP).  Ministry of Public Works (MOP).  PRESENT COUNTERPART AGENCY  I) To formulate the rural bridges rehabilitation program; 2) To make the manual for bridge maintenance work and rehabilitation; and 3) To make the system of bridge design by CADD and compile design standard.  OBJECTIVES OF THE STUDY  Pacific Consultants International  CONSULTANT(S)  STUDY PERIOD Sep. 1996  Mar. 1998  18month(s)  Objectives are across the country. The samples are in the Ninth State.  MAJOR PROPOSED PROJECT(S)  hing in particular. |

CSA CHL/S 107/98 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

(FY 1999 Domestic Survey)

There is no information about the utilization of the sample bridge design made by CADD system, even though the fund procurement for construction was supposed to be started soon after the study.

(FY 1999 Overseas Survey)

The results of this Study are utilized.

(FY 2001 Overseas Survey)

Maintenance and rehabilitation of some bridges recommended in the study have been already included in the regional development project under the consideration of priority, social needs, and financial situation. Maintenance and rehabilitation of 45 bridges (total extension: approximately 3km) have been already completed. The bridges were included in regional development projects or urgent construction projects in accordance with the priority of urgency because final design and plans for investment/fund procurement were not prepared in the study and there was no fund procurement to start construction.

(FY 2001 Domestic Survey)

The study aims to transfer techniques of bridge maintenance methodology. No implementation of construction was proposed in the study.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2008 Overseas Survey)

Replacement of the bridge was implemented with own funding. A part of the bridge which is in a critical state has been left as it is. The final recommendation was the replacement of the majority of the bridge and is usually considered in the majority of cases.

(M/P+F/S)

Compiled

Jun.2000

**CSA** CHL/A 226/99 Revised Jul.2009 1. COUNTRY Chile Agricultural Development and Water Management in Metropolitan Area NAME OF STUDY 3. SECTOR / (Agriculture in) General TYPE OF STUDY M/P+F/S Agriculture COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY To formulate master plan for agricultural development and water management to improve the environmental conditions in Metropolitan area To conduct a feasibility study for the agricultural development plan in the priority area To carry out technology transfer to the Chilean C/P through OJT OBJECTIVES OF THE STUDY Naigai Engineering Co., Ltd. 7. CONSULTANT(S) Asia Air Survey Co., Ltd. Jun.1998 Aug.1999 14month(s) 8. STUDY PERIOD M/P:3,200km2 (Metropolitan, Prov.V and Prov.IV) F/S:Popeta area (5,000ha) and Mallarauco area (7,000ha) 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) M/P: 1. Agricultural Infrastructure Development (1) Irrigation Development (2) Improvement of existing irrigation system 2. Rural Living Infrastructure Development (1) Water supply (2) Sewerage System (3) Local Road Improvement 3. Environmental Conservation 1. Agricultural production plan 2. Farmer's org./Agri. Support plan 3. Agricultural infrastructure improvement plan 4. Rural infrastructure improvement plan

CSA CHL/A 226/99 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| Completed      |                          |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

Subsequent Study:

(FY 2000 Domestic Survey)

The Chilean government is examining for the realization of this project.

### (FY 2001 Overseas Survey)

Maipo River Third District and Yali/Aruue Basin Irrigation Optimization Integrated Study was implemented for prereminary survey to realize the project. In the study, especially the irrigation channels in the south riverside of Maipo River and other elements were analized as proposed in JICA's proposal.

Study period: Approximately 13 months.

Financial Source: Chili Industry Field Foundation.

Fund Procured: 200,000,000 peso. (FY 2003 Overseas Survey)

Study results: affirmative economic indices have been suggested in most of the proposal, and national fund or transfer of business rights to the private sector has been proposed as funds for implementation of the project. In the case of the water channel improvement construction of the third sector of the Maipo River, subsidization to private investment in small-scale construction and financing managed by the national irrigation committee have been proposed.

### (FY 2002 Overseas Survey)

Procurements: there has no plan requesting for financial assistance. Ministry of Public Work has decided to implement detailed study, according to institutional priority and contents of proposal.

### (FY 2003 Overseas Survey)

The "Diagnostic Study on Current Condition of Reuse of Sewage Plant Effluent in the Capital Area" is expected to be started within 2003 and completed at the beginning of 2004. This study integrally aims at strengthening agriculture in the Capital Area by using the treated effluent for irrigation in districts where regulated effluent is currently used for cultivation of various vegetables.

Quality improvement of agricultural products irrigated by higher quality water will contribute to larger effects in economic fields and enhanced export advantage in overseas market.

Projects that have been implemented so far are as follows:

- 1) Implementation of meetings with farmhouses in regions targeted for the study with the objective of obtaining their recognition about the study results and proposals.
- 2) The initiative of the private sector especially in a more detailed investigation of the プアンゲ Swamp region in a tributary of the Maipo River.
- 3) The initiative of the Ministry of Public Services in order to implement a more detailed study based on the organizational priority and the related budget in near future (the irrigation facility construction bureau and the business right adjustment unit).
- 4) Adjustment with the irrigation promotion unit with the objective of implementing small-scale projects proposed in the sewage utilization study.

### (FY 2004 Domestic Survey)

No information to be specifically mentioned.

### (FY 2004 Overseas Survey)

- 1. Subsequent Studies
- 1) Completed Studies: "Status Diagnostic Study of Rural Sewage Water Utilisation in the Capital" has completed in early 2004. Valuable report was brought for sewage utilisation for irrigation system in the capital by the study. Fine irrigation water can improve the quality of agricultural products. Detailed analysis was also conducted for related regulation in the study (irrigation and drainage regulations). Existing disputes on water property rights and a rental fee of water and irrigation were scrutinised.
- 2) Future Prospect: Results of F/S of the above proposed projects are presented in the beginning of 2004. Further study will include an analysis for proposed constructions. Scale of the construction which are considered ranges from small to medium facilities.
- 2. Other progress status

So far, following activities have been conducted:

- 1) eetings held with farmers in target area to present research results and its proposal
- 2) Detail study by private entity in Puange region, where there is a tributaries of Mapio River.
- 3) Detail study to be conducted by Ministerio de Obras P?blicas (hydrological construction department and commission adjustment team) in the near future, according to priorities of the projects and budget.
- 4) Adjustment by irrigation promotion team to implement small-scaled construction project presented in water source utilization study.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Oct.2002 CSA CHL/S 129/01 Revised Jul.2009

| 1.  | COUNTRY  | Chile   |  |  |
|-----|--|---|--|--|
| 2.  | NAME OF STUDY  | Study for Promotion of Investments and Exports for the Balanced Economic Development  |  |  |
| 3.  | SECTOR   | Development Plan / (Development Plan in) General 4. TYPE OF STUDY M/P   |  |  |
| 5.  | COUNTERPART AGENORIES OF DEVELOPME   |   |  |  |
|     | PRESENT COUNTERPA  |   |  |  |
| 6.  | OBJECTIVES OF THE STUDY  | To formulate new regional development strategy and short-term action plan in promoting FDI and export growth between Aisa and South America within APEC framework, in order to achieve well balanced economic development in Chili. |  |  |
| 7.  | CONSULTANT(S)  | International Development Center of Japan UNICO International Corporation   |  |  |
| 8.  | STUDY PERIOD   | Mar.2000 ~ Sep.2001 18month(s) ~  |  |  |
| 9.  | SITE OR AREA   | Throughout the county   |  |  |
| 10. | MAJOR PROPOSED PR  | OJECT(S)  |  |  |
| _   | The second secon |   |  |  |

### Development impact:

- 1. North zone: promoting trade relations with Asia and West coast of North America, aimed at developing new industries macro-region in macro-region,
- 2. Central zone: developing the area as the international gateway of South Africa,
- $3. \ South \ zone: Conservation \ of \ natural \ environment \ and \ its \ utilization \ for \ higher \ value \ added.$
- 4. Rehabilitation of non natural resource dependent manufacturing sector: To diverse export product by expanding non-natural resource dependent product in order to sustain economic development.
- 5. Rehabilitation of information technology industry: To develop export oriented information technology industry in order to complement and strengthen function as a gateway to South America.

CSA CHL/S 129/01 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

### **Description:**

(FY 2002 Domestic Survey)

1. JICA's cooperation has continued: After the study, the government has requested Japan's cooperation in developing information technology, which is recommended as a result of the Study. JICA has already conducted project formulation study at the early time of 2002, who advised that the IT center should be established in Valparaiso. JICA has dispatched a specialist for formulating IT center building plans. The Center is to be opened in 2003, and additional specialists are expected to be dispatched. 2. Chile government: Responding to the recommendation by the Study, the government has launched effort to promote export and private investment in Northern, Central and Southern regions. CORFO (Chilean Economic Development Agency) is playing the leading role.

### (FY2002 Overseas Survey)

The projects are in practice, emphasizing on the followings:

- 1. Regional development of Tarapaca:
- 1.1.Developing Port of Arica: The study on financing method of private investment by setting conditions for investment is to be conducted.
- 1.2.Developing infrastructure and strengthening function as a gateway: Corridor construction.
- 1.3.Developing infrastructure in the Region of Tarapaca: Renovation and construction work of 4 bridges along the Arica, Tambo, Macedo line was implemented on budget of Ministry of public work.
- 2. Valparaiso Region
- 2.1 Demand expansion of gateway: Export promotion for commercial services: local government organized management meetings of Argentina and Brazil.
- 2.2 Strengthening logistic support: Global system of General Port Operation and tourism
- 2.3 Study for regional integration: Research Center was established, responding to regional integration.
- 2.4 Tourism development: In FY2002, M/P and promotion program were conducted on the budget of local Govt.. Tourist information was established on Robinson Crusoe Island.
- 2.5. Infrastructure development: infrastructure development, aerial development as logistic support, garbage disposal system were invested. Metro construction and national highway construction, bridging Argentine and Chile are to be implemented.
- 3.Los Lagos: In 2002 there was no activities implemented, shown in the project plan.

### (FY 2004 Overseas Survey)

All strategies indicate that important progress degree up until now and its degree depend on the situation where the action plan was planned. In terms of public organs, respond to the demands of this survey perfectly. MOPTT, CORFO, PROCHILE, PROCHILE, and SERNATUR did their duties at medium and high level. Private sectors are not active enough. In most cases, implementing action plans, although public sectors raised a partial or total results, demanding for the governments financial measures. Small scale firms are built up on the basis of a single strategy, and are luck of action capacity along with competitiveness to respond to challenge the globalised world. In most of all, the strategies which are progressing at high speed; the southern part, middle part, and ITC fields. On the other hand, the northern part and manufacturing cluster strategy is relatively low.

### (FY 2005 Domestic Survey)

"IT development center" was pre-operated for a year, with Santa Maria University as a counterpart (2004). Whether the project would be implemented or not depends on the result of operation. However, there is no information on this subject.

### (FY 2005 Overseas Survey)

Subsequent study: Territorial integration of salmon cluster

Implementing period: 2004 - 2007

 $Implementing\ body: CORGO\ -\ INSTITUTO\ TECN.\ DEL\ SALMON\ -\ CODEPROVAL.$ 

Objective: 1) Enhancement of internal relations within salmon farming cluster between producer, processor, feed produces, fund/service providers, research/educational organizations, and related public organizations. 2) Establishment of working committee to prepare salmon farming industry development strategy for the industry's overall sustainable development (standards and laws related to diving, delivery, logistics, fish farming administration and fish net production). 3) Public advertisement of technologies related to development of the industry's logistics, management, biotechnology, and new product/process method development was assisted.

Status:

Although salmon cultivation industry were seemed to be extremely positive, several issues exists especially on environment, human capital development, and production environment, which need to be solved in the near future.

Even though development of XI region is expected in the future, the region is inferior in infrastructure (number of supplier, waste disposal system, fishery method, hygiene control, fodder supply, logistics of human and resource capital), which requires efficient logistics system for future development.

Several research development projects are implemented with an assistance from CORFO(Corporacion de Fomento de la Produccion). These projects focuses for a solutions to the energy problem (carbon fund), and waste recycling (forest/agricultural soil, construction material, biotechnology products and etc.) to make products, in order to establish waste processing method for wastes from few particular manufactures.

In addition, based on eco-regionalization proposed together with JICA and EPIE, institutionalization of clean production has progressed, which established a committee for clean production to formulate an "Agreement of clean production (acuerdos de produccion limpia: APL)" described below.

- Salmon cultivator APL: completed, In second stage for certification
- Fishing net producer APL: Formulating an agreement
- Merluza producer/exporter APL: In final stage for signature
- Constructor APL: Formulating an agreement
- Cheese producer APL: Formulating an agreement
- Lumberer and timber processor APL: Formulating an agreement

Committee for a Clean Production has demanded CORFO to survey current situation of Fat PL (technical assistance fund) and Pag PL (company assistance fund) of their situation for delay and termination.

CONICYT, CECTA, and University of Chile Austral will jointly establish "Institute of sustainable nutrition and provision" in Llanquihue and to contribute 2.7 million CLP for a budget.

### (FY 2007 Domestic Survey)

No information to be specifically mentioned.

# STUDY SUMMARY SHEET (M/P)

(M/P) Compiled Mar.1986
CSA COL/S 101/81 Revised Jul.2009

| 1.  | COUNTRY   | Colombia   |  |  |  |
|---|---|--|--|--|--|
| 2.  | NAME OF STUDY   | Simon Bolivar Great Memorial Park Project  |  |  |  |
|   | SECTOR  | TOR Social Infrastructure / Urban Planning & Land Development   4. TYPE OF STUDY M/P |  |  |  |
| 5.  |   | Inmuebles Nacionales, Ministerio de Obras Publicas y Transportes                     |  |  |  |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY |   |  |  |  |  |
|   |   |  |  |  |  |
| Comprehensive urban park development.   |   |  |  |  |  |
| 6.  | OBJECTIVES OF THE STUDY   |  |  |  |  |
|   |   | JCP Co., Ltd.  |  |  |  |
| 7.  | CONSULTANT(S)   | Pacific Consultants International  |  |  |  |
| 8.  | STUDY PERIOD  | Oct.1980 ~ Sep.1981 11month(s) ~   |  |  |  |
|   |   | Southern center (250 ha) of Rogota City  |  |  |  |
|   |   | Southern center (350 ha) of Bogota City  |  |  |  |
| 9.  | SITE OR AREA  |  |  |  |  |
| The<br>Ma<br>-M   | 10. MAJOR PROPOSED PROJECT(S)  The study proposed to establish a large-scale park complex in the sourthern part of the central area of Bogota City.  Major components are as follows.  -Memorial park: national festival plaza, international communication center, convention hall, outdoor theater, etc.  -Athletic facilities: sports center  -Educational and amusement facilities: historical museum, transport museum, natural history museum, botanical garden, amusement park, etc. |  |  |  |  |
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**COL/S 101/81 CSA** M/P In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** The Study report has been higly valued and the proposal made by M/P has been implemented. Subsequent Studies: 1981 F/S implemented with the own fund upon the completion of this Study Finance: Own fund Construction: 1988 Commenced (FY 1991 Overseas Survey) Memorial square, water supply facilities, etc. have been completed. At the end of 1990, the park complex was opened to the public. Other facilities are planned to be constructed. (FY 1995 Overseas Survey) Construction works of ponds, drainage channels, surrounding promenades and bridges are being carried on. Also, there are plans to construct restaurants and icecream stands.

(Basic Study)

|           |                                       |                 | (Basic Study)  | Compiled          | Mar.1990 |  |
|-----------|---------------------------------------|-----------------|--|-------------------|----------|--|
| CS        | SA COL/A 501/                         | /81             |  | Revised           | Jul.2009 |  |
| 1.        | COUNTRY                               | Colombia        |  |                   |          |  |
| 2         | NAME OF STUDY                         | Fisheries Resor | urces Survey   |                   | -        |  |
|           |                                       | Eigh            | / Fight and the state of the st | D:- C44           |          |  |
| <b>5.</b> | SECTOR                                | Fishery         | / Fishery 4. TYPE OF STUDY Bureau of Natural Resources, Agency of Natural Resources and Environment  | Basic Study       |          |  |
|           | COUNTERPART AGEN<br>TIME OF DEVELOPME |                 |  |                   |          |  |
|           | PRESENT COUNTERPA                     | ART AGENCY      |  |                   |          |  |
| 6.        | OBJECTIVES OF THE STUDY               |                 |  |                   |          |  |
| 7.        | CONSULTANT(S)                         |                 |  |                   |          |  |
| 8.        | STUDY PERIOD                          | Apr.1979 ~      | Mar.1981 23month(s)  |                   |          |  |
| 9.        | SITE OR AREA                          |                 | Pacific Ocean, Caribbean Sea, and San Andres Islands, Basin at the depth of 10-nt to the border with Panama, and at the depth of 10-200 fathon from Chirambira   |                   |          |  |
| 10.       | MAJOR PROPOSED PR                     | ROJECT(S)       |  |                   |          |  |
|           |                                       |                 | ☐ ntal shelves and slopes in Colombian waters, environmental survey around fishin  | ng places, experi | nental   |  |
|           | eration, methods to utilize           |                 |  | -8 F              |          |  |
|           | iological survey of main              |                 |  |                   |          |  |
| - N       | leteorological observation            | n               |  |                   |          |  |
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**CSA** COL/A 501/81 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** The export of deep sea shrimps earns valuable foreign exchange and about 20 fishing boats (including seven Japanese boats) are in operation in the Pacific Ocean side of Colombia. Colombian Government hopes to increase the number of fishing boats to increase the haul (current haul is about 1,500MT per year), and requested the Japanese cooperation to identify the maximum sustainable yields of fishery resources. (FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) No particular progress.

**(F/S)** 

Compiled Mar.1986

| CS  |  |  |  |           | Revised | Jul.2009 |
|---|--|--|--|-----------|---------|----------|
| 1.  | COUNTRY                                    | Colombia                               |  |           |         |          |
| 2.  | NAME OF STUDY                              | Bogota-Buenav                          | entura Road Project  |           |         |          |
| 3.  | SECTOR                                     | Transportation                         | / Road 4. TYPE OF  | STUDY F/S |         |          |
| 5.  |  |  | Ministry of Public Works and Transportation                              |           |         |          |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |  |  |  |           |         |          |
|   | PRESENT COUNTERPA                          | ART AGENCY                             |  |           |         |          |
|   | •  | Formulation of                         | road improvement between the capital and major cities on the east coast. |           |         |          |
| 6.  | OBJECTIVES OF THE STUDY                    |  |  |           |         |          |
|   |  | KOKUSAI KO                             | GYO CO., LTD.  |           |         |          |
| 7.  | CONSULTANT(S)                              |  |  |           |         |          |
| 8.  | STUDY PERIOD                               | Jun.1979 ~                             | Mar.1981 21month(s)  |           |         |          |
|   |  | Road                                   | d between Buenaventura and Bogota  |           |         |          |
|   |  | Road                                   | roctween Buchaventula and Bogota   |           |         |          |
| 9.  | SITE OR AREA                               |  |  |           |         |          |
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|   |  |  |  |           |         |          |
| 10  | MA IOD DDODOGED DD                         | O TECT(C)                              |  |           |         |          |
|   | MAJOR PROPOSED PRovo-lane road improvement |  |  |           |         |          |
|   | ridening 70 l                              |  |  |           |         |          |
| la  | indslide protection 100 k                  | am                                     |  |           |         |          |
|   | ew road ypass shortcutting the cro         | ossing of Magdal                       | ena River  |           |         |          |
| Ο,  | , pass shorteating the ere                 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |  |           |         |          |
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CSA COL/S 301/82 F/S

|   | Completed or In Progress | Promoting                  |  |  |  |  |
|---|--------------------------|----------------------------|--|--|--|--|
| DDEGES TO GOT : TO GO                   | Completed                |                            |  |  |  |  |
| PRESENT STATUS                          | Partially Completed      | Delayed or Suspended       |  |  |  |  |
|   | Implementing Processing  | Discontinued or Cancelled  |  |  |  |  |
| Description :                           | 11000000119              | Discontinued of California |  |  |  |  |
|   |                          |                            |  |  |  |  |
| FY1994 Domestic Survey) No information. |                          |                            |  |  |  |  |
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# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1988
CSA COL/S 102/84
Revised Jul.2009

| CS                              |  |  |                         |                          |                |                       | Revised             | Jul.2009 |
|---------------------------------|--|--|-------------------------|--------------------------|----------------|-----------------------|---------------------|----------|
| 1.                              | COUNTRY  | Colombia   | Lirban Transport Stud   | y in Barranquilla Metro  | nolitan Dagic  | Nn.                   |                     |          |
| 2.                              | NAME OF STUDY  | Comprehensive  | Croan Transport Stud    | y iii Barranquina Meuo   | pontan Kegic   | <i>7</i> 11           |                     |          |
| 3.                              | SECTOR   | Transportation   | / Urban T               | ransportation            | 4.             | TYPE OF STUDY         | M/P                 |          |
| 5.                              |  |  | Municipality of Barra   |                          |                |                       |                     |          |
|                                 | COUNTERPART AGEN<br>TIME OF DEVELOPME  |  |                         |                          |                |                       |                     |          |
|                                 | PRESENT COUNTERP   | ART AGENCY   |                         |                          |                |                       |                     |          |
|                                 | <u> </u>   | Formulation of   | a transport master plan | for Barranquilla         |                |                       |                     |          |
| 6.                              | OBJECTIVES OF THE STUDY  |  |                         |                          |                |                       |                     |          |
| 7.                              | CONSULTANT(S)  | Chodai Co., Ltd<br>Yachiyo Engine                                      |                         |                          |                |                       |                     |          |
|                                 | .,   |  |                         |                          |                |                       |                     |          |
| 8.                              | STUDY PERIOD   | Jul.1983 ~   | Mar.1985                | 20month(s)               |                |                       |                     |          |
| 9.                              | SITE OR AREA   | Ва   | rranquilla metropolitar | n area                   |                |                       |                     |          |
|                                 | MAJOR PROPOSED PR  |  |                         |                          |                |                       |                     |          |
|                                 | the major large scale pro  |  |                         | gh the master plan study | <b>y.</b>      |                       |                     |          |
| b.R<br>c.D<br>d.D<br>e.D<br>f.D | rban Renewal/Development of Aberband Network Development of Bus Transpevelopment of Rail Transpevelopment of South Sulpevelopment of North Sulpevelopm | ent.<br>sport System.<br>sit System.<br>beenter Area.<br>ocenter Area. |                         | cent of the Central Dict | rict should be | , most urgantly carri | ad out sings the Co | antral   |
| Dis                             | Among the above, the study related to the urban renewal/development of the Central District should be most urgently carried out since the Central District has numerous problems in its land use, transport, environment, etc., while it is expected to be the most important regional core of the Caribbean oast.   |  |                         |                          |                |                       |                     |          |
|                                 |  |  |                         |                          |                |                       |                     |          |

CSA COL/S 102/84 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

Based of the recommendations of the study, the following actions have been taken.

1)Adoption of short-term measures(e.g. traffic control).

2)Endorsement by the city council of the land use plan

3)A feasibility study by JICA on the urban renewal of CBD

4)Establishment of a planning unit in the city government

5)Dispatch of a Japanese long-term expert

(FY 1998 Overseas Survey)

1996 Secretary of the Tourism and Transportation was established.

1998 Policy of Urban Transportation was introduced.

#### Project implemented

(1)Barranquilla Renewal / Development of the Central District

#### (2) Public Transportation Improvement Project

(FY 1994 Domestic Survey)

\*By the year of 1994, the constuction of bus terminals in suburbs and re-routing of bus routes going toward to the central parts of downtown are being implemented. (FY 1995 Domestic Survey)

\*Various road construction projects are being implemented by their own budget.

(FY 1995 Overseas Survey)

\*Regarding to the drainage of rain water from the main facilities of transportation in the city, the regulations concerned were proclaimed on August, 1995, and an agreement of the construction works was signed on October, 1995 with a contractor.

#### (3)Others

(FY 1998 Overseas Survey)

#### Subsequent study:

Apr. - Nov.1998 F/S and D/D, 720mil.pesos (FONADE credit), Construction of Avenida del Rio.

May - Sep.1994 D/D, 90mil.pesos (EDUBAR S.A.), Expansion of 30th District.

May - Oct. 1995 F/S, 300mil.pesos (FONADE credit), Drainage project for Barranquilla.

 $May-Aug.\ 1997\ F/S,\ 70 mil.pesos\ (FINDETER\ credit),\ Construction\ of\ the\ terminal\ for\ inter-municipality\ buses.$ 

#### Implementing projects:

1998 - 1999 Construction of Santo Domingo River Canal (concrete canalization).

1990 - 1999 Installation of traffic signals at 96 intersections.

1994 - 1996 Construction of bridges/roads at 45th District - Circunvalar Ave.and 51B road - Circunvalar Ave.

#### (4)Acceptance of trainees

(FY 1998 Overseas Survey)

Jun.1987 One trainee (urban transportation).

1987 One trainee (urban drainage).

#### Others:

(FY 1991 Overseas Survey)

30 million Peso is budgeted for the duration of 10 years, and the related ministries are in the process of budget finalization. The state government is requesting to the World Bank for financial assistance.

(FY 1997 Domestic Survey)

No additional information.

(F/S)

Compiled Mar.1990

COL/A 301/84 **CSA** Revised Jul.2009 1. COUNTRY Colombia Pamplonita River Basin Agricultural Development Project 2. NAME OF STUDY 3. SECTOR / (Agriculture in) General TYPE OF STUDY F/S Agriculture 5. Instituto Colombiano de hidrologia, Meteorologia Y adecuacion de tierras(HIMAT) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY 1)To propose solution to drainage problems ; 2)To propose irrigation and the land improvement plans including land reclamation ; and 3)To evaluate technical, economic and social spects of the proposed development plans. OBJECTIVES OF THE STUDY Pacific Consultants International 7. CONSULTANT(S) Jun.1983 Jul.1984 13month(s) 8. STUDY PERIOD Norte de santander, 40km north of Cucuta, Pamplonita River Basin 13,500ha, 400,000 people 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) 1. Drainage improvement Drainage improvement are:1,740 ha : 50.5 km Main canal Lateral canal : 84.1 km Interception canal : 14.6 km 2. Irrigation facilities Irrigable area :4,300 ha Head race : 6.4 km Main canal : 26.7 km Lateral canal : 25.3 km Rerated structure 3. Farm roads Main road (construction): 14.5 km (improvement): 6.2 km Lateral road : 250 km Bridge and others

CSA COL/A 301/84 F/S

PRESENT STATUS

Completed or In Progress
Completed
Partially Completed
Partially Completed
Implementing
Processing
Discontinued or Cancelled

#### **Description:**

The project was divided into two sections by its climatological and soil conditions. HIMAT and CORPONOR are in charge of each sector.

(1) First Sector (of which HIMAT is in charge)

Subsequent Studies:

D/D

Finance:

World Bank loan and the fund of HIMAT

Construction:

Scheduled to be commenced this year (FY 1992 Overseas Survey)

(2) Second Sector (of which CORPONOR is in charge)

Subsequent Studies:

D/D

Finance:

the fund of CORPONOR

Construction:

Part of construction completed (FY 1992 Overseas Survey)

Detail:

(FY 1991 Overseas Survey)

A part of the projects in the neighbouring Suria area (downstream only which was not proposed by this study) was completed in 1988 with the World Bank loan. However, the construction covering the upstream has been suspended. Other parts of the project has been untouched.

(FY 1992 Overseas Survey)

The Pamplonita project has been integrated into the National Program of Adaptation of Land.

(FY 1995 Overseas Survey)

12.5 mil. Pesos was allocated from the state budget.

Descriptions in the Study Summary Sheet are based on the answers of the questionnaire, which a fact-finding have only been conducted when sources were available. Therefore, not all of the facts are up-to date. In addition, some may not describe the fact. Questionnaire conducted for the present year (FY 2008) have been conducted for studies completed in FY2007,FY 2005, FY2003 and FY1998. Data which where not known, such as months of the study period, are described as ZERO.

(F/S)

Compiled Mar.1990

**CSA** COL/A 302/86 Revised Jul.2009 1. COUNTRY Colombia Small Scale Irrigation Package Project in Slope Area 2. NAME OF STUDY 3. SECTOR / (Agriculture in) General TYPE OF STUDY F/S Agriculture 5. Instituto Colombiano de hidrologia meteorologia y adecuacion de tierras COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Agricultural development OBJECTIVES OF THE STUDY Naigai Engineering Co., Ltd. 7. CONSULTANT(S) Pacific Consultants International Nippon Koei Co., Ltd. Mar.1987 Jan.1986 14month(s) 8. STUDY PERIOD Andes region among the Oriental Moutain Range 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Proposed Components in 4 areas SanPedro de Iguaque Santa Sofia Caqueza Tibacuy Total Sub-area 1,076 Irrigation area(ha) 162 239 417 258 Pond(site) 2 4 6 Intake facilities(site) 3 4 5 4 16 Main irrigation canal(km) 11 13 8 5 37

傾斜地小規模かんがい計画

CSA COL/A 302/86 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

The agricultural development project in this area has been implemented by the government with three stages. This F/S is a model plan to formulate the development project in this sloping area.

(1) Phase I (including a part of Santa Sofia area)

Finance:

Sep.1987 BIRF loan (US\$ 32 mil.)

Construction:

Oct.1987 Commenced Investment cost (Local Currency)-\$31,624,905

1988 Completed (50ha out of 239ha of Santa Sofia area)

(The World Bank Loan US\$ 62,500)

Mar.1989 Phase I Completed

(2) Remaining Part of Santa Sofia Area and other areas

(FY 1992 Overseas survey)

The project has been delayed.

(FY 1995 Domestic Survey)

It is heard that the consolidation of farmland is in progress at some parts of San Pedro de Iquque, however the detail is unknown.

(FY 1998 Overseas survey)

There has not been any progress in project implementation due to the budget constraint and restructuring of the engineering institution.

\*Project-Type Technical Cooperation

"Irrigation Agricultural Development in the Sloping Area"

Oct.1.1991 - Sep.30.1997

(FY 1994 Domestic Survey)

1993-1994 Model Infrastructure Development Project implemented

(FY 1997 & 1998 Domestic Survey)

Jan.1998~ An individual expert (cultivation) was dispatched (for two years).

Jan.1999 A short-term expert (water management) was dispatched for one month).

#### Situation:

60% of the farmers in the nation is the small-scale farmers who carry out their agricultural activities in mid-slope of mountainous areas.

To promote the eradication of poverty, relief of these small-scale farmers and elevation of agricultural productivity are the most urgent policy of the nation.

Descriptions in the Study Summary Sheet are based on the answers of the questionnaire, which a fact-finding have only been conducted when sources were available. Therefore, not all of the facts are up-to date. In addition, some may not describe the fact. Questionnaire conducted for the present year (FY 2008) have been conducted for studies completed in FY2007,FY 2005, FY2003 and FY1998. Data which where not known, such as months of the study period, are described as ZERO.

(F/S)

| C                            |  | 02/07  | Complica |          |  |  |
|------------------------------|--|--|----------|----------|--|--|
|                              | SA COLINERY  |  | Revised  | Jul.2009 |  |  |
| 1.                           | COUNTRY  | Colombia Urban Development of the Central District of Barranquilla   |          |          |  |  |
| 2.                           |  |  |          |          |  |  |
| 3.<br>5.                     | SECTOR   | Social Infrastructure  |          |          |  |  |
| <i>5.</i>                    | COUNTERPART AGEN TIME OF DEVELOPME PRESENT COUNTERPA   | CY AT THE CNT STUDY  |          |          |  |  |
|                              | 1  | Urban renewal for Barranquillita and Boriche in Barranquilla City    |          |          |  |  |
| 6.                           | OBJECTIVES OF THE STUDY  |  |          |          |  |  |
|                              |  | Chodai Co., Ltd.   |          |          |  |  |
| 7.                           | CONSULTANT(S)  | Yachiyo Engineering Co., Ltd.  |          |          |  |  |
|                              |  | Jul.1986 ~ Feb.1988 19month(s)                                       |          |          |  |  |
| 8.                           | STUDY PERIOD   | ~  |          |          |  |  |
| 9.                           | SITE OR AREA   | Central Area(150 ha) of Barranquilla                                 |          |          |  |  |
|                              | MAJOR PROPOSED PR  |  |          |          |  |  |
|                              |  | re in connection with the urban development of the Central District: |          |          |  |  |
| 2) ]<br>3) ]<br>4) ]<br>5) ( | 1) Construction of the Bus Terminal.  - Intermunicipal bus terminal  - Urban bus terminal  - Urban bus routing to and from Barranquillita  2) Reorganization of the Existing Public Market in Barranquillita.  3) Provision of an Urban Park to Replace the Mrcado Canal.  4) Improvement of Calle 30.  5) Construction of the Riverside Bypass.  6) Arrangement of Infrastructures. |  |          |          |  |  |
|                              |  |  |          |          |  |  |
|                              |  |  |          |          |  |  |
|                              |  |  |          |          |  |  |
|                              |  |  |          |          |  |  |
|                              |  |  |          |          |  |  |

CSA COL/S 302/87 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

The Colombian Government established EDUBAR (Empresa Desarollo Urbano de Barranquilla, government 51%, private sector 49%) in April 1990.

(FY 1998 Overseas Survey)

The proposed project has been included in the pilot macro project on national urban policy started in 1994.

#### Subsequent studies:

(FY 1998 Overseas Survey)

Nov.1996 - May 1997 Revision, 180mil.pesos (FINDETER credit).

Apr. - Oct.1998 F/S and D/D on Rio Ave., 720mil.pesos (FONADE credit).

Oct.1997 - Feb.1998 F/S on the development of Ahuyama Canal, 150mil.pesos (CORMAGDALENA, Barranquilla).

Jan. - Mar. 1998 Design of the sewage network, 50mil.pesos (EDUBAR fund).

#### Project Implemented:

(1) The expansion of road

EDUBAR undertook F/S, on Nov.1991 the construction commenced.

(2) Bus terminal

(FY 1991 Overseas Survey)

EDUBAR undertook F/S, one of terminals completed on Mar.1992, the

construction of another one will be started on Jun. 1992.

(FY 1995 Overseas Survey)

Inter Municipal Bus Terminal: The construction commenced on Jul.1996, will be completed on Feb.1997.

(3)Others

(FY 1998 Overseas Survey)

Jan. 1997 - Nov. 1998 (completed) Expansion of the 30th district between 46th St. and 38th St., 6,400mil.pesos (FINDETER credit).

May - Dec. 1998 (completed) Environmental improvement of Cano del Mercado Ring Road, 1,300mil.pesos (Barranquilla, Ministry of Environment: FONAM).

Feb.1998 - Jan.1999 (completed) Improvement of inner roads, 7,600mil.pesos (FINDETER credit).

Jan. - Dec. 1996 (completed) Establishment of Cano del Mercado, 6,000mil.pesos (Central government fund).

Oct.1998 - Pump station for sewage system, 300mil.pesos (FINDETER credit).

Jan.1997 - Jan.1999 Construction of the markets (Mercado El Playon, Mercado Plaza Ujueta, Mercado La Magola, Mercado Edubar, Mercado E.P.M., Mercado Cafetero), 550mil.pesos (Central government fund and FINDETER credit).

### Operation & management:

(FY 1998 Overseas Survey)

EDUBAR S.A. is engaged in managing the markets.

Public works projects (roads, bridges, canals) have been taken over to Barranquilla.

#### Dispatch of Experts:

Upon the request of the minicipality of Barranquilla, JICA dispatched a short term expert to the EDUBAR (Empresa Desarrollo Urbano de Barranquilla) from Nov.1994 to Jan.1995.

#### Acceptance of trainees:

(FY 1998 Overseas Survey)

May - Jun.1996 One trainee (urban development).

Oct. - Dec.1998 One trainee (land readjustment).

#### Detail:

(FY 1992 Overseas Survey)

Total investment costs \$79,500 million pesos (US\$103.5 million).

The projects are being implemented according to the F/S.

#### (FY 1995 Domestic Survey)

As the project for Yen Credit, the priority is low. Therefore, this project has been excluded from the list of requesting projects.

#### (FY 1995 Overseas Survey)

Every project consisted this survey work have been commenced to implement about the same time and are going to complete until June, 1996.

Descriptions in the Study Summary Sheet are based on the answers of the questionnaire, which a fact-finding have only been conducted when sources were available. Therefore, not all of the facts are up-to date. In addition, some may not describe the fact. Questionnaire conducted for the present year (FY 2008) have been conducted for studies completed in FY2007,FY 2005, FY2003 and FY1998. Data which where not known, such as months of the study period, are described as ZERO.

# STUDY SUMMARY SHEET (M/P)

(M/P) Compiled Mar.1990 CSA COL/A 101/88 Revised Jul.2009

| 1.                         | COUNTRY   |  | Colombia  |  |  |  |
|----------------------------|---|--|---|--|--|--|
| 2.                         | NAME OF STUDY   |  | ntegrated Agricultural Development Project              |  |  |  |
|                            | SECTOR  | Agriculture                            | / (Agriculture in) General                              | 4. TYPE OF STUDY M/P                                 |  |  |
| 5.                         |   |  | Regional Autonomous Corporation of Quindio              |  |  |  |
|                            | COUNTERPART AGEN<br>TIME OF DEVELOPME                                     |  |   |  |  |  |
|                            | PRESENT COUNTERPA   | ART AGENCY                             |   |  |  |  |
|                            |   | To formulate an Quindio.               | integrated agricultural development project in the area | a covering a total of 200,000ha of the Department of |  |  |
| 6. OBJECTIVES OF THE STUDY |   |  |   |  |  |  |
| 7.                         | CONSULTANT(S)   | Naigai Engineer                        | ints International<br>ring Co., Ltd.                    |  |  |  |
| 8.                         | STUDY PERIOD  | Jan.1987 ~                             | Jun.1988 17month(s)                                     |  |  |  |
| 9.                         | SITE OR AREA  | Quindi                                 | to (20,000,000 sq.km) population 400,000                |  |  |  |
| 10                         | A LA LOR DRODOGER DR  |  |   |  |  |  |
|                            | MAJOR PROPOSED PR   |  | Quindio a long term plan has been set for the year 20   | 005  |  |  |
|                            |   |  | as conducted as short term plans.                       | 005.   |  |  |
|                            | ng term plan :  | occurre pro 175                        | as conducted as short term plants                       |  |  |  |
|                            | ricultural development p  |  | Oha)  |  |  |  |
|                            | saster prevention plan (6   |  |   |  |  |  |
|                            | provement of water (7 ar rastructure(197km road,                          |  | vater supply)   |  |  |  |
| Sho<br>-Ag<br>-Di          | ort term plan :<br>gricultural development p<br>saster prevention plan(en | lan (9 areas 7000<br>nergency flood co | vha)  |  |  |  |
|                            | ater quality improvement  |  |   |  |  |  |
| -Inf                       | rastructure (113km road,  | ∠ power stations                       | 5)  |  |  |  |
|                            |   |  |   |  |  |  |
|                            |   |  |   |  |  |  |
|                            |   |  |   |  |  |  |
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|                            |   |  |   |  |  |  |
|                            |   |  |   |  |  |  |

CSA COL/A 101/88 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 1989 Domestic Survey)

The agricultural development project which includes measures for small farms corresponds with the national policy for improving regional differences.

The change from the coffee monoculture also has been proved important in activating the area's agriculture, leading to the development of the area.

Utilization of the study

(FY 1989 Domestic Survey)

A request was made to the Japanese Govenment by the DNP regarding technical assistance on the F/S of this project.

The F/S was carried out from March 1990. The final report will be made in January 1991. During the F/S, the model plants of coffee waste water treatment were constructed.

The maps of the study were incorporated with the following development plans.

- National integrated agricultural development
- Disaster prevention projects
- Water supply management etc.

#### Others

(FY 1992 Overseas Survey)

1992.11 Asemblea departamental del Quindio approved the Integrated Agricultural Development Project at the state level by the No.5 order. The investment plans of the First Phase are as follows:

1993 \$23.1 million, 1994 \$43.6 million, 1995 \$68.2 million,

1996 \$123.9 million, 1997 \$23.1 million

(FY 1995 Domestic Survey)

Providing for making this coffee waste water treatment plan as a grant aid project.

(FY 1995 Overseas Survey)

C.R.Q. is implementing the survey works of disaster protection plan and the analysis of the agricultural land soil from hydrological and geological viewpoints.

**(F/S)** 

Compiled Mar.1991

| <u>CS</u>   | SA COL/A  | x 303/89                          |                                      |                        |           |   | Revised . | Jul.2009 |  |
|---|---|-----------------------------------|--------------------------------------|------------------------|-----------|---|-----------|----------|--|
| 1.  | COUNTRY   | Colombia                          |                                      |                        |           |   |           |          |  |
| 2.  | NAME OF STUDY   | Ariari River Ba                   | sin Integrated Ag                    | ricultural Developmer  | t Project |   |           |          |  |
| 3.  | SECTOR  | Agriculture                       | / (                                  | (Agriculture in) Gener | al        | 4. TYPE OF STUDY F/S  |           |          |  |
| 5.  | COUNTERPART AGI   |                                   |                                      |                        |           | uacion de tierras(HIMAT)  |           |          |  |
|   | PRESENT COUNTER   | RPART AGENCY                      |                                      |                        |           |   |           |          |  |
| 6.  | OBJECTIVES OF TH<br>STUDY                               | feasibility of th                 |                                      |                        |           | (2) To verify technical and sociology to Colombian counterparts |           |          |  |
| 7.  | CONSULTANT(S)   | Pacific Consult<br>Naigai Enginee | ants International<br>ring Co., Ltd. | l                      |           |   |           |          |  |
| 8.  | STUDY PERIOD  | Aug.1988 ~                        | Nov.1989                             | 15month(s)             |           |   |           |          |  |
| Meta, Ariari upper river basin (150km southeast of the capital Bogota) study area 41,000ha  9. SITE OR AREA |   |                                   |                                      |                        |           |   |           |          |  |
| 10  | MAJOR PROPOSED  | PROJECT(S)                        |                                      |                        |           |   |           |          |  |
|   | Irrigation Area: 23,815 ha                              |                                   |                                      |                        |           |   |           |          |  |
|   | eadworks: 1   |                                   |                                      |                        |           |   |           |          |  |
|   | fixed weir: width 187m                                  | n x height 3m)                    |                                      |                        |           |   |           |          |  |
|   | Movable weir: width 27m x height 10m)                   |                                   |                                      |                        |           |   |           |          |  |
|   | Main Irrigation canal (Concrete and earth lining): 95km |                                   |                                      |                        |           |   |           |          |  |

- Main drainage Canal (Earth lining): 5km
- Lateral Irrigation Canal (Concrete and earth lining): 113km
- Road (Asphalt and aggregate paved): 235km
- Diversion works: 6
- Bridges: 138

- Siphons: 161

In addition of above facilities, tertiary irrigation canals and on-farm development were included.

CSA COL/A 303/89 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

Subsequent Study:

(FY 1997 Domestic Survey)

Bid for D/D was held in 1996. As soon as OECF approves a consultant, D/D will be started. Bid for construction will be opened continuously.

D/D consultant / PCI

#### Finance:

Apr.1996 L/A 7,673 mil.Yen

(AriAri River Basin Integrated Agricultural Development Project)

\*Contents of Project

- 1. Intake weir (height 3.0m, width 210m)
- 2. Irrigation Canal (208km)
- 3. Drainage Canal (5km)
- 4. Road improvement

#### Details before the procurement of the fund:

In February 1991 the Colombian government officially requested the Japanese government for the financial assistance to implement the project. Although OECF mission was planned to be dispatched, the delay in the procedure to dispatch a mission, the public disorder in Colombia (frequent occurrence of Terrorism, etc.), etc. caused it to be suspended.

In June 1993 an OECF appraisal mission was sent at last and had a discussion with the concerned Colombian Authority over the project cost and other related topics.

#### Construction:

(FY 1996 Domestic Survey)

Jan.1997~2003 Scheduled to be implemented

(FY 1997 Domestic Survey)

Not commenced yet

(FY 1998 Domestic Survey)

Since the structure of the implementing agency has changed and expenses for consultant contract are not prepared by the government, scope of works by OECF loan has not been decide.

(FY 1998 Overseas Survey)

Consultant contract is to be made after OECF will approve. Response to the conditions presented by OECF was submitted in March 1999.

(FY 1999 Domestic Survey)

PCI outbid the contract. However, due to the security problem, the construction was suspended. The possibility for launch is extremely low.

(FY 1999 Overseas Survey)

Embassy of Japan requested that the security problem in Colombia should be solved.

#### Detail:

(FY 1992 Overseas Survey)

The ARIARI project has been integrated into the National Program of Adaptation of Land, in which the improvement of 535,000ha of land is planned for a decade commencing in 1991.

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## STUDY SUMMARY SHEET (M/P)

Compiled Mar.1993 **CSA** COL/S 103/91 Revised Jul.2009

| 1.  | COUNTRY                           | Colombia         |   |  |                 |                     |  |  |
|-----|-----------------------------------|------------------|---|--|-----------------|---------------------|--|--|
| 2.  | NAME OF STUDY                     | Air Pollution Co | Pollution Control Plan in Santafe de Bogota City Area |  |                 |                     |  |  |
| 3.  | SECTOR                            | Administration   | / Environ   | mental Problems  | 4.              | TYPE OF STUDY       | M/P  |  |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME |                  | Jefe Section Protection                               | n Ambiente, La Secretar                                | ria Distrital d | le Salud Santafe de | Bogota D.C.  |  |
|     | PRESENT COUNTERPA                 |                  |   |  |                 |                     |  |  |
| 6.  | OBJECTIVES OF THE STUDY           | _                | • •   | n, meteorology, air pollu<br>City, on the basis of whi |                 |                     | onditions and air pollution<br>e air pollution control |  |
| 7.  | CONSULTANT(S)                     |                  | rsis and Computing<br>ants International              |  |                 |                     |  |  |
| 8.  | STUDY PERIOD                      | Jul.1990 ~       | Feb.1992  | 19month(s)   |                 |                     |  |  |
|     | SITE OR AREA                      |                  | the juridication of the s                             | Sectetaria Distetaria Dist                             | trital de Salu  | dde Santafe de Bog  | gota D.C.  |  |
| 10. | MAJOR PROPOSED PR                 | O.IECT(S)        |   |  |                 |                     |  |  |

- (1) Countermeasure for the whole area
- (a)Institutional: 1)Revision of emission standards 2)Education of operator of stationary sources 3)Reinforcement of regulation on stationary sources 4)Revision of motor vehicle inspection and refistration system 5)Establishment of type approval system of motor vehicle about exhaust gas 6)General instruction of drivers on motor vehicle operation 7)Treatment of diesel motor vehicles 8)Reviews of the tax imposing system on vehicles 9) Establishment of prevention system against hydrocarbon evaporation from stationary sources
- 10)Establishment of subsidy system for private investment on air pollution control 11)Deliberate Reorganization of laud use in the city.
- (b)For short term: 1)Improvement of combustion 2)Fuel Improvement or conversion 3)Installation of dust collector 4)Reduction of heat radiation loss 5)Prevention of soil dust dispersion from soil mining or asphalt mixing plant
- (c) For Medium to Long Term: 1)Improvement of combustion of oil boilers. 2)Fuel Improvement or Conversion 3)Installation of dust collector 4)Reform of used gasoline motor vehicle 5)Reconstruction of trolley bus network 6)Construction of passenger railway lines. 7)Improvement of public bus system.
- (2) Countermeasure for specific area
- (a)Large Intersections:1)Prevention of tall buildings 2)Open space as buffer area
- 3)To keep the distance from residential areas
- (b) Specific Stationary Source:

Raising of chimney height to lower the concentration of pollution.

CSA COL/S 103/91 M/P

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

Air Pollution Control

- Regulation of exhaust gas (CO, HC concentration by car type):

Implemented

- Improvement of public bus system: Implemented
- Reconstruction of trolley bus system: Delayed
- Construction of passenger train system: Delayed
- Installation of mechanical coal-feeder: Implemented
- Fuel improvement: Implemented
- Installation of dust collector: Implemented

#### Others:

(FY 1995 Overseas Survey)

Regulations of the air pollution control were proclaimed on June, 1995, and additional regulations will follow in succession.

In future, it is planned to investigate the performances of air pollution control activities in every 3 years by the specialists' group established by Japanese cooperation.

#### (FY 1996 Domestic Survey)

An IBRD project (US\$40 mil.), which aimed to assist to formulate a nationwide environmental policy targetting Bogota, Cali, Medellin etc. and to establish an environment information system to carry out the assistance, was implemented and, consequently, the nationwide air quality monitoring system seems to be established (yet to be confirmed). Around 1993, the Ministry of Environment was newly established.

(Project in Bogota was proposed by this study)

#### (1)Air Pollution Control in Bogota

(FY 1997 Domestic Survey)(FY 1998 Overseas Survey)

Finance: World Bank/ DAMA

\* Contents of the project

Establishment of air pollution monitoring system (32 stations)

Stage I: 9 stations, II:11 stations, III:12 stations.

Construction:

9 stations were opened at the time of Jan.1997.

12 stations have been installed and 2 stations were under installation as of 1999.

Opereation of the network is commissioned to APCYTEL Ltd. and that of the additional 2 stations is commissioned to ESC Sanambiente.

#### (2)Countermeasure for whole country

(FY 1997 Domestic Survey)

- Control of exhaust gas of vehicle

Makers were obligated to install system to check exhaust gas when register new car.

- Promotion of exclusive lane for buses
- Promotion of use of gas in household
- Control of evaporation of HC (executed in 1996)
- Reinforcement of control over exhaust gas from factories (executed in Jul.1996)

#### (FY 1999 Overseas Survey)

Being implemented: emission control, new vehicle control, gasoline car control, fuel measurement, introduction of gasoline peroxide, improvement of trolley bus, introduction of passenger train, improvement of bus transport system, education for citizens/drivers, improvement of incineration way, improvement of the quality of fuel, evaluation of height of chimneys, training for technicians, etc.

Being implemented/Will be implemented: air monitoring/networking, introduction of technology for cleaning, implementation of public campaign for improving the conciseness on environment, etc.

Delayed: strengthening of registration system, countermeasurement for diesel vehicles, review of tax on cars, treatment of exhaust gas, etc.

#### (3)Other implemented projects

(FY 1998 Overseas Survey)

1.Follow-up and monitoring the source of air pollution in Bogota industrial estate (completed in Jul.1998): \$400,300,000 (CORPODIB:\$72,300,000, ELDAMA:\$328,000,000).

2.Strategy for the training the mechanics for controlling the pollution (Jul.1997 - Dec.1998): \$145,000,000 (DAMA).

3.Evaluation of the relation between the air pollution and the respiratory disease of the children in Puente Aranda (Dec. 1996 - Sep. 1997, by Colombia Medical School):\$40,000,000 (DAMA).

4.Study on the relation between the air pollution and the respiratory disease in 5 areas in Santa fe de Bogota (Mar.1998 - Sep.1999, by Javeriana Univ.):\$142,400,000 (Javeriana Univ., Dep. of Health, DAMA).

#### Others:

(FY 1997 Domestic Survey)

Several gas fields have been exploited at Casana province. Provision of gas for users including households is going on.

If gas supply for lower income group increases, exhaustion of substances derived from coal which cause air pollution will be reduced.

Descriptions in the Study Summary Sheet are based on the answers of the questionnaire, which a fact-finding have only been conducted when sources were available. Therefore, not all of the facts are up-to date. In addition, some may not describe the fact. Questionnaire conducted for the present year (FY 2008) have been conducted for studies completed in FY2007,FY 2005, FY2003 and FY1998. Data which where not known, such as months of the study period, are described as ZERO.

**(F/S)** 

Compiled Mar.1993

| CS   | SA COL/A :   | 804/91   | Revised | Jul.2009 |
|------|--|--|---------|----------|
| 1.   | COUNTRY  | Colombia   |         |          |
|      |  | Quindio Basin Integrated Agricultural Development Project                          |         |          |
| 2.   | NAME OF STUDY                                      | C C C C C C C C C C C C C C C C C C C  |         |          |
| 3.   | SECTOR   | Agriculture / (Agriculture in) General 4. TYPE OF STUDY F/S                        |         |          |
| 5.   | SECTOR   | Regional Autonomous Corporation of Quindio (CRQ)                                   |         |          |
|      |  | regional rationomous corporation of Quintilo (CRQ)                                 |         |          |
|      | COUNTERPART AGEN                                   |  |         |          |
|      | TIME OF DEVELOPME                                  | ENT STUDY  |         |          |
|      |  |  |         |          |
|      |  |  |         |          |
|      |  |  |         |          |
|      | PRESENT COUNTERPA                                  | ART ACENCY   |         |          |
|      | TRESERVI COUNTERIA                                 | INT AGENCI   |         |          |
|      |  |  |         |          |
|      |  | To implement the F/S for the priority areas selected in the M/P conducted in 1988. |         |          |
|      |  | To imprement the 175 for the priority them selected in the 1711 conducted in 1700. |         |          |
|      |  |  |         |          |
|      |  |  |         |          |
| 6.   | OBJECTIVES OF THE                                  |  |         |          |
|      | STUDY  |  |         |          |
|      |  |  |         |          |
|      |  |  |         |          |
|      |  |  |         |          |
|      |  | Pacific Consultants International  |         |          |
| 7.   | CONSULTANT(S)                                      |  |         |          |
|      |  |  |         |          |
| 0    | CTUDY DEDIOD                                       | Mar.1990 ~ Aug.1991 17month(s)   |         |          |
| ъ.   | STUDY PERIOD                                       | ~  |         |          |
|      |  | 7 areas in Dept of Quindio(7,600ha, population 3,400) and                          |         |          |
|      |  | Cristales River Watershed (9,400ha)  |         |          |
|      |  |  |         |          |
| o    | SITE OR AREA                                       |  |         |          |
| ٠.   | SITE OR AREA                                       |  |         |          |
|      |  |  |         |          |
|      |  |  |         |          |
|      |  |  |         |          |
|      | MAJOR PROPOSED PR                                  |  |         |          |
| The  | e project is devided in tw                         | o sub-project:   |         |          |
|      |  |  |         |          |
|      | Agricultural Developme                             |  |         |          |
|      | oad improvement (New 1                             |  |         |          |
|      | rigation improvement (1)                           |  |         |          |
|      | gro-industry (5 locations                          |  |         |          |
| - K  | esearch center (1 location                         | 18)  |         |          |
| (2)  | C-ff   |  |         |          |
|      | Coffee waste water treat del area 1,000 ha (52 Far |  |         |          |
| IVIO | uei aiea 1,000 iia (32 Fai                         | iii iiouseiioius)  |         |          |
|      |  |  |         |          |
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CSA COL/A 304/91 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY 1992 Domestic Survey)

1) The project is important for providing the solutions to the coffee monoculture and natural water deterioration. 2) A reduction of coffee export damaged the local economy. Hence, the local government is aiming at development of local economy with corporation of this project.

#### (1) Agriculture Development

Subsequent Studies:

(FY 1992 Overseas Survey) 1993 D/D implemented by Gobierno Department with its fund.

Construction:

\*Rural Road:

(FY 1997 Domestic Survey) Based on the proposal of this study, rural road is being rehabilitated by own fund.

(FY 1998 Domestic Survey)(FY 1999 Overseas Survey) Completed. The road damaged by earthquake was rehabilitated.

\*Irrigation facilities:

(FY 1998 Domestic Survey) Since, irrigation development project has not been implemented. Some large-scale farmers developed the irrigation facilities by their own funds.

(FY 2000 Domestic Survey) It is said that some large-scale farmers developed the irrigation facilities by their own funds, however, there is little possibility to procure public fund.

Others:

(FY 1998 Overseas Survey)

"Development project with the community participation in the forest sector (FACOFOR Project)" is under implementation based on the Dutch fund with the coordination of UN organizations, FAO, Regional Autonomous Cooperation of Quindio, Risaralda, Caldas, Tolima.

In addition, the forest program and rural forest program for production and conservation are introduced in Quindio.

Data on land utilization has been renewed/improved after the F/S.

Data on land utilization and distribution of the vegetation are digitized in the Regional Cooperation of Quindio.

#### (2) Coffee waste water treatment

(FY 1995 Domestic Survey) The preparation is in progress to request the Japanese grant aid to finance the Coffee Waste Water Treatment Plan.

(FY 1995 Overseas Survey)

Due to the participation of the other governmenal organizations, this project has not been implemented, yet. And the original plan was modified on the treatment method and on the location where the first test will be conducted. The water treatment facility aims to remove 90% of contaminating materials with high efficiency. However, it seems to be difficult to proceed the construction at the marshland in the project area due to its topographical characteristics. The application of the air-explosing method is consider to be hard because of the unstability of agents and the high energy costs while it is expected to be effective.

The treatment with erobic bacteria, which could oxidize the contaminated water and remove methan gas, is effective from the viewpoint of the improvement of water quality and the cost saving.

(FY 1996 Domestic Survey)

It is reported that the constructed model facilities have been well operated. Although there are some opinions to expand this model project and to submit a request for Japanese grant aid assistance to implement it, no step has been taken for its realization.

(FY 1998 Domestic Survey)

There was a demand for implementing the project with a grant aid assistance since the coffee farmers have to shoulder the high cost of the project. However, since a grant aid assistance is not applied for Colombia, the project has not been implemented. Implementing agency reported the operational situation of the pilot plant in 1995. The situation after that, however, is unknown.

Impeding factors: 1) Coffee waste water causes troubles only twice a year; 2) Urban waste water recently causes more troubles than coffee waste water; 3) Expenses for the coffee waste water treatment plant may put pressure on the farmers; and 4) It is difficult to organize the farmers.

(FY 1998 Overseas Survey)

National Coffee Center (CENICAFE) has developed a new technology with consideration of the environmental aspect which can apply coffee processing. (FY 1999 Overseas Survey)

Most of the coffee refinery facilities were damaged by the earthquake occurred on 25 Jan.1999. Through reconstructing these facilities, the introduction of the coffee refining system considering the environmental aspects became possible. In the basin along the Cristales Fall, the target area of this Study, 73 households introduced the coffee refining systems considering the environment. Another 84 households will introduce these systems.

#### (3) Improvement of farm technology

(FY 1998 Domestic Survey) It was reported that technology was extended through the activities of JOCV.

#### (4) Others

(FY 1998 Overseas Survey)

Improvement of the pollution by the domestic waste water.

Waste water treatment plants were constructed in Salento and La Tebaida, and sewage was constructed in Monte Neguro in 1998. Designs for the treatment plants and sewage in Quimbaya, Cordoba, Buenavista, Calarca were made. EDAR company was established for improving the pollution by the domestic waste water in Armenia.

## STUDY SUMMARY SHEET (M/P)

Compiled Mar.1994 **CSA** COL/S 104/92 Revised Jul.2009

| 1.  | COUNTRY  | Colombia                    |                         |                       |               |                          |                     |
|-----|--|-----------------------------|-------------------------|-----------------------|---------------|--------------------------|---------------------|
| 2.  | NAME OF STUDY  | The Urban Trans             | sport Study in the City | of Cartagena de India | s.            |                          |                     |
| 3.  | SECTOR   | Transportation              |                         | ransportation         | 4.            | TYPE OF STUDY M          | i/P                 |
| 5.  | COUNTERPART AGENCY AT TO<br>TIME OF DEVELOPMENT STUI |                             | Express Desarro de U    | rbano de Bolivar      |               |                          |                     |
|     | PRESENT COUNTERPA                                    |                             |                         |                       |               |                          |                     |
| 6.  | OBJECTIVES OF THE STUDY                              | The formulation until 2010. | of Comprehensive Ur     | ban Transport Plan (R | oad Transport | , Public Transport and ' | Traffic Management) |
| 7.  | CONSULTANT(S)  | Chodai Co., Ltd.            |                         |                       |               |                          |                     |
| 8.  | STUDY PERIOD   | Mar.1991 ~                  | Nov.1992                | 20month(s)            |               |                          |                     |
|     | SITE OR AREA   |                             | City of Cartagena       |                       |               |                          |                     |
| 10. | MAJOR PROPOSED PRO                                   | OJECT(S)                    |                         |                       |               |                          |                     |

- 1. Short Term Plan (Investment 1.042 billion Pesos)
- 1) Road Impr. (2 routes) and Road Construction (1 route), 2) Construction of Bus Bay, 3) Introduction of Water Tramsp., 4) Improvement of Traffic Management system
- 2. Medium Term Plan (Investment 100.218 billion Pesos)
- 1) Road Impr. (3 routes) and Road/Bridge Construction (6 routes, 3 bridges),
- 2) Construction of Bus Terminal (4), Improvement Bus Bay, 3) Installation of Traffic Signal
- 3. Long Term Plan (Investment 195.127 billion Pesos)
- 1) Road Impr. (17 routes) and Road construction (7 routes, 7 bridges), 2) Construction of Bus Terminal (7), Introduction of Trunk-Feeder Bus System,
- 3) Installation of Traffic Signal, etc..

CSA COL/S 104/92 M/P

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

The improvement of the public transport system has been given high priority in Cartagena.

(1) Public Transport System and Water Transport System

(FY 1998 Overseas Survey)

Subsequent study:

1994 F/S for Cartagena urban transportation (\$505mil., funds from District and FINDETER).

1996 Design for the route of public transportation in Cartagena de Indias (\$80mil., District fund).

1997 F/S for the installation of signals at 29 intersections in Cartagena de Indias (\$7mil., District fund).

Finance:

1996 District fund (\$7mil.) Installation of signals at 29 intersections and construction of the pavement.

Construction: 1997 - 1998 (Spanish ETRA).

Operation & Management: DATT

Effect: Improvement/alleviation of traffic congestion at the peak time in commercial and residential areas.

(2) Improvement of Road Network

The Colombian government is in preparation for TOR to request the Japanese government to conduct F/S.

(FY 1994 Domestic Survey)

The Colombian government requested the Japanese government to implement F/S. However, it was not successful because it was not given high priority.

(FY 1995 Overseas Survey)

In 1995 a part of the improvement project of the existing road network has been implemented.

(FY 1998 Domestic Survey)

Improvement of the road network is underway with their own fund. However, detail information is unknown.

(FY 2000 Domestic Survey)

The Road Network project between the center of Cartagena and the north area of Cartagena where the large-scale development project is planned was being implemented in 1998. The local consultant in Bogoda carried out this Road Network project by private fund.

(3) Others

(FY 1998 Domestic Survey)

Cartagena city expects Japanese government to conduct F/S.

(4) Other projects implemented or under implementation

(FY 1998 Overseas Survey)

Local roads:

2-lane Ring road (Pontezuela - Bayunca): constructed.

Variante Mamobal - Gambote - Cordialidad (2 lane): constructed.

Manzanillo del Mar Ring road: bid was made.

Punta Canoa Ring road: bid was made.

Baru crossing road: under examination.

Perimetral road and Cienaga de la Virgen (C9): financed.

Marginal Sur road and Chambacu road (C20): under bidding.

Urban arterial roads:

Cargo road: under implementation.

Pavement of Consulado Ave.: changed to 2 lanes.

Pedro de Heredia Ave.: changed from 4 to 6 lanes.

Pavement of St.46:changed to 2 lanes (Ceballos - Espana).

Pavement of St.51:changed to 2 lanes (Nuevo Basque - Costa Linda).

Expansion of St.41:changed from 2 to 4 lanes (Av.Santander - India Catalina).

Pavement of St.71:changed to 2 lanes (Biffi - El Socorro).

Pavement of St.15:chaneged to 2 lanes (Santa Clara - Sn Fernando).

Bridge

Romero Aguirre Bridge (Canapote)(Br11): constructed.

|    |                |          | (Basic Study) | ompiled | Mar.1994 |
|----|----------------|----------|---------------|---------|----------|
| CS | SA COL/A 502/9 | 92       | R             | levised | Jul.2009 |
| 1. | COUNTRY        | Colombia |               |         |          |
|    |                |          |               |         |          |

| 2. | NAME OF STUDY                     | Forest Resource | Forest Resources Management |  |         |                    |             |
|----|-----------------------------------|-----------------|-----------------------------|--|---------|--------------------|-------------|
| 3. | SECTOR                            | Forestry        | / Forest                    | ry & Forest Conservation   | 4.      | TYPE OF STUDY      | Basic Study |
| 5. | COUNTERPART AGENTIME OF DEVELOPME |                 | Inderena (Instituto N       | Nacional de los Recursos Natura                                  | les Rei | novables y del Amb | iente)      |
|    | PRESENT COUNTERPA                 | ART AGENCY      |                             |  |         |                    |             |
| 6. | OBJECTIVES OF THE STUDY           |                 | an and the model plan       | ons to conserve headwaters, and as should be formulated contribu |         |                    |             |
| 7. | CONSULTANT(S)                     | Japan Forest Te | chnical Association         |  |         |                    |             |
| 8. | STUDY PERIOD                      | Feb.1989 ~      | Jun.1992                    | 40month(s)   |         |                    |             |
| 9. | SITE OR AREA                      | Reserva Foresta | l Central and forest a      | area in Caldas Province  |         |                    |             |

### 10. MAJOR PROPOSED PROJECT(S)

- Study Area: 1,600,000 ha - Intensive Area: aprox. 200,000 ha - Model Areas : Approx. 20,000 ha

As the Study Area, the Reserva Forestal Central was investigated by means of forest and land use condition by using the Landsat data. The guideline for forest resources control was formulated based upon the results of the investigation.

Using the guideline, forest management model plans were formulated on three Model Areas.

**CSA** COL/A 502/92 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** The reason for Delay or Cancellation: (FY 1995 Overseas Survey) Suspended due to the shuffling of the governmental organization in charge. Situation: The Government of Colombia is considering to establish national forest resources management system covering the whole country based on this guideline and forest resources management plan. But no movement of materialization has been observed. (FY 1997 & 1998 Domestic Survey) No further information.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Jun.1997
CSA COL/S 118/96 Revised Jul.2009

| portation for Santafe of Bogota City |  |
|--------------------------------------|--|
|                                      |  |
| on / Road                            | 4. TYPE OF STUDY M/P   |
| 7                                    |  |
|                                      | solve the serious traffic jam and to promote the development in                                      |
|                                      |  |
| ~ Dec.1996 17month(s)                |  |
| y of Bogota                          |  |
| rojects<br>jects<br>ojects<br>s<br>s | and long term (2020)   |
| tte Projects                         | te the M/P for the urban transportation to y and its surrounding areas.  , Ltd. ngineering Co., Ltd. |

CSA COL/S 118/96 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 1997 Domestic Survey)

Based on the short-term project proposed by this M/P, some projects have being implemented in the Bogota city. Recognizing the importance of trunk bus system and construction of highway, the city has requested a technical cooperation to conduct F/S to the Japanese government. Preliminary study team will be dispatched in Dec 1997

(1) Traffic Management Project (15th avenue)

(FY 1998 Domestic Survey)

On-going.

(FY 2000 Overseas Survey)

Finance: Bogota City budget (45 million USD)

Consturuction:1997 ~1999(Completed)

Contents: Bus Route Development Project(2 Routes)(Bus Route Development, Extension of the sidewalk and improvement of parks)

(2) Bus Route Development Project

Subsequent study:

(FY 1998 Domestic Survey)

1998/Apr - 1999/Jun F/S by JICA

(Study on the Construction of Highway and Bus Lane in Bogota City)

Cost/approximately 300 million JPY.

Bogota City expects Japanese government to further conduct D/D.

Finance:

(FY 1998 Domestic Survey)

OECF loan is to be provided.

(FY 2001 Domestic Survey)

Bogota City budget.

Consturuction:

Completed

Refer to COL/S 310/99 Feasibility Study on the Project of Highway and Bus-lane of Santa Fe de Bogota (1999)

(3) Railway Development

Subsequent study:

(FY 1999 Overseas Survey)

F/S in under implementation.

(FY 2000 Domestic Survey)

F/S of the Subway Construction Project in Bogota City was implemented.

(FY 2001 Domestic Survey)

Contents of F/S: This Railway Development Project was studied as the F/S by the consultant group composed of the American, French and Colombian with the completion target in 2007 after the agreement between Bogota City and Central Government on the implementation of Study and Planning (SITM) concerning to a mass-transportation in Sept.1996. This Project was proceeded by the Ex-President and does not seem to be progressed well.

#### (FY 2006 Overseas Survey)

The concerned Master plan study has not been utilised due to lack of financial resources of the Bogota City Government. However, the study has been refered in 3 of the Master Plans prepared by Bogota City Government.

Master plans prepared by the city:

- 1) Traffic flow survey
- 2) Vehicle traffic flow survey, 2006
- 3) Vehicle traffic flow master plan, 2006

**(F/S)** 

Compiled Jun.2000

|                              | A COL/S 3                  |                                   |   | Revised Jul.2009   |
|------------------------------|----------------------------|-----------------------------------|---|--|
|                              | COUNTRY                    | Colombia<br>Feasibility Stud      | y on the Project of Highway and Bus-lane      | of Santa Fe de Bogota  |
|                              | NAME OF STUDY              |                                   |   |  |
| 3.<br>5.                     | SECTOR                     | Transportation                    | / Road<br>Secretaria de Transito y Transporte | 4. TYPE OF STUDY F/S   |
|                              | COUNTERPART AGEN           |                                   | Secretaria de Transito y Transporte           |  |
|                              | PRESENT COUNTERPA          | ART AGENCY                        |   |  |
| 6.                           | OBJECTIVES OF THE<br>STUDY | To conduct a F/Bogota City.       | <br>'S of Urban Highway and Bus Trunk Road:   | s for mitigation of traffic congestion in the urbanization area in |
| 7.                           | CONSULTANT(S)              | Chodai Co., Ltd<br>Yachiyo Engine | eering Co., Ltd.                              |  |
| 8.                           | STUDY PERIOD               | Mar.1998 ~                        | Jul.1999 16month(s)                           |  |
|                              |                            | Bogota City                       |   |  |
|                              | SITE OR AREA               | DO HECTE(I)                       |   |  |
| Two<br>(1) U<br>The<br>(2) T | Trunk Bus Road Project     | ded;<br>ect<br>-Lane dual carria  | geway and the design speed is adopted at 8    |  |
| Trui                         | ak Bus Road will be cor    | structed on the e                 | xisting trunk roads and the total bus roads   | length are about 125 km including 11 km viaduct bus road.          |
|                              |                            |                                   |   |  |

CSA COL/S 310/99 F/S

PRESENT STATUS

Completed

Partially Completed

Partially Completed

Implementing

Processing

Delayed or Suspended

Discontinued or Cancelled

#### Description:

1. Trunk Bus Roads Project (Autopista Sur and Autopista Norte)

(FY 2000 Domestic Survey)

It prposed by JICA F/S were completed by Bogota City budget.

2. Urban Expressway Project

(FY 2001 Domestic Survey)

No particular progress.

3. Developing public transportation route project

(FY 2001 Overseas Survey)

Subsequent Studies:

9th, August, 2002-9th Mar., 2003.

Finsnce:

Financed by FONDATT, around 258 thousand dollarsFONDATT, 25mil. Dollars

4. Constructing car park

Subsequent Studies:

Study related with car park (7 studies) 22nd Jan.1999-Feb.2003.

Finsnce:

Funded by FODATT. The followings will be achieved by a series of projects.

- setting time-zone and area allowed for parking on roads,
- setting time-zone and area inhibited from parking,
- punishing illegal parkers for fine, and,
- providing guidance for preventing buss drivers from parking on roads or walking spaces.

Profit effects:

- a) contributing to greater security of citizens, smoother passage of emergency vehicles,
- b) abbreviating travel time and cutting economic loss, caused by traffic congestion,
- c) gaining greater economic competitiveness,
- d) raising awareness of civilians about traffic rules, especially related to parking,
- e) eliminating traffic congestion, decreasing traffic accident, and improving city scope,
- f) contributing to construction of new urban model, consistent with National Development Plan
- 5. Center for Traffic Management Project

19th Sep, 2001 -19th Sep, 2003.

The project conducts survey in real time, on traffic situation, and introduction "Center" to enable flexible response to any case.

### (FY 2003 Domestic Survey)

The proposal project for this study was implemented. In addition, the bus network is supposed to be further improved including the plan to extend the trunk bus route.

(FY 2004 Domestic Survey)

- 1. Proposed Project: Trans Milenio
- 2. Beneficiaries: Whole Bogota city
- 3. Degree of Appliance: Drastic improvements in bus system, introduction of new cars (a two-car)
- 4. Effects: Results of the questionnaire to bus users.
- 1) Traffic congestion drastically improved
- 2) The bus became cleaner, crimes has reduced, and became a safer transportation
- 3) Runs on schedule and became convenient

#### (FY 2004 Overseas Survey)

Bus Arterial Road Project - Trans-Millennium Outline Plan

- 1) Content: Economic based prioritising and evaluation of constructed and on construction arterial roads, future arterial roads of Trans-Millennium system, promotion of national and regional agreements, and balance and condition of invested capital, loan based, and non-loan based arterial roads.
- 2) Period: 2003
- 3) Finance: Domestic Finance (gasoline tax), the World Bank amount: 18.1 billion Peso (2001) 79.5 billion Peso (2002) 1.7 trillion (2003)
- 4) Design/Construction:
- 1. Phase 1: Caracas arterial road, Northern Highway, and Medellin-Highway
- 2. Phase 2: Americas-Centauro Arterial Road, Suba Road, and Norte Kito Sur
- 5) Start of Construction
- 1. Phase 1: 1999
- 2. Phase 2: 2001
- 6) Status of the Progress
- 1. Completed
- 2. 30 percent

Phase 3 arterial road construction is scheduled.

### (FY 2005 Domestic Survey)

No information to be specifically mentioned.

Descriptions in the Study Summary Sheet are based on the answers of the questionnaire, which a fact-finding have only been conducted when sources were available. Therefore, not all of the facts are up-to date. In addition, some may not describe the fact. Questionnaire conducted for the present year (FY 2008) have been conducted for studies completed in FY2007,FY 2005, FY2003 and FY1998. Data which where not known, such as months of the study period, are described as ZERO.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled May.2001
CSA COL/S 106/00 Revised Jul.2009

| 1.                                     | COUNTRY                               | Colombia  |   |                        |                       |                          |
|--|---------------------------------------|---|---|------------------------|-----------------------|--------------------------|
| 2.                                     | NAME OF STUDY                         | The Study on the  | e Regional Environmental Improven   | nent Plan for the Basi | in of Lake Fuquene in | the Republic of Colombia |
| 3.                                     | SECTOR                                | Administration  | / Environmental Proble  | ms 4.                  | TYPE OF STUDY         | M/P                      |
| 5.                                     |                                       |   | Regional Autonomous Corporation   | of Cundinamarca (C     | CAR)                  |                          |
|  | COUNTERPART AGEN<br>TIME OF DEVELOPME |   |   |                        |                       |                          |
|  | PRESENT COUNTERPA                     | ART AGENCY  |   |                        |                       |                          |
| 6.                                     | OBJECTIVES OF THE STUDY               | and to pursue ted   | master plan for regional environment chnology transfer to the counter part                      |                        |                       | targeting the year 2010, |
| 7.                                     | CONSULTANT(S)                         | CTI Engineering   | g International Co., Ltd.   |                        |                       |                          |
| 8.                                     | STUDY PERIOD                          | Feb.1999 ~  | May.2000 15month(s)   | 1                      |                       |                          |
|  | SITE OR AREA                          | OFCT(S)   |   |                        |                       |                          |
|  |                                       |   |   |                        |                       |                          |
| 1. V 1) 2) 3) 2. V 1) 2) 3) 3. A 1) 2) |                                       | Management ion Facilities  y age Treatment Systemerage Treatmer idustrial Wastewa | stem (4 Municipalities)<br>nt System (10 Municipalities)<br>ter Treatment System (48 Factories) |                        |                       |                          |

CSA COL/S 106/00 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 2001 Domestic Survey)

At the end of the Project, continuous study was requested by Colombian side. JICA notified that Japanese small scale local grant aid could be possible to continue the study. Howeve the present situation of the subsequent Project has not been updated.

(FY 2003 Overseas Survey)

The following projects have been implemented or in progress of implementation.

1) Irrigation between Fuquene and Kukunuba and maintenance of equipment for the drainage system.

Subsequent Study: 6 months from 2003/Jul to 2004/Jan

Funding: Own financial resources of the Cundinamarca CAR Municipality (303 million COP)

Construction: 2003/Jul - 2004 /Jan

2) Cleaning of Lake Fuquene to Suarez River and removal of aquatic plants in the Suarez River by machinery

Subsequent Study: 8 months from 2003/Jul to 2004/Mar

Funding: own financial resources of the Cundinamarca CAR Municipality (882 million COP)

Construction: 2003/Jul - 2004/Mar

3) Recovery of the water surface level of the Lake Fuquene

Subsequent Study: for 3 months from 2003/Nov to 2004/Jan

Funding: own financial resources of the Cundinamarca CAR Municipality (4.2 million COP)

Construction: 2003/Nov - 2004 /Jan

4) Optimization of water resources operation of the Lake Fuquene

Subsequent Study: 4 months from 2003/Jul to 2003/Nov

Funding: own financial resources of the Cundinamarca CAR Municipality (30 million COP)

Construction: 2003/Jul - 2003 /Nov

5) Optimization of the sewage disposal system in the municipalities of Ubate, Lengwasake, San Miguel de Sema, and Saboya

Subsequent Study: 13 months from 2003/Oct to 2004/Dec

Funding: own financial resources of the Cundinamarca CAR Municipality (113 million COP)

Construction: 2003/Oct - 2004 /Dec

6) Prioritizing of the construction of the disposal systems of sewage generated from villages located in the basin of the Lake Fuquene

Subsequent Study: 13 months from 2003/Oct to 2004/Dec

Funding: own financial resources of the Cundinamarca CAR Municipality (36 million COP)

Construction: 2003/Oct - 2004 /Dec

7) Reduction of pollutants exhausted from the dairy product industry existing in the basin of the Lake Fuquene

Subsequent Study: 13 months from 2003/Dec to 2004/Dec

Funding: own financial resources of the Cundinamarca CAR Municipality (22 million COP)

Construction: 2003/Oct - 2004 /Dec

8) Study of impacts on the environment of grass-eating carp introduced for the sake of controlling propagation of aquatic plants in the Lake Fuquene

Subsequent Study: 12 months 2004/Jan to 2004/Dec

Funding: own financial resources of the Cundinamarca CAR Municipality (11 million COP)

Construction: 2004/Jan - 2004/Dec

9) Study on composting, application and disposal methods

Subsequent Study: 11 months 2003/Aug to 2004/Jul

Funding: own financial resources of the Cundinamarca CAR Municipality (71 million COP)

Construction: 2003/Aug - 2004/Jul

10) Validation Study on water channel construction toward control of emerging plants

Subsequent Study: 12 months from 2003/Oct to 2004/Oct

Funding: own financial resources of the Cundinamarca CAR Municipality (49 million COP)

Construction: 2003/Oct - 2004/Oct

11) Birds inhabiting within the region, surviving individuals and unexplored habitats - study on habitat of birds

Subsequent Study: 6 months from 2003/Jul to 2004/Jan

Funding: own financial resources of the Cundinamarca CAR Municipality (10 million COP)

Construction: 2003/Jul - 2004 /Jan

12) Ecological preservation in the basin of the Lake Fuquene

Subsequent Study: 9 months from 2003/Jul to 2004/Apr

Funding: own financial resources of the Cundinamarca CAR Municipality (5 million COP)

Construction: 2003/Jul - 2004/Apr

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Oct.2002
CSA COL/S 130/01 Revised Jul.2009

| 1. | COUNTRY                           | Colombia         |                          |   |            |               |          |
|----|-----------------------------------|------------------|--------------------------|---|------------|---------------|----------|
| 2. | NAME OF STUDY                     | The Study on th  | ne Disaster Prevention i | n the Bogota metropolitan                             | area       |               |          |
| 3. | SECTOR                            | Transportation   | / Meteoro                | logy & Seismology                                     | 4.         | TYPE OF STUDY | M/P      |
| 5. | COUNTERPART AGENTIME OF DEVELOPME | CY AT THE        |                          | ent, Direction of Emergenc                            | cy Prevent |               |          |
|    | PRESENT COUNTERPA                 | RT AGENCY        |                          |   |            |               |          |
| 6. | OBJECTIVES OF THE STUDY           |                  |                          | revention such as earthquair to Colombian counterpart |            |               | e Study. |
| 7. | CONSULTANT(S)                     | Pacific Consulta | ants International       |   |            |               |          |
| 8. | STUDY PERIOD                      | Mar.2001 ~       | Mar.2002                 | 12month(s)  |            |               |          |
| 9. | SITE OR AREA                      | Bogota Metropo   | olitan Area              |   |            |               |          |

#### 10. MAJOR PROPOSED PROJECT(S)

- 1. Development of governmental organizations, specialized in disaster countermeasures: The government of Bogota City, the government of Cundinamarca Prefecture and the National Government are required to arrange the government entities for disaster prevention and emergency response immediately owing to the responsibilities in preparedness for disaster prevention and in emergency response required before, in and after a seismic disaster.
- 2. Sharing disaster information and database within the government sector: The database, information and disaster management information systems for the Bogota Metropolitan Area developed in the study should be held in common among the related agencies, and it needs to be maintained properly because the database is a basic tool for disaster management.
- 3. Strengthening of emergency and strategic public building: A large part of the buildings in Bogota Metropolitan Area are required to be seismic resistant in order to mitigate seismic damage. In order to achieve the objective, raising public awareness of disaster prevention, quake-proofing buildings and responding illegal constructions are considered to be prioritized issues.
- 4. Seismic design and construction standard for masonry buildings shall be reviewed duly based on the actual conditions: In the Bogota Metropolitan Area, out of 950,000 buildings, more than 80% of them are masonry. It is recommended for the Bogota metropolitan Area to review the seismic design and construction standard for masonry buildings duly considering the building damages estimated and the assessment of the building damages in earthquake.
- 5. Developing a Disaster Management Information System (DMIS): The Bogota Metropolitan Area is required to complehensively review the decentrally-organized existing information and communication systems in order to promote the development of a DMIS as a basic management tool for disaster prevention and emergency responses.
- 6. Prepareing public or service entities' emergency response plans: Public service providers are required to prepare disaster prevention, strengthen the facilities for emergency response in a disaster and restorate of the damaged facilities after a disaster.
- 7. Public education for disaster prevention: The residents and communities are recommended to be enhanced of public awareness to follow the regulations related to disaster prevention in general, and for the necessity of seismic design and strengthening the building structures, though generally they do not have any penalty cords in building construction, land development and housing development.
- 8. Early execution of a pilot study:In order to promote the Basic Plan for disaster prevention of the Bogota Metropolitan Area, the pilot study on disaster prevention to include organization of local communities, emergency response facilities and restoration plan and for the pilot area to be selected from the vulnerable localities and municipalities selected from disaster prevention aspects in Bogota and Cundinamarca.
- 9. Promotion of further study the existing conditions of the Bogota Metropolitan Area: "Development study on disaster prevention for pilot areas in the Bogota Metropolitan Area", "Geophysical study on Cundinamarca", "Geotechnical study on Cundinamarca", "Study on Water Resources and Environmental Management for the Upper Rio Bogota".

CSA COL/S 130/01 M/P

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 2002 Domestic Survey)

Based on the Study, the government of Bogota City have launched management of earthquake disaster. At the initial stage, preparation of the emergency response plan is in progress. However, due to lack of necessary skills and human resource, the government still needs Japan's technical assistance.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2004 Overseas Survey)

One of the recommendations in the implemented study is enhancement of quake-resistance in Bogota Metropolitan Area. The government of Bogota City allocated 1.2 trillion COP for the city's development aiming quake-proofing public buildings (educational facilities, hospitals, public transportation organizations, vehicles and pedestrian bridges, and athletic facilities) and easing crisis activities, and enhancing the cooperation between concerning authorities.

The request, which was formulated on the basis of the earthquake measurement plan by the Administrative Department for District Planning (DPAE), and aimed monitoring areas having high risk of earth slide and flood, early alarming system and early damage prediction survey after earthquakes, have been submitted to JICA. The collected information through the study is utilized for the building Bogota City's earthquake measurement plan and the project submitted by the UNDP.

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

(FY 2005 Overseas Survey)

No subsequent study/project has been implemented. In September 2005, S/W will be signed for the study of monitoring and early warning system for land slides and flood and disaster assessment.

Technical cooperation:

Training: System and infrastructure for disaster relief. (1 person, 14 May, 2005 - 30 July, 2005)

Other cooperations: A follow-up mission, "The Study on the Disaster Prevention in the Bogota metropolitan area", in response to observation and anxiety of AIS and DPAE, in relation to a signing of memorandom concerning damages in basic plan or meetings.

(FY 2006 Domestic survey)

No information to be specifically mentioned.

(FY 2006 Oversease Survey)

Signed S/W for "The Study on the Disaster Prevention in the Bogota metropolitans area", in September 2005.

(FY2007 Oversea Survey)

Subsequent study: The Study on the Disaster Prevention in the Bogota metropolitan area

Implementing period: May 2005 - March 2008

Implementing institution: Administrative Department for District Planning (DPAE), Soacha

Objectives:

- 1) Preparing the development plan of monitoring systems and early alerts for landslides and floods at the river basin of the Tunjuelo River and the Soacha River.
- 2) Enhancing disaster preventing capability of C/P authorities and communities through implementing the pilot project of establishing, operating and maintaining the monitoring systems and early warning systems for flood and landslides, that will be done by the initiative of the community.
- 3) Transfer technology to Colombian.

Technical cooperation;

Training: 4 people, 15 days (Japan, 13 -28 April, 2006)

Progress

(FY2007 Oversea Survey)

While the study needed to be discussed and adjusted, formulation of hazard maps recommended by the study group was considered useful and economically possible. It is considered beneficial and supportive to the DPAE, and should be implemented promptly. So far, following activities have been implemented: implementing the research covering monitoring district; analyzing the zones affected by landslides and floods community-participating seminars for installing and utilizing equipment (rainfall sensors and water-level sensors).

Others: There are possibilities the sensors to be included by the DPAE in the telemetric system of monitoring the district. The installed sensors, like all the others, would work automatically, and as the agreement based on the engineering specifications requested from the DPAE during the purchase of the equipment, the sensors can be integrated to the telemetric network, adding systems of transmission via radio. The District considered the project important because one of city's policies is to improve, update, automatize and make telemetric the hydrometeorological stations. Since the JICA study group recommended that the equipment should not be telemetric at least in the beginning of operating the system, the DPAE accepted installing both automatic sensors. It is expected that these sensors would be improved and integrated to the monitoring systems which support the warning systems covering the Chiguaza Valley and river basins of the Tunjuelo River and the Bogota River.

## STUDY SUMMARY SHEET (M/P)

Compiled Sep.2003 **CSA** COL/S 126/02 Revised Jul.2009

| 1.  | COUNTRY                    | Colombia                          |                    |                       |                |        |   |
|-----|----------------------------|-----------------------------------|--------------------|-----------------------|----------------|--------|---|
| 2.  | NAME OF STUDY              | Study on Groun                    | d Water Developmen | t in the Bogota Plain | in the Republi | lic of | f Colombia  |
| 3.  | SECTOR                     | Social Welfare                    | / Disaste          | er Relief             | 4              | 4.     | TYPE OF STUDY M/P   |
| 5.  | COUNTERPART AGENO          |                                   | Bogota Water Suppl | y and Sewerage Com    | pany           |        |   |
|     | PRESENT COUNTERPA          |                                   |                    |                       |                |        |   |
| 6.  | OBJECTIVES OF THE<br>STUDY |                                   |                    |                       |                |        | the current situation of the environment related n, d) To conduct technical transfer programs for |
| 7.  | CONSULTANT(S)              | Yachiyo Engine<br>Asia Air Survey | •                  |                       |                |        |   |
| 8.  | STUDY PERIOD               | Nov.2000 ~                        | Feb.2003           | 27month(s)            |                |        |   |
|     | SITE OR AREA               | (2)Groundwater                    |                    |                       |                |        | Bogota Plain (Eastern Project)<br>gota Plain (Western Project)                                    |
| 10. | MAJOR PROPOSED PR          | OJECT(S)                          |                    |                       |                |        |   |

(1) Groundwater Development and Conservation Project in Eastern Hills of Bogota Plain (Eastern Project):

Purpose of the project in Eastern Hills is i) water supply to Bogota City and neighboring cities and ii) improvement of water environment of Bogota Plain. By this project, groundwater will be newly developed from 63 wells, amounting to 2m3/s for ordinary water supply and 4m3/s for emergency water supply. On the other hand, total volume of 0.45m3/s should be artificially recharged into the aquifers from 13 wells for groundwater conservation of Eastern Hills. Areas for water supply are: (a) Cerros Norte, (b) Santana/Chico, (c) Suba, (d) Soacha, (e) Vitelma, (f) San Diego, (g) Hills of Yerba Buena.

(2) Groundwater Conservation Plan of Area of High Groundwater Use in Bogota Plain (Western Project):

Groundwater resource is to be conserved in areas of high groundwater use for floriculture, irrigation and industry. This project will enable the current water use to be continued sustain ably. Areas for artificial recharge are: i) Subachoque River Basin, ii) Chicu River Basin, iii) up-stream of Frio River Basin. Groundwater recharge will be carried out amounting to 0.5m3/s though 28 recharge wells that will be drilled in 14 sites of above three river basin. Items for research and development of technology of groundwater use are: (a) Reuse of drained water of irrigation, (b) Use of rainwater for irrigation, (c) Use of water of Bogota River for irrigation, (d) Change of sites for new flower production, (e) Improvement of irrigation efficiency.

CSA COL/S 126/02 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 2003 Domestic Survey)

The objective of mentioned study is formulating the sustainable use of ground water at the Bogota Plane, and implementing the F/S was requested from the Government of Colombia to the Government of Japan during 2001-2002. The aim of F/S is to develop and preserve the eastern mountain region of the Bogota Plane and equivalent to the project recommended at the M/P study. The Government of Colombia acknowledges vulnerability of the water supply system at the Bogota City and has strong request to improve it. The government also welcomes the shift of the water source from river water to underground water since it will improve river environments and the financial condition of the Company of Water Supply and Sewage Service of Bogota (EAAB).

(FY 2003 Overseas Survey)

After the completion of the study, underground water level monitoring and meteorological weather stations are maintained at Bogota channels. Every month, meteorological hydrologic office produces records. The executive committee consisting of NGEOMINAS, Administrative Department of the Environment (DAMA), Institute of Hydrology, Meteorology and Environmental Studies (IDEAM), Regional Autonomous Corporation (CAR), the Colombian flower growers trade association (ASOCOLFLORES) and Acueducto de Bogota which covers 70% of the Bogota Plane is still operating. In August 2002, the Acueducto requested to the Government Japan for its continuing support to the company in order to implement the F/S of underground water and is now waiting for the reply. (FY 2004 Domestic Survey)

As for the F/S of prioritized project proposed in the Study on Ground Water Development in Bogota Plane, request has been made for an implementation of Study on Bogota city ground water development/preservation plan by the Colombian government to Japan. JICA has conducted P/S of the above study in November 2004. Currently JICA is considering for the implementation of the project.

(FY 2004 Overseas Survey)

Following projects has been completed or in progress using Bogota Water Supply and Sewerage Company's capital.

1) Monitoring of meteorological observation station: bimonthly one-issue-completion. 198,000 USD 2) Maintenance, mowing, coating, oiling, and repair. 99,000 USD 3) Groundwater level monitoring: phase 4 well and Guadalupe: data recording of automatic observation equipment, mowing 116,160 USD. 4) Water quality of phase 4 well and Guadalupe: sampling and chemical analysis 5) Cleaning of well and groundwater quality physical chemical and microbiological analysis 47,040 USD 6) Continuance of well monitoring on drinking water, agricultural water, industrial water in 100 sites. Special research on contaminant, which may have effect to the treatment of major water source. 7) Continuance of refilling, supply of water vain and rehabilitation pilot project: Cooperative project follow contract43,077.76USD period: May - November 2003 8) Bogota plain water vain lists. New basin: Contract to improve cooperation project information 122,438 USD period December 2002 - September 2003 9) Management of Bogota plain water vain lists. New basin: Contract to improve cooperation project information 6,000 USD period: December 2002 - April 2003 10) Ground water project and coordination assistance contract: Consulting, assistance, coordination, budget planning, documentation.1,197,740 USD period 2002-2003, 2004-2005

Benefits are as follow:

1) Improvement of knowledge of groundwater resource in savannah. 2) Identification of important themes to sustain water resource balance improvement, such as water resource lists. 3) Able to conduct activities within and with institutions and to increase the efficiency from technical and economical perspective in researching same theme from a different perspective. 4) To identify availability of groundwater use in emergency and to search for a measure to improve living cost in the highland of the city. 5) Able to understand environmental technologies, which were previously not understood. 6) Although the actual beneficiaries has not been calculated, it is now able to correspond to emergencies in the city, improvement in living cost, and water shortage in northern and southern Bogota area. (FY 2005 Domestic and Overseas Survey)

Groundwater development in Bogota was proposed in the Study. F/S was requested by the Colombia government, which a preparatory study was conducted by JICA in December 2004. The study team was re-dispatched, and S/W of "Sustainable water supply programme based on comprehensive water resource management in Bogota" was concluded in April 2005. The objectives of the Study are as follows. The Study has not been conducted, though possible to be implemented in 2006. Objectives: Water resource management/sustainable water supply programme in Bogota, considering the following points

1. Poor area in Bogota (security of minimum water supply) 2. Human security and disaster prevention 3. Environment and sustainability 4. Organisation/system

#### (FY 2006 Domestic Survey)

Sustainable water supply plan based on comprehensive water resource management in Bogota metropolitan city has been pre-announced by JICA though not been publicly announced yet, as of September, 2006.

(FY 2006 Overseas Survey)

JICA acknowledges that the precondition which the study team has established have been fullfilled. In addition, it has been mentioned that there is a possibility of dispatching study team around early January, 2006. Company of Water Supply and Sewage Service of Bogota (EAAB-ESP) has responded to the above statement that are ready to welcome Japanese team and have requested for number of study team, requirement of office space or staffs. However, official response from JICA has not been made yet. EAAB-ESP is prospecting that the Japanese study team will be arriving around November 2006 and be concretely making decisions on target of the project, scope of work, cost, and funding to decide on the details of the activities.

(FY 2007 Domestic and Overseas Survey)

Subsequent study: Study of Sustainable Water Supply based on comprehensive water resource management in Bogota Metropolitan Area in the Republic Of Colombia. Implementing body: JICA, Acueducto de Bogota

Implementing period: November 2006 - March 2008

Funding party: JICA (development study)

Objective: Formulating the M/P and F/S of water supply plan among the prioritized projects of underground water development. The M/P improves water suppling efficiency at high-ray and poor zones and securing water supply for emergency. The Acueducto, taking the role of supplying water to Bogota Metropolitan Area faces two challenges. 1) To supply water to high-ray and poor zones is increasingly difficult due to squeeze pumps' cost and illegal access and stealing water. 2) Even though the Acueducto enhances earthquake safety of water pumps to prepare natural disaster, capacity building and other preparations are not enough.

In order to overcome these problems, the Government of Colombia requested the Government of Japan for technical cooperation. The study implemented by ACUEDUCTO and accomplish following objectives by utilizing underground water: 1) improving water suppling efficiency at high-ray and poor zone, 2) securing water supply at emergency. It also formulates the M/P of the water supply plan. After collecting and analyzing existing documents in the field study, and implementing research on current situation, water condition, social and economic situation, projects with higher priority will be selected and F/S will be implemented.

Contents: Five wells out of 62 proposed wells will be test-drilled.

Beneficiary: The Acueducto, governmental organizations, the institute of alpline topography, IDEAM, the government of Cundinamarca, and other participants of the project.

Impact:

Technical cooperation: - Geophysical instruments such as transient electromagnetic (TEM) surveying, numeric analysis simulation software of underground water.

Descriptions in the Study Summary Sheet are based on the answers of the questionnaire, which a fact-finding have only been conducted when sources were available. Therefore, not all of the facts are up-to date. In addition, some may not describe the fact. Questionnaire conducted for the present year (FY 2008) have been conducted for studies completed in FY2007,FY 2005, FY2003 and FY1998. Data which where not known, such as months of the study period, are described as ZERO.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Jun.2009
CSA COL/S 101/07
Revised Jul.2009

|    | SA COL/S 101/                         |  |  |   |                        |                         |            |                  |                      |                          |                   | Kevise                       | a Jui                  | .2009  |
|----|---------------------------------------|--|--|---|------------------------|-------------------------|------------|------------------|----------------------|--------------------------|-------------------|------------------------------|------------------------|--------|
| 1. | COUNTRY                               | Colombia   |  |   |                        |                         |            |                  |                      |                          |                   |                              |                        |        |
| 2  | NAME OF CITIDS                        | The Study on Mo  | onitoring and  | Early Warn                                    | ning Systen            | n for Land              | slides ar  | nd Flo           | oods in S            | Selected .               | Areas             | in the Capi                  | ital Distri            | ict of |
| 2. | NAME OF STUDY                         | Bogot? and Soac  |  |   |                        |                         |            |                  |                      |                          |                   | •                            |                        |        |
| 3. | SECTOR                                | Social Infrastruct   |  | (Social Infi                                  |                        |                         | al         | 4.               | TYPE (               | F STUD                   | Y M               | /P                           |                        |        |
| 5. |                                       |  | Capital Distric                                      |   |                        |                         |            |                  |                      |                          |                   |                              |                        |        |
|    | COUNTERPART AGEN<br>TIME OF DEVELOPME | CY AT THE  | •  |   |                        |                         |            |                  |                      |                          |                   |                              |                        |        |
|    | PRESENT COUNTERPA                     | ART AGENCY   |  |   |                        |                         |            |                  |                      |                          |                   |                              |                        |        |
| 6. | OBJECTIVES OF THE STUDY               | 1)To prepare a P.<br>2020. 2)To estab<br>selected areas thr<br>disaster preventic<br>Colombian perso | lish, operate a<br>rough pilot pro<br>on of the coun | and maintai<br>ojects relyin<br>nterpart orga | n the moning on the in | toring and nitiative of | early wa   | arnin<br>ınity j | g systen<br>people i | n for land<br>n order to | dslides<br>o enha | s and floods<br>ance the cap | s for the<br>pacity on |        |
| 7. | CONSULTANT(S)                         | Pacific Consultar<br>OYO Internation   |  |   |                        |                         |            |                  |                      |                          |                   |                              |                        |        |
| 8. | STUDY PERIOD                          | Jun.2006 ~<br>May.2007 ~   | Mar.2007<br>Mar.2008                                 |   | 9month(s<br>10month(s  |                         |            |                  |                      |                          |                   |                              |                        |        |
| 9. | SITE OR AREA                          | With regard to fle<br>The term "flood of<br>term "landslide of<br>fall".                             | disaster" cove                                       | rs "disaster                                  | caused by              | flood, and              | l flash fl | ood              | containii            | ng sedim                 | ent su            | ch as debri                  | s flow". 7             | Гhе    |

### 10. MAJOR PROPOSED PROJECT(S)

- 1) BOGOTA City
- 1.Landslide Monitoring Plan
- a) Safety of the residential area, b) Monitoring on specific cracks and deformation on structures and the ground, c) Safety of construction works, d) Verification of effectiveness of stabilization works
- 2.Flood
- a) Monitoring and Early Waning System Establishment; Monitoring and Data Gathering System, Warning Criteria
- b)Community Based Disaster Management (CBDM) Activities by DPAE
- 2) SOACHA City
- 1. Landslide Monitoring Plan Recommendations to Mitigate Landslide Damages
- a) People in the Critical Zones should be relocated. A priority for relocation should be given to the people settled in the most hazardous area of the Critical Zones.
- b) Until all the people in the Critical Zones are relocated, the Soacha Municipality should take care of the safety of people remaining in the Critical Zones.
- c) People remaining in the Critical Zones should be informed that they are found in the Critical Zones and they may be affected by danger even in case of fine weather.
- d) In case of heavy rain, the Soacha Municipality should stay on alert for people found in the Critical Zones
- e) To obtain the basic information about the alert level of rain fall, the Soacha Municipality should collect rain fall data.
- 2.Flood
- a) Monitoring and Early Waning System Establishment; Monitoring and Data Gathering System, Data Analysis and Processing System, Information Dissemination System, Agreement on Data exchange
- b)Institutional Arrangement (Institutional arrangement in Soacha, Agreement on Data exchange)
- c)Community Based Disaster Management (CBDM) Activities
- d)River Improvement

**CSA** COL/S 101/07 M/P In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** (FY 2008 Domestic Survey) No information to be specifically mentioned.

(Basic Study)

Compiled

Jun.2009

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|-------|----------------------|--------|-----|-------|
| CSA   | COL                  | /      | 501 | /11/7 |
|       |                      | // 1.7 | 201 | /W/   |

|    |                                       | `   | Compilea  | Jun.2007        |
|----|---------------------------------------|---|---|-----------------|
| CS | SA COL/S 501/                         |   | Revised   | Jul.2009        |
| 1. | COUNTRY                               | Colombia  |   |                 |
| 2. | NAME OF STUDY                         | The Study on the Formulation of Geographic Data Base of the Principal Cities in the Atlantic Coa<br>Colombia  | ast in Republic o                                       | f               |
| 3. | SECTOR                                | Social Infrastructure / Survey & Mapping 4. TYPE OF STUDY Ba  | asic Study  |                 |
| 5. | COUNTERPART AGEN<br>TIME OF DEVELOPME |   | COLOMBIA  |                 |
|    | PRESENT COUNTERPA                     | ART AGENCY  |   |                 |
| 6. | OBJECTIVES OF THE STUDY               | 1)To support making POT aimed at the urban planning for the 103 municipalities in Colombia and coastal cities where urban area is spreading and therefore making reliable urban development plan the JICA Study Team made basic GIS data based on the 1/2,000 scale digital topographic maps. 2 sustainability analysis of IGAC s 1/2,000 scale map and basic GIS data making program for the remunicipalities.3)Transfer technologies required in modern digital mapping to IGAC through the ad 1 and 2 above. | n is given high p<br>2)Carrying out se<br>remaining 100 | riority,<br>elf |
| 7. | CONSULTANT(S)                         | Asia Air Survey Co., Ltd. PASCO Corporation   |   |                 |
| 8. | STUDY PERIOD                          | Aug.2005       ~       Mar.2006       7month(s)         Jun.2006       ~       Nov.2008       29month(s)  |   |                 |
| 9. | SITE OR AREA                          | The target of this study is the three cities located along the Atlantic coast, namely, Cartagena, San Metropolitan area of Barranquilla. Colombia Total mapping size is 400 km2.  | ata Marta and   |                 |

### 10. MAJOR PROPOSED PROJECT(S)

Scope of the study:

- 1 Aerial photography
- 2 Ground control point survey
- 3 Aerial triangulation
- 4 Digital topographic mapping
- 5 Basic Data creation
- 6 GIS model system
- GIS model system CD-Rom
- 7 Production of CD-Rom
- 8 Polyester base map
- 9 Report

Physical output:

- -Field classification result
- -Aerial triangulation result
- -Printed maps in polyester paper
- -Basic GIS data made from 1/2,000 scale map
- -Sample of GIS model system

大西洋沿岸主要都市GISデータ基盤整備計画調査

**CSA COL/S 501/07 Basic Study** 

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 2008 Domestic Survey)

Sustainability of IGAC:

JICA concluded that IGAC has technical capacity to create topographic maps of the remaining 100 cities through this study, if there is enough budget. IGAC hopes to create a cadastral map again with cooperation of JICA Study Team, utilizing the data created and technology transferred in this study.

(FY 2008 Overseas Survey)

The study to create the geographic database of the major cities of the Atlantic coastal areas will include the creation of a detailed map of urban areas. The map will be used for the cadaster, public service, urban planning, environment, study on infrastructure.

The map will be created to promote the usage of the geographic information system and Japan and Colombia exchanged the experience about the management of the map creation outcome. This is the reason that Japanese experts go to the inspection with the staff in Colombia.

The project has achieved the expectation and the outcome was satisfied by the experts.

Three major cities of Colombia will receive the benefit and these cities will be able to use the updated maps for the implementation of the technical projects as well as use them as a foundation for updating the cadaster.

Descriptions in the Study Summary Sheet are based on the answers of the questionnaire, which a fact-finding have only been conducted when sources were available. Therefore, not all of the facts are up-to date. In addition, some may not describe the fact. Questionnaire conducted for the present year (FY 2008) have been conducted for studies completed in FY2007,FY 2005, FY2003 and FY1998. Data which where not known, such as months of the study period, are described as ZERO.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1986
CSA CRI/S 101/77 Revised Jul.2009

| C   | SA CRI/S 101/7                       |  |
|-----|--------------------------------------|--|
| 1.  | COUNTRY                              | Costa Rica   |
| 2.  | NAME OF STUDY                        | Regional Study of the Hinterland of Caldera and Puntarenas Ports   |
| 3.  | SECTOR                               | Development Plan / Integrated Regional Development Plan 4. TYPE OF STUDY M/P   |
| 5.  | COUNTERPART AGENCE TIME OF DEVELOPME |  |
|     | PRESENT COUNTERPA                    |  |
| 6.  | OBJECTIVES OF THE                    | Identification of development potentials in the hinterlands of two ports and basic development strategies.           |
| 7.  | CONSULTANT(S)                        | International Development Center of Japan  |
| 8.  | STUDY PERIOD                         | Feb.1977 ~ Nov.1977 9month(s) ~  |
|     | SITE OR AREA                         | Gran Puntarenas and Pacifico Central areas along the Pacific Coast   |
| 10. | MAJOR PROPOSED PRO                   | OJECT(S)   |
| 1.0 | Gran Puntarenas Area                 |  |
| 1)E | El Rodare Blanca urban pl            | anning 2)Conservation of Puntarenas sand bar and urban renewal 3)Development of the distribution center near Caldera |

- 1)El Rodare Blanca urban planning 2)Conservation of Puntarenas sand bar and urban renewal 3)Development of the distribution center near Caldera port 4)Industrial area planning
- 5)Projects concerning Industrial area -Facilities for human resours training -Facilities for research of construction materials -Greenbelt

6)Agricultural products processing and related industry

- -Fish products processing facilities -Grain snd meat processing factories -Industry related agricultural products
- 7) Water supply for residents and industry
- 8)Transportation Development -Terminal for trucks and passengers
- -Improvement of railway and switchyard -Road sign and traffic signal
- 9)Elementary sewerage facilities 10)protection against water pollution of sea products processing 11)Development of recreation center
- 2.Pacific Central Area
- 1)Supplement reserch of regional economic development
- 2)Development of suburban horticulture
- 3)Development of fishely activity 4)Development of water resource
- 5)Introduction of farmers' income surveys
- 6)Program of protection against environmental pollution
- 7)Sewerage using soil

(couninued to down below)

**CSA** CRI/S 101/77 M/P In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** The findings of the study were utilized to formulate the development policy framework for the Gran Puntarenas area. (FY1991 Overseas Survey) No additional information. (FY1993 Overseas Survey) Present status of this project is discontinued. (FY1994 Domestic Survey) No additional information. (FY 1996 Overseas Survey) The outputs of the study were being utilized to formulate policy and so on for a while, but they are not being used at all nowadays due to the changes of economical and political situations.

(F/S)

Compiled Mar.1986

**CSA** CRI/S 301/81 Revised Jul.2009 1. COUNTRY Costa Rica Second Stage Expansion Project of the Port of Caldera 2. NAME OF STUDY 3. SECTOR Transportation / Port TYPE OF STUDY F/S 5. Ministry of Public Works and Transport(MOPT) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Master Plan for 2000. Short-term Plan for 1990 and it's F/S. OBJECTIVES OF THE 6. STUDY The Overseas Coastal Area Development Institute 7. CONSULTANT(S) Jun.1980 Dec.1981 18month(s) 8. STUDY PERIOD 30km south of Punta Arenas City 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) -Breakwater 150m -Container Berth (-12m) 250m -Dredging, Reclamation 820,000cu.m -Shore Protection 440m -Cargo Handling Facilities 1 set

カルデラ港建設計画

CSA CRI/S 301/81 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |
|                |                          |                           |

**Description:** 

Reasons for Cancellation: (FY 1991 Overseas Survey)

There is no IDB financing as long as we observed. Stage II was suspended because of the economic problems.

Alternative Plan:

(FY 1991 Overseas Survey)

Instead of this project, Maintenance Project of the Port of Caldera is planned.

**(F/S)** 

Compiled Mar.1990

| C   | SA CRI/S 30                             |                      |  |                                | Revised | Jul.2009 |
|-----|---|----------------------|--|--------------------------------|---------|----------|
| 1.  | COUNTRY                                 | Costa Rica           |  |                                |         |          |
|     |   |                      | ect of the Port of Caldera                           |                                |         |          |
| 2.  | NAME OF STUDY                           | 1. mineriance i 10j  | of the fort of cultura                               |                                |         |          |
| -   |   |                      | (8)  | T                              |         |          |
| 3.  | SECTOR                                  | Transportation       | / Port   | 4. TYPE OF STUDY F/S           |         |          |
| 5.  |   | N                    | Ministry of Public Works and Transport(MOPT)         |                                | -       |          |
|     |   |                      | 1 \ /  |                                |         |          |
|     | COUNTERPART AGEN                        | CY AT THE            |  |                                |         |          |
|     | TIME OF DEVELOPME                       |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     | PRESENT COUNTERPA                       | ART AGENCY           |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   | G .                  | C P  | 6 1000                         |         |          |
|     |   | Countermeasures      | for sedimentation, and a short-term development pla  | n for 1992                     |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
| _   | OBJECTIVES OF THE                       |                      |  |                                |         |          |
| 6.  | STUDY                                   |                      |  |                                |         |          |
|     | 51021                                   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   | The Overseas Coa     | astal Area Development Institute                     |                                |         |          |
| 7.  | CONSULTANT(S)                           | Central Consultan    |  |                                |         |          |
| / · | eonsellin(1(s)                          | Contrar Consultan    | ii, iie.   |                                |         |          |
|     |   | g 100#               | X 1 100¢ 10 1()                                      |                                |         |          |
| 8.  | STUDY PERIOD                            | Sep.1985 ~           | Jul.1986 10month(s)                                  |                                |         |          |
| 0.  | STEDITEMOD                              | ~                    |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   | Coldo                | ra Port on the northwest Pacific coast               |                                |         |          |
|     |   | Calde                | ra Port on the northwest Pacific coast               |                                |         |          |
|     |   |                      |  |                                |         |          |
|     | CHEE OR A DEA                           |                      |  |                                |         |          |
| 9.  | SITE OR AREA                            |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
|     |   |                      |  |                                |         |          |
| 10  | MAJOR PROPOSED PR                       | OIFCT(S)             |  |                                |         |          |
|     |   |                      | .1   |                                |         |          |
|     | e way to maintain Port of               |                      |  |                                |         |          |
| Th  | ne first phase of the port v            | vas finished in 1981 | I and the second phase was studied to meet increasin | g cargo and containerlization. |         |          |
|     |   |                      |  |                                |         |          |
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|     |   |                      | ction machines related: 1 set                        |                                |         |          |
| -Bı | reakwater (construction a               | nd transfer): 362n   | 1  |                                |         |          |
| -Dı | redging: 72,000cu.m                     |                      |  |                                |         |          |
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カルデラ港維持整備計画

CSA CRI/S 302/86 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### Description:

(FY 1996 Overseas Survey)

Subsequent Studies:

Mar.1991 MOPT contracted with North American consultant to conduct "Study for Grain Control at Cardera Port" In this study, it was conducted that Cardera Port is the only port which has a capacity to import grains.

Jul.1995 MOPT examined "Study of Fiscal and Economic Situation at Cardera Port" and concluded that the Second Expantion Plan is not feasible. To utilize the port efficientry, MOPT proposed 1)transformation of passenger terminal to Puntarenas Port (under implementation financed by the Govt. of Taiwan) 2)construction of breakwater, 3)construction of grain terminal, 4)installation of crane.

Nov.1995 "National Port Development Plan"was executed by OCDI with fund from World Bank. The proposal on Cardera Port was almost same as proposal of "Study of Fiscal and Economic Situation at Cardera Port"

#### (1) Construction and Transfer of Breakwater (362 m)

Finance:

unclear for the part of 282 m already completed own fund for remained 80 m

#### Construction:

A part of 282 m was completed and the rest of 80 m scheduled to be completed in the end of 1997

#### (2)Dredger and Related Equipment

MOPT decided not to purchase equipment but to contract with dredging company.

(FY 1998 Overseas Survey)

Two front loaders for container, two headers with carrier for transfering container, Two 30-ton forklift, a 2,400 HP tagboat, 6 vehicles have been procured.

#### (3)Dredging of inner port

(FY 1998 Overseas Survey)

It is to be completed by June 1999. A total cost of US\$230 million is demanded. 83% of the expenditure will be beared by INCOP, whereas the remaining 17% by MOPT.

#### (4)Grain Terminal

(FY 1998 Overseas Survey)

INCOP made a contract with IMNSA HOSKONING, a consortium of Costa Rica and Holland in Dec. 1996 to comission the market survey, project draft formation, technical survey for the development of port infrastructure.

Sicne INCOP did not have their own budget and financial sources, they decided to adopt the participation of private enterprizes for fund procurement, implementation, and operation of the project. Documents for bid and technical documents were already submitted to MOPT.

#### Background:

Negotion is on going with World Bank and the Govt. of Finnland.

#### (5)Tuna Terminal

(FY 1998 Overseas Survey)

INCOP made a contract with BEL INGENIERIA in Dec. 1996 to comission the market survey, project draft formation, technical survey for the development of port infrastructure.

INCOP decided to adopt the participation of private enterprizes for fund procurement, implementation, and operation of the project. Documents for bid and technical documents were already submitted to MOPT.

#### (6)Others

(FY 1998 Overseas Survey)

Reconstruction of floor of the pier: completed.

3-ton bucket: completed.

Reconstruction of corridor and access road: under construction. It is to be completed by April 1999.

Installation of 52 defenses on the pier: completed.

Modernization/improvement of buildings and facilities: completed.

Afforestation of the port: completed.

Improvement of electoric system and illumination: Reconstruction of illumination and installation of new electoric system.

(M/P+F/S)

Compiled Mar.1990 **CSA** CRI/A 201B/88 Revised Jul.2009

| I.   | COUNTRY  | Costa Rica  |  |                  |         |  |
|--|--|---|--|------------------|---------|--|
| 2.   | NAME OF STUDY  | Limon Integrated Agricultural Development Project |  |                  |         |  |
| 3.   | SECTOR   | Agriculture                                       | / (Agriculture in) General   | 4. TYPE OF STUDY | M/P+F/S |  |
|  |  | 8   | Servicio Nacional de Aguas Sabterraneas, Ric   |                  |         |  |
| 5.   | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  5.  PRESENT COUNTERPART AGENCY                                      |   |  |                  |         |  |
|  |  | Formulation of                                    | agricultural and rural development plan  |                  |         |  |
| 6.   | OBJECTIVES OF THE STUDY  |   | agricultura tara ratar de relopinent pian  |                  |         |  |
|  |  | Naigai Enginee                                    | ring Co., Ltd.   |                  |         |  |
| 7.   | CONSULTANT(S)  | Pacific Consult                                   | ants International   |                  |         |  |
|  |  | Sanyu Consulta                                    |  |                  |         |  |
| 8.   | STUDY PERIOD   | Feb.1987 ~  | Oct.1988 20month(s)  |                  |         |  |
| 9.   | SITE OR AREA   | Limon ar  | ea located in eastern coastal zone of the Atlant   | ic               |         |  |
| 10.  | MAJOR PROPOSED PR  | OJECT(S)  |  |                  |         |  |
| <m<br>cor<br/><f <="" td=""><td>I/P&gt;Elimination of the semponents of the project to</td><td>asonal flood dan<br/>promote the sta</td><td>alage and improvement of the poor drainage are ble agricultural management in the area. is selected as the objective area for the F/S(19).</td><td></td><td></td></f></m<br> | I/P>Elimination of the semponents of the project to  | asonal flood dan<br>promote the sta               | alage and improvement of the poor drainage are ble agricultural management in the area. is selected as the objective area for the F/S(19). |                  |         |  |
|  | ows,<br>Orainage Improvement Pla   | a <b>n</b>  | <m p=""> <f s=""></f></m>  |                  |         |  |
|  | New construction of princ  |   |  |                  |         |  |
|  | Rehabilitation of principal  |   | 43.9km 25.95km   |                  |         |  |
|  | New construction of secon  |   |  |                  |         |  |
|  | Rehabilitation of secondar   |   | s - 24.70km  |                  |         |  |
|  | Agricultural priduction Pla<br>Establishment of 7 farming  |   |  |                  |         |  |
|  |  |   | mbankment 118.2km 56.10km  |                  |         |  |
|  | Road network Plan New o  |   | 81.5km 13.60km   |                  |         |  |
|  |  | habilitation                                      | 151.3km 46.00km  |                  |         |  |
|  | and Consolidation Plan   |   | 4,240ha  |                  |         |  |
|  | Improvement of drainage canals and farm roads 6.Rural Infrastructure Plan Water supply facilities for 5 villages(on F/S) |   |  |                  |         |  |
|  | 7.Settlement and rural development plan  |   |  |                  |         |  |
|  | Improvement of public facilities in three new settlement areas(on M/P)   |   |  |                  |         |  |
|  | Agricultural Promotion Pla   |   | · •  |                  |         |  |
|  |  |   | ganizations, Improvement of  |                  |         |  |
|  | famer's organizations, Establishment of the agricultural machinery centers, Establishment of the post-harvest facilities |   |  |                  |         |  |
|  |  | -   |  |                  |         |  |
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CSA CRI/A 201B/88 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

Reasons for Delay or Cancellation:

The change of circumstances at the target area, financial problem and lower priority given.

(FY 1997 Domestic Survey)

It is difficult to find finance newly for the implementation of the project from international organizations because economic structure adjustment is on going

#### Finance

SENARA requested the OECF loan, but agreement has not concluded yet.

#### Situation:

(FY 1992 Overseas Survey)

The revised F/S is necessary in order to adjust the project to new circumstances. The project in B block focusing the flood protection schedule should be implemented. Finance of the project is pending until the M/P and the study of B block are completed.

(FY 1993 Overseas Survey)

SENARA requested MIDEPLAN to privide necessary cooperation for final plan. However, it has not been realized yet.

#### Other Situations:

The object area located in coastal zone of the Atlantic is left behind the agricultural development though suitable area for agricultural development still remains in and around the object area.

Qualitative improvement and quantitative enlargement of the agricultural production are the urgent subjects in the nation. Accordingly, implementation of the project is strongly anticipated.

(FY 1991 Overseas Survey)

The project is being implemented by the fund of banana producer who own nearly 90% of the target area.

(FY 1993 Overseas Survey)

This study played an important role as a base of banana plantation development in the area.

(FY 1995 Domestic Survey)

At present, the local peoples are improving the drainage system and facilities at this area by private base. However, it seems to have no possibility to materialize this project as there are no way to get the fund and no improvement of the surrounding circumstances at the target area.

(FY 1995 Overseas Survey)

Many canals and rivers had been improved with a total length of 37.5km during FY 1991 to 92. Since 1992, the price and the other conditions with banana export, the traditional exporting agricultural product, had been improved considerably. So, it became an urgent matter to renovate the farmland which is impossible to cultivate due to the floody water. It becomes possible to invest for development of the drainage channels in order to protect the flood.

(FY 1996 Domestic Survey)

The improvement of the drainage system has been undertaken in a part of area on private base, referring to the report of this Study. However, it is unknown how the project has been implemented in a whole area.

(FY 1998 Overseas Survey)

The rehabilitation of drainage project etc. (new construction/rehabilitation of principal drainage canals) has been undergoing with the national committee fund, SENARA fund, America's PL-480 fund. Other proposed projects need to be reconsidered including the fund-raising device.

(Basic Study)

Compiled Mar.1990 CRI/A 501/88 **CSA** Revised Jul.2009

| 1. | COUNTRY   | Costa Rica                                      |   |   |  |  |  |
|----|---|---|---|---|--|--|--|
| 2. | NAME OF STUDY   | Fisheries Resources Survey of the Pacific Coast |   |   |  |  |  |
| 3. | SECTOR  | Fishery   | / Fishery   | 4. TYPE OF STUDY Basic Study              |  |  |  |
| 5. | 5.  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |   | CIMAR(Work-1)<br>MAG (Work-2)   |   |  |  |  |
|    | PRESENT COUNTERPA                                       |   |   |   |  |  |  |
| 6. | OBJECTIVES OF THE STUDY                                 |   | tion of the biomass and distribution of the principal dinent of the fishery development plan. | mersal species.                           |  |  |  |
| 7. | CONSULTANT(S)   | Nichiro Corpora                                 | ation   |   |  |  |  |
| 8. | STUDY PERIOD  | Feb.1987 ~                                      | Mar.1989 25month(s)   |   |  |  |  |
|    | SITE OR AREA  MAJOR PROPOSED PR                         |   | he Pacific Ocean in Costa Rica (area: 10,118 sq.m, po   | pulation:192,000, water basin:2,229nAEm2) |  |  |  |

Master Plans for development were proposed, the Project cost was not estimated.

Work-I: Short-term planning:

- a. Project of development of unexploited fishery resources in the Project of creation of a model fishing village.
- b. Investigation for development of unexploited fishery resources.
- c. Project of processing for marine products.

Work-II: Short-term planning:

- a. Project of creation of a model fishing village.
- b. Project of training for fishermen by INA, who has experiences to execute the education and training for them.
- c. Promotion of Fishery Cooperation.

Mid and long-term planning:

- a. Project of training of fishermen, into the planning of education and training for fishermen.
- b. Project of improvement of distribution of the marine products.
- c. Project of creation of fishing villages.

**CSA** CRI/A 501/88 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Request for Assistance: Mar. 1989 MAG and CIMAR submitted to the Japanese Embassy in Costa Rica for assistance on the following proposals. 1. Construction of a pier, a processing plant and the related facilities including a trading center at Coco beach. 2. Building of an Oceanographic Research Vessel. Utilization of the Study: (FY 1991 Overseas Survey) CIMAR seems this survey as academic research not as development study and is utilizing the data as such. (FY 1996 Overseas Survey) According to the result of JICA study, the importance of statictics was recognized and data collection system was established. The Costa Rica government requests for implementation of fiseries resources survey of which results can be available for the local fishermen engaging in asmall scale fishing.

(Basic Study)

Compiled Mar.1993

| CS  | SA CRI/S 501/9                                | 91               |                         |                             |             |                      | Revised     | Jul.2009 |
|-----|---|------------------|-------------------------|-----------------------------|-------------|----------------------|-------------|----------|
|     | COUNTRY                                       | Costa Rica       |                         |                             |             |                      |             |          |
|     | NAME OF STUDY                                 |                  | ct for Metropolitan Are | a of San Jose City          |             |                      |             |          |
| 3.  | SECTOR  | Social Infrastru | cture / Survey          | & Mapping                   | 4.          | TYPE OF STUDY        | Basic Study |          |
| 5.  |   | -                | Instituto Geografico N  |                             | -           |                      |             |          |
|     | COUNTERPART AGEN<br>TIME OF DEVELOPMI         |                  | C C                     |                             |             |                      |             |          |
|     | PRESENT COUNTERP                              | ART AGENCY       |                         |                             |             |                      |             |          |
|     |   | Topographic ma   | apping, which is necess | sary to the integrated rura | al developm | ent of this country. |             |          |
| 6.  | OBJECTIVES OF THE STUDY                       |                  |                         |                             | ·           |                      |             |          |
|     |   | International Er | ngineering Consultants  | Association                 |             |                      |             |          |
| 7.  | CONSULTANT(S)                                 | Asia Air Survey  | y Co., Ltd.             |                             |             |                      |             |          |
|     |   | 0 1000           | D 1001                  | 20 1()                      |             |                      |             |          |
| 8.  | STUDY PERIOD                                  | Oct.1988 ~       | Dec.1991                | 38month(s)                  |             |                      |             |          |
|     |   | Se               | an Jose Metropolitan A  | ran                         |             |                      |             |          |
|     |   | 36               | an Jose Metropontan A   | ilea                        |             |                      |             |          |
|     |   |                  |                         |                             |             |                      |             |          |
| 9.  | SITE OR AREA                                  |                  |                         |                             |             |                      |             |          |
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|     | MAJOR PROPOSED PI<br>rial photography 1:20,00 |                  |                         |                             |             |                      |             |          |
| 1/1 | 0,000 Topographic map                         | os 79 (1,600sg)  |                         |                             |             |                      |             |          |
| 1/1 | 0,000 Land use maps 4                         | 0 (900aa)        |                         |                             |             |                      |             |          |
| 1/1 | 0,000 Land use maps 4                         | 0 (800sg)        |                         |                             |             |                      |             |          |
|     |   |                  |                         |                             |             |                      |             |          |
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|     |   |                  |                         |                             |             |                      |             |          |

CSA CRI/S 501/91 Basic Study

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

Utilization of the Study:

The outputs of this project (aerial photography and maps) are managed by the Instituto Geografico Nacional and widely used in the public planning.

#### (FY 1992 Overseas Survey)

The outputs of this project are distributed to the governmental, academic and private organizations. The digitalization of the maps (three layers) is working for establishment of geographic information system.

#### (FY 1995 Overseas Survey)

The performances of this project distributed to many organizations and are being utilized for various planning works such as

- -Urban Planning,
- -Plan for Public Transportation,
- -Plan for Treatment of the Wasted Materials,
- -Plan for Main Road Network,
- -Plan for Communication Network,
- -Plan for Network of Water Supply & Sewage, etc.

#### (FY 1996 Domestic Survey)

After the completion of the Study, a long-term expert was dispatched for the technical transfer on the production of atlas.

#### (FY 1996 Overseas Survey)

Digitalized maps for other 50 cities are to be made. Request for financial aid is supposed to be submitted to JICA in 1998.

#### (FY 1998 Overseas Survey)

The maps have been digitized from 1992. Digitized maps in the fields of roads, rivers, and buildings are already completed. Digitized maps of air photographs, renewal of the present map, and drawing of topographic map of 1:10,000 are expected in the future with the cooperation from Japan.

#### (FY 1999 Overseas Survey)

First printings of some maps are out of stock.

(M/P+F/S)

Compiled Mar.1994

**CSA** CRI/S 201B/92 Revised Jul.2009 1. COUNTRY Costa Rica Development Project of Three International Airports NAME OF STUDY 3. SECTOR / Air Transportation & Airport 4. TYPE OF STUDY M/P+F/S Transportation Ministry of Public Works and Transport (MOPT) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY Preparation of master plan on three international airports and feasibility study of the priority project on the short-term development project. OBJECTIVES OF THE STUDY Pacific Consultants International 7. CONSULTANT(S) Aug.1991 Nov.1992 15month(s) 8. STUDY PERIOD Juan Santamaria International Airport Liberia International Airport Limon International Airport 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) <M/P> Development of Three Airports. 1. Juan Santamaria International Airport US\$ 43.2 million (Short) (Civil works, Architectural Works, Air Navigations Systems, Airport Utilities Works etc.) US\$ 214.2 million (Short) 2. Liberia International Airport (Civil works, Architectural Works, Air Navigations Systems, US\$ 12.7 million (Long) Airport Utilities Works) 3. Limon International Airport (Civil works, Architectural Works, Air Navigations Systems, US\$ 4.9 million (Long) Airport Utilities Works) <F/S> The following works were proposed for the short-term development project of Juan Santamaria International Airport (the project) which was produced within the framework of the long-term airport master planning: 1. Civil Works US\$ 10.7 million 2. Architectural Works US\$ 22.2 million 3. Air Navigtion Systems US\$ 3.6 million 4. Airport Utilities Works US\$ 3.9 million 5. Compensation Works, Engineering US\$ 13.6 million Services and Contingency

CSA CRI/S 201B/92 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description**:

(1)Improvement of Juan Santamaria International Airport

The Costalican government was determined to implement a part of the short-term development project (the expansion of the passenger terminal building and the construction of new apron)upon the completion of a draft final report.

Subsequent Studies:

B/D completed

1993 D/D (government fund)

Finance:

Government fund

Construction:

\*Phase I (FY 1995 Overseas Survey)

The government approved to allocate US\$ 12 mil. for the project implementation. (\*US\$ 7.5 mil. for the improvement of dormitories, radar facilities and a control tower)

-Construction of Fuel Storage Facilities

Completed (location was changed from the place designated in M/P)

-Expansion of Passenger's Terminal Building

Scheduled to be implemented

Phase I: for 18 months commencing in May, 1996

Phase II: for 12 months commencing in September, 1996

- -Construction of Air Cargo Terminal Building(US\$ 2 mil.)
- -Construction of Platform for Air Cargo (US\$ 1.3 mil.)
- -Construction of Radar Facilities

Scheduled to be implemented for eight months commencing in

Feb.1996

(FY 1997 Domestic Survey)

After 1994, a part of new apron which has been included in F/S short term plan, was constructed as international apron. Moreover, a remote terminal building was constructed accompanying the apron. The terminal is used as a waiting lobby for passengers.

These facilities will compose a part of a future main terminal.

#### \*Phase II

Finance:

(FY 1998 Overseas Survey)(FY 1999 Overseas Survey)

BOT Model (20 years of concession), AGI (Airport Group International), US\$180mil.

Construction:

(FY 1998 Overseas Survey)

Tenders are now made.

\*Content

Maintenance of airport and its management.

(FY 1999 Overseas Survey)

Construction of the passenger terminal building is to be started in June 2000. AGI will start managing the airport in Apr. 2000. Expansion of the platform and rehabilitation of the concrete of the existing runway are to be started in Nov. 2000. Expansion of the boarding gates (11 gates) is to be started in Nov. 2000. AGI will continue improving the facilities by 2020.

#### (2)Liberia International Airport

(FY 1998 Overseas Survey)

The enlargement of the passenger terminal etc. is scheduled in 1999. The maintenance issue of the Airport has been remarked in the view of tourist development on the Pacific Ocean side. The reconsideration of the present M/P and its implementation of F/S are looked upon. The government looks forward to Japan's cooperation. (FY 1999 Overseas Survey)

Expansion of the existing platform and improvement of the passenger terminal are to be implemented during the year of 2000.

#### (3)Limon International Airport

(FY 1998 Overseas Survey)

The rehabilitation of landing strip and passenger terminal is scheduled in 1999. The project has been put off as the number of Airport users turned out to undergo the expected number in M/P because of the delay of tourist development.

(FY 1999 Overseas Survey)

Rehabilitation of the runway and platform and improvement of the passenger terminal are to be implemented in the year of 2000.

(M/P+F/S)

Compiled May.2001

Jul.2009

Revised

|    | 01120 20                              | Revised Jul.2002  |  |  |  |  |
|----|---------------------------------------|---|--|--|--|--|
| 1. | COUNTRY                               | Costa Rica  |  |  |  |  |
| 2. | NAME OF STUDY                         | The Study for the Land Use Plan in the Coastal Zones of the Tourist Planning Units in the Republic of Costa Rica  |  |  |  |  |
| 3. | SECTOR                                | Development Plan / Integrated Regional Development Plan 4. TYPE OF STUDY M/P+F/S  |  |  |  |  |
| 5. | COUNTERPART AGEN<br>TIME OF DEVELOPME |   |  |  |  |  |
|    | PRESENT COUNTERPA                     | ART AGENCY  |  |  |  |  |
| 6. | OBJECTIVES OF THE STUDY               | <ul> <li>To formulate lands use plans in order to promote sustainable tourism development in the coastal zones with a view to ensuring environmental quality.</li> <li>To prepare the necessary measure for sustainable tourism development.</li> <li>To carry out the relevant technology and knowledge transfer.</li> </ul> |  |  |  |  |
| 7. | CONSULTANT(S)                         | Pacific Consultants International Yachiyo Engineering Co., Ltd.   |  |  |  |  |
| 8. | STUDY PERIOD                          | Feb.2000 ~ Dec.2000 10month(s) ~  |  |  |  |  |
| 9. | SITE OR AREA                          | M/P: South Guanacaste Region and Corcovado-Golfito Region   |  |  |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

**CSA** 

CRI/S 206/00

- 1. Land Use Management: To review and revise existing regulatory plans
- 1) South Guanacaste Region: Tourism centers (Samara-Carrillo primary tourism center, Norsa-Garza secondary tourism center, San Miguel-Coyote secondary tourism center, Sanata Teresa-Mal Paris secondary tourism center).
- 2) Corcovado-Golfito Region: Tourism centers (Golfito Town primary tourism center, Puerto Jimenez primary tourism center, Drake secondary tourism center, Zancudo secondary tourism center, Pavanes secondary tourism center).
- 2. Infrastructure Development: Tourism development and water resource development for local communities
- 1) South Gauanacaste Region: Regional road improvement: Carrillo-Samara-Nosara Town, San Fransisco de Coyote- San Miguel, San Fransisco de Coyote-Betel-Bello Horizonte-Santa Teresa. / Water Supply: Santa Teresa-Mal Pais secondary tourism center, Samara-Carrillo secondary tourism center. / Sewage Treatment: Samara-Carrillo primary tourism center.
- 2) Corcovado-Golfito Region: Regional road improvement: Puerto Jimenes-Rilcon, Golfito Town-Conte-Punta Banco, Mouthof the Sierpe River-Agujitas of Drake. / Water Supply: Puerto Jimenez Town and Playa Platanares, Agujitas Community and in Drake secondary tourism center. / Sewage Treatment: Puerto Jimenez primary tourism center.
- 3. Private Invenstment Promotion (Common to both Region): Inducement of private investment to each tourism center by cooperation of ICT, CINDE, and ALDETUS
- 4. Local Tourism Promotion and Community Development (Common to both Region): ALDETUS (Local Association for Susutainable Tourism) projects in selected tourism center and tourism area, Local tourism promotion, Improvement of tourist amenities in tourism center, Pollution prevention in tourism center, Tourism-based community development.
- 5. Establishment and Utilization of Nature Area:
- 1) South Guanacaste Region: Management of tourists on the Ostional National Wildlife Refuge Establishment and utilization of ICT-Municipality natural area between Samara and Garza.
- 2) Corcovado-Colfito Region: Environmental education and training for boat operators for Terraba-Sierpe wetland, Golfto Dulce and Cano Island. 6. Improvement of Local Public Facilities (Common to both Region): Local Public Facility development projects (vocational school, high school, hospitals or clinic, etc)

CSA CRI/S 206/00 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 2001 Domestic Survey)

ICT, the counterpart agency, seriously considered taking actions recommended by the JICA study, immediately after the interim report. However, ICT felt some technical limitation to pursue the recommended actions immediately. Therefore, ICT decided to make another request to the Japanese government and JICA to conduct a project for increasing ICT's preparedness for taking actions recommended by the JICA study. In response to this project request, Professor Nishimura and JICA task manager suggested to ICT that ICT should make another study project request to the Japanese government and JICA.

Although the proposed project is in the scheme of a development study, the project consist of a technical assistant project and a development study, which has been discussed recently among related bodies. The approach utilise the C/P, sush as ICT and concerned parties, to take actual steps in implementing the proposed project, while the study team for the project is that ICT and local parties concerned will take a lead to implement the projects proposed through the M/P, while the study team supports the implementation by preparing for the implementation (preparation of detailed action plan).

(FY 2001 Overseas Survey)

Requests for 4 Development Study were submitted to Japanese Embassy in Costa Rica, mid-Atlantic ridge and Punta Arenas and Ministry of National Planning, aimed at promoting sustainable tourism development in shore frontage and islands. Approval by JICA is currently pending.

(FY 2002 Overseas Survey)

The current situation was diagnosed on the basic infrastructure in the target regions of plans. In addition, field activities were waged toward the follow-up based on this plan through the Sustainable Tourism Development Areas Association (ALDETUS). The aforementioned activities at the stage of this plan were implemented by research institutes and funds provided by the funds contributed by member organizations from ALDETUS - an organization established under the support of Costa Rica Environmental Studies.

#### Condition of request:

(FY 2002 Overseas Survey)

In September 2002, four development studies were requested to the Japanese Embassy in Costa Rica and the Ministry of Planning and Economic Policy for the purpose of promoting sustainable tourism development in coasts and islands of Costa Rica, deep water of the Atlantic Ocean, Punta Arenas Bay. The studies are awaiting approval from JICA at present.

(FY 2003 Overseas Survey)

Based on the result of the studies, the Costa Rica National Tourism Development Plan and a utilization plan of Caribbean land for development were prepared. In addition, based on the technology transfer through the studies, land utilization plan and tourism development plan of the coastal area were implemented. The National sustainable Tourism Development Plan (2002 - 2012) was pushed forward by use of a similar technique.

At present, four studies have been requested to JICA on the coastal region coordination plan and its implementation for the purpose of tourism promotion.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2004 Overseas Survey)

ICT has prepared a D/S on use of lands in northern Caribbean, southern Caribbean, northern fields, Carthage canyon, and middle Pacific Ocean and tourism with its own fund, based on the concept model of this study. It is planning to continue the project with concerned departments in Punta Arenas, northern Guanacaste region, and central canyon.

Although it has submitted subsequent plans to JICA for several times, replies have not been made.

(FY 2005 Domestic Survey) (FY 2005 Overseas Survey)

The follow-up study was implemented for a development plan of the study, which the Committee for the sustainable development was established in Drake, Jimenez port, and Sanata Teresa-Mal Paris. In addition, partnership between the mentioned institution has been maintained to conduct the study.

For the human development, the National Vocational Training Bureau has been increasing technical training opportunities for people in tourism sector. ICT has submitted requests for a technical assistance to JICA for several times.

For the macro-level regional planning has become possible from the experience, knowledge, and techniques acquired in the mentioned study, though experience is still to be gained for subsequent micro-level planning and pilot project implementations.

For the infrastructure development, discussions has been held with the representatives from the related institutions, which an involvement from such institutions are requisite in reflecting individual tourism development plans to comprehensive action plan, as well as a necessity of investments.

Subsequent Study: The detailed land utilisation plan in the coastal zones of Ossa Peninsula, and the detailed land utilisation plan in the coastal zone of Nicoya peninsula. Funding:

Funding party: Own funds

Implementing body: The Costa Rican Tourist Agency

Implementing period: 2000/Jan - 2001/Jan

Study Area:

Phase I: Northern and southern Caribbean (Caribe Norte, Caribe Sur), northern Llanurace, Pacifico Medio

Phase II: Valle Central, northern Guanacaste, Punt Arenas, costal zones of Nicoya peninsula and islands

Objectives: To prepare and to partially implement a detailed land utilisation, tourism development, environmental preservation, and community development plan based on the macro land utilisation plan in the coastal zone.

1) To prepare land utilisation plan in order to facilitate sustainable development in the coastal area, while preserving the environment. 2) To prepare measures required for sustainable tourism development plan. 3) To implement transfer of technology and knowledge to increase domestic competitiveness.

Contents proposed: The mentioned study has proposed establishment and capacity development of sustainable development centre, development of information system to assist decision making, land development to facilitate efficient use of natural resources, strengthening of individual project to attract tourists, and to foster implementation of investment plans until the year 2012. 1) Tourism development, 2) natural environment management, 3) economic development in regional society, 4) infrastructure management, 5) land use management.

(F/S)

Compiled Sep.2003

 CSA
 CRI/A 303/02
 Revised
 Jul.2009

 1. COUNTRY
 Costa Rica

| 1.  | COUNTRY   | Costa Rica                           |   |   |   |     |  |  |
|---|---|--------------------------------------|---|---|---|-----|--|--|
| 2.  | NAME OF STUDY   | The Study on Ru                      | The Study on Rural Development Project for The Middle Basin of Tempique River in the Republic of Costa Rica |   |   |     |  |  |
| 3.  | SECTOR  | Agriculture                          | / (Agriculture in) General  | 4.  | TYPE OF STUDY   | F/S |  |  |
| 5.  | 5. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  |                                      |   |   |   |     |  |  |
|   | PRESENT COUNTERPA   | ART AGENCY                           |   |   |   |     |  |  |
| Review of the existing master plan for the Arenal Tempisque Irrigation Project (PRAT) and formulation of a relating to implementation of FS for 35,000 Ha of the basin of Tempisque River, Guanakate Province. This formulate an agricultural system by irrigation aiming at prevention of regional floods and sustainable develous and medium farmhouses in consideration of the environment including the national park located upstream are of the aforementioned river. Technology of the study technique will be transferred to the C/P. |   |                                      |   | ovince. This plan intends to nable development of small |   |     |  |  |
| 7.  | CONSULTANT(S)   | Pacific Consulta<br>Naigai Engineeri |   |   |   |     |  |  |
| 8.  | STUDY PERIOD  | Jun.2000 ~                           | Aug.2002 26month(s)   |   |   |     |  |  |
| 9.  | Approximately 35,000 Ha lying astride counties of Liberia, Santa Cruz, and Carillo of Guanakate Province. A part of the area is included in three counties out of 11 counties of Guanakate Province, and the area targeted for the study. On the chand, in terms of the district level, the following places are included in the study target area: Liberia and Nacascolo district in Liberia County, Sardinal and Philadelphia districts in Carillo Palmyra County, and Guanakate district in Santa Cruz County. |                                      |   |   | d for the study. On the other peria and Nacascolo districts |     |  |  |

#### ${\bf 10.\ \ MAJOR\ PROPOSED\ PROJECT(S)}$

Project plan for each zone:

All zones: Developing multiple farming units by grouping small/medium size farms and improving farming management, as well as diversity of farming products and developing intensive farming for specific zones.

Zone A: There is not much hope for the effect of the irrigation. Converting grazing land to mango farming partially to develop multiple farming products and improve management.

Zone B: Irrigation from rivers is not efficient. Improve groundwater irrigation on some farm land and convert farming products from sugarcane to vegetables to develop multiple farming types and improve management.

Zone C: Improve irrigation of some farmland from river. Convert from grazing land and sugarcane to vegetables and melons for dry season, and in rainy season, plan for recruital irrigation to develop multiple farming types and improve management.

Components to achieve development project:

Component 1 (Irrigation and drainage): Due to a shortage of water to irrigate all the farmland, only zone C, which has advantageous conditions for irrigation water, will be maintained by a pumps. Facility plan was designed with a condition of possible usage of 3.0CBM/s irrigation water. In addition, zones with abundant ground water, irrigation facility will be improved using ground water. This project will proceed with particular care not to negatively change or adversely impact the condition of the local land conditions.

Component 2 (Flood control) Purpose of this project is not for preventing floods to local area but to reduce the flooding damage for farmland conservation for 10 years. The effect will be great, if improvement to farming is made by stabilizing incomes of small/medium size farms, which have been affected by flooding every year. Therefore, for these proposed measures, construction to widen the River Tempisque and Las Palmas, and bank rising work for the main road to upgrade emergency access in flooding period will be implemented.

Component 3 (Environment conservation): For continuous improvement of small/medium farms, convey and monitor environmental awareness for local citizens.

Component 4 (Strengthen assistance for farmers): Strengthening the assistance to farmers is needed to improve small/medium farms currently. Particularly, strengthening and restructuring is essential for a farming organizations. In addition, cultivation techniques and dissemination of agriculture knowledge, mediation of financial credit to farmers and supporting women in rural villages.

CSA CRI/A 303/02 F/S

|                | Completed or In Progress                   | Promoting                 |
|----------------|--|---------------------------|
| PRESENT STATUS | Completed Partially Completed Implementing | Delayed or Suspended      |
|                | Processing                                 | Discontinued or Cancelled |

#### Description:

#### (FY 2003 overseas Survey)

Based on the proposal, a possibility in relation to construction of a weir and a dam in La kyruba and Piedras is under consideration.

These were proposed in the study as a long-term plan and are regarded as projects that should be prioritized from the perspective of being priority project of SENARA, present condition of the basin of Tempisque, and the tourism development of the coastal area. Therefore, these plans were reviewed in the extensive regional plan toward the water resources management of the basin of Tempisque and the coastal region. This plan will be pursued based on the agreement between SENARA and Costa Rica Water and Sewerage Bureau.

#### (FY 2004 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2004 Overseas Survey)

Recommendation for a study to research utilization of water resource for coastal tourism development was made from SENARA and AyA. Amount of funding and the funding party depends on the project plan and the output of F/S.

#### (FY 2005 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2005 Overseas Survey)

Construction of bank to protect urban area is considered by Philadelphia city, Department of construction and transportation, and National Committee of Disaster Prevention and Urgent Measures.

Subsequent study: Temisque river midstream basin coastal area water sources increase plan

Implementing period: Progress in FY 2005 Implementing body: SENARA and AyA

Objective: To determine and analyze an alternative plan to be implemented for next 20 years in order to supply drinking water to residents in coastal area in northern Nicoya peninsula and irrigation water to agricultural area through a feasibility study.

Relation with the report: Used the implemented Master Plan.

Progress

(FY 2006 Overseas Survey) Using the cross section alongside with Tempisque river, the flood prevention measures were implemented every 500m in 20km interval area.

#### (FY 2006 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2006 Overseas Survey)

SENARA has requested BCIE for a FS on Pietos Dam by document No.2006GE-665-06 on September, However, formal reply from BCIE has not been made yet.

#### (FY2007 Overseas survey)

Implementation of the project was planned but details of progress is not known.

#### (FY2007 Overseas Survey)

The project implementation by ADB was under consideration, however, the detailed information is not known.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.2005
CSA CUB/S 101/03
Revised Jul.2009

| 1.  | COUNTRY                            | Cuba  |                        |                  |               |                     |   |  |  |
|-----|------------------------------------|---|------------------------|------------------|---------------|---------------------|---|--|--|
| 2.  | NAME OF STUDY                      | Development St<br>Cuba  |                        |                  |               |                     |   |  |  |
| 3.  | SECTOR                             | Administration  | / Enviro               | nmental Problems | 4.            | TYPE OF STUDY       | M/P   |  |  |
| 5.  | COUNTERPART AGENORIME OF DEVELOPME |   | GTE                    |                  |               |                     |   |  |  |
|     | PRESENT COUNTERPA                  | RT AGENCY   |                        |                  |               |                     |   |  |  |
| 6.  | OBJECTIVES OF THE STUDY            | A baseline survey concerning measures for pollution source in Havana Bay where water pollution becomes serious is to be conducted and the formulation of a master plan concerning sewage (target year: short-term goal 2009, long-term goal 2020), the implementation of F/S survey aiming mainly the improvement in sewage system and the capacity building of staff of the counterpart agencies through this study are also aimed. In addition, the interest of concerned parties including donors involved toward this study is to be cultivated through workshops and seminars, and also environmental education activities on the purification of Havana Bay are to be provided to the public. |                        |                  |               |                     |   |  |  |
| 7.  | CONSULTANT(S)                      | Nihon Suido Co  | onsultants Co., Ltd.   |                  |               |                     |   |  |  |
| 8.  | STUDY PERIOD                       | Jun.2002 ~  | Mar.2004               | 21month(s)       |               |                     |   |  |  |
|     | SITE OR AREA                       | volume of 47 m<br>well as an impor<br>issue.  | illion m?, average dep |                  | rist spots of | Old Havana register | . Havana Bay (5.0km?,<br>red as a World Heritage, as<br>pollution is an important |  |  |
| 10. | MAJOR PROPOSED PR                  | O.IECT(S)   |                        |                  |               |                     |   |  |  |

### Outline of M/P:

Sewage development plan targeted the year 2020 (M/P)

- 1. Improvement plan of existing sewage facilities (Central Sewage System): detailed survey and measures for misconnected pipes, detailed survey of siphon, repair of screening facilities, repair of the Casablanca pump station, installation of new sewage main line system (Matadero pump station, discharge pipe, new sewage pipe Colector Sur Nuevo, connecting pipe to existing main sewage pipe), repair of Cokector Sur, installation of Colector Sur A, installation of re-suction pump station, repair of tunnel waterways.
- 2. New sewage facilities plan for the mid- and down-stream of the Luyano River and the Martin Perez River: installation of new main sewer line (Colector Luyano Left, Colector Luyano-Martin Perez), installation of service lateral, construction of sewage treatment plants (secondary treatment, treatment capacity 53,700 cubic meter, conventional activated sludge process, anaerobic digestion for sludge treatment process, mechanical dehydration, final disposal site is landfill) in the treatment plant site to be constructed by GEF/UNDP. Meanwhile, common facilities are being coordinated.

#### Outline of F/S:

- 1. Improvement plan of existing sewage system (Central System): detailed survey and measures for misconnected pipes in the area related to Matadero drainage canal, detailed survey of siphon, repair of screening facilities, repair of the Casablanca pump station, installation of new sewage main line system (Matadero pump station, discharge pipe, new sewage pipe Colector Sur Nuevo, connecting pipe to existing main sewage pipe)
- 2. New sewage plan for the sewage treatment district in the mid- and down-stream of the Luvano River and Martin Perez River:
- 1) Sewage collection facilities: partial maintenance of newly installed main sewer line (Colector Luyano Left, Colector Luyano-Martin Perez), installation of service lateral
- 2) Sewage treatment plant: sewage treatment plant facilities (secondary treatment, treatment capacity 17,900 cubic meter/day, conventional activated sludge process, anaerobic digestion for sludge treatment process, mechanical dehydration, final disposal site is landfill)

| CSA CUB/S 10  | 1/03                      | M/P |
|---|---------------------------|-----|
|   | In Progress or In Use     |     |
| PRESENT STATUS  | Dalayad                   |     |
|   | Delayed                   |     |
| Description :   | Discontinued or Cancelled |     |
| (FY 2004 Domestic Survey)                                   |                           |     |
| No information to be mentioned                              | specifically.             |     |
| FY 2005 Domestic Survey)                                    |                           |     |
| No information to be mentioned                              | specifically.             |     |
| FY 2006 Domestic Survey)                                    | ic. n                     |     |
| No information to be mentioned                              | specifically.             |     |
| (FY 2007 Domestic Survey)<br>No information to be mentioned | opacifically.             |     |
|   | specifically.             |     |
| (FY 2008 Domestic Survey)<br>No information to be mentioned | specifically              |     |
|   | -position.                |     |
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### STUDY SUMMARY SHEET (M/P+F/S)

Compiled Feb.2007 **CSA** CUB/A 201/05 Revised Jul.2009

| COUNTRY                 | Cuba   |   |   |   |  |  |  |
|-------------------------|--|---|---|---|--|--|--|
| NAME OF STUDY           | The study on sus   | ne study on sustainable technical development for rice cultivation in the central area in the Republic of Cuba  |   |   |  |  |  |
| SECTOR                  | Agriculture  | / (Agriculture in) General  | 4. T  | YPE OF STUDY M/P+F/S  |  |  |  |
|                         |  |   |   |   |  |  |  |
| PRESENT COUNTERPA       | RT AGENCY  |   |   |   |  |  |  |
| OBJECTIVES OF THE STUDY | 1) To formulate a development plan for improving sustainable production of voluntarily marketed rice in the central 5 prefectures (including survey for demonstration).  2) To transfer technology on the survey operation to counterpart personnel on the side of Cuba through OJT. |   |   |   |  |  |  |
| CONSULTANT(S)           | Pacific Consultar  | Pacific Consultants International   |   |   |  |  |  |
| STUDY PERIOD            | Oct.2003 ~   | Mar.2006 29month(s)   |   |   |  |  |  |
| SITE OR AREA            | M/P: Central 5 prefectures (Prefectures of Cienfuegos, VillaClara, SanctiSpiritus, CiegodeAvila and Camaguey) F/S: Choose 5 priority counties of the 5 prefectures (Counties of AguadadePasajeros, SantoDomingo, Yaguajay, Chambas and Vertientes)                                   |   |   |   |  |  |  |
|                         | NAME OF STUDY  SECTOR  COUNTERPART AGENORY TIME OF DEVELOPME  PRESENT COUNTERPA  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD  | NAME OF STUDY  SECTOR  Agriculture  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  1) To formulate a prefectures (inclu 2) To transfer text  OBJECTIVES OF THE STUDY  Pacific Consultant  CONSULTANT(S)  Pacific Consultant  CONSULTANT(S)  M/P: Central 5 p F/S: Choose 5 pr and Vertientes) | The study on sustainable technical development for rice cultives.  SECTOR  Agriculture  / (Agriculture in) General  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  1) To formulate a development plan for improving sustainable prefectures (including survey for demonstration). 2) To transfer technology on the survey operation to counterprovent to counterprovent plan for improving sustainable prefectures (including survey for demonstration). 2) To transfer technology on the survey operation to counterprovent plan for improving sustainable prefectures (including survey for demonstration). 2) To transfer technology on the survey operation to counterprovent plan for improving sustainable prefectures (including survey for demonstration). 2) To transfer technology on the survey operation to counterprovent plan for improving sustainable prefectures (including survey for demonstration). 2) To transfer technology on the survey operation to counterprovent plan for improving sustainable prefectures (including survey for demonstration). 2) To transfer technology on the survey operation to counterprovent plan for improving sustainable prefectures (including survey for demonstration). 2) To transfer technology on the survey operation to counterprovent plan for improving sustainable prefectures (including survey for demonstration). 2) To transfer technology on the survey operation to counterprovent plan for improving sustainable prefectures (including survey for demonstration).  CONSULTANT(S)  Pacific Consultants International  Oct. 2003 ~ Mar. 2006 29month(s)  M/P: Central 5 prefectures (Prefectures of Cienfuegos, VillaC F/S: Choose 5 priority counties of the 5 prefectures (Counties and Vertientes) | The study on sustainable technical development for rice cultivation in the center of the constitution of the center of the center of the center of the cultivation in the center of |  |  |  |

M/P:

1) Improving producers' skill, 2) improving production environment, 3) improving promotion activities and 4) enhancing the relevant organizations. F/S: "Program for improving technology for sustainable rice production"

Improvement of cultivation technology:

1) Project for composting angleworm and establishing the delivery unit for the producers of voluntarily marketed rice in each county. 2) Project for supporting the production of biologic agrochemicals at the Biologic Agrochemicals Breeding Center (CREE = Centros de Reproducci?n de Entom?fagos y Entomopat?genos) in each county. 3) Project for manufacturing small-scale agricultural machines and utilizing them by the producers of voluntarily marketed rice at agricultural field for demonstration. 4) Project for improving water management at agricultural field level. 5) Project for enhancing the organization of water users.

Improvement of post-harvesting treatment technology:

1) Pilot project for sharing of agricultural machines and facilities by groups of producers of voluntarily marketed rice. 2) Project for improving the drying method for producers of voluntarily marketed rice.

Improvement of promotion activities:

1) Project for developing chief producer and enhancing technology promotion. 2) Project for implementing study tour, a method for technology promotion.

Program for improving promotion activity and developing human resource.

Program for enhancing the production and delivery of testified seeds for voluntarily marketed rice.

Program for improving testing and research activities:

CSA CUB/A 201/05 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 2006 Domestic Survey)

Given that reinforcement of production of the certified seed of free trade rice and its provision is required, the Japanese government receives a requests of the projects of technical cooperation.

(FY2007 Domestic survey)

Implemented project: Project of reinforcement production of the certified seed of free trade rice and its diffusion

Implementing period: From November, 2007 (3 years)

Implementing body: Ministry of Agriculture Rice Research Institution, JICA (Technical Cooperation project)

Objective: Establish cultivation technique for free distribution rice with quality seeds.

Relation to the mentioned study: The necessity of some action plans are being under consideration in the headed study. For production expansion of free distribution rice, in particular, it transpires that the introduction of a variety of rice which coincide with regional characters is an urgent need and its immediate effectivity holds promise. However, the production and distribution system of seeds suitable for the local cultivation system, and certified seed with guaranteed germination rate have not been established as of the moment. Therefore, taking an immediate action for this matter is considered to be the issue of high priority for the action plan based on the proposal of development research. The PPI, a counterpart organization of development research, is willing for the early launch of the production and establishment of free distribution rice and establishing the cultivation technique. Japan was requested technical cooperation as part of the development study follow-up.

Benefits: 1) Easy access to seed certificate, 2) Expanding the usage of quality seeds, 3) Dissemination of free distribution rice cultivation technique by introduction of quality seeds, 4) Establishment of free distribution rice cultivation technique by introduction of quality seeds, 5) Expectation of production expansion of free distribution rice and increasing production.

#### (FY 2008 Domestic Survey)

The four programs proposed in the study are under organic coordination and are being implemented. In addition, the expert of project management/ paddy cultivation and the short-term expert of agricultural machinery (paddy seed production) were dispatched in 2008.

**(F/S)** 

|   |   |  | (F/S)  | Compiled    | Mar.1990 |  |  |
|---|---|--|--|-------------|----------|--|--|
| CS  |   |  |  | Revised     | Jul.2009 |  |  |
| 1.  | COUNTRY   | Dominican Rep  |  |             |          |  |  |
| 2.  | NAME OF STUDY   | Proyecto del de  | sarrollo agricola del area Agripo (El Pozo)                                    |             |          |  |  |
| 3.<br>5.                                  | SECTOR  | Agriculture  | / (Agriculture in) General  4. TYPE OF STUDY F/S  Dominican Agrarian Institute |             |          |  |  |
|   | COUNTERPART AGEN<br>TIME OF DEVELOPME   |  | National Institute of Hydraulic Resources                                      |             |          |  |  |
|   | PRESENT COUNTERPA   | ART AGENCY   |  |             |          |  |  |
|   | <u>I</u>  | Feasibility Stud   | y for rice production increase.  |             |          |  |  |
| 6.  | OBJECTIVES OF THE STUDY   |  |  |             |          |  |  |
| 7.  | CONSULTANT(S)   | Pacific Consulta   | ants International   |             |          |  |  |
| 8.  | STUDY PERIOD  | Jul.1980 ~   | Jan.1982 18month(s)  |             |          |  |  |
| 9.  | El Pozo, Maria Trinidad Sanchez (180 km from capital, 50,000 people, 10,000ha)  9. SITE OR AREA   |  |  |             |          |  |  |
|   | MAJOR PROPOSED PR   |  |  |             |          |  |  |
| 1)P 2)L 3)P 4)P 5)Ir 6)Ir 7)T 8)T 9)R 10) | gation of 7,500ha: Alter rincipal canals:Concrete :irrg. cum draina ateral canals(irrg.cum dr tump stations(Yuna Rive. :units/diam tump sta. retarding basint take weir, Nagua River take weir, Helechal Riv tide gates, Nagua Riv.(sa tide gates, Cano Colorad ctiver channel improveme Drainage canals (same fo | lined & earth 11 lined & earth 11 lined . 119 r):water intake 4 n 3 units/1,000 (for Alt. A):10 loc (same for Alts. A . (same for Alts. A wo(same for Alts. A ent(same for Alts. A | .5km & 31.6km 11.5km & 25.5km<br>16.0km<br>7km 119.7km                         | ng (2km), e | tc.      |  |  |

CSA DOM/A 301/81 F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

Subsequent Studies: Jan.~Nov.1984 D/D

Finance:

May.11.1983 L/A 8,825 mil.Yen

(Agricultural Development Project in Agripo Area (El Pozo))\*

\*Contents of project

1)Pump site, gate, water canal, drainage canal, supplementary structure, improvement and new construction of rural road

2)D/D and consulting service for works above

3)Land acquisition

(loan for all foreign currency for 1),2) and a part of local currency)

Mar.1994 L/A 9,013 mil.Yen

Construction:

Aug.1985 started Aug.1989 completed

Related Project:

"Agriopo Agricultural Development Project II"

The project aims to improve productivity and increase rice production in Aguacate Guallapo, Agripo area.

Finance

Mar.1994 L/A 9,013mil.yen

(F/S)

Compiled Mar.1988

**CSA** DOM/S 301/85 Revised Jul.2009 1. COUNTRY Dominican Republic Radio and Television Development Project 2. NAME OF STUDY 3. SECTOR Communications & Broadcasti/ Broadcasting TYPE OF STUDY F/S 5. Radio Television Commission COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Expansion and improvement of educational radio and TV broadcasting. OBJECTIVES OF THE STUDY 7. CONSULTANT(S) Aug.1984 Jul.1985 11month(s) 8. STUDY PERIOD 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) 1)Broadcasting antennas radio(FM) 1 set TV(2DP) 1 set 2)Transmission equipment radio(FM) 2 sets TV 2 sets 3)STL(RTVD Santo Domingo - Aldela Bandela) radio(FM) 2 sets of 960MHz transmitting and receiving equipment TVAESHF 2 sets of transmitting and receiving equipment 4)Local TV relay stations replacement of receiving equipment at 8 TV relay stations.

CSA DOM/S 301/85 F/S

|                 | Completed or In Progress | Promoting                 |
|-----------------|--------------------------|---------------------------|
| DDDGENE GEARNIG | Completed                |                           |
| PRESENT STATUS  | Partially Completed      | Delayed or Suspended      |
|                 | Implementing             |                           |
|                 | Processing               | Discontinued or Cancelled |

Description:

Subsequent Studies: Mar.~Apr.1991 B/D

Finance:

Jun.1991 E/N 527 mil.Yen

(Project to Replace Equipment for Radio and Television Educational Programs I)

Jul.1992 E/N 740 mil.Yen

(Project to Replace Equipment for Radio and Television Educational Programs II)

Construction:

Jun.1991 started

Oct.1993 completed

Situation:

(FY 1993 Overseas Survey)

The Government requested JICA to dispatch an expert related to this project.

(F/S)

Compiled Mar.1990 **CSA** DOM/A 302/86 Revised Jul.2009

| 1.  | COUNTRY                               | Dominican Repu  | Dominican Republic  |                   |              |              |       |           |            |         |                 |      |
|-----|---------------------------------------|---|---|-------------------|--------------|--------------|-------|-----------|------------|---------|-----------------|------|
| 2.  | NAME OF STUDY                         | Aguacate-Guaya  | nacate-Guayabo Agricultural Development Project   |                   |              |              |       |           |            |         |                 |      |
| 3.  | SECTOR                                | Agriculture   | / (2  | Agriculture in) ( | General      |              | 4.    | TYPE (    | OF STUDY   | F/S     |                 |      |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME | СҮ АТ ТНЕ   | Dominican Agra<br>National Institute  | rian Institute    |              |              |       |           |            |         |                 |      |
|     | PRESENT COUNTERPA                     |   | T AGENCY  |                   |              |              |       |           |            |         |                 |      |
| 6.  | OBJECTIVES OF THE STUDY               | The purpose of t feasibility.   | the study is to for   | mulate an optim   | num agricult | tural develo | opmen | t plan to | o evaluate | its tec | hnial and econo | omic |
| 7.  | CONSULTANT(S)                         | Naigai Engineer<br>Sanyu Consultar  | acific Consultants International<br>(aigai Engineering Co., Ltd.<br>anyu Consultants Inc. |                   |              |              |       |           |            |         |                 |      |
| 8.  | STUDY PERIOD                          | Jun.1985 ~  | Aug.1986  | 14month(s)        |              |              |       |           |            |         |                 |      |
|     | SITE OR AREA                          | Maria, Trinidad Sanchez, Duarte, Samana, Aguacate, Guayabo (200km from capital, 17,000 people,24,000ha) |   |                   |              |              |       |           |            |         |                 |      |
| 10. | MAJOR PROPOSED PR                     | OJECT(S)  |   |                   |              |              |       |           |            |         |                 |      |

The purpose of this project is to promote agricultrure of the Aguacate-Guayabo area within the AGLIPO area.

This follows development of the El Pozo area where construction, as a first step of the AGLIPO Agricultural Development Plan, has already completed. The following facilities have been formulated in the Project.

- Headworks : 1 - Drainage Canal : 125km - Training wall : 1 - Drainage : 135 km - Road : 130 km

CSA DOM/A 302/86 F/S

PRESENT STATUS

Completed or In Progress
Completed
Partially Completed
Partially Completed
Implementing
Processing
Discontinued or Cancelled

#### **Description:**

Subsequent Studies:

(FY 1997 Domestic Survey) (FY 1997 Overseas Survey)

Nov.1995~Sep.1996 D/D (INDRHI, Consulting Company / PCI)

OECF 3,400mil.yen

Government budget RD\$ 3.86mil.

\*Contents of study

Collection of data, soil survey, etc.

Water supply for the adjacent area of 3,000ha at EL Pozo Project area.

#### Finance:

Mar.31.1994 L/A 9,013 mil.Yen(Constanza Valley Irrigation ProjectII)

\*Content of project: D/D, Construction of irrigation and drainage facilities and construction of roads. (All the projects proposed by F/S are included) Government budget RD\$ 4,200mil.

#### Construction:

(FY 1998 Domestic Survey)

May 1999~May 2003 Scheduled to be implemented

Oct.1998 4 contractors (Japan, Spain, Italy, Mexico) were selected.

#### (FY 1995 Overseas Survey)

The reason that the provision of this Yen credit was delayed was because the Dominican government had delayed in the payment of the OECF loan interst. However following the consultation with IMF and the request from the Paris Club the Japanese government decided to resume the provision of Yen Credit.

#### (FY 1998 Domestic Survey)

Term of L/A is up to 2003. If construction does not progress smoothly, the extension of the term will be required.

(M/P+F/S)

Compiled Mar.1990 CSA DOM/S 201B/87

1. COUNTRY Dominica Revised Jul.2009

| 1.           | COUNTRI                                     | Dominican Republic  |
|--------------|---|---|
| 2.           | NAME OF STUDY                               | Development Project of the San Pedro de Macoris   |
| 3.           | SECTOR                                      | Transportation / Port 4. TYPE OF STUDY M/P+F/S  |
|              |   | Ministry of Public Works and Communications   |
| 5.           | COUNTERPART AGEN<br>TIME OF DEVELOPME       |   |
| ٠.           |   |   |
|              | PRESENT COUNTERP                            | ART AGENCY  |
|              |   | Formulation of Master Plan in the target year of 2000. Formulation of short-term development plan in 1995 and execution of feasibility study. |
|              |   | of indiation of short-term development plan in 1993 and execution of leastonity study.  |
| 6.           | OBJECTIVES OF THE STUDY                     |   |
|              |   |   |
| 7.           | CONSULTANT(S)                               | The Overseas Coastal Area Development Institute TETRA Co., Ltd.   |
| Q            | STUDY PERIOD                                | Sep.1986 ~ Nov.1987 14month(s)  |
| 0.           | STODITEMOD                                  | ~   |
|              | SITE OR AREA                                | OFCT(S)   |
|              | MAJOR PROPOSED PR<br>I/P>                   | OJEC1(S)  |
|              | u/P><br>he study formulated a mas           | eter plan (until 2005)  |
|              |   | estimated in 2005, 7 wharves will be constructed.   |
|              |   | ength 100m  |
| 1)           | -7.5m                                       | 260m  |
|              | -11.0m                                      | 840m  |
| 2) (         |   | 3) Ferry Terminal   |
|              | Port Management Office                      |   |
| _            | /a  |   |
|              | /S>   | stimated in 1995, 6 berths are located on the esastern side. Introduction of new cargo handling system and establishment of                   |
|              | t managing body are prop                    |   |
|              | ort Term Plan (until 1995                   |   |
|              | Wharves depth -5m                           |   |
|              | -7.5m                                       | 260m  |
| 2            | -11m  | 630m  |
|              | Container Terminal 3 Port Management Office | 3) Ferry Terminal  5) Maintenance Shop  |
| <b>+</b> ) I | on management office                        | 3) Manuchance Shop  |
|              |   |   |
|              |   |   |
|              |   |   |
|              |   |   |
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|              |   |   |
|              |   |   |
|              |   |   |
| l            |   |   |

CSA DOM/S 201B/87 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

#### Reasons for Cancellation:

The Government of the Dominican Republic could not reach an agreement with the IMF, and therefore has been unable to receive foreign finance.

#### Situation:

May.1991 The Government resumed negotiation with the IMF

Nov.1991 At the Paris club, it was settled with the total sum of US\$1.8 billion. This project is included in the list of projects which the office of national economic planning consides to implement with OECF fund.

#### (FY 1991 Overseas Survey)

The Government of the Dominican Republic requested review of this study and the technical advise about the port development policy.

#### (FY1992 Overseas Survey)

The Dominican Government has not yet used the M/P. The Government is not looking for financial sources to support this project.

#### (FY1993 Overseas Survey)

Dominican Government think this project impossible. The National Budget of 1994 did not include the project.

#### (FY 1995 Overseas Survey)

It seems difficult to resume this project.

**(F/S)** 

Compiled Mar.1992 DOM/A 303/90

Dominican Republic Revised Jul.2009

| _,  | COCIVIRI  | Constants Vallay Irrigation Project |   |  |  |  |  |  |
|-----|---|-------------------------------------|---|--|--|--|--|--|
| 2.  | NAME OF STUDY   | Constanza Valley Irrigation Project |   |  |  |  |  |  |
|     | SECTOR  | Agriculture                         | / (Agriculture in) General                  | 4. TYPE OF STUDY F/S   |  |  |  |  |
| 5.  |   |                                     | National hydraulic resources institute      |  |  |  |  |  |
|     | COUNTERPART AGEN<br>TIME OF DEVELOPME   |                                     |   |  |  |  |  |  |
|     | PRESENT COUNTERPA   | ART AGENCY                          |   |  |  |  |  |  |
|     |   | Feasibility study                   | on the agricultural development in Constant | za Area.   |  |  |  |  |
| 6.  | OBJECTIVES OF THE STUDY   |                                     |   |  |  |  |  |  |
|     |   | Pacific Consulta                    | nts International                           |  |  |  |  |  |
| 7.  | CONSULTANT(S)   |                                     |   |  |  |  |  |  |
|     |   | Jul.1989 ~                          | Mar.1990 8month(s)                          |  |  |  |  |  |
| 8.  | STUDY PERIOD  | ~                                   | Mar. 1990 Official (S)                      |  |  |  |  |  |
| 9.  | Constanza Valley area situated about 140km north-west of the capital  9. SITE OR AREA                     |                                     |   |  |  |  |  |  |
| 10. | MAJOR PROPOSED PR   | OJECT(S)                            |   |  |  |  |  |  |
| The |   |                                     | n condition for the Constanza Valley the im | provement of the present irrigation scheme. Main facilities of |  |  |  |  |
| ]   | Dam - central core type ro<br>Height of dam: 30m,<br>Dam volume: 214,000 c<br>Total storage capacity: 1,0 | Length of cres                      | st: 162m,                                   |  |  |  |  |  |
|     | Head works and head race<br>Construction of Mountain<br>Discharge: 1.0 cub.m/S                            |                                     | n works and Head race.                      |  |  |  |  |  |
|     | Canal  New construction and rel  Related facilities: Divers  Chute, Small intake gate,                    | sion works/Conflu                   | nence works,                                |  |  |  |  |  |
|     |   |                                     |   |  |  |  |  |  |

コンスタンサ地域畑地灌漑計画

CSA DOM/A 303/90 F/S

PRESENT STATUS

Completed or In Progress
Completed
Partially Completed
Partially Completed
Implementing
Processing
Discontinued or Cancelled

#### **Description:**

Subsequent Studies: Jul.~Aug.1993 B/D

#### Finance:

24 Jan.1994 E/N 546 mil. Yen (Constanza Valley Irrigation Project-1/2) 3 Aug.1994 E/N 32 mil. Yen (Constanza Valley Irrigation Project-2/2-1)

E/N 946 mil. Yen (Constanza Valley Irrigation Project-2/2)(provided in 1995)

Dominican side budgeted US\$ 158 thousand for the project, but it seems that the budget will not be used.

#### Construction:

Mar.1995 completed

#### Effect:

(FY 1998 Overseas Survey)

The followings have been realized through the implementation of the proposed project.

- Stable annual agricultural production has been achieved. If the average planted area in 1988 is regarded as 100%, that in 1998 is 210%.
- Irrigated area has been expanded from 500 ha to 2,502ha.

(Basic Study)

|     |                                       | (Basic Study)  | Compiled       | Mar.1994  |
|-----|---------------------------------------|--|----------------|-----------|
|     | SA DOM/S 501                          |  | Revised        | Jul.2009  |
| 1.  | COUNTRY                               | Dominican Republic   |                |           |
| 2.  | NAME OF STUDY                         | Groundwater Development Project in The Western Region  |                |           |
|     | SECTOR                                | Social Infrastructure  | sic Study      |           |
|     | COUNTERPART AGEN<br>TIME OF DEVELOPMI |  |                |           |
|     | PRESENT COUNTERP.                     | ART AGENCY   |                |           |
|     |                                       | To evaluate the development potential of groundwater resources in the four western provinces. To     | prepare water  | resources |
|     |                                       | development plan including rural water supply plan for the 158 villages in the four western province |                |           |
| 6.  | OBJECTIVES OF THE STUDY               |  |                |           |
|     |                                       | KOKUSAI KOGYO CO., LTD.  |                |           |
| 7.  | CONSULTANT(S)                         | Sumiko Consultants Co., Ltd.   |                |           |
|     |                                       | 0.1000   |                |           |
| 8.  | STUDY PERIOD                          | Oct.1990 ~ Sep.1992 23month(s)   |                |           |
|     |                                       | Four Provinces   |                |           |
|     |                                       | - MONTE CRISTI - ELIAS PINA  |                |           |
|     |                                       | - DAJABON - INDEPENDENCIA  |                |           |
| _   |                                       |  |                |           |
| 9.  | SITE OR AREA                          |  |                |           |
|     |                                       |  |                |           |
|     |                                       |  |                |           |
|     |                                       |  |                |           |
|     | MAJOR PROPOSED PI                     |  |                |           |
|     |                                       | selected from 158 villages which were requested by Government of Dominican Republic. The Facil       | ities required | in this   |
| pro | ject are as follows:                  |  |                |           |
|     |                                       |  |                |           |
|     | Hand Pump System                      | 40 villages (131 wells)  |                |           |
|     | Motor Pump System                     | 7 villages (4 wells)   |                |           |
|     | Reservoir Pond, Purifica              | tion 2 places (7 villages)   |                |           |
|     | Booster Pump System                   | • (4.11)   |                |           |
| a.  | Water Conveyance Syste                | em 2 sets (4 villages)   |                |           |
|     |                                       |  |                |           |
|     |                                       |  |                |           |
|     |                                       |  |                |           |
|     |                                       |  |                |           |
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|     |                                       |  |                |           |
|     |                                       |  |                |           |

CSA DOM/S 501/92 Basic Study

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 1997 Overseas Survey)

The results of this study were incorporated into "Rural-Urban Water Supply and Sanitation National Plan (1995~2000)". Moreover, INAPA is utilizing the outputs of the study.

Subsequent Studies:

B/D (Implementing organ / INAPA, Consulting Company / Kokusai Kougyou)

The following projects were formulated:

1) Hand Pump system 37 villages (93 wells)
2) Motor Pump System 7 villages (7 wells)
3) Reservoir, Water Distribution Facilities 7 villages (2 systems)
4) Cooperative Water Reservoir Facilities 4 villages (11 sets)
5) Facilities for Maintenance and Administration 1 set

5) Facilities for Maintenance and Administration 1 set 6) Equipment for Maintenance and administration 1 set

(1)Dahabon Province

Subsequent Studies:

Jun.13-Jul.17, 1994 B/D

Finance:

Feb.1995 E/N 391 mil.Yen (Project for Water Supply in Three Western Departments )
Sep.1995 E/N 121 mil.Yen (Project for Water Supply in Three Western Departments 1/2)
Sep.1995 E/N 983 mil.Yen (Project for Water Supply in Three Western Departments 2/2)

\*Contents of the project

Hand pump, motor pomp, purification plant, reservoir, etc.

Construction:

Jul.1995~Mar.1996 Implemented

Contractor / Fujita

(2)Monte Christy and Elias Pina

Finance:

 $5\;Sep.1995\;\;E/N\;121\;mil.Yen\;(Project\;for\;Water\;Supply\;in\;Three\;Western\;Departments\;1/2)$ 

 $5\;Sep.1995\;E/N\;983 mil.yen\;\; (Project\;for\;Water\;Supply\;in\;Three\;Western\;Departments\;2/2)\;(provided\;in\;1996)$ 

\*Contents of the project

Hand pump, motor pomp, purification plant, reservoir, etc.

Construction:

Feb.1996 started Mar.1997 completed Contractor / Fujita

#### Effect:

(FY 1997 Domestic Survey)

Standard of living of rural area (approx. 5,300 households, 25,000 persons) has improved greatly by stable pure water supply. As a result, decrease of epidemic infected by water and respiratory desease, and prevention of depopulation are expected. Moreover participation of female in economic activity and increase of school attendance rate are expected because the hard work of women and children to carry water will be mitigated.

**(F/S)** 

|      |  |   |                                   | (P                 | <b>/S</b> )          |           |                          | Compiled     | Jul.1996 |
|------|--|---|-----------------------------------|--------------------|----------------------|-----------|--------------------------|--------------|----------|
| CS   |  |   |                                   |                    |                      |           |                          | Revised      | Jul.2009 |
| 1.   | COUNTRY  | Dominican Repu                            |                                   | 10 '               |                      |           |                          |              |          |
| 2.   | NAME OF STUDY                                      | Limon del Yuna                            | Area Agricult                     | ural Developmen    | t                    |           |                          |              |          |
| 3.   | SECTOR   | Agriculture                               |                                   | / (Agriculture in) | General              | 4.        | TYPE OF STUDY F/S        |              |          |
| 5.   |  |   | INDRHI                            | , (                |                      | 1         |                          |              |          |
|      | COUNTERPART AGEN                                   | ICY AT THE                                |                                   |                    |                      |           |                          |              |          |
|      | TIME OF DEVELOPMI                                  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      | PRESENT COUNTERP                                   | ART AGENCY                                |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  | Revitalization in                         | the area with                     | increase of agricu | ltural production by | agricultu | ıral development removii | ng the imped | liment   |
|      |  | factor of irrigatio                       | on drainage.                      |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
| 6    | OBJECTIVES OF THE STUDY                            |   |                                   |                    |                      |           |                          |              |          |
| 0.   | STUDY  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  | Pacific Consultar                         | nte Internation                   | .a1                |                      |           |                          |              |          |
| 7.   | CONSULTANT(S)                                      | KOKUSAI KOG                               |                                   |                    |                      |           |                          |              |          |
|      | . (-)  |   |                                   |                    |                      |           |                          |              |          |
| 8.   | STUDY PERIOD                                       | Mar.1994 ~                                | Aug.199                           | 95 17month(s)      |                      |           |                          |              |          |
|      |  | Limon del Yuna                            | araa right ha                     | als of Vuna laure  | straam               |           |                          |              |          |
|      |  | Limon dei Tuna                            | area, rigiit bai                  | ik of Tuna lower   | stream               |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
| 9.   | SITE OR AREA                                       |   |                                   |                    |                      |           |                          |              |          |
| •    | SILE ON THEE                                       |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
| 10.  | MAJOR PROPOSED PI                                  | ROJECT(S)                                 |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      | Facility for Source of Warrigation Facility: trunk |   |                                   | pump, etc.         |                      |           |                          |              |          |
| 3.1  | Orainage Facility: trunk a                         | and branch canal, t<br>and branch drainag | turnouts, etc.<br>re canal. accor | nnanving work. e   | c.                   |           |                          |              |          |
|      | Flood Protection: river re                         |   | ,,                                |                    |                      |           |                          |              |          |
|      | 7. Road Facility: trunk and branch road, bridge    |   |                                   |                    |                      |           |                          |              |          |
| 6. ( | D/M office   |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
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|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |
|      |  |   |                                   |                    |                      |           |                          |              |          |

CSA DOM/A 304/95 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### Description:

(FY 1996 Domestic Survey)

As of Sep.1996 D/D on Agripo (II) is being undertaken and the construction is expected to commence around Sep.1997.

After the implementation of Agripo (II), this project, Agripo (III) is intended to be materialized, the Govt. of Dominica Republic seems to request in the near future.

(FY 1997 Domestic Survey)

No action has been taken to request D/D study.

Request will be submitted after the completion of a tender for Agripo (II) which is in process.

(FY 1997 Overseas Survey)

INDRHI (National Institute of Hydraulic Resources) is not preparing for procurement of fund yet.

INDRHI has intention to request for financial assistance for D/D and implementation of the project, after the completion of a tender for construction of Agripo (II).

(FY 1998 Domestic Survey) (FY 1998 Overseas Survey) (FY 1999 Overseas Survey)

Contractors for Agripo (II) were under selection as of Nov. 1998. It seems that the construction will be started around March or April of 1999. If it is implemented smoothly, Agripo (III) will be realized. Followings were requested regarding Agripo (III): (FY 2000 Domestic Survey)

The construction of Agripo(II) projects has been implementing.

Subsequent study: Request for D/D was submitted in 1997. It is to be implemented by INDRHI.

Finance: Request for OECF loan (approx. 4,000 mil. yen) for construction and rehabilitation of the irrigation facilities was made in 1997.

\*Refer to "Aglipo (El Pozo) Agricultural Development (DOM/A 301/81)" for detail.

#### (FY 2005 Domestic survey) (FY 2005 Overseas survey)

Construction of the Aglipo (II) was completed in March 2004. Dominican Republic has an intention to continue the project as Aglipo (III). However, coordination is required with the request submitted for other projects. In addition, there is a trend to revise the whole concept due to frequent occurrence of floods. INDRHI has shown their intention to implement Aglipo (III) and Dominican government is planning to bear the costs for administrative procedures, EIA, road maintenance, tax, and etc.

(M/P+F/S)

Compiled Jun.2000 **CSA** DOM/A 227/99 Revised Jul.2009

| 1. | COUNTRY   | Dominican Republic  |   |                          |  |  |
|----|---|---|---|--------------------------|--|--|
| 2. | NAME OF STUDY                                       | Integrated Rural Development Project of Yaque Del Sur River Basin   |   |                          |  |  |
| 3. | SECTOR  | Agriculture   | / (Agriculture in) General                        | 4. TYPE OF STUDY M/P+F/S |  |  |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |   | National Institute of Hydraulic Resources(INDRHI) |                          |  |  |
|    | PRESENT COUNTERPART AGENCY                          |   |   |                          |  |  |
| 6. | OBJECTIVES OF THE STUDY                             | <ol> <li>To prepare a Master Plan on an integrated rural development plan on the Yaque Del Sur River Basin.</li> <li>To conduct a Feasibility Study of priority areas selected in the Master Plan.</li> <li>To transfer technology to counterpart personnel.</li> </ol> |   |                          |  |  |
| 7. | CONSULTANT(S)                                       | Nippon Koei Co., Ltd. Pasco International Inc.  |   |                          |  |  |
| 8. | STUDY PERIOD  | Oct.1997 ~  | Aug.1999 22month(s)                               |                          |  |  |
|    | SITE OR AREA  | M/P: Yaque Del Sur River Basin F/S: Lower Yaque Del Sur River Basin   |   |                          |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

M/P:

To stabilize farmer's economic situation, to improve farmers' life quality, to create job opportunity and to improve the social welfare, the projects in 7 sectors were formulated based on 6 basic concepts as follows,

- 1) soil conservation
- 2) increase of agri-production
- 3) increase of cropping intensity
- 4) strengthening agri-support system
- 5) improvement of social infrastructure
- 6) environmental conservation in Ricon Lake

The proposed projects consists of 1 agriculture, 6 agri-support, 1 overall water management, 9 irrigation/drainage, 4 social rural infrastructure, 4 water resources and 2 environment development projects.

#### F/S:

The agricultural development in the lower Yaque Del Sur River has about 6,000 ha extending over the existing irrigation system. The development projects consists of 5 project components such as,

- 1) improvement of irrigation facilities
- 2) establishment of the water user's organizations
- 3) establishment the Yaque Del Sur Water Management Center
- 4) constructions of rural water supply system and community center
- 5) reinforcement of agricultural support services relevant to a research program of adaptive and applied on-farm research, education and trinity for extension workers and leaders of nucleus farmers, preparation of cadastral ledges and services for land registers, establishment of the model agricultural cooperation and market information system.

CSA DOM/A 227/99 M/P+F/S

|                | Completed or In Progress | Promoting                 |  |
|----------------|--------------------------|---------------------------|--|
|                | Completed                |                           |  |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |  |
|                | Implementing             |                           |  |
|                | Processing               | Discontinued or Cancelled |  |

#### **Description:**

At present INDRHI has been requesting that the Japanese government should implement the following project components among the agricultural development projects in the lower Yaque Del Sur river as Japanese grant aid projects.

- 1) Improvement of irrigation facilities of Viellarpand headworks
- 2) Improvement of Santana headworks
- 3) Improvement and rehabilitation of irrigation and drainage facilities in the existing Tawayo irrigation system
- 4) Installation of telemeter system

#### (FY 2002 Domestic Survey)(FY 2002 Overseas Survey)

The government submitted the request for grant aid but there has seen no progress. Moreover, it is allegedly known that the government approached to JBIC for loan aid. Therefore, the government launched procedures for loans from the Export-Import Bank of the United States however, there has no progress.

#### (FY 2003 Overseas Survey)

The proposed project is regarded as an extremely high priority plan among the nation's agricultural development plans due to the deteriorated poverty of the target region. The Dominican government filed a request for grant aid with the objective of obtaining financing for this plan in 2002 but it has not progressed yet.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2005 Domestic Survey)

The counterpart government desires the actualisation of the project.

(FY 2005 Overseas Survey) Subsequent study: Phase-I Implementation period: 2 years

#### Objective:

- Design and construction of Yaque Del Sur River water resources management centre, establishment of urgent warning system, and technical training
- Design and construction of Santana diversion bank improvement and Yaque Del Sur River (Tawayo irrigation facilities) irrigation infrastructure improvement.
- To strengthen the function of water users association in the Tawayo irrigation area
- To prepare ownership registration maps of Tawayo irrigation area and to provide necessary services in order to provide land rights for peasants using the irrigation.
- To strengthen information system on land partition in the target area
- To prepare irrigation infrastructure improvement project in target area.

Relation with the report: The study has proposed several projects for comprehensive development of Yaque Del Sur River basin area. Comprehensive development project is a large-scale project, which takes two years for Phase-I and three years for Phase-II five totalling five years.

Situation: Rural development project is part of the national policy, which INDRHI has an intention of implementing the project soon. However, presently, there have been no requests. While financing method is planned to be discussed during the planning phase of the subsequent study, Dominican government has an intention to finance EIA, road maintenance, and costs for administration, logistics and technical support in preparing land registration map and determining land rights regarding the project. However, although INDRFI has an intention to conduct comprehensive development of the Yaque Del Sur River basin, loan limits of IMF and policies of CAFTA, joined by United States, Dominican Republic, and Latin American countries will affect the implementation of the project.

(M/P+F/S)

Compiled Oct.2002

| CS  | SA DOM/S 2  | 222/01                           | `                                | ,                         |      |               | Revised | Jul.2009 |
|---|---|----------------------------------|----------------------------------|---------------------------|------|---------------|---------|----------|
| 1.  | COUNTRY   | Dominican Rep                    | ublic                            |                           |      |               |         |          |
| 2.  | NAME OF STUDY   | Improvement of                   | Sewage System and Environm       | ent in the City of Santia | go   |               |         |          |
| 3.  | SECTOR  | Public Utilities                 | / Sewerage                       |                           | 4.   | TYPE OF STUDY | M/P+F/S |          |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME   |                                  | Corporacion del Acueducto y      | Alcantarillado de Santia  | go ( | CORAASAN)     |         |          |
|   | PRESENT COUNTERPA   | ART AGENCY                       |                                  |                           |      |               |         |          |
| 6.  | (1) Establish a sewerage master plan for the target year of 2015 to improve the Santiago City environmental /sanitary conditions and the river water pollution caused by the uncontrilled wastewater discharge from the built-up urban dist (2) Conduct a F/S for prioritised project in the above MP (new sewerage system construction, existing sewerage treatment/rehabilitation and pipe system maintenance) (3) Technical transfer to the CP |                                  |                                  |                           |      |               |         |          |
| 7.  | CONSULTANT(S)   | Nihon Suido Co<br>Nippon Koei Co | onsultants Co., Ltd.<br>D., Ltd. |                           |      |               |         |          |
| 8.  | . STUDY PERIOD Dec.2000 ~ Feb.2002 14month(s)   |                                  |                                  |                           |      |               |         |          |
| M/P: Santiago, Tamboril, Licey F/S: Santiago  9. SITE OR AREA |   |                                  |                                  |                           |      |               |         |          |

## 10. MAJOR PROPOSED PROJECT(S)

M/P:

The master plan proposes that the sewerage improvement program be implemented under the following three consecutive stages by 2015:

- (1)The first phase plan (2003-2006); rehabilitation works of the existing Rafey, Cienfuegos and Los Salados wastewater treatment plants; construction of Zona Sur wastewater treatment plan; and construction of main sewers and rehabilitation of existing pumping station.
- (2) The second phase plan (2007-2010); rehabilitation and construction of collector/interceptor mains; expansion of Rafey wastewater treatment plant; and rehabilitation of Tamboril wastewater treatment plant.
- (3) The third phase plan (2011-2015); construction/ rehabilitation of sewers, rehabilitation of Embrujo wastewater treatment plant, and expansion of Zona Sur wastewater treatment plant.

## F/S:

Under the Feasibility Study, the preliminary engineering design of the sewerage facilities selected in the master plan are carried out, taking account the results of field inspections and surveys. The first stage project, from 2003 to 2006 (4 years), comprises the rehabilitation of Rafey, Cienfuegos and Los Salados WWTPs, the construction of Zona Sur WWTP, and the construction of main sewers of 14.6 km long. To implement the project effectively and smoothly, the strengthening of CORAASAN's organization (improvement of the organization, training for operation and maintenance staff) is proposed. The proposal also includes reinforcement of the procurement of sewer cleaning equipment, and establishment of a new organization to control industrial wastewater discharge to the public sewers.

CSA DOM/S 222/01 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## **Description:**

(FY 2002 Domestic Survey)

The Government of Dominica Republic is currently being under consideration on the application for JBIC loan.

#### (FY 2002 Overseas Survey)

Policy for institutional capacity building was introduced. Based on the proposal of the Study, request financial Yen Loans to the Japanese government was submitted.

#### (FY 2003 Domestic Survey)

The implementing body has been favorably responding to this project and applied for the JBIC loan. JBIC appears to be waiting for the final confirmation of Presidency of the Dominican Republic on the loan.

## (FY 2003 Overseas Survey)

Funding of 52,235USD was requested to Northern European countries. Contents of projects are as follow.

Phase I: Improvement and expansion of PTAR Rafey, improvement of PTAR Cienfuegos, improvement of PTAR Tamboril, and supply of pipe equipment for sewage system.

Phase II: Construction of southern PTAR, rehabilitation of PTAR Los Salados, and construction of sewage system

In the master plan of Sewage sanitation, recommendation concerning Environment and Water Supply department was submitted, which was implemented from January 2003.

## (FY 2004 Domestic Survey)

From the implementing body of public water and sewer corporation in Santiago, applied to the central government to request yen loans for the project implementation.

## (FY 2005 Domestic Survey)

The Dominican government will be requesting for a Yen loan to JBIC. Currently, it is being under consideration within JBIC.

#### (FY 2006 Domestic Study)(FY 2006 Overseas Study)

Mission team have been dispatched from JBIC in September 2006, and this project is supposed to be implemented as a Yen Loan service.

In addition, requests mentioned below has been made dated on 17th March 2006;

- 1) Plan for revision of general law concerning sewage sector
- 2) Merger/Integration plan for sewage sector for improvement and modernization
- 3) Analysis on sewage sector in Dominica Republic
- 4) Comprehensive evaluation on sewage business in FY 2000

## (FY2007 Domestic survey)

JBIC planned to conclude LA in 2006 and proceed with the project to improve sewage system in Santiago City. However, it became clear that there is no funding plan on the Dominican side. Therefore, as of December, 2007, the loan cannot be given with the situation of no prospect of the local fund.

# STUDY SUMMARY SHEET (M/P)

Compiled Sep.2003 **CSA** DOM/A 108/02 Revised Jul.2009

| 1.  | COUNTRY           | Dominican Republic   |  |  |  |  |
|-----|-------------------|--|--|--|--|--|
| 2.  | NAME OF STUDY     | he Master Plan Study on Watershed Management in the Upper Area of the Sabana Yegua Dam   |  |  |  |  |
| 3.  | SECTOR            | orestry / Forestry & Forest Conservation 4. TYPE OF STUDY M/P  |  |  |  |  |
| 5.  | COUNTERPART AGENO |  |  |  |  |  |
|     | PRESENT COUNTERPA | T AGENCY   |  |  |  |  |
| 6.  |                   | 1) To formulate a watershed management plan(Master Plan)for the upper reaches of Subana Yegua Dam to restore the headwater conservation function and soil conservation function by means of forest management, agroforestry, community development and forest fire prevention and control, etc. 2) To transfer techniques / skills relating to various surveys, forest management plan formulation and participatory surveys to the counterparts for the Study through actual field surveys and the demonstration project. |  |  |  |  |
| 7.  | CONSULTANT(S)     | apan Forest Technical Association aiyo Consultants Co., Ltd.   |  |  |  |  |
| 8.  | STUDY PERIOD      | fov.2000 ~ Aug.2002 21month(s) ~   |  |  |  |  |
|     | SITE OR AREA      | he study area locates in upper part of Yaque del Sur River, and covers some 166,000 ha   |  |  |  |  |
| 10. | MAJOR PROPOSED PR | IECT(S)  |  |  |  |  |

- 1) Forest management (Natural Forest Management: 40,000ha, Reforetation: 20,000 ha, Village Nursery: 153 villages, Forest Road: 630km)
- 2) Agroforestory/ Farming Practice (agroforestry: 129 villages, Improvement of Farming Practice: 129 villages, Silvo-Pasture: 25 villages)
- 3) Soil Conservation (Small Scale Gully Erosion Control: 30 sites, Small Scale Landslide Prevention and Control: 561 sites)
- 4) Forest Fire Control (Formation of Voluntary Fire Corps: 158 villages, Improvement of Fire Extinguishing Techniques: 15 times)
- 5) Community Development (Livelihood Improvement: 159 villages, Social Infrastructure irrigation facility: 387 km)
- 6) Strengthening of Community Organization (workshops: 153 villages, Monitoring / Evaluation: 153 villages)
- 7) Extension and Training (Training: 153 villages, AV Equipment: one set, Vehicles: one set)
- 8) Project Support (Project Personnel: 8, Extension Workers: 9, NGO: 9)

CSA DOM/A 108/02 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

## **Description:**

(FY 2003 Domestic Survey)

After finishing the Study, a community project with agroforestory activities supported by JOCV volunteer was conducted to follow up the study results in the northern part of Study Area. We have not yet received the feature information.

According to some internet homepages published in Dominican Republic, Secretriat of State for Environment and Natural Resources The Dominican Republic and Fundacion Sur Futuro Inc. have made an agreement on implementation of this project.

(FY 2003 Overseas Survey)

- 1) A village project based on agroforestry was implemented in the northern part of the region targeted for the study as a follow-up of this study.
- 2) An office was established for forest management and operation.
- 3) A plantation with cultivation capacity of 4 million seedlings per year was established.
- 4) An activity to strengthen community-based organizations was commenced.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2005 Domestic Survey)

Subsequent study: Sustainable management programme of upper Savanna Yebuadam basin

Implementing period: 2006/Jan

Implementing body: Ministry of Environment and Fundacion Sur Futuro Inc.

Funding: Own fund

Objective: To develop capacity of C/P organisations' staff regarding basin management by introducing simple irrigation agroforestry and activities of forestry fire prevention in 14 villages of the Kwavas and the El Grande river basin

Progress:

(FY 2006 Overseas Survey) The study was conducted on the establishment of basic social and economic criteria for 14 areas, selection of sites for allocating compartment, preparation of documented proposal on agricultural and forestry production, selection of 9 potential sites for the construction of irrigation system, designing of 3 irrigation systems, planning of reforestation and delivery of tools for fire control at worksite.

(FY 2006 Domestic and Overseas Survey)

Technical cooperation:

Training: 1 personnel, during the period of September 24 through October 7, 2006

Opinion exchange and facility inspection tour were conducted in pursuit of having a meeting with the related parties of JICA in regard to the project operation and management by expanding understandings and knowledge of forest conservation, controlled administration and watershed management through participation. Dispatch of specialists: 5 personnel for 143 days at maximum and 30 at minimum, responsible operations: 1) Chief advisor, watershed management and forest fire, 2) Agroforestry (including coordination work), 3) Development through participation, 4) Irrigated agriculture and 5) GIS.

(FY 2007 Domestic Survey)

Implemented project: Sustainable management programme of upper Savanna Yebuadam basin

Implementing period: 21 April 2006 - 31 March 2009

Implementing body: Ministry of Environment and Natural Resources, JICA

Funding party: JICA (Technical cooperation project)

Objective: To improve technical and management capacity of staffs of Sul Futuro Foundation and Ministry of Environment and Natural Resources in order to maintain the river basin and operate the project

Target: 14 villages alongside of Las Cuevas River and Grande del Medio River in the city of Padre Las Casas, upper Savanna Yebuadam basin

Dispatch of expart: Five experts: Chief advisor/watershed management/forest fire, agroforestly, participative development, irrigated agriculture Progress:

(FY 2007 Domestic Survey) Since the Hurricane Noel (October 2007) hit the project site, construction of simple irrigation facilities was halted for one month. The facilities under construction was also damaged and need to be repaired.

- 1)Agroforestry: By 2007, demonstration farms of 20 families were established
- 2) Simple irrigation agriculture: Two villages (2006/61 families, 36ha); One village (2007/32 families, 14ha); One village (2008 planned). The families signed the agreement to abandon slash-and-burn agriculture and conduct reforestation.
- 3) Reforestation: By September 2007, 18ha of area were forested at the villages which applied simple irrigation agriculture. The seedling farm of the Sul Futuro Foundation produced 195,400 seedlings in 2007 and is producing 816,600 trees. FSF engineers measured the area for forestation planned in spring of 2007 using GPS and prepared the draft. The forested area will be maintained using GIS.
  - 4) Forest fire: Agreed to organize fine fighter groups and three villages already established the group.

# STUDY SUMMARY SHEET (M/P+F/S)

(NI/P+F/S) Compiled Mar.2005 CSA DOM/S 101/03 Revised Jul.2009

| 1. | COUNTRY                                | Dominican Republic   |  |  |  |  |  |
|----|--|--|--|--|--|--|--|
| 2. | NAME OF STUDY                          | The Study on the Integrated Rural Development of Former Sugercane Plantation Area and the Pilot Project of La Luisa, Monte Plata Province in the Dominik\ can Republic   |  |  |  |  |  |
| 3. | SECTOR                                 | Social Infrastructure / Urban Planning & Land Development   4. TYPE OF STUDY   M/P+F/S   |  |  |  |  |  |
| 5. | COUNTERPART AGENO<br>TIME OF DEVELOPME |  |  |  |  |  |  |
|    | PRESENT COUNTERPA                      |  |  |  |  |  |  |
| 6. | OBJECTIVES OF THE STUDY                | Based on the result of the preliminarily study on the establishment of La Luisa model area, not only this study includes the development of the area, but also it formulates a master plan for integrated rural development in vacant lots of public farms. Also, the study divides study areas in types and plans/implements/assesses a pilot project in the model area. M/P is formulated, reflecting the result. In addition, in this study, technical transfer on concrete study methods, planning procedure, and the way of thinking for planning etc. is to be implemented for the counterparts in the Dominican Republic. |  |  |  |  |  |
| 7. | CONSULTANT(S)                          | Sanyu Consultants Inc.<br>Yachiyo Engineering Co., Ltd.  |  |  |  |  |  |
| 8. | STUDY PERIOD                           | Feb.2001 ~ Jul.2003 29month(s)<br>~  |  |  |  |  |  |
| 9. | SITE OR AREA                           | Settlements for the beneficiaries of agricultural land reform by the Farmland Agency in 56 districts across the country  |  |  |  |  |  |

## 10. MAJOR PROPOSED PROJECT(S)

- 1. Immigrant's income increase project
- 1) Development of agricultural product functions (development of existing irrigation facilities, expansion and construction of irrigation facilities, development of agricultural roads) 2) Development of farmlands(leveling out fields, development of field drainage, farmland protection) 3) Development of farm products(enhancement of technical support organizations of production-related department at the Farmland Agency, technical support service for immigrants, introduction of crops and varieties suitable for land conditions, improvement of irrigation water use technology) 4) Improvement of livestock production (enhancement of technical support organizations of production-related department at the Farmland Agency, rangeland improvement, facilities development, mechanical service, financial support, introduction of improved variety of livestock) 5) Improvement of distribution and processing of agricultural products (enhancement of technical support organizations of production-related department at the Farmland Agency, provision of information and seminars on distribution of agricultural products, seminars on cooperative shipping and processing of agricultural products, financial support) and employment and promotion of small enterprises (vocational training and establishment of small enterprises) 2. Life circumstance development project
- 1) To secure safe drinking and daily life water (establishment of water supply organizations and promotion of participation, improvement of digging wells, development of deep wells and water supply for each household through water lines) 2) Development of health and sanitary environment (enhancement of local clinic, care visit consultation, enhancement of basic medicaments supply, introduction and enhancement of health activities, introduction and enhancement of school health program, improvement of water use, promotion of latrine, promotion of flushing toilet, improvement of waste collection and disposal system), improvement of educational environment (enhancement of elementary schools, enhancement of equipment for elementary education, promotion of interactions among teachers, enhancement of Parent-Teacher-Associations (PTAs), support for accessing to secondary education, development and enhancement of secondary education, improvement of adult education) 3) Development of transport system (development of community roads, access roads, and arterial highways, strengthening road safety, development of road safety facilities, enhancement of public transportation systems) 4) Development of communication system and electrification (expansion of electricity network to be connected to each household, promotion of solar energy system for households, promotion of public telephones in each community, expansion of telephone network, expansion of mobile phone services, expansion of broadcasting related to rural areas, promotion of the Internet 5) Cultural and community activities (development and improvement of sports facilities, community centers and parks, development of libraries) 6) Improvement of living environment (improvement of housing, community mutual aid system and technical training for carpenters)

CSA DOM/S 101/03 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

## (FY 2004 Domestic Survey)

At the submission meeting of the draft final report in August, 2003, JICA Dominican Republic office showed an intention in supporting the Farmland Agency in planning, implementing, and M&E for the implementation of a regional plan prepared in the development study. A basic design study of a grant-aided water supply project targeting at beneficiary areas of the land reform conducted by the Farmland Agency has started in 2003. This project was intending to cover a part of the M/P. In addition, although it is unconfirmed information, the lawsuit filed by the Japanese immigrants to Dominican Republic against the Japanese government seems to be reconciled.

(FY 2005 Domestic Survey)

Subsequent study: Water supply B/D

Implementing period: 2003 Implementing body: JICA

Relation with the study: Rural water supply project, consists part of the sub-project of "securing safe drinking water".

Status: In March 2005, selection of local consultant is planned for an investigation of the necessity of technical cooperation based on the evaluation study planned to be conducted by local JICA office. As for renovation of former public plantation area which includes plenty of lands on the margin of cultivation, in addition to living environment improvement component such as improvement of water supply, M/P for small scale comprehensive agricultural rural development and the concrete methods to implement the plan are proposed.

At the time of development study, the targeted former public plantation area for the renovation was about 64,000 ha, including 60,000 ha in total which could be allocated for landless farmers although it was not registered officially at that time.

The most part of the land is considered to be the former sugarcane plantation area. It is regarded to be important that under the initiative of the government of Dominican Republic, the local offices of the Farmland Agency play a major role to formulate a study plan on the renovation of the former public plantation areas and implement the survey, monitoring and evaluation on their own, in cooperation with the local offices of the Ministry of Agriculture and Ministry of Water. If necessary, they should also involve local governments and NGOs and establish a coordination framework for such activities.

## (FY 2005 Overseas Survey)

As for the income increase project proposed by the study, it was decided to be a priority project of the Farmland Agency in fiscal 2005. (Decision No.006)

The comprehensive groundwater development plan to expand the living environment improvement project proposed by the study is under consideration for implementation. Until 2009, 200 wells are planned to be constructed. The expected effects are; to increase beneficiaries of drinking water supply by 30,000, improve drilling technology of IAD staff, improve water supply system at a national level, enhance the function of drinking water users associations and establish new associations, and decrease the number of patients contracted diseases by using contaminated water.

In addition, the follow-up survey of this study was conducted by the JICA Dominican Republic Office through local consultants from February to March in 2005. The purpose of the survey was to investigate the possibility of continuous implementation and development of the pilot project carried out under the study.

## (FY 2006 Domestic Study)

As the Dominican Republic is already excluded from eligible countries for Japanese Grant Aid (Per capita GNI exceeds the level of grant eligibility), the next phase project using Japanese grant scheme will not be realized. 3 years have passed since the submission of the final report and the possibility of new projects using other resources also seems to be low.

As the Dominican Agrarian Institute (IAD: Instituto Agrario Dominicano), which is the C/P agency at the time of development study implementation, is an agency whose main objective is the transfer of land to landless farmers. And there is an aspect that the system to provide support to farmers after land transfer is quite week, and as cooperation and collaboration with other agencies for the implementation of planned various projects were essential, it seems unlikely that next phase projects other than the abovementioned grant project are implemented by the Institute alone.

## (FY 2006 Overseas Study)

Evaluation of present situation, continuity and progress of the Integrated Rural Development Plan for Former Sugarcane Plantation Area in the Dominican Republic is implementing.

Purpose: To follow up pilot projects (sugarcane reaping machine/instrument) implemented in a number of communities focusing present situation, continuity and the degree of progress of the results of this integrated plan in the framework of the "Integrated Rural Development Plan for Former Sugarcane Plantation Area".

Relation to the study: To focus on the evaluation of the actual situation of authorization to the Dominican Agrarian Institute (IAD) which is an implementing agency concerning recommendation about the report, maintenance and expansion of results gained by pilot projects carried out during the implementation period of the study report.

## Others:

Although a request for technical cooperation of JICA on follow-up was requested to strengthen the authority of the Dominican Agrarian Institute (IAD: Instituto Agrario Dominicano) for the application of activities and suggestions based on the study, it was not approved by JICA. As a concrete activity suggested in this report, they implemented JICA grant aid to the Dominican Agrarian Institute (IAD) in the form of donation of machinery and equipments amounting 5.5 million dollars for the "Integrated Rural Development Plan of Groundwater in Former Clearance and Former Sugarcane Plantation Area" (from 2003 to 2007) to supply groundwater to 15 arable lands in reclaimed lands.

The Dominican Agrarian Institute (IAD) has also adopted the internal resolution (No. 006) dated on July 29, 2005. Accordingly they formulated an integrated rural development program in reclaimed

(FY 2007 Domestic Survey)(FY 2008 Domestic Survey)

No information to be specifically mentioned.

(F/S)

Compiled Mar.1990

ECU/A 301/82 **CSA** Jul.2009 Revised 1. COUNTRY Ecuador Proyecto Catarama de Desarrollo Agricola NAME OF STUDY 3. SECTOR / (Agriculture in) General TYPE OF STUDY F/S Agriculture 5. Ministry of Agriculture and Livestock Guayas River Basin Development Study Committee (CEDEGE) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Formulation of agricultural development in Catarama River Basin. OBJECTIVES OF THE STUDY Nippon Koei Co., Ltd. 7. CONSULTANT(S) Kyowa Engineering Consultants Co., Ltd. Sep.1981 Jul.1982 10month(s) 8. STUDY PERIOD Catarama of Los. Rios Province (19,860ha, Population 7,880 persons) 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Las Piedras Northwest Major facilities Sibimbe Catarama 1)Net irrigation area: 3,470ha 2,330ha 290ha 1,950ha 2)Diversion weir: Height3.5m,length50m Height3.0m,length35m 3)Pumping station: 66m3/min.x3pumps 4)Main irrg.canal: 17.94km 2.98km 27.02km 23.74km 5)Secondary irrg.canals: 5.7km 6)Main drainage canals: 16.6km 7)Secondary drain.canals: 33.7km 24.6km 47.3km 8)Project cost(US\$1,000): 23,600 11,700 1,000 7,600

CSA ECU/A 301/82 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

## **Description:**

1. Sibimbe, Catarama Areas

Subsequent Studies:

Sep.1990~Aug.1991 D/D for 3,860ha in Sibimbe and 2,590ha in Catarama

Finance:

Feb.12,1988 L/A 8,594 mil. Yen (including 1,030 mil. Yen for the consulting service) for the implementation of Sibimbe Plan (irrigation of 3,860ha at the left bank of Catarama River) and Catarama Plan (irrigation of 2,590ha at the right bank of Catarama River)

Due to the various reasons, the project was temporarily suspended.

## After the resumption:

Aug.1994 Tender was called. Andrade group was recommended to OECF by the comittee and a bidding price was US\$ 3.77 mil.

Sep.1995 The contract is scheduled to be concluded. The local firm, Hidalgo & Hidalgo, was appointed as a contractor.

(Andrade was claiming against this decision, however, it is expected to be settled without any difficulty.)

#### Construction:

April 1999 Completed (scheduled).

Since only 20 % of the construction works had been completed by Oct. 1998, the Government of Ecuador is now discussing that the period of the construction works should be extender up to Aug. 2000. Therefore, they have the intention of requesting the extension of the OECF loan term.

Construction Trader / Hidalgo & Hidalto S.A.

Amount to be pledged:C/57,300 mil.(approximately 2,600 mil.Yen) & V.S.\$21M

2. Las Piedras, Northwest Areas

(FY 1998 Domestic Survey)

Projects is to be implemented by their own funds.

(M/P+F/S)

Compiled Mar.1990 **CSA** ECU/S 201B/86 Revised Jul.2009

| 1.  | COUNTRY                              | Ecuador  |                                       |                |    |               |         |
|---|--------------------------------------|--|---------------------------------------|----------------|----|---------------|---------|
| 2.  | NAME OF STUDY                        | Guayaquil City Urban T   | ransportation Plan                    |                |    |               |         |
| 3.  | SECTOR                               | Transportation   | / Urban Transportation                |                | 4. | TYPE OF STUDY | M/P+F/S |
| 5.  | COUNTERPART AGENCE TIME OF DEVELOPME | Y AT THE   | Commission of the Province            | of Guayas      |    |               |         |
|   | PRESENT COUNTERPA                    | RT AGENCY  |                                       |                |    |               |         |
| 6.  | OBJECTIVES OF THE STUDY              | Formulation of comprehensive transport plan (M/P) and F/S on an elevated urban railroad project. |                                       |                |    |               |         |
| 7.  | CONSULTANT(S)                        | Fonichi Engineering Co<br>Central Consultant, Inc.   | nsultants, Inc.                       |                |    |               |         |
| 8.  | STUDY PERIOD                         | Oct.1985 ~ Dec   | g.1983 17month(s)<br>.1986 14month(s) |                |    |               |         |
| Guayaguil urban area /Total study area 41,200 ha, F/S Study area 13,200 ha /population 1.52 Million ('85).  9. SITE OR AREA |                                      |  |                                       | Million ('85). |    |               |         |

## 10. MAJOR PROPOSED PROJECT(S)

< M/P >

- 1) Road Network Plan
- Extension of proposed Road Network 71.8km long.
- Improvement of Intersections at 17 locations.
- 2) Extension of MRT Plan
- Construction of a railway urban transportation system.
- Extension of 51km, and 51 stations.

Total cost above pertains to the elevated railroad project (15 km) (1982 prices)

<F/S> An elevated urban railroad project, starting from the big bus. terminal in the northern part of the city, through the central area, and till the southern residential area where is highly populated.

Route length 15km No. of stations 12

No. of demand 401,000/day The total cost pertains 1) to the Phase I of the eleveated railroad project (9.1 km), and 2) to the total railroad project (15 km) (1985 prices).

CSA ECU/S 201B/86 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## **Description:**

<M/P>

1.Long-term Plan

1)The elevated railway (15km) through the city from north to south.

May 1985 S/W of F/S concluded

Oct.1985 15 members of Study Team was dispatched

The project was disignated as an important project of the Five-year National Plan (1986-1990).

2) The ring road in the city and improvement of the related roads.

#### 2.Short-term Improvement Plan

1)Improvement of Intersections at 8 locations. A part of them has been improved financed by World Bank.

<F/S>

1. The Elevated Railway Project

The project was adopted as one of the national projects in the five-year development plan (1986-1990).

## 2.Irrigation and Power Transmission Project

The application was made before the completion of this feasibility study, the OECF appraisal was put off till next year.

## Reasons of Stoppage:

Owing to the decline in price of crude oil and primary commodities, the economic conditions seriously deteriorated in 1987, making it difficult to secure funds for local currency component of the project. At the same time, the newly elected President initiated the review of the country's economic policy.

#### Situation:

(FY1994 Overseas Survey)

No survey work was carried out since the follow-up survey on this project completed in March 1993.

|    |                |         | (Basic Study) | Compiled | Mar.1990 |
|----|----------------|---------|---------------|----------|----------|
| CS | SA ECU/A 501/8 | 38      |               | Revised  | Jul.2009 |
| 1. | COUNTRY        | Ecuador |               |          |          |
|    |                |         |               |          |          |

| 1.  | COUNTRY                           | Ecuador   |          |                          |    |               |             |
|-----|-----------------------------------|---|----------|--------------------------|----|---------------|-------------|
| 2.  | NAME OF STUDY                     | Survey for Forest Inventory in the Northeastern Region  |          |                          |    |               |             |
| 3.  | SECTOR                            | Forestry  | / Forest | ry & Forest Conservation | 4. | TYPE OF STUDY | Basic Study |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME | CY AT THE   |          | iculture and Livestock   |    |               | ,           |
|     | PRESENT COUNTERPA                 |   |          |                          |    |               |             |
| 6.  | OBJECTIVES OF THE STUDY           | Guideline of forest managment and development plan will be prepared.  This aims at the contribution to development of socio-economic condition of northeastern region in Ecuador. |          |                          |    |               |             |
| 7.  | CONSULTANT(S)                     | Japan Forest Technical Association<br>KOKUSAI KOGYO CO., LTD.   |          |                          |    |               |             |
| 8.  | STUDY PERIOD                      | Jun.1985 ~  | Dec.1988 | 42month(s)               |    |               |             |
|     | SITE OR AREA                      | An area of 10,000 sq.km Napo Province of Northeastern region  |          |                          |    |               |             |
| 10. | MAJOR PROPOSED PR                 | OJECT(S)  |          |                          |    |               |             |
|     |                                   |   |          |                          |    |               |             |

Guideline of forest management and development plan was prepared and following proposals were prepared based on this guideline.

- 1. Arrangement of forest and forestry policy
- 2. Arrangement of basic related information to forest operations
- 3. Promotion of re-afforestation and agro-forestry
- 4. Promotion of study, development and diffusion of re-afforestation technology.
- 5. Promotion of development policy of forestry related industry
- 6. Concentration of land use and advanced utilization of land.

**CSA** ECU/A 501/88 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Utilization of the study: (FY 1992 Overseas Survey) The study prepared 36 plate of maps with three different scales (1:20,000, 1:50,000 and 1:100,000), which are being used as bases for planning forest resources utilization, forestry project, afforestation program etc. (FY 1996 Domestic Survey) This Study report has been well utilized on the development of roads to transfer the extracted oil and on the overall forestry development. In particular, this Study fully investigated the situation of forestry resources in this area. So, the existing state of forest became clear. Situation: (FY 1994 Overseas Survey) The administration and development plan for the emphasized area was not materialized due to the difficulty of financing. However, the authority concerns about the possibility of new technical cooperation on this subject.

**(F/S)** 

Compiled Mar.1993 ECU/A 302/91 CSA Revised Jul.2009

| 1.  | COUNTRY  | Ecuador                                       |  |                             |                               |  |
|---|--|---|--|-----------------------------|-------------------------------|--|
| ,   | NAME OF STUDY  | Small-Scale Fish                              | hing Port Development Project in Manabi Province           |                             |                               |  |
|   |  |   |  |                             |                               |  |
| 3.  | SECTOR   | Fishery                                       | / Fishery  | 4. TYPE OF STUDY            | F/S                           |  |
| 5.  |  |   | Ministry of Industries, Commerce, Integrated and Fisher    | ery (MICIP)                 |                               |  |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY |  |   |  |                             |                               |  |
|   |  | To carry out ma                               | laster plan study for small-scale fishery development in N | Manahi Province and to ca   | rry out feasibility study for |  |
| 6.  | OBJECTIVES OF THE STUDY  |   | identified in the master plan.                             | valiabilitiovince and to ca | ny out reasionity study for   |  |
| 7.  | CONSULTANT(S)  | Nippon Koei Co                                | o., Ltd.   |                             |                               |  |
|   |  |   |  |                             |                               |  |
| 8.  | STUDY PERIOD   | Dec.1990 ~                                    | Mar.1992 15month(s)  |                             |                               |  |
|   | Manta City, Manabi Province.  9. SITE OR AREA  |   |  |                             |                               |  |
| 10.   | MAJOR PROPOSED PR  | OJECT(S)                                      |  |                             |                               |  |
| 1)M<br>Foot<br>Tra<br>2)P<br>- Re<br>- Fit<br>- Fr<br>- Bl<br>- W               | MAJOR PROPOSED PR fain Port Facilities: r small boat Landing: 50 r middle boat Landing: 50 r mid | Om Outfitting Id<br>OOm Outfitting I<br>ties: |  |                             |                               |  |

CSA ECU/A 302/91 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## **Description:**

This project may have very high priority as it will contribute not only Manabi Province but all over the country.

## Technical Cooperation:

(FY 1994 Overseas Survey)

On 1994, the Government of Ecuador decided to request for the technical cooperation to construct Puerto Lopez Fishing Port to the Government of Japan. The preliminary measures have been taken on Nov.1994. It is expected that the official request will be submitted on March or April 1995.

#### Situation

After making the final report on March1992, MICIP has been deliberating on the possibility of applying for a Japanese Grant. (Oct.1992)

## (FY 1994 Domestic Survey)

Ecuador Government planned to made an I/P about the facilities which are needed urgently, and to request the Japanese Grant Aid in fisheries. But it seems not to be easy to receive it with in FY 1994.

**(F/S)** 

Compiled Mar.1994

| 1. COUNTRY 2. NAME OF STUDY 3. SECTOR 3. SECTOR 3. SECTOR 4. TYPE OF STUDY 5. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  Water development project and elaboration of the optimum water resources development on the river basin scheme around area (water supply, irrigation water, fresh water for shrimp farming).  Water development project and elaboration of the optimum water resources development on the river basin scheme around area (water supply, irrigation water, fresh water for shrimp farming).  Nippon Koei Co., Ltd.  7. CONSULTANT(S)  Nippon Koei Co., Ltd.  Chone-Portovicjo River Basins of the central zone in Manabi state  9. SITE OR AREA | Jul.2009 |
|---|----------|
| 3. SECTOR   Social Infrastructure   / Water Resources Development   4. TYPE OF STUDY   F/S    COUNTERPART AGENCY AT THE   TIME OF DEVELOPMENT STUDY    PRESENT COUNTERPART AGENCY    Water development project and elaboration of the optimum water resources development on the river basin scheme around area (water supply, irrigation water, fresh water for shrimp farming).  Nippon Koei Co., Ltd.  7. CONSULTANT(S)    Nippon Koei Co., Ltd.    Nippon Koei Co., Ltd.    Chone-Portoviejo River Basins of the central zone in Manabi state   |          |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  Water development project and elaboration of the optimum water resources development on the river basin scheme around area (water supply, irrigation water, fresh water for shrimp farming).  7. CONSULTANT(S)  Nippon Koei Co., Ltd.  May.1991 ~ Dec.1992 19month(s)  Chone-Portoviejo River Basins of the central zone in Manabi state   |          |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  Water development project and elaboration of the optimum water resources development on the river basin scheme around area (water supply, irrigation water, fresh water for shrimp farming).  7. CONSULTANT(S)  Nippon Koei Co., Ltd.  Nippon Koei Co., Ltd.  Dec.1992 19month(s)  Chone-Portoviejo River Basins of the central zone in Manabi state   |          |
| Water development project and elaboration of the optimum water resources development on the river basin scheme around area (water supply, irrigation water, fresh water for shrimp farming).  Nippon Koei Co., Ltd.  Nippon Koei Co., Ltd.  May.1991 ~ Dec.1992 19month(s)  Chone-Portoviejo River Basins of the central zone in Manabi state   |          |
| around area (water supply, irrigation water, fresh water for shrimp farming).  6. OBJECTIVES OF THE STUDY  Nippon Koei Co., Ltd.  Nippon Koei Co., Ltd.  May.1991 ~ Dec.1992 19month(s) ~  Chone-Portoviejo River Basins of the central zone in Manabi state  |          |
| 7. CONSULTANT(S)  8. STUDY PERIOD  May.1991 ~ Dec.1992 19month(s)  Chone-Portoviejo River Basins of the central zone in Manabi state  | in and   |
| Chone-Portoviejo River Basins of the central zone in Manabi state   |          |
|   |          |
| 10. MAJOR PROPOSED PROJECT(S)  1. Tunnel (1) Daule Peripa Dam-La Esperanza Dam Trans basin scheme (L=8.3km, Q=18m3/s) (2) La Esperanza Dam-Poza Honda Dam scheme (L=10.7km, Q=4m3/s) (3) Poza Honda Dam-Mancha Grande River Scheme (L=3.9km, Q=4m3/s)  2. Pumping station, Head tank, open channely, siphon (La Esperanza Dam-Poza Honda Dam Trans Basin Scheme) Pump station (Q=16m3/s, H=76m) Open channel (Q=16m3/s, L=5.4km, Section: Trape Zadial)   |          |

CSA ECU/S 303/92 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## **Description:**

In February 1993 the Government of Ecuador requested the Japanese government to finance D/D and the construction. The newly elected president expressed his strong commitment for the implementation of this project at his inargural address. The implementation of D/D and the construction is highly desired.

#### (1) Tunnels

(except for the Daule Peripa-La Esperanza Transbasin Scheme)

Refer to "D/D on the Water Transbasin Schemes for Chone Portoviejo River Basins (1994)".

## Subsequent Studies:

Oct.1993-Mar.1995 D/D implemented by JICA

#### Finance:

Apr.12.1996 L/A 12.4 bil. Yen (Environment Improvement for Portoviejo River Basins)

Total cost 150.405 mil.US\$ (own fund 25.6 mil.US\$)

## (FY 1998 Domestic Survey)

Although L/A for yen loan was signed, the prospect for implementing the projects by yen loan is vague since there is also some possibility that Brazil will provide funds for these projects.

## (2) Daule Peripa-La Esperanza Transbasin Scheme

Finance:

(FY 1994 Overseas Survey)

Andes Fund (Government of Spain) US\$44.1 million

Construction:

1996 ~ 1999

Contractor: Dragados Co., Ltd. (Spain)

**(F/S)** 

Compiled Sep.1995

| CS                | A ECU/A 3  | <b>04/94</b> Revised Jul.2009  |
|-------------------|--|--|
| 1.                | COUNTRY  | Ecuador  |
| 2.                | NAME OF STUDY  | Tumbabiro Irrigation Project   |
| 3.<br>5.          | SECTOR   | Agriculture / Irrigation, Drainage & Reclamation 4. TYPE OF STUDY F/S  Ecuadorian Institute of Water Resources             |
| ٥.                | COUNTERPART AGEN TIME OF DEVELOPME PRESENT COUNTERPA | CY AT THE NT STUDY   |
|                   |  | Feasibility study on the agricultural development including the development of new water resources (dam construction, etc) |
| 6.                | OBJECTIVES OF THE STUDY                              | for providing irrigation facilities at the Tumbabiro District. Technical transfer in the field of irrigation planning.     |
| 7.                | CONSULTANT(S)  | Pacific Consultants International Naigai Engineering Co., Ltd.   |
| 8.                | STUDY PERIOD   | Aug.1992 ~ Feb.1994 18month(s)   |
| 10.<br>1)D<br>2)H | ead work (75m in width)                              | ll type, total capacity: 13M ton): 1   |

CSA ECU/A 304/94 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |
| Description .  |                          |                           |

#### Description :

The Government of the Republic of Ecuador has keen interest to implement this project by Japanese Yen Credit. However, the present situation is not clear as the authority concerned (INERHI) has been dissolved.

(FY 1996 Domestic Survey)

The Water Utilization Committee has taken over this project after INERHI was resolved.

(FY 1997 Domestic Survey)

The Government of Ecuador puts lower priority to this project than the projects on port, road, power plant, etc.

(FY 1998 Domestic Survey)

No detailed information at present.

**(D/D)** 

Compiled Oct.1995

| CS                         |  |   |  |  |  |  |  |
|----------------------------|--|---|--|--|--|--|--|
| 1.                         | COUNTRY  | Ecuador  Detailed Design Study on the Water Translation School for Change Design Discon Parising  |  |  |  |  |  |
| 2.                         | NAME OF STUDY                                    | Detailed Design Study on the Water Transbasin Schemes for Chone-Portoviejo River Basins   |  |  |  |  |  |
| 3.                         | SECTOR   | Social Infrastructure / Water Resources Development 4. TYPE OF STUDY D/D  |  |  |  |  |  |
| 5.                         |  | Restration Center of Manabi State (CRM)   |  |  |  |  |  |
|                            | COUNTERPART AGEN<br>TIME OF DEVELOPMI            | ICY AT THE  |  |  |  |  |  |
| PRESENT COUNTERPART AGENCY |  |   |  |  |  |  |  |
| 6.                         | OBJECTIVES OF THE STUDY                          | To draw up basic design, detailed design and tender documents in connection with the water resources development of Chone-Portviejo River basins. |  |  |  |  |  |
| 7.                         | CONSULTANT(S)                                    | Nippon Koei Co., Ltd.   |  |  |  |  |  |
| 8.                         | STUDY PERIOD                                     | Sep.1993 ~ Mar.1995 18month(s)  |  |  |  |  |  |
|                            | STOD I I EMOD                                    | Chone-Portiviejo River Basins   |  |  |  |  |  |
|                            | SITE OR AREA                                     |   |  |  |  |  |  |
|                            | MAJOR PROPOSED PR                                | ROJECT(S)   |  |  |  |  |  |
|                            | Waterway Tunnel:                                 |   |  |  |  |  |  |
|                            | Daule Peripa - La Espera                         |   |  |  |  |  |  |
| -                          | La Esperanza - Posa Hon<br>Posa Honda - Momcha G |   |  |  |  |  |  |
|                            | Facilities:                                      | (4.1km, 4cd.m/s)  |  |  |  |  |  |
|                            |  | Open Channel, Siphon, Construction road, Power Line, Substation, etc.   |  |  |  |  |  |
|                            |  |   |  |  |  |  |  |
|                            |  |   |  |  |  |  |  |
|                            |  |   |  |  |  |  |  |
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|                            |  |   |  |  |  |  |  |

CSA ECU/S 401/94 D/D

PRESENT STATUS

Completed
Completed
Partially Completed
Delayed or Suspended
Implementing
Processing
Discontinued or Cancelled

## **Description:**

1. Waterway Tunnel Subsequent Studies:

Mar.1995 D/D completed

Finance:

(FY 1996 Overseas Survey)

Apr.12.1996 L/A 12,400mil. Yen (Environment Improvement for Chone Portoviejo River Basins)

Own fund US\$25.60mil (Total investment: US\$150,405,000)

\*Content of project

(1)Waterway Tunnel

La Esperanza-Posa Honda (11.4km, 1.6m3/s)

Posa Honda-Mancha Grande (4.1km, 4m3/s)

(2)Facilities

Pump station, Head tank, Open channel, Siphon,

Consturction road, Power line, Substation, etc.

\*Daule Perip-La Esperanza Tansbasin Scheme will be excluded.

Construction:

(FY 1996 Overseas Survey)

Jul.1997~Jun.2001 Scheduled to be implemented

Construction Trader:under screening

(FY 1998 Domestic Survey)

Although L/A for yen loan was signed, the prospect for implementing the projects by yen loan is vague since there is also some possibility that Brazil will provide funds for these projects.

\*Refer to "Water Resources Development for Chone-Portoviejo River Basins (ECU/S 303/92, JICA F/S)" for detail.

2. Daule Peripa-La Esperanza Transbasin Scheme

Finance:

(FY 1994 Overseas Survey)

Andes Fund (Government of Spain) US\$44.1 million

Construction:

1996 ~ 1999

Contractor: Dragados Co., Ltd. (Spain)

(M/P+F/S)

Compiled Jul.1996

| CS  |   |                                  |   |            |                        | Revised | Jul.2009 |
|---|---|----------------------------------|---|------------|------------------------|---------|----------|
| 1.  | COUNTRY   | Ecuador                          |   |            |                        |         |          |
| 2.  | NAME OF STUDY   | Extension of Gu                  | nayaquil Port                                   |            |                        |         |          |
| 3.  | SECTOR  | Transportation                   | / Port  | 4.         | TYPE OF STUDY          | M/P+F/S |          |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME   |                                  | APG   |            |                        |         |          |
|   | PRESENT COUNTERPA   | ART AGENCY                       |   |            |                        |         |          |
|   |   | To formulate a l                 | M/P on Guayaquil Port (target year: 2010) and a | short-tern | n plan (target year: 2 | 2003).  |          |
| 6.  | OBJECTIVES OF THE STUDY   |                                  |   |            |                        |         |          |
| 7.  | CONSULTANT(S)   | The Overseas C<br>Nippon Koei Co | oastal Area Development Institute o., Ltd.      |            |                        |         |          |
| 8.  | STUDY PERIOD  | Jul.1994 ~                       | Sep.1995 14month(s)                             |            |                        |         |          |
|   |   | Guayaquil Port,                  | port area                                       |            |                        |         |          |
| 9.  | SITE OR AREA  |                                  |   |            |                        |         |          |
| 10.   | MAJOR PROPOSED PR   | ROJECT(S)                        |   |            |                        |         |          |
| 18<br>Ro<br>M<br>W<br>Po<br>2)C<br>18<br>Ro<br>M<br>W | Case X (in case that efficience Sm Container berth Sm Multi-purpose berth eclamation related fooring basin dredging tharf pavement ontun transfer for small vectors as Y (in case that efficience Sm Container berth eclamation related fooring basin dredging tharf pavement ontun transfer for small vectors as the sector of the | essels<br>ency has increase      |   |            |                        |         |          |
|   |   |                                  |   |            |                        |         |          |

CSA ECU/S 202/95 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## Description:

(FY 1996 Domestic Survey)

No concrete actions have been taken since only few years have passed after the completion of this Study.

## (FY 2001 Domestic Survey)

In the homepage of the port public corporation (APG) of the Guayaquil Port which is the counter part of this Study, the plan plane view of this Study is carried and signs that realization of this plan is expected are imagined.

#### 1. Container Berth

(FY 2001 Overseas Survey)

No concrete actions have been taken.

## 2. Multi-Purpose Berth

(FY 2001 Overseas Survey)

No concrete actions have been taken.

## 3. Existing Berth Rehabilitation

(FY 2001 Overseas Survey)

Rehabilitation and maintenance works for existing berths were implemented.

## 4. Dredging

(FY 2001 Overseas Survey)

Dredging to keep the depth of the front berth channel at 10m (MLWS) was regularly operated.

There is a dredging plan to keep the depth of the front berth channel at 10m (MLWS) permanently.

## 5. Pavement for Berth

(FY 2001 Overseas Survey)

Protection work for berth floor was regularly operated.

## 6. Pontoon for Small Craft

(FY 2001 Overseas Survey)

Floating pontoons of motion gear for this system and steel concrete system were regularly repaired.

## (FY 2005 Domestic survey)

There has been no concrete action taken for the construction of container terminal proposed in the study, where existing three berths is still in use.

## (FY 2005 Overseas Survey)

BID-CONAM-APG has conducted a study on privatisation of terminals between 1998 and 2004.

No funding request has been made for the study, which the C/P, is considering for a need to take surrounding three private ports and a possibility of constructing a new terminal on deeper points into account, prospecting future 20 years.

They are willing to introduce private funds adapting models in private participation in infrastructure.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Feb.2007
CSA ECU/A 101/05
Revised Jul.2009

| 1. | COUNTRY                           | Ecuador   |                                  |                        |                 |                    |                             |  |
|----|-----------------------------------|---|----------------------------------|------------------------|-----------------|--------------------|-----------------------------|--|
| 2  | NAME OF STUDY                     | Republic of Ecu   | ador, study on develop           | oment for reactivation | of productivity | and poverty reduct | ion in the central-southern |  |
| 4. | NAME OF STUDY                     | region of the Re  | public of Ecuador                |                        |                 |                    |                             |  |
| 3. | SECTOR                            | Agriculture   | / (Agricu                        | lture in) General      | 4.              | TYPE OF STUDY      | M/P                         |  |
| 5. | COUNTERPART AGENTIME OF DEVELOPME |   |                                  |                        |                 |                    |                             |  |
|    | PRESENT COUNTERPA                 | ART AGENCY  |                                  |                        |                 |                    |                             |  |
| 6. | OBJECTIVES OF THE STUDY           | <ul><li>(1) To formulate a master plan to contribute to poverty reduction in response to needs of the poor class in farm villages in the south of Sierra in the Republic of Ecuador by analyzing controlling factors for the solution of poverty.</li><li>(2) To transfer technology to the counterpart in pursuit of improving the function of relevant agencies on the side of Ecuador.</li></ul> |                                  |                        |                 |                    |                             |  |
| 7. | CONSULTANT(S)                     | Pacific Consulta<br>Naigai Engineer   | ints International ing Co., Ltd. |                        |                 |                    |                             |  |
| 8. | STUDY PERIOD                      | Nov.2002 ~  | Jan.2006                         | 38month(s)             |                 |                    |                             |  |
| 9. | SITE OR AREA                      |   |                                  |                        |                 |                    |                             |  |

## 10. MAJOR PROPOSED PROJECT(S)

The project plan of M/P at the development study will be consisted with five development component and 13 projects. Implementing period: 15 years, Fund amount 20,693 million USD

Improvement of self-sufficient production: To aim at improving production of basic crops by adopting excellent seeds and production materials. Increase in farmers' income: To pursue an increase in farmers' income by introducing small livestock and agricultural products which are unique to Andes.

Improvement of tiny-scale stockbreeding and milk production: To increase the amount of milk produced by employing excellent seeds for pasture and production materials and improving satellite technology for domestic stockbreeding.

Support for cash crop: To grow production and increase income by introducing cash crop which is unique to Andes.

Improvement of dairy product distribution: To increase income by selling high-value added dairy products through the installation of cryogenic storage and the establishment of collection and delivery system.

Agricultural processing: To create job opportunities in the community by introducing facilities for agricultural processing which utilize agricultural products in developing areas.

Handicraft industry in farm villages: To create job opportunities in community by introducing facilities for developing handicraft industry in developing areas

Improvement of life and production infrastructure: To improve irrigation facilities, farm roads and private water supply system involving residents in community.

Afforestation promotion: To promote afforestation projects conducted by CREA and establish collaborative framework with relevant agencies. Environmental education: To provide environmental education for farmers and young generation.

Enhancement of CREA: To enhance technological assistance and promotion system by modernizing facilities, effectively utilizing farm land and developing human resources.

Enhancement of INIAP: To enhance technological assistance and promotion system by improving facilities, developing testing institute and advancing promotion capacity.

CSA ECU/A 101/05 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

## **Description:**

(FY 2007 Domestic and Overseas Survey)

For Life and Production infrastructure, irrigation system were maintained in the Provinces of Azuay and Canar (1,100ha), and irrigation for farming is planned to be established at production site (9,000ha). The local organization managing the irrigation were incorporate, and capacity building for system maintenance was implemented. These projects were implemented under the support of the local governments and community. Studies of comprehensive projects and irrigation facilities at the provinces of Azuay and Canar were implemented in order to commerce fund procurement negotiation with domestic and oversea authorities. Twenty project were proposed for the watersheds in the provinces of Azuay, Canar and Morona Santiago. In addition, evaluation of water resource and technology utilization(Azuay), and formulation of water resource list (Canar) were being implemented. For afforestations promotion, the degraded zones (1,500ha) in the provinces of Azuay and Canar were reforested between 2005-2007 with a funding support from municipalities and communities. For enhancement of CREA, CREA laboratories of ground and microbiology analysis, introduced the latest equipment and facilities. CREA's center of production, which obtains community space for study and research, has modernized equipment of cattle farms. It also obtains resources for improving yields of milk production, forest and fruit plants.

## (FY 2008 Domestic Survey)

There has been no progress except for some recommendations that have been materialized to some extent.

When the study was completed, the director of the counterpart agency has changed. With the new director, there was limited understanding of the master plan at institutional level. There was also not/little information sharing among counterpart officials. This institutional situation made it difficult for the counterpart agency to take actions for implementation of the recommended projects. Although the request for assistance was made to the embassy of Japan after the completion of the study, it was found that it did not follow the contents of the master plan.

While there was a tendency of declining the scale of business undertaken by the counterpart agency and the amount of budget for it under on-going decentralization policy, SENPLADES (National Secretariat of Planning and Development) articulated, through the development study, the importance of this organization. However, with the decrease in human resources and the deterioration of physical resources remaining in the counterpart agency, there appeared the inevitable question of whether it was an appropriate entity to receive the assistance. According to the recent information received, the institutional position of the CREA has been reviewed, which results in the gradual increase of the budget over years.

Just prior to the completion of the study, the requests for Grass-root Grant Aid and Japan Overseas Cooperation Volunteers had been made. As for Grass-root Grant Aid, the proposal for small-scale irrigation projects were approved. At present they are being implemented with community participation.

In addition, "Study on the Reorganization plan of the Poverty Reduction Support System for Small Scale Farmers in Sierra Regions of Ecuador" is also conducted based on the experience of the previous project in the southern part of Sierra. The study has taken into account the contents of the the previous project since the starting-point of the study formulation. This is because there has been an attempt to replicate the experience in the southern part of Sierra to other provinces and higher priority has been put on assistance to poor and/or native people in rural areas.

## (FY 2008 Overseas Survey)

The central government promulgated laws and regulations to launch the reorganization of the central organizations and their jurisdictions based on the law of "Modernization of the State and Privatization/Provision of Public Services with Private Enterprises" that was enacted in December 1993, in order to restructure the system, attain efficient administration, and decentralize and simplify public services.

Against this background, it was proposed to "transfer the authorities of the central government to govern the economy and administration and collect tax to the local governments through cooperation with ANME (Association of National Municipal of the Ecuador) and CONCOPR (Consortium of Provincial Councils of the Ecuador) in the promotion of decentralization. With the establishment of this framework, the central government has launched the transfer of the administrative function, authority and responsibility to the local administrative organs. As has been observed in the case of CREA (the Center of Reconversion of Azuay, Canar and Morona Santiago), however, this transfer does not take into account the planning and development levels of the local development entities. The policy was finally reflected in the constitution enacted in 2008: the authority concerning irrigation has been handed over to INAR (the state irrigation administration) since then; CREA had concentrated its financial, human and physical resources into this transfer program until 2007.

This political context led to the reduction of budget for investment and the shortage of funds for proceeding with international economic cooperation, which resulted in the limited capacity of the counterpart agency for institutional management. This management limitation, in turn, created disturbance in materializing the main frame of "the Master plan for the Economic Reinvigoration and the Poverty Alleviation in the Central Southern Region of Ecuador" which had been formulated with the cooperation of Japanese Government.

CREA and the delegation of Japan handed over the materials of the master plan to the authorities of central/regional/local governments from June to August in 2005. However, the negotiation to acquire financial resources through international cooperation for the master plan has not yet been held so far.

Following are the major projects undertaken by CREA in relation to the recommendations made in the master plan.

- 1. Improvement of agricultural and livestock production
- -Increase of production for home consumption (e.g. technical assistance to small-scale farmers, implementation of small-scale irrigations, and development of aquaculture fields)
- -Increase in farmer's income (e.g. the development of farming areas to cultivate cacao trees, the livestock of small animals)
- -Increase in farmer's income (e.g. the development and maintenance of pasture lands and the production and marketing of stud bulls)
- -Processing of agricultural products (e.g. design and construction of cacao processing factories and implementation of training)
- 2. Promotion of handicraft industry in rural areas
- -Training for improvement of handicraft skills
- -Rolling and extension of metal materials
- -Training to support for production of fiber, lumbering, dairy products, food processing and service industries
- 3. Improvement of living condition
- -Maintenance and construction of waterways and irrigation channels (e.g. coating and repairing of waterways, establishment of water pipes, development and maintenance of farm roads, and construction of reservoirs)
- -Maintenance and construction of walking bridges and passing baskets
- 4.Promotion of reforestation

**(F/S)** 

Compiled Jul.1998

| -  | SA GRD/S 3   |                            |   | Re  | evised    | Jul.2009 |
|----|--|----------------------------|---|---|-----------|----------|
| 1. |  | Grenada<br>Road Rehabilita | ation and Improvement                   |   |           |          |
| 2. | NAME OF STUDY                                      |                            | -                                       |   |           |          |
| 3. | SECTOR   | Transportation             | / Road                                  | 4. TYPE OF STUDY F/S                                | -         | -        |
| 5. | COUNTERPART AGEN<br>TIME OF DEVELOPME              |                            | Ministry of Public Work                 |   |           |          |
|    | PRESENT COUNTERPA                                  |                            |   |   |           |          |
|    |  | Based on a requ            | nest of the government of Grenada, cond | act a feasibility study on road improvements of the | e country | ,        |
| 6. | OBJECTIVES OF THE STUDY                            |                            |   |   |           |          |
| 7. | CONSULTANT(S)                                      | Katahira & Eng             | rineers International                   |   |           |          |
| Ω  | STUDY PERIOD                                       | Mar.1997 ~                 | Jan.1998 10month(s)                     |   |           |          |
| ٥. | DIODITEMOD   | C~~~                       | and Comission I-1 1 (C1 0)              |   |           |          |
|    |  | Grenada Island             | and Carriacau Island (61.8km)           |   |           |          |
|    | SITE OR AREA                                       |                            |   |   |           |          |
|    | MAJOR PROPOSED PR                                  | ROJECT(S)                  |   |   |           |          |
|    | ad improvement project<br>Length of a road: 45.8km |                            |   |   |           |          |
| -ν | Vidth of a road: Round-tri                         | ip 2 traffic lanes         |   |   |           |          |
|    | ridge: New construction brainage ditch: 31.6km     | 6 bridges, Extens          | sion 3 bridges, Rehabilitation 1 bridge |   |           |          |
|    | oject Period Planned]                              |                            |   |   |           |          |
|    | years and 8 months                                 |                            |   |   |           |          |
|    |  |                            |   |   |           |          |
|    |  |                            |   |   |           |          |
|    |  |                            |   |   |           |          |
|    |  |                            |   |   |           |          |
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|    |  |                            |   |   |           |          |
|    |  |                            |   |   |           |          |
|    |  |                            |   |   |           |          |
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|    |  |                            |   |   |           |          |
|    |  |                            |   |   |           |          |
|    |  |                            |   |   |           |          |
|    |  |                            |   |   |           |          |

道路整備計画調査

CSA GRD/S 303/97 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## **Description:**

(FY 1998 Domestic Survey)

The government of Grenada is expecting to implement the project proposed in the mentioned study with support from the Japanese Government and had requested the Japanese Government for an assistance.

(FY 2001 Domestic Survey)(FY 2003 Domestic Survey)

Subsequent Study: Marine Products Distribution Improvement Plan in Grenville

Implementing body: JICA

Implementing period: Jun/2001 - Jan/2002

Objective: To conduct B/D study for preparation of fishery logistics improvement

Relation with the Study: The study have requested for a Grant Aid an assistance through Grant-Aid Cooperation

(FY 2003 Overseas Survey)

Implemented project: Grenville fisheries

Funding:

Funding party: Japanese Grant Aid (E/N concluded Jun2002/)

Amount: 1410 million

Contents: Most of the construction of 4 bridges have been completed, which 2 of the bridges are planned to be opened. Hairpin curve will be opened after paving asphalt and guardrail.

(FY 2007 Domestic Survey)

No information to be specifically mentioned

(M/P+F/S)

Compiled Mar.1990 **CSA** GTM/S 201B/84 Revised Jul.2009

| 1.  | COUNTRY                 | Guatemala           |   |                           |                      |               |         |  |
|---|-------------------------|---------------------|---|---------------------------|----------------------|---------------|---------|--|
| 2.  | NAME OF STUDY           |                     | Flood Control Project (Archiguate and Pantaleon Rivers) |                           |                      |               |         |  |
| 3.  | SECTOR                  | Social Infrastructi | ure / R   | River & Erosion Control   | 4.                   | TYPE OF STUDY | M/P+F/S |  |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  5.  PRESENT COUNTERPART AGENCY |                         |                     | Ministerio de C   | Comunicaciones, Transpo   | orte y Obras Publico | os            |         |  |
| 6.  | OBJECTIVES OF THE STUDY |                     |   | d control plan and identi | fication of a short- | term plan     |         |  |
| 7.  | CONSULTANT(S)           | CTI Engineering     |   |                           |                      |               |         |  |
| 8.  | STUDY PERIOD            | Jul.1983 ~ ~        | Feb.1985  | 19month(s)                |                      |               |         |  |
|   | SITE OR AREA            |                     | higuate and Pa  | antaleon Rivers           |                      |               |         |  |

## 10. MAJOR PROPOSED PROJECT(S)

[Sediment Control Works]<M/P>The design sediment discharge of 30-year(M/P),10-year (F/S) return period is 1.94 million cu.m(M/P), 710 thousand cu.m(F/S) in the Achiguate river basin and 3.25 million cu.m(M/P), 1,206 thousand cu.m(F/S) in the Panteleon river basin. The sediment control plan is made up of sediment control dams of cobble stone concrete type. It is proposed that three dams for the Achiguate river basin and five dams for the Pantaleon river basin be conducted to fully regulate the design sediment discharge:<F/S> Sediment control can be accomplished at a limited number of sites by high dams which have the highest sediment regulation effect. Sediment control is made up of two dams of cobble stone concrete type for Achiguate river and one dam of the same type for Pantaleon river.

[Flood Control Works]<M/P>To protect the target assets from flood damage,

partial river improvement works are employed for the project.

For Achiguate river, the flood control works consist of river channel

improvement in two stretches for the CA-2 road bridge and the railway bridge and for the urban area in Finca La Trinidad, respectively, and a ring levee around the urban area in Finca La Barrita. For Pantaleon river, river channel improvement will be undertaken for the protection of the CA-2 road bridge and the national railway bridge. The total length of river improvement are 11.0km and 3.4km in the Achiguate and the Pantaleon rivers, respectively. The ring levee is constructed over 5.0km around Finca La Barrita. Riparian facilities such as revetment, groundsill, etc., will be installed to maintain the function of the proposed improvement works. The design flood discharge are1,200m3/s(M/P), 950m3/s(F/S) for the Achiguate river and 1,150m3/s(M/P),900m3/s(F/S) for Pantaleon river, respectively. <F/S>Folood control can be accomplished by river improvement works. For Achiguate river, the river improvement works are composed of channel excavation with wet masonry revetment and concrete groundsill, and construction of foot protection groyne. For Pnataleon river, river improvement stretches to 3.4km, and river improvement works are of excavation with wet masonry revetment and concrete groundstill.

CSA GTM/S 201B/84 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## **Description:**

The reasons for delay or stoppage:

Low priority

#### Detail:

Regarding M/P, since the arterial road and railway cross the two rivers, it is crucial to ensure the safety of the bridges through effective flood control measures.

Regarding F/S, owing to the budgetary constraints, it is difficult to allocate government funds to the proposed project which would not have an immediate impact on the productive sectors.

Because of the low EIRR, the Government of Guatemala assigned lower priority to the proposed project.

The Government reviewed the study and applied to Japanese Grant Aid in March 1991, but was not successful.

## (FY 1991 Overseas Survey)

The Ministry considers that the proposed project is high in urgency and hopes to obtain financial assistance from Japan. The Ministry expects that the project be implemented in conjunction with the conservation of the upper basin of Achiguate River.

#### (FY 1993 Overseas Survey)

Application for Grant Aid was made in March 1991, however project cost was far beyond the limit of grant aid of Japanese Government and the implementation of the project was suspended. Annual budget of the agency is approximately 6.5 million US\$ and almost all annual budget is spent for maintenance and repair work of existing road. Moreover serious flood damage of other rivers, such as river Samara of Retalhueu province has been observed, so the priority of this project has been ranked low.

## (FY 1996 Domestic Survey)

In 1996 a request was submitted to the Japanese government for a grant aid assistance in order to implement a part of the proposed project.

## (FY 1997 Domestic Survey)

Request was submitted to Japanese Embassy in Guatemala.

## (FY 1998 Domestic Survey)

Although request for a grant aid assistance was submitted in 1997, the project has not been implemented due to the shortage of government fund allocation.

## (FY 1998 Overseas Survey)

Application for grant aid over Achiguate River water control was submitted in Sep. 1997, but was not accepted. Hurricane Mitch has done harm in '98 and countermeasure to flood control is urgently needed. The government looks upon the grant aid assistance from Japan.

(Basic Study)

Compiled Mar.1990

| CS  | SA GTM/S 501  | /86                          |                  |                 |                       |          |               | Revised     | Jul.2009 |
|---|---|------------------------------|------------------|-----------------|-----------------------|----------|---------------|-------------|----------|
|   | COUNTRY   | Guatemala                    |                  |                 |                       |          |               |             |          |
| 2.  | NAME OF STUDY   | Ground Water I               | Development Pro  | ject            |                       |          |               |             |          |
| 3.  | SECTOR  | Social Infrastru             | cture / W        | ater Resources  | Development           | 4.       | TYPE OF STUDY | Basic Study |          |
| 5.  |   |                              |                  |                 | oal de Agua de la Ciu | ıdad de  |               | <b>,</b>    |          |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |   |                              |                  |                 |                       |          | ·             |             |          |
|   | PRESENT COUNTERPA   | ART AGENCY                   |                  |                 |                       |          |               |             |          |
|   | 1   | To obtain water              | source for porta | ble water suppl | y for Guatemala City  | 7.       |               |             |          |
| 6.  | OBJECTIVES OF THE STUDY   |                              |                  |                 | •                     |          |               |             |          |
|   |   | Chuo Kaihatsu                | Corporation      |                 |                       |          |               |             |          |
| 7.  | CONSULTANT(S)   |                              |                  |                 |                       |          |               |             |          |
| 8.  | STUDY PERIOD  | Jul.1985 ~ Guatemala City    | Sep.1986         | 14moi           | nth(s)                | rtheast  | tern area     |             |          |
|   |   | Guatemara City               | , surrounding Ou | atemara City va | mey and adjacent no   | rtiicasi | icin arca     |             |          |
| 9.  | SITE OR AREA  |                              |                  |                 |                       |          |               |             |          |
| 10.   | MAJOR PROPOSED PR   | ROJECT(S)                    |                  |                 |                       |          |               |             |          |
| - '<br>- ]<br>- ]                                   | eep well excavation<br>Water distribution faciliti<br>Distribution tank<br>Power distribution facilit<br>Existing well rehabilitatio<br>Work shop | 1,260cu.m-2,8<br>ies 23,000m | 35cu.m           |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |
|   |   |                              |                  |                 |                       |          |               |             |          |

CSA GTM/S 501/86 Basic Study

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

## **Description:**

Subsequent Studies:

May.2.1994 D/D+S/V (49 months) Sep.19.1994 Consulting work started

Finance:

Jun.16.1992 L/A 4,711 mil.Yen

- (1) Construction of 38 deep wells and related facilities.
- (2)Renovation of the existing 22 wells.
- (3)Fee for the consuting services.

Contract with a Consulting Firm (Chuo Kaihatsu International Corp.)

## Related Implemented Projects:

(FY 1993 Overseas Survey)

- (1)Installation of water level meters and implementation of regular water check-up tests at 64 wells, 80% of 80 wells owned by EMPAGUA.
- (2)Digging of 17 new wells with domestic fund of 18 mil.Q.
- (3)Study on water supply and distribution system in the North with French loan of US\$ 1 mil.
- (4)Organizational restructuring of EMPAGUA.

Utilizing a part of US\$ 120 mil. loan which was provided by the World Bank for the economic modernaization, EMPAGUA concluded a contract with the consortium composed of TAHAL (Israel), E.T.ARCRER (U.S.A.), SANEPAR and COMSIP (both Brazil) (US\$ 2.15 mil.) and formulated the organizational restructuring plan covering 21 areas, such as management, financial affaris, investment, public fare system, staff training, etc. from 1989. Also, the installation of 40,000 domestic water supply pipes and the procurement of seven vehicles were carried out.

**(F/S)** 

| CS  | SA GTM/S 3   |  | Revised | Jul.2009 |
|-----|--|--|---------|----------|
| 1.  |  | Guatemala  |         |          |
| 2.  | NAME OF STUDY  | Development Project of the Port of Santo Tomas de Castilla                       |         |          |
|     | SECTOR   | Transportation / Port 4. TYPE OF STUDY F/S                                       |         |          |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME PRESENT COUNTERPA                                    | ENT STUDY  |         |          |
|     |  | Formulation of Stage III development plan  |         |          |
| 6.  | OBJECTIVES OF THE STUDY  |  |         |          |
| 7.  | CONSULTANT(S)  | The Overseas Coastal Area Development Institute<br>Yachiyo Engineering Co., Ltd. |         |          |
| 8.  | STUDY PERIOD   | May.1987 ~ Jul.1988 14month(s) ~   |         |          |
| 9.  | SITE OR AREA   | Santo Tomas on the Caribbean coast   |         |          |
|     | MAJOR PROPOSED PR  |  |         |          |
| - S | hort Term Plan (Target ye  | ear: 1995)   |         |          |
| -   | A container terminal<br>Length: 500 m (-11m)<br>Area: 25 ha<br>Handling equipment: 3 g | gantry cranes, 6 strand carriers, 1 forklift                                     |         |          |
|     | A petroleum terminal<br>Length: 270 m (-11m)   |  |         |          |
| -   | Access Channel<br>depth: -11m<br>width: 80m<br>navigation aid system                   |  |         |          |
|     |  |  |         |          |
|     |  |  |         |          |
|     |  |  |         |          |
|     |  |  |         |          |

サント・トーマス港開発計画

CSA GTM/S 301/88 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## **Description:**

Projects with their own fund:

(FY 1993 Overseas Survey)

Dec.1992 ~July 1993 Dredging of inland channel and grounding of terminal completed with the own fund of 110 mil.Q

The construction of the oil terminal with the domestic fund of 15 mil. Q has been under consideration to be commenced from mid-1995.

## Background:

(FY 1991 Overseas Survey)

The study report has been utilized in the Planning Unit and the Engneering Department of EMPORNAC. The project is given high priority, therefore, it is likely to be implemented in future.

#### (FY 1993 Overseas Survey)

The 1989 OECF Loan Appraisal Mission proposed a loan on the condition that the project scale be reduced: (1)Installation of two gantry cranes instead of three, (2)Installation of four strand carriers instead of six, (3)Reduction of the forklift capacity by half and (4)no construction work on the waterways because of the environmental consideration. However, the Minister of Finance did not approve the acceptance of the loan in fear that the Port of Santo Thomas Authority be unable to repay. As a result, there will be no possibility to implement the project with an OECF loan.

## (FY 1993 Overseas Survey)

In August 1993, the Central American Bank of Economic Integration (BCIE) decided to provide loan (45 mil. Q) for expansion of container terminal, the construction of container yard, the improvement of navigation aid facilities and the installation of cranes. The construction was planned to be completed by Dec. 1997 (total construction cost: 525 mil. Q, including 45 mil. Q of the foreign currency).

## (FY 1993 and 1998 Overseas Survey)

Since D/D and EIA was conditioned prior to the provision of BCIE loan, EMPORNAC conducted EIA in Nov. 1993 and started D/D in July 1994 with their own fund  $(2.5 \sim 3 \text{ mil. Q})$ . However, the provision of BCIE loan was postponed.

**(F/S)** 

Compiled Mar.1990

| CS   |   |                                    |   |                      |                        | Revised         | Jul.2009 |
|--|---|------------------------------------|---|----------------------|------------------------|-----------------|----------|
| 1.   | COUNTRY   | Guatemala<br>Monjas Irrigatio      | n Project   |                      |                        |                 |          |
| 2.   | NAME OF STUDY   | Wonjas irrigado                    | n i Toject  |                      |                        |                 |          |
| 3.   | SECTOR  | Agriculture                        | / (Agriculture in) General                                | 4.                   | TYPE OF STUDY          | F/S             |          |
| 5. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |   |                                    | Ministerio de Agricultura, Ganaderia y A                  | Alimentacion         |                        |                 |          |
|  | PRESENT COUNTERPA                                     | ART AGENCY                         |   |                      |                        |                 |          |
| 6.   | OBJECTIVES OF THE STUDY                               | Formulation of                     | a water resource development and utiliza                  | tion plan to promote | e agricultural develop | oment in Monjas |          |
| 7.   | CONSULTANT(S)   | Pacific Consulta<br>Sanyu Consulta | nts International<br>nts Inc.                             |                      |                        |                 |          |
| 8.   | STUDY PERIOD  | Jul.1987 ~                         | Jul.1988 12month(s)                                       |                      |                        |                 |          |
| 10.  | SITE OR AREA  MAJOR PROPOSED PRogation area: 4,800 ha |                                    | (Area 7,100ha, population 14,130, 150ki                   | in nom the emphalis  |                        |                 |          |
|  | Sub dam : He  | eight 31m Head w                   | n 1,072m, capacity 2.63MCM<br>ork: Water Intake 4.3cu.m/s |                      |                        |                 |          |
| Dri  | ving canal: 4.0 cu.m/s                                | 9.5km                              |   |                      |                        |                 |          |
| Div  | version canal: South 3.28<br>North 2.23               | cu. m/sec 8km<br>cu.m/sec 15.2km   |   |                      |                        |                 |          |
|  | in canal: 1,526 cu.m/s                                |                                    |   |                      |                        |                 |          |
|  | enal canal: 0.338 cu.m/                               | sec 39km                           |   |                      |                        |                 |          |
|  | gulating pond: 3 units                                |                                    |   |                      |                        |                 |          |
| * T  | The cost is estimated in O                            | ct. 1987 prices.                   |   |                      |                        |                 |          |

CSA GTM/A 301/88 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## Description:

Subsequent Studies:

#### (FY 1994 Domestic Survey)

Due to change of laws, environmental assessment study is required before the implementation of the project. The DIRYA has completed the environmental assessment study.

#### (FY 1997 Domestic Survey)

An expert of a consulting company which conducted F/S accompanied JICA short-term expert in FY 1993 and made a draft on EIA.

#### Finance:

\*Process

## (FY 1989 Domestic Survey)

In view of the high priority of the proposed project, the Government of Guatemela applied for Japanese Grant Aid in March 1989, but it was not successful due to huge project cost of US\$46.85 mil.

#### (FY 1991 Overseas Survey)

The ministry assigns high priority to the proposed project and plans to revive the request for Japanese Grant Aid in 1992.

#### (FY 1993 Overseas Survey)

2 JICA experts were sent for 1 month to conduct complementary study and to find out measures to reduce the project cost. The agency is still planning to apply grant aid and loan aid for the implementation of the project.

#### (FY 1993 Overseas Survey)

Priority of the project is stil ranked high and is the top priority project among agricultural projects of Guatemelan Government. The agency considers that project cost of 70,000q/ha is almost 3 times as compared to standard project cost of 20,000q/ha.

#### (FY 1994 Domestic Survey)

According to the result of project cost review by JICA experts, the total cost of the project was US\$63 million. The Government of Guatemela hasn't dicided to implement the project.

## (FY 1996 Domestic Survey)

The project implementation has been hindered because the project cost is too big for grant aid assistance and the adaption of an OECF loan is likely to burden farmers. Unless the government decides the allocation of more fund to this project, it is unlikely that an OECF loan is approved.

## (FY 1997 Domestic Survey)

While the expert was in Guatemala, "Conference for Urgent Implementation of the Project" was held by beneficiaries and local public organizations, requesting realization of the project to the Government.

It seems that the development project which needs large-scale investment is difficult to approve because of the Government's policy not to increase foreign debt.

## (FY 1997 Overseas Survey)

In the period of change of regime, the management was stopped and priority of the government was changed. Therefore, the project was postponed also because of its high cost.

According to the policies of MAGA, the project referred to development of irrigation areas had high priority during 1991 from now on. It was informed that the Ministry of Agriculture is willing to support the Monjas Project into an investment average of 36,000 per ha, but it is necessary to review the study.

## (FY 1998 Overseas Survey)

The enlargement of irrigation area is an important agricultural policy, whereas MAGA continues to put high priority on this project and is willing to implement it. Because of the private management policy of irrigation which started from 1987 (management of facility by farmers etc.), it is necessary to review the survey.

(F/S)

Compiled Mar.1991

| C   | SA GTM/S  | 5 302/89             |                   |                  |                 |              |       |              |          | Revised | Ju | 1.2009 |
|-----|---|----------------------|-------------------|------------------|-----------------|--------------|-------|--------------|----------|---------|----|--------|
| 1.  | COUNTRY   | Guatemala            |                   |                  |                 |              |       |              |          |         |    |        |
| 2.  | NAME OF STUDY   | Development Pr       | roject of La Auro | ora and Santa El | lena Airports   |              |       |              |          |         |    |        |
| 3.  | SECTOR  | Transportation       | /                 | Air Transportati | ion & Airport   |              | 4.    | TYPE OF ST   | TUDY F/S | )       |    |        |
| 5.  | COUNTERPART AGI   | ENCY AT THE          |                   | eral de Aeronaut |                 |              |       |              |          |         |    |        |
|     | PRESENT COUNTER   |                      |                   |                  |                 |              |       |              |          |         |    |        |
| 6.  | OBJECTIVES OF TH<br>STUDY   |                      | nd expansion of l | La Aurora and S  | Santa Elena Ai  | irports.     |       |              |          |         |    |        |
| 7.  | CONSULTANT(S)   | Nippon Koei Co       | o., Ltd.          |                  |                 |              |       |              |          |         |    |        |
| 8.  | STUDY PERIOD  | Jan.1989 ~           | Feb.1990          | 13month(s)       |                 |              |       |              |          |         |    |        |
| 9.  | SITE OR AREA  | La Aurora airpo      | ort in Guatemala  | city and St.Eler | na airport in P | eten City    |       |              |          |         |    |        |
| 10. | MAJOR PROPOSED  | PROJECT(S)           |                   |                  |                 |              |       |              |          |         |    |        |
| (Er | nergency Programs)<br>Renovation of radar systemovation of secondar | stems including inst |                   | /SSR equipment   | and renovation  | on of CFR fa | acili | ies at La Au | rora.    |         |    |        |

(Short-term Development)

- 1. Improvement of runway, taxiway and apron.
- 2. Improvement of drainage and other infrastructures.
- 3. Improvement and expansion of terminal buildings.
- 4. Improvement of aviation support facilities, including visual navaids.
- 5. Improvement of electrical power supply and other airport supporting facilities.

Note: Cost 1) is for La Aurora Airport and Cost 2) for Santa Elena Airport.

CSA GTM/S 302/89 F/S

| PRESENT STATUS | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## Description:

Project implemented

Even with the reduced scale and cost, some feasible projects are being implemented by their own budget.

- (1)Aurora Airport
- 1. Renewal of radar system
- (FY 1998 Overseas Survey)

New radar system was ordered. Primary radar and single-pulse radar were purchased. They are to be installed by the Paytheon-Indran enterprise within this year. The construction of a new control tower which is included in this project was started.

(FY 1999 Overseas Survey)

Regarding the renewal of primary radar ELTA, conventional secondary model COSSOR, primary radar system PYTHOEON ARS 10SS, secondary radar mono pulse INDRA IRS20MP-L, radar data processing AIRCON2000 system, voyage plan data processing, 80% of civil work and 10% of installation have been completed.

- 2. Recording system and VHF telecommunication of the control tower were purchased from AEROCOM Co. (USA) with the cost of 2 million Q. Installed on Jun. 1993.
- 3. Visual fright support system was purchased from CROUISE HANDS Co. (USA) with the cost of 5 million Q. It will be installed on Mar. 15.1994.
- 4.Modernization and expansion of terminal building: A contract agreement has been signed with COGUSA Co. However, due to the

rapid increase of demands, the cost estimation is not come out as yet. Various facilities are provided already, but the periods of installation are not fixed because of the lack of infrastracture for security.

(FY 1998 Overseas Survey)

Improvement works of customs, baggage conveyor, bank services, rent-a-car, hotels, VIP room, baggage room was conducted.

Regarding the JICA-proposed projects, the transfer of the baggage conveyor to the north part was implemented. North satellite plan proposed by JICA as a short-term project is under consideration.

The construction is suspended because the plan to transfer the concession of developing the airport is under consideration.

5.Repavement of the arrival runway at the La Aurora Airport was implemented by the successful bidder. Not only the methods suggested by JICA, but some other convenient methods are considered to apply on this project.

(FY 1998 Overseas Survey)

Construction works were conducted by Sigma Construction for five months in 1994. Paving work of the part of taxiway was conducted.

(FY 1999 Overseas Survey)

Improvement of the taxiway is on-going.

(2)Santa Elena Airport

1.Renewal of radar system

(FY 1998 Overseas Survey)

New radar system was ordered. Single-pulse radar were purchased. They are to be installed by the Paytheon-Indran enterprise within this year. The construction of a new control tower which is included in this project was started.

2. Visual fright Support System at Santa Elena Airport

To renew within FY 1994, budget for the installation has been presented to the Diet.

3. Improvement of the terminal building

(FY 1998 Overseas Survey)

It was improved recently. However, it has not been expanded.

## Pending Problem

The DGAC has not yet decided on the schedule of implementation of large-scales projects due to economic reason.

(FY 1993 Overseas Survey)

- 1) DGAC attempted to request an OECF loan for the short-term development program, but the Ministry of Finance turned it down because of the high project cost, and no further development along this line partly due to the policy change that places more emphasis on social sectors.
- 2) The GOG made a request for a 1000mil.yen Japanese Grant on the renovation of CFR facilities in 1990, but it has not been realized. Although studies were conducted by two Western engineering companies: by Westinghouse in late 1993 and

Electronics in Feb. 1994, DGAC has concluded that the project is too large (\$10 mil. to 15 mil.) to be carried out with domestic fund.

## (FY 1998 Domestic Survey)

All the projects proposed in the emergency development program and the short-term development program have not been completed. The government has been promoting the projects, while some political parties have been opposing them. Therefore, progress has been made with very slow pace.

# STUDY SUMMARY SHEET (M/P)

Compiled Mar.1993 **CSA** GTM/S 101/91 Revised Jul.2009

| 1.  | COUNTRY   | Guatemala                         |                       |                       |                |        |              |            |              |          |
|-----|---|-----------------------------------|-----------------------|-----------------------|----------------|--------|--------------|------------|--------------|----------|
| 2.  | NAME OF STUDY                                       | Comprehensive                     | Urban Transportation  | n System in Guatemal  | la Metropolita | an Are | ea           |            |              |          |
| 3.  | SECTOR  | Transportation                    | / Urban               | Transportation        |                | 4. T   | YPE OF STU   | DY M/I     | P            |          |
| 5.  | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                                   | Guatemala Municipa    | ality                 |                |        |              |            |              |          |
|     | PRESENT COUNTERPA                                   |                                   |                       |                       |                |        |              |            |              |          |
| 6.  | OBJECTIVES OF THE STUDY                             | To formulate a                    | Master Plan on the co | omprehensive urban tr | ansportation s | systen | n in Guatema | ala Metroj | politan Area | <b>.</b> |
| 7.  | CONSULTANT(S)                                       | Yachiyo Engine<br>Central Consult |                       |                       |                |        |              |            |              |          |
| 8.  | STUDY PERIOD  | Jul.1990 ~                        | Dec.1991              | 17month(s)            |                |        |              |            |              |          |
|     | SITE OR AREA  |                                   | atemala Metropolitan  | Area 937 sq.km        |                |        |              |            |              |          |
| 10. | MAJOR PROPOSED PR                                   | OJECT(S)                          | 1                     |                       |                |        |              |            |              |          |

- 1) Phase I (Immediate Action Projects)
- a) Bus stop development b) Bus lane development c) Effective lane usage d) Pavement marking development e) Side walk development
- 2) Phase II (Short Term Projects)
- a) East-West corridor development b) Preriferico tramo development
- c) Ave. Petapa Improvement d) 15 Ave. Improvement e) A part of intersectio improvement f) Busway (Ciudod Ral to Zona 4) development g) Traffic control system development h) Parking card system development i) Pedestrian mall development
- 3) Phase III, IV (Mid Term and Long Term Projects)
- a) Eastern part of middlering road development b) Intersection improvement c) Bus way development (Mixco to Centro) d) Bus center Zona 4 improvement e) Extra-Urban bus terminal f) Bus inspection center construction g) Traffic control system development h) Traffic safety park development
- 4) Long term Project
- a) Outer ring road development b) Northern part of the middle ring road development c) Inner ring road improvement d) CA-9 (South) improvement e) Ca-1 (East) improvement f) 13 Ave. 6A Ave. and 35 Ave, improvement g) Boulevard sud improvement h) Bus way (Villa Nueva-Centro) development i) Bus center zona 1 development j) Car parking development

CSA GTM/S 101/91 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### Description:

Based on the Study results, 31 projects, which belong to any of (i)Road Network Plan, (ii)Public Transportation Plan or (iii)Traffic Management Plan, were proposed to be implemented by 2010.

(1)Projects for East-West Corridor, Ave.Petapa, Busway, Bus Centers for Each Zone, Extra-Urban Bus Terminal and Bus Weight Inspection Center.

These six projects were interated into one project. The Japanese government was requested for the implementation of its F/S.

In Apr.1995 a preliminary survey mission was dispatched and S/W was concluded.

Aug.1995~Feb.1997 JICA F/S "Comprehensive Urban Transportation System in the Metropolitan Area (S 313/96)"

#### (2)Improvement of Intersections

The construction is scheduled to be commenced from 1995 with 30 mil.Q.financed by central American Bank of Economic Integration.

\*Initially, F/S for this project wasrequested to JICA. (Although M/P proposed to construct an underground multi-level crossing at four intersections, due to the cost consideration, it was revised to the construction of flyovers).

#### (3) Three Projects out of 14 projects in Phase I and II

Finance: Own fund of the City of Guatemala

-Improvement of 15 streets in six districts

(Budget:6 mil.Q/Implementing Period:Nov.1992-Apr.1994)

-Improvement of 250 bus stops

(Budget:3 mil.Q/Implementing Period:Jan.-Dec.1994)

-Improvement of road signs

(Budget: 0.7 mil. Q/Implementing Period: two years commencing in Jan. 1994)

#### (4)Improvement of Traffic Control System

A bill was submitted to the legislature in order to change the jurisdiction of the traffic control from the Police Department to the City of Guatemela. After the bill is passed, the budget will be allocated and the project will be commenced in the first half of 1995.

(5)Ave. Hincapie Project (Frequent occurrence of traffic accidents are observed in this avenue)

A part of the projects such as the construction of a bridge and the improvement and the widening of road have been implemented by the Ministry of Traffic, Communications and Public Works. (Budget: 20 mil. Q/Implementing Period: May-June, 1992)

(6)Middle Ring Road Plan (one of four mid-term projects)

(FY 1993 Overseas Survey)

The construction of a part (3km) of the ring road is scheduled to be commenced from November 1994 with the budget of the City of Guatemala (7 mill. Q).

(M/P+F/S)

Compiled Mar.1993 **CSA** GTM/S 202B/91 Revised Jul.2009

| 1. | COUNTRY   | Guatemala                                  |                |                                       |                |               |           |             |        |             |               |
|----|---|--|----------------|---------------------------------------|----------------|---------------|-----------|-------------|--------|-------------|---------------|
| 2. | NAME OF STUDY                                       | Solid Waste Ma                             | nagement in M  | etropolitan Area                      | of Guatemala   | City          |           |             |        |             |               |
| 3. | SECTOR  | Public Utilities                           | / <b>U</b>     | Jrban Sanitation                      | 1              | 4.            | TYPE      | OF STUD     | Y M    | /P+F/S      |               |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |  |                | Bureau (DSP),<br>lic Cleaning De      | partment (DLP  | M)            |           |             |        |             |               |
|    | PRESENT COUNTERPART AGENCY                          |  |                |                                       |                |               |           |             |        |             |               |
| 6. | OBJECTIVES OF THE STUDY                             | 1)To contribute<br>City.<br>2)To determine | •              |                                       | J              |               |           |             | •      | •           |               |
| 7. | CONSULTANT(S)                                       | Environmental 7                            | Гесhnologic Co | nsultants Co., L                      | td.            |               |           |             |        |             |               |
| 8. | STUDY PERIOD  | Jun.1990 ~                                 | Sep.1991       | 15month(s)                            |                |               |           |             |        |             |               |
| 9. | SITE OR AREA  | Guatemala City,<br>population 1,532        | •              | illa Nueva City,                      | Chinautla City | 7, Villa Cana | lles City | , Sta. Cata | rina F | Pinula City | y (350 sq.km, |
| 40 | A CALLOD DE OBOCCED DE                              | OTE CITY(C)                                |                | · · · · · · · · · · · · · · · · · · · | ·              | ·             |           |             |        | ·           | ·             |

#### 10. MAJOR PROPOSED PROJECT(S)

M/P(target year: 2000, estimated population:2,047,000)

- 1) Expansion of collection service
- 2) Improvement on final disposal
- Immediate conversion of the EL Trebol disposal site into a controlled landfill
- Construction of a new sanitary landfill
- 3) Institutional development and financial strengthening
- Concessions of collection service to private collectors
- Preventive maintenance and repair program
- Education and community participation programs
- Personnel training program
- Recycling and resource recovery program
- Institutional organization of the DSP
- Initiate metropolitan committee in charge of solid waste

F/S(planned year: 1996, estimated population:1,841,000)

- 1) Improvement of collection service in surrounding areas(experiments on container collection and equipment management): Zone cocession to private collectors/increased efficiency in operation/improvement of collection service in isolated areas
- 2) Improvement of final disposal sites: EL Trebol landfill(existing) and a new sanitary landfill in Las Guacamayas
- 3) Institutional strengthening: Formation of a working group and a Metropolitan Solid Waste Committee/ increase of the SWM's budget/ a pilot program on sanitary education for residents, etc.

CSA GTM/S 202B/91 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(1)El Trebol Landfill

Subsequent Studies:

Jan 1992 B/D

Finance:

Mar.1992 E/N (Project for Procuring Equipment for the Management of Solid Garbage in the Metropolitan Area, 309 mil.Yen)\*

\*Contents of project

Equipments for the management of solid garbage (4 bulldozers, 2 wheel-loaders, 4 dump-trucks for gravel transportation and 10 dump-trucks for refuse-collection) to resolve sanitary problem in Guatemala City.

Local fund (Guatemela City)

(FY 1998 Overseas Survey)

They are waiting for the approval of IDB loan (US\$34.7 million) for collection, transportation disposal plant and landfill of the waste.

(FY 1999 Overseas Survey)

Solid waste project is not financed by IDB. Domestic and international bid will be done at the end of Apr. 2000 for plant and landfill project with the contract period of 20 years.

#### Construction/Realized Project:

\*Equipments

Mar.1993 Delivety ceremony (The instructions in operation and maintenance of bulldozers and those in operation of truck/ wheel loader were given by experts for 10 days and 2 days respectively.) The central vehicle maintenance factory which handles protection and maintenance of vehicles and heavy machines, electric circuit and lathe-procession of repair parts has been set up separately from the solid wastes section. Condition of staff and finance has been much improved. Constant supply of parts, under this grant project, is expected to improve operation of the vehicles and machines considerably.

\*Dispatch of Experts

Nov.~Dec.1993 Two experts on landfill were dispatched and their guidance contributed to improve the treatment.

\*Guatemala City, Local Fund

Four truck slopes, two office buildings and four truck scales were prepared by its own budget. Now, the landfill is collecting garbages from all public area and 75~80% domestic area.

\*Others

Rooms for heavy machines, storehouse for parts and workers' houses have already been set up at the El Trebol landfill and the scavengers have been living in the newly completed houses.

#### (2)El Guacamaya Landfill

Land acquisition trouble caused this project to delay.

(FY 1999 Overseas Survey)

This site is no more candidate site for the project due to the people's movement against the project.

#### (3)Privatization of Garbage Collection

The project was once implemented, but it is unsuccessful. Floowing step is not decided now.

(FY 1999 Overseas Survey)

Area classification system and route were proposed for the management of the waste collection and transportation.

#### (4)Approval System for Garbage Collection

The City introduced approval system on 239 private garbage trucks. The trucks have annually periodical inspection and area restriction.

(FY 1999 Overseas Survey)

307 private trucks were checked and approved. These trucks were divided into 286 routes for waste collecting services.

#### (5)Sanitary Education

Video software provided by JICA was useful to enlighten adults and pupiles. Almost 250 thousand persons already have seen it.

#### (6)Metropolitan Garbage Committee

Established. However, unsuccessful function brought the Comittee to discontinue.

#### (7)Restructuring of Public Cleaning Department

The City established Advisory Committee. The Department will be restructured in 1995.

#### Others:

(FY 1998 Overseas Survey)

Environmental plan regarding the solid waste management in the city has been formulated since Nov.1996 with IDB finance of US\$360,000.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1994
CSA GTM/A 101/92 Revised Jul.2009

| <u> </u> |                         | / =              |  |                               |         |   |
|----------|-------------------------|------------------|--|-------------------------------|---------|---|
| 1.       | COUNTRY                 | Guatemala        |  |                               |         |   |
| 2.       | NAME OF STUDY           | Integrated Agric | cultural and Rural Develo                              | pment Project in Jutiapa      |         |   |
| 3.       | SECTOR                  | Agriculture      | / (Agricultu   | re in) General                | 4.      | TYPE OF STUDY M/P                               |
| 5.       | COUNTERPART AGENO       |                  | Ministry of Agriculture,<br>(USPADA)                   | Livestock and Food (MAGA      | A), Sec | ctorial Unit of Agricultural and Food Planning  |
|          | PRESENT COUNTERPA       |                  |  |                               |         |   |
| 6.       | OBJECTIVES OF THE STUDY |                  | aster Plan Study on the In<br>tern limit of Guatemala. | tegrated Rural and Agricultur | ral De  | evelopment Project at Jutiapa, which is located |
| 7.       | CONSULTANT(S)           |                  | ants International                                     |                               |         |   |
| 8.       | STUDY PERIOD            | Mar.1992 ~       | Dec.1992   | 9month(s)                     |         |   |
|          | SITE OR AREA            |                  | Department of Jutiapa                                  |                               |         |   |
| 10.      | MAJOR PROPOSED PR       | OJECT(S)         |  |                               |         |   |

Project cost 1) is of total projects

2) is of high priority projects.

In the Master Plan Study, a total of 12 project have been formulated, of which the Santa Cataring Mita Integrated Rural Development Project and The Moutufar Integrated Rural Development Project have been identified as high priority project.

Santa Catarina Mita Integrated Rural Development Project:

The Project consists of irrigation plan ( rehabilitation and construction of pumping station). rural roads & rural water supply development plan and other component.

Muntufar Integrated Rural Development Project:

The Project consists of irrigation plan (2,400ha) drainage plan (1,065ha), rural road and rural water supply development plan.

CSA GTM/A 101/92 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

#### Finance:

(FY 1996 Domestic Survey)

The Government of Guatemala made application for Grant Aid in Sep.1993 for the implementation of Santa Catarina Integrated Rural Development Project and Montufar Integrated Rural Development Project.

Both Santa Catarina Mita Project and Montufar Project were on the list of the projects for which B/D is expected to be implemented. However, no progress has been made for the realization of B/D.

(FY 1997 Domestic Survey)

There is no progress in the situation.

#### Situation:

The agency puts the higher priority on Santa Catalina Mita Project because it is planned to utilize the existing facilities. The agency is negotiating with SEGEPLAN for the implementation of Montufare project to start after the implementation of Santa Catalina Mita Project.

#### (FY 1997 Domestic Survey)

At Santa Catarina Mita Integrated Rural Development Area, a part of rural road project is being implemented.

MAGA has desired for early realization of both projects.

#### (FY 1997 Overseas Survey)

The implementation of the project has been delayed because of politic changes during 1992 from now on, change of investment priorities besides the high cost of the project and the economic situation the city went in through that period.

According to the Agriculture Ministry the project is not feasible to execute as it was originally stated, and it will be necessary to check it and to bring up to date to search the possible alternatives to carry out.

#### (FY 1998 Domestic Survey)

The government changed their development target area and contents due to the change of political regime, policies, and peace agreement, following the cease of civil war. Therefore, the project has not been implemented.

#### (FY 1999 Overseas Survey)

Ministry of Agriculture implemented the project on irrigation infrastructure and pump equipment. The National Assembly approved the implementation of the development project in the north-east part of the country including Department of Jutiapa.

#### (FY 2000 Domestic Survey)

The project on irrigation infrastructure and pump equipment that was implemented by Ministry of Agriculture is one of the proposed projects in this Study. There is no information about the reason why the Santa Catalina Mita Project and the Montufar Project did not realize the request for the Grant Aid.

(M/P+F/S)

Compiled Jul.1996

| CS  | SA GTM/S                    | 203/95 Revised Jul.2009   |
|-----|-----------------------------|---|
| 1.  | COUNTRY                     | Guatemala   |
|     |                             | Groundwater Development in the Central Plateau Area   |
| 2.  | NAME OF STUDY               | Ordina mater Development in the Central Fueda Pued  |
| _   | CECTOR                      | C III C ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (   |
| 3.  | SECTOR                      | Social Infrastructure / Water Resources Development 4. TYPE OF STUDY M/P+F/S  |
|     |                             | INFOM   |
|     | COLINIEEDDA DE A CEN        | VON A TOTAL   |
|     | COUNTERPART AGEN            |   |
|     | TIME OF DEVELOPME           | ENT STUDY   |
|     |                             |   |
| 5.  |                             |   |
|     |                             |   |
|     |                             |   |
|     | PRESENT COUNTERPA           | ART AGENCY  |
|     |                             |   |
|     |                             |   |
|     |                             | Water resources (groundwater) development for water supply in the local cities.                                       |
|     |                             |   |
|     |                             |   |
|     |                             |   |
| 6.  | OBJECTIVES OF THE           |   |
| 0.  | STUDY                       |   |
|     |                             |   |
|     |                             |   |
|     |                             |   |
|     |                             |   |
|     |                             | KOKUSAI KOGYO CO., LTD.   |
| 7   | CONCILL TANT(C)             | RORES/II ROGTO CO., ETD.  |
| /.  | CONSULTANT(S)               |   |
|     |                             |   |
| Q   | STUDY PERIOD                | Jan.1994 ~ Jul.1995 18month(s)  |
| 0.  | STODITERIOD                 | ~   |
|     |                             | 54 local cities at central plateau of Guatemela, F/S on 10 cities   |
|     |                             |   |
|     |                             |   |
|     |                             |   |
| 9.  | SITE OR AREA                |   |
|     |                             |   |
|     |                             |   |
|     |                             |   |
|     |                             |   |
| 10  | MAJOR PROPOSED PR           | POIECT(S)   |
| 10. | WASOK I KOI OSED I I        | KOJECT(5)   |
|     |                             |   |
| Pha | ase I study: M/P on 54 ci   |   |
|     |                             | n water use, water supply condition, water resources development potential, and type analysis of 54                   |
|     | cities. 10 cities we        | ere selected for F/S.   |
| Pha |                             | ties selected by points of ground water development potential, social economic condition related                      |
|     |                             | water supply facility.  |
|     | to mannenance of            | water supply facility.  |
|     | 1, .                        |   |
|     |                             | development in 10 cities (excepting one town which needs only one trial boring well), and improvement on water supply |
| fac | ility (construction of drai | inage pond and construction of distribution facility from new resources) were proposed.                               |
|     |                             |   |
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|     |                             |   |

CSA GTM/S 203/95 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Promoting

Completed

Delayed or Suspended

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

(FY 1996 Domestic Survey)

The first half of 1994. M/P undertaken. The second half of 1994~the first half of 1995. F/S undertaken.

Jul.1996 F/R submitted.

Oct.1995 INFOM requested Japanese Grant Aid for ground water development at 10 cities of F/S.

(FY 1998 Domestic Survey)

Finance:

Grant Aid E/N Dec.10.1997 "Groundwater Development in the Central Plateau Area"

\*Contents

Construction of wells, installation of pumps, construction of water distribution pipes, provision of maintenance materials and water quality check.

Construction:

(FY 1999 Overseas Survey)

Completed.

# STUDY SUMMARY SHEET (M/P)

Compiled Jun.1997 **CSA** GTM/A 106/96 Revised Jul.2009

| -  |                                    |  |
|----|------------------------------------|--|
| 1. | COUNTRY                            | Guatemala  |
| 2. | NAME OF STUDY                      | orest Management in Baja Verapas   |
| 3. | SECTOR                             | orestry / Forestry & Forest Conservation 4. TYPE OF STUDY M/P  |
| 5. | COUNTERPART AGENORIES OF DEVELOPME |  |
|    | PRESENT COUNTERPA                  |  |
| 6. | OBJECTIVES OF THE STUDY            | To formulate the Forest Management Plan with researching the resources of the forest in the whole area of 280,000 ha of the Baja Verapas. 2)To formulate the Pilot Forest Management Plan after researching and setting the pilot forest for raining and practice. |
| 7. | CONSULTANT(S)                      | apan Forest Technical Association asco International Inc.  |
| 8. | STUDY PERIOD                       | an.1995 ~ Dec.1996 23month(s)<br>~   |
|    | SITE OR AREA                       | Intire Department of Baja Verapaz (280,000ha) and San Jeronimo National Forest (1,700ha) located in the department.  |
| 10 | MA IOR PROPOSED PR                 | IECT(S)  |

- 1. Forest Management Plan for Baja Verapaz
- Established operational standards for each stand classifications: Production Forest, Conservation Forest, Protection Forest;
- Prepared a proposal for forest industry development; and
- Incorporated environmental considerations in the Plan.
- 2. Management Plan for San Jeronimo National Forest
- Forest Operation Plan: Established principals and methodologies of forest operation in production and conservation forests.
- Social Forestry Plan: Land use planning for farm and grass lands used by local inhabitants in and around the National forest.
- Training forest Plan: Exhibition Forest, Seed Collecting Forest, Sample Forest, Experimental Forest, etc.
- Training Programs: Training programs at Sub-regional forestry Office II-4 and in San Jeronimo National Forest.

CSA GTM/A 106/96 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 1997 Domestic Survey)

#### 1. Reorganization

Based on the New Forest Law put in force on January 2, 1997, DIGEBOS, the counterpart organization for the Study has been re-established as INAB (National Institute of Forests). Although there has been substantial staff turnover, the key counterpart personnel, Ing. Noengry has kept his office at Regional Office II.

As a technical for Regional Office II which controls the Study Area, Noengry is preparing for the implementation of the Plan. Recently, "Junta Directiva" has been established as the highest decision-making body with an authority over the Director of INAB. He advised that the Japanese side need to consult Junta Directiva, at diplomatic level, for smooth implementation of the Plan.

#### 2. Utilization of the outputs

The outputs of the Study, such as aerial photography and thematic maps, are now utilized for operation of INAB, as well as in the implementation of UNEPROCH project (This project is being implemented by the Ministry of Agriculture, Livestock and Food for the purpose of natural resource management and rural community development. It covers an area of 5494 km2 in the upstream of Chixoy river including Baja Verapas). The outputs of the Study are also used for PLV (Regional Development Program "Las verapaces" implemented by SEGEPLAN/GTZ) for local development.

#### (FY 1998 Overseas Survey)

Sub-projects for San Jeronimo National Forest have not been implemented due to the lack of finance. Although the request was submitted for the provision of a grant aid assistance and dispatch of two Japanese experts (inventory and forest conservation), there has not been any response so far.

The training in Japan regarding natural resources was given to an expert of DIGEBOS.

INAB is presently in charge of San Jeronimo National Forest. However, it is under consideration that the concession of development of the Forest will be transferred to the private sector.

#### (FY 1999 Overseas Survey)

Due to the change of the forest policy, INAB provides incentives to the land owners who are engaged in afforestation and management of the land used as the forest. As a result, the land owners participate in forest management and afforestation.

#### San Jeronimo Farm Project:

(FY 2001 Overseas Project)

Regional members of farms, concerned organizations, and schools participate in the project activities such as forest fire control education and farm regional members group formation.

This project is supported by engineers of INAB which offices locate in each municipality and San Jeronimo, Baja Verapas.

#### Content(s):

- $1.\ Feasibility\ of\ the\ forest\ concession\ under\ the\ forest\ act\ No.12\ is\ to\ be\ researched\ by\ forestry\ consultants.$
- 2. Management of national farms: Organizational/technical forestation, Forest control and observation, Conservation of natural resources.

  Objectives:
- 1. To transfer the concession of National San Jeronimo Farm to the private sector under the Forest Act and to implement conservation of natural resources.
- 2. To complete the procedure of concession of National San Jeronimo Farm in Baja Verapaz.
- 3. To promote participation of the neibor farm district for the feasible utilization of natural resourses in the National San Jeronimo Farm.

#### (FY 2002 Overseas Survey)

At present, control of illegal logging, prevention and control of forest fires, and monitoring and management of resoruces within farms have been continuously implemented.

(M/P+F/S)

Compiled Jun.1997

| CS  | SA GTM/S 2                | <b>419/96</b>      |  | Revised Jul  | 1.2009 |
|-----|---------------------------|--------------------|--|--|--------|
| 1.  | COUNTRY                   | Guatemala          |  |  |        |
|     |                           |                    | Wastewater Management in the Guate         | emala Metropolitan Area  |        |
| 2.  | NAME OF STUDY             | O                  |  |  |        |
| 3   | SECTOR                    | Public Utilities   | / Sewerage                                 | 4. TYPE OF STUDY M/P+F/S                                       |        |
| ٥.  | SECTOR                    | I done oundes      | / Sewerage                                 | 4. THE OF STODI   W/1 +1/5                                     |        |
|     |                           |                    |  |  |        |
|     | COUNTERPART AGEN          | ICY AT THE         |  |  |        |
|     | TIME OF DEVELOPME         |                    |  |  |        |
|     |                           |                    |  |  |        |
| 5.  |                           |                    |  |  |        |
|     |                           |                    | Empresa Municipal de Agua (EMPA            | GUA: Guatemala Municipal Water Supply Public Corporation)      |        |
|     |                           |                    |  |  |        |
|     | PRESENT COUNTERPA         | ART AGENCY         |  |  |        |
|     |                           |                    |  |  |        |
|     |                           | T                  |  |  |        |
|     |                           |                    |  | ctor to improve the public health and conserve the environment | in the |
|     |                           | Guatemala Met      | ropolitan Area by 2015; and 2)To cond      | luct the F/S for the selected priority projects.               |        |
|     |                           |                    |  |  |        |
|     | OD TO COMPT TO OR OTHER   |                    |  |  |        |
| 6.  | OBJECTIVES OF THE         |                    |  |  |        |
|     | STUDY                     |                    |  |  |        |
|     |                           |                    |  |  |        |
|     |                           |                    |  |  |        |
|     |                           |                    |  |  |        |
|     |                           | N:1 G : 1 G        | In a Co. Lat                               |  |        |
| _   | CONCERT THE NAME OF       |                    | onsultants Co., Ltd.                       |  |        |
| 7.  | CONSULTANT(S)             | Pacific Consulta   | ants International                         |  |        |
|     |                           |                    |  |  |        |
| 8   | STUDY PERIOD              | Mar.1995 ~         | Sep.1996 18month(s)                        |  |        |
| ٥.  |                           | ~                  |  |  |        |
|     |                           | Guatemala Met      | ropolitan Area                             |  |        |
|     |                           |                    |  |  |        |
|     |                           |                    |  |  |        |
| _   |                           |                    |  |  |        |
| 9.  | SITE OR AREA              |                    |  |  |        |
|     |                           |                    |  |  |        |
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|     |                           |                    |  |  |        |
| 10  | MA TOD DDODOGED DI        | DO FECTE(C)        |  |  |        |
|     | MAJOR PROPOSED PR         | ROJECT(S)          |  |  |        |
|     | I/P>                      |                    |  |  |        |
|     |                           | for the sewerage/  | sanitation facilities, and operation/man   | agement plan of those systems/facilities (20,470ha)            |        |
| <F/ | /S>                       |                    |  |  |        |
| C   | onstruction Schedule of s | sewerage/ sanitati | on facilities in the top priority area (So | outh-3 area:2,360ha) selected in the Master Plan.              |        |
|     |                           | C                  |  | , ,  |        |
| Πm  | np. Period]               |                    |  |  |        |
|     | Д/P>                      |                    |  |  |        |
|     | 999~2015                  |                    |  |  |        |
|     | 5/S>                      |                    |  |  |        |
|     |                           |                    |  |  |        |
| 1   | 999~2001                  |                    |  |  |        |
|     |                           |                    |  |  |        |
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CSA GTM/S 219/96 M/P+F/S

|                | Completed or In Progress | Promoting  |
|----------------|--------------------------|--|
|                | Completed                | Promoting  Delayed or Suspended  Discontinued or Cancelled |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended                                       |
|                | Implementing             |  |
|                | Processing               | Discontinued or Cancelled                                  |

#### Description:

#### (FY 1997 Domestic Survey)

As recommended in the F/S, EMPAGUA started to execute the South-3 project with an external loan, but the recent unfavorable economic condition of Guatemala and the priority of the Guatemala City for the external loan which was focused on the purchase of public buses, etc., made difficult to arrange a loan for South-3 project.

However, the increasing wastewater generated in the South-3 area would degrade rapidly the water environment and living environment, and also would contaminate very important ground water (Water source of Guatemala Water Supply), if no wastewater management projects start.

Since it is urgent to start the wastewater management project in South-3 area, EMPAGUA prepared an application for grant-aid to Japanese Government and submitted to SEGEPLAN for the approval.

It has been reported that recently SEGEPLAN approved the application and informed EMPAGUA to proceed.

#### (FY 1998 Domestic Survey) (FY 1998 Overseas Survey)

Although the request for OECF loan was supposed to be submitted, another project was given higher priority. However, the negotiation is undergoing through SEGEPLAN, and the request is planning to be submitted in coming Jan.1999.

#### \*Contents of the request:

- OECF loan
- Planned implementation agency: EMPAGUA
- Planned implementation schedule: year of around 2000
- Contents: Construction of sewerage/ sanitation facilities in the priority area in F/S and its relating D/D, S/V (Supervision), and C/S (Consulting Services).

#### (FY 1999 Domestic Survey)

Government of Guatemala is in the process of selecting one project for requesting Japan's ODA loan out of three projects, one of which is the project proposed by this Study.

#### (FY 1999 Overseas Survey)

Government of Guatemala (SEGEPLAN and Ministry of Finance) decided that the proposed project by this Study should be put first priority in requesting Japan's ODA loan. EMPAGUA submitted the document to Ministry of Finance in Dec.1999.

Amount to be requested: 128,460,000 USD

Contents: sewage collecting channel, sewage treatment plant, etc.

#### (FY 2001 Domestic Survey)

Although this project has a high priority, it is difficult to implement by the financing under the Yen loan because of the financial problem of EMPAGUA.

#### (FY 2002 Overseas Survey)

The implementing agency is collecting information on the current or planned projects.

(F/S)

|     |         |       | $(\mathbf{F}/\mathbf{S})$ | Compiled | Jun.1997 |
|-----|---------|-------|---------------------------|----------|----------|
| CSA | GTM/S 3 | 13/96 |                           | Revised  | Jul.2009 |
|     |         |       |                           |          |          |

| COUNTRY                 | Guatemala  |   |   |  |  |   |   |
|-------------------------|--|---|---|--|--|---|---|
| NAME OF STUDY           | Comprehensive  | Urban Transporta  | tion System in  | the Metropoli  | tan Area   |   |   |
| SECTOR                  | Transportation   | / U   | Irban Transport   | ation  | 4.   | TYPE OF STUDY F/S   |   |
| COUNTERPART AGEN        | CY AT THE  |   | ,   |  |  |   |   |
| PRESENT COUNTERPA       |  |   |   |  |  |   |   |
| OBJECTIVES OF THE STUDY |  |   |   |  |  |   | n the   |
| CONSULTANT(S)           |  |   |   |  |  |   |   |
| STUDY PERIOD            | Sep.1995 ~   | Jan.1997  | 16month(s)  |  |  |   |   |
| SITE OR AREA            |  | Metropolitan area   |   |  |  |   |   |
|                         | NAME OF STUDY SECTOR  COUNTERPART AGENTIME OF DEVELOPME  PRESENT COUNTERPA  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD | NAME OF STUDY  SECTOR  Transportation  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  To conduct the I public transportation  OBJECTIVES OF THE STUDY  Yachiyo Engine Chodai Co., Ltd.  STUDY PERIOD  Sep.1995  Guatemala | NAME OF STUDY  SECTOR  Transportation  Transportation  Tuber of Development Study  PRESENT COUNTERPART AGENCY  To conduct the F/S for the developublic transportation system and to public transportation system and to public transportation system and to Consultant(s)  Yachiyo Engineering Co., Ltd. Chodai Co., Ltd.  STUDY PERIOD  Sep.1995 ~ Jan.1997  Guatemala Metropolitan area  SITE OR AREA | COMPRESENT COUNTERPART AGENCY  To conduct the F/S for the development project of public transportation system and to improve the restriction of the system a | COMPRESENT COUNTERPART AGENCY  To conduct the F/S for the development project of urban transpublic transportation system and to improve the road network in the Metropolity  OBJECTIVES OF THE STUDY  To conduct the F/S for the development project of urban transpublic transportation system and to improve the road network in the Metropolity  OBJECTIVES OF THE STUDY  Yachiyo Engineering Co., Ltd. Chodai Co., Ltd.  STUDY PERIOD  Sep. 1995 ~ Jan. 1997 16month(s)  Guatemala Metropolitan area | SECTOR Transportation Vurban Transportation Vurban Transportation  4.  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  To conduct the F/S for the development project of urban transportation system and to improve the road network in the Metropological Consultants  OBJECTIVES OF THE STUDY  Yachiyo Engineering Co., Ltd. Chodai Co., Ltd. Chodai Co., Ltd. STUDY PERIOD  Sep.1995 ~ Jan.1997 16month(s)  Guatemala Metropolitan area  SITE OR AREA | NAME OF STUDY  Comprehensive Urban Transportation System in the Metropolitan Area  Transportation / Urban Transportation 4. TYPE OF STUDY FS  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  To conduct the F/S for the development project of urban transportation system in the Metropolitan Area to strengthe public transportation system and to improve the road network in the Metropolitan Area.  OBJECTIVES OF THE STUDY  Yachiyo Engineering Co., Ltd.  CONSULTANT(S)  Sep.1995 ~ Jan.1997 16month(s)  Guatemala Metropolitan area  SITE OR AREA |

#### ${\bf 10.\ \ MAJOR\ PROPOSED\ PROJECT(S)}$

1) Petapa road

Construction project to build the trunk road between Guatemala and Petapa to the south. This road is planned as a four-lane rod 7.2km in length and 30m in width.

2) Fegua exclusive bus road

An inter-city railway runs through the Guatemalais urban area from south to north. The planned road will utilize the unused right-of-way on both sides of the railway as a exclusive bus road. This will greatly improve bus service.

3) Bus inspection and service center. The center will contribute to improvement of the maintenance of Guatemalais inner city buses while improving the bus service. This will also facilitate the flow of public transportation. This center will also help reduce urban pollution from buses, such as air pollution, noise, and vibration. The center planned will have an inspection capacity of 3,000 buses annually.

[Imp. period]

- 1) 1998~2000
- 2) 1998~2003
- 3) 1997~1998

CSA GTM/S 313/96 F/S

| PRESENT STATUS | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

#### (FY 1998 Overseas Survey)

Construction of Naranjo Bridge and supplement construction work of the East-west Corridor have been implemented with own fund of Guatemala City. The renewal of signals, traffic signs, bus stops, and other equipment which was proposed by JICA has been completed by 40 % and transferred to the Public Transport Management Institution

The subsequent study (D/D) regarding East-west Corridor and Atanazio Tzul Project is planning to be conducted in 2000 ~ 2001 and the request for the loan is to be submitted by the end of this year.

#### Japanese technical cooperation:

#### (FY 1998 Overseas Survey)

1999 ~ (1 year) Acceptance of 4 trainees (public transport).

#### (FY 1998 Overseas Survey)

The project is proceeding satisfactorily because

- -raising finance became within the range of possibility with establishment of regulations from 1995.
- -the government became to understand the importance to carry out the proposed plan of the comprehensive urban transportation system in metropolitan area .
- the present president makes good use of his experience as a mayor.

#### (FY 1999 Overseas Survey)

Construction of the followings has been completed: La Paz Calzada (5km), Atanazio Tzul Calzada (5km), Rafael Landivar Boulevard (5km), acquisition of buses, level crossing, network of signals, etc.

Request for Japanese government's cooperation for "Centralization and automatization of the signal system in Guatemala City" was submitted.

F/S for "" is under implementation with own fund. Request for BCIE (Central American Bank for Economic Integration) is suspended.

#### (FY 2000 Domestic Survey)

- (1) Petapa Road: Public Project Agency improved the part of the Road, there has been little progress.
- (2) FEGUA exclusive bus road: No progress
- (3) Bus inspection and service center: The request for Japan's grant aid was submitted in 1997 but not adopted.

#### (FY 2001 Domestic Survey)

Out of the proposed projects, part of the one for the East-West Corridor was implemented financed by the Central American Bank for Economic Integration (BCIE). As for the development of public transportation, a new arterious route was constructed with the introduction of large buses and the bus networks were reorganized, based on the concept of the M/P of the study.

One of the unimplemented projects is the construction of exclusive bus lanes. The obstacles are as follows;

- 1) Lack of coordination with the reconstruction of FEGUA (railways)
- 2) Lack of prospects of financial source

To promote the project further, a policy change is necessary, from the one to focus on introducing new-type buses to the one to develop infrastructure and bus system at the same time.

#### (FY 2001 Overseas Survey)

- 1) Petapa Road: The traffic in the south part of the town was improved by the project. At present, as a part of road integration of this area, Atanasio Tzul Project is being integrated. Atanazio Tzul was planned as a busway along FEGUA Railroad.
- 2) FEGUA busway: Busway is not included in the extension road of Atanasio Tzul.
- 3) Bus Inspection and Service Center: No application has been submitted. 300 buses of 800 city transportation authority buses are in service. Operation application was planned for improvement of air quality and maintenance standards.

#### (FY 2002 Domestic Survey)

Out of 13 km of the proposed road construction project for the East-West Corridor, 8.3 km of the suburban part including a 300-meter bridge across Baranco Valley has been completed and placed in service.

## (FY 2002 Overseas Survey)

Atanazio Tzul arterious road: Progress of the construction 90 %

South extra urban bus terminal (transfer station for long-distance routes): At the stage of planning. Operation is planned to be started in July 2003 (BOT scheme) Urban exclusive bus lane (arterios road, South Corridor Aguilar Batres): At the stage of planning. Operation is planned to be started in July 2003 (BOT scheme)

<sup>\*</sup> This project is derived from JICA M/P "Comprehensive Urban Transportation System in Guatemala Metropolitan Area (S101/91)".

# STUDY SUMMARY SHEET (M/P)

(M/P) Compiled Sep.2003
CSA GTM/A 109/02 Revised Jul.2009

| 1.  | COUNTRY                           | Guatemala                         |                       |  |             |                     |                             |
|-----|-----------------------------------|-----------------------------------|-----------------------|--|-------------|---------------------|-----------------------------|
| 2   | NAME OF STUDY                     | Master Plan Stu                   | dy on Sustamable Rura | Development for the Re                             | eduction of | Poverty in the Cent | ral Highland Region of the  |
| 2.  | NAME OF STUDY                     | Republic of Gua                   | itemala               |  |             |                     |                             |
| 3.  | SECTOR                            | Agriculture                       | / (Agricult           | ture in) General                                   | 4.          | TYPE OF STUDY       | M/P                         |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME |                                   |                       |  |             |                     |                             |
|     | PRESENT COUNTERPA                 |                                   |                       |  |             |                     |                             |
| 6.  | OBJECTIVES OF THE STUDY           |                                   |                       | icient examination of the ghland Region of the Rep |             |                     | d Rural Development for the |
| 7.  | CONSULTANT(S)                     | Nippon Koei Co<br>Asia Air Survey |                       |  |             |                     |                             |
| 8.  | STUDY PERIOD                      | Feb.2000 ~                        | Mar.2003              | 37month(s)   |             |                     |                             |
|     | SITE OR AREA                      |                                   |                       |  |             |                     |                             |
| 10. | MAJOR PROPOSED PR                 | O.IECT(S)                         |                       |  |             |                     |                             |

List of small-scale project projects(Total Amount: 5,231,400GTQ)

Xeatzan Bojo District: 1. Program for promoting of sew business (beneficiaries: estimated 200 people, project cost: 261,900GTQ), 2. Small-scaled irrigation project (beneficiaries: 80 households, project cost: 906,000GTQ), 3. Program for improving quality of drinking water (beneficiaries: 240 households, project cost: 18,920GTQ),

Panyevar District: 4. Program to increase coffee production (beneficiaries: 72 households, project cost: 128,100GTQ), 5. Program to introduce processing facilities to coffee production (beneficiaries: 80 households, project cost: 75,370GTQ), 6. Program to rehabilitate drinking water facilities (beneficiaries: 298 households, project cost: 609,180GTQ), 7. Program to improve quality of drinking water (beneficiaries: 298 households, project cost: 35,850GTQ)

Pachum District: 8. Afforestation program (beneficiaries: 198 households, project cost: 140,704GTQ), 9. Program to breed breeding commorant by women group (beneficiaries: 150 households, project cost: 73,082GTQ), 10. Program to improve the quality of drinking water (beneficiaries: 121 households, project cost: 231,210GTQ), 11. Program to improve quality of stove range/promotion of sauna/sweating-bath (beneficiaries -stove:130 households, -sauna: 40 households/kitchen range, project cost: 166,000GTQ), 12. Program to establish supplying general medicine unit (beneficiaries: estimated 150 households, project cost: 51,392GTQ)

Palestina District: 13. Program to establish model farm for Potatoes production (beneficiaries: 210 households, project cost: 13,155GTQ), 14. Program to improve Potatoes reservation system (beneficiaries: 210 households, project cost: 655,712GTQ), 15. Small-scaled irrigation program (beneficiaries: 75 households, project cost: 1,228,000GTQ), 16. Program to improve quality of drinking water (beneficiaries: 106 households, project cost: 150,570GTQ), 17. Program to improve heath care service in municipalities (beneficiaries: 325 households, project cost: 91,837GTQ), 18. Program to formulate immigrants control plan in southern region (beneficiaries: 200 households, project cost: 394,000GTQ)

CSA GTM/A 109/02 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### Description:

(FY 2005 Domestic and Overseas Survey)

Technical cooperation:

Dispatch of experts: 1 personnel, 2002/Sep - 2005/Oct

Beneficiary of technical cooperation through dispatch of agricultural policy experts is MAGA. This project aims to establish and review MAGA's agricultural policy, to determine the main strategy, and to give some advice regarding the indication of prioritised projects and programmes. Support for the staff and the Ministry of Agriculture and overseas cooperation project section played an effective role in promoting the cooperation projects that the Ministry requested from Japanese government in the past 3 years. The ministry is requesting Japanese government to continue technical cooperation, but it has not been determined.

(FY 2006 Domestic and Overseas Survey)(FY 2007 Domestic and Overseas Survey)

Implemented projects (progress of small-scale project)

Xeatzan Bojo District

1. Program for promoting of sew business:

(FY 2006 Overseas Survey) All of revolving funds, stock and supply of threads are in shortage. Beneficiaries of the project purchase threads in Patzun (in Chimaltenango Prefecture) and are not interested in rescuing shops.

(FY 2007 Overseas Survey) The threads shops drew up capital investment and the project was closed in Dec. 2005, due to delays of payment of debt.

2. Small-scaled irrigation project:

(FY 2006 Overseas Survey) Contract agreed with engineers in order to implement vegetable market investigation, to support cultivation management technology, to make irrigation schedule, and to sustain the project. We also input 72,000 GTQ.

(FY 2007 Overseas Survey) The number of beneficiaries was increased to 100 households. The project contributes to improving income since it is possible to cultivate in dry season. Also, the project contributes to making the way of account various and to expand the cultivation area.

3. Program for improving quality of drinking water:

(FY 2007 Overseas Survey) Since the demand for water was increased, the plan to use other water source, which is near to the village, has already been submitted. MAGA have conducted a guidance for forestation of water resource areas in order to afforest in water source area.

#### Panyevar District

4. Program to increase coffee production:

(FY 2006 Overseas Survey) The greenhouse is not used and wooden basic construction part is remaining. Corn seeds are sown in the place of greenhouse.

(FY 2007 Overseas Survey) Since the greenhouse was damaged by a strong wind in 2002, neither investment nor negotiation have been conducted to rebuild the greenhouse.

5. Program to introduce processing facilities to coffee production

(FY 2006 Overseas Survey) There are 4 coffee beans separators. According to beneficiaries, the quality of coffee beans extracted by the separator are poor and only 7% of them are used. The custom of selling the remaining 93% to brokers has been continuously practiced.

(FY 2007 Overseas Survey) People now do not have to go far, because they are now working within the area. Currently, work and marketing are conducted in the area. 6. Program to rehabilitate drinking water facilities

(FY 2006 Overseas Survey) Greenhouse was built with chlorine treatment system installed. However, the basic construction part remains unused, since the community does not purchase chlorine.

(FY 2007 Overseas Survey) Sustainability has been maintained since concerning organization still exists. Chlorine treatment has now been implemented and waste water has also decreasing.

#### Pachum District

9. Program to breed breeding cormorants by women group

11. Program to improve quality of stove range/promotion of sauna/sweating-bath

(FY 2006 Overseas Survey) As the use and stockpile of firewood are limited, improved kiln is used for festivals and special occasions and during the cold season. Sauna was removed. A few existing units are used twice a month (exclusively used by the old). The young generation tends to use other types of system with more practical functions.

(FY 2007 Overseas Survey) 130 stove and 10 saunas were produced, which reduced at least 50% firewood. However, materials which were initially used have already worn out.

#### Palestina District

13. Program to establish model farm for Potatoes production

(FY 2007 Overseas Survey) The potato production is implemented by the producer organization. Therefore, the producers organization itself, which achieved to sustain its activities, can be thought as the main beneficiaries.

14. Program to improve Potatoes reservation system

(FY 2007 Overseas Survey) the silo mentioned above became unused since storage method have changed.

16. Program to improve quality of drinking water

(FY 2006 Overseas Survey) Chlorine sterilization of drinking water by utilizing the difference of elevation are in operation in the communities of Los Perez, Los Morales and Los Dias.

(FY 2007 Overseas Survey) Impact of the project in the municipality's responsibility for chlorine treatment. The degree of utilisation is low since residents did not allow to dig wells by machines.

17. Program to improve heath care service in municipalities

(FY 2006 Overseas Survey) Among 3 drug stores operated by the community in the city, two are still in operation. One was closed due to the shortage of manpower. The mobile toilet plan was cancelled.

18. Program to formulate immigrants control plan in southern region

(FY 2007 Overseas Survey) Beneficiaries established local chemists in 3 places. These chemists is in function not only in the small villages of Los Dias and Los Cabrera, but also in the center of the city.

(M/P+F/S)

Compiled

Sep.2003

**CSA** GTM/S 221/02 Revised Jul.2009 1. COUNTRY Guatemala The Study of National Turism Development for the Republic of Guatemala NAME OF STUDY 4. TYPE OF STUDY M/P+F/S 3. SECTOR / (Tourism in) General Tourism COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY (1) Formulation of National Tourism M/P with 2020 as the target year (2)selection of priority tourism development regions and formulation of region M/P with 2020 as the target year, (3)selection of pilot projects with 2010 as the target year and implementation of a feasibility study for them, (4)technology transfer to C/P OBJECTIVES OF THE STUDY Pacific Consultants International 7. CONSULTANT(S) Dec.2000 Apr.2002 16month(s) 8. STUDY PERIOD 9. SITE OR AREA

#### 10. MAJOR PROPOSED PROJECT(S)

Development strategy: Conservation and social development through tourism

1) Social development through tourism; 2) Adequately managing and conserving tourism resources; 3) Increasing the competitiveness of the tourism sector

#### El Peten PTDA

Short-term plan: 1) Tourism improvement of archaeological sites that are important from a tourism viewpoint and are ready to receive visitors; 2) Development of Peten Itza Resort; 3) Prepare Installation plan of visitor management system in Tikal

Lon-term plan: 1) Development of Peten Iza Resport; 2) Development of Community Tourism in Uaxactun; 3) Development of nature tourism facilities along the San Pedro River; 4) Tourism improvement of archaeological sites in remote areas.

Short-term pilot projects: 1) Tourism improvement of Yaxha and Nakum archaeological sites; 2) Development of the Maya Research and Learning Center; 3) Tourism improvement of Celbal and Aguateca archaeological sites; 4) Development of Archaeology and Regional Culture Center.

#### Las Verapaces PTDA

Short-term plan: 1) Tourism developments for the Verapaz Eco-Corridor formulation; 2) Development of Community Tourism in San Cristobal Verapaz; 3) Promotion and supports for agrotourism and private reserve; 4) Improvement of existing tourism products along the Coban - Flores Tourism Corridor, and promotion of the overland trip from Coban to Flores.

Long-term plan:1) Tourism improvements of Coban City: museums, creasion gathering places; 2) Extension of the Verapaz Eco-Corridor: Chilasco Falls, Laguana Lachua; 3) Establishment of the Huehuetenango-Coban-Izabal Tourism Corridor; 4) Development of a bypass toad that connects Guatemala City and Salama.

Short-term pilot projects: 1) Tourism improvement of Sierra de Yalijux; 2) Development of the Verapaz Eco-Corridor Itnerpretation Center; 3) Development of Sierra de Pampacche Cloud Forest Park;

#### The Southwestern Highlands PTDA

Short-term plan: 1) Development of Community Tourism in Momostenango; 2) Tourism improvement of Quetzaltenango City; 3)

Development/improvement of visitor facilities related with cultural tourism; 4) Establishment of linkage with ethnic tourism destinations along the Huchuetenango-Coban Tourism Corridor.

Long-term plan: 1) Development/improcement of nature-based tourism products in the volcanic area; 2) Development of spa resorts and their integration with nature and cultural tourism; 3) Strengthning of linkage with Mexico.

Short-term pilot projects: Development of Community Tourism in Momostenango

CSA GTM/S 221/02 M/P+F/S

| PRESENT STATUS | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY 2003 Overseas Survey)

The following papers were prepared based on the studies under the support of San Carlos University, Faculty of Architecture.

1) Priority Tourism Development Region in Peten: Improvement of El Seibal Archaeological Site for sightseeing purposes, improvement of Soyassye Local Culture Center, improvement of Dos Pilas Archaeological Site for sightseeing purposes. 2) Tourism Development Region in Berapesesu: Rehabilitation and regulation for use of the Historical Center and tourist hotels in Koben city. 3) Southwest Tableland Priority Tourism Development Regions: Development of the Traditional Toy Museum and improvement of hot spring facilities in Zunil and Tikobikkusu (Kettuarutenan), ponchos and exhibition shops for the Textile Museum, and hot spring baths and accommodations (Totonikakan)

(FY 2005 Domestic and Overseas Survey)

Construction of visitor centre has been conducted in Verapace region, supporting Semuc Champey project. In addition, through the cooperation program targeting 6 local entities, customer service and cookery training were conducted, as well as assisting in funds and equipment for infrastructure development (supported by international agencies and NGO). In South-West region, assistance to Comite de Autogestion Turistica de Totonicapan comprising Momostenago were given.

Guatemalan tourist department financed 240 million GTQ to support a project to strengthen competitiveness of small or medium-sized corporation in the area of tourism. With its four pillars, skill training, technical assistance, accreditation of skills, financial assistance, the project has been implemented in Flores, Peten, Copan, Alta Verapace, Livingston, Izabal, Antiqua Guatemala, Sacatepequez.

Implemented project: Sustainable tourism development for Maya civilisation

Implementing period: 2002-2003

Funding party: INGUAT, USAID (a program on sustainable tourism), the French government

Objectives: 1) To develop local communities and to establish tourist routes (focusing on tourist sites in Peten Department) in the area of Maya civilization 2) To prepare technical survey report for reconstruction of Mundo Maya Airport 3) To prepare technical survey report for reconstruction of Melchor de Mencos custom office 4) To prepare technical survey report for reconstruction of Tikal visitor center.

Relation with the report of the study: While the JICA's study targets at the whole country, this study on Maya civilization targets only at Peten Department. However, the study on Maya civilization is to implement a strategy derived from the study by JICA as a base, aiming to promote tourism and social development with the participation of local people through Comite de Autogestion Turistica de Totonicapan.

Status: The USAID has stated to support the project and is planning to dispatch a study team from December 2005 to January 2006. In addition, the financial support from the department of public financing under the Ministry of Finance is also expected. However, to receive such assistance, it is necessary to gain recognition from the Secretariat of Planning and Programming and approval from the Bank of Guatemala, and then to seek approval from the Diet.

Implemented project: Improvement of tourism conditions in Yaxha Nakum historic site

Implementing body: INGUAT

Contents: a) construction of access road and visitor center; b) Improvement of tourism conditions in Nakum historic site (restoration, securing of finance for the construction of access road and visitor center, preparing interpreters in archeological park, financing small amount of loans and human resource development for Comite de Autogestion Turistica de Totonicapan, formulation of a preservation area management plan and assistance to guards)

Implemented project: Improvement of tourism conditions in Ceibal and Aguateca

Implementing body: INGUAT

Contents: restoration of stone monuments, restoration of models of historic sites, and reconstruction of visitor center which is planned to be implemented in 2006 Implemented project: Improvement of tourism conditions in Uaxactun

Implementing body: INGUAT

Contents: assistance for a local eco-tourism guide program, financial support for restaurants for tourists.

(FY 2006 Domestic and Overseas Survey)

Request has been made to BID concerning Peten department for Maya biosphere reserve.

Activities in 2004:

1) For 2 month during September and October, several seminars on technical assistance and financial assistance were held to construct cooperative relationships between implementing bodies of each plan, technical advisory institutions, and financial institutions. 2) Implementation of prioritized project/study in prioritized tourism development area.

Activities in 2005:

1) Peten prioritized tourism development: 7 projects, 3 studies 2) Verapaz prioritized tourism development: 1 project 3) Southwestern highlands prioritized tourism development: 1 project

Activities in 2006:

1) Peten prioritized tourism development: 4 project, advocacy, environment management, and etc: 7 program 2) Verapaz prioritized tourism development: 1 project 3) Southwestern highlands prioritized tourism development: 2 project in preparation

(FY 2007 Domestic Survey)

Implemented project: Enhancing Committee of Tourist Self-management (Comite de Autogestion Turistica/CAT)

Implementing period: 11 September 2007 - 10 September 2010

Implementing body: INGUAT

Objects: Enhance capacity of the CAT in Las Verapaces and El Peten in order to promote tourism using communities' resources.

Contents: 1) Enhancing organizational capability of the CAT, and establishing and maintaining cooperation system between public sectors, communities and small-scale tourism industries; 2) Development of tourism commodities: Identifying tourism commodities and packages; 3) Tourism infrastructures and services: Improving services and infrastructures to receive visitors including preserving tourism resources; 4) Marketing and promotion: Promoting identified tourism commodities and packages.

Relationship with the mentioned study: Implementing the strategies to build capacity of tourism administration which were recommended in the development study. The project was the result of the technical cooperation request from the Government of Guatemala.

(FY 2007 Overseas Survey)

Activities in 2007

1. El Peten PTDA: Tourist facilities in the Remate Beach, etc (5 measures).

Activities in 2008, 2009, 2010 (plan)

1. El Peten PTDA: Improving El Petencitio Zoo (2009-2010) 2. Las Verapaces PTDA: Tourist facilities of Chilasco Waterfall (2009-2010), etc. (2 measures) 3. The Southwestern Highlands PTDA: Improving the tourist facilities at Riscos de Momostenango, etc. (2008) (2 measures)

(Basic Study)

Compiled Mar.2005 **CSA** GTM/S 501/03 Revised Jul.2009

| 1. | COUNTRY                               | Guatemala  |  |  |  |  |  |
|----|---------------------------------------|--|--|--|--|--|--|
| 2. | NAME OF STUDY                         | The Study for Establishument of Base Maps and Hazard Maps for GIS in the Repubulic of Guatemala  |  |  |  |  |  |
| 3. | SECTOR                                | ocial Infrastructure / Survey & Mapping 4. TYPE OF STUDY Basic Study   |  |  |  |  |  |
| 5. | COUNTERPART AGEN<br>TIME OF DEVELOPME |  |  |  |  |  |  |
|    | PRESENT COUNTERPA                     | T AGENCY   |  |  |  |  |  |
| 6. | OBJECTIVES OF THE STUDY               | o develop 1/50,000 scale topography, Hazard map on earthquake, volcano, flood, Technology transfer   |  |  |  |  |  |
| 7. | CONSULTANT(S)                         | OKUSAI KOGYO CO., LTD.   |  |  |  |  |  |
| 8. | STUDY PERIOD                          | nn.2001 ~ Sep.2003 32month(s)<br>~   |  |  |  |  |  |
| 9. | SITE OR AREA                          | arthquake: Guatemala City, Quetzaltenango, Mazetanango, Escuintla, Puerto Barrios, Volcano: Santiaguito, Cerro quemado, Pacaya, Tacana, Landslide: Guatemala City, Quetzaltenango, Antigua, Landslide (northwest region): El Quiche, fuehuetenango, San Marcos, Landslide (central region): Sacatepequez, Chimaltenango, Flood: Samala River basin, come River basin, Achiguate River basin, Maria Linda River basin |  |  |  |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

#### Recommendation:

- 1. Future development of transferred technologies
- 1) Digital plotting/compilation technologies: (1) Training of engineers, (2) Increase of production, (3) Higher production efficiency.
- 2) Database/GIS technologies: (1) Accessing upgrading cost of the existing application under the license and data conversion, and to plan the future work, and fund raising for the required cost from the equipment, technology, products and others provided in the project, (2) The responsibility of each engineer to participate in technology transfer training be defined to enhance his motivation in the technology transfer.
- 3) Digital Printing technologies: (1) Film output methods, (2) hardware for DTP, (3) Acquire the operation of the image processing software and page layout software, (4) Effective use of existing data (GIS database), social contribution by digital maps.
- 4) Current tasks in National Geographical Institute (IGN) and National Institute for Seismology, Volcanology, Meteorology and Hydrology (INSIVUMEH) and proposals for the future: (1) Developing human resources, (2) Investing in equipment, and (3) Securing budgets.
- 5) Proposals for disaster prevention: (1) Establishing hazard maps into disaster prevention maps, (2) Implementing disaster prevention activities in the department level, (3) Enhancement of a municipality for disaster prevention of communities by providing them with the appropriate guidance, (4) Raise awareness about disaster prevention in community level.
- 2. Recommendations for project implementation of the disaster prevention plan formulation
- 1) Types of disaster prevention plans: (1) Extensive disaster prevention, (2) National disaster prevention, (3) Local disaster prevention
- 2) Local disaster prevention and use of hazard maps: Formulating and utilizing the continuing hazard maps through the cooperation of INSIVUMEH, CONRED, IGN and SNIG.
- 3) Enhancement of functionality of the emergency action and measures organization: Promoting CONRED for national disaster prevention (Creating frameworks for sustainable development of disaster prevention measures, Collecting and analyzing data on natural and social conditions in preparation for influences from disasters, securing the governing function, protecting people and their properties, enhancing the socio-economic systems)
- 3. The recommendation Guatemala to launch at an early date the next project, "Community Disaster Management Project." which the CONRED shall be an implementing agency with collaboration from Western countries and Japan.

CSA GTM/S 501/03 Basic Study

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 2004 Overseas Survey)

1. In the survey, making a hazard map is under consideration, the work has been completed. In future, although we desire to take consideration of other important areas where has potentiality of being damaged by natural disasters, to implement it, capital is needed.

2. IGN has taken 10,000 km2 aviation photographs by its own found in 2003. Then in 2004, 4,100 km2 aviation photograph is being taken. Continuing digitalization of the scale of 1 to 50,000 basic maps and photographing the scale of 1 to 100,000 in other area.

(FY 2005 Domestic Survey) (FY 2007 Overseas Survey)

Subsequent study: Field database improvement for hazard map preparation

Implementing period: January, 2004 - 6 January, 2006

Implementing body: INSIVUMEH

Objectives: 1) To gather new data in areas damaged by hydrologic and atmospheric phenomenon, such as hurricane, tropical shower, land slides, and flood. 2) To gather field data for hazard map preparation. 3) To improve and update the database acquired through field works of JICA study and for newly targeted regions. Contents: Data gathering has been incorporated in FY 2004 activity. Information and maps developed has been distributed to related regional municipality and institutions.

Technical cooperation:

Training program: Seminars for technical transfer on GIS system and hazard maps (300 personnel / 19 - 20 June, 2003)

Others: 1) Skill training for the project, 2) Procedures of hazard map drawing (February, 2001), 3) Skills for interpretation of geographical photograph (June, 2001), 4) Analysis method for disaster history (June, 2002), 5) Examination of hazard map (June, 2003)

Benefit:

Beneficiaries: the city authority, CONRED, and other institutions concerned

Benefits: Municipalities in target area of the project now posses hazard map (in both paper and digital). In addition, CONRED has worked on with early warning system in the target area. Many of the institutions concerned including the road department and SEGEPLAN utilize the outcome of the project, for example by introducing the hazard map in their own development plans. JICA also used the project results for the study on the construction of a new airport in Masagua, Escuintla. In addition, the hazard map is released on the website of INSIVUNMEH (www.insivumeh.gob.gt) so that it can be widely used among the public, and the images are also available free of charge. Furthermore, INSIVUMEH accepts inquiries from high school or university students at its office or on its website through the Internet (www.insivumeh.gob.gt). Progress:

(FY 2005 Overseas Survey) 75%

(FY 2007 Overseas Survey) CONRED has operated early warning systems at targeted areas of the study. (FY 2007 Overseas Survey)

Subsequent study: IGN modernisation

Implementing period: January, 2006 - June, 2007

Implementing body: IGN

Objective: To improve correspondence and implementation skills.

Funding:

Funding party: Own fund, Switzerland Grant Aid

Amount: 200 million USD, half of the amount from Grant Aid, and other half from low rate loans to procure equipment

Content

First phase: Procurement of equipment (January, 2006 - June, 2006)

Second and third phase: contract and construction (January, 2006 - August, 2007)

Output: 1) Improvement of technical skills, 2) Also graphic for land registration map preparation

Progress:

1. Technical transfer concerning aerial triangulation, digital elevation model (DEM), contour drawing, 2. Technical transfer concerning distortion correction of topographical survey and drawing ortho image map (Part 1), 3. Technical transfer concerning distortion correction of topographical survey and drawing ortho image map (Part 2), 4. Technical transfer concerning vectorization, correction mapping, and DEM creation., 5. Technical transfer concerning structuration and application of GIS data, 6. Technical transfer concerning structuration and application (correction) of GIS data, and data conversion for printing, 7. Technical transfer concerning legend and digital map editing (Part 1), 8. Technical transfer concerning legend and digital map editing (Part 2)

Progress:

(FY 2006 Overseas Survey) Number and specification of the instrument has already been divided, which is now in negotiation for procurement in Switzerland.

(FY 2008 Domestic Survey)

Implementing project: Wide digital orthophoto map maintenance

Funding body: Loan from World Bank

Implementing body: MAGA

\*The project was implemented based on the advice of IGN. This multipurpose database will be used not only for agricultural development but also for a cadastral survey purpose.

Subsequent study: Disaster Planning Program Preliminary Survey

Implementing body: JICA

Implementing period: March, 2009

\* Necessity of the repair of rivers and bridges at highly prone to accidents and road accident prevention was confirmed. The project is expected to be conducted with a Yen Loan

Implementing project: Weather Observation Radar maintenance

Implementing body: IDB Implementing period: 2009 \* Details are unknown.

# STUDY SUMMARY SHEET (M/P+F/S)

Compiled Feb.2007 GTM/S 201/05 Jul.2009 Revised

| Ci  | OA G1N/52   | W1/U5                              |                |                    |                    |            |             |           | Revised | Jul.20 |
|-----|---|------------------------------------|----------------|--------------------|--------------------|------------|-------------|-----------|---------|--------|
| 1.  | COUNTRY   | Guatemala                          |                |                    |                    |            |             |           |         |        |
| 2.  | NAME OF STUDY   | The study of the                   | improvement/   | construction of t  | he International A | Airport in | the Republi | ic of Gua | itemala |        |
| 3.  | SECTOR  | Transportation                     | / /            | Air Transportation | on & Airport       | 4.         | TYPE OF     | STUDY     | M/P+F/S |        |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME   |                                    | Ministry of Co | ommunications,     | Infrastructure and | Housing,   | MCIV        |           |         |        |
|     | PRESENT COUNTERPA   | ART AGENCY                         |                |                    |                    |            |             |           |         |        |
| 6.  | 1) Improvement plan of existing airports until the opening of the new international airport, 2) Selection of appropriate site for the new airport, 3) F/S for the new international airport project, 4) Proposal of project method for the new international airport, 5) Support for environmental and social considerations study  OBJECTIVES OF THE STUDY |                                    |                |                    |                    |            |             |           |         |        |
| 7.  | CONSULTANT(S)   | Japan Airport Co<br>Nippon Koei Co |                |                    |                    |            |             |           |         |        |
| 8.  | STUDY PERIOD  | May.2003 ~                         | Mar.2005       | 22month(s)         |                    |            |             |           |         |        |
| 9.  | M/P: 19 potential sites in a range of 150km x 150km in the Southern Guatemala F/S: The new international airport construction project targeting the year 2020 at the site 14B  . SITE OR AREA   |                                    |                |                    |                    |            |             |           |         |        |
| 10. | MAJOR PROPOSED PR   | OJECT(S)                           |                |                    |                    |            |             |           |         |        |
|     | OMINGI GOLD IN  | 22202(0)                           | J              |                    |                    |            |             |           |         |        |

M/P:

**CSA** 

Air passenger demand in 2030 6.5 million, new international airport plan accommodating 258,000 tons of air cargo demand, 2 3,500m runways, passenger terminal building 105,700m?, cargo terminal building 24,100m?, parallel runway, passenger apron, cargo apron, aircraft maintenance apron, control tower/administration building, fire station, aviation security facilities, aircraft fuel facilities, approaching road

F/S: Airport facilities to accommodate 4.2 million of air passenger demand and 165,000 tons of cargo in 2020 are to be developed. 1 3,500m runway, parallel runway, passenger apron, cargo apron, aircraft maintenance apron, passenger building 69,600m?, cargo building 15,400m?, control tower/administration building, fire station, aviation security facilities, aircraft fuel facilities, approaching road Proposed project budget:

M/P:

Site No. 11: 925 million US dollars Site No. 12: 886 million US dollars Site No. 14(B): 917 million US dollars Site No. 14(C): 930 million US dollars

F/S:

First phase: 564.694 million USD (local currency: 136.58 million USD, foreign currency: 428.114 million USD)

Period of a planned project: F/S first phase: From 2008 to 2014 CSA GTM/S 201/05 M/P+F/S

| PRESENT STATUS | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

#### (FY 2006 Domestic Survey)

The Guatemalan government announced that the current airport would be extended in August 2005, the last year of this study. The government has had a contract with ICAO since April 2006 and a reform construction has been resumed (40 million USD). On the other hand, the MCIV selected local companies to implement the Environmental Influence Assessment so as to acquire environmental license for a new international airport construction project. The study has been implemented and is still in process. However, once the improvements of the current airport are completed,

#### (FY 2006 Overseas Survey)

UNEPRA and MCIV have conducted the evaluation of the mentioned study by surveying the Improvement and Construction of the Guatemara International Airport.. However, decision for airport construction has not been planned before 2009.

#### (FY 2007 Domestic Survey)

The Ministry of Communications, Infrastructures, and Housing is implementing EIA on construction site proposed for the new airport. While the Civil Aviation Bureau changed the policy to expand the existing airport. From 2006, civil aviation department, consulted by on expert from ICAO, started expansion works using own fund, which phase 1 have completed. Thus, with a extension work in progress, construction of a new airport is unlikely to the realised.

the expand work started by own fund consulted by ICAO experts and phase one of the construction was done in December 2007. From above-mentioned reasons, the construction of new airport seems unlikely.

#### (FY 2007 Overseas Survey)

With a new regime established in late 2007, implementation of proposals will be considered by the new regime. The decision of implementing recommendations in the mentioned study is up to the new administration (2007-). However following supplementary works were conducted during 2007: 1) The Ministry of Communications, Infrastructures, and Housing and the municipality of Masagua, Escuintla Department concluded the agreement about protecting the project site of constructing the new airport; 2) The border stone was set to the project phase one and two construction site; 3) The EIA of the project was completed and approved by the Ministry of Environment and Natural Resources.

**(F/S)** 

Compiled Mar.1990 CSA HND/A 301/78 Revised Jul.2009

| 1.                            | COUNTRY  | Honduras  |   |                      |
|-------------------------------|--|---|---|----------------------|
| 2.                            | NAME OF STUDY  | Agricultural De   | evelopment in the Choluteca River Basin                         |                      |
| 3.                            | SECTOR   | Agriculture   | / (Agriculture in) General                                      | 4. TYPE OF STUDY F/S |
| 5.                            | COUNTERPART AGEN<br>TIME OF DEVELOPME  | CY AT THE   | Ministry of Natural Resources                                   |                      |
|                               | PRESENT COUNTERPA  | ART AGENCY  |   |                      |
| 6.                            | OBJECTIVES OF THE STUDY  | F/S   |   |                      |
| 7.                            | CONSULTANT(S)  | Nippon Koei C   | o., Ltd.  |                      |
| 8.                            | STUDY PERIOD   | Jul.1977 ~  | May.1978 10month(s)   |                      |
|                               | SITE OR AREA   |   | OLUTECA plan, southern part of Honduras                         |                      |
|                               | MAJOR PROPOSED PR  |   |   |                      |
| 2.Ir<br>3.Ir<br>Ir<br>Ir<br>D | rigation Facilities:  take weir 1 place  rigation Canal 158km(Norainage Canal 144km(Norainage Canal 122km)  taken Road 122km  taken Road 122km | 00 ha(new 14,370<br>Main 26.3km, Bra<br>Main 121.9km, S | Oha, existing pumping 1,630ha)  anch 46.5km)  Secondary 22.5km) |                      |
| Th                            | e project cost 1) is for the   | e entire project a                                      | nd 2) for the 1st Stage(the dam and irrigation developm         | ent of 12,400ha).    |
|                               |  |   |   |                      |

CSA HND/A 301/78 F/S

|                 | Completed or In Progress | Promoting                 |
|-----------------|--------------------------|---------------------------|
| DDDGENE GEARNIG | Completed                |                           |
| PRESENT STATUS  | Partially Completed      | Delayed or Suspended      |
|                 | Implementing             |                           |
|                 | Processing               | Discontinued or Cancelled |

#### **Description:**

The project was suspended for a while after the completion of F/S.

Subsequent Studies:

1984 F/S was updated by JICA

Aug.2.1985 L/A 1,651 mil.Yen

(Agricultural Development in the Choluteca River Basion E/S)

Dec.1985 -May 1988 D/D implemented

#### Finance:

The request was submitted in March 1987 for an OECF loan, however, due to the high project cost, it was not accepted.

(FY 1994 Domestic Survey)

The Structural Adjustment Program was initiated by the World Bank, which also made some comments on the environmental aspects of this project. In 1992 OECF implemented SAPROF and concluded that the project would not give any serious adverse impact on environment. The World Bank and the Government of Honduras are discussing about the implementation of the project.

Refer to "Choluteca River Basin Agricultural Development Project (Updating Study 1984 HND/A 302/84)".

**(F/S)** 

Compiled Mar.1986 CSA

1. COUNTRY HND/S 301/79 Revised Jul.2009 Honduras

| NAME OF STUDY   | New Tegucigalpa Airport Development   |  |
|---|---|--|
| SECTOR  | Transportation / Air Transportation & Airport 4. TYPE OF STUDY F/S  | 1  |
| -   | Directorate General of Civil Works, Min. of Communications, Public Works & Transport  | ٦  |
|   |   |  |
|   |   |  |
|   |   |  |
| CONSULTANT(S)   | Japan Airport Consultants, Inc.   |  |
| STUDY PERIOD  | Dec.1977 ~ Jul.1979 19month(s) ~  |  |
| SITE OR AREA  | Valle de Talanga, 60km north of Capital City  |  |
| ilities to be developed Runway Apron Passenger Terminal Bldg Airport lighting and radio navaids | Size/quantity 2,700m x 45m 69,100sq.m g. 12,000sq.m   |  |
| (power, telephones water  | supply/sewerage) Total system 45km x 75m  |  |
|   |   |  |
|   | SECTOR  COUNTERPART AGENCY TIME OF DEVELOPME  PRESENT COUNTERPA  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD  SITE OR AREA  MAJOR PROPOSED PRESIDITION OF THE STUDY  MAJOR PROPOSED PRESIDITION OF THE STUDY APPONENT OF THE STUDY APPONENT OF THE STUDY OF THE | SECTOR Transportation / Air Transportation & Airport   4. TYPE OF STUDY   F/S    COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  To select suitable site for new airport to replace the existing airport seriously handicapped by aircraft operation problems  ORIECTIVES OF THE STUDY  Japan Airport Consultants, Inc.  CONSULTANT(S)  Japan Airport Consultants, Inc.  Valle de Talanga, 60km north of Capital City  Valle de Talanga, 60km north of Capital City  MAIOR PROPOSED PROJECT(S)  illities to be developed Size/quantity Runway 2,700m x 45m Apron 69,10084 m Passenger Terminal Bildg. 12,00084 m Passenger Term |

デグシガルパ新空港建設計画

CSA HND/S 301/79 F/S

|                       | Completed or In Progress | Promoting                 |
|-----------------------|--------------------------|---------------------------|
| DD FIGURE OF A FIX IC | Completed                |                           |
| PRESENT STATUS        | Partially Completed      | Delayed or Suspended      |
|                       | Implementing             |                           |
|                       | Processing               | Discontinued or Cancelled |

#### **Description:**

#### (FY 1993 Overseas Survey)

Although the request for an OECF loan was approved, the object of spending of the loan was re-examined as the result of the change of the Government, and the loan was applied to other public investment. A research financed by Spain was conducted between 1987 and 1989, and concluded that the other proposed site was better sited than Talanga. To date, the other site has still been the most important candidate for the airport, and proposal are submitted from each of a British and a American engineering companies, and under appraisal of the Chamber of Commerce and Industry, SECOPT and Tegucigalpa city.

#### (FY 1994 Domestic Survey)

Anglo-American contractors consortium named Lehrer McGovern Bovis won a contract from Blivian Government to construct New Tegucigalpa Airport on the built-operate-transfer basis. the 3-year contract includes construction of a 3,500m-long runway and other facilities in the contract amount of US\$120 million.

#### (FY 1997 Domestic Survey)

Implementation of project would be difficult because it is said that cost for construction of new airport is more than 10bil.yen. BOT project seems to have no progress.

(Basic Study)

|          |                                   | (Basic Study)   | Compiled          | Mar.1990 |
|----------|-----------------------------------|---|-------------------|----------|
|          | SA HND/A 501                      |   | Revised           | Jul.200  |
| 1.       | COUNTRY                           | Honduras  |                   |          |
| 2.       | NAME OF STUDY                     | Inventario Forestal del Distrito Forestal de La Mosquitia   |                   |          |
| 3.<br>5. | SECTOR                            | Forestry / Forestry & Forest Conservation 4. TYPE OF STUDY  Forest Development Corporation of the Republic of Honduras                | Basic Study       |          |
|          | COUNTERPART AGENTIME OF DEVELOPME | NCY AT THE  |                   |          |
|          | PRESENT COUNTERP                  | PART AGENCY   |                   |          |
|          |                                   | To provide the fundamental data and information to systematize the forest management for the socio-economic development in Mosquitia. | e contribution to |          |
| 6.       | OBJECTIVES OF THE STUDY           |   |                   |          |
| 7.       | CONSULTANT(S)                     | Japan Forest Technical Association  |                   |          |
| o        | CELIDA DEDICE                     | Dec.1980 ~ Mar.1983 27month(s)  |                   |          |
| 5.       | STUDY PERIOD                      | ~   |                   |          |
| 9.       | SITE OR AREA                      | An area of 2,000 sq.km in Mosquitia District, Gracias A Dios Province   |                   |          |
| 0.       | MAJOR PROPOSED PI                 | PROJECT(S)  |                   |          |
|          |                                   | an pines in the subject area, a forest management plan was proposed containing following compo  | onents:           |          |
|          | ountermeasures against f          |   |                   |          |
|          | nprovement of forest road         |   |                   |          |
| To       | enlarge natural regener           | ration and re-afforestation   |                   |          |
|          | increase the timber pro           |   |                   |          |
|          | -                                 |   |                   |          |
|          |                                   |   |                   |          |
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|          |                                   |   |                   |          |

CSA HND/A 501/83 Basic Study

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

Utilization of the Study:

(FY 1993 Overseas Survey)

The results of this study such as the aerial photographs, the topographic maps, forest type maps, etc., are used by the authorities concerned.

In recent years the Government of Germany implemented a technical cooperation project using this forest management plan.

At the donor conference held in 1989, the Government of Germeny showed the interest in implementation of Forest management and Reserve protection project of Rio Platano. F/S for [Proyecto de manejo y Proteccion de la Reserva de la Biosfera del Rio Platano] has been completed and the agency is now negotiating with GTZ and KFW for the implementation of the project.

#### Situation:

Application of the Grant Aid for the implementation of sawlumber project was made in 1983 however the application was not approved. Wood chips production project near Nicaragua border was intended in 1986 but it was not implemented.

#### (FY 1996 Overseas Survey)

Because more than ten years have passed since the completion of this Study, the renovation of outputs is necessary. The Government of Honduras, however, has no fund to allocate to it or have no concrete national forest plan.

#### (FY 1997 Overseas FU Survey)

Finance:

Lps 12 mil. in 15 years

The investment made by AFE-COHDEFOR (Corporacion Hondurena de Desarrollo Forestal) in 1997 was more than \$ 100,000 less than that of 1983.

#### Situation of Progress:

1.Wood utilization

Out of 240,000 feet of sawed wood per year recommended, 37.0%

was achieved.(89,000 ft/year)

2.Forest Road

57 km were built, which represents a 48.6% of the programed 130.3 km.

3.Forest Protection

Fire Fence - 115km of fire fences (12% of recommendation) were built.

Fire detection towers - In addition to the existing 5 towers, construction of 10 towers was recommended, of which 1 was constructed and is in use.

Fire Control - Reduction of burned areas by fires in a 43.0% of the identified area in 1983.

In general, application level of the recommended measures is not superior to 20% of the five-year planned goals of the inventory.

Currently the private development institute (MOPAWI) is doing management in more than 3,000 hectares of the Dursura forest supported by VIDA foundation, WWF of Germany and the Tear Fund of Canada.

#### Causes for the unaccomplishment:

- -Lack of political clarity, related to the kind of management that should be keeled on the zone, if as a protected zone of the Rio Platano Biosphere reserve or as a forest production zone
- -Refugees presence and armed civil groups from Nicaragua
- -Occupational personnel instability, due to the difficult condition of the zone such as accessibility, housing and nourishment
- -Nonexistence of sectorial politics which are responsible for integrating the zone in a national development plan
- -The limited public diffusion provided by the information about the management plan

(Basic Study)

|             |   |  | (Basic Study)   | Compiled     | Mar.1990  |
|-------------|---|--|---|--------------|-----------|
| CS          |   | /83                                      |   | Revised      | Jul.2009  |
| 1.          | COUNTRY   | Honduras                                 |   |              |           |
| 2.          | NAME OF STUDY   | Fisheries Resou                          | irces Survey  |              |           |
|             | SECTOR  | Fishery                                  | / Fishery 4. TYPE OF STUDY Basic Bureau of Rehabilitation, Ministry of Natural Resources; Fishery Section, Economic |              | Agency    |
|             | COUNTERPART AGEN<br>TIME OF DEVELOPME                 |  |   |              |           |
|             | PRESENT COUNTERPA                                     | ART AGENCY                               |   |              |           |
| 6.          | OBJECTIVES OF THE STUDY                               | To survey the a                          | quacultural resources along the Coast of Atlantic Ocean in order to promote the fishe                               | ry industry. |           |
|             |   |  |   |              |           |
| 7.          | CONSULTANT(S)   |  |   |              |           |
| 8.          | STUDY PERIOD  | Jun.1981 ~                               | Mar.1983 21month(s)   |              |           |
| 9.          | SITE OR AREA  | From To                                  | rujillo to Puerto Cortes, North sea-shore of Honduras   |              |           |
|             | MAJOR PROPOSED PR                                     |  |   |              |           |
| - F         | ishing port is necessary b                            | etween Tela and                          | La Ceiba.   |              |           |
| - It<br>- U | is necessary to improve to inder the proper condition | the distribution s<br>n of distribution, | ystem.<br>fishing base, etc., bottom gillnet, shark long line, trawl fishing are useful for marine r                | esource dev  | elopment. |
|             |   |  |   |              |           |

CSA HND/A 502/83 Basic Study
In Progress or In Use

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

Utilization of the Study:

(FY 1993 Overseas Survey)

Among recommendations of the study, improvement of long line fishery of shark was not implemented because of low economic value of shark, Fish harbour improvement and commercialization of products are implemented at several locations of Atlantic sea coast utilizing JICA Mini Project at Trujillo as a model project. The agency is planning to initiate small scale fishery development project at La Mosquitia, province of Gracias a Dios, however lack of social infrastructure such as road and communiation system causes difficulty for the implementation of the project.

#### Situation:

(FY 1991 Overseas Survey)

The Ministry of Natural Resources is requesting Japanese assistance for similar studies in other areas (Cortes, Atrantida, Colon, Bahia islands, Gracias a Dios). (FY 1995 Overseas Survey)

Trying to materialize the modernization of the fishing port of Trujillo as a mini-project to make it the basement to carry on new test and investigations at the Carribean Sea Coast.

The Master Plan Study on Small Scale Fisheries Development Project on the North Coast of The Republic of Honduras is being implemented from December 1995. (FY 1996 Overseas Survey)

It is desired to conduct a study on the impact of fish catchment, the regional and seasonal resource availability, the lifecycle and fish behavior in order to renew this Study result.

(F/S)

Compiled Mar.1990 CSA HND/A 302/84

|      |  | 04/0 <del>4</del> |                   |                                      |                     |        |           |      |     | Revised | Jui | .2007 |
|------|--|-------------------|-------------------|--------------------------------------|---------------------|--------|-----------|------|-----|---------|-----|-------|
| 1.   | COUNTRY  | Honduras          |                   |                                      |                     |        |           |      |     |         |     |       |
| 2.   | NAME OF STUDY  | Choluteca Rive    | er Basin Agricult | tural Developmen                     | t Project (Updating | Study) |           |      |     |         |     |       |
| 3.   | SECTOR   | Agriculture       | ,                 | (Agriculture in)                     | General             | 4.     | TYPE OF S | TUDY | F/S |         |     |       |
| 5.   | COUNTERPART AGEN<br>TIME OF DEVELOPME  |                   | Ministry of Na    | tural Resources                      |                     |        |           |      |     |         |     |       |
|      | PRESENT COUNTERPA  | ART AGENCY        |                   |                                      |                     |        |           |      |     |         |     |       |
| 6.   | OBJECTIVES OF THE STUDY  | Update of feasi   | bility study cond | ducted in 1977 in                    | Choluteca Area.     |        |           |      |     |         |     |       |
| 7.   | CONSULTANT(S)  | Nippon Koei C     | o., Ltd.          |                                      |                     |        |           |      |     |         |     |       |
| 8.   | STUDY PERIOD   | Aug.1984 ~        | Mar.198           | 5 7month(s)                          |                     |        |           |      |     |         |     |       |
|      | SITE OR AREA   | (Inves            |                   | part of Honduras<br>000ha,population |                     |        |           |      |     |         |     |       |
|      | MAJOR PROPOSED PR  |                   | haiaht 100r       | wast lamath 220                      |                     |        |           |      |     |         |     |       |
| 2. I | San Fernando Dam:Concr<br>Irrigation Area:20,600ha(<br>Irrigation Facilities |                   |                   |                                      |                     |        |           |      |     |         |     |       |

1 intake weir(concrete type, weir height 4.8m, crest length 140m)

Main canals 30.6km(Western Area 23.6km, East-A Area 7.0km)

Branch canals 75.5km(Western Area 45.2km, East-A Area 30.3km)

Secondary canals 33.6km(Western Area only)

Main Drainage canals 113.0km(W.Area 90.5km, E.-A Area 22.5km)

Secondary drainage canals 27.0km(Western Area only)

- 4. Power Plant:Installed Cap. 18.2MW, Annual Output 53.6GWh
- \*The project cost 1) above is for the entire project, and 2) for the 1st Stage(Dam & Power plant and irrigation dev. of Western Area)

\*The implementation period below pertains to the 1st Stage of the project.

CSA HND/A 302/84 F/S

|                | Completed or In Progress                   | Promoting                 |
|----------------|--|---------------------------|
| PRESENT STATUS | Completed Partially Completed Implementing | Delayed or Suspended      |
|                | Processing                                 | Discontinued or Cancelled |

#### Description:

\*Refer to "Agricultural Development in the Choluteca River Basin (1978)".

#### Subsequent Studies:

Dec.1985 -May 1988 D/D (Consulting firm/Nippon Koei Co., Ltd.)

Aug.1985 L/A 1,651 mil.Yen (E/S)

#### Finance:

The request was submitted in March 1987 for an OECF loan, however, due to the high project cost, it was not accepted.

#### Detail:

#### (FY 1993 Overseas Survey)

After the completion of D/D funded by the OECF loan, the World Bank, which had been promoting the Structural Adjustment Program in Honduras, reviewed various development studies implemented there. Concerning this project, the World Bank made several recommendations for the environment protection and for the reduction of the project cost. As a response to those recommendations, OECF conducted SAPROF study, however, since then, no progress has been made to implement the project.

#### (FY 1994 Overseas Survey)

No problem was found by SAPROF conducted in 1992, to implement the project. After that negotiation is being held between the World Bank and Honduras.

#### (FY 1997 Overseas FU Survey)

#### Causes for Suspension:

The financial constraint such as allocation of a large amount of money to another priority project (El Cajon Hydroelectric Project) and existence of external debt is main cause. After the change of regime, priority to this project has been lowered.

Moreover, the lack of clear policy of water resources management, appropriate legal framework for irrigation and multipurpose water use development, and intersectoral coordination framework has caused the delay.

#### Perspective for Implementation:

There is a low possibility to implement the project. However, hydroelectric generation and agricultural development are important because there is a growing interest in irrigation schemes and increasing demand for energy. To promote the implementation, participation of private sector and review of F/S in accordance with a new natural resources management policy are necessary.

#### (FY 1998 Domestic Survey)

There is little possibility to implement the projects by Japanese ODA.

(F/S)

Compiled Mar.1990 **CSA** HND/A 303/85 Jul.2009 Revised

| 1.  | COUNTRY                               | Honduras         |                                       |                                     |                     |    |  |    |
|-----|---------------------------------------|------------------|---------------------------------------|-------------------------------------|---------------------|----|--|----|
| 2.  | NAME OF STUDY                         | Aguan Valley A   | Agricultural Deve                     | lopment Project (                   | Saba-Olanchito Area | ı) |  |    |
| 3.  | SECTOR                                | Agriculture      | / (                                   | (Agriculture in) C                  | eneral              | 4. | TYPE OF STUDY F/S  |    |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME | CY AT THE        | National Agrari                       |                                     |                     |    |  |    |
|     | PRESENT COUNTERPA                     | ART AGENCY       |                                       |                                     |                     |    |  |    |
| 6.  | OBJECTIVES OF THE STUDY               |                  |                                       |                                     |                     |    | which include: introduction of new irrigation land; and development of uncultivated farm | 1; |
| 7.  | CONSULTANT(S)                         | Pacific Consulta | ants International                    |                                     |                     |    |  |    |
| 8.  | STUDY PERIOD                          | Feb.1984 ~       | Jun.1985                              | 16month(s)                          |                     |    |  |    |
|     | SITE OR AREA                          | 188,             | entral Valley(Sat<br>000 people, 200k | oa-Oranchito)<br>.m from capital, 2 | 3,000ha             |    |  |    |
| TŲ. | MAJOR PROPOSED PR                     | OJECI(3)         |                                       |                                     |                     |    |  |    |

For the purpose of the promotion of agrarian reform programs, the increase of agricultural production for export, the generation of new job opportunities, the rationalized distribution of population and etc, the Lower Aguan Project has been carried out since 1971 at

the Aguan Valley located in the north part of the Honduras.

Considering the importance of the continuous development of the Valley, the agricultural development project for the Middle Aguan was planned as

Land Reclamation: 9,100ha (double-cropping 1,600ha, semi-annual cropping 4,800ha, Fruit growing and others 2,700ha)

Irrigation Facilities (Maximum water requirement 4.1 m3/s)

Head works: 4

Siphon : River crossing 1, other 41

Pumping Station: 2(capacity 2.1 m3/s, 0.4 m3/s) Irrigation canal: Main 73.7 km, secondary 81.0 km

Related Structures: 213

Drainage Facilities (Proposed discharge 15.2 m3/s)

Drainage Canal : 64.6km Drop Works : 90 Transportation Facilities Main Farm Road : 82.0km Blanch Farm Road: 120.7km Bridge :82

アグアン川流域農業開発計画

CSA HND/A 303/85 F/S

|                 | Completed or In Progress | Promoting                 |
|-----------------|--------------------------|---------------------------|
| DDDGENE GEARNIG | Completed                |                           |
| PRESENT STATUS  | Partially Completed      | Delayed or Suspended      |
|                 | Implementing             |                           |
|                 | Processing               | Discontinued or Cancelled |

#### **Description:**

After the completion of F/S, the economic situation of the country was worsened, foreign debt was accumulated. The other project (Choluteca River Basin Agricultural Development) was suspended after the D/D, and there has been no progress regarding this project.

Reasons for Cancellation:

(FY1993 Overseas Survey)

Since the study was conducted, no effort for financing of the project implementation has been made. Reasons why the project is cancelled are

- (1) huge project cost;
- (2) no financial arrangement is planned; and
- (3) allocation of government budget is getting difficult due to the Structural Adjustment Programme.

Moreover, situation of the project site has been changed and beneficiary farmers of the project site sold their farm land to Standard Fruit Corporation.

(Basic Study)

|     |                                       | (Basic Study)   | Compiled      | Mar.1991 |
|-----|---------------------------------------|---|---------------|----------|
| CS  | SA HND/S 501/                         | 89  | Revised       | Jul.2009 |
|     | COUNTRY                               | Honduras  |               |          |
| 2.  | NAME OF STUDY                         | Groundwater Development Project in Comayagua  |               |          |
|     | SECTOR                                | Social Infrastructure   | e Study       |          |
|     | COUNTERPART AGEN<br>TIME OF DEVELOPME | ICY AT THE  |               |          |
|     | PRESENT COUNTERPA                     | ART AGENCY  |               |          |
|     | 1                                     | Groundwater Potential Evaluation & Master Plan of Rural Water Supply.                                   |               |          |
| 6.  | OBJECTIVES OF THE STUDY               |   |               |          |
|     |                                       | Nippon Koei Co., Ltd.   |               |          |
| 7.  | CONSULTANT(S)                         |   |               |          |
| 8.  | STUDY PERIOD                          | Feb.1988 ~ Oct.1989 20month(s)  |               |          |
|     |                                       |   |               |          |
|     |                                       | Comayagua Basin (Municiparity Comayagua & La Paz)   |               |          |
|     |                                       |   |               |          |
| 9.  | SITE OR AREA                          |   |               |          |
|     |                                       |   |               |          |
|     |                                       |   |               |          |
|     |                                       |   |               |          |
| 10. | MAJOR PROPOSED PR                     | ROJECT(S)   |               |          |
|     |                                       | ded that the project should be implemented in stages, and by the end of the second stages, of which the | e target year | is 1996, |
| 60  | units of the type 1 and 22            | 2 units of the type 3 should be constructed as the rural water supply system.                           |               |          |
|     |                                       |   |               |          |
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CSA HND/S 501/89 Basic Study

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

In November 1989 the Government of Honduras made a second request for the Japanese grant aid.

Subsequent Studies:

Mar.1990 B/D

(1)Phase I

Subsequent Studies:

Jul.1990 D/D

Finance:

28 Jun.1990 Grant Aid E/N, no more than 1,108 mil. Yen for digging of 53 wells and construction of water supply facilities

Construction:

Feb.1992 Completed

(2)Phase II

Subsequent Studies:

Aug.1991 D/D

Finance:

9 Jul.1991 Grant Aid E/N, no more than 394 mil.Yen for digging of 36 wells and construction of water supply facilities

Construction:

Jul.1992 Completed

Total project cost of Phase I and II was 1,529 mil. Yen, 1,502 mil. Yen of which was financed by the Japanese grant aid and 270 mil. Yen was the own fund of the Government of Honduras.

(3)Phase III-1

Subsequent Studies:

Feb.1988~Oct.1989 D/D (JICA 20 mil.Yen 1&2)

Finance:

Dec.1993 Grant Aid E/N, no more than 520 mil. Yen (Local Cost: equivalent to 50 mil. Yen, budget of Ministry of Public Health) for digging of 200 wells and construction of water supply facilities: 30wells in Phase III-1, 30 wells in Phase III-2 and 140 wells to be constructed with the government fund.

Construction:

Dec.1994 Commenced Mar.1995 Completed

(4)Phase III-2

Subsequent Studies:

Feb.1988~Oct.1989 D/D (JICA 20 mil.Yen 1&2)

Finance:

 $26\,\mathrm{Jul.}1994\,$  Grant Aid E/N  $205\,\mathrm{mil.}Yen$ 

(Own fund:1,174,705Lp/year)

(Local Cost: equivalent to 50mil.Yen, budget of Ministry of Public Health)

Construction:

Apr.1995 Commenced Dec.1998 Completed

Construction Trader:Itochu

Situation:

(FY 1996 Domestic Survey)

In Phase III, a total of 105 wells was constructed by Mar.1996 (64 wells with grant aid assistance and 45 wells with local fund (21 constructed between Aug. and Dec.1995 and 20 constructed between Jan. and Mar.1996). Because problems about the maintenance and operation of machinery arose, the Government of Hondurus again submitted a request for grant aid assistance (1,500 mil.Yen). The Government of Hondurus is supposed to undertake the remaining construction works of uncompleted wells. However, the change of the president in Dec.1996 and the owrn-out machinery may become an impediment of the project. Effect:

A total of 154 wells (53 in Phase I, 36 in Phase II, 30 in Phase III (1) and 34 in Phase III (2)) have been constructed since 1990. It contributes to the well-being of residents, the social stability and the strength of Water Users Associations. The rate of water supply has improved from 20% to 60%. Impact on surrounding Environment:

-Higher demand on the well digging and the well improvement

-Participation of municipality governments in the decision making process about places where wells are to be constructed and in their construction

-Consensus among residents concerning the project implementation

-Enlargement of water supply area in the Area 2

-Change in the traditional way of water usage and water consumption

(FY 1996 Overseas Survey)

**(F/S)** 

Compiled Mar.1992 CSA
1. COUNTRY HND/A 304/90 Revised Jul.2009 Honduras

| 2.   | NAME OF STUDY                                   | Rehabilitation of Coyolar Dam and Irrigation Improvement Project in Comayagua Valley               |
|------|---|--|
|      | SECTOR  | Agriculture / Irrigation, Drainage & Reclamation 4. TYPE OF STUDY F/S                              |
| 5.   | COUNTERPART AGEN<br>TIME OF DEVELOPME           |  |
|      | PRESENT COUNTERPA                               | ART AGENCY   |
| 6.   | OBJECTIVES OF THE STUDY                         | Establishment of Coyolar Dam Rehabilitation Plan and Improvement Plan of Flores Irrigation System. |
| 7.   | CONSULTANT(S)                                   | Pacific Consultants International  |
| 8.   | STUDY PERIOD                                    | Dec.1989 ~ Mar.1990 3month(s)  |
| 9.   | SITE OR AREA                                    | Flores Irrigation District and its adjacent area of about 3600 ha                                  |
|      | MAJOR PROPOSED PR<br>chabilitation Plan of Coy- |  |
| - R  | einforcement of existing                        | plan   |
| - C  | onstruciotn of new spillw                       | ay   |
| - R  | ehabilitation of Maintena                       | nce Road   |
| - In | nprovement of Flores Irri                       | gation System  |
| - D  | iversion Weir                                   |  |
| - In | rigation Canal Main<br>Secondary                | 12.55 Km<br>27.70 Km   |
| - In | spection Road 40.2 Km                           |  |
|      |   |  |

CSA HND/A 304/90 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### Description:

The request for the Japanese grant aid submitted in December 1991 was not approved.

Subsequent Studies:

1991 Implemented

Expenses/40,713,010Lp., 17,313,494US\$

Finance:

Dec.1992 A loan from Kuwait Fund was secured

Total Amount/US\$ 29.09 mil.

(US\$ 16.45 mil. for the Dam Rehabilitation, US\$ 8.46 mil. for the Irrigation Project and US\$ 4.18 mil. for miscellaneous)

The government fund was also secured

Total Amount/11.55 mil. Lempira

(7.66 mil. Lempira for the Dam Rehabilitation, 3.89 mil. Lempira for the Irrigation Project)

Difference with the JICA Study:

Installation of 2MW hydropower station

Construction:

(FY 1995 Overseas Survey)

The Coyolar Dam has been developed into the multi-purpose dam. The total construction cost is US\$ 20.7 mil. for foreign currency and 18.59 mil. Lempira for local currency.

(FY 1996 Overseas Survey)

Jun.1993 Commenced (Scheduled to be completed by Dec.1998)

(FY 1997 Domestic Survey)

Mar.1995~May.1996

Contractor / ASTALDI (Italia)

Consulting Firm / CINSA (Honduras)

Cost / 8.2 mil.US\$

Administration:

(FY 1997 Overseas FU Survey)

The project is administrated and handled by Coordinate Unit of the Project El Coyolar, property to the Direction of Water Resources of the Secretary of Natural Resources and Environment.

The handling of the basin is realized by AFE-COHDEFOR in cooperation with the farmers of the District of the Flores, Villa de San Antonio and surroundings.

#### Effect:

The valley of Comayagua supplys an excellent contribution to the agriculture sector of Honduras, especially in the production of vegetables. Vegetables are supplied to the national market and also exported to United States and surrounding countries.

With the rehabilitation of the dam, a very important source of water for irigation in the district of Flores and Villa de San Francisco, 11% and 19% of land that is not cultivated by the lack of water during the season of rain and dry, has been recuperated.

With the production, the standard of living of the farmers can be bettered avoiding the migration to the cities.

#### Situation:

(FY 1997 Overseas Survey)(FY 1999 Overseas Survey)

Stage I (Rehabilitation of the Coyolar Dam): 1995~1996.

Stage II (New irrigation system): completed.

Stage III (Small-scale hydropower generation plant (2Mw)): 1999 ~ Mar. 2000.

Stage IV (construction of administrative building and other constructions and a demonstration farm): 1998 ~ 1999.

(M/P) Compiled Nov.1993 Revised

Jul.2009

| 1.        |   | Honduras                                 |  |  |  |
|-----------|---|--|--|--|--|
| 2.        | NAME OF STUDY   | Rural Telecommunications Network Project |  |  |  |
|           | SECTOR  | Communication                            | s & Broadca / Telecommunication  4. TYPE OF STUDY M/P  |  |  |
| 5.        |   |  | Empresa Hondurena de Telecomunicaciones (HONDUTEL) Development Division  |  |  |
|           | COUNTERPART AGENO<br>TIME OF DEVELOPME                |  |  |  |  |
|           | PRESENT COUNTERPA                                     | RT AGENCY                                |  |  |  |
| 6.        | OBJECTIVES OF THE                                     |  | master plan covering until the year 2002 for a rural telecommunications network offering automatic see to 223 rural community areas (Aldea). |  |  |
| <b>U.</b> | STUDY   | NTT Internation                          | nal Corporation  |  |  |
| 7.        | CONSULTANT(S)   |  |  |  |  |
| 8.        | STUDY PERIOD  | Dec.1991 ~                               | Nov.1992 11month(s)  |  |  |
| 9.        | SITE OR AREA  | 223rural comm                            | unity areas scattering around the whole country of Honduras  |  |  |
| 10        | MA IOD DDODOSED DD                                    | OFCT(S)                                  |  |  |  |
|           | MAJOR PROPOSED PR                                     |  | the telephone penetration ratio per 100 inhebitants in the cubicat areas from 1.10 to 1.66 by providing                                      |  |  |
|           | main content of the proj<br>090 telephone lines until |  | the telephone penetration ratio per 100 inhabitants in the subject areas from 1.19 to 1.66 by providing                                      |  |  |
|           | ise-1 (1994-1997)                                     | ine year 2002.                           |  |  |  |
|           | New telephone exchange                                | stations                                 | 12 Stations  |  |  |
|           | Optical Fiber Cable Trans                             |  | 12 Sections  |  |  |
|           | Digital Multi Access Syst                             |  | 4 Systems  |  |  |
|           | Subscriber lines                                      |  | 5,670 Pair x Kms   |  |  |
|           | se-1 (1997-2000)                                      |  |  |  |  |
|           | New telephone exchange                                |  | 6 Stations   |  |  |
|           | Optical Fiber Cable Trans                             |  | 6 Sections   |  |  |
|           | Digital Multi Access Syst<br>Subscriber lines         |  | 6 Systems<br>14,850 Pair x Kms   |  |  |
|           |   |  |  |  |  |
|           |   |  |  |  |  |
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CSA

HND/S 102/92

CSA HND/S 102/92 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

Reasons of Cancellation:

(FY 1994 Domestic Survey)

This project was discontinued because the American firm, AT&T, started providing the exchanges to main towns and villages holding a mortgate on the change for international call.

#### Situation before Cancellation:

The Government of Honduras has given high priority to developing a telecommunications network because it is indispensable for social and economic development. The state-owned enterprise responsible for telecommunications services in Honduras (HONDUTEL) also has made great efforts to expand telephone services in rural areas. However, HONDUTEL cannot afford to set up telephone services in rural areas because of technical and financial defficulties. As the economy in Honduras depends on primary products, development of primary industries is of vital importance for the nation. However, there is a great difference in the standard of living between rural areas and urban areas. The government, therfore, is actively promoting the development of rural areas.

1. Feasibility Study on Telecommunications Network Expansion Project

No request was submitted in FY 1993 on F/S by HONDUTEL and Ministry of Planning.

2.Rural Telecommunications Network Expansion Project

The proposed project had been revised throughly by the technical planning department of HONDUTEL by October 1993.

The proposal of the revised plan is to provide 7227 lines for 17 prefectures (212 districts). The project divides the country into four regions(Southeast, Northwest, Midwest and North) and is implemented as four sub-projects.

#### \*South-East project

Under implementation (ECU 2.9 mil. Grant from EC and ECU 2.059 mil. domestic fund). It is scheduled to provide 1,511 lines to three prefectures (49 districts).

#### \*Other 3 Projects

As for other sub-projects, requests for grants or long-team soft loans have been made to Japan, Mexico, Canada, and international organizations.

(M/P+F/S)

Compiled Mar.1995

Revised Jul.2009

| CS  | SA HND/S 2                            | 13/93            |  |                                      |                       | Revised | Jul.2009 |  |
|-----|---------------------------------------|------------------|--|--------------------------------------|-----------------------|---------|----------|--|
| 1.  | COUNTRY                               | Honduras         |  |                                      |                       |         |          |  |
| 2.  | NAME OF STUDY                         | Erosion and Sec  | on and Sediment Control in the Pilot River Basin, Choloma, San Pedro Sula, Cortes                |                                      |                       |         |          |  |
| 3.  | SECTOR                                | Social Infrastru | cture / R  | tiver & Erosion Control              | 4. TYPE OF STUDY M/P- | +F/S    |          |  |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME |                  | Ministry of Co.  | mmunications, Public Works and Trans | sportation(SECOPT)    |         |          |  |
|     | PRESENT COUNTERPART AGENCY            |                  |  |                                      |                       |         |          |  |
| 6.  | OBJECTIVES OF THE STUDY               |                  | o formulate a master plan of flood control and sediment control and conduct a feasibility study. |                                      |                       |         |          |  |
| 7.  | CONSULTANT(S)                         |                  | ants Internationa<br>GYO CO., LTD  |                                      |                       |         |          |  |
| 8.  | STUDY PERIOD                          | Aug.1992 ~       | Jan.1994   | 17month(s)                           |                       |         |          |  |
| 9.  | SITE OR AREA                          | North-western    | area of Sula Val   | ley (717km2)                         |                       |         |          |  |
| 10. | MAJOR PROPOSED PR                     | OJECT(S)         |  |                                      |                       |         |          |  |
|     |                                       |                  | -  |                                      |                       |         |          |  |

The Master plan for flood control and sediment control was formulated with the design scale of 50 year flood and recorded maximum sediment disaster in 1974 respectively.

#### 1)Choloma River

- -River improvement 7.8km, embankment 15.6km etc
- -Check dam 10nos, Consolidation dam 17nos., training levee 1.3km

#### 2)El Sauce River/Blanco River

- -River improvement 7.5km, Diversion channel 2.6km, embankment 19.7km etc
- -Check dam 23nos., Consolidation dam 7nos., training levee 4.0km channel works 3 places.

CSA HND/S 213/93 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

Among the master plan of the Choloma river, following urgent plan was formulated by the feasibility study.

Urgent Plan of the Choloma River:

Total cost: US\$22,890 X 1,000( F/C: US\$14,197 X 1,000)( L/C: US\$ 8,693 X 1,000)

1) River improvement 3.4km, embankment 6.9km, revetment 3.4km etc 2) Check dam 2nos., consolidation dam 2nos., training levee 1no. 3) Replacement of railway bridges

The urgent plan of this project covers an area of 712 km2 including river basin of Choloma, San Pedro Sula and Cortes conforming an industrial center of the country with a total population of approximately 330.000.

#### Situation:

(FY 1995 Overseas Survey) This project is now providing to commence the implementation on 1995 and planned to complete on 1997, however, there is no progress due to the difficulty to find the financing.

(FY 1996 Overseas Survey) The Government of Honduras requested the JICA's grant aid to the Government of Japan for implementation of the above urgent plan.

#### (1)Improvement of the hydrologic information system

(FY 1997 Overseas FU Survey) 11 pluviometers donated by the study team were installed in the area of study, San Pedro Sula, Valle de Sula in 1996. They are under administration of Municipal Division of Waters(DIMA) and SERNA(Secretary of Natural Resources and Environment).

(2) Elaboration of Maps of Risk

(FY 1997 Overseas FU Survey) Financial Source: National funds Administration and Handling: Copeco

Year:1994

(3)Canalization of the Choloma River

(FY 1997 Overseas FU Survey)

Scale: 8 km of length and 60 m of width in average

Financial Source: External Funds

Amount: US\$ 100,000

Implementing Organ/Executive Commission of Valle de Sula

Year:1995

(4) Construction of Consolidation Reservoir in the Choloma River

(FY 1997 Overseas FU Survey) Amount: US\$ 100,000

Implementing Organ: Executive Commission of Valle de Sula

Year: 1996

(5) Choloma River Check Dam Construction

(FY 1998 Domestic Survey) Period: Oct. 1998 ~ Feb. 2001 Contractor: Hazama

(FY 2000 Domestic Survey)

Sabo works in the upstream reaches from Choloma City, which are the 1st stage implementation, have been completed in October 2000. The 2nd stage implementation of the river improvement works in the downstream reaches from Choloma City has been started and will be finished by March 2001.

(6)Alarm System

(FY 1997 Overseas FU Survey)

Finance: External Funds Amount: US\$ 5,000/year

Administration and Handling: Copeco

Year: 1990~1997 (7)Urgent Plan

(FY 1997 Overseas FU Survey)

Subsequent Study: Based on the result of the basic study conducted by JICA, detailed design study is being undertaken.

Finance: Jan.20.1998 E/N 60 mil.yen (Flood Control and Sabo in Choloma River)

Construction: 2000 scheduled to be completed

(FY 1999 Domestic Survey) Finance: 15 Jun 1999 F/N 587mil ven

(FY 1999 Domestic Survey) Construction: Construction of the Choloma water transmission weir was started at the end of 1999.

(8)Others

(FY 1997 Overseas FU Survey)

The results of the study are utilized by the institutions related to environment, agriculture and civil works, and universities.

Long-term Plan is planned to be executed from 2001 to 2010.

(9) Remaining projects relating to El Sauce River and Blanco River

(FY 1998 Domestic Survey) Shortage of the budget has impeded the progress of the projects. Since the decline of the river bed of Blanco is serious, SOPTRAVI realizes the importance of countermeasure. It seems that the budget will be gradually allocated for the project and the construction will be started.

(FY 1999 Overseas Survey) There has not been any progress in the project on El Sauce River.

(M/P+F/S)

Compiled Mar.1995

| CS        | SA HND/S 2               |                   |   | Revised  | Jul.2009 |
|-----------|--------------------------|-------------------|---|--|----------|
| 1.        | COUNTRY                  | Honduras          |   |  |          |
|           |                          | Improvement of    | the Ports                               |  |          |
| 2.        | NAME OF STUDY            | improvement of    | die Forts                               |  |          |
| 2         | CECTOR                   | T                 | / D                                     | A MEADE OF CONTRACT 3 4/D F/C                        |          |
| <b>5.</b> | SECTOR                   | Transportation    | / Port                                  | 4. TYPE OF STUDY $M/P+F/S$                           |          |
|           |                          |                   | Empresa Nacional Portuaria(ENP)         |  |          |
|           | COUNTERPART AGEN         | ICV AT THE        |   |  |          |
|           |                          |                   |   |  |          |
|           | TIME OF DEVELOPME        | ENTSTUDY          |   |  |          |
| _         |                          |                   |   |  |          |
| 5.        |                          |                   |   |  |          |
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|           | DDEGENE GOVERNEDD        | A DOT A CITALON   |   |  |          |
|           | PRESENT COUNTERPA        | ARI AGENCY        |   |  |          |
|           |                          |                   |   |  |          |
|           |                          | 100 0 1           |   |  |          |
|           |                          | 1)Port Developi   | nent and Management Strategy; 2)M/P, F/ | S for port of Cortes; and 3)Urgent Improvement Plan. |          |
|           |                          |                   |   |  |          |
|           |                          |                   |   |  |          |
|           |                          |                   |   |  |          |
| 6.        | OBJECTIVES OF THE        |                   |   |  |          |
| υ.        | STUDY                    |                   |   |  |          |
|           |                          |                   |   |  |          |
|           |                          |                   |   |  |          |
|           |                          |                   |   |  |          |
|           |                          |                   |   |  |          |
| -         | <del></del>              | The Overseas C    | oastal Area Development Institute       |  |          |
| 7.        | CONSULTANT(S)            | Nippon Koei Co    |   |  |          |
| ••        | - 31 (D)                 | - Appoint record  | ··, —····                               |  |          |
|           |                          | Ion 1002          | Mar 1004 14month(s)                     |  |          |
| 8.        | STUDY PERIOD             | Jan.1993 ~        | Mar.1994 14month(s)                     |  |          |
|           |                          | ~                 |   |  |          |
|           |                          |                   |   |  |          |
|           |                          | Major ports in    | Honduras                                |  |          |
|           |                          |                   |   |  |          |
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| 9.        | SITE OR AREA             |                   |   |  |          |
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| 10.       | MAJOR PROPOSED PR        | ROJECT(S)         |   |  |          |
| 1.P       | orts Development and M   | Ianagement Strate | gv.                                     |  |          |
|           | evelopment plan for Por  |                   | 6,7                                     |  |          |
|           | Ianagement plan for Port |                   |   |  |          |
|           |                          |                   |   |  |          |
| 4. U      | rgent Improvement plan   | for major ports.  |   |  |          |
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CSA HND/S 214/93 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

(FY 1994 Domestic Survey)

The development plan proposed by this study has three steps as follows.

(FY 1995 Overseas Survey)

It will be settled the medium term plan during 1996 to 1999 for the whole tasks of the improvement of the ports.

(FY 1999 Overseas Survey)

"Development Plan for 21st Century" was formulated in 1998, where the investment for the port infrastructure was proposed. Based on the proposals of this Study, the following projects were planned: Cortes Port cargo terminal (2000~2001), Cortes Port dry grain terminal (2000), Castilla second wharf(75m)(2000), Lempira concrete wharf (50m)(2001).

#### (1)Urgent improvement of ports and harbors

The improvement works of civil facilities and loading/discharging facilities which should be treated as the daily maintenance, and the improvement of management of port have been completed or processing with the responsibility of the port manager.

Construction in Progress:

(FY 1996 Overseas Survey)

May.1995~May.1997 Construction of wharf in Port of Cortes

Construction Trader: COTIZAR (FY 1997 Overseas FU Survey)

<Administration>

As a consequence of modification in the laydays prices, the shipowners will not lay the ships more than necessary. Moreover, efficiency improvement in cargo handling and reduction of labor work accidents have been achieved.

On the other hand, the cut of working hours resulted from introduction of two shift basis, caused the decrease of salaries of workers, then the government had compensated the salaries.

The decentralization of ENP is being discussed in Congress.

Concession period: 25 years

<Urgent Rehabilitation>

Equipments of importance, with durability and which require low investment cost and are simple to repair will be rehabilitated firstly.

(FY 1999 Overseas Survey)

Five container ships were acquired. No.1 crane, P&H crane, dredger, tag boat, chassis were rehabilitated. Radio communications at the container terminal of Cortes Port was improved. Inspection/control of the ships going through the Cortes Port No.11 gate was strengthened, Protector of the wharf of Castilla Port was renewed. Cortes Port No.4 wharf was renewed. Yard of Cortes Port and Castilla Port was improved.

(2)Development Plan for Port of Cortes (short-term: target year of 2000; long-term: target year of 2010)

(FY 1996 Overseas Survey)

Subsequent Studies: Jan.~Jun.1996 Scheduled to be implemented by ENP

Finance:

Finance source is to be determined in 1998

Content:Construction of a new container terminal

Construction: 1998 Scheduled to be commenced

(FY 1997 Overseas FU Survey)

<Construction of basic infrastructure>

3 unit load berths, dry bulk load terminal, refrigerating warehouse terminal, cabotage terminal, alternative route

Finance: ENP US\$ 7 mil. (total expenses up to present)

#### Situation of Progress:

1.Refrigerating Warehouse Terminal

Financial sources: Spanish government and BCIE

Total amount: US\$ 11.75 mil.

Constructed and in operation

2.Terminal Unit

Urgent projects are not started yet because ENP is waiting for decision making by the government on the privatization (maintenance and expansion of public facilities). Urgent project cost / 28,948.9 Ls (47.5% for construction of unit)

3.Cabotage Terminal

Cabotage teminal was constructed in East Free Zone at Cortes Port. - "L" shaped, 200m in length, 4.5m in depth (scaled-down due to the financial constraint)

Completed in 1997 cost: US\$ 1.5 mil.

Mitigation of congestion of general berth and efficiency improvement of cargo handling were acheived.

Extension up to 200m is planned.

4. Coastal Traffic Jetty (La Ceiba)

Completed in 1994 cost / US\$ 5.6 mil.

5.Alternative Route (Stage 1)

Road from the Laguna Bridge to Cortes Port cabotage terminal was completed in 1999 (660m in length, 12m in width). Breakwater was also constructed.

The project contributes not only to the mitigation of traffic jam in Puerto Cortes city but also to tourism development improving the landscape.

The new road (850m) from the cabotage wharf to the new container terminal is to be constructed in 2000.

(F/S)

Compiled Oct.1995

HND/A 305/94 **CSA** Revised Jul.2009 1. COUNTRY Honduras Irrigated Agricultural Development Project in Jesus de Otoro, Intibuca Department NAME OF STUDY 3. SECTOR / Irrigation, Drainage & Reclamation TYPE OF STUDY F/S Agriculture 5. Directorate General of Water Resources, Ministry of Natural Resources COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Elaboration of the most appropriate project implementation plan through the feasibility study of the agricultural development by irrigation in the target area. OBJECTIVES OF THE STUDY KOKUSAI KOGYO CO., LTD. 7. CONSULTANT(S) Naigai Engineering Co., Ltd. Feb.1994 Sep.1992 17month(s) 8. STUDY PERIOD Jesus de Otoro Basin, Intibuca Department, Honduras (with an area of approx.7,500ha and an estimated population of 16,300) 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) 1)Plan of Irrigation and Drainage: Area of Development Trunk canal Branch cana Administrative Rural road EIRR (ha) (km) (km) (km) (%) Left bank of Otro 950 11.5 20.3 32.7 13.2 Right bank of Otro 284 6.6 4.9 11.7 7.7 Right bank of Yucanguare 16.0 19.0 460 2.2 18.2 Left bank of Yucanguare 215 13.4 1.5 11.8 17.1 Naranjo 13.4 11.2 375 1.6 11.8 Mixcre 538 4.1 11.3 15.5 11.9 Cumes 447 4.4 16.4 4.8 9.6 90 1.9 5.5 7.7 7.2 Aro Total 3,359 2)Plan of Agricultural infrastructure: Rural road: 5.96km, Spillway: 3, Farmers' assemly hall: 8, Agricultural development center: 1

CSA HND/A 305/94 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

The final report of this survey works has been submitted in March 1994. Based on the report, the Honduran Government officially requested to the Government of Japan during the fiscal year of 1994 to implement this project by Japanese grant aid.

#### (FY 1995 Overseas Survey)

The negotiation regarding to the financial cooperation is carrying on among both government of Japan and Honduras.

#### (FY 1996 Overseas Survey)

The Japanese Government was requested for the provision of grant aid assistance for the implementation of the Irrigation and Drainage Project targetting 460ha of area covering the left bank of the Yucanguare.

#### (FY 1997 Domestic Survey)

The Government of Honduras is preparing to request a grant aid.

The regime has changed soon after the completion of the study. Therefore, all the projects were checked. The Government has decided to request a grant aid for this project but difficulty in allocating national budget and outflow of C/P at that time due to the change of regime and delayed payment of wages are impeding factors.

#### (FY 1998 Domestic Survey)

It seems that the request for a grant aid assistance for irrigation/drainage development project in Yucanguare Area will be submitted.

#### (FY 1999 Overseas Survey)

1997-98 The request for Japan's grant aid for "Irrigation and Drainage Plan for the Right Bank of Yucanguare" was submitted.

Amount: US\$4,200,000. Contents: construction of facilities, procurement of equipment/materials, technical assistance.

#### (FY 2000 Domestic Survey)

No information.

#### (FY 1997 Overseas FU Survey)

#### Causes of Delay:

The Honduran government defines in its Agricultural Politics(1995-1998) the Valley of Jesus de Otoro as one of the areas with an urgent need for the development of irrigation. However, up to now, actions have not been made in order to reach the project execution. Among the reasons found are,

- -the high total cost of the project and a low number of families who would be benefitted in a direct way
- -the plan proposed a high percentage participation on the part of the Honduran government, which represent 47.5% of the total cost
- -absence of an appropriate legal framework for the hydrological resources.

#### Actual Situation of the Areas:

\*Possession of the land

The legal possession of the land is related to getting credit. All the organism that provide credit in rural areas demand a mortgages. This requires submission of the land title. The government of Honduras developed a plan of expropriation and distribution of land within the framework of agrarian reform with the objective of strengthening families with less than 5 ha.

\*Farmers' organizations

The farmers in the zone are organized in groups, associative enterprises and cooperatuves with the object of administering and working the land in a collective way. At the same time, this grouping makes technical assistance, credit and commercialization of the products.

\*Infrastructure

The road system in the Jesus de Otoro Valley is the same as mentioned in the study. In the last 5 years, 3 communal centers were built in the communities of Aro, San Francisco, and Tatumba.

#### Consideration for the Implementation of the Project:

(Recommendation by the FU consulting company)

For implementation of the poject it is necessary to consider aspects such as the number of beneficiaries, the project cost, the chronogram of execution and others. Firstly, sub-projects which benefit a high number of families of small and medium produce with a high EIRR, namely sub-project of right bank of the Yucanguare river, left bank of the Grande de Otoro river, Naranjo, Mixcure, Aro, right bank of the Grande de Otoro, need to be implemented. The sub-project right bank of the Yucanguare river must be done as a high priority. It is suggested that this sub-project be established as a demonstration center, in which the experiences of the project may be evaluated. At the same time, it can be used to check the changes of attitude of the participating producers, and to give training to other producers of the zone.

The zone of the project is located not far from CEDA (Agricultural Development Training Center) and FHIA (Honduran Agricultural Investigation Foundation), so that the importance of building a development center only for a short period of time in the zone is not clear. Making use of CEDA and FHIA is recommended for the training of technicians as well as producers in the zone.

There are 12 Associative Enterprises of Farmers (EACP) and 18 farmers' groups among farmers' organizations, which is one of the important aspects of the project. This shows that the producers have seen the advantages of being organized. The next step must consist of an organization of the farmers's groups in EACP and of encouraging the non-associated producers. Also the creation of groups of water users will be necessary in each region.

The creation of the legal framework is necessary for the smooth functioning of the irrigation project. The approval of the law of waters by the National Congress is of an urgent because it is necessary to establish a national plan of hydrological resources.

The new agenda of the Honduran government has programed for the next 4 years the implementation of 16,000 ha of irrigation. The bilateral cooperations and support from international organizations are fundamental to achieve the goals.

#### Other Organizations:

The World Bank is conducting the Rural Land Administration Program (US\$ 3.4 mil for 3 years) and Environment Development Project(US\$ 11 mil), and BID is supporting drainage and water supply project. Both banks have no plan to assist irrigation project near future.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Jun.1997

CSA HND/S 119/96 Revised Jul.2009

1. COUNTRY Honduras

| 1.                    | COUNTRY  | Honduras                              |                               |                      |                   |                          |                     |
|-----------------------|--|---------------------------------------|-------------------------------|----------------------|-------------------|--------------------------|---------------------|
| 2.                    | NAME OF STUDY  |                                       | ject of the Vehicle Traf      | fic System in Teguc  | chigalpa          |                          |                     |
| 3.<br>5.              | SECTOR   | Transportation                        | / Urban Tra                   | nsportation          | 4. 7              | TYPE OF STUDY M/I        |                     |
|                       | COUNTERPART AGENTIME OF DEVELOPME  |                                       |                               |                      |                   |                          |                     |
|                       | PRESENT COUNTERPA  |                                       |                               |                      |                   |                          |                     |
| 6.                    | OBJECTIVES OF THE STUDY  | To formulate the Teguchigalpa by      | M/P for the Maintenance 2010. | ce Project of the Ve | hicle Traffic Sys | tem to alleviate the ser | ious traffic jam in |
| 7.                    | CONSULTANT(S)  | Oriental Consulta<br>Central Consulta |                               |                      |                   |                          |                     |
| 8.                    | STUDY PERIOD   | May.1995 ~<br>~<br>Metro Greater T    | Nov.1996<br>eguchigalpa       | 18month(s)           |                   |                          |                     |
| 9.                    | SITE OR AREA   |                                       |                               |                      |                   |                          |                     |
| 1. Ii<br>2. R<br>3. N | MAJOR PROPOSED PR ntersection Improvement Road Improvement and N lew Bridge Construction mprovement of Bus Syste | ew Construction                       | Work                          |                      |                   |                          |                     |

**CSA** HND/S 119/96 M/P

In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled

#### **Description:**

(FY 1997 Domestic Survey)

Teguchigalpa City is carrying out an intersection improvement project with a loan from Mexico.

Teguchigalpa City requested to carry out a bridge construction project over the middle to long-team with a Japanese grant.

(FY 1998 Domestic Survey)

The review of the project is required due to the damage by hurricane on Oct. 1998.

(FY 1998 Overseas Survey)

Study regarding the proposed projects (1),(2), and (4) were conducted;

- (1) Improvement of the traffic toward and the ring road around the National Stadium;
- (2) Improvement of the intersection of Cabanas Blvd. and Santa Fe; and
- (3) Installation of the traffic signs at the intersection of Blvd. Jose Cecilio Valle and Golan Street.

#### (FY 1999 Overseas Survey)

Training on the transportation/traffic projects was held in Sep. 1997 with financial assistance from Mexico. Twelve experts from the Tegucigalpa Road Committee participated in this training

The Government of Honduras constructed the bridge connecting from Comayaguela Sixth Street to Tiloarque.

#### (FY 1999 Domestic Survey)(FY 2000 Domestic Survey)

1. Project for Reconstruction of Bridges in Teguchigalpa Metropolitan Area

Finance:

1999/Dec/17 E/N 73 million JPY 2000/Apr/26 E/N 2,233 million JPY

Construction

Constructor: Konoike Construction Co., Ltd.) Consultants: Central Consultant Inc., PCI

2. Project for Construction of Choluteca Bypass Bridge

Finance:

1999/Dec/17 E/N 68 million JPY 2000/Apr/26 E/N 2,116 million JPY

Construction:

(FY 2001 Overseas Survey) 2000/Oct/24-2003/Jan/31 Constructor: Hazama Corporation Consultants: Central Consultant Inc., PCI

3. Project for Construction of Ilama Bridge and Democracia Bridge

Finance:

1999/Dec/17 E/N 85 million JPY 2000/Apr/26 E/N 3,519 million JPY

Construction:

(FY 2005 Overseas Survey) 2000/Oct/24-2003/Apr/30 Constructor: Hazama Corporation Consultants: Central Consultant Inc., PCI

(M/P)

Compiled Jun.1997

| CS | SA HND/S 123/9  | 96  |  |            |    |               | Revised | l Jul.2009 |
|----|---|---|--|------------|----|---------------|---------|------------|
| 1. | COUNTRY   | Honduras  |  |            |    |               |         |            |
| 2. | NAME OF STUDY   | The Study on the  | The Study on the Strategies and Plans for the Upgrading of Health Status |            |    |               |         |            |
| 3. | SECTOR  | Others  | / Others   |            | 4. | TYPE OF STUDY | Y M/P   |            |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY |   | MOH(Ministry of Hea  | alth)      |    |               |         |            |
|    |   |   | МОН  |            |    |               |         |            |
| 6. | OBJECTIVES OF THE STUDY   | To formulate the M/P for the health care services in the priority sub-sectors and areas; and the strategies to upgrade the comprehensive health and medical services. |  |            |    |               |         |            |
| 7. | CONSULTANT(S)   | System Science  | Consultants Inc.   |            |    |               |         |            |
| 8. | STUDY PERIOD  | Jan.1995 ~  | Oct.1996   | 21month(s) |    |               |         |            |
| 9. | SITE OR AREA  | whole country   | y  |            |    |               |         |            |

10. MAJOR PROPOSED PROJECT(S)

The study identified the present condition of the whole nation and analyzed the problems in Phase I. Based on this analysis, Phase II was carried out to plan the strategies and to prepare the National Master Plan. In Phase III, various rural programs/projects were formulated and selected along with the context of this National Master Plan. The components which possibly need financial assistance from the donor countries or the international organizations are shown below;

- 1. Model Program for Urban Cities (San Pedro Sula city)
- -AIDS promotion center
- -Health information center
- -Maintenance center for medical equipment and facilities
- 2. Model Program for Poverty Areas (Intibuca and Tegucigalpa)
  - -Training/Promotion center for "Healthy Village" in mountainous areas (rural type)
  - -Health Information Center for Urban Poors (urban type)
- 3. Model Program for Integrated Development Area (Olancho)
  - -Information System for improvement of rural health

CSA HND/S 123/96 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 1997 Domestic Survey)

No progress at the moment, although the project is being promoted. It is also because the change of the government is expected due to election results.

(FY 1998 Domestic Survey)

Higher priority is given to projects in other sectors and the priority of the project became lower accordingly.

(FY 1998 Overseas Survey)(FY 1999 Overseas Survey)

Integrated Development Model Program in Olancho is to be included in the M/P that would be approved by Japanese government within FY 1998.

The request for implementing the Project of Strengthening the Hospital Networks in San Pedro Sula (five emergency clinics, one maternity hospital, their equipment) was submitted to Japanese government.

(FY 2000 Domestic Survey)

As for the projects in San Pedro Sula city, the B/D was said to be started in 2000. No detailed information was available however.

Subsequent Study:

(FY 2001 Overseas Survey) Study period: 2002/Mar (B/D)

Contents: Regarding the project to enhance the network among urban hospitals (construction of medical facilities and equipment including obstetrical facilities)

(Basic Study)

Compiled Jun.1997 HND/A 501/96 **CSA** Revised Jul.2009 1. COUNTRY Honduras

| 2. | NAME OF STUDY                                       | Forest Resources Management and Development Study in Teupassenti |   |                           |            |                      |             |
|----|---|--|---|---------------------------|------------|----------------------|-------------|
| 3. | SECTOR  | Forestry   | / Forestr   | y & Forest Conservation   | 4.         | TYPE OF STUDY        | Basic Study |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |  |   |                           |            |                      |             |
|    | PRESENT COUNTERPA                                   |  |   |                           |            |                      |             |
| 6. | OBJECTIVES OF THE STUDY                             | Teupassenti Are  | To establish the Forest Management Guideline based on the results of the investigation for the forest resources in Teupassenti Area (190,000 ha) in El Paso. To formulate the Forest Resources Management Plan for the model area (40,000 ha) according to the Guideline. |                           |            |                      |             |
| 7. | CONSULTANT(S)                                       | Japan Forest Tec<br>Pasco Internatio                             | chnical Association nal Inc.  |                           |            |                      |             |
| 8. | STUDY PERIOD  | Jan.1995 ~   | Nov.1996  | 22month(s)                |            |                      |             |
| 9. | SITE OR AREA  | Study Area (190  | 0,000ha) and Model A  | rea (40,000ha) located in | Teupasenti | , Department of El I | Paraiso.    |

#### 10. MAJOR PROPOSED PROJECT(S)

- 1. Forest Management Guideline for Study Area
- Established guidelines for land use, forest management, cutting, regeneration, forest protection, social forestry, forest industry development, and forest roads.
- Incorporated environmental considerations into the guidelines.
- 2. Forest Management Plan for the Model Area
- Established a ten-year forest management plan based on the guidelines prepared above.
- Prepared the productivity map for the pine forest (5,000ha) in the Model Area for the effective implementation of the Plan.

CSA HND/A 501/96 Basic Study

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

Japanese technical cooperation:

(FY 1998 Overseas Survey)

April 1998 ~ April 2000 Dispatch of an expert (forestry management)

#### (FY 1997 Domestic Survey)

1. Japanese expert

COHDEFOR, the counterpart organization of the Study, has requested that JICA dispatch a Japanese expert for the implementation of the Forest Management Plan.

2. Operational Plan of COHDEFOR

Based on the above Plan, COHDEFOR has prepared an operational plan for Teupasenti National Forest for the period of July to December, 1997 which is currently under implementation.

#### (FY 1998 Domestic Survey)

COHDEFOR is implementing the project in part of the planned area in accordance with the plan.

Part of the forest in the planned area was damaged by a hurricane this year.

#### (FY 1999 Overseas Survey)

Annual Operation Plan in 1998 has 2.1 million HNL for forest protection, silviculture, logging, social infrastructure, investigation and administration, etc. Some of those funds was realized. Those funds were mainly used for preparation of logging site. Five lots were prepared in 1998. Three of these lots were sold with the value of 1.28 million HNL and currently under logging.

#### (FY 2001 Domestic Survey)

Although the forests were damaged by Hurricane Mitch, they seem to be recovering. The bridges are being reconstructed fully or temporarily. Access roads to the study sites have also recovered.

(M/P)

Compiled

Jul.1998

| CS | SA HND/A 113/                         | <b>'97</b>        |                        |  |        |                   |          | Revised     | Jul.2009 |
|----|---------------------------------------|-------------------|------------------------|--|--------|-------------------|----------|-------------|----------|
| 1. | COUNTRY                               | Honduras          |                        |  |        |                   |          |             |          |
| 2. | NAME OF STUDY                         | Small Scale Fish  | heries Development Pro | ject on the North Coast  |        |                   |          |             |          |
| 3. | SECTOR                                | Fishery           | / Fishery              |  | 4.     | TYPE OF STUDY     | M/P      |             |          |
| 5. | COUNTERPART AGEN<br>TIME OF DEVELOPME |                   | Directorate General of | Fishery and Fish-farming, Mi                                     | nistry | of Natural Resour | ces      |             |          |
|    | PRESENT COUNTERPA                     |                   |                        |  |        |                   |          |             |          |
| 6. | OBJECTIVES OF THE STUDY               |                   |                        | fisheries with the aim of prom<br>gth of coasts: about 683 km) o |        |                   | es and i | mproving li | ves for  |
| 7. | CONSULTANT(S)                         | System Science    | Consultants Inc.       |  |        |                   |          |             |          |
| 8. | STUDY PERIOD                          | Jan.1995 ~        | Oct.1997               | 33month(s)   |        |                   |          |             |          |
| 9. | SITE OR AREA                          | Entire areas of t | he northern coasts     |  |        |                   |          |             |          |

10. MAJOR PROPOSED PROJECT(S)

The study was conducted in 3 phases. In Phase I, the present situation was examined, problems were analyzed, and a basic design survey was prepared. In Phase II, a fishery census was carried out and a basic design of a master plan was prepared. In Phase III, the entire master plan was made. Sector plans included in this master plan are as follows.

- (1) Plan for Strengthening Capacity to Manage Coastal Resources
- (2) Plan for Modernizing Small-scale Fisheries
- (3) Plan for Improving Distribution for Marine Products
- Plan for Improving a Base for Collecting Marine Products in Trujillo District
- Plan for Improving Distribution for Marine Products in the Eastern Region
- Plan for Improving the Sale of Fresh Fish in Consumer Markets in Coasts
- (4) Plan for Improving Infrastructure in Fishing Villages
- (5) Plan for Supporting Women in Fishing Villages
- (6) Plan for Improving Fishermen's Organizations
- (7) Plan for Financing Small-scale Fisheries

CSA HND/A 113/97 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |
| Description :  |                           |

(FY 1998 Domestic Survey)

The grant aid project "Project for Modernizing Small-scale Fisheries in the Northern Coasts" (18th of Mar. 1997) has already finished handing over facilities to the government. However, the damage of the hurricane which hit the country in 1998 was devastating, and its follow-up has been examined. No other movement concerning proposed project is specifically mentioned.

(FY 2001 Overseas Survey)

There is no project in Trujillo district implemented with the finance of other international institutions, and the only project implemented is the Japanese Plan for Modernizing Small-scale Fisheries.

(FY 2007 Domestic Survey)

No information to be specifically mentioned.

(M/P+F/S)

Compiled May.2001

**CSA** HND/S 208/00 Revised Jul.2009 1. COUNTRY Honduras Study on Water Supply for Tegucigalpa Urban Area in the Republic of Honduras 2. NAME OF STUDY 3. SECTOR **Public Utilities** / Water Supply 4. TYPE OF STUDY M/P+F/S Metropolitan Division of the National Service Authority for Water Supply and Sewerage (SANAA) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY The water supply in Teguchigalpa is facing two major problems; to confront the current deficits in balance between demand and supply and to make provision for the future demand growth. This study aims to prepare a master plan for the middle term development of water supply capacity and to conduct a feasibility study for a priority project in the master plan to improve the current water shortage. OBJECTIVES OF THE 6. STUDY Pacific Consultants International 7. CONSULTANT(S) Jan.2000 Jan.2001 12month(s) 8. STUDY PERIOD Upstream of the existing Los Laureles Dam 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) As a F/S project, Los Laureles II Project was selected. Los Laureles II Project comprises the following two components; - Construction of Los Laureles II Dam - Sediment Excavation of existing Los Laureles Dam and the planned river channel of the new Los Laureles II Dam

CSA HND/S 208/00 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description**:

#### (FY2001 Overseas survey)

Service for the expansion and improvement of system, for the improvement of life environment for its inhabitants in Tegucigalpa, SANANAA has been working for the concretion and assessment of this survey.

#### Finance:

#### (FY 2001 Domestic Survey)

The construction of Los Laureles II Dam project was officially applied in August 2000.

Since it was not adopted as projects for fiscal year 2000, application was re-submitted in August 2001. Awaiting for the acceptance.

#### (FY 2003 Overseas Survey)

A request for grant aid was made to the Japanese government with the objective of constructing the Los Laureles II Dam in the urgent plan for supplying potable water to Tegucigalpa. SANAA implemented field consulting in relation to the hydrogical survey and the geological survey in Gwaserike River that is a dam site in the upstream of Los Laureles Dam.

#### (FY 2004 Domestic survey)

Honduras government has been requesting for JICA grant aid cooperation every year since 2001.

#### (FY 2004 overseas survey)

About the final designing of the emergency project for the water supply to Tegucigalpa, Los Laureles II, requested the grant aid cooperation in 2003 July 16 via SETCO. The total sum was 3 billion yen. Also based on the domestic finance, SANAA had a consultation on the conformation of geological features for hydrology and land of Los Laureless Dam on Gwaserike River. More over, SANAA had a survey on the private property and houses of the residents who would be harmed by its effects as a transitional preparation. Today, the Honduras government is judging that drawing up of an emergency project for the Teguchigalpa water supply in the same are as Los Laureles II survey area. Also, if the necessary amendments would be done, the capacity of water tank would be expanded. Water tank would be constructed, dividing its work into several phases.

#### (FY 2005 Domestic Survey)

Subsequent Study: The quantity survey of emergency water supply plan in Tegucigalpa and the study of its environmental and social consideration Implementing period: the beginning of July 2005 - the end of January 2006

Implementing body: JICA

Objectives:

To confirm the contents of the request and the intention of the Honduran government concerning the plan based on the studies mentioned above, to consider feasibility and validity of implementing a grant-aided cooperation by reviewing the result of development study with necessary information particularly focusing on environmental and social consideration

#### (FY 2005 Overseas Survey)

In August 2005 - JICA has dispatched a pre-study team to confirm the contents of the request made. Study team has evaluated information. conducted site survey, and analysed the importance of Laureles II with the SANAA.

(M/P+F/S)

Compiled Sep.2003

| C  | SA HND/S 2   |   |                         |                      |                    |       |                       | Revised     | Jul.2009 |
|--|--|---|-------------------------|----------------------|--------------------|-------|-----------------------|-------------|----------|
| 1.   | COUNTRY  | Honduras  |                         |                      |                    |       |                       |             |          |
| 2.   | NAME OF STUDY  | The Study on flo  | ood control and l       | landslide prevention | in the metropolita | n are | ea of the Republic of | of Honduras |          |
| 3.   | SECTOR   | Social Welfare  | / D                     | isaster Relief       |                    | 4.    | TYPE OF STUDY         | M/P+F/S     |          |
| 5.   | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  |   |                         |                      |                    |       |                       |             |          |
|  | PRESENT COUNTERP   | ART AGENCY  |                         |                      |                    |       |                       |             |          |
| 1) Formulate the disaster prevention master plan of anti-flooding and anti-landsliding in urban area, 2) implement feasibility study for urgent and preferential project, 3) technical transfer to counterpart organizations through  6. OBJECTIVES OF THE STUDY |  |   |                         |                      |                    |       |                       |             |          |
| 7.   | CONSULTANT(S)  | Pacific Consulta  | nnts International      | l                    |                    |       |                       |             |          |
| 8.   | STUDY PERIOD   | Jan.2001 ~  | May.2002                | 16month(s)           |                    |       |                       |             |          |
|  | SITE OR AREA  MAJOR PROPOSED PR  | OFCIE   |                         |                      |                    |       |                       |             |          |
| Pile<br>St<br>2<br>3<br>N  | ot Plan: ructural measures: 1) Construction of channe 2) Stabilization of Berring 3) Construction small-sca on-structural measures: 1) Strengthening response 2) Early warning system ( 3) Education for residents | els of Choluteca F<br>che, Reparto<br>le channels in Ba<br>e capacity of resid<br>(SAT) | mbu Canyon and<br>lents | d other areas        |                    |       |                       |             |          |

CSA HND/S 222/02 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY 2003 Overseas Survey)

Details of request:

- 1) Financing of 2 million USD for development of projects with less environmental impacts such as stabilization of Bambu Jand Campo Cielo and construction of rainwater channels in such districts as Reparto and Kanane.
- 2) Funds to construct the Estocolmo Bridge.

#### Details of future projects:

- 1) Strengthening of organizations, fostering of CODELES as an emergency response agency of this city, expansion of equipment for CODELES and strengthening of CODEM
- 2) Early Warning System 1 and Siren 4 that needs to be installed, and equipment to support information obtained by various communication technologies by use of river water level detection system, water level scale and rain gauge under the support of PNUD.
- 3) Introduction of a multiskilled personnel group for the purpose of education of CODEM personnel in relation to the ARC VIEW system and preparation for it.
- 4) Improvement of capabilities in terms of dealing with site structures (CODEL). Equipment and fosterage.

#### (FY 2004 Domestic and Overseas Survey)

Request for an economic Grant Aid was submitted to Japanese government from Ministry of Public Works, Transport and Housing (SOPTRAVI) through Ministry of International Cooperation (SETCO) on 3rd September 2002. Currently, other funding parties have not been secured. The requested amount is 36 million USD, which is planned to be used for urgent construction identified by the study team from Japan. If the reply can not be heard within this fiscal year, it is intending to reconsider the request for economic Grant Aid in 2005. Currently, fund raising activities for the implementation of the project are conducted by Municipality of the Central District (AMDC) and other agencies.

Implemented Project: Construction on flooding and landsliding measures in urban area

Implemented Period: 2003 - 2004 Implementing Party: SOPTRAVI

Funding:

Funding body: Own fund Amount: 350,000 USD

#### (FY 2005 Domestic Survey)

While several requests for a Grant Aid have been made regarding flood control and utilization, priority is being given to urgent water supply to Tegucigalpa metropolitan area, which the project has low priority in comparison.

#### (FY 2006 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2006 Overseas Survey)

Most prioritized project has been decided with Metropolitan construction project cost aggregates up to 36 million USD taking into account the proposal made for flood control and landslide. Request has been made to Japan for amount of 12.8 million USD through SETCO for project implementation. Breakout is as follows.

6.8 million USD part will be a Grant Aid for heavy machines utilized in Southern, Western, and coast of Atlantic.

6.0 million USD part will be for a construction for landslide measure in El Berrinche, El Reparto, Quebrada El Bambu and Tegucigalpa.

#### (FY 2007 Domestic survey)

Feasibility study of landslide measure project in the urban areas (El Berrinche, El Reparto, El Bambu) was carried out from November 2007 to January 2008. This F/S is a prioritized project in the mentioned study for the landslide measure to the three districts with greatest risk of landslides (El Berrinche, El Reparto, El Bambu), and Grant Aid was requested from Honduras. This study inspects the validity of request contents. In addition, this project is for the structural measures in particular against landslides in the three districts.

**(F/S)** 

|                                      |  |                                 | (F/S)  | Compiled | Mar.1990 |  |  |
|--------------------------------------|--|---------------------------------|--|----------|----------|--|--|
| CS                                   |  | 301/85                          |  | Revised  | Jul.2009 |  |  |
| 1.<br>2.                             | NAME OF STUDY  | Jamaica Agricultural De         | evelopment Project on the Black River Lower Morass   |          |          |  |  |
| 3.<br>5.                             | SECTOR   | Agriculture                     | / (Agriculture in) General 4. TYPE OF STUDY F/S Ministry of Agriculture, Department of Planning and Policy   |          |          |  |  |
|                                      | COUNTERPART AGEN<br>TIME OF DEVELOPMI  |                                 |  |          |          |  |  |
|                                      | PRESENT COUNTERP   | ART AGENCY                      |  |          |          |  |  |
|                                      |  | F/S to formulate                | e the project and verify its technical and economic feasibility.   |          |          |  |  |
| 6.                                   | OBJECTIVES OF THE STUDY  |                                 |  |          |          |  |  |
| 7.                                   | CONSULTANT(S)  | Nippon Koei C<br>Taiyo Consulta |  |          |          |  |  |
| 8.                                   | STUDY PERIOD   | Feb.1984 ~                      | Jun.1985 16month(s)  |          |          |  |  |
| 9.                                   | SITE OR AREA   |                                 | wer Morass Area(situated in the western part of Jamaica ern cost in the Parish of St. Elizabeth)   |          |          |  |  |
| 1)M<br>a.<br>B<br>plac<br>sec<br>Qua | 10. MAJOR PROPOSED PROJECT(S)  1) Major Investment for the Project a. Irrigation Area: 3,080 ha B. Major Facilities: (1) Diversion Weir: 1place, (2) Irrigation Pump St: 1 place with 4 units of 120kW 700mm diameter, (3) Drainage Pump St.: 4 places with 15 units of 100-125HP 800mm diameter, (4) Irrigation Canal: main 35.2km & secondary 31.6km, (5) Drainage Canal: main 41.3 km, secondary 154.0km & catch drain 17.0km, (6) Farm Road:main 35.2km & secondary 83.4km, (7) Flood Protection Dike: 29.0km, (8) Others: Office & Quarters, Ground water level observation wells & Environment conservation. |                                 |  |          |          |  |  |
| 3)S                                  |  | grading/constructi              | ion of Housing, Schools, Health center Road, Water supply and Community center consists of Phase-I of 3 years including detailed design and Phase-II of 3 years. |          |          |  |  |
|                                      | •  | -                               |  |          |          |  |  |
|                                      |  |                                 |  |          |          |  |  |
|                                      |  |                                 |  |          |          |  |  |
|                                      |  |                                 |  |          |          |  |  |
|                                      |  |                                 |  |          |          |  |  |
|                                      |  |                                 |  |          |          |  |  |

CSA JAM/A 301/85 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CELATRIC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### Description:

Causes for Delay or Cancellation:

(FY 1994 Domestic Survey)

At first, the project was suspended due to the high construction cost. Later, the government has changed its agricultural development policy to export oriented agriculture following the change of regime.

(FY 1997 Overseas Survey)

Environmental protection of wet land is necessary. Study to show benefits of draining lands when idle lands are remained untouched, must be carried out.

(FY 1998 Domestic Survey)

It seems that there is little possibility to implement the projects by Japanese ODA. Approximately 14 years have passed since the completion of this study, and the social and environmental situations have been changed. Therefore, it seems the proposed projects will not be implemented without being reviewed.

#### Situation:

It was subject to establish a holding company who would be responsible for construction of civil engineering works, development and operation of the pilot farm, land lease and management as well as recruitment, training, selection and settlement of farmers.

However, due to some reasons such as rather expensive cost per unit area, etc., some agency (National Investment Bank) refused to establish the holding company, as of November, 1985. Proposed membership of the Board of Directors to be appointed by the Government was, Permanent Secretary of the Ministry of Agriculture or his nominee, Commissioner of Land, a representative from the Ministry of Finance, a representative from the Jamaica National Investment Bank, a representative from the National Water Commission, and two other nominees.

#### Related Project:

(FY 1997 Overseas Survey)

"National Irrigation Development Plan (NIDP)" (overall development of Jamaica's irrigation sector)

Consulting Company / HARZA International

Imp. Period / Feb.1997~Mar.1998

Cost / US\$ 900,000 (IADB)

Request for financial assistance will be submitted to IADB in Nov.1998. Implementation is scheduled in 1998~2003.

**(F/S)** 

Compiled Mar.1990

| CS   | SA JAM/A 3  | 302/87  |   |                      | Revised | Jul.2009 |
|------|---|---|---|----------------------|---------|----------|
| 1.   | COUNTRY   | Jamaica   |   |                      |         |          |
| 2.   | NAME OF STUDY   | Modernization a                                 | and Expansion of the Rio Cobre Irrigation Scheme  |                      |         |          |
| 3.   | SECTOR  | Agriculture                                     | / (Agriculture in) General  | 4. TYPE OF STUDY F/S |         |          |
| 5.   | SECTOR  | rigileulture                                    | Ministry of Agriculture   | 4. THE OF STODE 17/5 |         |          |
|      | COUNTERPART AGEN<br>TIME OF DEVELOPME                   |   |   |                      |         |          |
|      | PRESENT COUNTERPA                                       | ART AGENCY                                      |   |                      |         |          |
| 6.   | OBJECTIVES OF THE STUDY                                 |   |   |                      |         |          |
| 7.   | CONSULTANT(S)   | Taiyo Consultar<br>Nippon Koei Co<br>KOKUSAI KO | o., Ltd.<br>GYO CO., LTD.   |                      |         |          |
| 8.   | STUDY PERIOD  | Jan.1986 ~                                      | Jun.1987 17month(s)   |                      |         |          |
|      |   |   | Kingstone in the west   |                      |         |          |
|      |   | (the surv                                       | veyed area: 274 sq.km, population 130,000)  |                      |         |          |
| 9.   | SITE OR AREA  |   |   |                      |         |          |
| 10.  | MAJOR PROPOSED PR                                       | ROJECT(S)                                       |   |                      |         |          |
| The  | e project area is situated i                            | in the eastern part                             | of Jamaica near the southern coast in the parish of St.   | Catherine.           |         |          |
|      | Rio Cobre Irrigation Syste                              |   |   |                      |         |          |
|      | St. Dorothy Irrigation Sys<br>he main concepts of the p |   | mpleted in 1963)  |                      |         |          |
|      |   |   | ion system by reconstructing and improving existing in  | frastructures.       |         |          |
| - to | introduce diversified cro                               | opping patterns in                              | cluding non-traditional crops into the annual rotation of   | f cropping.          |         |          |
|      |   |   | on of crops by means of sound management of irrigation  |                      |         |          |
|      |   |   | nancement through appropriate training and agricultura<br>ds and more equitable distribution of income to the pec |                      |         |          |
| The  | e main civil works are:<br>ehabilitation of headwork    |   |   | pic.                 |         |          |
| 4)la | and consolidation, 5)road                               | construction.                                   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |
|      |   |   |   |                      |         |          |

CSA JAM/A 302/87 F/S

|                 | Completed or In Progress | Promoting                 |
|-----------------|--------------------------|---------------------------|
| DDDGENE GEARNIG | Completed                |                           |
| PRESENT STATUS  | Partially Completed      | Delayed or Suspended      |
|                 | Implementing             |                           |
|                 | Processing               | Discontinued or Cancelled |

#### **Description:**

This project has been given high priority in the "Food and Agriculture Policies/production Five-Year plan (1983/84-1987/88)" of the Government.

#### Finance

Own fund and USAID fund

#### Detail

Because the allocated fund was considerably small, the project was partially implemented. The implemented projects were the improvement of a small-scale reservoir and the small -scale land consolidation.

#### (FY 1997 Overseas Survey)

All the irrigation projects in Jamaica are to be implemented within the framework of National Irrigation Development Plan (1998~2003).

Financial sources are government budget, IADB, FAO, Japanese grant and so on.

Within the Rio Cobre project, canals have been modernized under the Government budget.

# STUDY SUMMARY SHEET (Other Studies)

 CSA
 MEX/S 601/77
 Revised
 Jul.2009

 1. COUNTRY
 Mexico

| 1.                                      | COUNTRY  | Mexico  |   |                             |                  |                   |                       |
|---|--|---|---|-----------------------------|------------------|-------------------|-----------------------|
| 2.                                      | NAME OF STUDY  | Mexico City Su                                  | burban Railways Cor   | nstruction Project          |                  |                   |                       |
|   |  |   |   |                             |                  |                   |                       |
|   | SECTOR   | Transportation                                  | / Railwa  | ay                          | 4. T             | YPE OF STUDY      | Other Studies         |
| 5.                                      | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  |   | Secretaria de Comur   | nicaciones y Transportes    |                  |                   |                       |
|   | PRESENT COUNTERPA  | ART AGENCY                                      |   |                             |                  |                   |                       |
| 6.                                      | OBJECTIVES OF THE STUDY  | Review of the M                                 | Mexican Government'   | s basic plan for new railwa | ay lines, and te | chnical advice or | n construction works. |
|   |  | Japan Railway                                   | Technical Service   |                             |                  |                   |                       |
| 7.                                      | CONSULTANT(S)  |   |   |                             |                  |                   |                       |
| 8.                                      | STUDY PERIOD   | Sep.1977 ~                                      | Mar.1978  | 6month(s)                   |                  |                   |                       |
| 9.                                      | SITE OR AREA   |   |   |                             |                  |                   |                       |
| 10.                                     | MAJOR PROPOSED PR  | OJECT(S)  |   |                             |                  |                   |                       |
| Alt<br>Civ<br>Ele<br>(po<br>Sig<br>(ind | ernatives: il engineering Works(stactric engineering Works) wer transmission) nal and telecommunication cluding interference coun ling stock (318 - 369 car ling Stock bases | 2,2<br>on equipment<br>termeasures) 1,<br>s) 6, | A B 022 7,821  221 1,395  731 1,416 107 4,952 ,327 1,296 Ilion pesos) |                             |                  |                   |                       |
| No                                      | te: The costs of Alternati   | ve A correspond                                 | to the figures for 1) a   | and Alternative B for 2) ab | oove.            |                   |                       |
|   |  |   |   |                             |                  |                   |                       |

CSA MEX/S 601/77 Other Studies

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

Reasons for Cancellation:

This study was to review, from the technical and economic standpoints, the basic plan for new suburban railway lines which was being prepared by the Mexican Government as part of the overall urban transport improvement policy for Mexico City, and to undertake a pre-feasibility study of the construction plan.

Based on the results of this study, Mexican Government came to the conclusion that the estimated costs of construction would be too large for the already financially-strapped National Railways to bear, and decided on the alternative of subway construction which was being promoted by the Federal District Government. In other words, the proposals of this study were not adopted for implementation, but served as one of the bases for the important policy decision by the Mexican Government.

#### Related Information:

Subway Construction in Mexico City

Fiscal Year Line Length Passenger 1977 2 37km 1.81 mil./day 1988 8 141km 4.04 mil./day

As for the railway connection between Mexico metropolitan and suburbs, the construction plan of 6 radial railways with a radius of 100km is on process.

# STUDY SUMMARY SHEET (Other Studies)

CSA MEX/S 602/79 (Other Studies) Compiled Mar.1990
Revised Jul.2009

| 1. | COUNTRY                    | Mexico   |                          |                      |                                       |  |
|----|----------------------------|--|--------------------------|----------------------|---------------------------------------|--|
| 2. | NAME OF STUDY              | Suburban Railw   | ays Project (Follow-Up)  |                      |                                       |  |
| 3. | SECTOR                     | Transportation   | / Railway                |                      | 4. TYPE OF STUDY Other Studies        |  |
| 5. |                            |  | Secretaria de Comunicado | ciones y Transportes |                                       |  |
|    | PRESENT COUNTERPA          |  |                          |                      |                                       |  |
| 6. | OBJECTIVES OF THE<br>STUDY | Technical advice and guidance on the physical planning and the operation and management for the trunk line electrification plan of the Mexican National Railway. |                          |                      |                                       |  |
| 7. | CONSULTANT(S)              | Japan Railway T  | echnical Service         |                      |                                       |  |
| 8. | STUDY PERIOD               | Jun.1979 ~   | Aug.1979                 | 2month(s)            |                                       |  |
| 9. | SITE OR AREA               | Su   | burbs of Mexico City     |                      |                                       |  |
| 10 | MA IOD DDODOSED DD         | OTECTI(C)  | ·                        | ·                    | · · · · · · · · · · · · · · · · · · · |  |

#### 10. MAJOR PROPOSED PROJECT(S)

As part of the railway modernization policy, the Mexican Government is planning the electrification of the entire railway system. The Government requested Japanese technical cooperation concerning feasibility studies on two of the high priority sections selected for electrification: Namely, the section between Mexico City and Queretaro (244km) and the section between Mexico City and Irapuato (95km).

In response to the request, the Japanese Government sent a team of experts to assist the undertaking of the feasibility studies. THe process are the following;

- $1. \ \, \text{This study took the following into account.}$
- $(1) Several \ sypes \ of \ electrification \ are \ widely \ applied \ in \ the \ world.$
- (2) Electrification is considered not a simple aggrigation but a "united system" integrating the related factors.
- 2. This study compared the following types
- Types of electric generations ; a. AT type, b. direct type
- Types of aerial line; a. multiful type, b. arranged-T type

This study investigated electric characters of each type, and tried to clear the relation between signal systems and each type.

3. At last the study suggested gov. of Mexico the following issue be very important. A type of electrification, being the most suitable to the whole situation of the nation, should be selected from many types.

**CSA** MEX/S 602/79 **Other Studies** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** (1)Mexico City-Queretaro (244km) Construction: 1981 Commenced 1982-1986 Construction suspended due to the decline of oil prices Feb.1992 80% of construction works completed 1993 Operation on commercial basis scheduled to be started (2)Queretaro-Irapuato (95km) Suspended until the section between Mexico City and Queretaro is open. Detail: (FY 1994 Domestic Survey) The findings of this study were also utilized in the "Project of Electrification of Line from Mexico to Irapuato (1981)".

(Other Studies) Compiled Mar.1986 **CSA** MEX/S 603/81 Revised Jul.2009

| 1. | COUNTRY   | Mexico   |  |                      |    |               |               |
|----|---|--|--|----------------------|----|---------------|---------------|
| 2. | NAME OF STUDY                                       | Proyecto de Electrificacion de la Linea de Mexico a Irapuato   |  |                      |    |               |               |
| 3. | SECTOR  | Transportation   | / Railway                                  |                      | 4. | TYPE OF STUDY | Other Studies |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |  | Secretaria de Comunicaciones y Transportes |                      |    |               |               |
|    | PRESENT COUNTERPA                                   |  |  |                      |    |               |               |
| 6. | OBJECTIVES OF THE<br>STUDY                          | Technical advice and guidance on technical standards and specification for detailed study on electrification of the section between Mexican City and Irapuato, as part of the trunk line electrification plan of the Mexican National Railway. |  |                      |    |               |               |
| 7. | CONSULTANT(S)                                       | Japan Railway Technical Service  |  |                      |    |               |               |
| 8. | STUDY PERIOD  | May.1980 ~ ~   | Mar.1981                                   | 10month(s)           |    |               |               |
|    | SITE OR AREA  |  | n between Mexico city an                   | nd Irapuato(351.2km) |    |               |               |
| 10 | 10. MAJOR PROPOSED PROJECT(S)                       |  |  |                      |    |               |               |

For each technical field composing the electrification of the railway, various systems are adopted in the world.

These systems may have respective merits and demerits. Since the electrification is not a simple cumulation of those technologies but a composite system organizing each regarding technologies. It has been recommended to the Mexican government that it is the most important subject to select the most appropriate system for Mexico among AT feeding, direct feeding, railway track feeding and the other systems from the point of view of that in comparison of electrical characteristies sach as of feeding and/or of collection of current, and to make clear the relationship between feeding system and signaling facilities corresponding facilities. The recommendation is consisted of following items :

- (1)To draw the operation (driving) plans,
- (2)Introduction of locomotives,
- (3)Design of Railway Lines,
- (4)Arrangements of suppliment system of electricity,
- (5)Arrangements of signaling facilities
- a. Signaling system for double track
- b.CTC for whole section
- c.New establishment of ATC for whole section,
- (6)Arrangements of corresponding system, and
- (7)Arrangements of inspection/repairment systems for rolling stocks.

**CSA** MEX/S 603/81 **Other Studies** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** \*Refer to "Suburban Railways Project (follow-up) (1979)". (1)Mexico City-Queretaro (244km) Finance: Several institutions relating to NAFINSA financed the project. Own fund (FY 1997 Overseas Survey) 1986~1992 (World Bank) Construction: 1981 Commenced 1982-1986 Construction suspended due to the decline of oil prices Feb.1992 80% of construction works completed Operation on commercial basis scheduled to be started (2)Queretaro-Irapuato (95km) Suspended until the section between Mexico City and Queretaro is open. (FY 1997 Overseas Survey) There is no plan for electrification of section from Queretaro because of low feasibility.

# STUDY SUMMARY SHEET (Other Studies)

(Other Studies) Compiled Mar.1990 **CSA** MEX/S 604/82 Revised Jul.2009 1. COUNTRY Mexico Development Plan of Industrial Ports 2. NAME OF STUDY SECTOR / Integrated Regional Development Plan 4. TYPE OF STUDY Other Studies 3. Development Plan 5. Comision Nacional Coordinadora del Desarrollo, Secretaria de Presidente (SCT) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Technical advice on all aspects of port development for coastal industrial growth. **OBJECTIVES OF THE** STUDY The Overseas Coastal Area Development Institute 7. CONSULTANT(S) Jul.1980 Mar.1982 20month(s) 8. STUDY PERIOD Altamira Port, Lazaro Cardenas Port, Oschon Port, Salina Cruz Port, Dos Bocas Port, Ensenada Port, Toborobanpo Port, Tocuspan Port 9. SITE OR AREA

#### 10. MAJOR PROPOSED PROJECT(S)

The Japanese expert team provided technical advice and guidance on the port development necessary for coastal industrial growth, covering such areas as planning of physical facilities(including cargo facilities at multi-purpose wharves), cargo handling operations, and alternatives of physical development.

- -Plan and design of basic port facilities of major ports.
- -How to develop and manage industrial ports.

CSA MEX/S 604/82 Other Studies

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

The progress of development in the selected ports has been as follows:

(1)Altamira Port

1985 Multi-purpose berth (No.1 Berth) completed for use

Feb.1990 No.2 Berth completed for use

May.1990 Construction of No.3 Berth to be started and to be completed in 1992.

(Infrastructural development to be financed by own funds, and necessary equipment by World Bank.)

#### (2)Lazaro Cardenas Port

1985 General cargo berth completed for use No.3 Berth (multi-purpose) will be constructed dependent on the future increase of cargo throughput.

#### (3)Oschon Port

Development is suspended due to problems in land acquisition

#### (4)Salina Cruz Port

The construction of the breakwater was completed, but the development of the port is suspended. However, the development of oil-exporting port facilities has been under way.

#### Maintenance & Operation:

(FY 1996 Overseas Survey)

The private trading company, which is responsible for the comprehensive port management, has been conducting the management of the completed project. Also, the container terminal in the Altamira Port was transferred to a private corporation through concession.

#### Effect:

(FY 1996 Overseas Survey)

The project implementation results in the growth of the cargo volume handled in the Port. Between 1985 and 1995, the handled volume grew by 46% in the Altamira Port and by 22.7% in the Lazaro Cardenas Port.

Progress in the Port Development Plan:

(FY 1996 Overseas Survey)

The capacity of volume, which can be handled in each port, is projected as follows:

Present volume Projected capacity 12mil.ton/year 330mil.ton/year

Altamira Port 12mil.ton/year 330mil.ton/year Lazaro Cardenas Port 18mil.ton/year 160mil.ton/year

(F/S)

Compiled Mar.1986

**CSA** MEX/S 301/83 Jul.2009 Revised 1. COUNTRY Mexico Guanajuato New Railway Development Project 2. NAME OF STUDY 3. SECTOR / Railway TYPE OF STUDY F/S Transportation 5. Gobierno del Estado de Guanajuato COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Construction of a new railway line for passenger transport in the Bajio Industial Corridor in Guanajuato State. OBJECTIVES OF THE STUDY Japan Railway Technical Service 7. CONSULTANT(S) Mar.1983 Nov.1984 20month(s) 8. STUDY PERIOD A line linking major cities between Apaseo el Grande and Francisco del Rincon (167km) 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) (100 million pesos) 169 Civil engineering works Electric engineering works 86 Rolling stock bases and workshops 34 Land acquisition (compensation) 12 Rolling stock 131

CSA MEX/S 301/83 F/S

|                | Completed or In Progress | Promoting                 |  |  |  |  |
|----------------|--------------------------|---------------------------|--|--|--|--|
|                | Completed                |                           |  |  |  |  |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |  |  |  |  |
|                | Implementing             |                           |  |  |  |  |
|                | Processing               | Discontinued or Cancelled |  |  |  |  |
| Description:   |                          |                           |  |  |  |  |

Reasons for Cancellation:

The implementation of the proposed project was suspended in October 1983, when the Governor of Guanajuato was replaced together with his technical staff.

Because the construction of highways and the electrification of national railways are currently under way, the present Government of Guanajuato State is unlikely to reconsider the project. Therefore, the project is judged as cancelled.

#### (FY1991 Overseas Survey)

After the election in 1991, the opposition party took the political power. As a result, the personnel who knows the background of this project left the state government.

(F/S)

Compiled Mar.1986

**CSA** MEX/S 302/83 Jul.2009 Revised 1. COUNTRY Mexico Development Project of the Industrial Port of Tuxpan 2. NAME OF STUDY 3. SECTOR / Port TYPE OF STUDY F/S Transportation 5. Comision Nacional Coordinadora de Puertos, Secretaria de Comunicaciones y Transportes COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Formulation of a master plan through 2000; the formulation of a short-term development plan; and the execution of a feasibility study. OBJECTIVES OF THE STUDY The Overseas Coastal Area Development Institute 7. CONSULTANT(S) Jul.1982 Nov.1983 16month(s) 8. STUDY PERIOD Tuxpan, Veracruz State 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) As a part of industrial port development plan, Tuxpan Port Project was studied. (1)Industrial Port 15 berths (3,0550n) (2)Commercial Port Container berth 1 berth Bulk cargo berth 2 berths General cargo berth 1 berth

トクスパン工業港開発計画

CSA MEX/S 302/83 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

Reasons for Cancellation:

The project was suspended after the completion of the F/S.

The project was identified as part of the industrial port development plan by the Mexican Government. The Tuxpan Port was considered as one of the development projects to support and expedite the petroleum development plan in Chicontepec Basin. Because petroleum-producing strata in the Basin were found to be very deep, the petroleum development was suspended in 1982.

In response to the onset of severe economic crisis in 1982, the President De la Madri announced in January 1983 that the industrial port development would be limited to the Altamira Port and the Lazaro Cardenas Port. This policy has been continued by the President Sarinas who took power in December 1988.

Under the circumstances, the development of the Tuxpan Port as an industrial port is currently suspended.

| (FY1991 | Overseas | Survey) |
|---------|----------|---------|
|---------|----------|---------|

| The development of the | Tuxpan Industrial Port | must be suspended pr | resently, as far as th | e transportation pr | oblems (railway | and roads) | can not be solved. |
|------------------------|------------------------|----------------------|------------------------|---------------------|-----------------|------------|--------------------|
|                        |                        |                      |                        |                     |                 |            |                    |

**(F/S)** 

Compiled Mar.1988 MEX/S 303/85
Mexico Revised Jul.2009

| 1.                          | COCIVIRI  | Davidonment Project of the Port of Manzanillo   |  |  |  |  |
|-----------------------------|---|---|--|--|--|--|
| 2.                          | NAME OF STUDY   | Development Project of the Port of Manzanillo   |  |  |  |  |
| 3.                          | SECTOR  | Transportation / Port 4. TYPE OF STUDY F/S  |  |  |  |  |
| 5.                          | COUNTERPART AGEN TIME OF DEVELOPME PRESENT COUNTERPA                                | Comision Nacional Coordinadora de Puertos, Secretaria de Comunicaciones y Transportes  CY AT THE  NT STUDY          |  |  |  |  |
|                             | PRESENT COUNTERPA   | Formulation of a master plan through 2000; the formulation of a short-term development plan; and the execution of a |  |  |  |  |
| 6.                          | OBJECTIVES OF THE STUDY   | feasibility study.  |  |  |  |  |
| 7.                          | CONSULTANT(S)   | The Overseas Coastal Area Development Institute   |  |  |  |  |
| 8.                          | STUDY PERIOD  | Sep.1984 ~ Oct.1985 13month(s)  |  |  |  |  |
|                             | SITE OR AREA  MAJOR PROPOSED PR   | Manzanillo, Colima State  |  |  |  |  |
|                             |   | cloped as a hub port in Mexico.   |  |  |  |  |
| Fac<br>- Di<br>- Qi<br>- Ra | cilities Sca<br>redging 1,17<br>uaywall (-12m)<br>(agri-bulk berths: 2 be<br>ailway | le or capacity 0,000 cum 900 m rths, container berth: 1 berth) 1,500 m 7,500 m ,000 sqm                             |  |  |  |  |
|                             | orage 15<br>ater and electricity suppl  |   |  |  |  |  |
| - **                        | arei and electricity suppr  | y facilities — 1 System   |  |  |  |  |

マンサニージョ港開発計画

CSA MEX/S 303/85 F/S

|                 | Completed or In Progress | Promoting                 |
|-----------------|--------------------------|---------------------------|
| DDDGENE GEARNIG | Completed                |                           |
| PRESENT STATUS  | Partially Completed      | Delayed or Suspended      |
|                 | Implementing             |                           |
|                 | Processing               | Discontinued or Cancelled |

#### **Description:**

Subsequent Studies:

D/D completed (Mexican Side)

#### Finance

The application for an OECF loan fell through. Construction has been partly financed by the World Bank sector loan, but mostly by own funds.

#### Construction

1986 Land development behind Berth B and construction of Berth C started

1987 Cargo handling facilities behind Berth B, Berth C and petroleum tanks and associated facilities completed

1988 Land development and surface pavement behind Berth C completed

1990 A container yard and a berth behind Berth C (land reclamation started in 1990, and the Berth expected to be completed in 1991)

1992 Berth C is scheduled to be completed and to be operated from the forth quarter (FY 1991 Overseas Survey)

Feb.1993 completion of 9 Berths (FY 1992 Overseas Survey)

**(F/S)** 

Compiled Mar.1990 **CSA** MEX/S 304/87 Revised Jul.2009

| 1.                         | COUNTRY  | Mexico                  |  |   |
|----------------------------|--|-------------------------|--|---|
| 2.                         | NAME OF STUDY  |                         | d in Lazaro Cardenas                                       |   |
|                            | SECTOR   | Transportation          | / Marine Transportation & Ships                            | 4. TYPE OF STUDY F/S                                |
| 5.                         | COUNTERPART AGEN<br>TIME OF DEVELOPME  | CY AT THE               | Banco Mexicano SOMEX                                       |   |
| PRESENT COUNTERPART AGENCY |  |                         |  |   |
|                            |  | Feasibility analy       | rsis of a repair dockyard and technical transfer to Mexica | an counterparts.                                    |
| 6. OBJECTIVES OF THE STUDY |  |                         |  |   |
| 7.                         | CONSULTANT(S)  | Overseas Ship-b         | uilding Cooperation Centre                                 |   |
| 8.                         | STUDY PERIOD   | Mar.1987 ~              | Mar.1988 12month(s)  |   |
|                            | SITE OR AREA   |                         | f Lazaro Cardenas which is centrally located in the Paci   | fic coast   |
|                            | MAJOR PROPOSED PR  | OJECT(S)                |  |   |
| Flo<br>W                   | ilities Scale pating dock 230m x 5. ork Bay 230m x 40 pair berth and other asso x. size of objective ship                    | Om<br>ciated facilities | DW Type, with width below 32.2m (abt 40,000Gt) which       | n is max. sizes of ship who can navigate the Panama |
|                            | nnel at present.   |                         |  |   |
| Sta<br>Co<br>Sta           | art of preparation for con<br>art of Phase I constructio<br>ompletion of "<br>art of Phase II construction<br>ompletion of " | n : July, 1<br>: Dec.,  | 1990<br>1992<br>1995                                       |   |
|                            |  |                         |  |   |

CSA MEX/S 304/87 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |
| Description :  |                          |                           |

Reasons for Cancellation:

SOMEX initially expected to select one of its 117 subsidiary enterprises for operation and management of the proposed dockyard. However, privatization of those enterprises was completed in October 1988.

Along with the election of the new President in December 1988, top management of SOMEX was also replaced, necessitating the suspension of the proposed project.

#### (FY1991 Overseas Survey)

Furthermore, the privatization of the SOMEX itself was determined in 1992 and the necessary procedure is being taken including personnel transfer. The project is now judged cancelled.

### STUDY SUMMARY SHEET (Other Studies)

Compiled Mar.1990 CSA MEX/S 605/88 Revised Jul.2009

|     | 11 111111111111111111111111111111111111 | 30  |                      |                         |                |                    | 110 11000        | U 411.2003 |
|-----|---|---|----------------------|-------------------------|----------------|--------------------|------------------|------------|
| 1.  | COUNTRY                                 | Mexico                                      |                      |                         |                |                    |                  |            |
| 2.  | NAME OF STUDY                           | Air Pollution Contro                        | ol Plan in the Feder | al District             |                |                    |                  |            |
| 3.  | SECTOR                                  | Administration                              |                      | mental Problems         |                | TYPE OF STUDY      |                  |            |
| 5.  | COUNTERPART AGENO                       | CY AT THE                                   | partamento del Dist  | trito Federal, Direccio | n General de R | deordenacion Urban | a y Pro Ecologia |            |
|     | PRESENT COUNTERPA                       |   |                      |                         |                |                    |                  |            |
| 6.  | OBJECTIVES OF THE STUDY                 | Recommendation of                           | measures for air p   | ollution control.       |                |                    |                  |            |
| 7.  | CONSULTANT(S)                           | Pacific Consultants<br>Research, Analysis a |                      |                         |                |                    |                  |            |
| 8.  | STUDY PERIOD                            | Feb.1987 ~ ~                                | Dec.1988             | 22month(s)              |                |                    |                  |            |
| 9.  | SITE OR AREA                            | Mexi  | co City Metropolit   | an Area                 |                |                    |                  |            |
| 10. | MAJOR PROPOSED PR                       | OJECT(S)                                    |                      |                         |                |                    |                  |            |

The study did not identify specific projects per se, but reviewed various measures for air pollution control which the Mexican Government has been either implementing or plans to implement, and evaluated the expected effects of these measures. On the basis of the findings, the study made the following recommendations:

- 1) Introduction of the secondary air supply device for used cars;
- 2) Further desulphurization of gasoline;
- 3) Improvement of rules and regulations in accordance with the Environmental Law;
- 4) Strengthening of the air pollution monitoring network;
- 5) Institution building and manpower training; and
- 6) Strengthening of surveillance over sources of pollutants.

CSA MEX/S 605/88 Other Studies

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

Utilization of Study:

The Study results have been incorporated into "the Integrated Air Pollution Control Program" which was commenced in 1990 and "Air Pollution Improvement Program in Mexico Valley 1995-2000" which has been implemented since Mar.1996.

#### Subsequent Studies:

Feb.1989-Sep.1991 "Air Pollution Control Plan of Stationary Sources in the Metropolitan Area (F/S)" (JICA)

Jun.1993~Jul.1995 "Survey Works for the Introduction of Combustion Technology for Air pollution Control at the Federal District (M/P)" (JICA)

#### Finance:

Nov. 7.1990 L/A 69,338 mil.Yen

(The Mexico City Sulfur Dioxide Emission Reduction Project)

\*Content of project:

1)Desulfurization of heavy oil

2)Desulfurization of diesel oil

Sep.27.1994 L/A Japanese Import & Export Bank(Untied Loan)

21,400 mil. Yen

. (Air Pollution Control Plan of Stationary Sources)

#### Project-Type Technical Cooperation:

Jul.1.1995~Jun.30.1997 "National Center for Environmental Research and Training in Mexico"

#### Others:

(FY 1996 Overseas Survey)

As anti-air pollution measures, some of the following projects have been implemented or will be implemented.

- 1.Regulation on the source of air pollution
- a)Production and supply of improved fuel,
- b)Countermeasure program against exhaust.
- c)Hoy no circula "No driving Day" program.
- 2. Enactment of legislation
- 3. Monitoring on air pollution
- 4. Monitoring and inspection on the stationary source of air pollution
- 5.Inspection on vehicles

6.Reinforcement of organizations (Establishment of Metropolitan Area Environment Committee and Ministry of Environment of Federal District)

**(F/S)** 

Compiled Mar.1992 CSA
1. COUNTRY MEX/S 305/90 Revised Jul.2009

| 1.   | COUNTRY   | Mexico   |   |   |  |  |
|--|---|--|---|---|--|--|
|  | NAME OF STUDY   |  | the Pacific Coast Ports                               |   |  |  |
| 3.<br>5.                                       | SECTOR  | Transportation   | / Port Puertos Mexicanos                              | 4. TYPE OF STUDY F/S                                  |  |  |
|  | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY   |  | Tuctos (venedas)                                      |   |  |  |
|  | PRESENT COUNTERPA   | ART AGENCY   |   |   |  |  |
| ports.  6. OBJECTIVES OF THE STUDY             |   |  | vement Plan of each port; 2)Long-term development pol | icy of each port; and 3)Feasibility study of selected |  |  |
| 7. CONSULTANT(S)  The Overseas C Nippon Koei C |   |  |   |   |  |  |
| 8. STUDY PERIOD Mar.1989 ~                     |   |  | Jul.1990 16month(s)                                   |   |  |  |
| 9.   | SITE OR AREA  | Port of Salina cr  | uz, Larzaro cardenas, Manzanillo, Mazatran, Guaymas a | and Engenada  |  |  |
| 10.  | MAJOR PROPOSED PR   |  |   |   |  |  |
| Par  | zaro cardenas) vement etc.: 49050 s.m C.F.S.: 1 nos Gate: 1 nos Utilitis: 1 nos antry Crane: 1 nos nsfer Crane: 1 nos Others: 1 nos | (Manzanillo) Dredging: 7 Pavement etc C.F.S.: 1 no Quay wall: Utilities: 1 n Gantry Cranc Transfer Cran Others: 1 no | c.: 133000 s.m  ss 1 nos os e: 2 nos ne: 4 nos        |   |  |  |
|  |   |  |   |   |  |  |

CSA MEX/S 305/90 F/S

|                    | Completed or In Progress | Promoting                 |
|--------------------|--------------------------|---------------------------|
| DDECENTE COLATOLIC | Completed                |                           |
| PRESENT STATUS     | Partially Completed      | Delayed or Suspended      |
|                    | Implementing             |                           |
|                    | Processing               | Discontinued or Cancelled |

#### **Description:**

Improvement Plan of Each Port

Finance

The World Bank committed 45 million dollar loan in order to implement the improvement plan of each port (Total amount of investment: 50 million dollars). Spanish and Mexican governments also provided financial resources.

#### Construction:

(1)Manzanillo Port

Dec.1990-Jan.1993 Equipment Procurement (US\$ 5.52 million)

1989-1994 Infrastructure Development (US\$ 10.65 million)

Spanish Govt., the World Bank and Mexican Govt. provided financial resources.

1992 New container terminal, scheduled to operate.

(2)Lazaro Cardenas Port

Dec.1990-Feb.1994 Equipment Procurement (US\$ 8.18 million)

Spanish Govt. and the World Bank provided financial resources.

1992 Container terminal, scheduled to operate construction of additional gantry crane.

\*For the realization of efficient cargo handling systems, some measures such as privatization are taken based on this study.

#### Situation:

(FY 1995 Overseas Survey)

The implementation of this project has been permitted by the Administrative Office of the Port. The tasks such as consultant services to plan the construction of container terminals are included.

(F/S)

Compiled Sep.1995 **CSA** MEX/S 306/94 Jul.2009 Revised

| 1.  | COUNTRY                           | Mexico           |   |              |             |    |             |  |  |
|---|-----------------------------------|------------------|---|--------------|-------------|----|-------------|--|--|
| 2.  | NAME OF STUDY                     | Wastewater Trea  | tewater Treatment in the Federal District of Mexico |              |             |    |             |  |  |
| 3.  | SECTOR                            | Public Utilities | /:  | Sewerage     |             | 4. | TYPE OF STU | DY F/S                                   |  |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME | CY AT THE        | Department of t                                     |              | trict (DDF) |    |             |  |  |
|   | PRESENT COUNTERPA                 | ART AGENCY       |   |              |             |    |             |  |  |
| 6.  | OBJECTIVES OF THE STUDY           |                  | xican Governme                                      | nt. 2)Sewage |             |    |             | ran Canal which w<br>at dirty mud will b |  |
| 7.  | CONSULTANT(S)                     | Pacific Consulta | nts International                                   |              |             |    |             |  |  |
| 8.  | STUDY PERIOD                      | Feb.1994 ~       | Feb.1995  | 12month(s)   |             |    |             |  |  |
| Mexico DF and a part of Mexico State  9. SITE OR AREA |                                   |                  |   |              |             |    |             |  |  |
| 10.   | MAJOR PROPOSED PR                 | OJECT(S)         |   |              |             |    |             |  |  |

Despite of presence of the sewage treatment system which is good for 80% of population, major portion of collected sewage is flowing into Gran Canal and Emisol Central and grow worse the water quality and the environment at the lower reach. Under these circumstances, followings will be implemented.

1)Feasibility Study on the Master Plan drawn for:

- All of collected sewage will be treated and utilized as for the irrigation water,
- And improve the water quality and the environment at the lower reach (Target period is 2015).

2)Detailed Design (at the primary stage) of the treatment facility by means of dirty mud activation method in order to realize the level of water quality which will meet with the level of regulation concerned settled by the government on 1992.

3)Draw up the guidelines manuals and transfer the technologies concerned.

CSA MEX/S 306/94 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

Finance:

(FY 1996 Overseas Survey)

Dec.5.1996 IDB Loan

\*Content of project:Construction of drainage and treatment plant

(FY 1996 Domestic Survey)

12 March 1997 L/A 45,112 mil.Yen

"Metropolitan Mexico Sanitation Project"

\*Content of project:Construction of four treatment plants (Texcoco Norte, Coyotepec, El Salto, Nextlalpan).

\*This project is co-financed by the IDB and OECF and its total cost is US\$1,053 million.

Construction:

(FY 1998 Overseas Survey)

Construction works and bid have not been started.

Situation:

(FY 1995 Overseas Survey)

A Private enterprise which will be with the good technological level and has the capacity to invest the fund should be selected until 2nd semester of 1996. This enterprise has to construct and operate the plant for 10 years. The implementation works will be carried on under BOT system.

Definite annual amount as for the volume of treated sewage will be paid by the state.

Supervision of the implementation will be done by OECF and the WB, and the audit by the Ministry of Finance of Mexican Government.

(M/P)Compiled Jul.1996 **CSA** MEX/A 101/95 Revised Jul.2009 1. COUNTRY Integrated Agriculture, Livestock and Rural Development in the Coast of Jalisco 2. NAME OF STUDY SECTOR / (Agriculture in) General TYPE OF STUDY M/P 3. Agriculture 5. SAGAR COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Elaboration of Integrated Development Project (M/P level) integrated by measures for effective utilization of land and water resources organization of producers, products distribution in the target area. **OBJECTIVES OF THE** 6. STUDY Japan Agricultural Land Development Agency 7. CONSULTANT(S) Jan. 1995 Nov.1996 22month(s) 8. STUDY PERIOD Mexico, Jalisco State Coastal Area (8 provinces, 1.2million ha) 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) 5 projects and 10 programs were proposed. Projects/ Programs with high priority are as follows. 1. Farm Products for Export Promotion Program. 2. Agricultural and Stock Farm Products Distribution Improvement Program. 3. Agricultural and Stock Farm Products Processing Facility Project. 4. Small-Scale Irrigation Project 5. WID. Organization Reinforcement Program.

CSA MEX/A 101/95 M/P

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

The Govt. of Mexico is preparing to submit a request for assistance to implement a part of proposed projects to Japan.

#### (FY 1996 Overseas Survey)

According to the proposed project, 8 cities have been implementing the investment project in the year of 1996/1997.

1."Farm Products for Export Promotion Program"

The Products Improvement Program was formulated for the production of banana, sesame, mango, melon, watermelon, sugar cane and papaya as well as the Dried Fruits Program for papaya, lemon and banana.

#### 2."Agricultural and Stock Farm Products Distribution Improvement Program"

The collecting place for the stock farm products was constructed and the market information system for producers was established.

#### 3."Agricultural and Stock Farm Products Processing Facility Project"

The packing facility for mango, melon and papaya was constructed.

#### 4."Small-scale Irrigation Project"

Various irrigation facilities are to be constructed in the second unit as the Fertilizer Irrigation Project is implemented.

#### 5."WID Organization Reinforcement Program"

The Domestic Works Training Program, including sawing, cooking, first-aid treatment and sweets making, and the program to integrate women into the producers groups are to be implemented.

#### (FY 1997 Domestic Survey)

JICA Expert dispatched to SAGAR is examining a realization of priority projects. T/R is being prepared to request assistance from Japan for small-scale irrigation project.

#### (FY 1998 Overseas Survey)

During the period of 1996~98, the following activities have been made.

#### 1."Farm Products for Export Promotion Program'

Principal component of the project is the application of fertilizer and irrigation technology to horticulture (water melon, melon, chile). Seeded area has been enlarged and the number of cultivations and production per hectare has been increased. Municipalities such as Cihuatlan, Casimiro Castillo, La Huerta are participating this activity. Cultivation of eggplant, cabbage, tomato, okra, macadamia for export is being introduced. Small-scale horticulture has been started in Puerto Vallarta. Seeding technology was firstly applied to Casimiro Castillo, and La Huerta from 1996 to 98, then to Tomatlan, and Cihuatlen from 1998 to 99.

#### 3."Agricultural and Stock Farm Products Processing Facility Project"

Two plants for processing mango for export were constructed in Tomatlan and Cihuatlen. Training regarding operation is being conducted. Others:

SAGAR is implementing the extension of irrgation and training to the concerned producers under the program of "Alliance for Rural Area".

#### (FY 1999 Overseas Survey)

#### 1. "Farm Products for Export Promotion Program"

220 Tractors equipped with harrow and plow, 40 irrigation equipment (sprinklers), 250 sprayers, 250 tracks were introduced. Advanced technology of fertilizer and irrigation are applied for 2,000 ha and the new way of sowing is used for the cultivation of water melon, melon, papaya. Therefore, quality, quantity, and productivity of the agricultural products have been greatly improved and enhanced. Okura, beans, squash for export are able to be cultivated.

2."Agricultural and Stock Farm Products Distribution Improvement Program"

Communication network model on agricultural/livestock activities connecting both public and private institutions through the artificial satellite is under examination.

3."Agricultural and Stock Farm Products Processing Facility Project"

The packing machines for mango, lemon, water melon, papaya, and banana were introduced. A milk collecting center and the centers for livestock shipping were constructed. Those projects are financed by federal and state government, and producers.

#### 4."Small-scale Irrigation Project"

Irrigation system (sprinklers) were installed at 40 sites, 25 of which are financed by both the federal government and the producers and the rest 15 of which are financed by only producers. The total investment is US\$12,000,000. Benefited area is 2,000ha and the number of beneficiaries is 300 producers.

The irrigated area development program (US\$10,000,000; first unit for 5,000ha and second unit for 5,000ha) is to be completed.

#### "WID Organization Reinforcement Program"

The training of domestic works such as including sawing, sweets making, handicrafts is conducted.

#### (FY 2005 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2005 Overseas Survey)

Senior Volunteers (SV) were dispatched from October 28th 2001 to October 27th, 2004 for a follow up of the development study. SV facilitated soil conservation and improvement, farming technology improvement, and farming management improvement.

Although the activities does not mean a realisation of the prooject proposed in the D/S, which requires huge investments, part of the projects have been revised to posses a higher feasibility.

## STUDY SUMMARY SHEET (M/P)

|     |              | Compilea | Jun.199  |
|-----|--------------|----------|----------|
| CSA | MEX/S 120/96 | Revised  | Jul.2009 |

| 1.                          | COUNTRY   | Mexico  |  |             |    |  |  |  |
|-----------------------------|---|---|--|-------------|----|--|--|--|
| 2.                          | NAME OF STUDY   | Determination o                                     | Determination of the Investment Strategy for the Tourist Promotion |             |    |  |  |  |
| 3.                          | SECTOR  | Tourism   | / (Tourism   | in) General | 4. | TYPE OF STUDY M/P                        |  |  |
| 5.                          |   |   | , (2 0 0 0 0 0 0 0 0   |             |    |  |  |  |
|                             | COUNTERPART AGEN<br>TIME OF DEVELOPME   |   |  |             |    |  |  |  |
|                             | PRESENT COUNTERPA   | ART AGENCY  |  |             |    |  |  |  |
| 6.                          | OBJECTIVES OF THE STUDY   |   | e future tourism develop<br>courist spots developmen               |             |    | ourist spots, through evaluating the nt. |  |  |
|                             |   | Pacific Consulta                                    | ints International   |             |    |  |  |  |
| 7.                          | CONSULTANT(S)   |   |  |             |    |  |  |  |
| 8.                          | STUDY PERIOD  | Sep.1995 ~  | Dec.1996   | 15month(s)  |    |  |  |  |
| 10.                         | SITE OR AREA  MAJOR PROPOSED PR   | OJECT(S)  |  |             |    |  |  |  |
| Ro<br>Fo<br>In<br>2.L<br>To | Cancun evitalization of Cancun T ormation and Reinforcem approvement of Tourism E os Cabos ourism Development in E evitalization of La Paz To | ent of Mundo Ma<br>Base in the Southe<br>East Cape. |  |             |    |  |  |  |
| Fo<br>3.P<br>Ro             | ormation of Tourism Corr<br>duerto Vallarta<br>einforcement of Puerto V   | ridor La Paz-Cop<br>allarta City.                   |  |             |    |  |  |  |
|                             | ourism Development focu   |   | Mexican Culture.   |             |    |  |  |  |

CSA MEX/S 120/96 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 1997 Domestic Survey)

- The Ministry of Tourism reviewed the results of the JICA study for incorporating its recommendations and action plans into the new policy of tourism development and promotion.
- The Municipal Government of Benito Juares in Cancun requested to the Federal Government the implementation of the Nipcute Lagoon Comprehensive environment improvement project.

#### (FY 1998 Overseas Survey)

(1)Cancun

Documentes and information are utilized as the base of development promotion activities.

(2)Los Cabos

South Baja California Tourist Service Promotion Program was formulated based on this study.

(3)Puerto Vallarta

This study is utilized as the base for formulating the tourist promotion plan in this area.

Tourist promotion activities in this area are as follows.

- -Reinforcement of regionalization strategy in the context of tourist route.
- -West San Sebastian: development of accommodation for the tourists of the route of Puerto Vallarta San Sebastian, commercialization of the same route by Tron Airline, development of infrastructure of Vallarta mountain, road development of Mascota Puerto Vallarta.
- -Air route of Puerto Vallarta Guadajara: commerialization of package tour for tourists from overseas.
- -Start of promotion of convention center, golf courses, ecology park.
- -Rural tourism in this area and neighboring area.

#### (FY 2000 Overseas Survey)

(1)Puerto Vallarta

The results of this Study have been utilized as the base for formulating the tourist promotion plan in this area. 45% of proposed projects has been implemented. After the next election, the government would continue to realize the proposed projects.

(2)Los Cabos

The results of this Study have been utilized as the base for formulating the tourist promotion plan in la Paz and Cabo del Este.

(3)Cancun

This study is utilized as the base for formulating the tourist promotion plan in this area.

Tourist promotion activities in this area are as follows.

- -Cancun City Center: Expansion of Pedestrian Area in Tulum and Uxmal Avenue, Redevelopemnt of Las Palapas Park.
- -Cancun TouristCenter: Partial Redevelopement of Punta Cancun Area, Tourism Promotion by Private Sector named Corazone, Accommodation-140 Hotels and 24,610 Rooms (1999),141 Hotels and 25,368 Rooms (2000) .
- -Route of Mayan Culture: Tourists Agencies run 3 day trip and 7 day trip along the route of Mayan ruins.
- -Investment and New Projects in Sourthern Part: Service Center in Kohunlich Archeological Site, Oxtankah, and Dzibanche. Development of Mahahual Port, Expansion of Roads(Chetumal-Bacalar(constructed), Bacalar-Mahahual(planned)).

#### (FY 2002 Overseas Survey)

The projects for promoting tourism and development, implemented during the period between 2001-2002 are following:

- 1. Cancun1.
- 1-1. Training programs on tourism, targeted for tourist agents and civilians,
- 1-2. Establishing the Caucun Visitor Center and the Conference Center, aimed at attracting conference and activating tourist industries,
- 1-3. Modernizing transportation network,
- 1-4.Improving environment for the lake system, etc.
- 2. Los Cabos
- 2-1. Opening new hotel
- 2-2.Increasing domestic and international fright in Loreto, etc.
- 3.Cancun
- 3-1. Developing eco-tourism in several areas,
- 3-2.Implementing government-financed training programs for staff, etc.

(M/P+F/S)

Compiled Dec.1999

| CS | SA MEX/A 2  | 225/98                               |   |   |                          |                              |                       |                                     |                | Revised   | Ju      | 1.2009 |
|----|---|--------------------------------------|---|---|--------------------------|------------------------------|-----------------------|-------------------------------------|----------------|---|---------|--------|
| 1. | COUNTRY   | Mexico                               |   |   |                          |                              |                       |                                     |                |   |         |        |
| 2. | NAME OF STUDY   | Sustainable De                       | velopment Pla                                       | n of Forests  | at Villages              | in Oaxaca                    |                       |                                     |                |   |         |        |
| 3. | SECTOR  | Forestry                             |   | / Forestry &  | Forest Cor               | servation                    | 4.                    | TYPE OF ST                          | UDY            | M/P+F/S   |         |        |
| 5. | COUNTERPART AGEN<br>TIME OF DEVELOPME   | -                                    |   |   |                          |                              |                       |                                     |                |   |         |        |
|    | PRESENT COUNTERPA   | RESENT COUNTERPART AGENCY            |   | Direction General of Forestry, Undersecretariat of Natural Resources, Secretariat of Environment, Natural Resources and Fisheries (SEMAENAP). |                          |                              |                       |                                     |                |   |         |        |
| 6. | 1) To prepare a sustainable development plan (M/P) to make possible the conservation and sustainable use of forest resources of the Study are of 160,000ha which was defined in the Sierra Juanrez Region in the State of Oaxaca, 2)To prepare forest management plans for the villages located in the Pilot Area of 20,000ha, which locate around the San Pedry Yolox, and to execute a F/S according to the prepared plans, and 3)To transfer related technology in the course of the Study to C/P personnel. |                                      |   | Pedro   |                          |                              |                       |                                     |                |   |         |        |
| 7. | CONSULTANT(S)   | Japan Forest Te<br>Pasco Internation |   | ciation   |                          |                              |                       |                                     |                |   |         |        |
| 8. | STUDY PERIOD  | Jan.1997 ~ Oct.1998 21month(s)       |   |   |                          |                              |                       |                                     |                |   |         |        |
| 9. | SITE OR AREA  | of the Study, th                     | nat area has ex<br>ea of 13,000ha<br>For 5,000ha, a | tended to 190<br>a (at first, the<br>affected by th   | 0,000ha in<br>Pilot Area | consideration<br>was defined | of admir<br>in 18,000 | nistrative bour<br>Tha, but this an | dary)<br>ea ne | 50,000ha, but in<br>eded to be chang<br>ate measures to r | ged due | e to   |
| 40 |   | O TELOTE (O)                         |   |   |                          |                              |                       |                                     |                |   |         |        |

#### 10. MAJOR PROPOSED PROJECT(S)

<M/P>

CCA

MEV/A 225/09

A M/P was prepared as a Sustainable Forestry Development Plan for the Communities (indigenous communities of Mexico) located in the Study Area of steep mountain region in which the forest resources are practically the only natural resources. The objective of the Plan is to accomplish development of these Communities through the promotion of forest management and production. The principle of the M/P is to execute forestry operations to maintain the sustainability of various forest functions such as public and economic utilities. Based on this principle, the Plan indicated how the Communities should take measures to develop forestry operation and production. This Plan should be considered and used as a model for cases of which the Communities develop their forestry operation and production. In the M/P, some model cases are analyzed comparatively depending on forest conditions and other geographical conditions, by estimating cost, income, and profitability, And also the perspective of Communities' development is mentioned.

<F/S>

For three Communities which were selected in the Study Area (at first, four Communities had been selected, but one of them was damaged by forest fire, and therefore, it became impossible to prepare Forest Management Plan. So, for this Community, a guide on forest rehabilitation of damaged area was prepared), the Forest Management Plans were prepared for each individual and independent implementation by themselves. These Plans took various conditions of Communities into consideration, such as forest resources' situation, location, socio-economic situation, and inhabitants' opinions, in order to suggest the principle and measures on their own forestry operation. Furthermore, next ten years' operation plan was arranged based on forest classification by their functions and long term perspective of forestry management. However, it needs very long term till the wood products are obtained through the forestry management. Therefore, Feasibility was examined taking into account 90 years, that is the sum of 60 years, which is the period to start to yield from the forest renewed by this plan, and more 30 years, in which it will be able to yield stably. The judgement of feasibility was done by Present Net Value. Main contents of the forestry operation are: 1)tending (weeding, improvement cutting, and thinning), cutting (thinning and final cutting), regeneration (mainly by natural regeneration), and forest improvement in commercial forest, 2)forest improvement in fuel wood's forest, and 3)construction and maintenance of forest roads. Furthermore, the environmental impact consideration on forestry operation was conducted.

CSA MEX/A 225/98 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY 1999 Domestic Survey)

Major part of the Sierra Juarez Region, in which the Study Area located, has no relevant natural resources but forest resources, therefore, the inhabitants of the Communities earn by only agriculture in steep lands and going to foreign or domestic cities to work. However, the communities are found in poverty situation. Scales, qualities, and other conditions of forest resources that form most important resources in this region differ by each communities. But, to considerable measure, forest resources have contributed to improve living basic conditions and to generate income for inhabitant. Nevertheless, in the past, private forestry enterprises operated devastating cuttings without consideration to sustainability, therefore, pine trees, that have high commercial value, have been reducing. Consequently, it is very difficult for major part of communities to execute continuos forestry production.

Under such a situation, Oaxaca Office of SEMAENAP is making effort to improve communities' situation of this region through the forestry development. Therefore, this office expects the Forest Management Plans, prepared by this Study, will be carried out to accomplish that objective, and will contribute as a model of adequate forest management. In case of implementation, Oaxaca Office of SEMARNAP will take responsibility to offer communities technical and administrative support. However, this office ahs shortage of technical staff and finance to give sufficient support. So, SEMARNAP is desiring Japanese cooperation for continuation of this project. After the Study terminated, SEMAENAP has requested Japanese short term experts, and two Japanese experts (Forest Management and Forest Fire Prevention) were dispatched in relation with this project.

(FY 1999 Overseas Survey)

SEMARNAP Office in Oaxaca State now revises the plans of study and search the possibility to support the communities for the operation of the project. Derection General of Forest will negotiate the support of JICA.

Dispatch of expert:

(FY 2001 Domestic Survey)

Short-term expert (one, Participatory Forestry Management): From Mar. to Apr.2001

Long-term expert (one, Technical Advice on the Rural Forestry Diffusion): Two years from Oct.2001

(FY 2003 Domestic Survey) Target of the request for funds:

JICATime of request: August 2002

Condition in relation to the realization of the request: A project to realize the plan formulated in the development studies was proposed by a local NGO, and was adopted (requested by NGO, subject to application of Development Welfare Support Project). Because the scheme of Development Welfare Support Project was abolished, the project will be implemented as a Technical Cooperation Project and is now prepared for signing of R/D.

Fixed contents (amount) in the case that the fund raising is realized: Amount of approximately 15 million yen

|     |              | (NI/P) | Compiled | Jun.2000 |
|-----|--------------|--------|----------|----------|
| CSA | MEX/S 112/99 |        | Revised  | Jul.2009 |

| 1.                 | COUNTRY  | Mexico                                  |                        |  |                |                    |            |
|--------------------|--|---|------------------------|--|----------------|--------------------|------------|
| 2.                 | NAME OF STUDY  | Study on Develo                         | opment of the National | Water Quality Monitoring   | g Program i    | n Coastal Areas    |            |
| 3.                 | SECTOR   | Administration                          | / Environ              | mental Problems  | 4.             | TYPE OF STUDY      | M/P        |
| <u>5.</u>          | DOION  | 2 KirminsuatiOII                        | Nacional Water Comi    |  | 7.             | THE OF STUDI       | 17 A/ 1    |
| ·                  | COUNTERPART AGEN<br>TIME OF DEVELOPME  |   | Tuelonal Water Com     | ission (C. v.)   |                |                    |            |
|                    | PRESENT COUNTERPA  | ART AGENCY                              |                        |  |                |                    |            |
| 6.                 | OBJECTIVES OF THE STUDY  | 2) Preparation o                        |                        | monitoring program for T<br>tional water quality monito<br>f the study |                |                    |            |
|                    |  | Pacific Consulta                        | ants International     |  |                |                    |            |
| 7.                 | CONSULTANT(S)  | Tuerrie Consulta                        | and international      |  |                |                    |            |
| 8.                 | STUDY PERIOD   | Jan.1999 ~                              | Mar.2000               | 14month(s)   |                |                    |            |
|                    |  | Tampico area ar                         | nd nation-wide coastal | areas  |                |                    |            |
| 9.                 | SITE OR AREA   |   |                        |  |                |                    |            |
| 10                 | MA IOD DDODOGED DD   | O TECT(C)                               |                        |  |                |                    |            |
| 1) N<br>De<br>2) T | MAJOR PROPOSED PR<br>National Coastal Water Q<br>evelopment of 10 Region<br>Tampico Area<br>approvement of the existin | Quality Monitoring<br>al Laboratories a | nd 16 Monitoring Site  | Offices of a monitoring Care Cen                                       | iter for the N | Vational Monitorin | g Network. |
|                    |  |   |                        |  |                |                    |            |
|                    |  |   |                        |  |                |                    |            |
|                    |  |   |                        |  |                |                    |            |
|                    |  |   |                        |  |                |                    |            |

CSA MEX/S 112/99 M/P

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 2000 Domestic Survey)

No information is available because the political situation was changed by the election after the completion of this study.

#### (FY 2002 Overseas Survey)

Alteration of regime has thrown the society into confusion. However, the factors, hampered the project from progressing as planned were economic/financial problems. Despite this, it was determined to construct a laboratory at headquarter of Northern region, as continuing project, operated by CAN. There also comes possibility of building facilities for the water quality monitoring center in Altamira city of Tamaulipas state before long. Water quality monitoring program in Tampico has continued to be implemented, based on basic principles, presented in the final report of National program. The criteria, proposed by JICA experts have been adopted in National program.

#### (FY 2003 Overseas Survey)

Part of the observation of water quality in Altamira and Tampico city of Tamaulipas state have been conducted using there own budget. Improvement and expansion have been conducted for local water quality institution in northern port area in Altamira of Tamaulipas state.

#### (FY 2004 Domestic Survey)

- 1. Proposed Project: National Water Quality Monitoring Program
- 2. Funding Party: the World Bank, and Mexican Gov. budget
- 3. Amount: Loan from the World Bank through "Water Quality Resource Management Project" is planned to total to 186.5 million USD from 1996 to 2005 period (part of the fund will be used for renewal, alteration, and purchasing of evaluation equipment of water quality evaluation laboratory).
- 4. Content: The project plans for national wide comprehensive water quality monitoring not only for coastal water but including surface water and groundwater.
- 5. Design/Construction progress
- 1) Project Name: Coastal Water Quality Monitoring Reference Laboratory Construction
- 2) Construction Period: Start 2000 End November 2003
- 3) Content: Based on the proposal of this D/S, Project-Type Technical Cooperation is planned to be implemented in improving capability of Costal Water Monitoring Reference Laboratory, as a new FY 2004 project.
- 6. Progress of the Implemented Projects
- 1) Project Name: "Coastal Water Quality Monitoring Network Empowerment Assistance Plan"
- 2) Benefit:

Direct Beneficiaries - local water quality analyst of CAN (13 location nation wide)

Indirect Beneficiaries - All Mexican nationals

#### (FY 2005 Domestic Survey)(FY 2005 Overseas Survey)

Subsequent study: Study on Development of the National Water Quality Monitoring Programme in Coastal Areas (JICA Technical Cooperation Project)
Implementing body: Mexican government State Water Committee

Situation:

August 2005: Preparatory study was completed.

Early 2006: The programme is to be started.

Relationship with the study: The Mexican government State Water Committee would implement this technical cooperation project by utilising the world bank loan funds, targeting State Water Committee Northern Coastal Area Reference Laboratory built in the Tamauripas Altamira city in 2003.

### STUDY SUMMARY SHEET (M/P)

Compiled Jun.2000 **CSA** MEX/A 118/99 Revised Jul.2009

|                            | DA VILA/A 110                         |  |  | Keviseu Jui.2009     |  |  |  |  |  |
|----------------------------|---------------------------------------|--|--|----------------------|--|--|--|--|--|
| 1.                         | COUNTRY                               | Mexico   |  |                      |  |  |  |  |  |
| 2.                         | NAME OF STUDY                         |  | ntegrated Agricultural, Livestock and Rural Development of the Soconusco Region (the Rural Development District No. in Tapachula) in Chiapas   |                      |  |  |  |  |  |
| 3.                         | SECTOR                                | Agriculture  | / (Agriculture in) General   | 4. TYPE OF STUDY M/P |  |  |  |  |  |
| 5.                         | COUNTERPART AGEN<br>TIME OF DEVELOPME |  | Secretariat of Agriculture, Livestock and Rural Develor<br>Secretariat of Agriculture and Livestock (SAG)  | opment (SAGAR)       |  |  |  |  |  |
| PRESENT COUNTERPART AGENCY |                                       |  |  |                      |  |  |  |  |  |
| 6.                         | OBJECTIVES OF THE STUDY               | scale farmers, to<br>formulation of in<br>might serve supp<br>Soconusco Regi<br>(2) To conduct t | In view of effective accomplishment and enhancement of quality of life and increase in agricultural income among small scale farmers, to formulate a M/P for sustainable integrated agriculture and rural development project with focus laid on formulation of infrastructure development for agricultural production and grass-roots-assisted small-scale projects that might serve supporting small farmers in embarking them with their own funds covering a total area of 5,996 km2 in the Soconusco Region.  (2) To conduct technology transfer to the Mexican counterpart personnel regarding study methodology and flow and concept on formulation of development. |                      |  |  |  |  |  |
| 7.                         | CONSULTANT(S)                         | Pacific Consultants International Naigai Engineering Co., Ltd.                                   |  |                      |  |  |  |  |  |
| 8.                         | STUDY PERIOD                          | Jun.1998 ~   | Aug.1999 14month(s)  |                      |  |  |  |  |  |
|                            | SITE OR AREA                          | Soconusco Region in the State of Chiapas   |  |                      |  |  |  |  |  |
| 10.                        | MAJOR PROPOSED PR                     | OJECT(S)   |  |                      |  |  |  |  |  |

M/P:

- 1. Invigoration of Rural Society
- 2. Strengthening of Agriculture and Livestock Production System
- 3. Agriculture and Rural Infrastructure Development
- 4. Environmental Conservation

Pre F/S: Soconusco Region ,Santa Cruz Area, Mixcum Area

- 1. Santa Cruz Area (Improvement of agricultural and livestock production of low income farmers in the area by the following development plan. Plan for the introduction of mixed agriculture swine breeding ,Plan to strengthen technical assistance and extension services, Plan to improve agricultural with and livestock commercialization system and agro industrial promotion and Plan to improve agricultural and rural infrastructure)
- 2.Mixcum Area (Plan for the introduction of mixed agriculture with swine breeding, Plan to strengthen agricultural extension services, Plan to improve commercialization and promote agro industry and Plan to develop rural infrastructure)
- 3.Plan for the Promotion of Ecological Agriculture( Promotion of sustainable agriculture, Promotion of agricultural practices using natural resource and Measure for forestry resoure)

CSA MEX/A 118/99 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY2000 Domestic Survey)

Two Japanese experts(Short term experts; Sustainable agriculture specialist and small animals specialist) were requested by SAGAR to Japanese Government on 1999, however there is no information about the progress after the request.

(FY 20002 Domestic Survey)

Dispatch of experts has not been realized. Furthermore, there is no progress for the implementation.

Japanese Technical Cooperation

(FY2002 Overseas Survey)

Training experts in Japan: 1 trainee, Oct - Nov, 2002,

Dispatching experts: staying in Tapachula.

(FY2002 Domestic Survey)

The local Govt. requested for project-type cooperation, and JICA conducted contact mission in Aug 2002. However, no information is available on the status of projects.

(FY 2004 Domestic Survey)

- 1. Finance:
- 1) Proposed Project: Project on Assistance Plan for Small Producers in El Soconusco, Chiapas
- 2) Funding Party: Project-type Technical Cooperation
- 3) Amount: Approximately 150 million YEN (1st March, 2003 28th February, 2006)
- Contents
- (1) Project Objectives: To become cable of conducting new projects for village development, where municipal taking a leading role with corporations from the SDR and the SAGARPA.
  - (2) Outcome: the following can be considered as an outcome
  - New organisations to be established in 4 villages (Tapachula, Pavencul, Acagoyagua, Union Juarez) to promote new businesses.
  - New businesses to be established by local initiatives in 5 villages (Pevencul, Tuzantan, Jaramillo, Los Cacaos, San Rafael), taking into account individual situations.
  - Assistance will be given by SDR and SAGARPA in establishing organisation for new businesses in 4 villages.
  - (3) Japanese Implementation Structure
  - Long-term consultants: 2 personnel (organisational management, project management/operation)
  - JOCV: 3 personnel (Community Development)
  - (4) Short-term dispatch of experts
  - August 2002 Short-term experts (Village Study)
  - August-September 2004 Short-term experts (Community Development)
- Other Progresses
- 1) Project Name: Project on Assistance Plan for Small Producers in El Soconusco, Chiapas
- 2) Beneficiaries: Residents in Chiapas, Soconusco district

Soconusco district has 16 municipalities with 5,500 squire km of land. Population is 920 thousand (1995).

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

(M/P+F/S)

Compiled Jun.2000

| CS       | SA MEX/S 2                             | 217/99                                    |   |                       | Revise                                    | ed Jul.2009 |
|----------|--|---|---|-----------------------|---|-------------|
| 1.       | COUNTRY                                | Mexico                                    |   |                       |   |             |
| 2.       | NAME OF STUDY                          | Study on Solid                            | Waste Management for Mexico City  |                       |   |             |
| 3.       | SECTOR                                 | Public Utilities                          | / Urban Sanitation<br>Gobierno del Distrito Federal, Direccio   | 4. n General de Servi | TYPE OF STUDY M/P+F/S cios Urbanos (DGSU) |             |
|          | COUNTERPART AGENTIME OF DEVELOPME      |   |   |                       |   |             |
| 5.       |  |   |   |                       |   |             |
|          | PRESENT COUNTERPA                      | ART AGENCY                                |   |                       |   |             |
| 6.       | OBJECTIVES OF THE STUDY                | 2) Carry out the                          | SWM master plan for the target year 20 feasibility study of the priority project(sology transfer regarding SWM to counter   | s)                    |   |             |
| 7.       | CONSULTANT(S)                          | KOKUSAI KO                                | GYO CO., LTD.   |                       |   |             |
| 8.       | STUDY PERIOD                           | Jun.1998 ~                                | May.1999 11month(s)   |                       |   |             |
| 9.       | SITE OR AREA                           | M/P: Mexico Ci<br>F/S: Bordo Poni         | ity (DF: Distrito Federal)<br>iente Area  |                       |   |             |
| 1) 2) 17 | Vertical Expansion of the million ton) | ting facility in ord<br>existing landfill | der to minimize final disposal amount (Sup to 24m in order to secure disposal casecure disposal capacity for the future was | pacity for the futur  | e waste disposed of. (Capacity sec        |             |
|          |  |   |   |                       |   |             |

CSA MEX/S 217/99 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY 2000 Domestic Survey)

Regarding implementation of the projects, the Mexican side requested the Japanese Government to dispatch an expert. Then, the vice-leader of the Study has been dispatched in December 2000 and is working in Mexico. At present, DGSU has prepared to implement the two of the three proposed projects, i.e., Composting Facility and Vertical Expansion of the Existing Landfill.

#### (FY 2002 Domestic Survey)

Construction of compost facility and enlargement of existing disposal facilities are implemented using its own capital.

#### (FY 2003 Overseas Survey)

A compost plant in Bordo Poniente that composts organic wastes is expected to be constructed in 2000 and formally operated from the following year after finishing the test operation stage. In the landfill of Bordo Poniente, 13 wells were constructed or placed and five more wells are expected to be constructed or placed in 2004.

#### (FY 2004 Domestic Survey)

Dispatch of experts: 1 personnel Solid waste treatment December 2000 - December 2003.

#### (FY 2004 Overseas Survey)

- 1. Design/construction:
- 1) Bordo Poniente ultimate disposal facility has completed Phase IV load test, which presented satisfactory result with no signs of ground deformation, which may result in risks of facility stability and exudation.
- 2) Bordo Poniente Phase IV closing project has been prepared. This includes expansion design from 12 m to 15 m, resulting in 3.85 years longer life span, usable till 2007
- 2. Progress of Design/Construction: 95 percent
- 3. Completion:
- 1) Study and project related to ultimate disposal facility and compost plant has fully completed. In December 2004, the first annual geological examination will be conducted.
- 2) Operation of ultimate disposal plant exceeding the maximum level scheduled in FY 1992 will start from July, 2004 and will be operated until the closer according to the plan.
- 4. Operation/management body after completion: Technical Director of M. en C.

### STUDY SUMMARY SHEET (M/P)

Compiled Jan.2006 **CSA MEX/S 101/04** Revised Jul.2009

| 1.  | COUNTRY                                | Mexico         |   |                       |  |  |  |
|-----|--|----------------|---|-----------------------|--|--|--|
| 2.  | NAME OF STUDY                          | Development St | udy of Environmental Management in the Caribbean C  | Coast of Quintana Roo |  |  |  |
| 3.  | SECTOR                                 | Administration | / Environmental Problems  | 4. TYPE OF STUDY M/P  |  |  |  |
| 5.  | COUNTERPART AGENO<br>TIME OF DEVELOPME | CY AT THE      | Ministry of Environment and Natural Resources, National Water Commission (CONAGUA), Urban Development and Environment Ministry of Quintana Roo State (SEDUMA, State Commission for Water and Sewage of Quintana Roo (CAPA)                      |                       |  |  |  |
|     | PRESENT COUNTERPA                      |                |   |                       |  |  |  |
| 6.  | OBJECTIVES OF THE STUDY                |                | The goal of this study is: 1) to formulate "Sanitary Environment Management Master Plan" setting the year 2015 as a arget year; 2) to select priority projects based on M/P and to conduct F/S; and 3) to implement technology transfer to C/P. |                       |  |  |  |
| 7.  | CONSULTANT(S)                          | KOKUSAI KOO    |   |                       |  |  |  |
| 8.  | STUDY PERIOD                           | Mar.2003 ~     | Aug.2004 17month(s)   |                       |  |  |  |
|     | SITE OR AREA                           |                | , Felipe c. Puerto, Solidaridad   |                       |  |  |  |
| 10. | MAJOR PROPOSED PR                      | OJECT(S)       |   |                       |  |  |  |

- 1. Waste water facilities development
- 1) Improvement of waste collection rate
- 2) implementation of safe closure of disposal site
- 3) reduction of waste,
- 4) improvements in service fee collection system
- 5) establishment of waste management legislation
- 3. Groundwater monitoring system development, and establishment and improvement of groundwater preservation
- 4. Diagnose water quality, evaluate, and implement necessary measures in order to preserve coastal water environment.

CSA MEX/S 101/04 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2005 Overseas Survey)

Although infrastructure development is in delay compared to infrastructure development plan noted in the MP, water distribution management plan is in progress according to proposal made in the M/P, which CAPA officials has utilized knowledge and techniques gained through the study.

For the urban solid waste disposal management, while majority of executive officials has been replaced in SEDUM, technical staffs participated in the study has remained. On the other hand, for the regional level, majority of staffs from prior regime has been replaced, which the outcome of the study has not been passed on with low acknowledgement.

For the model project for waste water disposal, waste water disposal system has been constructed in other village utilizing experience gained from the model project joined by CAPA as a CP.

Comprehensive solid waste management system developed with SEDUM and 3 province as a CP is still in operation, which SEDUM intends to publicise the system on the homepage in the near future.

#### (FY 2006 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2007 Domestic Survey)

Conduction of "Reinforcement of Underground Water Management Capacity in Yucatan Peninsula", which is a technical support project in aim to take in the contamination of underground water and to strengthen the management capacity of underground water, has been considered by JICA. The objective is to conserve underground water and to utilize it in sustainable manner.

**(F/S)** 

Compiled Mar.1995

| CS   | 6A NIC/S 30                | <i>J</i> 6/93       |   |                   | Revis                              | ed Ju   | ul.2009 |
|------|----------------------------|---------------------|---|-------------------|------------------------------------|---------|---------|
| 1.   | COUNTRY                    | Nicaragua           |   |                   |                                    |         |         |
| 2    | NAME OF CTUDY              | Water Supply P      | ject in Managua                               |                   |                                    |         |         |
| 2.   | NAME OF STUDY              |                     |   |                   |                                    |         |         |
| 3.   | SECTOR                     | Social Infrastruc   | ire / Water Resources Developm                | ent 4.            | TYPE OF STUDY F/S                  |         |         |
| 5.   |                            |                     | NAA   |                   |                                    | -       | -       |
|      |                            |                     | NTER  |                   |                                    |         |         |
|      | COUNTERPART AGEN           |                     | 1221  |                   |                                    |         |         |
|      | TIME OF DEVELOPME          | ENT STUDY           |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    | -       | -       |
|      |                            |                     |   |                   |                                    |         |         |
|      | DDECENTE COLUMEDO          | A DEL A CIENCIA     |   |                   |                                    |         |         |
|      | PRESENT COUNTERPA          | AKI AGENCI          |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         | ļ       |
|      |                            | m 11                | 1   | 1. 1              |                                    |         |         |
|      |                            | To evaluate the     | oundwater potential of Managua basin and      | to make a con     | crete plan for groundwater develo  | pment.  |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      | OBJECTIVES OF THE          |                     |   |                   |                                    |         |         |
| 6.   | STUDY                      |                     |   |                   |                                    |         |         |
|      | 51021                      |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            | KOKUSAI KO          | YO CO., LTD.                                  |                   |                                    |         |         |
| 7.   | CONSULTANT(S)              |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            | Dec.1991 ~          | Mar.1992 3month(s)                            |                   |                                    | -       | -       |
| 8.   | STUDY PERIOD               | Jun.1992 ~          | Sep.1993 15month(s)                           |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            | the area of the     | uthern side of Lake Managua (about 880ki      | m2)               |                                    |         |         |
|      |                            | the area of the     | itien side of Lake Managua (about 660ki       | 1112)             |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
| 9.   | SITE OR AREA               |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      | MAJOR PROPOSED PR          |                     |   |                   |                                    |         |         |
|      |                            |                     | n North Ticuantepe in the Eastern sub-area    | and installation  | of the facilities for water convey | ance to | the     |
| exis | sting water distribution p | ond in Altamira.    |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     | s in the Eastern sub-basin and installation   | of the facilities | for water conveyance to the existi | ng wate | er      |
| dist | ribution pond in Americ    | as no.4.            |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
| 3)0  | Groundwater developmen     | t in the area adjac | nt to the east of the Study Area and installa | ation of the faci | lities for water conveyance to Mar | nagua C | ity.    |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |
|      |                            |                     |   |                   |                                    |         |         |

CSA NIC/S 306/93 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(1)Development of New Groundwater Source in Ticuantepe and

Installation of Water Conveyance to Altamira Pond.

Subsequent Studies:

Jul.1994 B/D Commenced

Feb.1995 E/N 84mil.Yen

(Project for Improvement of Water System in Managua City (D/D))

#### Finance:

Jun.1995 E/N 1,516 mil.Yen

(Project for Improvement of Water System in Managua City)

\*Components

Construction of water supply system

Provision of machinery for pumping and its installation

FY 1996 E/N 1,393 mil.Yen

(Project for Improvement of Water System in Managua City)

#### Construction:

Nov.1995~Mar.1998 Implementation

Consulting Firm/Kokusai Kougyo, Nippon Jogesuido Sekkei

#### (2) Development of Residual Groundwater Sources

(FY 1996 Domestic Survey)

This project is planned to be implemented as the Phase-II following to the presently-implemented Phase-I. The request is to be submitted to the Japanese Government as the 1998 grant aid project.

(FY 1997 Overseas Survey)

Study for Phase II was requested. Basic Study has been completed in Dec.1997.

INAA is promoting legalization of land for the project.

#### Finance:

(FY 1999 Domestic Survey)(FY 1999 Overseas Survey)

11 Jan. 1999 E/N 99mil.yen.

14 May 1999 E/N 2,867mil.yen.

Construction:

(FY 1999 Overseas Survey)

Phase I: May 1999 ~ Mar. 2000.

Phase II: Apr. 2000 ~ Mar. 2001.

\*Contents: excavation of 15 wells, construction of 2 water supply tanks, construction of a pumping station, etc.

#### (3) Groundwater Development in the Adjacent Area to East of Study Area

(FY 1996 Domestic Survey)

The development study should be implemented to formulate a long-term plan on the water source of Managua City, with considering the possibility of water intake from Lake of Nicaragua.

(M/P+F/S)

Compiled Sep.1995

**CSA** NIC/S 201/94 Revised Jul.2009 1. COUNTRY Nicaragua Road Improvement and Rehabilitation Study 2. NAME OF STUDY 3. SECTOR / Road 4. TYPE OF STUDY M/P+F/S Transportation Ministry of Construction and Transportation (MCT) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY To draw up the Master Plan for arrangement of main national highways in Nicaragua, and the Feasibility Study for the national highways with high priority. 6. OBJECTIVES OF THE STUDY Central Consultant, Inc. 7. CONSULTANT(S) Nippon Koei Co., Ltd. Feb.1993 Jun.1994 16month(s) 8. STUDY PERIOD Whole of the country 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Following projects of the road arrangement have been selected as for the feasible projects. 1)Managua - Masaya (8.52km) Level or two level crossing, expansion of road width to 4 lanes, reconstruction of 2 bridges, renovation fo pavement and partial course. 2)Managua - Masaya (17.38km) 3) Managua - Tipitapa (4.30km) Renovation of the structure mainly 4) Nandaime - San Venito (65.13km) Improvement of pavement including facillities for drainage and sidewalks. 5)Telica - San Isidro (95.76km) Same as above (with a little inferior level of renovation).

CSA NIC/S 201/94 M/P+F/S

PRESENT STATUS

Completed

Completed

Partially Completed

Delayed or Suspended

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

(1) Road

(FY 1997 Overseas Survey)

1. Managua ~ Masaya (segment of La Morita bridge ~ Ticuantepe)

Subsequent Study: 1998 Review, D/D (BASS-private-fund); Finance: 1997 Private fund; Construction: to be started after D/D

2.Managua ~ Tipitalapa

Subsequent Study: 1998~1999 D/D (DANIDA)

3.Rivas ~ Tola

Subseugent Study: 1999 F/S, D/D to be carried out

4.Somotillo ~ Guasaule

Subsequent Study: 1996~1997 B/D, D/D (IBRD US\$ 134,292); Construction: not started yet

5.El Crucero ~ Nejapa

Subsequent Study: F/S; Construction: not started yet (fund is not procured)

6.Siuna ~ Puerto Cabezas: No schedule for F/S nor construction

7.Chinandega ~ El Viejo: F/S not undertaken (fund is not procured)

8.Matagalpa ~ Siuna

(Matagalpa~Santa Emilia - rehabilitation, Santa Emilia~El Tuma~La Dalia - pavement, La Dalia~Waslala - rehabilitation)

Subsequent Study:1996 D/D (government budget, EU, BID)

Finance: government budget, EU, BID; (1) Santa Emilia~El Tuma~La Dalia(US\$ 6.84 mil) (2) Matagalpa~Santa Emilia, La Dalia~Waslala(US\$ 5.19 mil)

Construction: 1) Santa Emilia~El Tuma~La Dalia : Apr.1997 commenced Contractor/NAP, Consulting Firm/CISCONCO 2) La Dalia~Waslala: Mar.1997 commenced

Contractor/Consorcio Nacional, Consulting Firm/INACONSULT

9.Sebaco ~ Matagalpa

Subsequent Study: Apr.1998 F/S and D/D started (own fund)

10.La Virgen ~ Rivas (a part of Nandaime ~ Rivas ~ Penas Blancas project)

 $Subsequent\ Study:\ D/D\ (DANIDA)\ ;\ Finance:\ 1995\ Government\ budget(US\$\ 1,897,201.37),\ Denmark\ Govt(US\$\ 13,856,223.29)\ ;\ Construction:\ 1995\ commenced\ ;$ 

Contractor: Denmark firm

11. Esteli ~ Somoto, Somoto ~ Yalaguina ~ Ocotal, Ocotal ~ Las Manos: Apr. 1998~end of 1998 F/S, D/D and EIA are to be undertaken (BID)

(2) Bridge

(FY 1997 Domestic Survey, Overseas Survey)

1.Sebaco, La Madera

Subsequent Study: 1996~1997 B/D and D/D

Study cost: 65.3 mil.yen; Construction: 1996~Apr.1997; Contractor: Hazama, Cousultant/Cental

2.Las Lajas

Subsequent Study:1995~1996 B/D and D/D

Study cost / 65.6 mil.yen ; Construction: 1995~1996 ; Contractor: Hazama, Cousultant/Cental

Finance: "Project for Reconstruction of Bridges in Principal highways" (Dec. 1994 E/N(518 mil.yen), Jun. 1995 E/N(260 mil.yen), E/N(401 mil.yen))

3. Rio Leona, Telica, Cinco Cruces, La Pavona, Los Llanos (a part of Izapa~Leon~Chinandega)

Subsequent Study: 1998 B/D and D/D

Finance: IBRD, government budget ; Construction: 1998~1999 ; Contractor: IMPREGILO (Italia), Consulting Firm/Federic Harris

4.Las Banderas, La Tonga, Estero Real

Subsequent Study:

(FY 1999 Overseas Survey)(FY 1999 Domestic Survey) 16 Jan. 2000 E/N 82mil.yen (D/D)

Finance:

(FY 2000 Domestic Survey) May 2000 E/N 2351 mil.yen "Project for Reconstruction of Bridges in Principal highways"

5. El Venado, Mayaris: No progress due to the financial problem.

6. El Arroyo No.1: Request for financial assistance will be submitted to JICA

7. Gil Gonzales, Ochomogo, Rio Negro

Subsequent Study:

9 Jan.1998 E/N 46 million yen

Jan.1998~May.1998 D/D(JICA Study on reconstruction of main bridges II)

Finance: (FY 1998 Domestic Survey) 28 May 1998 E/N 1,617 million yen.

Construction: (FY 1998 Domestic Survey) Oct.1999~ Construction is to be started.

8.Guarumo(situated in Izapa~Leon~Chinandega which is under construction at present)

Firm/IMPREGILO(Italia)
9.El Arroyo, La Morita: The bridges are in between Managua ~ Masaya of which enlargement was started in the end of February. BASS finances for road and IBRD for

Subsequent Study: 1998 B/D and D/D (IBRD); Finance: 1997 IBRD; Construction: 1998~1999; Contractor: Federic R. Harris, Consulting

bridges.

Subsequent Study: 1998 B/D and D/D (BID); Finance: Government budget, BID; Construction: to be started after D/D

Situation before implementation: At the beginning, the financing from CABEI was expected. However, it is still not granted as yet. Afterwards, an idea to get the finance from OECF came out, but the financing of OECF for Nicaragua is not commenced.

Impeding Factor:

(FY 1997 Domestic Survey) It is still difficult to implement the project with loan owing to the slow economic growth.

(M/P+F/S)

Compiled Jul.1996

| CS          | SA NIC/S 20   |                                      |  |                    |               | Revised  | Jul.2009 |
|-------------|---|--------------------------------------|--|--------------------|---------------|----------|----------|
| 1.          | COUNTRY   | Nicaragua                            |  |                    |               |          |          |
| 2.          | NAME OF STUDY   | Improvement of                       | the Solid Waste Management System f                            | or the City of Man | agua          |          |          |
| 3.          | SECTOR  | Public Utilities                     | / Urban Sanitation   | 4.                 | TYPE OF STUDY | M/P+F/S  |          |
|             | SECTOR  | T done Camales                       | Municipality of Managua  |                    | THE OF STOEL  | 1,111175 |          |
| 5.          | COUNTERPART AGEN<br>TIME OF DEVELOPME   |                                      |  |                    |               |          |          |
|             | PRESENT COUNTERP  | ART AGENCY                           |  |                    |               |          |          |
| 6.          | OBJECTIVES OF THE STUDY   | 1)M/P on waste<br>2)F/S on the mo    | disposal.<br>ost preferred project.                            |                    |               |          |          |
| 7.          | CONSULTANT(S)   | KOKUSAI KO                           | GYO CO., LTD.  |                    |               |          |          |
| Q           | STUDY PERIOD  | Mar.1994 ~                           | May.1995 14month(s)  |                    |               |          |          |
| 8.          | STUDY PERIOD  | Final disposal p                     | lan: Acahualinca sanitary reclamation d                        | isposal plant      |               |          |          |
| 9.          | SITE OR AREA  |                                      |  |                    |               |          |          |
| 10.         | MAJOR PROPOSED PR   | ROJECT(S)                            |  |                    |               |          |          |
| 2)I1<br>3)P | mprovement in collecting improvement in existing I dromotion on community Construction of Acahualin | Los Cocos worksl<br>consciousness ar | nop.<br>ad participation.                                      |                    |               |          |          |
| *PI<br>M    |   |                                      | / 1US\$=C\$7.1183 / 1C\$=Yen14.357)<br>Foreign Cost(US\$1,000) |                    |               |          |          |
| 1           |   | 47.12                                | 9,439  |                    |               |          |          |
| 2           | 11.50   | 0.88                                 | 1,492  |                    |               |          |          |
| 3           |   | 20.52                                | 46<br>17,989   |                    |               |          |          |
|             |   |                                      |  |                    |               |          |          |
|             |   |                                      |  |                    |               |          |          |
|             |   |                                      |  |                    |               |          |          |
|             |   |                                      |  |                    |               |          |          |
|             |   |                                      |  |                    |               |          |          |

CSA NIC/S 202/95 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

The municipality of Managua desires the implementation of the project including the construction of disposal plant. Existing disposal plant in Managua city will be filled within  $4\sim5$  years.

Technology guidance by the study team has been highly evaluated owing to the success on pilot project implemented in this study.

Dispatch of experts is expected.

#### (FY 1997 Overseas Survey)

Municipality of Managua has carried out activities as follows. Fund has not been procured yet for remaining projects.

(1)Improvement in gathering and cleaning system at public area

Expansion of collection service area by introducing new route

Installation of containers(15 cu.m)

(2)Construction of Acahualinca new final disposal plant

Legalization of land for construction of disposal plant

#### Subsequent Study:

(FY 1997 Overseas Survey)

B/D implementing

#### Finance:

(FY 1997 Overseas Survey)(FY 1999 Overseas Survey)

Request for financial assistance was submitted to Japanese government in January 1996.

\*Contents of the request: provision of equipment/materials for operating the system, construction of the new final disposal plant, the improvement in existing Los Cocos workshop, promotion on community consciousness and participation.

(FY 2001 Domestic Survey)

Own fund (2 million Cordoba)

Japanese Technical Cooperation (Dispatch of Expert):

(FY 2001 Domestic Survey) Period: From Apr. to May 2000 Dispatched agency: Managua city Fields: Waste Treatment Planning (1)

Geological Evaluation / Civil Planning (1)

Environment Evaluation (1)

#### Detail:

#### (FY 1998 Domestic Survey)

Japanese government pointed out that financial inability caused the failure in privatizing the collecting system, and proposed that the project contents should be changed and environmentally re-assessed. Priority of the project is reviewed, considering the rehabilitation of the damage by hurricane.

#### FY 1999 Overseas Survey)

Since Acahulinca was flooded by the hurricane Mitch, it was excluded from the candidate sites. Three JICA experts are to be dispatched for selection/evaluation of the candidate site for a new disposal plant.

#### (FY 2001 Domestic Survey)

Three experts were dispatched to Managua city from Apr. to May 2000. As the result of survey by the experts, the location of future disposal plant was selected in CHILITEPE-SOUTH among 5 proposed sites. They said that the proposed site for the disposal plant was far from the city center and needed a large investment like a relay site, therefore, the proposal was made to develop sanitary conditions of the exist plant in order to make the present function longer for the time being. As the reaction to this proposal, Managua city secured 2 million Cordoba for the betterment of exist Acahualinca disposal plant and the betterment works are scheduled to start in Oct.2001. Moreover, Managua city made a request on dispatch of Japanese experts for the purpose of the technical advice, however, the request was not adopted because of the delay of its submit.

#### (FY 2005 Overseas Survey)

Municipality of Managua has requested the Japanese Government for a technical and financial assistance for small-scale enterprise development, assistance, and strengthning as well as improving lliving standars on health, employment, and sanitation aspects.

Several subsequent projects and studies has been conducted. For an examples, improvement of solid waste collection system has been implemented with a Yen loan, construction of gas well in Acahualinca final disposal plant has been implemented with a loan from IADB, and improvement of Los Cocos disposal plant is made with own fund.

(M/P+F/S)

Compiled

Jul.1998

| CS  | SA NIC/S 21  | 5/97                               |   |            |                  | Revised           | Jul.2009 |
|---|--|------------------------------------|---|------------|------------------|-------------------|----------|
| 1.  | COUNTRY  | Nicaragua                          |   |            |                  |                   |          |
| 2.  | NAME OF STUDY  | Sanitation and I                   | mprovement of Urban Environment of Principal  | Cities     |                  |                   |          |
| 3.  | SECTOR   | Public Utilities                   | / (Public Utilities in) General               | 4.         | TYPE OF STUDY    | M/P+F/S           |          |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME PRESENT COUNTERPA  | NT STUDY                           | INIFOM (Instituto Nicaraguense de Fomento M   | Municipal) |                  |                   |          |
| Conduct a basic survey on urban sanitary environment to improve urban sanitation of Chinandega, Le?n, and Gramake a master plan (M/P) for integrated urban sanitary environment improvement including wastes, sewage disparainwater drainage in a city selected there, and furthermore conduct a feasibility study (F/S) on a priority project.  6. OBJECTIVES OF THE STUDY |  |                                    |   |            | osal, and        |                   |          |
| 7.  | CONSULTANT(S)  | KOKUSAI KO                         | GYO CO., LTD.                                 |            |                  |                   |          |
| 8.  | STUDY PERIOD   | Jul.1996 ~                         | Dec.1997 17month(s)                           |            |                  |                   |          |
| 9.  | SITE OR AREA   | Leon, Chinandega, Granada  OR AREA |   |            |                  |                   |          |
| 10.   | MAJOR PROPOSED PR  | OJECT(S)                           |   |            |                  |                   |          |
| F/S   |  | - V-/                              |   |            |                  |                   |          |
|   | Urban Waste Disposal Sy  | stem Improveme                     | nt Plan                                       |            |                  |                   |          |
|   | 1 .  | •                                  | odulo de Operacion Maintenance Factory impro- | vement Pla | n, SJV New Urban | Waste Treatment I | Plant    |
|   | ablishment Plan, Waste N   |                                    |   |            |                  |                   |          |
|   |  |                                    | provement Plan in a Model District            |            |                  |                   |          |
|   | Waste Collection Improvement Plan, Domestic Wastewater Treatment System Improvement Plan, Rainwater Drainage Improvement Plan, Water |                                    |   |            |                  |                   |          |
| Sup   | Supply and Sewage Improvement Plan, Promotion Organization System Improvement Plan   |                                    |   |            |                  |                   |          |

CSA NIC/S 215/97 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 1998 Domestic Survey)

The Ministry of Environment approved environmental impact assessment for a final treatment plant proposed by the project in 1998.

#### (FY 1999 Overseas Survey) (FY 2002 Overseas Survey)

They requested for grant aid (JPY 435.72 million) for the "Provision of Machinery and Materials for Garbage Collection in Granada City, Leon City, and Chinandega City".

#### (FY 2001 Domestic Survey)

The government of Nicaragua thinks that the "Managua City Waste Treatment Plan" implemented by Japan in 1995 is a top priority project. Thus, in the situation in which the project has not been implemented, it is difficult to implement projects proposed by the study.

#### (FY 2002 Overseas Survey)

Granada City tries to strengthen organizations to implement the Waste Treatment System Improvement Plan. As a part of it, the city plans to organize environment teams in 2003. Also, it constructed garbage collection points in Villa Sandino district.

#### (FY 2003 Overseas Survey)

Based on the result of the study, they requested for a fund for conducting a "Review and Revision" study in the first quarter of 2004 to the "Casa de Tres Mundos (3 worlds)" fund. At the time when the review and revision finish in April 2004, they will make a formal request for the implementation of this important project in Granada City and Nicaragua to the government of Japan in order to facilitate the introduction and implementation of the project.

#### (FY 2007 Overseas Survey)

The Nicaraguan government is appealing the following activities for the implementation of the mentioned study.

- Creating the master plan of solid waste synthesis processing for Leon City
- Cleaning the nonhazardous solid waste and a review, public notice and enforcement for general waste processing ordinance.
- Creating the environmental plan for the city.
- Collecting solid waste and support of the transportation vehicle.
- Improvement of the city cleaning by obtaining a cleaning machine with three wheels.
- Removing scrap depot in the Historic Center of the city.
- Installing 353 containers in the History Center of the city.
- Concluding a cooperation agreement with UNI.
- Updating the database of solid waste synthesis processing master plan for Leon City.
- Concluding cooperation agreement with Polytechnical University of Nicaragua (UPOLI).
- Implementing impact study affect to the environment (EIA).
- Acquiring environmental permission for constructing of the first phase of urban back-filling site.
- Creating backup design for the first phase of the urban back-filling site.
- Creating back up F/S history for the constructing first phase of the urban back-filling site.
- Participation of the second phase of fund tendering for the Nicaraguan state implemented by FISE, and conducted the first phase of construction of the urban back-filling site and closure of El Fortin disposal site.
- F/S for the first phase of construction project of the urban back-filling site and closure of El Fortin disposal site. (Tendering in progress)
- Physicochemical analysis of the spring water.
- Physicochemical analysis of the seeping water.
- Physicochemical analysis of chlorine and phosphoric processing material.
- Analysis of the air pollution.
- Soil investigation.
- Hydrogeological research.
- Social hydrogeological research.
- Social economy research.
- Surveying the first phase of the urban back-filling site (Altitude and grade level).
- Surveying the current El Fortin disposal site (Altitude and grade level).

For operation and maintenance of the back-filling site, probation of the fund raising and obtaining construction module are in progress by the Japan Embassy.

#### (FY2007 Domestic survey)

No information to be specifically mentioned.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Dec.1999
CSA NIC/S 108/98
Revised Jul.2009

| <u>US</u>  | OA NIC/S 100/9   | o                              |   |            |   |  | Revised | Jul.2009  |
|--|--|--------------------------------|---|------------|---|--|---------|-----------|
| 1.   | COUNTRY  | Nicaragua                      |   |            |   |  |         |           |
| 2.   | NAME OF STUDY  | Comprehensive                  | omprehensive Transportation Plan in the Municipality of Managua |            |   |  |         |           |
| 3.   | SECTOR   | Transportation                 | Fransportation / Road 4. TYPE OF STUDY M/P                      |            |   |  |         |           |
| 5. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |  |                                | Municipality of Mana  | agua       | · |  |         |           |
|  | PRESENT COUNTERPA  | ART AGENCY                     |   |            |   |  |         |           |
| 6.   | OBJECTIVES OF THE STUDY  | network(target                 | a M/P on comprehens<br>year: 2018).<br>echnology in relation to | -          | • |  | -       | course of |
| 7.   | CONSULTANT(S)  |                                | ALMEC Corporation Yachiyo Engineering Co., Ltd.                 |            |   |  |         |           |
| 8.   | STUDY PERIOD   | Jan.1998 ~                     | Feb.1999  | 13month(s) |   |  |         |           |
| 9.   | SITE OR AREA   | Entire municipality of Munagua |   |            |   |  |         |           |
| 10.  | MAJOR PROPOSED PR  | OJECT(S)                       |   |            |   |  |         |           |
| 1. F<br>2. F<br>-<br>3. T                              | Road Development(including a toll way of 88.6km): construction 225.9km; widening 101.1km  Public Transport  -Development of public transport corridor(Busway)  -Development of 6 public transport terminals  Traffic Management  -Intersection improvement (installation or upgrading of 259 signals)  -Development of pedestrian/bicycle path   |                                |   |            |   |  |         |           |
|  | The second secon |                                |   |            |   |  |         |           |

-Transport Demand Management (TDM)

CSA NIC/S 108/98 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

#### (FY 1999 Domestic Survey)

Dispatch of an urban transport expert from Japan was planned for follow-up study of the mentioned study (as of Nov. 1998). However, no candidates are found and it has been suspended. As for the proposed projects, the interest of donors including Japan Embassy, World Bank, and Inter-American Development Bank is currently directed toward the restoration of the country which was deeply damaged by Hurricane Mitch that hit Nicaragua in November 1998, and therefore no progress has been made yet. (FY 1999 Overseas Survey)

Municipality of Managua has implemented the intersection improvement project. 18 signals were installed at the municipal center.

Experts are to be dispatched from Japan. They will support Municipality of Managua to plan the priority projects(from Apr.1999).

As for the public transportation management, financing from IDB was proceed for implementing the F/S on busway.

#### (FY 2000 Overseas Survey)

Municipality of Managua constructed 5 circular arch roads (Centoamerica, Universitaria, Larreynaga, Jean Paul Genie, Periodista) to interconnect 5 main roads. In order to expand road network and to reconstruct bus network, F/S on municipal busway system has been implemented.

#### (FY 2002 Overseas Survey)

The activities of General Plan of City Maguana are as follows:

- 1.Transportation.
- 1) Implementation of F/S for "Urban development program, and improving public transport"
- It was implemented by Spanish Funds and was confirmed on the JICA's proposal (especially on specific transportation roads). Study on technical, economic, financial, legal, environmental feasibility was conducted. Utilization of alternative roads for cars and reorganization of lines including these roads were examined.
- 2) Implementation of technical survey on reformation of bus transportation route.
- 3) Construction of terminal facilities for Maguana City
- 3 terminals for Municipal transportation were constructed by Grant Aid. Fund; USD 11 mills, Contractor; Hazama Corporation
- 4) Construction of bridges for cars' exclusive use in Maguana City
- 11 bridges for only motor vehicles were constructed by Grant Aid. Fund; USD 4.68 mill, Contractor; Hazama Corporation
- 5) Renovation of transport vehicles
- To be carried out on domestic funds.
- 2. Construction of roads:

Under practice.

#### (FY 2003 Overseas Survey)

The study in relation to the FS of the "Busway Road No.1 (North Street)" was approved in the framework of strengthening and modernization of ALMA, commenced in 2000 and completed in February 2002. The project obtained financing of 450,000 US dollars worth of funds from Spain. Based on the result of the studies, construction has been implemented in succession on its own funds.

#### (FY 2004 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2004 Overseas Survey)

- 1. Name of project: Supporting prevention of traffic accident, improvement of distributor system in Managua City (1st) (Signal installation)
- 1) Beneficiaries: 1.3 million people, residents of Managua City
- 2)Benefits: Total 267 signals (252 signals for vehicles/automobiles and 13 signals for pedestrians) were installed. Central control has been implemented in each street by the computer system. It was installed in the North Street. This installation of new signal network contributes to dissolve traffic jam.

#### (FY 2008 Domestic Survey)

With respect to 1) road maintenance, 2) installation of traffic signals, and 3) construction of bus terminals, projects have been launched and completed one after another in line with the recommendations of the study. As regards the construction of bus-way, which was the most significant proposal made by the study, the F/S was completed in 2002 with the support of Spain; there seems no progress since then, however, because of financial difficulties (the comment of a World Bank consultant).

(M/P+F/S)

|            | (M/P+F/S)    | Compiled | Jul.2001 |
|------------|--------------|----------|----------|
| CSA        | NIC/A 205/00 | Revised  | Jul.2009 |
| 1. COUNTRY | Y Nicaragua  |          |          |

| 1. | COUNTRY   | Nicaragua  | Č   |                                  |  |  |  |
|----|---|--|---|----------------------------------|--|--|--|
| 2. | NAME OF STUDY   | The study on A   | gricultural Development for the Region 2 and 4 in   | n the Pacific Coast              |  |  |  |
| 3. | SECTOR  | Agriculture  | / (Agriculture in) General  | 4. TYPE OF STUDY M/P+F/S         |  |  |  |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY |  | The Ministry of Agriculture and Live Stock: MAG  The Ministry of Agriculture, Livestock and Forestry: MAG-FOR |                                  |  |  |  |
| 6. | OBJECTIVES OF THE STUDY   | 1). Formulate a M/P for agricultural development and carry out a F/S for the prioritized projects on the Pacific Coast of Regions II and IV with an emphasis on the extension system for the small-scale farmers. 2). Execute a Pilot Plan within the area selected by the F/S, aiming to promote the organization of farmers and carry out the verification of agricultural development plans implemented by the farmer's organizations. 3). Carry out the technological transfer to the Nicaraguan C/P concering the methods of study, approach and formulation of the projects. |   |                                  |  |  |  |
| 7. | CONSULTANT(S)   |  | Pacific Consultants International Asia Air Survey Co., Ltd.   |                                  |  |  |  |
| 8. | STUDY PERIOD  | Jun.1997 ~   | Jun.2000 36month(s)   |                                  |  |  |  |
|    |   |  | on II and IV in the Pacific Coast<br>area, (2) El Espino Area, (3) Model Development                          | t Area (Pacific Coast Region II) |  |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

M/P:

- Model Projects: Telica Area Development Project, Malacatoya Area Development Project, El Espino Area Development Project, Carazo, Masaya Area Project.
- 1) Increase agricultural productivity, 2) organization of farmers, 3) integrated agricultural development that includes farmer assistance components that centers branding of agricultural projects
- Irrigation Projects: El Sauce Irrigation Project, Cayanlipe Irrigation Project, Zarzales Irrigation Project
- Road Rehabilitation Project: Village Road Maintenance Project
- Seed Production Projects: Basic Grain Seeds Production Project (Region II) Construction of seed production processing center, production/distribution of good seeds.
- CESASUR Support Project (Region 4) Construction of Basic Grains and Vegetable Seeds Production Center
- Experimental Research Project: Rehabilitation of Cotton Research Center
- -Strengthening of Extension Services Project: Strengthening of Extension Services Project
- -Marketing: Market Information Gathering and Extension Strengthening Project
- -Farmers' Organizations: Farmers' Organizations Strengthening Project, Strengthening of Supporting Institutions of Farmers' Organizations, Formation of Communal Leaders, Communal Association Formation Strengthening Project
- -Agricultural Credit: Development of Agricultural Credit System for Small and Medium Scale Farmers
- -Environmental Protection Project: Seedling Production for Reforestation Project, Silvi-agricultural Areas Reforestation Project, Erosion Protection Project

F/S: Project name (1) Agricultural development model plan for the TELICA area. (2) Agricultural Development odel plan for the El Espino area, (3) Agricultural development model plan.

CSA NIC/A 205/00 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 2001 Domestic Survey)

MAG-FOR, the counter part organization in Nicaragua, understands the purpose and importance of this project, and recognizes that the first step of the development, which is the execution of the plan, will contribute to the small-scaled farmers in the future.

Therefore, at present, MAG-FOR prepares the project application for the international financial institutions including Inter-American Development Bank.

The engineer of Pacific Consultants International who was engaged in the development research of JICA, is in the neighbor country Costa Rica at present, therefore, an administrative officer of MAG-FOR and a Japanese expert visited there for an advanced case research in Aug. 2001 in view of the execution of this project.

(FY 2003 Domestic Survey)

The Irrigation Team (DGDT) implemented the operation plan in coordination with Japanese experts based on the suggestions made in the studies. The following results were yielded.

- a) Selection of 31 places out of 55 candidates.
- b) The study report was reviewed in terms of the description that implementation of the study was difficult in the Regions II and IV.
- c) Specific proposals were made about prerequisites in connection with implementation of the execution process of model agriculture development, enhancement of irrigation and drainage unit, development of cultivation techniques system by dissemination through UNAN |Leon and INTA, and reinforcement and fosterage of producer groups.

(FY 2004 Domestic survey) No special matters.

(FY 2004 overseas survey) No special matters.

(FY2005 Domestic Survey) (FY2005 Overseas Survey)

Fund has not yet been secured.

(M/P+F/S)

Compiled Sep.2003

| CS | SA NIC/S 22                           | 23/02   |  |   |                   |                      |                      | Revised | Jul.2009 |
|----|---------------------------------------|---|--|---|-------------------|----------------------|----------------------|---------|----------|
| 1. | COUNTRY                               | Nicaragua   |  |   |                   |                      |                      |         |          |
| 2. | NAME OF STUDY                         | The Study on V  | dy on Vulnerability Reduction for Major Roads in the Republic of Nicaragua |   |                   |                      |                      |         |          |
| 3. | SECTOR                                | Transportation  | / R  | Road  |                   | 4.                   | TYPE OF STUDY        | M/P+F/S |          |
| 5. | COUNTERPART AGEN<br>TIME OF DEVELOPME |   | Ministry of Tra  | ansport and Inf   | rastructure (MTI) |                      |                      |         |          |
|    | PRESENT COUNTERPA                     | ART AGENCY  |  |   |                   |                      |                      |         |          |
| 6. | OBJECTIVES OF THE STUDY               | - To identify disaster critical spots among vulnerable spots on the major roads, and to conduct a Feasibility Study of disaster prevention spots due to the emergent countermeasures - To prepare a disaster prevention plan and a manual for road vulnerability reduction - To transfer technology of maintenance and operation for the road disaster prevention to the staff of Nicaraguan counter-part organization via on-the-job training during the study |  |   |                   |                      |                      |         |          |
| 7. | CONSULTANT(S)                         | Oriental Consultants Co., LTD. Japan Engineering Consultants Co., Ltd.  |  |   |                   |                      |                      |         |          |
| 8. | STUDY PERIOD                          | Jan.2002 ~  | Jan.2003   | 12month(s)  |                   |                      |                      |         |          |
| 9. | SITE OR AREA                          | )Yalaguina - La   | ns Manos (NIC<br>ncluding 1)El E   | spino - San Benito (N<br>. 15), 5)Chinandega -<br>Ispino - San Benito (1<br>26) | Guasa             | ule (NIC. 24), 6)Tel | lica - San Isidro (N | NIC. 26 |          |

#### 10. MAJOR PROPOSED PROJECT(S)

M/P: To implement stability surveys at 6 natinal roads in total, and to identify disaster critical spots

F/S: To propose Counter measures for the 30 disaster prevention spots, to divided them into 3 groups in consideration of economic impact, and to prepare manuals for 5 types of mission (Disaster prevention survey, disaster prevention planning, design / construction, maintenance / operation, design criteria / drawings).

[Nic.1] (Total 6 sites) Junquillal(Gabion mat), San Nicolas(Gabion mat), N001AA280 (Horizontal drainage), Las Chanillas(Concrete Block), San Ramon(Gabion Ma), N001A290 (Removal of loose rocks, installation of netting and drainage)

[mNIC.3](Total 3 sites) N003B400(Cutting and drainage), N003B370(Cutting and drainage), N003B320(Retaining wall and fill, drainage and re-vegitation [NIC.26](Total 3 sites) N026B160(Remoal of loose rocks), Papalon(Gabion mat and riprap with mortar), Solis(Gabion mat and riprap with mortar)

Package 2

CCA

NTC/C 222/02

[NIC.3](Total 1 sites) El Guayacan(New bridge [NIC.5](Total 1 sites) N005A010(Cutting and drainage) [NIC.26](Total 5 sites) N026A060(Cutting, shotcrete and drainage), La Banderita (Masonry wall and Gabion mat), N026B140(Cutting, shotcrete, horizontal drainage), N026A150 (Cutting, drainage, and lateral carriageway drainage), San Juan de Dios(Gabion mat)
Package 3

[NIC.1](Total 7 sites) N001A240(Removal of loose rocks, installation of netting), N001B230(Removal of loose rocks, installation of netting), N001B170(Cutting and drainage), N001B150(Cutting, shotcrete and drainage), N001B120(Cutting and drainage), Rio Inali(Gabion mat and stone masonry), Rio Tapascali(Gabion mat) [NIC.3](Total 4 sites) N003C230(Cutting and concrete protect with vegetation, and lower down embankment plus drainage), N003E170(Cutting, drainage, concrete dam and culvert beneath road), N003C150(Cutting and drainage above road, embankment, Vegetation and drainage below), N003C140(Cutting with drainage and horizontal drainage above road, embankment, vegetation, and drainage below)

CSA NIC/S 223/02 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 2003 Domestic Survey)

In order to implement counter measure project against disaster critical spots, which are consisted of 7 spots for slopes, and 1 spot for scouring of bridge foundation, on the NIC3 proposed by the study, Nicaraguan government requested Japanese government in 2003 to provide the necessary assistance.

(FY 2003 Overseas Survey)

The Japanese government determined to dispatch two Japanese volunteers in order to allow the person in charge of the organization in question of Nicaragua to acquire the knowledge about utilization of the road disaster prevention manual.

#### (FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2004 Overseas Survey)

1. Fund request:

Grant Aid of 9.2 million USD. This includes construction of dam and land slide prevention and maintenance. Although the request has been made for disaster prevention for a major road in 2002, there has been no reply.

2. Progress:

- 1) Due to a restrictive finance, MTI is conducting a construction to mitigate the disaster only for a site which requires immediacy.
- 2) Accepted 2 JOCV in 2004. They have visited major road site included in the fragility survey target area and has prepared a inspection manual for irrigation, slope, and bridge. All of these activities have been conducted with a corporation with traffic department of MTI. In the first year's activity with the MTI, they have prepared the following report.
- Identification of road disaster and its cause: Inspection of Sebaco-Jinotega (NIC. 3) km135+433 promo hill site and reclaimed hill. Inspection of irrigations between Telica San Isidro (NIC. 26) km 167km to 171km. Slope inspection between El Espino San Benito (Nic. 1). Inspection of major site between Sebaco Matagalpa (Nic. 3). Inspection of 69km point in Nan Daime beniaus Brankas (Nic. 2). Preparatory inspection of major road. Inspection of 6 bridges.

#### (FY 2005 Domestic Survey)

The study team was working to realise the project, but it was not selected. Parts of the project road damaged by the Hurricane "Mitch" were rehabilitated with a financial support from other countries. In addition, 2 volunteers (involving rivers and roads) were dispatched in this project in 2003.

#### (FY 2006 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2007 Overseas Survey)

Funds for the subsequent study "Natural disaster measures in the main roads", which aims to reduce risk indexes of natural disasters for road users and national roads, has been requested (amount: USD 9,269,815.00 (currency rate in Aug.2002: 1JPY= 118.60 USD). While we put efforts into funding toward the implementation of grant aid cooperation and BOT, the outlook is still vague.

Contents to be implemented: Natural disaster measures in slope according to NIC-3 (3 rock-collapse spots, 3 slip surfaces,1 muddy slope), prevention measure for bridge collapse according to NIC-3, disaster measures in slopes according to NIC-5 (1 spot in danger of rock collapse)

#### (FY 2007 Domestic Survey)

Regarding Priority project of disaster measurement maintenance for selected areas (3 packages of disaster measures concerning fragile slopes and structures), materialisation of the project is difficult at present. Treatment for funding of project cost is remaining as considering issue. The implementing body requests financial cooperation in form of general grant aid, it has not been adopted.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Jan.2006
CSA NIC/S 101/04
Revised Jul.2009

| 1.       | COUNTRY   | Nicaragua       |  |   |                 |
|----------|---|-----------------|--|---|-----------------|
| 2.       | NAME OF STUDY                                       |                 | Study on Forest Management for Disaster Pre        | vention in the Northern Pacific Region in   | the Republic of |
| 2        | Nicaragua SECTOR Social Welfare                     |                 | / Disaster Relief                                  | 4. TYPE OF STUDY M/P                        |                 |
| 3.<br>5. | SECTOR  | Social Wellale  | / Disaster Refler                                  | 4. TIPE OF STUDY W/F                        |                 |
|          | COLINITEDDA DE A CEN                                |                 |  |   |                 |
|          | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                 |  |   |                 |
|          |   |                 |  |   |                 |
|          |   |                 |  |   |                 |
|          |   |                 |  |   |                 |
|          | PRESENT COUNTERPA                                   | ART AGENCY      |  |   |                 |
|          |   |                 |  |   |                 |
|          |   | 1) To prepare a | disaster prevention and forest management pla      | n for the improvement of water and soil n   | reservation     |
|          |   |                 | munity participation, 2) to conduct an empiric     |   |                 |
|          |   |                 | nology transfer to the counterpart.                |   |                 |
|          | OBJECTIVES OF THE                                   |                 |  |   |                 |
| 6.       | STUDY   |                 |  |   |                 |
|          |   |                 |  |   |                 |
|          |   |                 |  |   |                 |
|          |   |                 |  |   |                 |
| 7        | CONCIL TANT(C)                                      |                 | chnical Association                                |   |                 |
| /.       | CONSULTANT(S)                                       | Sanyu Consultar | itts flic.   |   |                 |
| Q        | STUDY PERIOD  | Dec.2000 ~      | Oct.2004 46month(s)                                |   |                 |
| 0.       | STUDI FERIOD  | ~               |  |   |                 |
|          |   | Chinandega prei | fecture (9 cities), Leon prefecture (10 cities), a | nd Managua prefecture (1 city): total of 20 | ) cities        |
|          |   |                 |  |   |                 |
| 0        | SITE OR AREA  |                 |  |   |                 |
| 9.       | SITE OR AREA  |                 |  |   |                 |
|          |   |                 |  |   |                 |
|          |   |                 |  |   |                 |
| 10.      | MAJOR PROPOSED PR                                   | OJECT(S)        |  |   |                 |
|          | ural forest management:                             | 16,500 ha       |  |   |                 |
|          | estation: 7,700ha<br>roforestry: 11,600ha           |                 |  |   |                 |
|          | opastoral: 15,000ha                                 |                 |  |   |                 |
|          | al: 50,800ha  |                 |  |   |                 |
|          |   |                 |  |   |                 |
|          | orestation facilities: 22,2<br>me garden: 175ha     | 97              |  |   |                 |
|          | proved stove: 1,750                                 |                 |  |   |                 |
|          | wity irrigated land: 2,310                          | )ha             |  |   |                 |
| Div      | ersifying agriculture pro-                          | ducts: 2,310ha  |  |   |                 |
|          | npost production: 2,310 l                           |                 |  |   |                 |
| ımp      | proved pasture cultivation                          | 1: 1,500na      |  |   |                 |
|          |   |                 |  |   |                 |
|          |   |                 |  |   |                 |
|          |   |                 |  |   |                 |
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|          |   |                 |  |   |                 |

CSA NIC/S 101/04 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 2005 Domestic Survey)

Participatory forest management plan is planned to be implemented in 3 cities and 9 villages in Leon. The objectives of the project is to improve living standard of local people and to increase water conservation capacity of the forest through sustainable activities of the local people by building capacities for forest management techniques, utilising the experience gained in the study.

(FY 2005 Overseas Survey)

Subsequent study: Disaster prevention forest management B/D

Implementing body: JICA

Objective: To introduce and implement activities for disaster prevention forest management action program proposed in the study, participated by local people, local authority, and officials from regional experts of Forestry Department Master Plan project, and to decide implementation method in accord with the plan.

Funding:

Funding party: JICA Amount: 200 million USD

(FY 2006 Domestic Survey)(FY 2007 Domestic and Overseas Survey)

Implemented project: Forest management plan by the residents (JICA technical cooperation project)

Implementation period: Jan.2006 to Jan.2011

Implementing body: INAFOR, Achuapa City, El Sauce City, Santa Rosa Del Penon City

Objective: The objectives of this project is to promote sustainable forest management activities by participating residents, to improve the object villagers' capability of implementing forest management activities of object villagers, and to improve the technical experts' capability of leading residents in city and INAFOR.

Funding: JICA technical cooperation project (amount of contracting consultant: FY 2005:JPY 20,469,000 FY 2006: JPY43,708,000 FY 2007 37,607,000), the amount of self fund in recipient country is known.

Technical cooperation:

Training: Training was implemented in 3rd countries at sustainable environmental development center in Panama, whose objects are 7 counterparts of technical cooperation project (4 people of INAFOR, 3 staffs of city environmental issue room)(Jan.2007). Counterpart training was also implemented concerning "participating forest management project in Nicaragua" in Nov.2007. The objective of this training was to strengthen project management by adjusting with Japan, and the objects of this training was a 1 person of the technical team of master plan project.

Dispatch of experts: 10th of Jan. 2007 to 3rd of Mar. 2007: dispatched 3 experts, 7th of May to 25th of June: dispatched 2 experts, 5th of Sep. to 22nd of Sep: dispatched an expert

Beneficiaries: Achuapa City: villagers of the 3 villages El Sauce City: villagers of the 3 villages, Santa Rosa Del Penon City: villagers of the 3 villages Benefits: Number of beneficiary residents in 9 villages: 320 people, area (9 villages): estimated 5,000 ha

Utilisation of the proposed project: Following to the guidelines for formulating operating plan of disaster prevention forest management, the forest management operating plan of each village was formulated. Also, instructing residents is implemented by utilising "residents instructing manual", which was made by verification study.

Other progress: Forestry promotion activities and community afforestation in vulnerable and extreme-poor area were introduced with concerning offices, regarding the improvement of sustainable forest management method which is based on the prior item of forest promoting principle. The master plan project technical team is negotiating with town hall of La Paz Centro and Nagarote Ciry on community forest management project, whose beneficiaries are 2 districts, as part of forest promoting principle, based on the operating plan proposed in the final report of the main study.

# STUDY SUMMARY SHEET (M/P+F/S)

CSA NIC/S 201/05 Compiled Feb.2007
Revised Jul.2009

| 1. | COUNTRY   | Nicaragua                             |   |                   |                          |         |  |
|----|---|---------------------------------------|---|-------------------|--------------------------|---------|--|
| 2. | NAME OF STUDY                                       | The study on im                       | provement of wa   | ater supply syste | em in Managua in the     | Repu    | blic of Nicaragua                          |
| 3. | SECTOR  | Public Utilities                      | / W   | ater Supply       |                          | 4.      | TYPE OF STUDY M/P+F/S                      |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                                       | National Water<br>ENACAL)   | and Sewage Co     | mpany (Empresa Nica      | arague  | ense de Acueductos y Alcantarillados;      |
|    | PRESENT COUNTERPA                                   | ART AGENCY                            |   |                   |                          |         |  |
| 6. | OBJECTIVES OF THE STUDY                             | target year. 2) T<br>technology trans | 1) To formulate an appropriate and highly feasible water and sewage project plan for Managua City with the year 2015 as arget year. 2) To select priority projects for facilities improvement and to prepare rough design. 3) To implement exchange transfer on survey and planning methods concerning the formulation of a long-term plan for a water and sewage project to the staff of National Water and Sewage Company which is a counterpart agency, through this activity. |                   |                          |         |  |
| 7. | CONSULTANT(S)                                       |                                       | Nihon Suido Consultants Co., Ltd.<br>Asia Air Survey Co., Ltd.  |                   |                          |         |  |
| 8. | STUDY PERIOD  | Jul.2004 ~                            | Nov.2005  | 16month(s)        |                          |         |  |
|    | SITE OR AREA  | district<br>F/S: ditto                | a of Managua ad   | lministrative dis | trict, Ticuantepe distri | ict, ur | ban district around Masaya road in Nindiri |
| 10 | MA IOD DDODOSED DD                                  | OTECT(S)                              |   |                   |                          |         |  |

#### 10. MAJOR PROPOSED PROJECT(S)

Project Year:

- 1) From 2006 to 2010
- 2) From 2010 to 2015

recovery of designing and production capacity for wells, step-by-step repair and renewal of decrepit wells, continuous monitoring and evaluation of water quality of water source by ENACAL, microsectorization (small blocking) of water distribution network and implementation of leakage/wasted water reduction measures at microsector, water supply improvement and sanitary environment preservation in the slums through a community participation approach, renewal of decrepit meters, expansion and strengthening of water supply, separation of Managua City water and sewage works accounts from other accounts, fee increase, staff training

CSA NIC/S 201/05 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 2006 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2007 Overseas Survey)

To implement the prioritized activities which have been identified by the study, the application of grant aid to a subsequent study relating to "the study on improvement of water supply system in Managua in the Republic of Nicaragua," has been requested to Japanese government. If this request is approved, Basic Design and Detailed Design could be started to implement the project.

Funding: Japan Government U.S.\$11,735,000 the World Bank U.S.\$34,000,000

Current Condition and Funding Possibility: Japanese government is yet to approve the finance. The World Bank's project is in progress towards entrance to directory in July 2008. Nicaragua government approved the project and completed the procedure for finance. As a result of this procedure, the World Bank is planning to provide U.S.\$45,000,000 in total. \$34,000,000 out of this amount is applied to the construction component as indicated by the development study. The World Bank is to finance this project with the Japan PHRD fund.

#### (FY 2007 Domestic Survey)

No specific activity plan is settled.

Initially, it seemed that Nicaragua government intended to implement a Grant Aid Project in line with the recommendation made by the study. There has been no updating on this issue these days, however. It is thus yet needed to confirm the latest intention of the government.

#### (FY 2008 Domestic Survey)

No information to be specifically mentioned.

(Basic Study)

Compiled Dec.2007 **CSA** NIC/S 501/06 Revised Jul.2009

| 1. | COUNTRY                           | Nicaragua   |  |  |  |  |
|----|-----------------------------------|---|--|--|--|--|
| 2. | NAME OF STUDY                     | The Study for Establishment of Base Maps and Hazard Maps for GIS in the Republic of Nicaragua   |  |  |  |  |
| 3. | SECTOR                            | Social Infrastructure / Survey & Mapping 4. TYPE OF STUDY Basic Study   |  |  |  |  |
| 5. | COUNTERPART AGENTIME OF DEVELOPME | Nicaraguan Institute of Territorial Studies CY AT THE   |  |  |  |  |
|    | PRESENT COUNTERPA                 |   |  |  |  |  |
| 6. | OBJECTIVES OF THE STUDY           | 1) Build digital national basic map(1/50,000) and provide GIS data basis in 20,000km2 of Pacific Ocean side area 2) Build hazard map 3) technology transfer about digital national basic map, GIS data basis, and hazard map  |  |  |  |  |
| 7. | CONSULTANT(S)                     | PASCO Corporation   |  |  |  |  |
| 8. | STUDY PERIOD                      | Oct.2003 ~ Dec.2006 38month(s) ~  |  |  |  |  |
| 9. | SITE OR AREA                      | The target area of 1/50,000 scale size of topographical map is 20,000km2 of Pacific Ocean side area.  The target area of 1/5,000 scale size of topographical map is 300km2 of Managua city area.  Thetarget area of disaster prevention facility information map is 20,000km2 of Pacific Ocean side area. |  |  |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

- 1) build digital national basic map(1/50,000) and provide GIS data basis in 20,000km2 of Pacific Ocean side area
- 2) build hazard map
- 3) technology transfer about digital national basic map, GIS data basis, and hazard map Specifically, followings were built and provided.

Air photo shoot, building topographical map of Managua(1/5,000), building topographical map(1/50,000), disaster prevention facility information map, earthquake hazard map, volcano hazard map, flood hazard map, and tidal wave hazard map

- < Suggestion against Nicaraguan Institute of Territorial Studies. INETER>
- 1) utilization of basic map and geographic information
- 2) building hazard map (earthquake hazard(afor improvement in accuracy of earthquake hazard map of Managua in organization and observation system) and volcano hazard}
- 3) building hazard map(flood hazard and tidal wave hazard)
- 4) development and utilization of GIS technology
- 5) GEO-Risk GIS system
- <Suggestion against other agency>
- 1) utilization of hazard map(utilization of the Survey achievement to disaster countermeasures, and publicize and enlighten disaster-prevention
- 2) reinforcement of disaster countermeasures(institutionalization of disaster countermeasures, activities that should be conducted aftertime, and community participation in disaster countermeasures)

CSA NIC/S 501/06 Basic Study

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

(FY2007 Domestic Survey)

No information to be specifically mentioned.

(FY2007 Overseas Survey)

Implemented project: Strategy of diffusing and commercializing the map

Implementing period: from January, 2007 to December, 2008

Implementing body: Nicaragua Geographic Laboratory Geodetic Map Building Department

Objective: Provision of utilizing formal map built by the nation in order to assure the quality of the data of information that is utilized for national development plans.

Progress: Already purchased equipments and accessories.

Funding: Own fund of aid-recipient country. INETER earmarked to ordinary budget of 2008.

Implemented project: Convert from NAD27 to WGS84 in 1/50,000 scale size of topographical map

Implementing period: from March, 2007 to July, 2007

Implementing body: Nicaragua Geographic Laboratory Geodetic Map Building Department

Objective: Design geo-reference in basis of WGS84 spheroid, in page 303 of 1/50,000 scale size of topographical map built in 1988.

Progress: completed

Implemented project: Training plan

Implementing period: from January, 2007 to December, 2008

Implementing body: Nicaragua Geographic Laboratory Geodetic Map Building Department

Objective: Cultivate situation analysis capacity about algorithm of technical staffs. This capacity would be the tool for analyzing and designing soft application that is

necessary to solve the problem in real world.

Progress: completed

Implemented project: Establish the method of building 1/50,000 scale basic map

Implementing period: from January, 2007 to December, 2010

Implementing body: Nicaragua Geographic Laboratory Geodetic Map Building Department

Objective: By the establishment of the method of building basic map, it would be possible to revise 1/50,000 scale size of topographical map of Nicaragua, and it would

be possible to built maps that would interest the nation.

Progress: in primary step

 $Funding: Own \ fund \ of \ aid-recipient \ country (110,520.00 Cordobas). \ INETER \ earmarked \ to \ ordinary \ budget \ of \ 2008.$ 

Implemented project: Analysis of flood in Maravilla river watershed

Implementing period: from May, 2006

Objective: reinforcement of credibility and perfectibility (without leaks) of flood forecast in Cuencas watershed area

Progress: Full-time monitoring has been conducted in the research targeted area.

Funding: Own fund of aid-recipient country. INETER earmarked to ordinary budget of 2008.

Implemented project: Measures against earth physics component

Objective: building hazard map of earthquake, volcano, and tidal wave, and utilization and development of GIS technology

Progress: now in progress

(Basic Study)

Compiled Mar.1990

| CS                         | SA  | PAN/S 501/8       | 81                 |  | Revised     | Jul.2009 |
|----------------------------|---|-------------------|--------------------|--|-------------|----------|
|                            | COUNT   |                   | Panama             |  | <u></u>     |          |
| 2                          | NAME  | OF STUDY          | Topographic Ma     | apping Project of the Caribbean Coastal Area |             |          |
|                            |   |                   |                    |  |             |          |
|                            | SECTO   | R                 | Social Infrastruc  |  | Basic Study |          |
| 5.                         |   |                   |                    | Instituto Geografico Nacional                |             |          |
|                            | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                   |                    |  |             |          |
|                            | PRESEN  | NT COUNTERPA      | ART AGENCY         |  |             |          |
|                            |   |                   | Preparation of b   | asic information for development planning.   |             |          |
| 6. OBJECTIVES OF THE STUDY |   |                   |                    |  |             |          |
|                            |   |                   | International En   | gineering Consultants Association            |             |          |
| 7.                         | CONSU   | LTANT(S)          |                    | 6  |             |          |
|                            |   |                   |                    | 1000   |             |          |
| 8.                         | STUDY   | PERIOD            | Jan.1979 ~         | May.1980 16month(s)                          |             |          |
|                            |   |                   |                    |  |             |          |
|                            |   |                   | Northwest region   | on along the Caribbean coast(8,000 sq.m)     |             |          |
|                            |   |                   |                    |  |             |          |
| 9.                         | SITE OI   | R AREA            |                    |  |             |          |
|                            |   |                   |                    |  |             |          |
|                            |   |                   |                    |  |             |          |
| 10                         | MATOD   | PROPOSED PR       | OFFCT(S)           |  |             |          |
|                            |   |                   | /50,000, 12 plates |  |             |          |
| 1 141                      | Tonur ou  | se maps (seare. 1 | 750,000, 12 place. | ''   |             |          |
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|                            |   |                   |                    |  |             |          |

**CSA** PAN/S 501/81 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Utilization of the Study: The result of the study is utilized especially in electric communication, broad casting and social infrastructure. The map will be utilized for the future development planning of the area. (FY 1995 Overseas Survey) In December 1995, Instituto Geografico National was Provided the equipment necessary to produce Topological maps by JICA. The production of Topological maps are strongly desired in Panama because many of the existing maps are considered inaccurate.

(Basic Study)

|     |                             |                   | (Basic Study)  | Compiled           | Mar.1990     |
|-----|-----------------------------|-------------------|--|--------------------|--------------|
| CS  | SA PAN/A 501/               | <b>'83</b>        |  | Revised            | Jul.2009     |
|     | COUNTRY                     | Panama            |  |                    |              |
| 2   | NAME OF STUDY               | Fisheries Resou   | arces Survey of the Atlantic Coast   |                    |              |
|     |                             |                   |  |                    |              |
|     | SECTOR                      | Fishery           | / Fishery 4. TYPE OF STUDY   | Basic Study        |              |
| 5.  |                             |                   | Bureau of Marine Resources, Department of Commerce and Industry                      |                    |              |
|     | COUNTERPART AGEN            | ICV AT THE        |  |                    |              |
|     | TIME OF DEVELOPME           |                   |  |                    |              |
|     | 12.12.01.02.12.01.11.2      | 2.12.02.02.1      |  |                    |              |
|     |                             |                   |  |                    |              |
|     |                             |                   |  |                    |              |
|     |                             |                   |  |                    |              |
|     | PRESENT COUNTERPA           | ART AGENCY        |  |                    |              |
|     |                             |                   |  |                    |              |
|     |                             | Rosic Survey o    | f nation's fisheries resources.  |                    |              |
|     |                             | Dasic Survey 0.   | i nation's fisheries resources.  |                    |              |
|     |                             |                   |  |                    |              |
|     |                             |                   |  |                    |              |
| 6.  | OBJECTIVES OF THE           |                   |  |                    |              |
| -   | STUDY                       |                   |  |                    |              |
|     |                             |                   |  |                    |              |
|     |                             |                   |  |                    |              |
|     |                             |                   |  |                    |              |
|     |                             | Universal Fishe   | eries Inc.   |                    |              |
| 7.  | CONSULTANT(S)               |                   |  |                    |              |
|     |                             |                   |  |                    |              |
| 8.  | STUDY PERIOD                | Jun.1981 ~        | Mar.1984 33month(s)  |                    |              |
|     |                             | ~                 |  |                    |              |
|     |                             | In the water bas  | sin within 200 nautical miles, deeper than 100m, in the offshore of Caribean Sea     | of Republic of P   | 'anama       |
|     |                             |                   |  |                    |              |
|     |                             |                   |  |                    |              |
| 9.  | SITE OR AREA                |                   |  |                    |              |
|     |                             |                   |  |                    |              |
|     |                             |                   |  |                    |              |
|     |                             |                   |  |                    |              |
| 10. | MAJOR PROPOSED PR           | ROJECT(S)         |  |                    |              |
|     |                             |                   | ☐ up basic datas of fisheries resources distribution in Carrebean sea area. The stud | v is considered to | o distribute |
|     | nation's large and middle   |                   |  | y is considered to | distribute   |
|     | nadon o nago ano midor      | o seure maneries. |  |                    |              |
| -Sı | rvev of fishery developn    | nent in the shore | of the Atlantic Ocean (1981,82,83).  |                    |              |
|     | approvement of fishing base |                   |  |                    |              |
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**CSA** PAN/A 501/83 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Utilization of the Study: (FY 1993 Overseas Survey) This study drew international attention to the fisheries resources of the Atlantic Ocean. Three groups of private firms including Japanese firms are interested in investing in the fishery. The result of the study is fully utilized. The final report is well utilized as an explanation note to these groups and as basic document for authorization of fishery right in the Department of Commerce and Industry. (FY 1995 Overseas Survey) The fisheries resources of the Atlantic Ocean needs to be developed. The study report is considered to be very useful for its development.

**(F/S)** 

|              |                                       | (F/S)  | Compiled | Mar.1990 |
|--------------|---------------------------------------|--|----------|----------|
|              | SA PAN/S 3                            |  | Revised  | Jul.2009 |
| 1.           | COUNTRY                               | Panama   |          |          |
| 2.           | NAME OF STUDY                         | Short-Wave Broadcast Station Project                                     |          |          |
| 2            | SECTOR                                | Communications & Broadcasti/ Broadcasting  4. TYPE OF STUDY F/S          |          |          |
| 5.<br>5.     | SECTOR                                | Ministry of Interior and Justice   |          |          |
|              | COUNTERPART AGEN<br>TIME OF DEVELOPMI | NCY AT THE   |          |          |
|              | PRESENT COUNTERP                      | ART AGENCY   |          |          |
|              |                                       | Construction planning for the experimental short-wave broadcasting.      |          |          |
| 6.           | OBJECTIVES OF THE STUDY               |  |          |          |
| 7.           | CONSULTANT(S)                         | NHK Integrated Technology  |          |          |
| 0            | COUDY DEDICE                          | Jun.1984 ~ Jan.1985 7month(s)  |          |          |
| 8.           | STUDY PERIOD                          | ~  |          |          |
|              |                                       |  |          |          |
|              |                                       | Entire country   |          |          |
|              |                                       |  |          |          |
| 9.           | SITE OR AREA                          |  |          |          |
|              |                                       |  |          |          |
|              |                                       |  |          |          |
|              |                                       |  |          |          |
|              | MAJOR PROPOSED PI                     |  |          |          |
|              |                                       | ripment and facilities are proposed to undertake the following services. |          |          |
|              | Domestic broadcasting (s              |  |          |          |
| 2)I1<br>2)T. | nternational broadcasting             | g (short-wave).  |          |          |
| 5)11         | nternational broadcast re             | lay.   |          |          |
|              |                                       |  |          |          |
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短波放送施設建設計画

CSA PAN/S 301/84

Completed or In Progress Promoting

Completed

PRESENT STATUS

Promoting

Completed

Promoting

Completed

Promoting

Partially Completed Delayed or Suspended
Implementing
Processing Discontinued or Cancelled

**Description:** 

The reasons for Cancellation:

(FY 1991 Overseas Survey)

The hearing of the project was impossible owing to the political and economic disorder caused by the American invasion.

(FY 1995 Overseas Survey)

Since the break-down of the military government there has been no need to broadcast the propaganda to the world with short-wave.

Because the latest technology, such as the optic fiber, is on higher demand than short-wave, the resumption of the proposed project seems to be unlikely.

**(F/S)** 

Compiled Mar.1988 PAN/S 302/84 Revised Jul.2009

| 1.       | COUNTRI  | 1 difdiffd   |  |  |
|----------|--|--|--|--|
| 2.       | NAME OF STUDY  | Urban Transport Project in the Panama Metropolitan Area (ESTAMPA II) |  |  |
| 3.<br>5. | SECTOR   | Transportation   | / Urban Transportation 4. TYPE OF STUDY F/S Ministry of Public Works |  |
|          | COUNTERPART AGEN<br>TIME OF DEVELOPME  |  |  |  |
|          | PRESENT COUNTERPA  | ART AGENCY   |  |  |
|          |  | A Feasibility str  | udy for the priority projects selected through the master plan study |  |
| 6.       | OBJECTIVES OF THE STUDY  |  |  |  |
| 7        | CONSULTANT(S)  | Yachiyo Engine   | eering Co., Ltd.   |  |
| ,·       | CONSCEIANT(S)  | May.1983 ~   | Jan.1985 20month(s)  |  |
| 8.       | STUDY PERIOD   | Way.1985 ~   | Jan.1983 Zomonui(s)  |  |
|          | SITE OR AREA   |  | anama Metropolitan Area  |  |
|          | MAJOR PROPOSED PR  |  | al roads connecting thereto.   |  |
| - ( - \  | Corredor Norte Via El Paical Extension Via Martin Sosa Extension Via Cerro Ancon Extension Via San Miguelito Oeste Existing Road Improvema Via Espana Via Bolivar, San Miguelita Via Cerro Ancon Via El Paical Bus Center Projects (four | n<br>ent Projects<br>o Intersection                                  | in roads connecting dicter.  |  |
|          | Bus Maintenance Center   |  |  |  |
|          |  |  |  |  |

CSA PAN/S 302/84 F/S

PRESENT STATUS

Completed or In Progress
Completed
Partially Completed
Partially Completed
Implementing
Processing
Discontinued or Cancelled

#### **Description:**

(1)New construction of Trunk Road

Subsequent Study:

D/D completed (IDB loan)

(Consulting firm: Lavalin International of Canada)

Finance:

(FY 1997 Overseas Survey)

Jul.1995 Private fund US\$ 328,767,614

1-North Corridor (Corredor Norte)

(FY 1995 Overseas Survey)

May 1995 PYCSA, a Panamanian reqresentative of a Mexican Contractor, obtained the approval to be the contractor of Corredor Norte as well as of Panama-Colon express highway.

\*Contents of project:1st Stage Albrook-San Miguelito

(FY 1998 Domestic Survey) Opening.

2nd Stage San Miguelito-Tucumen

2-Panama - Colon Highway

(FY 1997 Overseas Survey)

\*Contents of project

Panama City ~ Madden

Manei ~ Colon

Construction:

(FY 1996 Domestic Survey)

A Mexican Construction Company has been implementing the Construction. The road is scheduled to be open to traffic in 1997.

(2)Road Improvement Project

Finance:

A Mexican construction company is expected to fund the project.

(FY 1996 Overseas Survey)

Construction:

Footbridge was constructed at crosspoint of Martin Sosa, San

Miguelito, Domingo Diaz.

Bus stops were set up at more than 30 points.

(FY 1995 Overseas Survey)

(3)Bus Center Project

Finance:

A Mexican construction company is expected to fund the project.

(FY 1996 Overseas Survey)

Construction:

New bus center was established in front of Panama University.

(FY 1995 Overseas Survey)

Situation

The construction site for a bus center has been changed from that proposed in this study. (FY 1996 Domestic Survey)

(Basic Study)

|     |                                       |                  | (Basic Study  | <b>)</b>                              | Compiled           | Mar.1990 |
|-----|---------------------------------------|------------------|---|---------------------------------------|--------------------|----------|
| CS  | SA PAN/A 502/                         | <b>'84</b>       |   |                                       | Revised            | Jul.2009 |
| 1.  | COUNTRY                               | Panama           |   |                                       |                    |          |
| 2   | NAME OF STUDY                         | Survey for the   | orest Inventory   |                                       |                    |          |
|     | SECTOR SECTOR                         | Forestry         | / Forestry & Forest Conserv<br>National Direction of Renewable Natura |                                       | Basic Study        |          |
|     | COUNTERPART AGEN<br>TIME OF DEVELOPMI |                  |   |                                       |                    |          |
|     | PRESENT COUNTERPA                     | ART AGENCY       |   |                                       |                    |          |
|     |                                       | To contribute to | the socio-economic development of the                                 | study area and Republic of Panama.    |                    |          |
| 6.  | OBJECTIVES OF THE STUDY               |                  | ŗ   |                                       |                    |          |
| 7.  | CONSULTANT(S)                         | Japan Forest Te  | chnical Association   |                                       |                    |          |
|     | CTLIDY DEDICED                        | Dec.1982 ~       | Mar.1985 27month(s)   |                                       |                    |          |
| 8.  | STUDY PERIOD                          | ~                |   |                                       |                    |          |
| 9.  | SITE OR AREA                          | An area of 1,5   | 4 sq.km of Donoso District in Colon Stat                              | e of Panama                           |                    |          |
| 10. | MAJOR PROPOSED PR                     | ROJECT(S)        |   |                                       |                    |          |
| Gu  | ideline for forestry devel            | opment plan in u | developed area in Donoso District in Co                               | lon State was prepared containing the | e following compor | ents:    |
| 1)I | ntroduction of forest plan            | nning system;    | •   |                                       |                    |          |
| 2)F | Promotion of forest produ             | icts industry;   |   |                                       |                    |          |
| 3)E | Enforcement of land use p             | planning; and    |   |                                       |                    |          |
| 4)E | Enrichment of forest expe             | erimentation and | tudy.   |                                       |                    |          |
|     |                                       |                  |   |                                       |                    |          |
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|     |                                       |                  |   |                                       |                    |          |

CSA PAN/A 502/84 Basic Study

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

Utilization of the Study:

(FY 1991 Overseas Survey)

Technology and methods which were transferred to Panama during the study are utilized in the formulation of guidelines for forest resources development.

(FY 1995 Overseas Survey)

Because the Panamenian Government is satisfied with the JICA study, it desires JICA to conduct new surveys in other areas.

(FY 1997 Overseas Survey)

The results of the study were utilized to draw up "Panama Forestry Action Plan". Moreover, the study is used as reference for several types of surveys undertaken by INRENARE, Fundacion PANAMA, CONFOREC S.A., Simons Reid Collins, etc.

"Sustainable Forestry Development in Donoso District"

(FY 1997 Overseas Survey)

Subsequent Study:

Jul.1996~Dec.1997

"Forest Inventory" and biodiversity / socioeconomic information have been actualized.

Implementing Organization / INRENARE

#### Finance:

Nov.1995 Government budget B.372,800 (including a cost for survey)

**(F/S)** 

Compiled Mar.1990 CSA PAN/S 303/87

1. COUNTRY Panan Revised Jul.2009

|     | COCITIKI   | Corredor Sur Development Project in the Panama Metropolitan Area (ESTAMPA III)                              |  |  |
|-----|--|---|--|--|
|     | NAME OF STUDY  |   |  |  |
|     | SECTOR   | Transportation / Urban Transportation 4. TYPE OF STUDY F/S  |  |  |
|     | COUNTERPART AGEN TIME OF DEVELOPME PRESENT COUNTERPA | Ministry of Public Works  CY AT THE  NT STUDY   |  |  |
|     |  | F/S study of South Link Road Construction Project that was selected as priority project in the Master Plan. |  |  |
| 6.  | OBJECTIVES OF THE STUDY                              | 175 study of South Link Road Construction Project that was selected as phorty project in the Waster Plan.   |  |  |
| 7.  | CONSULTANT(S)  | Yachiyo Engineering Co., Ltd.   |  |  |
| 8.  | STUDY PERIOD   | Jul.1986 ~ Feb.1988 19month(s) ~  |  |  |
| 9.  | SITE OR AREA   | Area along the Bay at the southern Panama metropolitan area   |  |  |
| 10. | MAJOR PROPOSED PR                                    | OJECT(S)  |  |  |
|     | redor Sur I<br>the built-up area)                    | Expansion into 6 lanes, new construction: about 10km  |  |  |
|     | redor Sur II<br>ourbs)                               | New construction of 6 lanes and 4 lanes: about 12km   |  |  |
| Maj | or access road                                       | Expansion into 6 lanes, new construction: about 13km  |  |  |
| Ext | ension of Corredor Sur                               | Expansion into 4 lanes: about 2km   |  |  |
|     |  |   |  |  |
|     |  |   |  |  |
|     |  |   |  |  |
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CSA PAN/S 303/87 F/S

|                 | Completed or In Progress | Promoting                 |
|-----------------|--------------------------|---------------------------|
| DDDGENE GEARNIG | Completed                |                           |
| PRESENT STATUS  | Partially Completed      | Delayed or Suspended      |
|                 | Implementing             |                           |
|                 | Processing               | Discontinued or Cancelled |

#### **Description:**

Subsequent Studies:

In progress by ICA (FY 1996 Overseas Survey).

Finance:

(FY 1996 Domestic Survey)

The public tender was invited. As a result, the cabinet approved in Aug. 1996 the ICA (Mexico) and the Panamanian body corporate to undertake the construction.

(FY 1997 Overseas Survey)

1997 Tender Cost / US\$ 222 mil.

Administration Period:

30 years

Construction:

(FY 1996 Overseas Sruvey)

Scheduled to be implemented from mid-1997.

(FY 1997 Overseas Survey)

Construction was started in 1997.

(M/P+F/S)

Compiled Mar.1995

| CS        | SA PAN/S 2   | 15/93             | ·   | ,                                | Revised                     | Jul.200 |
|-----------|--|-------------------|---|----------------------------------|-----------------------------|---------|
| 1.        | COUNTRY  | Panama            |   |                                  |                             |         |
| 2.        | NAME OF STUDY  | Rehabilitation    | Plan and Container Terminal Operation   | on Plan at the Port of Cristobal |                             |         |
| 3.        | SECTOR   | Transportation    | / Port  | 4. TYPE C                        | OF STUDY M/P+F/S            |         |
|           |  |                   | National Port Authority   |                                  |                             |         |
| 5.        | COUNTERPART AGES<br>TIME OF DEVELOPM                                     |                   |   |                                  |                             |         |
|           | PRESENT COUNTERP   | ART AGENCY        |   |                                  |                             |         |
| 6.        | OBJECTIVES OF THE STUDY  |                   | the M/P for the port of Cristobal for the F/S of the short-term improvement               |                                  | or the target year of 2000. |         |
| 7.        | CONSULTANT(S)  |                   | Coastal Area Development Institute tants International                                    |                                  |                             |         |
| 8.        | STUDY PERIOD   | Oct.1992 ~        | Sep.1993 11month(s)   |                                  |                             |         |
|           | MAJOR PROPOSED P   | ROJECT(S)         |   |                                  |                             |         |
| Pro<br>Sh |  | ner Berth(d=13.0  | s Island)<br>0m,I=300m), Area 10.5ha, Container (<br>0m,I=600m), Area 21.0ha, Container ( |                                  |                             |         |
| Sh        |  | sion 1.8ha, Trans | iner Terminal<br>fer Crane 1, (additional)<br>sfer Crane 4, (additional)                  |                                  |                             |         |
| Sh        |  | o.7:Demolition o  | and Mole Area of Quay Shed 7,900m2, Mole:Pavemer cassenger Teminal, Mole:Pavement for     |                                  |                             |         |
| Sh        | ject 4 : Access Road<br>ort Term(2000) : Access<br>ng Term(2010) : Bypas |                   |   |                                  |                             |         |
|           |  |                   |   |                                  |                             |         |
|           |  |                   |   |                                  |                             |         |
|           |  |                   |   |                                  |                             |         |
|           |  |                   |   |                                  |                             |         |

CSA PAN/S 215/93 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 1995 Overseas Survey)

The proposals of the study have been implemented only partially(\*).

This is because various reasons relating to the privatization of the Port management have caused the delay in the project implementation.

A private firm will utilize the study results once it starts the rehabilitation works and the operation of the container terminal.

\*-the close of Pier No.7 and the construction of the container terminal there and the provision of the permission to construct the management facility of the Panama-Colon Route at Pier No.6.

(FY 1996 Overseas Survey)

The operation of the Port of Cristobal was privatized, which is expected to result in the upgrading of service and the improvement of its efficiency. The construction and improvement works are to be implemented under the supervision of the National Port Authority. The operation right of the Port has been transferred to Hutchinson International Terminal by concession and the construction is planned to be started from May 1997.

<Medium Term Plan>

Finance:

BOT

Construction:

(FY 1997 Overseas Survey)

1994~1995

Completed Components

Pier No.7 / Demolition of Quay Shed

Pavement for open storage area

Remaining Components:

(FY 1997 Overseas Survey)

(Implementation has delayed due to privatization of the Cirstobal Port)

Expansion of open storage area

Development of new port in Telfer island

**(F/S)** 

Compiled Mar.1995

| SA PAN/S 30   | 07/93   |  |  | Revised   | Jul.2009   |
|---|---|--|--|---|--|
| COUNTRY   | Panama  |  |  |   |  |
| NAME OF STUDY   | Study of Alterna  | tives to the Panama Canal  |  |   |  |
| SECTOD  | Transportation  | / Marine Transportation & Shine  | 4 TVDF OF STUDY E/S  |   |  |
| SECTOR  | Transportation  |  |  |   |  |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY   |   | ,  |  |   |  |
| PRESENT COUNTERPA   | ART AGENCY  |  |  |   |  |
| Economic analysis and impact analysis on the alternatives prescreened by the Commission.  Study of 47 canal alternatives on engineering and cost estimate for screenings.  6. OBJECTIVES OF THE STUDY   |   |  |  |   |  |
| CONSULTANT(S)   | Yachiyo Engine  | ering Co., Ltd.  |  |   |  |
| STUDY PERIOD  | Jul.1991 ~  | Aug.1994 37month(s)  |  |   |  |
| SITE OR AREA  | Canal Zone  |  |  |   |  |
| MAJOR PROPOSED PR   | OJECT(S)  |  |  |   |  |
|   |   |  |  |   |  |
| o construct the third locks   | s at both entrance  |  |  |   |  |
| o prepare approach chann  | els from the third  | locks to the present Canal. To widen the Gaillard Cut.   |  |   |  |
| Engineering and Cost Estimate Study (B)  Most feasible alternative reported by the Commission is as follows.  - construction with one lane lock for 150,000DWT ship parallel to the existing locks.  - two lane canal except one lane on Culebra Cut.  - The alternative project shall be constructed by the year 2020.  - Sea level canals are estimated not feasible. |   |  |  |   |  |
|   |   |  |  |   |  |
|   | COUNTRY  NAME OF STUDY  SECTOR  COUNTERPART AGEN TIME OF DEVELOPME  PRESENT COUNTERPA  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD  SITE OR AREA  MAJOR PROPOSED PR onomic and Impacts Study o construct the third locks o prepare approach channel of the step on struction with one lane wo lane canal except one lane wo lane canal except one lane alternative project shall | NAME OF STUDY  SECTOR  Transportation  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  PRESENT COUNTERPART AGENCY  Economic analyse Study of 47 canalyse Study of 47 canalyse Study of 47 canalyse Study of 47 canalyse Study of 48 canalyse Study of 48 canalyse Study of 48 canalyse Study of 48 canalyse Study Period  STUDY PERIOD  Jul. 1991  Canal Zone  STE OR AREA  MAJOR PROPOSED PROJECT(S)  To construct the third locks at both entrances of prepare approach channels from the third gineering and Cost Estimate Study (B) the proposed property of the study of the alternative project shall be constructed to the alternative | NAME OF STUDY  SECTOR  Transportation  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  Economic analysis and impact analysis on the alternatives prescreened Study of 47 canal alternatives on engineering and cost estimate for screening and estimate for screening and estimate for screening estimate estimate for screening estimate est | SCIONTRY Panama  Study of Alternatives to the Panama Canal  Study of Alternatives to the Panama Canal  SCIONTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY    Counterpart Agency | SECTOR Transportation / Marine Transportation & Ships 4. TYPE OF STUDY   F/S    SECTOR Transportation / Marine Transportation & Ships 4. TYPE OF STUDY   F/S    COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY   Commission for the Study of Alternatives to the Panama Canal    PRESENT COUNTERPART AGENCY    BECONOMIC THE STUDY   Economic analysis and impact analysis on the alternatives prescreened by the Commission. Study of 47 canal alternatives on engineering and cost estimate for screenings.  OBJECTIVES OF THE STUDY   Missubishi Research Institute Inc. Yachiyo Engineering Co., Ltd.    STUDY PERIOD   Jul. 1991 |

CSA PAN/S 307/93 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### Description:

By the Final Report of the comission (Sep.1993), existing canal will be available until 2020 and after 2020, improved canal by this project will be necessary. The project shall be completed by 2020.

The canal is to be transferred from USA to the Republic of Pananma in Dec.31,1999. This project has been suspended and the Commission was closed after completing the study.

#### (FY 1995 Overseas Survey)

In October 1995, the Ministry of Foreign Affairs of Panama produced the tentative report with which it is planning to request foreign donors to renew this study. In order to renew the study the Panamanian government has decided to allocate 34% of total cost (431,500US\$/year) while it expects foreign donors to contribute the remains.

#### (FY 1997 Domestic Survey)

In september 1997, International Panama Canal Conference was held by government of Panama and management method after the handover was discussed. Panama Canal Committee reported larger amount of services than estimated by the F/S and asserted that implementation of project should be earlier than as it planed.

#### (FY 1998 Domestic Survey)

The projects proposed by F/S have been implemented. The government established Panama Canal Bureau. M/P is under formulation with the idea of "School, Technology and Science City Development Project" as a development. This is planning to be financed by IDB.

#### (FY 1997 Overseas Survey)

Related Study:

"Transit Project"

Executing Organ / Ministry of Foreign Affairs, International Canal Conference

Consulting Firms / Advanced Logistics, Europroject, World Ltd.

Imp.Period / 7 months

Study Cost / US\$ 400,000 (EU fund)

Components of the study / evaluation of the Panama Canal development alternative plan, study for long term plan

Based on the results of above mentioned study, new department was founded in the Canal Committee for preparation of the construction of the third locks.

#### Related Private Investment Project:

1.Port

Projects such as privatization of Mansanillo Port and Coco Solo Port, are being implemented by ARI (Interoceanic Region Authority) and private sector. Construction of a container terminal at Colon Port has been started in September 1996 by the Taiwanese company. Negotiations on investment are being held in the area of tourism and other areas.

#### 2.Road

North Corridor 1998 opened

South Corridor 1997 construction started Panama-Colon Highway construction started Railway Transistmico 1998 rehabilitation started

#### 3.Canal

Widening of Culebra Cut 1995~2002

Capacity Increase Program(Canal Committee) 1996~

Gaillard widening

**(F/S)** 

Compiled Mar.1995

| CS         | SA PAN/S 3                  | 08/93               |  |                       | Revised | Jul.2009 |
|------------|-----------------------------|---------------------|--|-----------------------|---------|----------|
| 1.         | COUNTRY                     | Panama              |  |                       |         |          |
|            |                             |                     | Panama-Colon Highway                                   |                       |         |          |
| 2.         | NAME OF STUDY               | Table of            |  |                       |         |          |
| 2          | SECTOR                      | Transportation      | / Road   | 4. TYPE OF STUDY F/S  |         |          |
| <i>5</i> . | SECTOR                      | mansportation       |  | 7. 111E OF STUDY [7/S |         |          |
| 5.         |                             |                     | Ministry of Public works                               |                       |         |          |
|            | COUNTERPART AGEN            | CV AT THE           |  |                       |         |          |
|            | TIME OF DEVELOPME           |                     |  |                       |         |          |
|            | TIME OF DEVELORA            | ZVI STODI           |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
|            |                             |                     |  |                       | -       |          |
|            |                             |                     |  |                       |         |          |
|            | PRESENT COUNTERPA           | ART AGENCY          |  |                       |         |          |
|            | TREBERT COUNTERE            | IKI MOLNET          |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
|            |                             | T. C. 1.4 3         | 4/D.C  | 0.1                   |         |          |
|            |                             |                     | M/P for arterial road development between Panama and   | Colon.                |         |          |
|            |                             | To carry out a F    | easibility Study on selected projects of the M/P.      |                       |         |          |
|            |                             |                     |  |                       |         |          |
|            | OBJECTIVES OF THE           |                     |  |                       |         |          |
| 6.         | STUDY                       |                     |  |                       |         |          |
|            | 51001                       |                     |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
|            |                             | Yachiyo Engine      | ering Co., Ltd.  |                       |         |          |
| 7          | CONSULTANT(S)               | Chodai Co., Ltd     |  |                       |         |          |
| ٠.         | CONSULTANT(S)               | Asia Air Survey     |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
| 8.         | STUDY PERIOD                |                     | Mar.1994 15month(s)                                    |                       |         |          |
|            |                             | ~                   |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
|            |                             | Area between F      | anama and Colon  |                       |         |          |
|            |                             |                     |  |                       |         |          |
| 0          | SITE OR AREA                |                     |  |                       |         |          |
| 9.         | SITE OR AREA                |                     |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
| 10.        | MAJOR PROPOSED PR           | ROJECT(S)           |  |                       |         |          |
|            |                             |                     | ne highway with design speed of 110km/h in Alcade Di   | az Section(20.2km)    |         |          |
| -,-        |                             |                     | ie ingriwaj wiai design speed of 110ian i m 1 neade 21 |                       |         |          |
| 2)(        | Construction of a full acce | ass controlled 4-li | ne highway with design speed of 110km/h in Sabanitas   | Section(26.2km)       |         |          |
| 2)C        | construction of a full acce | ess controlled 4-11 | ie ingriway with design speed of 110km/n in Sabanitas  | Section(20.2km).      |         |          |
|            |                             |                     |  |                       |         |          |
|            |                             |                     |  |                       |         |          |
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パナマ・コロン間高速道路計画調査

CSA PAN/S 308/93 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CELATRIC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### **Description:**

Subsequent Studies: Implemented by PYCSA

Difference with JICA's Proposals:

The proposed route was changed and shortened. As a result, the negative impact on environment was mitigated. Also, the project cost was decreased.

#### Finance:

(FY 1995 Domestic Survey)

The Government of Panama signed on an agreement with PYSCA, a Panamanian Representative of a Mexican Contractor, and approved the construction works of the Panama-Colon express highway. Based on this agreement the construction has been commenced by means of BOT Process.

Total Cost/328 mil.B

\*Components

Section I: Alcade Diaz-Madden Section II: Madden-Colon

#### (FY 1998 Overseas Survey)

According to the contract with PYSCA, it is prescribed that PYCSA will be responsible for study, design, construction, maintenance, operation and management for 30 years and that the responsibility will be transferred to the government.

#### Construction:

1. Section I

(FY 1998 Overseas Survey)(FY 1999 Overseas Survey)

Jul.1996~June 1999 (completed)

(FY 1999 Domestic Survey)(FY 1999 Overseas Survey)

The highway is now possible for use.

#### 2.Section II

(FY 1998 Overseas Survey)(FY 1999 Overseas Survey)

Not yet started.

#### Situation:

(FY 1995 Overseas Survey)

The original HCA survey was partially modified for the environment conservation. PYCSA has been requesting for IDB loan.

(M/P+F/S)

Compiled Jul.1996 **CSA** PAN/S 201/95 Revised Jul.2009

| 1. | COUNTRY                              | Panama   |   |  |  |  |  |  |
|----|--------------------------------------|--|---|--|--|--|--|--|
| 2. | NAME OF STUDY                        | Development of Tourism in the Coastal Area                             |   |  |  |  |  |  |
| 3. | SECTOR                               | Tourism / (Tourism in) General 4. TYPE OF STUDY M/P+F/S                |   |  |  |  |  |  |
| 5. | COUNTERPART AGENCE TIME OF DEVELOPME |  | Panamanian Institute of Tourism   |  |  |  |  |  |
|    | PRESENT COUNTERPART AGENCY           |  |   |  |  |  |  |  |
| 6. | OBJECTIVES OF THE STUDY              |  | 1)To formulate a long-term tourism plan at coastal area to promote tourism (target year 2010).  2)To conduct F/S on priority selected projects. |  |  |  |  |  |
| 7. | CONSULTANT(S)                        |  | Yachiyo Engineering Co., Ltd. Pacific Consultants International   |  |  |  |  |  |
| 8. | STUDY PERIOD                         | Mar.1994 ~   | Oct.1995 19month(s)   |  |  |  |  |  |
| 9. | SITE OR AREA                         | Bastimentos, Arco Seco, Farallon, Metropolitana, Portobelo, Las Perlas |   |  |  |  |  |  |
| 10 | MA IOD DDODOCED DD                   | OTECT(C)   |   |  |  |  |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

- 1)Chame Resort Development
- -Formation of coastal resort hotel complex as a guidance development project in Farallon zone (total cost 284,630 Bl/1,000).
- 2)Panama Canal Tourism Development
- -Formation of continuous tourist atraction space utilizing the natural scenary and histric spot by preparing 10 sites as tourist bases along the Panama Canal (Total Cost 239,825).
- 3)Flower and Green City Project
- -Beautification of airport, airport and city connection road and parks, to improve the first impressions of tourists for Panama (Total Cost 32,495).
- 4)Portobelo Tourism Development
- -Formation of tourist resort along the coast, enclosing the Portobelo National Park by conserving and redeveloping the historical town of Portobelo (Total cost 131,063).
- 5) Caribbean Coast, Costa Arriba Road Development
- -Reform of Sabanita-Cuango trunk road, caribbean coast(Total Cost 42,808).
- 6)Superspeed Boat Sea Route Development
- -Formation of Super speed Boat Day-Trip-Tour Bloc among Panama city, Rey Island and Chame to correspond to tourist demand. Improvement of port facilities, access road, parking, passenger terminal (Total Cost 68,056).

CSA PAN/S 201/95 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Delayed or Suspended

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

(FY 1996 Overseas Survey)

As of Dec.1996, the revision of No.22 of Sep.15, 1960 Law is under deliberation. The promotion of tourism, the formulation of tourism development project, the human resource development of the concerned departments and the financing for the preservation of historical, cultural heritages are on agenda. Other than that, the proposals have been presented with respect to legislations and systems.

Also, Project financed by private sector is being carried out at the M/P target area.

(FY 1997 Overseas Survey)

There is no plan for public investment.

(1)Panama Canal Tourism Development

(FY 1996 Overseas Survey)

API has concluded a contract with a private company, "Emapresa Intercarib" and has ordered the formulation of the Land Utilization Plan and the Investment Promotion Program of this Project.

(FY 2000 Domestic Survey)

A private hotel enterprise bought the right as a concession to use the restored facilities in a canal area with the Panama Canal and runs some resort hotels.

(FY 2001 Overseas Survey)

Concerning special legislation applied to the Canal district, API is in charge of development pojects promotion while ACP is in charge of integrated control in the restoration area.

#### (2) Flower and Green City Project

(FY 1997 Overseas Survey)

This project has been partially implemented by the City of Panama, the main implementing body.

(FY 2000 Domestic Survey)

The Panama City shows interest in the plan and is seeking for available fund sources.

(FY 2001 Domestic Survey)

Main reason of interruption: Lack of finance for infrastructure improvement.

Subsequent study: Necessary design work has not started yet.

Fund procurement: Interested in yen loan.

(FY 2001Overseas Survey)

This project has not been implemented as planed, however, the municipality of Panama is implementing Green Area Project with their own financial source and fund from private enterprises.

#### (3)Portobelo Tourism Development

(FY 2000 Domestic Survey)

Spanish Government has completed the restoration of the Customs House, the main building in Portobelo Remains. Some private enterprise shows the interest in the tourism development.

Fund Procurement:

(FY 2001 Overseas Survey)

Financial source: Agency for International Cooperation, Spain.

1. Tourism facilities construction/improvement (Construction of visitors center, craft house, two harbors and Christbelo Museum, Signs for tourists in Portobelo, Pavement, Rehabilitaion of Portobelo Plaza, etc.), 2. Formulating tourism strategy plan, 3. Waste water treatment, 4. Training, etc.

#### (4) Chame Tourist Center Development

(FY 2001 Overseas Survey)

Utilized as a reference for planning of Escondia Resort and Malina Project (private investment project). The project application for institutions such as Panama Tourist Board and Authority of National Environment is being processed.

#### (5) Carribian Coast, Costa Aliba Road Improvement on Caribu and Aliba Coast

(FY 2001 Overseas Survey)

Portobelo-Palenque Road: Asphalt pavement Improvement was implemented.

San Antonio-Guaira Road: Soil pavement Improvement was implemented.

There's a tourist disignated area based on laws. The area has developed its relimitazation Santa Izabel and Grande Island. (Grande Island Standard Project is being formulated. Portobelo is integrated into local municipalities tourism project.

#### (6) Superspeed Boat Route Development

(FY 2001 Overseas Survey)

Only Farageon Tourism Development Ploject was implemented. Farageon Port is one of the ports of shipping route development.

Utilization of the study results:

(FY 2001 Domestic Survey)

Fully utilized as a guideline of tourism development.

#### (FY 2005 Domestic Survey)

Private sector financed development is in progress along the Panama Canal centring American military base.

Especially, tourism development of the Pacific side proposed in the study has become a district to be developed by private sector.

(M/P+F/S)

Compiled Jul.1998

| CS  | SA PAN/S 2                                   | 216/97                            |   | Revised Jul.200   |
|-----|--|-----------------------------------|---|---|
| 1.  | COUNTRY                                      | Panama                            |   |   |
| 2.  | NAME OF STUDY                                | Development P                     | lan of the Port of Balboa                             |   |
|     |  | m                                 | (5)   | 1. The Table  |
| •   | SECTOR                                       | Transportation                    | / Port  | 4. TYPE OF STUDY M/P+F/S  |
|     | COUNTERPART AGE<br>TIME OF DEVELOPM          |                                   |   |   |
| 5.  |  |                                   | National Port Authority                               |   |
|     | PRESENT COUNTERF                             | PART AGENCY                       | Transman Fort Additiontry                             |   |
| 6.  | OBJECTIVES OF THE STUDY                      | development m<br>(the target year | aster plan (the target year is 2015), and             | to increase handling capacity of containers, make a long-term dimplement a feasibility study of the short-term development plan |
| 7.  | CONSULTANT(S)                                |                                   | Coastal Area Development Institute ants International |   |
| R   | STUDY PERIOD                                 | Mar.1996 ~                        | May.1997 14month(s)                                   |   |
| σ.  | STUDI FERIOD                                 | ~                                 |   | essary at present and which will be necessary in the future as a result   |
| 9.  | SITE OR AREA                                 | of a projection of                | of demand   |   |
|     |  |                                   | T   |   |
| M/I | MAJOR PROPOSED P P: ntainer terminal (Farfan |                                   |   |   |
| F/S |  | ) Whorves for tur                 | na and sand, Increase in the depth of w               | harves for shins for passangers, etc.   |
| _OI | ntamer terminai (Diabio                      | ), wharves for tur                | ia and sand, increase in the deput of w               | narves for snips for passengers, etc.   |
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CSA PAN/S 216/97 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY 1998 Domestic Survey)

In Panama, there are more than 20 ports, most of which are owned and administrated by APN (Autoridad Portuaria Nacioal). Major ports such as Balboa Port, Christbal Port, Coco Solo Norte Port and Vacamonte Port (fishing), are located around the Panama Canal.

In recent years, fully-equipped container terminals have been constructed in the scheme of BOT. Close to Cristbal on the Caribbean Sea, MIT (Manzanillo International Terminal) was opened in 1993, and they made a contract that a part of Coco Solo Norte Port would be developed as a container terminal by Evergreen in 1995. On the other hand, in the Pacific side, a BOT contract to develop Balboa Port was signed with Panama Ports Company, S.A.(PPC) in December, 1996. This study was used as a reference to the development contract from the implementation stage, and including it they made a long-term plan of the port with the target year of 2015. It is expected that ports are developed appropriately based on the master plan in the future.

#### (FY 2001 Domestic Survey)

The new terminal of Balboa Port which has been constructed with USD 120 million, Balboa Container Terminal (BCT), was completed constructed and opened in November 14, 2000. The Panama Ports Company (PPC) operates the new terminal and now operates terminals in both Cristobal Port and Balboa Port. The contract period with the government of Panama is 50 years (25 years plus 25 years) for each.

BCT has the length of quay of 350 m, the depth of water of 12.9 m, the area of yard of 8.4 ha, 3 Super Panax Gantry Cranes, 9 RTG cargo handling equipment in yard, and the annual container handling capacity of 600,000 TEU. According to a projection of demand by the company, demand has been stable. Therefore, when phase 3 starts and the terminal is completed in November 2002, the capacity of 300,000 TEU will be added.

#### (FY 2003 Overseas Survey)

The funds come from the governmental funds and private funds (national and foreign), and the amount of USD 119 million was invested by November 2003.

#### Progress situation of construction:

(FY 2001 Overseas Survey)

Phase I and II are implemented as scheduled.

- 1) Activities completed: 350m wharf, 3 cranes, 16 cranes for yard, 8.4 ha container yard, 16.5 m deep water berth, 12.9 m water channel, 468 connection point for freeze container, Port shipping movement management house, Custom and immigration office, Access road to a port and the wharf 14 and 15
- 2) Activities being implemented: 270 m additional wharf, 16.8 ha container yard (Phaze III), 12.1 ha container yard (Phaze IV), Ship route dredging, Mastanijo River branch (outlet channel)
- 3) Activities to be implemented: 1,500 m wharf, 12 cranes, 27 cranes for yard, 50 ha container yard Phase III: June 2003-December 2004 (progress of 20%)

Difference with a JICA Study

(FY 2001 Overseas Survey)

The railroad improvement project was implemented without affecting the port development, and both of the means of transportation came to be used effectively. The Farfan district is not considered as the expansion area of Balboa Port at present. There is a possibility that the area is commissioned to an enterprise which starts the operation of new shipping lines. However, Panama Port Authority has not received the application.

#### (FY 2007 Domestic Survey)

No information to be specifically mentioned

#### (FY 2007 Overseas Survey)

The national port strategy proposed at mentioned study is the base of project which Panama Port Authority will implement in domestic port in this fiscal year. Furthermore, the analysis in mentioned study was useful as a framework of making concession contract on Balboa Terminal. Also, some activities such as international transportation utilisation, rural preparation development on port project, and provision/restoration of ships in Balboa District and etc became starting point for national port concession.

In addition, the project is in progress for completion of plat form and investigation and design about passengers/cargo terminal in Bocas del Toro, Almirante, Kaliki, Kokila, and La Balma sea port.

Progress Status: Designing term: from 1997 to 2008, constructing term: from 2004 to 2008

#### Technical cooperation:

Training program: Methods and outline about making plan on trade and marine transportation, technical support program in processing information, estimation of transporting cargo, and etc.

Dispatch of experts:15 people (modernization of trade and port, port maintenance development project and marketing plan, preservation of sea water, environmental effect, and etc.

(M/P+F/S)

Compiled Sep.2003

| C  | SA PAN/S 2  | 24/02            |   |                    |                      | Revised            | Jul.200 |
|----|---|------------------|---|--------------------|----------------------|--------------------|---------|
| 1. | COUNTRY   | Panama           |   |                    |                      |                    |         |
| 2. | NAME OF STUDY   | The Study on S   | olid Waste Management Plan for Municipa   | lity of Panama i   | n the Republic of Pa | anama              |         |
| 3. | SECTOR  | Public Utilities | / Urban Sanitation  | 4.                 | TYPE OF STUDY        | M/P+F/S            |         |
| 5. | COUNTERPART AGENTIME OF DEVELOPME   |                  | Municipality of Panama  |                    |                      |                    |         |
|    | PRESENT COUNTERP  | ART AGENCY       |   |                    |                      |                    |         |
| 6. | OBJECTIVES OF THE STUDY   | Republic of Par  | e study is to formulate a master plan on solution and targeted for the year 2015, and to conbe transferred to the counterpart personnel | duct a feasibility | study for priority p | projects. Furtherm |         |
| 7. | CONSULTANT(S)   | KOKUSAI KO       | GYO CO., LTD.   |                    |                      |                    |         |
| 8. | STUDY PERIOD  | Nov.2001 ~       | Feb.2003 15month(s)   |                    |                      |                    |         |
| 9. | M/P: the municipality of Panama (Area: approximately 2.5 thousand square meters, Population: approximately 700 thousand) F/S: the municipality of Panama (Area: approximately 2.5 thousand square meters, Population: approximately 700 thousand) |                  |   |                    |                      |                    |         |
| 10 | MAJOR PROPOSED PI   | POIECT(S)        |   |                    |                      |                    |         |

#### 10. MAJOR PROPOSED PROJECT(S)

M/P:

CCA

DANI/C 224/02

Goal FY: 2015

Objective: Building sound system of solid waste management in Panama City, which is the centre of economic activities and population of Panama. Components: 1) collection improvement whose purposes are to improve collection efficiency and to maintain the service standard, 2) introducing a transfer and transport system in order to improve the rate of collection and transportation. 3) introducing separate collection and building resource recovery facilities in order to encourage recycling. 4) Justification and expansion of existing final disposal site and improvement of collecting charge system which support finance and strengthening institution of organization, that are necessary for administrating projects, and etc. Implementation plan (goals):

Phase 1 (short-term target for: 2005): 100% collection rate (the current: 92%), introducing transfer and transport system (targeting eastern city district, Phase 1: 300 tons/day)

Phase 2 (mid-term target for: 2010): launch of separate collection, expansion of transfer and transport system (targeting eastern city district, Phase 2: 600 tons/day), introducing resource recovery facilities (25ton/day in 2007), expansion of final disposal site (to approx. 6,400,000 m3)

Phase 3 (long-term target for: 2015): 50% collection rate, expansion of resource recovery facilities (220ton/day)

Evaluation: B/C is 1.002 and the EIRR is 0.47% (when the citizens' willingness to pay obtained from the public opinion survey is regarded as the benefit)

Pre-F/S (as land for constructing facilities cannot be confirmed):

Construction of transfer station (Phase 1: 30ton/day, Phase 2: 600ton/day, evaluation: B/C 1.25, EIRR 17.5%)

F/S:

Expansion construction of Cerro Patacon Final Disposal Site

(Construction area is approx. 28 ha, landfill operation period: 2006-2015, landfill capacity: 6,400,000m3 (Phase 1: 2006-08, 1,300,000m3; Phase 2: 2008-10, 1,200,000 m3; Phase 3: 2010-11, 1,00,000 m3; and Phase 4: 2012-2015, 2,800,000m3), impact: the sanitary level of the final disposal site will be improved and the negative impact on the surrounding environment will be mitigated, evaluation: B/C is 1.2 and the EIRR is 8.9%.

CSA PAN/S 224/02 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY2003 Overseas Survey)

Formulation of the master plan and organization of the development unit (execution unit) are in progress at present. The following plans have been pushed forward.

- 1)Review of collection routes.
- 2)Review of cleaning routes.
- 3)Preparation of condition document for grant of business rights to operate the Cerro Patacon Landfill.
- 4)The condition document for grant of business rights of the transfer plant in the eastern part of Panama area was prepared.
- 5)The city's measures for administrative adjustment of the Civic and Household Health Office have been implemented.

#### (FY 2004 Domestic Survey)

There has been a request for the project-type technical cooperation.

#### (FY 2004 Overseas Survey)

1. Progress description of proposed project:

- 1) Garbage landfill:
- Construction of fourth stage, and expansion of the one in progress (2005 summer)
- Disposal of effusion. Construction of pump lake as the second stage of the existing pond. Public project pending (2005 summer)
- Transfer and transport
- Transport station: Searching for a place, making a contract with the estate agency is planned. Designing and Construction are expected against JICA.
- 3) Machinery facilities:
- -Collection cars: Based on necessity of an acquisition of the collected machines as indicated in the survey, supplied 30 trucks in 2004. During 2005, because 15 would be supplied as addition to 30, number of the vehicles would be secured in advance.
- 20 yards long packer vehicles (20 cars)
- 16 yards long packer vehicles (10 cars: purchase chassis)
- 4) Construction:
- Facilities and infrastructures: Anticipate for a transfer of central office to reclaimed land for the improvement in working condition and space. JICA technical cooperation is anticipated for site preparation (dumping area, diversification plant, and treatment plant) and selection of a site.
- 2. Feasibility of subsequent studies:

Requested JICA for an expansion of the study on solid waste management plan for municipality of Panama in August 2004

- 3. Request for funding:
- 1) Landfill disposal site: Own fund, DIMAUD Investment
- 2) Equipment preparation: Investment from regional banks
- 3) New facilities construction: Own fund
- 4. Other progress:
- 1) Strengthening, analysis, selection of the site, economic feasibility, financial improvement for construction/establishment of transfer station pilot project. Introduction of implementing team, a JICA technical cooperation as part of the request on August 2004.
- 2) Rout improvement program has continued by installing a new equipment for the for waste collection in 21 site.
- 3) Conducted discussion with related agencies, such as ANAM and MINSA, for recycling reusable waste, using waste diversification plant.
- 4) In addition to the commercialization program, improvements in environmental education in school and communities during school terms.
- 5) In addition to commerce programs, reinforcements of environmental education taught at schools and regions during learning terms

#### (FY 2005 Overseas Survey)

Several measures have been taken in order to develop capacity by implementing the output of the result of the study and the data configured. In addition, improvements for additional plan is being considered.

#### (FY 2007 Domestic and Overseas Survey)

Implemented project: "Project for strengthening solid waste management in Panama administrative district (JICA Technical Cooperation"

Implementing body: JICA, Municipal Bureau for Urban and Household Cleansing (DIMAUD)

Implementing period: Dec. 2006 to Nov. 2009

Funding:

Funding party: JICA (technical cooperation project)

Contents

- 1) Improvement of route management: Purchase software for setting route. Implemented staff training for using the software. Purchase geographical database to improve setting collecting route. The improvement will start in mid of Jan. 2008 at the plan of "Correction in Bethania and Bella Vista". Purchase new collection cars. 25 cars were purchased directly and the other 27 cars were purchased through bidding. Prevention maintenance of the 25 cars will be implemented in every 2 years by sale agency.
- 2) Strengthening of transfer and transport system: 1) The final step that to purchase approximate 5ha in Cabra district. The land is extremely successful to provide collection service in new area, since rapid development has been seen in throughout from Manianita district to San Martin, La Mesa, and Pacora district. 2) Considering possibility of purchasing second land in Fan Dias district which is owned by IDAAN. The area of land is 37ha and is planned construction of disposal plant of sewage project in coastal area. 3) Discussion with MIVI in order to analyze the land for moving capital city based on national land use plan.
- 3) Improvement of collection car management: The tender was implemented in 18th of Jan. 2008 to move the facilities of DIMAUD from Carrasquilla to Cerro Patacon.
  - 4) Strengthening of final disposal site: Tender regarding management of final disposal site was implemented.
- 5) Improvement of organization: The new map of organization was submitted to the mayor. Function manual of DIMAUD has now been reviewed. In addition, calculating machine was purchased with 30,000 Balboa and same amount will be put into another investment in 2008.

# STUDY SUMMARY SHEET (M/P)

(IVI/P) Compiled Jan.2006
PAN/S 101/04
Revised Jul.2009

| CS | SA PAN/S 101/0                        | <b>)</b> 4  |                       |   |          |            |     | Revised | Jul.2009 |
|----|---------------------------------------|---|-----------------------|---|----------|------------|-----|---------|----------|
| 1. | COUNTRY                               | Panama  |                       |   |          |            |     |         |          |
| 2. | NAME OF STUDY                         | The Study on the Comprehensive Ports Development Plan               |                       |   |          |            |     |         |          |
| 3. | SECTOR                                | Transportation / Marine Transportation & Ships 4. TYPE OF STUDY M/P |                       |   |          |            | M/P |         |          |
| 5. | COUNTERPART AGEN<br>TIME OF DEVELOPME | CY AT THE   | Autoridad Maritima de | Panama, (Panama Maritim                                   | e Author | rity, AMP) |     |         |          |
|    | PRESENT COUNTERPA                     | ART AGENCY  |                       |   |          |            |     |         |          |
| 6. | OBJECTIVES OF THE STUDY               | of organized ports  |                       | t contributing to the correc<br>a by suggesting developme |          |            |     |         |          |
| 7. | CONSULTANT(S)                         | Pacific Consultan   | ts International      |   |          |            |     |         |          |
| 8. | STUDY PERIOD                          | May.2003 ~  | Sep.2004              | 16month(s)  |          |            |     |         |          |
| 9. | SITE OR AREA                          | Nationwide  |                       |   |          |            |     |         |          |

#### 10. MAJOR PROPOSED PROJECT(S)

- 1. Assistance for city development suitable as a gateway for international tourist site at the Bocas del Toro port and the Almirante port
  - 1) Constructions of passenger terminals,
  - 2) improvements of cargo shipments to the remote islands, and
  - 3) environmental maintenances in Bocas del Toro city
- 2. Construction of Chiriqui port to facilitate regional industrial development
  - 1) Promotions of regional industry by reducing shipment costs of regional import and export cargos,
  - 2) furtherance of new industry and employments (shipments to the south of Costa Rica, and attraction as tuna ships
- 3. Coquilhat port development to secure a sea line to remote islands
  - 1) Maintenances of shipment route to costal communities and improvements of services, and
  - 2) a move of substitute functions due to an abolishment of the Panama Port.
- 4. Establishment of local activation centre for coastal residents in Darien prefecture, local industry development, and management of marine resources through La Parma port development
  - 1) Maintenances of shipment routes to the Darien prefecture coastal community and improvements of services,
  - 2) providing regional small scaled fishermen with accesses to markets, and
- 3) maintenances of a haul of fish, improvements of efficiency in commerce fishery industry, and promotions of regional industry (shrimp processing, timber processing and others)

CSA PAN/S 101/04 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 2005 Domestic Survey)

As of 2005, of the proposed 4 projects, AMP is conducting a tender utilising BOT scheme for Bocas del Toro Port and Almirante Port.

(FY 2005 Overseas Survey)

No information to be specifically mentioned.

(FY 2006 Domestic Survey)

Autoridad Maritima de Panama (AMP: La Autoridad Maritima de Panama) is planning and designing restoration works in Bocas del Toro Port as a part of restoration works in existing ports. AMP is the agency to implement works including construction and management and funds them on its own. According to AMP, the bidding is scheduled for contractors in the near future.

(FY 2006 Overseas Survey)

Survey is conducted in pursuit of establishing strategies for ports in Panama, preparing port and harbor expansion plans at a national level targeted for 2024, preparing a basic plan to expand ports and harbors chosen and reviewing the feasibility of preferential projects.

(FY 2007 Domestic Survey)

Out of the 4 proposed project, Panama government is willing to implement tender in form of BOT, targeting private companies. The tender is on Bocas del Toro Port Almirante Port. However, no private companies is interested in, as of Dec. 2007.

(FY 2007 Overseas Survey)

At present, AMP is preparing for the public tender on maintenance of Bocas del Toro, Kaliki, Cocle, Los Santos, and Darien sea port.

The study is useful for preparing domestic sea port infrastructure and strengthening operating body of AMP. Also, the study was useful for preparing local right division program and rural preparation development plan in national/local level.

Technical cooperation:

| Training program: Methods and outline about making plan on trade and marine transportation, technical support program in proc | essing information, estimation of |
|---|-----------------------------------|
| transporting cargo, and etc.  |                                   |

**(F/S)** 

Compiled Mar.1990 CSA

1. COUNTRY PER/A 301/77 Revised Jul.2009 Peru

| 2.          | NAME OF STUDY Proyecto de la Construccion del Complejo Pesquero del Centro |   |                 |
|-------------|--|---|-----------------|
| 3.          | SECTOR   | Fishery / Fishery 4. TY                         | PE OF STUDY F/S |
| 5.          |  |   | 1               |
|             | COUNTERPART AGENTIME OF DEVELOPME  |   |                 |
|             |  |   |                 |
|             |  |   |                 |
|             | PRESENT COUNTERPA  | PART AGENCY                                     |                 |
|             |  |   |                 |
|             |  |   |                 |
| 6.          | OBJECTIVES OF THE  | Σ   |                 |
| υ.          | STUDY  |   |                 |
|             |  |   |                 |
|             |  | Japan Port Consultants Co., Ltd.                |                 |
| 7.          | CONSULTANT(S)  |   |                 |
| 8.          | STUDY PERIOD   | Oct.1976 ~ Dec.1976 2month(s)                   |                 |
|             |  | Ventanilla                                      |                 |
|             |  | Ventalina                                       |                 |
| 9.          | SITE OR AREA   |   |                 |
|             |  |   |                 |
| 10.         | MAJOR PROPOSED PR  | PROJECT(S)                                      |                 |
| -Pla<br>-Ba | nning of proper scale fac<br>sic design of the structure                   | acilities and their arrangement in fishing base |                 |
| -Est        | timate of construction control and financial and                           | cost and period                                 |                 |
| L           |  |   |                 |
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CSA PER/A 301/77 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

Subsequent Study:

(FY 1998 Overseas Survey)

1988~90 F/S (Review study) undertaken

Cost/ US\$60,000 (FONDEPES)

Difference with JICA's proposal/Reduction of the scale of the project was proposed in order to implement the project with a grant aid assistance.

#### Finance

The grant aid has been requested based on the F/S (Dec.1990), and waiting for the response. The implementation of the project is delayed because of the financial problem.

#### Situation:

(FY 1993 Overseas Survey)

- -It is ready to commence the implementation whenever the fund becomes available.
- -Following effects are expected on this Project :
- 1)Supply enough sea foods to 6.5 millions of inhabitants in the metropolitan area,
- 2)Export sea products and earn foreign exchange,
- 3)Rural development by means of the establishment of a new fishing port, and
- 4)Create new employment opportunities.

#### (FY 1995 Overseas Survey)

- This project is very important and eagerly wished to materialize.
- It is expected much more technical transfer in the field of harbor industry, since technological innovation of fisheries industry becomes necessary.
- It is considerd followings as for the subjects in the near future:-
- 1) Construction of new facilities at a fishing port near by Lima.
- 2) Improvement of the Port of Callao, and
- 3) Construction of new fishing ports at the central part of the country.

#### (FY 1996 Overseas Survey)

Potential financial sources are counter value and grant aid. The Govt of Peru countinues negotiation for grant aid.

#### (FY 1997 Overseas Survey)

Request for a grant aid assistance has been submitted in May 1997.

(M/P+F/S)

Compiled Mar.1986 PER/S 201B/83 **CSA** Revised Jul.2009

| 1.    | COUNTRY                           | Peru   |   |      |                         |
|-------|-----------------------------------|--|---|------|-------------------------|
| 2.    | NAME OF STUDY                     | Development Pr   | Development Project of the Port of Callao |      |                         |
| 3.    | SECTOR                            | Transportation   | / Port                                    | 4    | . TYPE OF STUDY M/P+F/S |
| 5.    | COUNTERPART AGENTIME OF DEVELOPME | CY AT THE  | Empresa Nacional de Puertos               | S.A. |                         |
|       | PRESENT COUNTERPA                 | ART AGENCY   |   |      |                         |
| 6.    | OBJECTIVES OF THE STUDY           | -Formulation of a Master Plan through 2000<br>-Formulation of a Short-term Development Plan through 1987 |   |      |                         |
| 7.    | CONSULTANT(S)                     | The Overseas Coastal Area Development Institute  |   |      |                         |
| 8.    | STUDY PERIOD                      | Jul.1982 ~ ~   | Sep.1983 14month(s)                       |      |                         |
| 9.    | SITE OR AREA                      | Lima Capital Area (metropolitan area)  |   |      |                         |
| 10.   | MAJOR PROPOSED PR                 | OJECT(S)   |   |      |                         |
| - 3.4 | /D                                |  |   |      |                         |

<M/P>

The main purpose of the Short-term Plan through 1987 is containerization and provision of enough facilities.

- container berths 4 new berths - grain berths 2 new berths
- general cargo berth 1 new berth 2 renovated berths
- petroleum berth 1 new berth
- breakwater, basin, handling equipment

<F/S>

To handle 8.4 million tons in 1987, the following facilities will be prepoared.

The main purpose of the Short-term Plan through 1987 is containerization and provision of enough facilities.

- container wharf 1 berth with -12m depth and with 15ha area
- grain wharf 1 berth with -12m depth (for 60,000 DWT)

- container crane 2 cranes

- handling machines 2 machines

CSA PER/S 201B/83 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

Subsequent Studies:

1991~92 Pre-F/S conducted by ENAPU based on the short-term plan proposed by this Study. (FY 1994 Domestic Survey)

Oct.~Dec.1994 F/S

#### Finance:

Upon the request of the Peruvian government, OECF implemented SAPROF study from October 1994 to the end of 1994. (FY 1994 Domestic Survey)

Mar.1996 L/A 16,624 mil. Yen (Collao Port Improvement Project)

\*Contents of Project (D/D included)

(1)Improvement of one wharf of container and grain

(2) Take measures against environment impact by Counterpart Agency

(FY 1996 Domestic Survey)

(FY 1997 Overseas Survey)

The location of a grain terminal was modified to be constructed in parallel with No.1 terminal.

The total project cost is US\$ 221,212,000. Government budget is allocated in addition.

Depending on the result of D/D, construction of second container terminal will be considered. (fund will be procured separately)

#### Construction:

(FY 1997 Overseas Survey)

Under implementation

Jul.1988 D/D to be finished

2001 Civil works to be finished

2002 Equipment to be installed

#### Detail:

(FY 1991 Overseas Survey)

The Peruvian government still puts high priority on this project and, after modifying the project scale, plans to request the Japanese government for the financial assistance again during 1992.

(FY 1992 Overseas Survey)

The capacity of the port facilities to handle cargoes is likely to far exceed the expected volume of cargoes in future. The request for the budget allocation submitted to the National Planning Authority was turned down.

(FY 1993 Overseas Survey)

The revision of M/P in order to make it more applicable to the present situation and the implementation of F/S have been under consideration.

(FY 1994 Domestic Survey)

After the completion of F/S, during the 1980's, no progress was made for the project implementation. However, the Fujimori administration still gives high priority to this project.

(FY 1995 Overseas Survey)

The request was submitted to the Japanese government for the financial assistance. The Peruvian government is expecting an OECF loan.

(FY 1996 Overseas Survey)

Proposals of M/P have been modified in some aspects as parallel berth proposed at SAPROF. After SAPROF short-term plan was recommended as follows.

- -Construction of container terminal with the length of 270 m (silo and equipment included)
- -Dredging of access area and new terminal (14 m)

#### Reasons for Delay:

- -F/S was evaluated by special unit at Ministry of Economy and Finance.
- -Min. of Economy and Finance proposed the participation of private sector for implementation.
- -Responsible agency has altered to Min. of Tranport, Communication, Housing and Construction.
- -It took time to fill in the english questionnaire prepared by OECF.
- -Negotiation for contract delayed.

(F/S)

Compiled Mar.1990 **CSA** PER/A 302/84 Jul.2009 Revised 1. COUNTRY Peru Chancay-Huaral Valley Rehabilitation Project 2. NAME OF STUDY 3. SECTOR / (Agriculture in) General TYPE OF STUDY F/S Agriculture 5. Instituto nacional de ampliacion de la frontera agricola COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Agricultural development OBJECTIVES OF THE STUDY Naigai Engineering Co., Ltd. 7. CONSULTANT(S) Chuo Kaihatsu Corporation Feb.1984 Mar.1985 13month(s) 8. STUDY PERIOD Chancay-Huaral valley, 80km from Lima 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Irrigated area: 20,200 ha Intake facilities: 8 places Irrigation canal: 175km Pond: 18 places Drainage canal: 70 km Underdrainage: 407 km Road : 174 km Dike: 14 km The cost above is estimated in 1984 prices.

チャンカイ・ワラル谷かんがい復旧計画

CSA PER/A 302/84 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

The project was given top priority for early implementation to raise the self-sufficiency of basic foods and to increase exports.

Rehabilitation of irrigation and drainage facilities:

The priority project proposed in the F/S was implemented by the grant from the Japanese Government. 14,400 ha of farm land was developed in two stages.

#### Subsequent Studies:

Jan.~May.1989 B/D (Naigai Engineering Co.,Ltd)

Jul.1989 D/D (Naigai Engineering Co.,Ltd)

(FY 1997 Overseas Survey)

Out of B/D target areas, La Esperanza area has been pended.

#### Finance:

Nov.1987 Request for grant aid

Jun.27.1989 E/N 984 mil.yen (Reconstruction of Irrigation and Drainage System in the Chancay-Huarel Valley-Phase1/2)

Oct.1990 E/N 691 mil.yen (Reconstruction of Irrigation and Drainage System in the Chancay-Huarel Valley-Phase2/2)

#### Construction:

Jan.1990~Mar.199 1st Stage implemented

Feb.1991~Aug.1993 2nd Stage implemented

(Jul.1991~Jul.1992 Construction was suspended due to the act of terrorism)

\*Contents (2nd Stage)

Irrigation canal (8.2km)

Intake weir (3)

Drainage canal (30.1km)

Equipment

Service center

Contractor / Taisei Kensetsu

#### Operation and Management:

(FY 1998 Domestic Survey)

Water-users' association is in charge of management and operation. The equipment provided by grant aid assistance became decrepit.

#### Remaining Project:

(FY 1998 Domestic Survey)

Regarding the Rural Modernization Project in Esperanza Region, a request is to be submitted.

#### Situation

(FY1995 Overseas Survey)

At present, necessary measures are carrying on to request the detailed design and the implementation at Esperanza region which has been planned by the F/S of this project.

#### (FY1997 Domestic Survey)

As for the remaining project, Peruvian government has submitted a request for grant aid assistance to Japanese government.

#### (FY 1997 Overseas Survey)

Remained components are irrigation, facilities for transportation of agricultural product, equipment in La Esperanza.

Requesting a grant aid assistance.

(M/P+F/S)

Compiled Mar.1990

| C                 | SA PER/S 20   | 02B/86                                |   | I   | Revised                   | Jul.2009 |
|-------------------|---|---------------------------------------|---|---|---------------------------|----------|
| 1.                | COUNTRY   | Peru                                  |   |   |                           |          |
| 2.                | NAME OF STUDY   | Development Pr                        | roject of Jorge Chavez Lima-Callao International Airpo  | ort   |                           |          |
| 3.                | SECTOR  | Transportation                        | / Air Transportation & Airport  | 4. TYPE OF STUDY M/P+F  | 5/S                       |          |
|                   |   |                                       | Ministerio de Transportes y Comunicaciones  |   |                           |          |
| 5.                | COUNTERPART AGEN<br>TIME OF DEVELOPME   |                                       |   |   |                           |          |
|                   | PRESENT COUNTERPA   | ART AGENCY                            |   |   |                           |          |
| 6.                | OBJECTIVES OF THE STUDY   |                                       | Master Plan (with the target year of 2005). echnical, economic and financial feasibility of the sho   | t-term(1995) development proje                                      | ct.                       |          |
| 7.                | CONSULTANT(S)   | Japan Airport C                       | onsultants, Inc.  |   |                           |          |
| 8.                | STUDY PERIOD  | Jul.1985 ~                            | Jun.1986 11month(s)   |   |                           |          |
|                   | SITE OR AREA  |                                       | Int'l Airport in Lima, Peru   |   |                           |          |
| -                 | MAJOR PROPOSED PR   | OJECT(S)                              |   |   |                           |          |
|                   |   | lated to meet the                     | demand of 2005 and the improvement measures to be   | taken under the master plan are s                                   | summarized                | d as     |
| fol<br>1)0<br>4)I | lows;<br>Grading of Runway Strip<br>Expansion of Apron with   | 2)Bituminous ove<br>concrete pavement | erlay of Runway 3)Bituminous overlay of Taxiway and to 5)Expansion of main terminal building and construct a Airport administration building 8)Relocation of fire | d construction of a high-speed extion of satellites 6)Relocation of | kit taxiway<br>export car | go       |
|                   |   |                                       | installation of weather data recorder.  | ·   |                           |          |
| Thim 1)I          | The short-term development plan of the airport was prepared, to solve the problems of the existing facilities and also to meet the demand of 1995. The improvement measures for the short-term development plan are summarized as follows.  Bituminous overlay of Runway(3,507m x 45m) 2)Construction of a high-speed exist taxiway 3)Expansion of Apron(31 spots) 4)Expansion of Main erminal building and construction of satellites(40,000m2) 5)Relocation of export cargo terminal and customs office(14,000m2) 6)Expansion of Carwarks(1,370 cars) 7)Replacement of VOR and NDB, introduction of PAPI, upgrading of ALS to Cat-II. |                                       |   |   |                           |          |
|                   |   |                                       |   |   |                           |          |
|                   |   |                                       |   |   |                           |          |
|                   |   |                                       |   |   |                           |          |
|                   |   |                                       |   |   |                           |          |
|                   |   |                                       |   |   |                           |          |

CSA PER/S 202B/86 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

#### Subsequent Studies:

(FY 1996 Domestic Survey)

Oct.1995~Aug.1996 F/S (US\$430,000) funded by US Trade and Development Agency.

(FY 1998 Domestic Survey)

COPRI ordered an American Consultant Persons Aviation to formulate a M/P on airport development by the participation of private sector.

#### Proposed Project:

- 1.Expansion of passenger's terminal
- 2. Construction of GA aprons, terminals and hungers.
- 3. Renovation of roads and expansion of parking lot (2,600 vehicles)
- 4. Construction of parallel runways (3,480 x 45)
- 5. Construction of parallel taxiways

Total Cost: Approximately US\$370mil.(1)Runway

#### Finance:

(FY 1998 Domestic Survey)

Although OECF Loan was pledged, Government of Peru converted their policy to implementing the project by introducing the private sector funds (planned amount of investment: US\$ 400 million), and established COPRI for promoting private sector participation.

(FY 1997 Domestic Survey)

Date for signing L/A is not scheduled yet. (Land purchase by Peruvian government has a rough passage)

Loan amount: 26,269mil.yen \*Contents of the project:

Runway, establishment of national ATL system

#### Construction:

1998~2003 (schedule)

#### (FY 1996 Domestic Survey)

In order to utilize the present runway by the completion of a new runway, the Government is planning to undertake the urgent rehabilitation work of the present runway with the World Bank fund. The complete rehabilitation and expansion of the runway will be implemented after a new runway is constructed.

#### (FY 1998 Domestic Survey)

The contents of the construction work depends on the technical proposal by the private entities which will be awarded.

The urgent rehabilitation work of raising the present runway with the World Bank fund was completed at the end of Nov. 1998.

#### Future Prospects:

(FY 1998 Domestic Survey)

The schedule for the airport development by the private sector participation is as follows:

Jan. 1999 Bid announcement.

Explanatory sessions will be held in Europe, U.S., and Japan.

May 1999 Deadline of the technical proposal.

July 1999 Open of the commercial proposal, award, and contract.

Aug. 1999 Transfer of the airport.

(Basic Study)

|          |                                       | (Basic Study)  | Compiled  | Mar.1990 |
|----------|---------------------------------------|--|-----------|----------|
| C        | SA PER/S 501/8                        |  | Revised   | Jul.2009 |
| 1.       | COUNTRY                               | Peru   |           |          |
| 2.       | NAME OF STUDY                         | Topographic Mapping Project for Satipo Area, Department of Junin |           |          |
| 3.<br>5. | SECTOR                                | Social Infrastructure  | sic Study |          |
|          | COUNTERPART AGEN<br>TIME OF DEVELOPME |  |           |          |
|          | PRESENT COUNTERPA                     | ART AGENCY   |           |          |
|          | I                                     | Preparation of basic information for development planning.       |           |          |
| 6.       | OBJECTIVES OF THE STUDY               |  |           |          |
| 7.       | CONSULTANT(S)                         | International Engineering Consultants Association                |           |          |
| 8.       | STUDY PERIOD                          | Jun.1982 ~ Feb.1987 56month(s)                                   |           |          |
|          |                                       | G : A (20,000 I )  |           |          |
|          |                                       | Satipo Area(20,000 sq.km.)                                       |           |          |
|          |                                       |  |           |          |
| 9.       | SITE OR AREA                          |  |           |          |
|          |                                       |  |           |          |
|          |                                       |  |           |          |
| 10       | MAJOR PROPOSED PR                     | ODECT(S)   |           |          |
|          | Aerophotos                            | COLECT(5)  |           |          |
|          | cale: 1/60,000                        |  |           |          |
| C        | Coverage: 31,259 sq.km                |  |           |          |
| 2)7      | Copographic maps                      |  |           |          |
| 6        | 4 plates, covering 12,070             | ) sq.km  |           |          |
|          |                                       |  |           |          |
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|          |                                       |  |           |          |

**CSA** PER/S 501/86 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Utilization of the Study: (FY 1991 Overseas Survey) The maps are highly appreciated. (FY 1995 Overseas Survey) The performances of this study project are enrolled into the map of whole country and are utilized for the planning for the works of enterprises concerned by the Presidential Office, the Ministry of Agriculture, etc. The aerial photographs are utilized to draw the map of the whole country in scales of 1 & 50 and 100 thousand. The measures are taken to make it possible to print these maps automatically. (FY 1996 Overseas Survey) The output of study is utilized for petroleum exploration. Prospect for the Future: (FY 1991 Overseas Survey) Cooperation is desired to computerize these mapping works from now on. (FY 1995 Overseas Survey) The National Geographic Institute hopes for further Japanese assistance in land use mapping, automated drawing system, and so on.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1990
CSA PER/S 101/87
Revised Jul.2009

| 1.  | COUNTRY                   | Peru  |  |  |
|---|---------------------------|---|--|--|
| 2.  | NAME OF STUDY             | Disaster Prevention Project in the Rimac River Basin                    |  |  |
| 3.  | SECTOR                    | Social Infrastructure / River & Erosion Control 4. TYPE OF STUDY M/P    |  |  |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                           |   |  |  |
|   | PRESENT COUNTERPA         |   |  |  |
| 6.  | OBJECTIVES OF THE STUDY   | To formulate a Master Plan for disaster prevention in Rimac river basin |  |  |
| 7.  | CONSULTANT(S)             | Nippon Koei Co., Ltd.   |  |  |
| 8.  | STUDY PERIOD              | Feb.1987 ~ Mar.1988 13month(s) ~  |  |  |
|   | SITE OR AREA              | Rimac river basin 3,500 sq.km   |  |  |
| 10.   | MAJOR PROPOSED PROJECT(S) |   |  |  |

Major recommendations:

- 1) To carry out a feasibility study soon
- 2) To implement non-structural measures
- Establishment and implementation of land use regulation
- Establishment of a coordinated administrative organ to implement the overall watershed management
- Establishment of an implementing agency of disaster prevention structural measures
- Training of engineers

CSA PER/S 101/87 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

Owing to the political destabilization and the serious constraints in public finance, it is extremely difficult to find funds for implementing the proposals of the study.

#### Subsequent Studies:

Oct.1995, a project conforming team of JICA visited Peru and conformed a F/S project of disaster protection at the upper stream of Atarjea.

\*Contents of F/S

F/S includes water treatment of Rimac river basin (from drainage to the junction of San Mateo river and Santa Eularia river. It also includes control system of 7 rivers at Chosica area.

#### Detail:

#### (FY 1991 Overseas Survey)

The process of specifying areas for feasibility study was suspended after the Japanese expert who had been assigned for this purpose left the country because of the political and social destabilization. The National Institute of Civil Defense assigns high priority to the implementation of the proposals of the study.

#### (FY 1992 Overseas Survey)

The maps and basic data have been utilized in the determination of priority for emergency works.

#### (FY 1993 Overseas Survey)

Under the present economic situation, there will be no possibility to implement this project unless devide into several stages and carry out one by one, since it is too expensive to repair the collapsed portion according to the recommendation made by Japanese Side.

The maps and basic data, which come out as the results of the survey works, are very useful for the disaster prevention in this river basin.

Dispatch of experts who will manage and administrate the desaster prevention in this river basin are requested.

#### (FY 1995 Overseas Survey)

- Following to the indications of this master plan, INDC is implementing the disaster pretection works at the dangerous points by their own detailed plans since this project did not provide any detailed designs. These works were designed and requested to INDC by each autonomies.
- The technologies introduced by this project is very high in the costs. So, it is difficult to apply. After that, in Peru, a new bank protection method has been developed, and this method is very effective, even now.

#### (FY 1996 Domestic Survey)

"Improvement of Rimac River Basin" may be implemented as the 1997 development study.

#### (FY 1997 Domestic Survey)

F/S on Rimac River bank protection is supposed to be implemented in FY 1998.

#### (FY 1997 Overseas Survey)

The materialization of project has delayed due to financial problem and higher priority of other projects. In case of implementation, M/P needs to be up-dated in accordance with the change of circumstances.

**(F/S)** 

Compiled Mar.1991 CSA PER/S 301/89

1. COUNTRY Peru Revised Jul.2009

| 1.         | COUNTRI  | Improvement of        | Sewerage System in Southern Part of Lima  |
|------------|--|-----------------------|---|
|            | NAME OF STUDY  |                       |   |
|            | SECTOR   | Public Utilities      | / Sewerage 4. TYPE OF STUDY F/S   |
| 5.         | COUNTERPART AGENTIME OF DEVELOPME  PRESENT COUNTERPA | CY AT THE<br>NT STUDY | Servicio de agua potable y alcantarillad de Lima (SEDAPAL)  |
|            |  | Improvement of        | sea water contamination around the Lima and environmental health condition.                                   |
| 6.         | OBJECTIVES OF THE STUDY                              |                       |   |
| 7.         | CONSULTANT(S)  | Nippon Jogesuio       | lo Sekkei Co., Ltd.   |
| 8.         | STUDY PERIOD   | Apr.1989 ~            | Mar.1990 11month(s)   |
| 9.         | SITE OR AREA   | 16 southern dist      | ricts of Lima City (122 sq.m, pop. 1.8 million)   |
|            | MAJOR PROPOSED PR                                    |                       |   |
| The<br>Pla | e project proposes to treat<br>ins.                  | the raw sewage        | from the Surco drainage canal and to utilize treated water for agricultural and other purposes in San Bartolo |
|            | ake Facility   |                       |   |
|            | ansmission Facility                                  |                       |   |
|            | it Chamber Facility werage Treatment Plant           |                       |   |
|            |  |                       |   |

CSA PER/S 301/89 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description :

Subsequent Studies:

(FY 1996 Domestic Survey)

Review study was implemented with the World Bank loan in Dec.1995.

Waste water treatment plan for Lima City was formulated in 1996.

(FY 1996 Domestic Survey)

Oct.1996 D/D was commenced.

Consultant: Nippon Jogesuido Sekkei

\*Difference from JICA's proposal:

(FY 1998 Domestic Survey)

Change of the treatment measure; Construction of Huascar treatment plant and cancellation of No.26 Park STP; and Rehabilitation of San Juan sewerage treatment plant.

#### Finance:

(FY 1996 Domestic Survey)

Sep.24.1996 L/A 12,660 mil.yen

(Improvement of Sewerage System in Southern Part of Lima)

\*Components

- construction of sewerage treatment plant (San Bartro, Huascar)
- expansion of sewerage treatment plant (San Juan)
- wastewater pipeline 37.2 km

The objective of this project is to improve the sewerage system in this area. It aims to improve public health and to prevent environmental degradation in the Maric River and the coastal area.

It includes a designing work, F/S on the Surco sewerage treatment project and EIA on a whole project.

#### Construction:

(FY 1997 Overseas Survey)

May.1998 ~ May.2000

(FY 1999 Overseas Survey)

- 1. Construction of the water transmission channel (50km): Jun. 1999 ~ Feb. 2001.
- 2.Construction of the San Parto water treatment plant: Feb.1999 ~ Feb.2001.
- 3. Construction of the Huascar plant and rehabilitation/expansion of the San Juan plant: Sep.1999 ~May 2001.

#### Others:

(FY 1998 Domestic Survey)

If the project for Cerro La Chira Sewerage Treatment Plant is implemented, all the sewerage can be treated in the southern part of Lima City.

(M/P+F/S)

Compiled Mar.1992 **CSA** PER/A 201B/90 Revised Jul.2009

| 1.  | COUNTRY   | Peru             |  |                                   |                   |             |               |         |
|-----|---|------------------|--|-----------------------------------|-------------------|-------------|---------------|---------|
| 2.  | NAME OF STUDY                                       | Fisheries Develo | opment Plan of   | the Fishing Port                  | Construction in t | the Central | Coast of Peru |         |
| 3.  | SECTOR  | Fishery          | / F  | ishery                            |                   | 4.          | TYPE OF STUDY | M/P+F/S |
| 5.  | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                  | Ministerio de F  | esqueia (MIPE)<br>n Y Presupuesto |                   |             |               |         |
|     | PRESENT COUNTERPA                                   | RT AGENCY        |  |                                   |                   |             |               |         |
| 6.  | OBJECTIVES OF THE STUDY                             | To establish the | To establish the short-term plan for a fishing port construction and to study its feasibility. |                                   |                   |             |               |         |
| 7.  | CONSULTANT(S)                                       |                  | TETRA Co., Ltd. System Science Consultants Inc. Joint Venture/                                 |                                   |                   |             |               |         |
| 8.  | STUDY PERIOD  | Mar.1989 ~       | Dec.1990   | 21month(s)                        |                   |             |               |         |
|     | SITE OR AREA  | Ventanilla       |  |                                   |                   |             |               |         |
| 10. | MAJOR PROPOSED PR                                   | OJECT(S)         |  |                                   |                   |             |               |         |

<M/P>The proposed fishing port in Ventanilla is planned as a fishery base for supplying fish products to residents in the central district of Peru, aiming at moving and expanding the functions of the present fishing port in the Callao Port. The facilities of the fishing port will be provided to meet the landing of 88,788 tons in the target year of 2005.

i) Basic facilities

\* -7.5 m quay (91 m in length)

- ii) Function facilities

\* Fish market, sorting facilities

- \* Freezer, cold storage facilities \* Ice making machine
- \* Other facilities

<F/S> The purpose of the urgent plan is to develop Ventanilla fishing port having basic and functional facilities which will accommodate fishing boats of under 300GRT. with view to transfer fishing port function of existing Callao Port to ventanilla fishing port.

1) basic Facilities

2) Functional facilities

Southern Breakwater: 355m

Northern Breakwater: 320m Sorting facilities: 1,780sq.m 345m Cold Storage: 1,250t Quay Wall(-4.0): 565m Revetment: Ice Plant: 22t/day 450t Anchorage: 16,800 sq.m Ice storage:

Dredging:

Others

**CSA** PER/A 201B/90 M/P+F/S

|                | Completed or In Progress | Promoting                 |  |
|----------------|--------------------------|---------------------------|--|
|                | Completed                |                           |  |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |  |
|                | Implementing             |                           |  |
|                | Processing               | Discontinued or Cancelled |  |
| Description :  |                          |                           |  |

(FY1991 Overseas Survey)

The proposed projects by M/P was integrated into the National Plan. In Phase I the project scale was considerably reduced and has been implemened with the government budget of FY 1991 and FY 1992.

MIPE has put high priority on this project and is willing to implement it as soon as the finance is secured. The Japanese government was requested for the financial assistance in December 1991.

(FY 1997 Domestic Survey)

No further information.

(FY 1997 Overseas Survey)

Request for financial assistance was submitted to Japanese Government in May 1997.

(Basic Study)

Compiled Mar.1994

Jul.2009

Revised

| 1. COUNTRY 2. NAME OF STUDY                          | Peru The Topographic Mapping of I                        |                        |                              |  |
|--|--|------------------------|------------------------------|--|
| 2. NAME OF STUDY                                     | The Topographic Mapping of I                             |                        |                              |  |
|  | The Topographic Mapping of I                             | Lima Metropolitan Area |                              |  |
|  |  |                        |                              |  |
| 3. SECTOR  |  | Survey & Mapping       | 4. TYPE OF STUDY Basic Study |  |
| COUNTERPART AGENTIME OF DEVELOPME                    | CY AT THE  | rafico Nacional (IGN)  |                              |  |
| PRESENT COUNTERPA                                    | ART AGENCY   |                        |                              |  |
| 6. OBJECTIVES OF THE STUDY                           | Topographic Mapping.  Land Use Mapping.                  |                        |                              |  |
| 7. CONSULTANT(S)                                     | International Engineering Cons<br>Aero Asahi Corporation | sultants Association   |                              |  |
| 8. STUDY PERIOD                                      | Feb.1990 ~ Jul.1992 ~                                    | 29month(s)             |                              |  |
| 9. SITE OR AREA                                      |  |                        |                              |  |
| I.Air-Photographing Sc.<br>2.Tophgraphic Napping Sca | eale 1:30,000 1,570 km2                                  |                        |                              |  |

**CSA** 

PER/S 502/92

CSA PER/S 502/92 Basic Study
In Progress or In Use

|                | Discor | ntinued or Cancelled |  |
|----------------|--------|----------------------|--|
| PRESENT STATUS | Delaye | ed .                 |  |
|                | In Pro | gress or In Use      |  |

#### **Description:**

In spite that Air-Photographs and Topographic Maps have already completed, the Land Use Mapping is still suspended due to the unexpected tragic accident (three JICA experts were killed by terrorist).

#### Utilization of the Study:

Air-Photographs and Topographic Maps will be applied for promoting various urban developing project or land preserving project.

#### (FY 1995 Overseas Survey)

The topographic maps with a scale of 1/10,000 are utilized for the urban planning works to expand the metropolitan area, and the aerial photographs are used to grasp the circumstances at neighboring areas of the metropolitan area.

#### (FY 1996 Overseas Survey)

Sectors like education, mineral resources, agriculture and energy are benefited by this study. (Especially public and private institutions which carry out infrastructure projects.

#### Request:

#### (FY 1995 Overseas Survey)

In future it is desirable to computerize the drawing works of topographic maps and to draw up the land utilization maps.

#### (FY 1996 Overseas Survey)

Update of 1/10,000 map and technical assistance are important.

(M/P+F/S)

Compiled

Jun.2000

**CSA** PER/S 218/99 Revised Jul.2009 1. COUNTRY Peru The Study on the Integrated Water Pollution Control for Puno Interior Bay of Lake Titicaca NAME OF STUDY 3. SECTOR / Environmental Problems 4. TYPE OF STUDY M/P+F/S Administration National Institute of Development (INADE), Special Bilateral Project for Lake Titicaca (PELT), Ministry of the President COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY 1) To formulate a Master Plan of integrated water quality improvement of Puno Interior Bay. 2) To conduct a F/S on priority projects identified from the Master Plan 3) To transfer technology to counterpart personnel in the course of the Study. OBJECTIVES OF THE Pacific Consultants International 7. CONSULTANT(S) Environmental Technologic Consultants Co., Ltd. Sep.1998 Jan.2000 16month(s) 8. STUDY PERIOD M/P: Puno Interior Bay (17km2) and its surrounding catchment area(36km2) F/S: Puno City 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) M/P: 1) Sewerage System Improvement/ Sewer expansion, Wastewater treatment system improvement 2) Solid Waste Management/Increase of collection rate, Expansion/Upgrade of final disposal site 3) In-Lake Management/Removal of Lemna, Cover of bottom sediment, Replacing of Totora. 4) Non-structural Measures/Environmental education and Campaign, Citizen's participation, Institutional strengthening, Land use management, Livestock farming management, Regulation of effluents, Environmental monitoring

#### F/S:

Solid Waste Management/ Procurement of collection vehicles necessary for the increase of collection rate (70% in 2008), Expansion and upgrade of final disposal site(Sanitary landfill)

CSA PER/S 218/99 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 2000 Domestic Survey)

The German government (KFW) will offer a financial assistance for the urgent sewerage improvement project (target year: 2008). The detailed design has been to adjust the project cost to the fixed budget.

The Peruvian side has requested the Japanese government for grant aid of solid waste collection vehicles. The Japanese government has given no answer to the request. Water Quality monitoring will progress in collaboration with the Ministry of Health.

#### (FY 2001 Overseas Survey)

The completion of this Study made the local authority an implementation agency of each project so that duties of the National Institute of Development (INADE) as the implementation agency were handed over. The cooperation on water and sewerage system improvement by GTZ was materialized. INADE does not indicate its intention for continuation and make any request for concretization of the project because INADE was already out of responsibility.

#### (FY 2003 Overseas Survey)

1.Sewerage improvement project

Funds: 20 million Deutsche mark

Details of construction: improvement of water and sewerage system including expansion of water and sewerage facilities

2.Establishment of commission: with the objective of improving the water quality of Puno Bay of Lake Titicaca, a commission consisting of the Lake Titicaca Bilateral Project, Ministry of Tourism, Ministry of Trade and Industry, Puno City Government, the Ministry of Sewage of Punoju and other private enterprises was established and is in operation.

#### (FY 2004 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2005 Domestic Survey)

Subsequent project: Urgent Sewerage Improvement Project in Puno city (Tentative name)

Implementing period: 2004-2008 Implementing body: Puno city

Funding:

Funding party: Germany KfW Amount: 20 million DEM

Objective: To improve water/sewerage system in Puno city, including expansion of water supply system

Relationship with the study: Sewerage improvement, extension of drainage network, and improvement of sewage disposal were proposed in the report as water quality improvement measures in Puno. Subsequent project aims to implement these measures.

Progress: D/D was conducted since 2003, and it seems that the construction has been nearly completed.

Others: There is a movement of Ministry of Health in cooperation with a proposal of water quality monitoring of the lake and sewerage.

#### (FY 2005 Overseas Survey)

10 million USD was funded by Japanese government as Grant Aid for machinery and equipments procurement solid disposal treatment management in Puno city to improve Puno city environment and quality of life of more than 120,000 residents.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled May.2001
CSA PER/S 117/00 Revised Jul.2009

| 1.  | COUNTRY                            | Peru   |  |                         |                    |   |  |
|-----|------------------------------------|--|--|-------------------------|--------------------|---|--|
| 2.  | NAME OF STUDY                      | The Master of P  | ne Master of Plan Study on National Tourism Development in the Republic of Peru (Phase II)   |                         |                    |   |  |
| 3.  | SECTOR                             | Tourism  | Tourism / (Tourism in) General 4. TYPE OF STUDY M/P  |                         |                    |   |  |
| 5.  | COUNTERPART AGENORIME OF DEVELOPME |  | Ministry of Tourism, Industry, Integ   | ration, and Internation | al Trade (MITINCI) | ) |  |
|     | PRESENT COUNTERPA                  |  |  |                         |                    |   |  |
| 6.  | OBJECTIVES OF THE STUDY            | National Tourisi   | To conduct a feasibility study of the projects selected from the priority projects proposed in the Phase-1 Study of National Tourism Master Plan, as a case study to facilitate implementation of other proposed projects To transfer echnology to the counterparts. |                         |                    |   |  |
| 7.  | CONSULTANT(S)                      | Pacific Consultants International  |  |                         |                    |   |  |
| 8.  | STUDY PERIOD                       | Nov.1999 ~   | Jul.2000 8month(s)   | 1                       |                    |   |  |
|     | SITE OR AREA  MAJOR PROPOSED PR    | Trujillo-Chiclayo Tourism Corridor, Tumbes-Piura Tourism Corridor, Amazon River Tourism Corridor |  |                         |                    |   |  |
| 10. | MIND ON I NOI OBED IN              | OJECT(S)   |  |                         |                    |   |  |

- 1. Turujillo-Chiclayo Tourism Corridor
  - 1.1 Construction of the New Turujillo By-pass Road (12.84 mil.US\$)
  - 1.2 Tourism Improvement of Chan Chan Archeological Complex (2.79 mil. US\$)
  - 1.3 Tourism Improvement of Huacas del Sol y La Luna (3.92 mil. US\$)
  - 1.4 Development of Parque de Baluarte (4.51 mil. US\$)
  - 1.5 Tourism Improvement of El Brujo Archeological Site (3.73 mil. US\$)
  - 1.6 Beautification of Histroric Center of Pacasmayo (2.41 mil. US\$)
  - 1.7 Development of Sipan Archeological Park (11.92 mil. US\$)
  - 1.8 Tourism Improvement of Batan Grande Reserve Zone (3.98 mil. US\$)
- 2. Tumbes-Piura Tourism Corridor
  - 2.1 Development of the Hermosa Beach Resort (7.03 mil. US\$)
  - 2.2 Mangrove Tourism Improvement in Puerto Pizarro (0.06 mil. US\$)
  - 2.3 Improvement of the Tumbes Airport (5.33 mil. US\$)
  - 2.4 Community Development of La Encantada Ceramic Village (2.44 mil US\$)
- 3. Amazon River Tourism Corridor
  - 3.1 Development of Allpahuayo-Mishana Museum (1.47 mil US\$)
  - 3.2 Tourism Improvement of the Quistococha Tourist Complex (1.72 mil. US\$)
  - 3.3 Tourism Improvement of the San Jauan Handicraft Market (1.22 mil. US\$)

CSA PER/S 117/00 M/P

PRESENT STATUS

In Progress or In Use

Delayed

Discontinued or Cancelled

#### **Description:**

(FY 2001 Domestic Survey)

Official presentation of the Final Report of the study was conducted by Ministry of Tourism, Industry, Integration, and International Trade (MITINCI), the counterpart organization of the study, in Trujillo City on July 20, 2001. During the presentation, Vice-Minister of Tourism of MITINCI and an advisor of MITINCI officially expressed their will to implement the project funded by JBIC. However, new Toledo administration started in August 2001 demanded the extradition of the former president Alberto Fujimori, which complicated the diplomatic relationship between Japan and Peru. As a response, JBIC has not started any new project since then. (FY 2001 Overseas Survey)

The new request for implementing the projects which had 2 components was submitted from the Ministry of Tourism, Industry, Integration and International Trade to the JICA office. Although the one of two was to implement the similar Development Study at the other area, the request on dispatch of individual expert to guide the project implementation has been under discussion in preference to the new Development Study because of the higher priority on the project implementation based on the result of the Study (Contents of the study is to be said F/S although it was named as M/S.).

Playa Elmosa Tourist Base (a part of Tumbes - Piura Tourism Corridor Development Plan)

(FY 2003 Overseas Survey)

This project intends to develop a tourism infrastructure along the coast of Tumbes Province positioned in a coastal region established as a domestic tourism conservation area (all the coast in Tumbes Province from KAPONESU Promontory to the border with Piura Province). Out of the conservation area, a district called Playa Elmosa was selected and it will be prioritized in the tourism project within the framework of the National Tourism Development Master Plan. Fund raising: Peru government (at least 12 million US dollars is expected to be invested in its Phase I) Construction: The coastline of approximately 6 km in length and 70 hectares in area will be improved in the first place and such facilities will be constructed as accommodations, bed and breakfast, hostels, restaurants, ecology lodges, fishing clubs. The master plan to develop Playa Elmosa has been completed and the bidding is expected to start in the end of October 2003. This project consists of the following three phases. (Phase I: tourism development of 630 rooms, Phase II: tourism development of 525 rooms). Benefit effects: The conservation area including Playa Elmosa is positioned in the south of mangrove ecosystem of Tumbes and the water temperature fluctuates from 28 degrees in March to 25 degrees in August. This area is optimum for offshore fishing and marine sports. In addition, there are other tourism resources including a game preserve such as El Angolo, SEROSU de AMOPETA National Park, National Reserve of Tumbes Mangrove. Thus, this project is expected to play a role as a socioeconomic base of the Tumbes region. (FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY2005 Domestic Survey)

Regime change is predicted with the presidential election to be held in 2006. Current regime was against the policies prepared under President Fujimori. However, the project may have a possibility of a realisation due to Peruvian customary to deny previous policies.

(FY 2005 Overseas Survey)

Subsequent Study: Chan Chan archaeological complex development

Implementing period: 2005-2006 Implementing body: COPESCO, The Ministry of Culture

Objectives: 1) Comprehensive study, conservation, and rehabilitation of Velarde Palace 2) extension works of drainage No. 12, 3) Conservation and Maintenance of Museum

Funding:

Funding party: Own fund Amounts: 441,922.55 PEN

Construction period: September 2005 Beneficiaries: Domestic and overseas tourists

Subsequent Study: Huacas del Sol y La Luna tourism improvement

Implementing period: 2004 - 2006 Implementing body: COPESCO, and the Ministry of Trade and Tourism

Objective: 1) Road improvement between both pyramids, 2) road signs on access roads, and 3) technical training, awareness raising and tourism promotion Funding:

Funding party: own funds Amount: 2,540,397.00 PEN

Construction period: July 2005 Progress: 35%

Beneficiaries: : Domestic and overseas tourists, 3,315,304 residents Subsequent Study: Tourism improvement of El Brujo archaeological site

Implementing period: 2004-2006 Implementing body: COPESCO, the Ministry of Trade and Tourism, Ministry of Culture

Funding:

Funding party: own funds Amount: 247,476.63 PEN (Ministry of Trade and Tourism - 247,476.63 PEN)

Construction period: October 2005 Progress: 15%

Contents: Reinforcement of ruins, preservation of coloured decoration

Beneficiaries: 35,275 tourists

Subsequent Study: Tourism Improvement of Batan Grande Reserve Zone

Implementing period: 2004-2007 Implementing body: COPESCO, Regional Government and Ministry of Trade and Tourism Objectives: 1) Sign establishment, 2) utilization of tourism resources, 3) rehabilitation of an access road to the historical holy places

Funding:

Funding party: Own funds Amount: 427,022.69 PEN (Ministry of Trade and Tourism - 327,022.69 PEN, and 100,000 PEN)

Construction period: October 2005 Progress: 15% Beneficiaries: Domestic and overseas tourists, 13,731 residents Subsequent Study: Amazon river tourism corridor development

Implementing period: 2004-2005 Implementing body: COPESCO, the Ministry of Trade and Tourism

Objectives: Tower construction

Funding:

Funding party: Own funds Amount: 1,648,339.37 PEN (Ministry of Trade and Tourism - 778,669PEN, and 397,730.33PEN, local government - 472,749.9PEN)

Beneficiaries: Domestic and overseas tourists, 35,275 residents

# STUDY SUMMARY SHEET (Other Studies)

CSA PRY/S 601/76 Compiled Mar.1990
Revised Jul.2009

| 1.                  |  | Paraguay   |  |                            |   |        |
|---------------------|--|--|--|----------------------------|---|--------|
| 2.                  | NAME OF STUDY  | La Colmena Hig                                     | ghway (Follow-Up)                            |                            |   |        |
|                     | SECTOR   | Transportation                                     | / Road                                       |                            | 4. TYPE OF STUDY Other Studies                  |        |
| _                   | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  |  | Dept.of Road, Ministr                        | ry of Public Works and Com | munications                                     |        |
|                     | PRESENT COUNTERPA  | Review of the F                                    | /S   |                            |   |        |
| 6.                  | OBJECTIVES OF THE<br>STUDY   |  |  |                            |   |        |
| 7.                  | CONSULTANT(S)  | Central Consulta                                   | ant, Inc.                                    |                            |   |        |
| 8.                  | STUDY PERIOD   | Sep.1976 ~   | Jan.1977                                     | 4month(s)                  |   |        |
| 9.                  | SITE OR AREA   | Acaai - La Colr                                    | mena in the south of A                       | suncion                    |   |        |
| Foll<br>betw<br>-Ro | MAJOR PROPOSED PROWING THE PROPOSED PROWING THE F/S undertake ween Acaai and La Colmon and construction (28.5 km and construction (replaced) and the proposed provided the provided pro | n by a USA consena and proposed n, surface treatme | the following developent by the two-layer me | pment:<br>ethod); and      | a Colmena, the study reviewed the F/S on the se | ection |
|                     |  |  |  |                            |   |        |

**CSA** PRY/S 601/76 **Other Studies** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** 

Finance:

Sep30..1977 L/A 1,850 mil.yen

\*Contents of project: Road improvement for the section between La Colmena and Acaai (28.5km)

Apr.1979 Commenced Apr.1982 Completed

Situation after Completion:

(FY 1994 Domestic Survey)

As of 1994, no serious damage was observed on the paved road, however, some repair works should be implemented on several points. Currently, the renovation of the arterial roads has been implemented throughout the country. Therefore, this route may be renovated as a part of the arterial road renovation project.

(FY 1995 Overseas Survey)

In 1995 the reinvestigation works on this route was completed. As a result, it is concluded that connecting major agricultural and livestock farming areas, this route promote the supply of foodstuff from these areas to the capital city of Asuncion. Furthermore, it is expected to encourage the orchard industry at the area along this route. The extension of this highway further down south from the Capital is under consideration.

|    |                                       | (F/S)   | Compiled Mar.1986                  |
|----|---------------------------------------|---|------------------------------------|
| CS | SA PRY/S 3                            | 1/78  | Revised Jul.2009                   |
| 1. |                                       | Paraguay  |                                    |
|    |                                       | Fleet Expansion Project   |                                    |
| 2. | NAME OF STUDY                         | 1 3   |                                    |
| 3. | SECTOR                                | Transportation / Marine Transportation & Ships                                  | 4. TYPE OF STUDY F/S               |
| 5. |                                       | Flota Mercante del Estado (FME)   | 1                                  |
|    | COUNTERPART AGEN<br>TIME OF DEVELOPME | CY AT THE   |                                    |
|    | PRESENT COUNTERPA                     | RT AGENCY   |                                    |
|    |                                       | To evaluate the fleet expansion program of FME.                                 |                                    |
| 6. | OBJECTIVES OF THE STUDY               |   |                                    |
| 7. | CONSULTANT(S)                         |   |                                    |
| _  |                                       | Mar.1978 ~ Oct.1978 7month(s)   |                                    |
| 8. | STUDY PERIOD                          | ~   |                                    |
| 9. | SITE OR AREA                          |   |                                    |
| 10 | MA TOP PROPOSED PE                    | A TECTE(CI)   |                                    |
|    | MAJOR PROPOSED PR                     |   |                                    |
|    |                                       | essels purchased by the OECF loan of 1957, are now superannu                    |                                    |
|    |                                       | and economic feasibility of the fleet expansion program proposition             | sed by the Government of Paraguay. |
|    |                                       | als, general and container cargo)   |                                    |
|    | one 6,000DWT-ship and                 |   |                                    |
|    |                                       | general cargo, cereals, cement, etc.)<br>pushers (1,200PS) and 1 pusher (300PS) |                                    |
|    |                                       | d 1 Pusher/tug (2,400PS)  |                                    |
|    |                                       | id diesel oil, liquid gas, etc.)  |                                    |
|    | 4 barges(2,000 cu.m) and              |   |                                    |
| No | te: 1) OECF loan 2) BO                | .EXIM loan  |                                    |
|    |                                       |   |                                    |
|    |                                       |   |                                    |
|    |                                       |   |                                    |
|    |                                       |   |                                    |
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|    |                                       |   |                                    |
|    |                                       |   |                                    |

船舶増強計画

CSA PRY/S 301/78 F/S

PRESENT STATUS

Completed

Completed

Partially Completed

Delayed or Suspended

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

Finance:

Jun.28.1979 L/A (Fleet Expansion Project, 7,500 mil.yen)\*1 BOT.EXIM loan (approx.10.5 bil.yen)\*2

- \*1-Contents of OECF loan
- (1)Contents of Project
- 1.Construction of vessels
- 1)Ocean-going vessel 6,000 DWT 1
- 2)Ocean-going and river vessel 1,500DWT 1
- 3)Pusher/tug 5
- 4)Oil barge 4
- 5)800 DWT barge 10
- 6)360 DWT barge 20
- 2. Consulting service
- 3. Spare parts for existing 8 vessels
- (2)Subject of Loan
- 1-3), 5), 2 and 3 of project above

#### \*2-BOT.EXIM Loan

Mar.1.1983 signed (8,812 mil.Yen)

#### Realized Project:

Jan.1986 Entire fleet delivered

#### Dispatch of Expert:

Sep.1987-Sep.1989 Technical assistance on Transportation Management by Japanese experts.

(F/S)

Compiled Mar.1986 **CSA** PRY/S 302/79 Jul.2009 Revised

| 1.  | COUNTRY                           | Paraguay   |   |                 |                 |     |  |     |  |
|-----|-----------------------------------|--|---|-----------------|-----------------|-----|--|-----|--|
| 2.  | NAME OF STUDY                     | New Airport Co   | onstruction Projec  | t in Ciudad Pre | sidente Stroess | ner |  |     |  |
| 3.  | SECTOR                            | Transportation   | n / Air Transportation & Airport 4. TYPE OF STUDY F/S   |                 |                 |     |  | F/S |  |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME | CY AT THE  | Civil Aviation A  |                 |                 |     |  |     |  |
|     | PRESENT COUNTERPA                 |  |   |                 |                 |     |  |     |  |
| 6.  | OBJECTIVES OF THE STUDY           |  | To examine technical, economic and financial feasibility of project.  Technology transfer to counterpart officials. |                 |                 |     |  |     |  |
| 7.  | CONSULTANT(S)                     | Japan Airport C  | apan Airport Consultants, Inc.  |                 |                 |     |  |     |  |
| 8.  | STUDY PERIOD                      | Apr.1979 ~   | Feb.1980  | 10month(s)      |                 |     |  |     |  |
|     | SITE OR AREA                      | 24km west of Ciudad Del Este which is situated on the border with Brazil |   |                 |                 |     |  |     |  |
| 10. | MAJOR PROPOSED PR                 | OJECT(S)   |   |                 |                 |     |  |     |  |

The new airport will be constructed in two stages.

#### 1) Airfield facilities

Runway(3,400m x 45m); taxiways (161m x 23m x 2); passenger apron (42,443 sq.m in 1994, 55,107 in 2004); cargo apron (6,831 sq.m in 2004); general aviation apron (52,500 sq,m in 1994, 70,000 in 2004).

#### 2) Buildings

Passenger terminal (8,100 sq.m in 1994, 14,200 in 2004); cargo terminal (1,800 sq.m in 1994, 5,100 in 2004).

### 3) Airport equipment

Aeronautical telecommunications 1 set; radio navigational aids (ILS Category 1, VOR/DME, NDB); airfield ilghting 1 set; airport surveillance radar 1 set; meteorological service 1 set.

4) Power supply and fuel supply facilities

\*Cost 1) is for Stage I construction, and 2) for Stage II construction.

CSA PRY/S 302/79 F/S

PRESENT STATUS

Completed

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

Subsequent Studies:

Mar.1983 D/D completed (Japan Airport Consultants, Inc.)

Finance:

Dec.5.1980 L/A 11.3 bil.yen

(New Airport Construction Project in Ciudad Presidente Stroessner)

Nov.1990 L/A changed (for domestic currency)

#### Construction:

Apr.1987 Start of construction authorized

Jan.1988 Camp established

Feb.1989 After the coup d'etat, the new President Gonzalez directed to scale down the project.

Aug.1989 The name of the airport changed to Este International Airport

Dec.1990 The contract of construction is being adjusted

Mar.1994 Construction works of the signal tower and settlement of the antenna, completed

Oct.1994 completed

#### Situation:

(FY 1994 Domestic Survey)

According to the survey, the newly completed airport has not been made operational for international flights due to the delay in getting approval from the Gov't and has currently been served by a domestic flight per day.

**(F/S)** 

Compiled Mar.1990 CSA PRY/A 301/82 Revised Jul.2009

| 1.   | COUNTRY  | Paraguay                     |   |                      |  |
|--|--|------------------------------|---|----------------------|--|
| 2.   | NAME OF STUDY  | Northwest Lake               | e Ypoa Agricultural Development Project |                      |  |
| 3.   | SECTOR   | Agriculture                  | / (Agriculture in) General              | 4. TYPE OF STUDY F/S |  |
| 5.   | COUNTERPART AGEN<br>TIME OF DEVELOPME  | CY AT THE                    | Instituto de bienestar rural            |                      |  |
|  | PRESENT COUNTERPA  | ART AGENCY                   |   |                      |  |
| 6.   | OBJECTIVES OF THE STUDY  Formulation of agriculture and rural development plan for colonization  |                              |   |                      |  |
| 7.   | CONSULTANT(S)  | Naigai Enginee<br>KOKUSAI KO | ring Co., Ltd.<br>GYO CO., LTD.         |                      |  |
| 8.   | STUDY PERIOD   | Nov.1980 ~                   | Mar.1982 16month(s)                     |                      |  |
|  | SITE OR AREA   |                              | orthwest of the Lake Ypoa               |                      |  |
|  | MAJOR PROPOSED PR  |                              |   |                      |  |
| -Po<br>-Dr<br>-Ro<br>-Irr<br>-Cu<br>-Pro<br>-Sc<br>-Ho | Proposed components (40,000ha) -Polder: 35km -Drainage canal Main/Sub: 154/258km -Road Main/Sub: 84/288km -Irrigation facilities: 2,000ha -Cultivation: 40,000 ha -Preparation of community: 4 sites -School: 10 sites -Hospital: 1 site -Health center: 3 sites |                              |   |                      |  |
|  |  |                              |   |                      |  |

CSA PRY/A 301/82 F/S

|                                    | Completed or In Progress | Promoting                 |
|------------------------------------|--------------------------|---------------------------|
|                                    | Completed                |                           |
| PRESENT STATUS Partially Completed | Partially Completed      | Delayed or Suspended      |
|                                    | Implementing             |                           |
|                                    | Processing               | Discontinued or Cancelled |

#### **Description:**

Reasons for Delay or Suspension:

(FY 1995 Domestic Survey)

Difficulty in procuring fund

(FY 1992 Overseas Survey)

Department of National Park Wildlife founded in the Ministry of Agriculture and Livestocks, legistered the area as "Lake Ypoa National Park" in 1992. The size of the area is 100,000 ha covering Lake Ypoa, Lake Cabral and Lake Bela.

(FY1997 Domestic Survey)

A part of target area is inside a national park, therefore the realization of project is difficult unless the plan is revised.

(FY 1997 Overseas Survey)

The implementation of the project seems difficult because the target area was designated as a national park in 1992.

The reasons for discontinuance is that the Paraguayan government did not understand the scheme and schedule well and did not procure fund for the project.

#### Situation:

(FY1995 Overseas Survey)

Reinvestigation and the official notice of the "Lake Ypoa National Park" have been carried out based on the regulations of RAMSAR Treaty signed on 1994. In order to develop this area successfully, it is necessary to fulfil almost all of the public opinions concerned, to examine the land owners or representatives carefully, and to ask the participation of the local organizations from the planning stage.

For the implementation of the F/S, it should be made arrangements and negotiations among the Government, the financing authorities and the local organizations.

(M/P+F/S)

Compiled Mar.1986 **CSA** PRY/S 201B/83 Revised Jul.2009

| 1.                                   | COUNTRY                 | Paraguay  |  |  |  |  |
|--------------------------------------|-------------------------|---|--|--|--|--|
| 2.                                   | NAME OF STUDY           | National Telecommunications & Broadcasts Development Project  |  |  |  |  |
| 3.                                   | SECTOR                  | Communications & Broadca / (Comms. & Broad. in) General  4. TYPE OF STUDY   M/P+F/S   |  |  |  |  |
| COUNTERPART AGENTIME OF DEVELOPMENT. |                         | NT STUDY  |  |  |  |  |
|                                      | PRESENT COUNTERPA       | RI AGENCY   |  |  |  |  |
| 6.                                   | OBJECTIVES OF THE STUDY | -Formulation of a long-term plan (1983-1997) -Formulation of a long-term development plan(1983-1997) and a F/S of urgent projects |  |  |  |  |
| 7.                                   | CONSULTANT(S)           | Nippon Telegraph & Telephone Corporation<br>Kokusai Denshin Denwa Co, Ltd.<br>Japan Telecom. Eng. and Consulting Service          |  |  |  |  |
| 8.                                   | STUDY PERIOD            | Jul.1981 ~ Jun.1983 23month(s)<br>~   |  |  |  |  |
| 9.                                   | SITE OR AREA            | M/P for the entire country: F/S for Asuncion Area, Concepcion, Hohenau, San Pedro, Villarrica, Carapegua                          |  |  |  |  |
| 10                                   | MA IOD DDODOSED DD      | OIECT/S)  |  |  |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

M/P(1983-97)

1) Domestic telecommunications.

336,000 lines of subscriber telephones/ 3,394 public telephones/3,060 rural telephones/ digitized local exchanges/ 14 optical fiber systems/ 10 microwave routes/ 7 television transmission routes, etc.

2) International telecommunications

International circuits/ modification of the Aregua earth station/ international subscriver dialling/ a second earth station, etc.

- 3) Development of the Radio Regulation and Monitoring System
- 4) Establishment of a National Educational Television Service
- 5) Personnel development

F/S(Stage I< 1983-87)

- 1) Introduction of an international subscriber dialling system in the Asuncion area
- 2) Introduction of a digital switching system in the Asuncion area
- (11 exchanges by the end of 1997)
- 3) Consolidation of rural telephone systems in five areas (Conception, Hohenau, San Pedro, Villarrica, Carapegua) by 8-channel multiple access subscriber(MAS) radio systems

CSA PRY/S 201B/83 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(1)Automatic International Dialing

Finance:

Nov.1985 L/A 1,420 mil.yen (Automatic International Dialing)

\*Contents of project

1. International Communication system

a)International digital exchange machine

b)Earth Station improvement

2. consulting service

(loan for the part of foreign currency of project mentioned above)

Construction:

Oct.1988 Earth station and International digital exchange machine in use

(2)Second Earth Station

Subsequent Studies:

1988 F/S undertaken

Finance:

Feb.25.1994 L/A 3,234 mil.yen

#### (3)Others

ATELCO has signed a provisional contract in Nov.1991 with Siemens for the installation of 30,000 telephones, and formulated a telephone network expansion plan in cooperation with ITU.

#### Situation:

(FY 1995 Overseas Survey)

This project is consisted of various sub-projects. The implementation of the main portion has been completed and a remained part is now processing and the other remained part is suspended.

To develop and to expand the service area of radio regulation/ monitoring system and the standard of registration of the radio listners seem to be possible at certain range, however it is not enough to fulfil the demands. Conformation of the administrative organization for establishment of the state-owned educational television is not implemented due to lack of various resources. Training project is carrying on by IPT in order to supply the qualified professionals with certain necesary technological level for the increasing necessities.

#### (FY 1995 Domestic Survey)

Data are not available due to the person in charge had been shifted to the other place.

|     |             | (Basic Study) | Compiled | Mar.1990 |
|-----|-------------|---------------|----------|----------|
| CSA | PRY/A 501/8 | 33            | Revised  | Jul.2009 |
| 1 ( | OUNTRY      | Paramiay      |          |          |

| 1.   | COUNTRY  | Paraguay         |   |                                |  |  |  |
|--|--|------------------|---|--------------------------------|--|--|--|
| 2.   | NAME OF STUDY  | Forest Inventory | y in the Northeastern R                                       | egion                          |  |  |  |
|  | SECTOR Forestry  |                  | / Forestry & Forest Conservation 4. TYPE OF STUDY Basic Study |                                |  |  |  |
| 5.   |  |                  | National Forest Service                                       | ce The Republic of Paraguay    |  |  |  |
|  | COUNTERPART AGENCY AT THE<br>FIME OF DEVELOPMENT STUDY     |                  |   |                                |  |  |  |
| PRESENT COUNTERPART AGENCY   |  |                  |   |                                |  |  |  |
| To contribute the unplanned irreg  6. OBJECTIVES OF THE STUDY  |  |                  | ular cutting.   | nent by formulating forest man | agement plan to counter the deforestation by |  |  |
| 7.   | Japan Forest Technical Association KOKUSAI KOGYO CO., LTD. |                  |   |                                |  |  |  |
| 8.   | STUDY PERIOD   | Jul.1980 ~       | Feb.1984  | 43month(s)                     |  |  |  |
| •  | STODI I EMOD   | ~                |   |                                |  |  |  |
| An area of 15,000 sq.km of Department of Amamby, Concepcion, San Pedro and Canediyu  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S)  The forest management plan was presented containing following components for the above mentioned area which was the largest forest area in Northeastern region of Paraguay. This area's forest rate is 60%.  1)Promotion of advanced utilization of land 2)Normalization of forest operation 3)Sustained yield management of forest 4)Promotion of re-afforestation 5)Promotion and maintenance of function of public benefit of forest |  |                  |   |                                |  |  |  |
|  |  |                  |   |                                |  |  |  |

**CSA** PRY/A 501/83 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Utilization of the Study: Afforestation projects are being encouraged particularly among the cattle ranchers, because of the serious deforestation reported by the study. (FY 1995 Overseas Survey) The results of this study work are utilized for certain purpose at the limited area. Especially, the data of retaining volume of forest resources are very useful and used to make administrating, managing and utilizing plans for the forest of target area. (FY 1997 Overseas Survey) The results of the study have been incorporated into the National 5-year Development Plan. \*This study will not be followed up from FY 1998. (the outputs of study are being utilized)

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1990
CSA PRY/A 101/84 Revised Jul.2009

| 1.                                      | COUNTRY   | Paraguay   |                         |                            |                  |                    |                            |  |
|---|---|--|-------------------------|----------------------------|------------------|--------------------|----------------------------|--|
| 2.                                      | NAME OF STUDY   | Irrigation and Drainage Project in the Adjacent Area to the Yacyreta Dam       |                         |                            |                  |                    |                            |  |
| 3. SECTOR Agriculture                   |   |  | / (Agricu               | ılture in) General         | 4. 7             | TYPE OF STUDY      | M/P                        |  |
| <del>5.</del>                           |   |  | Ministerio de Agricu    |                            |                  | 2= 2 <b>-22-1</b>  |                            |  |
|   | COUNTERPART AGEN<br>TIME OF DEVELOPME   |  | J                       | ,                          |                  |                    |                            |  |
|   | PRESENT COUNTERPA   | ART AGENCY   |                         |                            |                  |                    |                            |  |
| Elaboration of I                        |   |  | M/P for the Integrated  | Agricultural Developmer    | nt Project in th | e Adjacent Area to | o Yacyreta Dam             |  |
| 6.                                      | OBJECTIVES OF THE STUDY   |  |                         |                            |                  |                    |                            |  |
|   |   | T A 1 1  | 11 15 1                 |                            |                  |                    |                            |  |
| 7.                                      | CONSULTANT(S)   | Japan Agricuiti  | ıral Land Developmen    | t Agency                   |                  |                    |                            |  |
| 8.                                      | STUDY PERIOD  | Dec.1982 ~   | Mar.1985                | 27month(s)                 |                  |                    |                            |  |
| 9.                                      | SITE OR AREA  | 150,000, Area  | 150,000, latitude 27 10 | " to 27'20"s and longitude | e 56 25 TO 57    | 10 w)              |                            |  |
| 10.                                     | MAJOR PROPOSED PR   | OJECT(S)   |                         |                            |                  |                    |                            |  |
| Irrig<br>Dra<br>Pur<br>Aga<br>Roa<br>Ag | gation Canal<br>ninage Canal<br>nping place<br>ricultural Land Reclamat<br>ad | 1,275kn<br>1,173 km<br>3 sets,<br>ion 92,920 h<br>474 km<br>ilities, Agricultu | a<br>a                  | on, Supplying system of i  | improved seed    | ds, Union to maint | ain facilities, Pilot farm |  |
|   |   |  |                         |                            |                  |                    |                            |  |

CSA PRY/A 101/84 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

Construction of the Yacyreta Dam

(FY 1993 Overseas Survey)

It is planned to commence to pour water into the dam in fiscal year of 1994 or 1995. The feasibility study of the plan for utilization of dam water is required. (FY 1995 Overseas Survey)

The environmental effects of the dam construction for surrounding area are now under investigation.

#### Dispatch of Expert:

(FY 1997 Overseas Survey)

Mar.10~Mar.31.1995 Study on drainage and road at the area of 5,000 ha acquired by IBR was carried out by a short-term expert.

#### Utilization of the Study:

(FY 1992 Overseas Survey)

In 1992, Institute de Bienestar Rural purchased the farmland (5,000ha) adjacent area to Ayolas and commenced settlement of small farmers. This plan is to be expanded in the future.

#### (FY 1993 Overseas Survey)

Farmers resided at the site are migrating and/or trying to get new area to live under the guidance of the authority concerned.

#### (FY 1996 Overseas Survey)

The outputs of this study has been utilized for surrounding area development. IBR reflected information and proposals obtained in this study for the 5000ha of residence area. Private sector which produce rice at San-Cosmel and Carmen del Parana analyzed the study's data to utilize water from Yacyreta.

#### (FY 1997 Overseas Survey)

The results of the study have been utilized as basic data by both private and public sector.

Similar M/P was elaborated in Argentine side.

#### Other Situations:

(FY 1993 Overseas Survey)

At the time of JICA's development survey, there were no participation of beneficial inhabitants. However, in future, it will be recommended to let these people participate according to the changes in surroundings.

#### (FY 1995 Overseas Survey)

The data obtained by this M/P are old, however, they are still very useful. In order to study the agricultural development in case of the paddy cultivation is commenced at this area it becomes necessary to research the way of irrigation, drainage, and to evaluate their environmental influences.

Paraguay side desires to establish a center to transfer Japanese technologies.

#### (FY 1997 Overseas Survey)

This study has contributed to increase consciousness about low land agriculture.

(F/S)

Compiled Mar.1990 **CSA** PRY/A 302/84 Revised Jul.2009

| 1.  | COUNTRY                           | Paraguay       |                                       |                    |                    |           |                 |     |
|-----|-----------------------------------|----------------|---------------------------------------|--------------------|--------------------|-----------|-----------------|-----|
| 2.  | NAME OF STUDY                     | Survey for the | Afforestation Proje                   | ect in Capiibary   |                    |           |                 |     |
| 3.  | SECTOR                            | Forestry       | / <b>F</b>                            | orestry & Fores    | t Conservation     | 4.        | TYPE OF STUDY   | F/S |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME | CY AT THE      |                                       |                    | oublic of Paraguay |           |                 |     |
|     | PRESENT COUNTERPA                 | ART AGENCY     |                                       |                    |                    |           |                 |     |
| 6.  | OBJECTIVES OF THE STUDY           |                |                                       |                    |                    |           |                 |     |
| 7.  | CONSULTANT(S)                     |                | echnical Association<br>GYO CO., LTD. | on                 |                    |           |                 |     |
| 8.  | STUDY PERIOD                      | Aug.1983 ~     | Mar.1985                              | 19month(s)         |                    |           |                 |     |
|     | SITE OR AREA                      |                | .5 sq.km in Capiib                    | ary district of Sa | n Estanisrao City  | of San Pe | edro Department |     |
| 10. | MAJOR PROPOSED PR                 | OJECT(S)       | 1                                     |                    |                    |           |                 |     |

Based on the results of investigations on related natural and socioeconomic conditions, a basic plan comprising land use principles and forest management systems was formulated. Using this basic plan, the project plan was prepared and consists of the following components. The duration of the project is assumed to be 50 years after the initiation.

1) Reforestation Plan:

The planned reforestation totally covers 6,628ha during 6 years.

2) Breeding Plan:

The necessary seedlings for the above activity, totally amounting to some 30,000 are to produced. The total area of nursery site including the various facilities is planned as some 8ha.

3) Forest Road Plan:

Some 107km of forest roads is to be constructed during 6 years.

4) Felling Plan:

Some 6 million cu.m would be felled for the 50 years.

5) Facilities Plan:

Administrative facilities, which are needed for the project implementation, including the central office eand durmitory are to be constructed.

6) Sales Plan:

The total sales price of the above total cutting volume is estimated as some 800 billions Gs.

CSA PRY/A 302/84 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## **Description:**

The Government planned to implement the afforestation project with an OECF loan, but has not been successful to date.

Project type technical cooperation by JICA has been carried out since 1987 (Reforestation Project in Central Paraguay; 1987 - 1992).

#### (FY1993 Overseas Survey)

Afforestration works for the sandy areas are implementing by means of the funds with an amount of Yen 376 million during 1988 to 1994.

In future, this activity will be expanded whole over the country.

It has been requested to let local counterparts to join with the decision makings on the various technical matters, and also to participate similar training courses which will be held in some countries nearby.

## (FY1994 Domestic Survey)

The project is under way.

#### (FY1995 Domestic Survey)

An information said that the implementation of above-mentioned project has been completed.

## (FY1995 Overseas Survey)

As it is very profitable to sale the products of forestry, the sales business is carring on by means of the investments consisted of 403 million J\$ from JICA and 128 million Gs from Paraguayan side, respectively.

More than 20 engineers and/or technicians are being trained either in Japan or Paraguay, and more than 96 of various kinds of technical workers and specialists are being fostered by vocational training in this field.

To afforest the Capiibary zone, the traditional farm-land or meadows, it is expected to create new industry and employment opportunities and also better environmental effects for this area.

# STUDY SUMMARY SHEET (M/P)

 CSA
 PRY/S 101/86
 Compiled Mar.1990

 Revised
 Jul.2009

|   | COUNTRY   | Paraguay The Transportation Facilities Immercument Project of the Asympton Metropolitan Area   |   |                        |   |  |  |  |
|---|---|--|---|------------------------|---|--|--|--|
| 2.  | NAME OF STUDY   | The Transportat  | The Transportation Facilities Improvement Project of the Asuncion Metropolitan Area |                        |   |  |  |  |
| 3.  | SECTOR  | Transportation   | / Hrban T   | ransportation          | 4. TYPE OF STUDY M/P                                    |  |  |  |
| 5.  | DECTOR  | 11ansportation   | Municipality of Asun  |                        | 7. IIIEOFSIUDI W/F                                      |  |  |  |
|   | COUNTERPART AGENTIME OF DEVELOPME   |  | Transferred or Table  |                        |   |  |  |  |
|   | PRESENT COUNTERPA   | ART AGENCY   |   |                        |   |  |  |  |
| 6.  | OBJECTIVES OF THE STUDY   | Formulation of a   | a M/P for urban transpo   | ort system including p | public transport, land use planning, road network, etc. |  |  |  |
| 7.  | CONSULTANT(S)   | Yachiyo Engine<br>Aero Asahi Cor   |   |                        |   |  |  |  |
| 8.  | STUDY PERIOD  | Aug.1984 ~   | Aug.1986  | 24month(s)             |   |  |  |  |
|   | SITE OR AREA  |  | politan Area(Asuncion   | City + 10 other cities | 571,000ha.  |  |  |  |
| The Trail 1   1   1   1   1   1   1   1   1   1 | MAJOR PROPOSED PR M/P consists Road Plan ansportation Plan. Road Network Plan Irban Arterial Road Plan area connecting Roa Road Improvement Project Av. Ayala-Av.R.Francia In Av.Espana-Av.San Teresa ambare-San Antonio Imp Irban Outer Rink Road In Jrban Area Road Plan an of classifing pedestriar Public Transportation Pla eformation of bus networ as terminal, exclusive bus as terminal, exclusive bus | - Rural area ar<br>d among urbans<br>et<br>mprovement Proj<br>Improvement Projec<br>nprovement Projec<br>nprovement Projec<br>n, automobile and<br>n | rterial Road Network - Semi Arterial Road ject roject et ect                        |                        |   |  |  |  |

CSA PRY/S 101/86 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

## **Description:**

Subsequent Studies:

- "Transportation Facilities Improvement Project of the Asuncion Metropolitan Area (F/S) (1988)."
- \*Components of Study
- -Improvement of East-West and North-South Corridors
- -Improvement of streets and traffic signal control in Minicentro area
- -Construction of a bus terminal near the market No.4

\*Refer to "Transportation Facilities Improvement project of the Asuncion Metropolitan Area (F/S) (1988) " for detail.

#### Detail:

(FY 1993 Overseas Survey)

Due to the coup d'etat, the change of the national economic policy, etc. the project has made little progress except for a part of the construction works.

On the other hand, some construction works, which had not been included in the initial plan, were implemented as an alternative to address the urgent problems. Its reevaluation must be conducted.

#### (FY 1995 Domestic Survey)

MOPC has officially requested to provide the assistance for the improvement of the road surrounding the urban area of Asuncion.

#### (FY 1995 Overseas Survey)

This project needs to be implemented, referring to the environment improvement plan of Asuncion and the surrounding area. The construction works proposed in the M/P report have been implemented only partially.

## (FY 1997 Domestic Survey)

Trunk roads in Metropolitan area except for Asuncion federal district, were rehabilitated by Ministry of Public Works.

(M/P+F/S)

Compiled Mar.1990

| C               | SA PRY/S 20  | 02B/86                  |             |              |              |                |              |                |         | Revised   | <br>Jul.2009 |
|-----------------|--|-------------------------|-------------|--------------|--------------|----------------|--------------|----------------|---------|-----------|--------------|
| 1.              | COUNTRY  | Paraguay                |             |              |              |                |              |                |         |           |              |
| ,               | NAME OF STUDY  | Storm Drainage          | System Im   | nprovement l | Project in A | suncion City   |              |                |         |           |              |
|                 |  |                         |             |              |              |                |              |                |         |           |              |
| 3.              | SECTOR   | Social Infrastruc       |             |              | Erosion Co   | ontrol         | 4.           | TYPE OF S      | STUDY   | M/P+F/S   |              |
| 5.              | COUNTERPART AGEN<br>TIME OF DEVELOPME  |                         | CORPOSA     | ANA          |              |                |              |                |         |           |              |
|                 | PRESENT COUNTERPA  | ART AGENCY              |             |              |              |                |              |                |         |           |              |
| 6.              | OBJECTIVES OF THE STUDY  | Year 2005 as the        | -           |              | lood contro  | l project cove | ring 26 rive | er basins of t | he Asun | cion City |              |
| 7.              | CONSULTANT(S)  | CTI Engineering         | g Co., Ltd. |              |              |                |              |                |         |           |              |
| 8.              | STUDY PERIOD   | Jul.1985 ~              | Jan.19      | 987 18mo     | onth(s)      |                |              |                |         |           |              |
|                 | SITE OR AREA   | Ytay and Mbur           | icao Rivers | s of Asuncio | n City       |                |              |                |         |           |              |
| -               | . MAJOR PROPOSED PR<br>M/P>  | OJECT(S)                |             |              |              |                |              |                |         |           |              |
| 1)l<br>C<br>2)l | A/P> Development plan 1986-1 Combination of river improduced plan 1996-2 Combination of river improduced plan 1996-2 Combination of river improduced plan 1996-2   | ovement, drainag<br>005 |             |              |              |                | (Ytay, Mb    | uricao and I   | .ambre) |           |              |
| M<br>wi<br>wi   | CF/S> The storm water control works will be basically carried out by means of river channel improvement and the installation of drainage facilities in both Mburicao and Itary river basins. Besides, at the downstream end of the improved section of the Itary River, the retarding will be constructed to cope with the anticipated increase of discharge due to the proposed improvement works in the upper reaches of Aviadores del Chaco Avenue in accordance with the results of the Master Plan. The outline of the major projects include river improvement of 21.2 km, retarding basin, construction of bank protection work of 97,000 m2, falling works of 32 units, river bed protection of 7,800 m2, bridge of 48 units, etc. |                         |             |              |              |                |              |                |         |           |              |
|                 |  |                         |             |              |              |                |              |                |         |           |              |

CSA PRY/S 202B/86 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

### **Description:**

 $(1) Construction \ works \ are \ in \ progress \ at \ emergent \ areas.$ 

1.Boggiani Av and Eusebio Ayala Av

Finance:own fund (12.890.090 G)

Construction:Dec.1995~Jan.1996 Drainpipe and drain

2.Marcelino Perez St (Antelco)

Finance:own fund (85,583,708 G)

Construction: Jan. 1995 ~ Mar. 1995 Drainpipe 3. Tte. Canete St and Marcelino Perez St (Antelco)

Finance: own fund (8.371.304 G)

Construction:Nov.1996~Dec.1996 Water canal (38 m)

4.Camacho Dure and Tte.Canete

Finance:own fund (1,803,992 G)

Construction:Mar.1995~Mar.1995 Drainpipe and drain

Mariscal Lopez Av. Gral Garay and Tte Vera

Finance:own fund (114,091,695 G)

Construction:Mar.1996~May.1996 Drainpipe and drain

6.Malutin St and Quesada

Finance:own fund (212,509,739 G)

Construction:Jul.1996~Sep.1996 Drainpipe and drain

7.S.Bogarin Av and Mburicao-Mi Av

Finance:own fund (108,853,794 G)

Construction:Sep.1996~Nov.1996 Drainpipe and drain

8.Madame Lynch Av

Finance:

Construction: to be started in 1997 Expansion and rehabilitation of M.L Av, construction of 3 overpasses, surface drainage system

9. Tender for 7 projects proposed by M/P on Storm Drainage System Construction/Rehabilitation is planned.

Total investment:96 mil. G

(2)Extension of drainage facilities and attached facilities

(FY 1998 Domestic Survey)

It was partially completed with their own fund.

## Situation:

(FY 1991 Overseas Survey)

CORPOSANA has been in preparation for the implementation of a part of projects, cooperating with the City of Asuncion and the Ministry of Public Works.

(FY 1993 Overseas Survey

CORPOSANA has been working to finance the urgent projects in cooperation with the municipalities in the project area.

Due to the financial constraints, CORPOSANA has been transferring the project to the concerned municipalities. Or, the project implementation would depend on the fact that how much of funds will be allocated to CORPOSANA by the central government.

(FY 1995 Domestic Survey)

Although the City of Asuncion will be in charge of the management of the drainage facilities, CORPOSANA has been requesting the Japanese government for the grand aid to procure equipment and materials for this project.

(FY 1995 Overseas Survey)

It is considered effective to shift the construction works under the control of the beneficial municipalities, which can finance the project with the collected tax.

CORPOSANA resumed the negotiation with the concerned municipalities to discuss about this matter and the establishment of a branch office of CORPOSANA in each municipalities.

(FY 1996 Domestic Survey)

It is said that the municipality will take over this project. Because of that, the project has been suspended.

(FY 1996 Overseas Survey)

Technical committee composed of municipality and CORPOSANA was established. The committee discuss about actual problem and implementation of projects. A law, including the transfer of execution body to municipality, was submitted to Parlament. Discussion on this matter will be continued this year.

Financial problem has caused a delay. In spite of the effects of CORPOSANA to expand water service nationwide, its coverage rate is in the lowest level in Latin America. (FY 1997 Domestic Survey)

There is a possibility that dredging and improvement of drainage canal be a grant aid project.

(FY 1997 Overseas Survey)

The project has been delayed due to financial shortage of CORPOSANA. Paraguayan side expects for financial assistance from Japan, and at the same time is preparing for requesting fund to other international organizations.

Review study and expansion of target area are needed because more than 10 years have passed since the completion of the sutdy.

The importance of drainage system improvement has arouse influenced by El Nino phenomenon.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1990
CSA PRY/A 102/87
Revised Jul.2009

| 1.  | COUNTRY            | Paraguay  |   |               |                       |                            |  |  |  |
|-----|--------------------|---|---|---------------|-----------------------|----------------------------|--|--|--|
|     | 0001,1111          |   | rain Production Increase Project in the Central A   | ron of the    | Department of Itani   | 10                         |  |  |  |
| 2.  | NAME OF STUDY      | The Timerpar G  | The Principal Grain Production Increase Project in the Central Area of the Department of Itapua |               |                       |                            |  |  |  |
| _   | GE GEORGE          | A • 1.  | //A : 1: : : : : :  |               | manne on amanna       | 3.47D                      |  |  |  |
|     | SECTOR             | Agriculture   | / (Agriculture in) General  | 4.            | TYPE OF STUDY         | M/P                        |  |  |  |
| 5.  |                    |   | Ministry of Agriculture and Livestock   |               |                       |                            |  |  |  |
|     | COUNTERPART AGEN   | CVATTUE   |   |               |                       |                            |  |  |  |
|     | TIME OF DEVELOPME  |   |   |               |                       |                            |  |  |  |
|     | TIME OF DEVELOTIME | NI SIODI  |   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
|     | PRESENT COUNTERPA  | RT ACENCY   |   |               |                       |                            |  |  |  |
|     | TRESENT COUNTERT   | INT MOLITICA  |   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
|     |                    | El-1  | M D-1   | 4141          | £ I4                  |                            |  |  |  |
|     |                    |   | Master Paln to increase main crop production in t   |               |                       |                            |  |  |  |
|     |                    |   | naster plan for the execution of integrated agricu  |               |                       |                            |  |  |  |
|     |                    |   | al grain production as well as to improve econom  | nic condition | on of small size fari | nrs in the central area of |  |  |  |
|     | OBJECTIVES OF THE  | Itapua department, surthern part of the Republic of Paraguay.   |   |               |                       |                            |  |  |  |
| 6.  | STUDY              |   |   |               |                       |                            |  |  |  |
|     | STODI              |   |   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
|     |                    | Japan Agricultural Land Development Agency  |   |               |                       |                            |  |  |  |
| 7.  | CONSULTANT(S)      | vupuii 1 <b>1</b> 811 <b>v</b> uitu   | and Band Be veropment ingency   |               |                       |                            |  |  |  |
| •   | CONSCERNITION      |   |   |               |                       |                            |  |  |  |
|     |                    | Jul.1985 ~  | Mar.1988 32month(s)   |               |                       |                            |  |  |  |
| 8.  | STUDY PERIOD       | Jul.1703  | 32monun(s)  |               |                       |                            |  |  |  |
|     |                    | Control Dort of I   | tanua District located in the South of this country   | n (Donulati   | ion 110 000 Area 5    | 10 000 letitude 26'35" to  |  |  |  |
|     |                    | Central Part of Itapua District located in the South of this country (Population 110,000, Area 510,000, latitude 26'35" to 27'20" S and Longitude 55'19" to 56'15" W) |   |               |                       |                            |  |  |  |
|     |                    | 2720 S and Lo   | ngitude 55 19 (0 56 15 W)   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
| 9.  | SITE OR AREA       |   |   |               |                       |                            |  |  |  |
| •   | SILL ON THEELT     |   |   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
|     |                    |   |   |               |                       |                            |  |  |  |
| 10. | MAJOR PROPOSED PR  | OJECT(S)  |   |               |                       |                            |  |  |  |
| _   | . d                |   |   |               |                       |                            |  |  |  |

Seeds supply, Study and extension of agriculture,

Road: 856 km Agricultural land reclamation: 84,000 ha Soil conservation: 117,600 ha Afforestation: 24,700 ha Paddy irrigation: 5,580 ha Drainage canal: 14 km

Stock facilities, Establishment of fund to increase main grains production, Improvement of small farmers, Electrification of rural area.

The following particular programmes have been formulated taking into account the basic concept with emphasis on soybean, wheat, rice and cotton.

- $1) \ Seed \ supply \ programme \ 2) \ Agricultural \ research \ and \ diffusion \ programme$
- 3) Farm road project (127km long of principal road, 264km of main road and 465km of branch road) 4) Agricultural land development projet(84,000ha)
- 5) Soil conservation project (117,600ha) 6) Afforestation project (24,700ha) 7) Paddy field irrigation (5,580ha) 8) Drainage project (14km long) 9)

Grain storage facility (20,000ton of capacity) 10) Social infrastructure improvement project (electrification, education, medical service,

telecommunication etc.) 11) Financial supporting service (establishment of agricultural fund) 12) Small size farmers supporting programme

CSA PRY/A 102/87 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

## **Description:**

Utilization of Outputs:

This project has been utilized by public organizations, private sectors and international organizations as a reference to grain production projects.

(FY 1997 Overseas Survey)

The results of the study have been incorporated into Agricultural Development Policy(1990-1997).

#### (1)Project-Type Technical Cooperation

"Main Grain Crops Production Project" (June 1, 1990 -May 31, 1995)

The Project aims to conduct a research over the following subjects and to provide an advice to increase the production of main grain crops, such as soybeans, wheat, etc.

- 1) Breeding and management of improved varieties
- 2) Development of suitable technology to produce certified seeds
- 3) Improvement of cropping system for soil conservation

(FY 1995 Overseas Survey)

This project is expected to finish in 1995. However, the beneficiaries desire to continue and expand these kind of technical cooperation, especially the supply of seeds, for the next ten years, until the project bears its fruits, because this project is considered highly effective.

(FY 1997 Overseas Survey)

Technology has been utilized by CRIA, cooperatives, private companies and farmers.

#### (2)Road

Finance

Apr.94 E/N 982 mil. yen. (project to Improve Rural Roads in Itapua Department.)

Aug.94 E/N 627 mil. yen. (project to Improve Rural Roads in Itapua Department II.)

(FY 1995 Domestic Survey)

Construction of Road in the targeted area

It has been implemented with the machinery provided by the OECF loan.

(FY 1996 Overseas Survey)

Construction and rehabilitation of roads have commenced. The construction is now on going in the segment of Carmen del Parana - Pirapo(127km)

## (3)Completed Projects

(FY 1995 Overseas Survey)

Supply of seeds, drawing of the agricultural experiment plan, cultivation of soybeans, maize and sunflower at the Local Agricultural Research Centers and the construction of rural roads at the surrounding area have been already completed. Any other project has not been commenced.

## Effects:

(FY 1996 Overseas Survey)

New varieties of soy bean, wheat and sunflower have been developed. Now they are diffused to local producers.

As a result of increase of grain production, storage facility, road, transportation facility, agricultural machinery, infrastructure for agro-industry were built.

(F/S)

Compiled Mar.1990 PRY/S 303/88 **CSA** Revised Jul.2009 1. COUNTRY Paraguay Transportation Facilities Improvement Project of the Asuncion Metropolitan Area 2. NAME OF STUDY 3. SECTOR / Urban Transportation TYPE OF STUDY F/S Transportation 5. Municipality of Asuncion COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY The establishment of the principal road by the corresponding road and the setting up of public transportation by the establishment of bus terminal. OBJECTIVES OF THE STUDY Yachiyo Engineering Co., Ltd. 7. CONSULTANT(S) Oct.1988 Sep.1987 13month(s) 8. STUDY PERIOD Asuncion metropolitan area 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) 1) The following road project for East-West corridor in Asuncion. - Improvement of M.Esttigarrribia road and Avenue E. Ayala (expansion) - Improvement of connection road between Av. Ayala and Av.Francia (expansion) - Improvement of Av.R.Francia (expansion) - Construction of Public Market No. 4 and bus terminal (new facility) - Improvement of streets/roads in rural area (traffic, signal, parking area, etc.) 2) Improvement of Av.MME.Lynchi of South-north corridor in Asuncion (expansion) 3) Extension of Av.Espana (new construction)

アスンシオン首都圏都市交通施設整備計画

CSA PRY/S 303/88 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

## Description:

This project has been derived from the Transportation Facilities Improvement Project of the Asuncion Metropolitan Area 1986 (M/P).

Subsequent Study:

(FY 1997 Domestic Survey)

Nov.1993 Request for technical cooperation for review

Jun.1997 Request for F/S

Dec.1997 S/W for F/S

(Transportation Facilities Improvement Project of the Asuncion Metropolitan Area Aftercare Study)

July 1999 Aftercare study (M/P+F/S) was undertaken

(1)Improvement of Madam Rinch Av.(expansion)

(FY 1997 Overseas Survey)

Finance:IDB

Construction: on-going, is to be completed by 2000 (FY 1998 Domestic Survey).

(2)Construction of new bus terminal

(FY 1997 Overseas Survey)

Finance:Private Fund

Construction: completed

(3)Pavement works

(FY 1997 Overseas Survey)

Finance:World Bank Construction: on-going

#### Situation:

After the completion of the feasibility study, the political situation become fluid because of the coup d'etat in Feb. 1989, and the mayoralty election in May 1991, among other. The proposals of the feasibility study and the application for the Japanese financing have been under review, but no specific decision has been made to date.

The introduction of car-free suggested as one of measures for the roads the Centro has been implemented once a week since June 1991.

The improvement of M.Lynch is scheduled to be implemented by the Ministry of Public Works financed by the World Bank within 5 years.

## (FY 1995 Overseas Survey)

The number of items to improve or arrange under this project seem to be doubled because of increasing demands.

## (FY1996 Domestic Survey)

Although in Sep. 1993 the request was submitted to JICA for the dispatch of experts in order to review M/P, F/S and the content of construction works and to formulate an implementing plan, it was turned down. The improvement of M.Lynch has not been commenced.

## (FY 1997 Overseas Survey)

Priority projects will be selected through examining the annual investment budget of Asuncion City, Ministry of Public Works and AGA under S/W study in Dec.1997.

## (FY 1997 Overseas Survey)

Budget of municipality is to be allocated for the project after the completion of Aftercare study. In case that the project require greater amount of cost as a result of the study, foreign fund will be requested.

## (FY 1998 Domestic Survey)

The Mayor desires to develop the East-West Corridor and to extend the Av. Espana. However, these have not been implemented since the political regime has been changed and the explanation for the residents were not enough.

(M/P)

Compiled Mar.1991

**CSA** PRY/S 102/89 Revised Jul.2009 1. COUNTRY Paraguay Water Pollution Control Plan for the Lake Ypacarai and its Basin 2. NAME OF STUDY SECTOR / Environmental Problems TYPE OF STUDY M/P 3. Administration 5. Technical Planning Secretariat Environmental Study Dept. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Study on Water Pollution Conditions in Lake Ypacarai and formulation of Water Pollution Control Plan. **OBJECTIVES OF THE** STUDY KOKUSAI KOGYO CO., LTD. 7. CONSULTANT(S) CTI Engineering Co., Ltd. Dec.1987 20month(s) Aug.1989 8. STUDY PERIOD Lake Ypacarai and its basin 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) First Priority 1) Construction of waste water treatment systems (for industrial plants and trourist installations) 2) Appropriate treatment of sludge and garbage in river beds and lake area 3) Construction of lakeshore vegetation Whithin 2-3 years 4) Construction of sludge treatment plant 5) Rebhabilitaion of existing sewage treatment plants 6) Forest conservation and management 7) Control of erosion from roads, quarries and river banks Within 5-10 years 8) Land use zoning, 9) Construction of sewage treatment plants 10) Afforestation, 11) Soil erosion control in cultivated land After detailed F/S 12) Raw sewage collection system by vacuum trucks 13) Construction of flood control channel (Yuguyry River) 14) Construction of contact oxidation ditch (urban rivers) 15) Installation of a sluice at the mouth of the Salado River

CSA PRY/S 102/89 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

## **Description:**

The first study was utilized as a base for a new F/S on analysis of water pollution and its decrease. It was also utilized for elaboration of land readjustment plan at central provinces and waste disposal plan of Asuncion City and peripheral areas.

#### Dispatch of Experts

An expert of solid wastes management was dispatched by JICA to the City of Asuncion.

Although the dispatch of an environment policy expert was requested every year, the Japanese government was unable to respond favorably due to the shortage of suitable manpower.

In April 1995, an expert of water quality analysis was dispatched from a private firm to SENSA for two years.

#### Cooperation with U.S.A.:

The Study results will be utilized as the basic data for F/S, which will be financed by TDA-USA and implemented under the Ministry of Natural Resources and Environment for six months commencing in April 1994.

The Ministry of Natural Resources and Environment has been observing and examining how the water quality in the Lake Ypacarai and the surrounding area has been improved. This water quality improvement program, for which the results of the JICA study are utilized, has been implemented by two American consulting firms with USAID fund.

In case an American consultant is appointed, not only will the financial assistance be provided but also the study on various problems concerning this Lake will be conducted.

(FY 1995 Overseas Survey)

#### Effect:

To secure water resources.

To upgrade the value of target area as the tourist and recreation area.

Reinforcement of pollution control at Lake Ypacarai.

## Others:

The Government of Paraguay was determined to follow the recommendations proposed by this M/P, which resulted in the establishment of the Basin Management Authority.

(FY 1993 Overseas Survey)

The Government of Paraguay requests the Japanese government for the participation of more local staff in these survey works in future.

(FY 1995 Domestic Survey)

The Technical Planning Secretariat moved the equipment in a laboratory to the Ministry of Natural Resources and Environment.

(FY 1996 Domestic Survey)

In case the improvement of sewerage is undertaken, it is necessary to determine in advance where sewege is to be released and how it would be treated.

(F/S)

Compiled Mar.1991

PRY/A 303/89 **CSA** Revised Jul.2009 1. COUNTRY Paraguay Integrated Rural Infrastructure Improvement Project in La Colmena 2. NAME OF STUDY 3. SECTOR / (Agriculture in) General TYPE OF STUDY F/S Agriculture 5. Ministry of Agriculture and Livestock, Techinical Cabinet. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY Formulation of agricultural and rural development plan. **OBJECTIVES OF THE** STUDY Naigai Engineering Co., Ltd. 7. CONSULTANT(S) Jul.1988 Jun.1989 11month(s) 8. STUDY PERIOD Paraguari, La Colmena District 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Overall Components First Stage Future Stage Project Road Improvement 97.4km 69.8km 27.6km Irrigation Facilities 900ha 400ha 500ha Drainage Improvement 10.0km 4.0km 6.0km Rural Water Supply L=70,050m L=56,650 L=13,400m Electricity L=48.8km L=48.8km Medical Care Facilities 1 set 1 set Telecommunication System L=24.3km L=14.0km L=10.3km **Educational Facilities** 2 schools 2 schools 6 ground O & M Center 1 place 1 place Sub-Center 10 Places 4 Places 6 Places Rural Park 10 Places 4 Places 6 Places Sewege & Garbage Treatment 5 Places 6 Places 1 Place Agricultural Processing Facilities Facility One of facility Facility Marketing Facilities Facilities Collecting Granding Demonstration Farm 5,000 sq.m 5,000 sq.m O & M Machines 1 unit 1 unit

CSA PRY/A 303/89 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

## Description:

Out of the components formulated in the F/S study, following priority projects were implemented as the grant aid projects of the Japanese Government.

## Subsequent Studies:

Aug.1989~Feb.1990 B/D (Naigai Engineering Co.,Ltd)

Aug.~Dec.1990 D/D

#### Finance:

30 Jul.1990 E/N 526 mil.Yen

(Model Project of Integrated Rural Development in La Colmena-1/2)\*

26 Jul.1991 E/N 621 mil.Yen

(Model Project of Integrated Rural Development in La Colmena-2/2)\*

\*Contents of Project

1.Road Improvement;Improvement:9 routes L=21.6km

Bridge: 1 Place, Culvert: 13 Places

2.Irrigation Facilities; Intake Facilities: 2 Places

Regulating Pond:2 Places, Conducting Pipeline:L= 5.1km

Distribution Pipeline:L=23.2km

3.Rural Water Supply Facilities; Well:1 Place

Filtration Plant: 1 Place, Distribution Tank: 1 Place

Distribution Pipeline:L=36.6km

4.O&M Facilities;O&M Center:1 Place A=280sq.m

O&M Machines:Grader 1 unit, Pickup 1 unit, Bike 1 unit

#### Construction:

Feb.1991 Phase1 started

Sep.1991 Phase2 started

Feb.1992 Completion of the phase 1 works

Mar.1992 Hand Over

May.1992 Completion of the phase 2 works

Jun.1992 Hand Over

May.1993 Defects Inspection

Total expenses was 1,147 plus 2,294 billion G, which is equivalent to approximately 1,376 billion Yen.

## Others

## (FY 1999 Overseas Survey)

Electric facilities have been remarkably developed in the study area under the rural electrification plan implemented by the government. Most of the urban and rural areas in La Colmena have been electized. Telecommunication systems with micro wave have been installed since 1993. Road development project (paved road of Paraguari - Villarrica and La Colena secondary road) is under implementation with ODA loan (10 Aug.1998 L/A).

(M/P)

Compiled Mar.1993 **CSA** PRY/S 103/91 Revised Jul.2009 1. COUNTRY Paraguay

| 2. | NAME OF STUDY           | National Transp | ort Master Plan  |   |      |               |     |
|----|-------------------------|-----------------|--|---|------|---------------|-----|
| 3. | SECTOR                  | Transportation  | / (Transp  | oortation in) General                               | 4.   | TYPE OF STUDY | M/P |
| 5. | COUNTERPART AGENO       | CY AT THE       |  | orks and Communication                              | on . |               |     |
|    | PRESENT COUNTERPA       |                 |  |   |      |               |     |
| 6. | OBJECTIVES OF THE STUDY |                 |  | em for regional developr<br>rt improvement policy a |      |               |     |
| 7. | CONSULTANT(S)           | Mitsubishi Rese | achiyo Engineering Co., Ltd.<br>iitsubishi Research Institute Inc.<br>ne Overseas Coastal Area Development Institute |   |      |               |     |
| 8. | STUDY PERIOD            | Mar.1990 ~      | Jan.1992   | 22month(s)  |      |               |     |
| 9. | SITE OR AREA            | Whole Paragua   | y and its export corrid  | lor   |      |               |     |

## 10. MAJOR PROPOSED PROJECT(S)

- 1) Highway Transport:
- R-1 Trunk Road Development; Primary highways Development; Secondary Highways Development. R-2 Rural Road Development. R-3 Amistad Bridge Expansion. R-4 San Tome - San Borja Bridge Construction.
- 2) Water Transport:
- N-1 Domestic Cereals Export terminals. N-2 Cereals Export Terminals at Free Zones. N-3 Main Foreign Trade Port at Villeta. N-4 Regional Freight Terminals. N-5 Petrorium Distribution Terminals. N-6 Paraguay River Improvement and Maintenance. N-7 Parana River Improvement and Maintenance. N-8 Fleet Enhancement.
- 3) Rail Transport:
- F-1 Asuncion Suburban Area Rail Improve. F-2 Gral. Artigas Encarnacion Rail Improve. F-3 Villarrica Gral. Artigas Rail Improve.F-4 Ypacarai -Villarrica Rail Improv. F-5 Encarnacion - Sao Borja 4 Rail System Development. F-6 Cereals Export Railway Terminals. F-7 Enhancement of Rolling Stocks. F-8 Nueva Palmira Port Branch Construction.
- 4) Air Transport:
- A-1 International Airports Facilities Development. A-2 Local Airports Facilities Development. A-3 Air Route Facilities Development. A-4 GSE Enhancement.

CSA PRY/S 103/91 M/P

PRESENT STATUS

In Progress or In Use

Delayed

Discontinued or Cancelled

## **Description:**

(1)Road Network Improvement

The short-term (-1995), mid-term (-2000) and long-term (-2010) road improvement plan were approved by the Cabinet. Various financial assistances are requested to implement the plans.

eg.)To improve the National Highway No.3 Limpio-San Estanislao (127km), the Government requested the World Bank for the financial assistance in October, 1991.

1.Arterial Road Development

(FY 1997 Domestic Survey)

Subsequent Study: Feb.1996 - Mar.1997 JICA F/S (Arterial Road Development Project)

This aims to formulate a project to improve the secondary national roads, Marumena-Villirorica and Paraguari-Villarica.

Finance: 10 Aug.1998 L/A 19,428 billion yen (Road Development Project (II)) (a part of the loan (approx. 5 billion yen) is for this project)

Contents of project: Development of arterial Road (approx. 25km including Praguari-Villarica)

2.Improvement of National Highways No.2,3,5,6and 7

(FY 1996 Domestic Survey))(FY 2000 Domestic Survey) Subsequent Study: Mar.1999 - Mar.2000 JICA F/S

Finance:BID, FONILATA

Construction:

(FY 1998 Domestic Survey) Completed

(FY 1998 Domestic Survey) Contents: Road improvement with widening the road (4 lanes) and overpass .

3. Situation of development/rehabilitation of the national routes

(FY 1998 Overseas Survey)

1)Rehabilitation and paving of Route 1 (Paragurari - Yaguaron -Ita): 1997.1 ~ 2000.1

2)Repairing and paving of Paraguari - San Juan Bautista: 1993 ~ 1995 (completed)

3)Repairing and paving of San Juan Bautista - Encarnacion: 2000 ~ 2003

4)Rehablitation of Coronel Oviedo - Caaguazu y Eusebio - Itacurubi: 1993 ~ 1995 (completed)

5)Rehabilitation and paving of Route 3 (Limpio - Emboscada): 1998 ~ 2000

6)Rehabilitation and paving of Route 3 (Emboscada - Santani): 1998 ~ 2001

7) Rehabilitation and paving of Route 3 (Tacuara - Santa Rosa): 1992 ~ 1995 (completed)

8)Rehabilitation and paving of Route 3 (Santa Rosa - Yby Yau): 1992 ~ 1995 (completed)

9)Rehabilitation and paving of Route 4 (14km - 29 km): 1995 ~ 1996 (completed)

10)Rehabilitation and paving of Route 4 (29 km- Pilar): 1995 ~ 1998

11)Rehabilitation and paving of Route 5 (Cuero Fresco - Concepcion): 1995 ~ 1999

12) Rehabilitation and paving of Concepcion - Pozo Colorado: 1997 ~ 2000

13) Repairing and paving of Bella Vista - 149 km (Route 6): 2000  $\sim$  2003

14) Rehablitation of Coronel Oviedo - Caaguazu: 1993 ~ 1996 (completed)

15) Rehablitation of Route 7 (Itaipu 323km - 183 km):1998 ~ 25 years

16)Rehablitation of Numi - Caazapa: 1992 ~ 1994 (completed)

17)Rehablitation of Caazapa - Cornel Bogado: 2000 ~ 2003

18) Repairing and paving of the term 1 of Transchaco:  $2000 \sim 2003$ 

19) Rehablitation of Puente Rio Negro - Pozo Colorado: 1995 ~ 1997 (completed)

20) Rehablitation of Pozo Colorado - Puente Rio Verde: 1995 ~ 1997 (completed)

21) Rehabilitation and paving of Mcal Estigarribia - Sg<br/>to. Rodriguez : 1999  $\sim 2003$ 

22)Rehabilitation and paving of Route 10 (Santani - Pto. Rosario): 1999 ~ 2002

23)Rehabilitation and paving of Route 10 (Tacuara - Saltos del Guaira): not yet decided

24)Rehabilitation and paving of Route 12 (Chacol - Gral Bruguez): not yet decided

(2)Strengthening of Transportation & Information Division

(FY 1998 Overseas Survey) Dispatch of Japanese experts to Ministry of Public Works and Communication (~ Dec. 1998).

(3)Railway Improvement

(FY 1995 Domestic Survey) The implementation with BOT scheme has been under consideration.

(FY 1998 Domestic Survey) There is still desire to implement the project with BOT scheme.

(FY 2000 Domestic Survey) As the demands for rail transportation in Paraguay has been decreasing year by year and the facilities have become too old for use, only the service in the section Asuncion- Ypacarai (once a week) and the section Encarnacion-Pakuwa(cargo) are under operation. Moreover, to replace the rail between Gral althigus and Encarnacion was compensated for the completion of the Yashiren Dam, however the replacement was not started because the section has not been submerged yet and the service has been already stopped.

(4) Water Transport Development

(FY 2000 Domestic Survey) The increase of the yield of soybeans rapidly made the transport volume large. In this fiscal year, the improvement of Concepcion port will be completed and the improvement plan concerning to the Pilar port will be decided.

## Detail:

(FY 1995 Overseas Survey) Various projects proposed in M/P were integrated into the National Plan of Transportation Policy. And the Department of Integrated Planning of Transportation was newly established in OPIT of the Ministry of Public Wouks and Communications to decide the implementing order of the Projects. Each project is given high priority by those who are in charge of road, marine and railway transportations. Upon the completion of each construction, the evaluation will be conducted and reported.

(FY2000 Domestic Survey) JICA Review Study: The Study on Economic development in Republic of Paraguay (Oct. 1998~ Nov.2000)

(M/P+F/S)

Compiled Mar.1995

| CS       | SA PRY/S 2  | 16/93                            |  |         |                          | Revised           | Jul.2009  |
|----------|---|----------------------------------|--|---------|--------------------------|-------------------|-----------|
| 1.       | COUNTRY   | Paraguay                         |  |         |                          |                   |           |
| 2.       | NAME OF STUDY   | The Establishm                   | ent of Educational Television Broadcasting Network   | k       |                          |                   |           |
| 3.       | SECTOR  | Communication                    | ns & Broadca / Broadcasting  | 4.      | TYPE OF STUDY M          | I/P+F/S           |           |
| 5.       | COUNTERPART AGEN<br>TIME OF DEVELOPMI   |                                  | Ministry of Education & Culture<br>National Administration of Telecommunication (A               | NTELO   | CO)                      |                   |           |
|          | PRESENT COUNTERPA   | ART AGENCY                       |  |         |                          |                   |           |
| 6.       | OBJECTIVES OF THE STUDY   |                                  | faster Plan on the establishment of educational televe easibility Study of the priority project. | ision b | roadcasting network thro | roughout the co   | untry and |
| 7.       | CONSULTANT(S)   | NHK Integrated<br>Yachiyo Engine |  |         |                          |                   |           |
| 8.       | STUDY PERIOD  | Nov.1992 ~ ~                     | Aug.1993 9month(s)   |         |                          |                   |           |
|          | SITE OR AREA  | Whole areas of                   | are country  |         |                          |                   |           |
| Wo<br>Co | MAJOR PROPOSED PR<br>ork 1<br>instruction of a television<br>ilities(US\$4.7 million)   |                                  | ion in Asuncion, which covers 40% of Paraguayan p  | opulat  | ion, and supplementation | on of existing st | udio      |
| Co       | ork 2<br>nstruction of the ETV Ce<br>%(US\$19.3 million)  | enter in Asuncion                | and construction of stations in three major regional   | cities, | which increases total po | opulation cover   | age to    |
|          | ork 3<br>nstruction of remaining r  | nine regional tran               | smitters of 13 1st-plan station, which increases total   | popula  | ation coverage to 84%(U  | JS\$10.8 million  | 1)        |
| Co       | Work 4 Construction of ten 2nd-plan regional stations, which increases total population coverage to 94%, and construction of studios in major regional stations(US\$10.6 million) |                                  |  |         |                          |                   |           |
|          |   |                                  |  |         |                          |                   |           |
|          |   |                                  |  |         |                          |                   |           |

CSA PRY/S 216/93 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## **Description:**

## Background:

The Minister of Education approved to request the cooperation for this Project to the Government of Japan on 20th June, 1994.

And the officers in charge of the Ministry of Education explained the necessity and the Priority of this project to the Parliament and asked to allocate national budget to materialize a part of the Project. Simultaneously, negotiations with the investors are also commenced.

### Finance:

A large initial investment will be required to implement the Master Plan to create an educational television broadcast network. However, in light of the current development budget of the Government and the expansion of the ANTELCO's investment, it will be difficult to obtain such a large amount for capital investment. Particularly, the implementation of the Priority Project should be financed by grants or very soft loans, so as to ease the repayment burden as much as possible.

## Situation:

## (FY 1995 Overseas Survey)

The Priority Project is most essential in establishing the educational television broadcasting service in Paraguay. In particular, the implementation of Work 1 to construct transmitting facilities in Asuncion has an important meaning in securing the TV channel, which the Paraguayan Government has retained for years for educational television in the capital city. With the Asuncion station put into service, some 40% of the entire population of the country will be able to receive education through the television service. Consequently, Work 1 of the Priority Project should be taken up for implementation at an earliest possible date.

## (FY 1997 Overseas Survey)

Request for a grant aid assistance was not submitted to Japanese Government in 1994 since Ministry of Technical Planning did not select this project as a project requesting for grant aid assistance.

## (FY 2000 Overseas Survey)

There has been no progress for materialization due to various reasons of Paraguay Government.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Oct.1995
CSA PRY/A 103/94 Revised Jul.2009

| 1.  | COUNTRY                 | Paraguay         |  |   |                 |                      |                          |  |  |
|-----|-------------------------|------------------|--|---|-----------------|----------------------|--------------------------|--|--|
| 2.  | NAME OF STUDY           | Integrated Agric | tegrated Agricultural and Livestock Development Project at Lower Chaco |   |                 |                      |                          |  |  |
| 3.  | SECTOR                  | Agriculture      | / (Agricu  | lture in) General                               | 4.              | TYPE OF STUDY        | M/P                      |  |  |
| 5.  | COUNTERPART AGENO       | CY AT THE        |  | re and Livestock, Dire                          | ction of Genera | l Planning.          |                          |  |  |
|     | PRESENT COUNTERPA       |                  |  |   |                 |                      |                          |  |  |
| 6.  | OBJECTIVES OF THE STUDY |                  |  | icultural and livestock<br>in Southern Lower Ch |                 | opment at the Presic | dente Hayes Department   |  |  |
| 7.  | CONSULTANT(S)           | Japan Agricultur | Japan Agricultural Land Development Agency                             |   |                 |                      |                          |  |  |
| 8.  | STUDY PERIOD            | Oct.1991 ~       | Mar.1994   | 29month(s)                                      |                 |                      |                          |  |  |
| 9.  | SITE OR AREA            |                  | s Department (with an<br>l of Chaco District                           | area of 73,000sq.km,                            | location Lat.22 | '10" to 25'20"S, Lo  | ng.57'10" to 60'45"W) at |  |  |
| 10. | MAJOR PROPOSED PR       | OJECT(S)         |  |   |                 |                      |                          |  |  |

1)Support the research work of agricultural and livestock farming industry:

Experiment station of livestock farming 1, Stock farm 1, Research center 1, Diffusing station 4, Cooperation society of agricultural equipment 1, Seed/Seedling supplying facility 1, etc.

2)Infrastructure improvement for agricultural and livestock farming society:

Improvement of trunk roads (701km), Preparation of farm (177,00ha) and Meadow (479,000ha), Preparation of irrigation waterway and drainage (43,000ha) and maintenance of the farmland (17,000ha)

3) Facilities of social infrastructure:

7 clinics, 37 educational facilities, 4 sets of electrification, 9 sets of living water supplying facilities and 3,780 residential housings

4) Facilities of distribution and/or processing:

3 cotton gins, 4 citrus selection facilities, 6 factories for dairy products, 5 meat processing and 1 cooperative forwarding facility for fruits and vegetables

CSA PRY/A 103/94 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

## **Description:**

#### Subsequent Study:

At present, 1.5 years after the completion of this survey works,

it seems to be on the stage of that an official request for implementation of the Feasibility Study in connection with the integrated agricultural and livestock farming development plan for Pozo Colorado District and Campo Azeval District is going to be submitted to the Government of Japan.

#### (FY 1996 Domestic Survey)

No request has been submitted by Ministry of Agriculture and Livestock.

### (FY 1997 Domestic Survey)

F/S for integrated agricultural and livestock farming development plan for Pozo Colorado District and Campo Azeval District is requested to Paraguayan Government. Now, it is under examination of General Directorate of Planning.

## (FY 1998 Domestic Survey)

The request for F/S has not been submitted.

#### Situation:

### (FY 1995 Overseas Survey)

In order to obtain various data, a dam has been constructed and reserved water during rainy season.

The pilot farm has been irrigated by the water from the dam to cultivate winter wheat and other crops.

This test was planned to complete on 1995, however, due to environmental and ecological cautions, it will be extended until 1996. It is planned to continue various experimental works including the research for the other crops under this Project.

## (FY 1996 Overseas Survey)

Information obtained by this project (soil, water, flora, infrastructure, population, development strategy, etc) is utilized for policy making and formulation of projects by Govt and international organizations. Materialization of this project has not realised yet. Govt, cooperating with Ministry of Agriculture and Livestock, emphasizes small scale projects, for example apiculture, horticulture, milk production to generate job opportunity and income.

#### (FY 1997 Domestic Survey)

This project is considered as a Paraguayan version of Serrado Development in Brazil.

## (FY 1997 Overseas Survey)

The results of the study have been incorporated into Rural Agricultural and Human Resources Development Strategy(10 years).

## (FY 1999 Overseas Survey)

Data and information acquired in this Study have been utilized in both public and private sectors for the policy decision and the formulation of bajo chaco development plan.

(M/P+F/S)

Compiled Oct.1995

| CS                  | SA PRY/S 2  | U5/94  |  |              |               | Revised | Jul.2009 |
|---------------------|---|--|--|--------------|---------------|---------|----------|
| 1.                  | COUNTRY   | Paraguay   |  |              |               |         |          |
| 2.                  | NAME OF STUDY   |  | nagement for Metropolitan Area of Asun   |              |               |         |          |
| 3.                  | SECTOR  | Public Utilities   | / Urban Sanitation   | 4. TYPE OI   | F STUDY M/P+l | F/S     |          |
| 5.                  | COUNTERPART AGEN<br>TIME OF DEVELOPMI   |  | Ministry of Health and Welfare,<br>Union of Autonomy of the Metropolitan           | Area (AMUAM) |               |         |          |
|                     | PRESENT COUNTERPA   | ART AGENCY   |  |              |               |         |          |
| 6.                  | OBJECTIVES OF THE   |  | be basic plan to treat waste material.  udy for the project with the top priority. |              |               |         |          |
|                     |   | KOKUSAI KO   | GYO CO., LTD.  |              |               |         |          |
| 7.                  | CONSULTANT(S)   |  |  |              |               |         |          |
| 8.                  | STUDY PERIOD  | Jun.1993 ~   | Aug.1994 14month(s)  |              |               |         |          |
| 9.                  | SITE OR AREA  | Asuncion Metro<br>Chaco-i Propos<br>Av. Madam Lir                |  |              |               |         |          |
| 1)I1<br>2)I1<br>3)C | MAJOR PROPOSED PE<br>improvement of waste col<br>improvement of waste col<br>construction of the transic<br>construction of the dispose | llection (at 14 aud<br>llection (at the cit<br>t base at Av. Mac | lam Linch.   |              |               |         |          |
|                     |   |  |  |              |               |         |          |
|                     |   |  |  |              |               |         |          |
|                     |   |  |  |              |               |         |          |
|                     |   |  |  |              |               |         |          |
|                     |   |  |  |              |               |         |          |

CSA PRY/S 203/94 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

Subsequent Study:

(FY 1997 Domestic Survey, Overseas Survey)

Nov.1997~Jan.1998 B/D

Consulting Firm/Kokusai Kougyo

After B/D is approved, D/D is to be started on April 1998.

(FY 1998 Domestic Survey)

Provision of machinery was completed by March 1999.

## Finance:

(FY 1996 Domestic Survey)

Among the proposed projects, the request is submitted for 800 mil. Yen grant aid assistance to procure waste collection equipment, which is considered the most urgent. (FY 1998 Domestic Survey)

Machinery Development Project for Solid Waste Management for Metropolitan Area of Asuncion.

\*Contents: Provision of machinery for waste collection and reclamation for Asuncion.

22 April 1998 E/N 799mil.yen

#### Background:

Authorities concerned in Paraguay (Ministry of Health and Welfare, SENASA and 15 autonomies of the city of Asuncion and the surrounding area) eagerly wish to implement this project.

#### (FY 1995 Overseas Survey)

The implementing schedule of this project is now drawing. SENASA will settle the regulations with regard to this issue, and AMUAM will establish the Urban Cleaning Office.

Additionally, SENASA will join with a consultation organization of the Presidential Office to research the socio-economical impacts of this Project, and will construct a disposal treatment facility for wider area at Chaco-i.

SENASA is going to publish a manual book for reduction and recycling of the disposals and the wasted materials from families, and distribute the manual book for each families in the municipality. And also to research the components of disposal in order to apply the results to this project and to introduce to the other cities and districts of the country. Above actions are considered as for a part of the National Plan. At present, it is still on the promoting stage such as designing, financing and providing the tender documents.

## (FY 1996 Domestic Survey)

Because the Japanese Government considers to end the provision of grand aid assistance for Paraguay, the early implementation of this project is desired.

## (FY 1998 Domestic Survey)

The metropolitan area consisted of 15 municipalities including Asuncion city when this study was conducted. After reorganizing the administrative district, the present metropolitan area consists of 23 municipalities including Asuncion city.

It was proposed that a new disposal treatment facility would be constructed in Chaco-i. However, the substitute site is presently under selection since the policy has changed.

## (FY 1999 Overseas Survey)

There has been little progress in finding the new final disposal site. The systems have been utilized in Asuncion, San Lorenzo, Capiata. Luque will utilize it soon. In Asuncion, the agency is collecting garbage on 2 - 3 shift basis. Therefore, the rate of collection is kept high. The Cateura disposal site has been remarkably improved.

(M/P) Compiled Jun.1997 Revised Jul.2009

| CS  | SA PRY/A 107/               | 96                 |   | Revised       | Jul.2009   |
|-----|-----------------------------|--------------------|---|---------------|------------|
| 1.  | COUNTRY                     | Paraguay           |   |               |            |
| 2   | NAME OF STUDY               |                    | ogram for the Small Scale Agriculture   |               |            |
| 4.  | NAME OF STODI               |                    |   |               |            |
|     | SECTOR                      | Agriculture        | / (Agriculture in) General 4. TYPE OF STUDY M/P                                       |               |            |
| 5.  |                             |                    | Ministry of Agriculture and Livestock, Direction of General Planning.                 |               |            |
|     | COUNTERPART AGEN            | ICV AT THE         |   |               |            |
|     | TIME OF DEVELOPME           |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     | DDECENT COUNTEDD            | ADT ACENCY         |   |               |            |
|     | PRESENT COUNTERPA           | AKI AGENCI         |   |               |            |
|     |                             |                    |   |               |            |
|     |                             | To formulate th    | e M/P for the comprehensive Cooperation Program for the Small Scale Agriculture for   | or small-scal | e farmers  |
|     |                             |                    | rea (160,000 km2), considering crop diversification, poverty alleviation, and environ |               |            |
|     |                             | III the Eastern I  | and (100,000 km2), considering crop diversification, poverty directation, and environ | mentar cons   | er vacion. |
|     |                             |                    |   |               |            |
| 6.  | OBJECTIVES OF THE           |                    |   |               |            |
|     | STUDY                       |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             | Japan Agricultu    | ral Land Development Agency   |               |            |
| 7.  | CONSULTANT(S)               |                    |   |               |            |
|     |                             |                    |   |               |            |
| Q   | STUDY PERIOD                | Jan.1996 ~         | Mar.1997 14month(s)   |               |            |
| 0.  | STODITEMOD                  | ~                  |   |               |            |
|     |                             | The target area    | covers 14 departments with an area of 16 million ha in the eastern part of Paraguay   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
| 9.  | SITE OR AREA                |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
| 10  | MAJOR PROPOSED PR           | POIECT(S)          |   |               |            |
|     | del Area Program            | COJECT(S)          |   |               |            |
|     | roject for the efficient us | e of farmland      |   |               |            |
|     | roject for the enhanceme    |                    | and   |               |            |
|     | roject for the enhanceme    |                    |   |               |            |
|     | roject for the demonstrat   |                    |   |               |            |
|     |                             |                    | tally accountable agriculture   |               |            |
|     | roject for soil improveme   |                    |   |               |            |
|     | roject for the developme    |                    |   |               |            |
| 8.P | roject for the promotion    | of suburban dairy  | farming   |               |            |
| 9.P | roject for the improveme    | ent of adult educa | tion for farmers, etc.  |               |            |
|     | Project for the promotion   |                    |   |               |            |
|     |                             |                    | Iture and livestock farming   |               |            |
| 12. | Project for the developm    | ent of model rura  | l area for paddy field development  |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
| 11  |                             |                    |   |               |            |
| 11  |                             |                    |   |               |            |
| 11  |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
| 11  |                             |                    |   |               |            |
| 11  |                             |                    |   |               |            |
|     |                             |                    |   |               |            |
|     |                             |                    |   |               |            |

CSA PRY/A 107/96 M/P

PRESENT STATUS

In Progress or In Use

Delayed

Discontinued or Cancelled

## **Description:**

Situation:

(FY2001 Overseas Survey)

The main objective of the project is to enhance the domestic agriculture through technological and finantial aids to small-scale farmers in the Eastern Area. The project also includes introduction of training farms, construction of water supply system, and improvement of rural roads.

#### Finance:

(FY 1998 Domestic Survey) (FY 1998 Overseas Survey)

10 Aug.1998 L/A (Agricultural Reinforcement Project II) 15,525 million yen

#### \*Contents:

- (1) Public works: development of infrastructure such as rural and irrigation and drinking water.
- (2) Development Loan through Banking System such as BNF, CAH, FDC (two step loan).

#### Construction:

(FY 2001 Domestic Survey)

Imp. Period: from 2001 to 2004 (until Feb.2005 according to the L/A)

Contents

The Department of Promotion selectes "Finca Escuela" and implements the simple F/S regarding the management to be exhibited. The necessary infrastructure and seeds are to be provided, and then the cultivation and management are to be exhibited. FY2001(2 Departments, 38 places), FY2002(6 Departments, 47 places), FY2003(6 Departments, 39 places), FY2004(All Departments, 39 places), FY2005(All Departments, 50 places)

Road: The manual is under preparation. The construction will be completed with total expansion of 50 km in Feb. 2002.

City Water: The manual is under preparation. The construction will be completed in Feb.2002. The World Bank has been implementing the similar Rural Water Supply Project and ironing out the proportion of residence burden.

Development Loan through Banking System such as BNF:

(FY 2001 Domestic Survey)

BNF: After the first disbursement, they have been disbursed satisfactory with the achievement of 317 times till June.

CAH: The first disbursement was made in Sep.2001. By the criterion of owned land area (about 20 ha) and income (37 thousands US\$), the subjects to financing were selected.

FDC: The manual was prepared by the draft level and is to be completed until mid-Feb.2002. Although the funds are from IFAD, there is much balance to be financed. The advisor of Yen loan has been directing FDC to increase the amount of loan.

(FY 2001 Overseas Survey)

BNF: Started to provide the loan since FY 2000. The amount of the loan provided to farm producers until now occupies 13.1% of the total allocation.

CAH: Procuring financial resources for the first disbursement which will start from Nov. 2000.

FDC: Specialized for loans to farm producers organizations. Currently DINCAP technical team is reviewing the operation manual.

## Background:

(FY 1997 Domestic Survey)

12 projects were selected as the most favorable projects in the M/P.

The government of Paraguay (The Department of General Planning in the Ministry of Agriculture and Livestock) is planning to request two projects among the most favorable projects to Japanese government as a technical cooperation project. Those projects are the Projects for the enhancement of irragation facilities in dry fields and the Project for the development of environmentally accountable agriculture.

On the other hand, in January 1997, the government of Paraguay submitted the request letter of the second phase of agricultural reinforcement project to the Japanese government as a loan.

This loan funds for important and urgent fields(farm management, distribution, agricultural support system, environment and WID, etc) to a financial institute of the Ministry of agriculture and livestocks. The amount of loan is estimated to be 97,540,000 US\$ which corresponds to about 11% of total costs of all the proposed projects of M/P in the cash basis.

## (FY 1998 Domestic Survey) (FY 1998 Overseas Survey)

Development studies (F/S) related to the proposed projects ("Irrigation and Soil Conservation Project in Coronel Oviedo" and "Development Project in Ybycul National Park") were examined. Considering the priority, the former project was requested in 1998.

Project-type technical cooperation is also being requested.

## (FY 1999 Overseas Survey)

MAG submitted requests for Japan's technical assistance in 1997 and 1998 for the implementation of 1)Irrigation infrastructure improvement and soil conservation project in Cnel Oveido District; and 2)Project for strengthening the Ybycui National Park and its surrounding areas. Although these projects have not been concretized, they are to be requested occasionally as the priority projects.

## (FY 2001 Domestic Survey)

The following projects which have been requested to Japan in 1997 and 1998 were not adopted. The assistance by the Japanese government are under discussion because the possibility to be adopted is low: the Irrigation Infrastructure Improvement, the Soil Conservation Project in Coronel Oviedo District, the Reinforcement Project in Ybycui National Park and around it.

**(F/S)** 

Compiled Jun.1997

| A STUDY PERIOD  PROJECT AND PROPOSED PRODUCTS.  SITTOR AREA  To conduct the FS for an acterial road which is put the highest priority, according to the results of the MP on the Comprehensive Transportation Project Study in Paraguay.  Central Consultant, Inc.  Central Consultant, Inc.  Vachtyo Engineering Co., 1 at.  SITUPY PERIOD  Feb. 1996 — Mar. 1997 13month(s)  Central region of Faet Paraguay  SITE OR AREA  RE MAIOR PROPOSED PROJECTS.  The main centerus of the project are construction works of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road road-proposed to the road construction.  DD 1997-1998  construction 1999-2005  | CS                        |  |   |
|---|---------------------------|--|---|
| S. SECTOR Transportation /Road 4. TYPE OF STUDY F/S  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  To conduct the F/S for an arterial road which is put the highest priority, according to the results of the M/P on the Comprehensive Transportation Project Study in Paraguay.  To conduct the F/S for an arterial road which is put the highest priority, according to the results of the M/P on the Comprehensive Transportation Project Study in Paraguay.  Central Consultant, Inc.  Yachiyo Engineering Co., Ltd.  STUDY PERIOD Feb. 1996 — Mar. 1997 13month(s)  Central region of East Paraguay  9. SITE OR AREA  To construction works of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road reaching to La Cormena, and environmental protection to the road construction.  (Imp. Period)  DD 1997-1998 | 1.                        | COUNTRY  | Paraguay  |
| Ministry of Public Works and Communications    Counterpart Agency   Present Counterpart Agency  | 2.                        | NAME OF STUDY  | Arterial Road Development Project   |
| PRESENT COUNTERPART AGENCY  To conduct the F/S for an arterial road which is put the highest priority, according to the results of the M/P on the Comprehensive Transportation Project Study in Paraguay.  Central Consultant, Inc. Yachiyo Engineering Co., Ltd.  Study Period  Feb. 1996 ~ Mar. 1997   13month(s)  Central region of East Paraguay  10. MAJOR PROPOSED PROJECT(S)  The main contents of the project are construction works of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road reaching to La Cormena, and environmental protection to the road construction. (Imp. Period) DD 1997-1998  |                           | SECTOR   |   |
| To conduct the F/S for an arterial road which is put the highest priority, according to the results of the M/P on the Comprehensive Transportation Project Study in Paraguay.  Central Consultant, Inc. Yachiyo Engineering Co., Ltd.  S. STUDY PERIOD  Feb.1996 ~ Mar.1997 13month(s)  Central region of East Paraguay  P. SITE OR AREA  Central region of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road reaching to La Comnena, and environmental protection to the road construction.  (Imp. Period) D/D 1997-1998  |                           |  | CY AT THE   |
| Comprehensive Transportation Project Study in Paraguay.  Consultant (Inc. Yachiyo Engineering Co., Ltd.  STUDY PERIOD  Feb. 1996 ~ Mar. 1997   13month(s)  Central region of East Paraguay  Central region of East Paraguay  Diagram and environmental protection to the road construction. (Imp. Period) D/D 1997-1998  Comprehensive Transportation Project Study in Paraguay.  |                           | PRESENT COUNTERPA  | ART AGENCY  |
| Central Consultant, Inc.  7. CONSULTANT(S)  Peb.1996  Mar.1997 13month(s)  Central region of East Paraguay  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S)  The main contents of the project are construction works of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road reaching to La Cormena, and environmental protection to the road construction. (Imp. Period)  D/D 1997~1998   |                           |  |   |
| 7. CONSULTANT(S)  Peb.1996 Mar.1997 13month(s)  Central region of East Paraguay  9. SITE OR AREA  Central region of East Paraguay  10. MAJOR PROPOSED PROJECT(S)  The main contents of the project are construction works of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road reaching to La Cormena, and environmental protection to the road construction. (Imp. Period) D/D 1997~1998  | 6.                        | OBJECTIVES OF THE STUDY  |   |
| Central region of East Paraguay  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S)  The main contents of the project are construction works of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road reaching to La Cormena, and environmental protection to the road construction.  (Imp. Period)  D/D 1997~1998   | 7.                        | CONSULTANT(S)  |   |
| 9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S)  The main contents of the project are construction works of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road reaching to La Cormena, and environmental protection to the road construction.  (Imp. Period)  D/D 1997~1998  | 8.                        | STUDY PERIOD   | ~   |
| 10. MAJOR PROPOSED PROJECT(S)  The main contents of the project are construction works of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road reaching to La Cormena, and environmental protection to the road construction.  (Imp. Period)  D/D 1997~1998   |                           |  | Central region of East Paraguay   |
| The main contents of the project are construction works of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road reaching to La Cormena, and environmental protection to the road construction.  (Imp. Period)  D/D 1997~1998  | 9.                        | SITE OR AREA   |   |
|   | The<br>read<br>(Im<br>D/I | e main contents of the proching to La Cormena, and p. Period)  1997~1998 | ject are construction works of total 121km road consist of 83km between Paraguari and Vijari and 38.1km branch road |
|   |                           |  |   |
|   |                           |  |   |
|   |                           |  |   |
|   |                           |  |   |
|   |                           |  |   |
|   |                           |  |   |
|   |                           |  |   |

CSA PRY/S 314/96 F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

## **Description:**

Subsequent study:

(FY 1998 Overseas Survey) March ~ Dec. 1999 D/D

## Finance:

(FY 1998 Domestic Survey) (FY 1998 Overseas Survey)

10 Aug. 1998 L/A 19,428 million yen "Road Development Project (II)"

\*Project contents:

- (1) Asphalt paving: i)Paraguari Tebicuari, ii)Tebicuary Villarica, iii)La Colmena Tebicuary;
- (2) Rehabilitation and re-paving: i)Yby Yau P.J.Caballero, ii)Bella Vista Km 148 (Route 6), iii)S. J. Bautista Encarnacion (including the enlarge of the bridge), iv)Cnel. Oviendo Santani, v) First term of the route; and
- (3) Enlarge of the width of the bridge: i)Paraguari S. J. Bautista, ii)Carapegua Acahay La Colmena.

#### Construction:

(FY 1999 Domestic Survey)(FY 1999 Overseas Survey)

Dec.1999 ~ 2003.

(FY 2002 Domestic Survey)

iv)Cnel. Oviendo - Santani Nov. 2001~May 2004 v) First term of the route Nov. 2001~Jan. 2004

Japanese technical cooperation:

(FY 1998 Overseas Survey)

Feb. 1996 ~ Nov. 1998 Training in Japan (4 trainees)

Jan. 1996 ~ Jan. 1998 Dispatch of a Japanese expert (road consultant)

- (ii) Tebicuary Villarica: Completed in March 2003.
- (iii) La Colmena Tebicuary: Completed in March 2003.
- (2) Rehabilitation and re-paving:
- (i) Yby-Yau P.J.Caballero: Completion scheduled in September 2004.
- (ii) Bella Vista (Route 6): Completion scheduled in March 2005.
- (iii) S. J. Bautista Encarnacion (including the enlarge of the bridge): Completion scheduled in March 2006
- (iv) Cnel. Oviendo Santani: Completed in January 2003.
- (v) First term of the route (across Chaco): Completed in March 2003.
- (3) Enlarge of the width of the bridge:
- (i) Paraguari S. J. Bautista: Completion scheduled in March 2006
- (ii) Carapegua Acahay La Colmena: Completion scheduled in March 2006.

## Background:

(FY 1997 Domestic Survey)

The project proposed by this survey was expected to be implemented by the onerous financial cooperation of Japan together with similar other works.

Although a little delay has been observed from the initial schedule, the Japanese Government has pledge on October 1997 a yen credit of approximately 20 billion yen for the total amount of approximately 25 billion yen for this work.

The L/A was signed on Aug.1998 and is scheduled that the implementation design started on Jan. 2000, and the Tender of the work opened on Sept. 2000 (first group). The duration of construction is planned for 3 years.

## STUDY SUMMARY SHEET (M/P)

Compiled Jun.2000 **CSA** PRY/S 113/99 Revised Jul.2009

| 1.  | COUNTRY                 | Paraguay  |  |                      |  |  |  |  |  |  |  |
|-----|-------------------------|---|--|----------------------|--|--|--|--|--|--|--|
| 2.  | NAME OF STUDY           | The Aftercare S   | he Aftercare Study on Urban Transportation Planning in Asuncion Metropolitan Area  |                      |  |  |  |  |  |  |  |
| 3.  | SECTOR                  | Transportation  | ransportation / Urban Transportation 4. TYPE OF STUDY M/P  |                      |  |  |  |  |  |  |  |
| 5.  | COUNTERPART AGENO       | CY AT THE   | The Municipality o   |                      |  |  |  |  |  |  |  |
|     | PRESENT COUNTERPA       | ART AGENCY  |  |                      |  |  |  |  |  |  |  |
| 6.  | OBJECTIVES OF THE STUDY | <ul><li>2) To formulate</li><li>3) To conduct F</li></ul> | <ol> <li>To revise the present Urban Transportation Master Plan for the period up to the year 2015.</li> <li>To formulate short-term development plans up to the year 2005 select high priority projects.</li> <li>To conduct Feasibility studies for the high priority projects</li> <li>To transfer technology during the course of the Study</li> </ol> |                      |  |  |  |  |  |  |  |
| 7.  | CONSULTANT(S)           |   | Yachiyo Engineering Co., Ltd. Central Consultant, Inc.   |                      |  |  |  |  |  |  |  |
| 8.  | STUDY PERIOD            | Jul.1998 ~  | Nov.1999   | 16month(s)           |  |  |  |  |  |  |  |
|     | SITE OR AREA            |   | ppolitan Area in the l   | Republic of Paraguay |  |  |  |  |  |  |  |
| 10. | MAJOR PROPOSED PR       | OJECT(S)  |  |                      |  |  |  |  |  |  |  |

- 1) Trunk Bus Project on E.Ayala Avenue
- Widening of Av. E. Ayala and Mcal. Estigarribia into six-lane roads
- Provision of executive trunk bus lanes
- Constructions of 4 viaducts at intersections with major trunk roads
- Improvements of road drainage facilities
- 2) Other Road Improvement Projects
- Widening of 4 main trunk roads
- Improvements of intersections on trunk roads that currently experience bottlenecks
- Improvements of road drainage facilities
- Pavement improvements
- 3) Traffic Management Projects
- Problems with the current traffic control system include visibility and recognition of traffic signals and a lack of good traffic data. The Study will propose improvement measures for traffic signal control using the central control scheme, taking into account current problems, future traffic demand, and the new trunk bus project.

CSA PRY/S 113/99 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

## **Description:**

## (FY 2000 Domestic Survey)

The municipality of Asuncion has so far no intention of applying for a new loan and has not approached the Government of Japan.

The CETA office still exists within the municipality, and municipal employees(4 former counterpart members and three new persons) work for transportation issues. A public transport bill to empower transport operators is under discussion in the Diet, and the proposed projects will be discussed further in detail once the bill is passed.

#### (FY 2001 Domestic Survey)

The government of Paraguay enacted a new law in 2000 for the preparaton and implementation of the proposed project in F/S.

The municipality of Asuncion and mayers of the vicinal municipalities established SETAMA (Secretaria de Transport del Metropolitana de Asuncion) for fund procurement, land utilization, and interest adjustment among concerned bus enterprises.

The government is seeking overseas financial aid because of its financial deficit.

The activities of SETAMA have been stopped for a few months due to the coming mayoral election on Nov. 18, 2001.

### (FY 2001 Overseas Survey)

Establishment of the National Transport System and a new management organization:

- DINATRAN, a nation-wide management organization, and SETAMA, a local-level management organization in Asuncion, were established on Dec. 29, 2000.

SETAMA formulated a M/P for Asuncion metropolitan area, however, the implementation of the plan has been suspended with many issues to be solved.

Because there are no concrete fund procurement plans to start activities of DINATRAN (budgeted from the Diet) and SETAMA (budgeted from the municipal council), an application for Japan's Technical Cooperation and Yen Loan for the implementation of the M/P is being prepared.

#### (FY 2002 Domestic Survey)

The delay of fund procurement is contributed from the following factors:

- 1. Lack of budget within govt. And borrowing from WB suspended (nearly in default).
- 2. Political instability and preliminary election, expected Apr. 2003, prevents govt. from concentrating on the primary duty.
- 3. Due to World recession of the World economy and peripheral countries (i.e. Argentine and Brazil), foreign currency inflow remains insufficient. The repair work on Palma st. in the Center of Asuncion City has been commenced, and width of roads has expanded.

#### (FY 2003 Overseas Survey)

The following projects were implemented on its own funds.

- 1. Of the four yards on the Mariscal Lopez scheduled to be constructed, three yards were constructed.
- 2. A bypass was constructed between Espana and Mariscal Lopez through a railbed
- 3. While the road width of the section between the Peru Avenue on the Artigas Street and Espana has been expanded, the section between the Peru Avenue and General Santos remains unfinished (approximately 750 m).
- 4. The construction to expand the both sides of the Palma Avenue had been expected in relation to the conversion plan of the downtown to a pedestrian avenue and partial expansion of the northern sidewalk of the Estrella Avenue were implemented.

## (FY 2004 Domestic Survey)

- Construction of roads (able to enter directly to Centro from Altigas via Paraguagyo Independinte)
- Increase in number of people using public transportation due to economic deterioration.
- Traffic congestion by the bus has reduced due to a bankruptcy of several Bus companies, which entity with stable management survived.

## (FY 2004 Overseas Survey)

Tender was made for expansion and re-pavement of 1km long section in Eusebio Ayala street. This is the section between Choferrel de Chaco and San Martin, where construction is in progress. This street is the major road from Eastern arterial road to the centre of capital. This road connects major cities in metropolitan area, which connects to Route 1 and Route 2. 21 thousand motor vehicles transits Eusebio Ayala street daily, which vans and public vehicle consists 24 percent.

On the other hand, implementation of the introduction of bus route has not yet been made till 2004.

Request for a YEN Grant Aid was mad for CETA 98 implementation through Ministry of Finance BID special team of BID conducted in May, 2004. However, chairman of SETAMA received in approval.

Although the budget of SETAMA for FY 2004 was 2 million USD, the Supreme Court judged allotting 15 percent of fixed asset tax of Ascention to SETAMA. Therefore, budget in FY 2005 was reduced for 75 percent.

## (FY 2005 Domestic Survey)

- 1. Expansion construction of Choferrel de Chaco is being implemented with own funds.
- 2. Land procurement has been made for construct of bus terminal in San Lorenzo city.
- 3. Discussion is in progress with bus companies on bus route reallocation.

(F/S)

Compiled Jun.2000 **CSA** PRY/S 311/99 Jul.2009 Revised

| 1.   | COUNTRY                           | Paraguay        |  |            |               |   |                           |             |     |                                       |   |
|--|-----------------------------------|-----------------|--|------------|---------------|---|---------------------------|-------------|-----|---------------------------------------|---|
| 2.   | NAME OF STUDY                     | The Feasibility | The Feasibility Study for the Improvement of the National Road Route 2 and Route 7 |            |               |   |                           |             |     |                                       |   |
| 3.   | SECTOR                            | Transportation  | / I  | Road       |               | 4 | 4.                        | TYPE OF STU | JDY | F/S                                   |   |
| 5.   | COUNTERPART AGENTIME OF DEVELOPME | CY AT THE       | Ministerio de Ol   |            | y Comunicacio |   |                           |             |     | 1                                     |   |
|  | PRESENT COUNTERPA                 |                 |  |            |               |   |                           |             |     |                                       |   |
| 6.   | OBJECTIVES OF THE STUDY           |                 | Feasibility Study elevant technolog  |            |               |   |                           |             |     | 7 with a target year of 201<br>study. | 0 |
| 7.   | CONSULTANT(S)                     | Yachiyo Engine  | eering Co., Ltd.   |            |               |   |                           |             |     |                                       |   |
| 8.   | STUDY PERIOD                      | Mar.1999 ~      | Mar.2000   | 12month(s) |               |   |                           |             |     |                                       |   |
| The study area covers the section between San Lorenzo (km 14) and Caaguazu (km 183) of the National Road Route 2 7 (approximately 169 km)  9. SITE OR AREA |                                   |                 |  |            |               |   | National Road Route 2 and | i           |     |                                       |   |
| 10   | MA IOR PROPOSED PR                | OTECT(S)        |  | -          | -             |   |                           | -           |     |                                       |   |

## 1) Mini-bypasees

The road width in these cities is narrower than that on the inter-city sections and often causes accidents resulting from mixed traffic of inter-city high-speed vehicles and local traffic. Since it is necessary to separate them to ensure safety, it is proposed that bypasses be constructed to circumvent the built-up area.

## 2) Provisions of Climbing Lanes

Ascending sections with along, steep gradient slow down the traveling speed of heavy vehicles and reduce the road capacity as a result. In such sections, many traffic accidents occur, involving those trying to overtake slow vehicles. Based on the AASHTO design standard, another lane will be provided for slow heavy vehicles to travel in sections with a gradient of over 3% continuing for more than 500m.

## 3) Construction of Flyer Intersection

At the existing intersection near the town Coronel Oviedo, many traffic accidents occur. In order to realize smooth traffic from Coronel Ovideo, where urbanization is taking place, and Route 2 and 7, the rotary intersection will be grade separated, and a flyover will be constructed.

## Implementation period:

- 1. Road Improvement, Urgent maintenance (Jan. 2003- Dec. 2004)
- 2. Bypass Construction (Jan. 2005- Dec. 2009)

CSA PRY/S 311/99 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

## **Description:**

## (FY 2000 Domestic Survey)

The Study team explained the summary of this project to JBIC in Paraguay. The study team has unofficially obtained the intention that JBIC will take up this project as a superior issue. Paraguay government has requested the proposed projects to JBIC.

## (FY 2001 Domestic Survey)

The Paraguay government is planning privatization of maintenance, management, rehabilitation and operation of trunk roads by concession.

#### (FY 2002 Domestic Survey)

Road improvement projects such as national highway construction between Paraguay-P roads are in progress as a loan project. The govt. of Paraguay seems to examine the progress of ongoing projects.

#### (FY 2003 Overseas Survey)

The total length of the Roads No. 2 and No. 7 is 325 km. The business right for privatization has been granted to the section of 184km between Caaguazu and Ciudad del Este. There is a plan to grant a business right for the remaining sections, which needs a case study.

## (FY 2004 Domestic Survey)

Within the total length of 325 km of Road No. 2 and No. 7, construction of 184 km road between Caaguaz and Ciudad del Este has completed. Although further investigation is needed for the remaining sections, there is a plan to commission this.

## (FY 2005 Domestic Survey)

The Paraguayan government is considering conducting national highway maintenance with concession scheme. Specifically, the highway placed as an important road maintenance link in southern recurrent road axis has the highest possibility. However, there are some downsides, such as greater risks of investment. On the other hand, Road No. 7 adjacent to the road was actualised by concession, and is operating from 2000.

## STUDY SUMMARY SHEET (M/P)

Compiled May.2001 **CSA** PRY/S 103/00 Revised Jul.2009

| 1. | COUNTRY                                | Paraguay                           |  |                     |                  |        |                |         |                              |
|----|--|------------------------------------|--|---------------------|------------------|--------|----------------|---------|------------------------------|
| 2. | NAME OF STUDY                          | The Study on Ec                    | The Study on Economic Development of the Republic of Paraguay      |                     |                  |        |                |         |                              |
|    | SECTOR                                 | Development Pla                    | an / (Devel  | opment Plan in) Go  | eneral           | 4.     | TYPE OF STU    | JDY     | M/P                          |
| 5. | COUNTERPART AGENO<br>TIME OF DEVELOPME | CY AT THE                          | Technical Planning S   | Secretariat(STP), P | residential Offi | ice    |                |         |                              |
|    | PRESENT COUNTERPA                      |                                    |  |                     |                  |        |                |         |                              |
| 6. | OBJECTIVES OF THE<br>STUDY             | To promote Para<br>promoting expor | · ·  | evelopment by sup   | porting diversif | ficati | on and industr | rializa | ation of agribusiness and by |
| 7. | CONSULTANT(S)                          |                                    | Daiwa Institute of Research Ltd. Pacific Consultants International |                     |                  |        |                |         |                              |
| 8. | STUDY PERIOD                           | Oct.1998 ~                         | Dec.2000   | 26month(s)          |                  |        |                |         |                              |
|    | SITE OR AREA                           | All the Paraguay                   | an territory   |                     |                  |        |                |         |                              |

## 10. MAJOR PROPOSED PROJECT(S)

- 1. Agriculture: Assistance to regional speciality goods, assistance to agricultural products export, enhancement of agricultural procedures and existing cooperatives, agricultural finance.
- 2. Industry: Investment promotion, improvement of quality and productivity, market enhancement, industry statistics, establishment of corporate counseling service.
- 3. Transportation infrastructure: Improvement of important transport routes, improvement of transport infrastructures for product distribution, decentralization of infrastructure improvement, enhancement of maintenance control of transport infrastructure, secure funding for infrastructure improvement, creation and promotion of transport sector.
- 4. Human resource development: Assistance to technical schools and agricultural schools.
- 5. Corporate Finance: Rationalize and stabilize bank management, export loan, promotion of capital market, enhance stability of self-financing ability.
- 6. Quality and productivity: Establishment of certification system, enhancement of examination and auditing organization, simplification of export procedures
- 7. Export and investment promotion: Discover export market, improvement of information systems related to export, promotion of internationalizing corporations, promotion of foreign currency direct investment.
- 8. Cluster: Mix feed cluster, vegetable cluster, revitalization of textile industry, processing of Paraiso Gigante and revitalization of forests, development.
- 9. Systematization promotion: Promotion to introduce development strategy.

CSA PRY/S 103/00 M/P

| PRESENT STATUS | In Progress or In Use     |
|----------------|---------------------------|
|                | Delayed                   |
|                | Discontinued or Cancelled |

## **Description:**

(FY 2001 Overseas Survey)

1) Based on EDEP, the government of Paraguay formulated the short and long term Socio-Economic Strategy Plan to double the imcome per person in 20 years. PEES is an integrated, concrete, and the first national plan for national socio-economic development and was announced by the Presidential Order in March 2001. All the concerned ministries and public organizations are obliged to formulate more concrete implementation plans and schedules and to take financial measures for the fiscal year 2002. EDFP/PEES proposed a strategy and a policy of high value added agricultural/industrial production and export for MERCOSUR and the world market. PEES is planning more than 40 urgent projects (for 2001-2003) to achieve the long-term objectives.

2) The cluster stragegy proposed by EDEP/PEES has been institutionalized since March 3, 2002. ONPEC (National Organization for Promoting the Strategy of Competitiveness) was established for the whole nation in July 2001. The promotional organization of ONPEC held more than 8 conferences for regional cluster formation, financial planning, regulations and actins, formiulation of action plans, creation fo home pages, and establishment of regional organizations. ONPEC implemented various surveys related to government projects, such as improvement of agricultural/industrial quality control in national level, export promotion, transportation infrastructure development, and elimination of obstacles against national products competitiveness promotion. Permanent Secretariat of ONPEC established as a part of STP is facilitating organizational integration of ONPEC and promotion of cluster formation. ONPEC makes efforts to establish regional cluster organizations in the related areas as well as to enhance the organizational power of ONPEC itself. A JICA expert has joined the ONPEC meeting as an advisor.

3) Since the PEES's anouncement, STP has made efforts to procure fund and technologies from overseas including Japan, EU, Spain, Canada and international banks such as IDB and WB.

As for JICA's assistance, the government is requesting ,for the fiscal year 2002, a F/S on cluster formation, road development for export promotion, four experts for national system improvement in products quality control, a long-term expert for cluster formation support, and two senior volunteers for agricultural/industrial products export promotion. The government has also requested cooperation programs for enhancement of national products competitiveness in the world market.

(FY 2003 Overseas Survey)

The following projects were implemented.

1) Strengthening of competitiveness in the processing agriculture sector

Fund raising: EU(13,000,000 euro),IDB-FOMIN(US\$640,000)

Description:(EU)

-Strengthening of the national certification organization (ONA), the national committee of weights and measures(INTN) of the national technology standardization office, and the national quality system by the standardization bureau of INTN.

- -Development and certification by ISO standard in the zoo sanitary inspection service and the phytosanitary inspection service
- -Adoption of a trace system to constantly identify cows and pigs.
- -Implementation of National Survey on Agriculture and Livestock Farming (MAG).
- -Operation of modern integration process of the national quality system by providing strategic standardization means, plans, budgets and management(STP and CONACYT).
- -Adjustment of the development process of legal frameworks of respective concerned organizations based on systematic and comprehensive viewpoints. (Vice President's Office)
- -Promotion of investment, production and export through implementing collective strategies by the National Organization for Competitive Strategy Promotion (OMPEC) under the supervision of MIC

(IDB):

-Facilitation of export procedures for non traditional items with many participants from the small and medium enterprise sector.

2) Technical cooperation of Japan: professional engineers

- -Instructor fosterage plan to activate small and medium enterprises in Republic of Paraguay Period: 2002 2005
- -Management improvement plan of small to medium sized farmhouses through dairy in Republic of Paraguay

Period:2002 - 2004

Description: formulation of appropriate dairy management models adequate for small to medium size producers. 3)Support of agricultural school

3)Support of agricultural school

Fund raising: Spanish government (:US\$104,000)

Description: Improvement and expansion of the education service on the processing agriculture sector in Paraguayan agricultural schools, the dairy product sector in San Pedro, and the sausage sector in Itapua. Repair of classrooms, improvement of equipment, operation of processing agriculture school, fosterage of engineers and ability development of regional producers.

4)Cotton production support project: results have been yielded by intensive activities of Ministry of Agriculture and Industry.

This project is implemented on its own funds though PRODESAL.

(M/P)

Compiled Oct.2002 **CSA** PRY/A 131/01 Revised Jul.2009 1. COUNTRY Paraguay The Study on Reforeestation Plan in the Eastern Region of Paraguay 2. NAME OF STUDY / Forestry & Forest Conservation TYPE OF STUDY M/P 3. SECTOR Forestry 5. National Forestry Service (SFN) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY 1) The Afforestation Plan (M/P) will be formulated for the Esatern Region of Paraguay (some 15.98 million ha) together with the preparation of a land cover map and the selection of recommended afforestation areas. 2) The Five Year Afforestation Programme which will be required to implement the afforestation work (project) will be formulated. **OBJECTIVES OF THE** 6. 3) Technology transfer to C/P STUDY Japan Forest Technical Association 7. CONSULTANT(S) Pasco International Inc. Mar.2002 Mar.2000 24month(s) 8. STUDY PERIOD The Master Plan is primarily formulated for the recommended afforestation areas (approximately 4,050,000 ha) and the target area for afforestation is 400,000ha. 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) 1) Target work volume for the Master Plan Phase 1:50,000ha, Phase 2:150,000ha, Phase 3:200,000ha 2) Forest Management Types Production Forest I-1: Production of timber wood Production Forest I-2: Production of fuelwood and pulpwood Production Forest II: Agro forestry Production Forest III: Production of timber wood and protection of livestock

Production Forest IV-1: Production of timber wood and windbreak forest Production Forest IV-2: Production of fuelwood and windbreak forest

Production Forest V: Silvopasture

3) Forest Protection

4) Production of Seedlings

5) Implementation System

6) Five Year Afforestatipon Programme

Year 1: 5,000ha Year 2: 5,000ha Year 3: 10,000ha Year 4: 10,000ha Year 5: 15,000ha

CSA PRY/A 131/01 M/P

| PRESENT STATUS | In Progress or In Use     |
|----------------|---------------------------|
|                | Delayed                   |
|                | Discontinued or Cancelled |

## **Description:**

(FY 2002 Domestic Survey)

No information.

(FY 2003 Domestic Survey)

Delay due to difficulty in procuring the funds.

## (FY 2003 Overseas Survey)

Although the project is not at the stage of making a formal financing application to main dealing banks or related financial institutions, economic advisors of the government issued an alert relating to the national debt ability. They indicated that the nation does no have enough debt ability to complete the whole project. In the light of this point, increase of domestic production and recovery of economic growth are needed. It is expected that improvement of the condition will lead to enhancement of the debt ability, everything will turn for the better, and overseas loan enough to implement all stages of the project will become obtainable.

At present, efforts have been made to acquire economic grant aid for part of the projects listed in the first phase study. The examples include the afforestation program and the agroforestry system intended for small-scale producers.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

(FY 2006 Domestic Survey)

No information to be specifically mentioned.

(FY2007 Domestic Survey)

No information to be specifically mentioned.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Jun.1997
CSA SLV/A 105/96 Revised Jul.2009

| 1.  | COUNTRY   | El Salvador  |  |  |  |
|---|---|--|--|--|--|
| 2.  | NAME OF STUDY   | Integrated Agric   | Agricultural Development Project in the Jiboa River Basin  |  |  |
|   | SECTOR  | Agriculture  | / (Agriculture in) General  4. TYPE OF STUDY M/P   |  |  |
| 5.  |   |  | Ministry of Agriculture and Livestock, Directorate of Natural R  | esources (DGRNR)                           |  |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |   |  |  |  |  |
| PRESENT COUNTERPART AGENCY                          |   | ART AGENCY   |  |  |  |
| 6.  | OBJECTIVES OF THE STUDY   | ha of the basin a  | M/P on the Integrated Agricultural Development Project to consarea adjacent to San El Salvador.  | erve the Jiboa River Basin covering 60,000 |  |
| 7.  | CONSULTANT(S)   | KOKUSAI KOGYO CO., LTD.                                      |  |  |  |
| 8.  | STUDY PERIOD  | Dec.1995 ~   | Mar.1997 15month(s)  |  |  |
| 9.  | SITE OR AREA  | The Jiboa River  | r Basin, 60,000ha  |  |  |
|   | MAJOR PROPOSED PR   |  |  |  |  |
| Mo<br>1. 1<br>2                                     | del Projects Cost 15,003<br>Basin Conservation Proje<br>Agricultural Developmer | 3,000 USD (Loca<br>ect : Afforestation<br>nt Project : Agric | al 6,933,000 Foreign 8,070,000) on Development and Extension, Soil Conservation Development and Extension, Soil Conservation Development and Extension Development of 3 model areas. The she is a subject of the she is a subject Promoting Conservation of Agricultural Extension Offices and Project Promoting Conservation Development of 3 model areas.  The she is a subject of the she is a subject Promoting Conservation Development of 3 model areas.  The she is a subject Promoting Conservation Development of 3 model areas.  The she is a subject Promoting Conservation Development of 3 model areas.  The she is a subject Promoting Conservation Development of 3 model areas.  The she is a subject Promoting Conservation Development of 3 model areas.  The she is a subject Promoting Conservation Development of 3 model areas.  The she is a subject Promoting Conservation Development of 3 model areas.  The she is a subject Promoting Conservation Development of 3 model areas.  The she is a subject Promoting Conservation Development of 3 model areas. |  |  |

CSA SLV/A 105/96 M/P

| PRESENT STATUS | In Progress or In Use     |
|----------------|---------------------------|
|                | Delayed                   |
|                | Discontinued or Cancelled |

## **Description:**

(FY 1997 Domestic Survey)

A change of organizations concerned was carried out after completion of the study. The most part of DGRNR, which was an actual counterpart agency was organized into the Secretaria Ejecutivo de Medio Ambiente (SEMA) (Forestry, Meteology, Hydrology, etc.). And the director of Sectional Office for Agricultural Planning (OSPA) who was a direct responsible person was relieved.

Under such conditions, considering the importance of the Project, the Ministry of Agriculture and Livestock is preparing the request to Japanese Government for Grant Aid.

Situation of the request:

(FY 1998 Domestic Survey)

Although the request for a grant aid assistance covering B/D was submitted in Jan. 1997, no progress has been made.

The amount requested: USD 15,003,000

Contents: Environmental conservation model projects (1. Basin conservation model project, 2. Agricultural Development model project, 3. Agricultural supporting model project).

Governmental organizations were reorganized in Aug. 1997 after the completion of this study, and the director of Sectional Office for Agricultural Planning (OSPA) in charge has been changed. His work had not been well handed over to the successor; follow-up for the project had not been conducted. Although the successor started conducting the follow-up, the above request is kept in Japanese Embassy since grant aid assistance cannot to be applied to El Salvador.

(FY 1998 Overseas Survey)

MAG submitted the request for financial assistance to MIREX in Jan.1998. However, there has not been any response so far.

The request for the project-type cooperation including soil conservation, afforestation, forest agriculture, flood control, water management, monitoring system for water management is to be submitted to Japanese government.

(FY 2001 Overseas Survey)

There is no cooperation from another country and no plan for the completion of any project regarding this project, due to the prioritization of projects from the Government.

(FY 2002 Overseas Survey)

No progress has been regarding this project. No plans exist in the near future for the financing of the project and no other cooperation agency working this project.

(FY 2001 Domestic Survey)

El Salvador is not the object country for a grant aid. As to the loan aid project, the priority on agriculture is low in the national level, therefore, this project is unlikely to be realized.

Japanese technical assistance:

(FY 1998 Domestic Survey)

An expert is dispatched to CENTA which is in charge of research and extension of the agricultural technology.

Situation of utilization:

(FY 1998 Overseas Survey)

The outputs of this study was utilized for the formulation of the National Plan of Economic & Social Development (1999~2004),

(M/P+F/S)

Compiled Jul.1998

| CS  | SA SLV/S 2                | <b>14/97</b> Revised Jul.2009  |
|-----|---------------------------|--|
| 1.  | COUNTRY                   | El Salvador  |
|     |                           | Comprehensive Flood Control and Water Resources Development for the Rio Grande de San Miguel                       |
| 2.  | NAME OF STUDY             | Completionsive Flood Control and water Resources Development for the Rio Grande de San ivilguer                    |
|     |                           |  |
| 3.  | SECTOR                    | Social Infrastructure   / River & Erosion Control   4. TYPE OF STUDY   M/P+F/S                                     |
|     |                           | Agriculture and Livestock Office, Ministry of Natural Resources  |
|     |                           | Agriculture and Livestock Office, Ministry of Natural Resources  |
|     | COUNTERPART AGEN          | ICY AT THE   |
|     | TIME OF DEVELOPME         |  |
|     | THIRD OF BEVELOTING       | 201001   |
| _   |                           |  |
| 5.  |                           |  |
|     |                           |  |
|     |                           | APPL CENTER  |
|     | PRESENT COUNTERP          | ARI AGENCY   |
|     |                           |  |
|     |                           |  |
|     |                           | Based on a request of El Salvador, make a master plan for integrated flood prevention measures in San Migual River |
|     |                           | basins and conduct a feasibility study for priority projects.  |
|     |                           | on projects.   |
|     |                           |  |
|     | OBJECTIVES OF THE         |  |
| 6.  | STUDY                     |  |
|     | STODI                     |  |
|     |                           |  |
|     |                           |  |
|     |                           |  |
|     |                           |  |
|     |                           | Pacific Consultants International  |
| 7.  | CONSULTANT(S)             | NIKKEN Consultants, Inc.   |
| ·•  | CONSCERNICIO)             | TATELY CONSTITUTE, INC.  |
|     |                           | B. 1005  |
| 8.  | STUDY PERIOD              | Feb.1996 ~ Sep.1997 19month(s)   |
| •   | STEETTERGE                | ~  |
|     |                           | San Migual River basin 2,247 km2   |
|     |                           |  |
|     |                           |  |
|     |                           |  |
| 0   | SITE OR AREA              |  |
| ٠.  | SITE ON AREA              |  |
|     |                           |  |
|     |                           |  |
|     |                           |  |
|     |                           |  |
|     | MAJOR PROPOSED PI         | ROJECT(S)  |
| M/I | ).                        |  |
| M   | easure for structures: Ri | ver improvement, Storage in the Lake Ormega (10 year return period)  |
|     |                           | s: Floodplain management, Watershed management   |
| 141 | easure for non-structure. | s. Floodplain management, watershed management   |
|     |                           |  |
| F/S |                           |  |
| M   | easure for structures: Ri | ver improvement, Storage in the Lake Ormega (2 year return period)   |
|     |                           | s: Floodplain management in San Migual, Ormega, and Jocotal areas  |
|     |                           | 7.1.50 opini. Inimigonom in our ragum, ornegu, und octour utual  |
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CSA SLV/S 214/97 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 1998 Domestic Survey)

The government of El Salvador requested OECF loan via the embassy of Japan in September 1998.

(FY 1999 Domestic Survey) (FY 1999 Overseas Survey)

The government of El Salvador requested OECF loan to the embassy of Japan in September 1998, but an official request for yen loans has not been submitted yet after that. (FY 2001 Overseas Survey)

The National Development Commission (CND) established in 1997 made a proposal to implement the project. Also, according to the Agriculture and Livestock Office, the government gives priority to the implementation of the project. However, we get unofficial information that they plan to implement the project 2 years after the implementation of the Cutuco Project for budgetary constraints.

(FY 2001 Domestic Survey)

There is no progress in the proposed projects. The government of El Salvador requested OECF loan to the embassy of Japan in September 1998, but an official request for yen loans has not been submitted yet after that.

Detailed design in cooperation with JICA and a request for the implementation of construction by JBIC loan are prepared now.

(FY 2002 Overseas Survey)

There is no progress.

The Ministry of Agriculture has an interest in the implementation of the project proposed, but it is difficult to implement it for financial difficulty since the earthquakes which took place in January and February 2001. According to the General Director of the Direction of Natural Renewable Resources in the Ministry of Agriculture, the Rio Grande Project is the priority project of the present government and the loan is planned after the implementation of the La Union Port vitalization project. JICA and CND conduct a master plan survey for economic development, focusing on the eastern region. The Ministry of Agriculture promotes the project continuously as one of the most important component for the development of the eastern region.

(FY 2003 Overseas Survey)

The government of El Salvador thinks that the project is an extremely important project for the development of agriculture and livestock farming in the eastern region and that they need finance by Japan for the implementation.

#### (FY2007 Domestic Survey)

The government of El Salvador is pursuing proceeding vigorous activities for the comprehensive flood control project for the river Grande de San Miguel, which is in the mentioned study. The activities include: risk diagnosis and devising a risk management plan for the downstream basin of the river Grande de San Miguel and the river Paz, lowering the risk (reconstruct the structure to lower the risk as well as adapting the risk productivity), installation and enhancement of an early warning system, and enhancement of other related systems. (Requested amount: 1 million USD, requested body: IDB). The Ministry of Agriculture in the El Salvador government, Ministry of Interior and Ministry of Environment and Natural Resources (National Service of Territorial Studies (SNET)) are preparing for a mutual cooperation agreement which is aimed for January.

#### (FY2007 Overseas Survey)

Implemented project: Hurricane damage rehabilitation equipment and material procurement

Objective: Improvement of road infrastructure (access roads to productive zone) and reconstruct the production base of agriculture and stock farms by progressing protective works e.g. river bank restoration, against natural disaster.

Funding

Funding party: Japanese government (non project Debt Relief Grant Aid)

Amount: 965 million USD

Progress:

(FY2007 Overseas survey) Application for funding to the Japanese Embassy, April 2005. Additionally, the Ministry of Agriculture applied to Japanese Government for the donation of a new machinery which can maintain the machinery donated 7 years ago (1 backhoe (320c), 1 tractor (D6R), 4 10m/sq dump truck and spare parts). Reconstruction of neighboring roads (more than 300km) and riverbank (more than 50km) between January, 2001 and September, 2005.

Implemented project: Flood control on river Paz, Jiboa, Lempa, Grande de San Miguel.

Objective: Improvement on road infrastructure (access roads to productive zone) and reconstruct the production base for agriculture and stock farms by progressing protective works e.g. river bank ruin, against natural disaster.

Funding:

Amount: 1 million USD (3.3 million is for he river Grande de San Miguel)

Funding party: IDB

Progress: This project was started on 3 December, 2007 and is expected to finish in 5 month time. Estimate of percentage complete is 5%.

(M/P+F/S)

Compiled Dec.1999 **CSA SLV/S 214/98** Revised Jul.2009

| 1.                         | COUNTRY  | El Salvador  |  |  |  |  |  |
|----------------------------|--|--|--|--|--|--|--|
|                            | NAME OF STUDY                                    | Port Reactivation in the Union Province  |  |  |  |  |  |
| 3.                         | SECTOR   | Transportation / Port 4. TYPE OF STUDY M/P+F/S  Comision Ejecutiva Portuaria Autonoma (CEPA)   |  |  |  |  |  |
| 5.                         | COUNTERPART AGEN<br>TIME OF DEVELOPME            |  |  |  |  |  |  |
|                            | PRESENT COUNTERPA                                | RT AGENCY  |  |  |  |  |  |
| 6.                         | OBJECTIVES OF THE STUDY                          | 1.To formulate a M/P for the Port of La Union up to the year of 2015 2.To conduct a F/S on a short term plan up to the year of 2005 based on the M/P |  |  |  |  |  |
| 7.                         | CONSULTANT(S)                                    | The Overseas Coastal Area Development Institute<br>Nippon Koei Co., Ltd.   |  |  |  |  |  |
| 8.                         | STUDY PERIOD                                     | Oct.1997 ~ Nov.1998 13month(s)   |  |  |  |  |  |
| 9.                         | SITE OR AREA                                     | Ajacent to the Port of Cutuco, Gulf of Fonseca, La Union Department  |  |  |  |  |  |
| 1.M<br>1<br>2<br>R<br>2.Si | bulk cargo priority termi *: To accommodate easy | Terminal area(12ha) with 2 gantry cranes nals: -13(-14*)m X 520(560*)m future expansion at need gation channel and access road                       |  |  |  |  |  |
|                            |  | gation channel and access road   |  |  |  |  |  |
|                            |  |  |  |  |  |  |  |

CSA SLV/S 214/98 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

Subsequent Studies:

(FY 2002 Domestic Survey)

 $Jul.2001 \sim Oct.2002~B/D~(JICA~D/D)$ 

Funding:

(FY 2001 Overseas Survey)

Date of the obtaining of the load: 25, Oct.2001, Amount of the loan: 11,233 million Yen

Contents of the Project:

- -Treating general/bulk cargo for the eastern region
- -Treating containerized cargo at the national level
- -Treating international containerized cargo
- -Developing socioeconomic activities of the eastern region

The plan for the utilization of the loan is as follows:

-Civil works 7,030 million Yen

-Equipment 2,333 million Yen

-Consulting 678 million Yen

-Physical contingency: 1,192 million Yen

-Total: 11,233 million Yen

The loan still has to be ratified by the legislative Assembly on the session of 8, Nov.2001.

#### Construction:

(FY 2001 Overseas Survey)

No civil works have been started yet. The D/D is in execution and the M/P was modified. Modification was about the place where soil supposed to be obtained. Soil was collected from the ford instead of the scheduled place whose bedrock was too steep. The progress of the D/D during the month of Sept. is as follows:

- Review of cargo and passenger traffic forecast
- Review on characteristics of calling ships
- Bathymetric and seismic profiling survey
- Environmental survey

The civil works are planning to be initiated in the year 2003 to accomplish in 2006.

(FY 2002 Domestic Survey)

Pre-qualification: Feb. 2003

Tender and tender evaluation: Aug. - Sept. 2003

Construction (Civil works and building): Nov. 2003- Sept. 2006

(FY 2002 Overseas Survey)

CEPA is preparing a plan for the rescue of the wild fauna that are estimated to be affected by the construction. The plan consists in the capture of wild fauna in the project site and the transfer of such fauna to a designated area approved by the Ministry of Environment. Additionally, it is planning utilize the cut trees to desks or any other tools for rural education in the area.

(FY 2003 Domestic Survey)

- -As of August 2003, the main unit of civil engineering works is under evaluation for preliminary qualification examination.
- -In the present plan, the terms of work for the main unit of civil engineering works (civil engineering and construction) is expected to last for 36 months.

-Operation and management of the target harbor (La Union Harbor)

The infrastructure will be improved by CEPA by Yen loan and the terminal operator who will subsequently execute operation and management of the facilities will be selected by CEPA from private companies based on concession method.

Consequently, since cooperation and coordination between the construction of infrastructure and the concession contract will become indispensable, the Japan Bank for International Cooperation entrusted the "Operation and Management Studies on the Harbor Concession" to the Overseas Coastal Area Development Institute of Japan with the objective of advising CEPA on how to proceed with the concession contract in future (April 2003 - August 2003).

Based on the suggestion in the said study, CEPA and the Japan Bank for International Cooperation are preparing for employment of a consultant in order to prepare and supervise the concession contract.

#### (FY 2004 Domestic Survey)

- 1. Subsequent study: "Study for D/D of La Union Province Port Reactivation Plan" had been implemented from July 2001 to Feb. 2003, as JICA project.
- 2. Funding request: L/A on Yen loan was concluded on 25th of Oct. 2001.
- 3. Other progresses:

The tender for civil engineering and construction works (Package A), which is the main package, was implemented on 13th of Apr. 2004. Contract is under procedure at present and will be signed by the Mar. 2005. The construction is scheduled to be started in the end of Mar. 2005. Moreover, PQ for Package B (Cargo Handling Equipment) and Package C(Tugboat) are going to be started after a year since the construction is started.

Apart from Yen loan, the tender for concession will also be implemented.

#### (FY 2008 Domestic Survey)

After the tender for construction work, El Salvadorian side modified the layout and deepened the depth of the terminal as compared to the original plan. This is because the size of container ships became inclined to be larger than before. With the modified designs, it has been proceeding with the construction work.

Regarding the privatization, there was a public bidding on master concession (i.e. undertaking development and management of the whole part of the port with one concession). However, the tender ended in failure and still has not yet been put out though it was changed to the concession including La Union port.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled May.2001
CSA SLV/S 105/00 Revised Jul.2009

| 1.               | COUNTRY   | El Salvador                                       |  |
|------------------|---|---|--|
| 2.               | NAME OF STUDY                                     | The Study on Ro                                   | egional Solid Waste Management for San Salvador Metropolitan Area in the Republic of El Salvador   |
|                  | SECTOR  | Public Utilities                                  | / Urban Sanitation 4. TYPE OF STUDY M/P  |
| 5.               |   |   | Planning Office for San Salvador Metropolitan Area (OPAMSS)  |
|                  | COUNTERPART AGENTIME OF DEVELOPME                 |   |  |
|                  | PRESENT COUNTERPA                                 | ART AGENCY  |  |
|                  |   |   | Master Plan on Regional Solid Waste Management targeting the year 2020. ical transfer regarding Solid Waste Management study and planning methods for the counterpart personnel.   |
| 6.               | OBJECTIVES OF THE STUDY                           |   |  |
| 7.               | CONSULTANT(S)                                     | KOKUSAI KO  | GYO CO., LTD.  |
| 8.               | STUDY PERIOD                                      | Dec.1999 ~  | Nov.2000 11month(s)  |
|                  |   | San Salvador M                                    | letropolitan Area (14 municipalities)  |
| 9.               | SITE OR AREA                                      |   |  |
| 1),<br>Mu<br>cos | nicipal Solid Waste Manats until 2010: 254,411,00 | ment, transfer tra<br>agement (Establi<br>00 USD) | ansport (Construction of transfer station and introduction of large-scale trailer trucks), Improvement of shment of regional solid waste management unit and self-supporting accounting system) (Total project (Total project costs until 2010: 4,297,000 USD) |
|                  |   |   |  |
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CSA SLV/S 105/00 M/P

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 2001 Domestic Survey)

Execution Unit, which deals with Solid Waste Management issues over the Metropolitan Area, has been established in Planning Office for San Salvador Metropolitan Area.

#### (FY 2002 Overseas Survey)

Execution Unit is taking steps forward the project for the construction of Echo Stations in order to establish the separate waste collection. Such project is being negotiated with private companies and consists in the construction of collection centers for recyclable materials in several communities.

The objectives of the project are;

- 1) Diminish the transport costs
- 2) Elimination of final disposition costs
- 3) Prolonging the life of Sanitary Landfill Site
- 4) Enployment generation

The project consist in the establishment of 8 echo stations, it is planned to attend 516 houses per stations in a total area of 72.75 ha, the total beneficiaries are estimated approximately in 16,500 inhabitants.

#### (FY 2002 Domestic Survey)(FY 2002 Overseas Survey)

Japanese Technical Cooperation

Dispatch of expert (Short-term expert): from Aug.10 to Aug.29, 2002 for 'Database Management for Manucipal Solid Waste Management'

Training in Japan: from Aug.13 to Sept. 29, 2002 for 'Waste Management Techniques for Central American Countries'

#### (FY 2003 Domestic Survey)

Environmental education has been in progress by use of the instructional material proposed in the studies.

Enhancement of the organizational capability is in progress.

#### (FY 2003 Overseas Survey)

- 1) Projects expected to be implemented from June 2001 to 2010:
  - -Master plan for solid waste disposal
  - -Optimization of solid waste collection routes
  - -Recommendation on the transfer station
  - -Management of the solid waste disposal service
  - -Collection of the service fee for solid waste disposal
- 2) Implemented projects and projects in progress:
- -Efforts were made on optimization of solid waste collection routes. At present, a report was submitted to San Marcos City and a report to AYUTWOKUSUTEPEKE City is under preparation. On the other hand, requests for support from other municipalities are invited.
- -A software to establish appropriate tariffs intended for four municipalities Delgado, Santa Tecla, AYUTWOKUSUTEPEKE and San Marcos called "COCEPRE" is in the process of installation .
- -Projects to reduce recyclable resources such as the eco station and the accumulation center, an auxiliary facility of the eco station, are in the process of introduction.
- 3) Benefit effects:

Approximately 2.3 million people in the metropolitan San Salvador area enjoy the benefits.

#### (FY 2003 Overseas Survey)

1 personnel each in 2002 and 2003.

#### (FY 2004 Domestic Survey)

Acceptance of trainee: 1 personnel for specially established "Solid Waste Management in Latin America". 1 personnel for training in Mexico (third country training).

(Basic Study)

Compiled Oct.2002 CSA SLV/S 504/01 Revised Jul.2009

|     |                             | 1  |                       |                       |                  |                     | TC VISCU    | Jui.2007 |
|-----|-----------------------------|--|-----------------------|-----------------------|------------------|---------------------|-------------|----------|
| 1.  | COUNTRY                     | El Salvador  |                       |                       |                  |                     |             |          |
| 2.  | NAME OF STUDY               | The Study for Establishment of National Basic Geographic Data  |                       |                       |                  |                     |             |          |
| 3.  | SECTOR                      | Social Infrastruct   | ure / Survey          | & Mapping             | 4.               | TYPE OF STUDY       | Basic Study |          |
| 5.  | COUNTERPART AGENO           | CY AT THE  | Planning Office for   | San Salvador Metropo  | olitan Area (OPA | AMSS)               | ·           |          |
|     | PRESENT COUNTERPA           |  |                       |                       |                  |                     |             |          |
| 6.  | OBJECTIVES OF THE STUDY     | The objective is to prepare topographic maps for areas not covered by the existing 1/25,000 scale maps and to prepare GIS dataset through out the nation for area covered by base topographical map by conducting numerical conversion of existing maps. |                       |                       |                  |                     |             |          |
| 7.  | CONSULTANT(S)               | Pasco Internation  | al Inc.               |                       |                  |                     |             |          |
| 8.  | STUDY PERIOD                | Mar.1999 ~   | Jun.2001              | 27month(s)            |                  |                     |             |          |
| 9.  | SITE OR AREA                | 1/25,000 scale geographical map: 3,700km2 San Salvador metropolitan area (14 municipalities)  OR AREA  |                       |                       |                  |                     |             |          |
| 10. | MAJOR PROPOSED PR           | OJECT(S)   |                       |                       |                  |                     |             |          |
|     | Creation of a topographic   |  | e of 1 to 25,000 that | covers 3,700 square l | kilometers.      |                     |             |          |
|     | reation of digital data for | •  |                       |                       |                  | scale of 1 to 25 00 | n           |          |

- Creation of digital data for GIS use that covers whole of El Salvador and is equivalent to a map with a scale of 1 to 25,000.
- 3. Creation of a situational map (5,100 square kilometers) that maps damages made by earthquakes in January and February 2001.
- 4. Creation of danger area extraction map (5,100 square kilometers) that indicate possibilities of secondary disasters.

CSA SLV/S 504/01 Basic Study

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 2002 Overseas Survey)

IGN has been generating income from the sales of the digital maps.

The major problem IGN is facing in the augrading the maps. One of the recommendation of this Study is upgrading maps because the conventional 1/25,000 maps used were not updated. Though technology transfer was done to the staff in the IGN, some of them no longer belong to the IGN and this is causing blanks in the operation of Ark/View and Ark/Edit.

The director of IGN has been changed. A reinforce to the Cartography Division was done by adding more members and estalishing the quality control unit, besides more people has been trained over the subject of digital mapping.

Status of Utilization:

The digital maps have been widely used by the Ministry of Agriculture, Ministry of Environment, Ministry of Finance and Technical Secretariat of Presidential House. IGN is negotiating with French Government for a loan of US\$ 12 million for the project, 'Modernization of Cadastre and the National Geographical Institute'. This project intends to include technical transfer, equipment, training in a variety of fields as Geodesy, Flights, photogrammetry, cartography, etc.

The IGN has established contact with the NIMA (National Imagery and Mapping Agency of the United States), in order to digitalize the 1/50,000 maps using as base maps the 1/25,000 topographic maps, product of the propose project.

Though IGN is having progress in the utilization of the maps, there have been certain problems with the equipment, regarding the lack of spare parts and technical service available in the courty for CALCOM.

(FY 2003 Overseas Survey)

Beneficial effects:

The whole country will enjoy the benefits from this geographic information. Even the current incomplete geographic information has been utilized by various organizations and groups including the Ministry of Environment & Natural Resources, the Ministry of Agriculture and Livestock, the Ministry of Economy, the Ministry of Public Works, the Ministry of Foreign Affairs, the civilian police, the National Energy Board, Social Investment Fund and the State Planning. It is also utilized by NGOs and private companies.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

(FY 2006 Domestic Survey)(FY 2006 Overseas Survey)

No information to be specifically mentioned.

(FY 2007 Overseas Survey)

No information to be specifically mentioned.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Sep.2003
CSA SLV/A 110/02
Revised Jul.2009

|                            |   | <i>_</i>   |  |      |                    |            |  |  |
|----------------------------|---|--|--|------|--------------------|------------|--|--|
| 1.                         | COUNTRY   | El Salvador  |  |      |                    |            |  |  |
| 2.                         | NAME OF STUDY   | The Master plan Study on Artisanal Fishery Development in the Republic of El Salvador  |  |      |                    |            |  |  |
| 3.                         | SECTOR  | Fishery  | / Fishery  | 4.   | TYPE OF STUDY      | M/P        |  |  |
| 5.                         | COUNTERPART AGEN<br>TIME OF DEVELOPME   |  | Ministry of Agriculture and Livestock, Fisheries and | Aqua | aculture Developme | ent Center |  |  |
| PRESENT COUNTERPART AGENCY |   |  |  |      |                    |            |  |  |
| 6.                         | OBJECTIVES OF THE STUDY   | In El Salvador, the majority of artisanal fishers (total population approximately 14,000) are war refugees and live in poverty. The Republic of El Salvador requested the Government of Japan to draw up a Master Plan (M/P) for coastal fisheries development. In 2000, an IC Net team carried out a series of field studies on subjects including the socio-economics of fishing communities, fisheries production, fisheries management, fish processing and marketing, aquaculture, fishers' organizations, and the institutional reform of the Fisheries Department (CENDEPESCA). Based on the findings of these studies, the IC Net team drafted a M/P for the promotion of artisanal fisheries. In 2001, the team presented CENDEPESCA with the contents of the Draft Final Report, including the M/P and proposal for four pilot projects. The team also successfully held a "technology transfer seminar" presenting the outline of the M/P and introducing |  |      |                    |            |  |  |
| 7.                         | CONSULTANT(S)   | the pilot projects.  IC Net Ltd.  System Science Consultants Inc.  |  |      |                    |            |  |  |
| 8.                         | STUDY PERIOD  | Aug.2000 ~   | Sep.2002 25month(s)                                  |      |                    |            |  |  |
| 9.                         | Western Region: Auhachapan Province (Garita Palmera, Barra de Santiago), Sonsonate Province (Acajutla, Los Cobanos), La Libertad Province (Puerto de La Libertad), La Paz Provinc (San Antonio Los Blancos, San Marcelino) Eastern Region: Usulutan Province (Isla de Mendez, Puerto El Triunfo, Puerto Parada), La Union Province (Isla Zacatillo, Isla Meanguera, Isla Conchaguita, El Tamarindo) |  |  |      |                    |            |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

- 1) Fisheries Statistics Improvement Project: The project aims at collecting, organizing and analyzing of reliable statistical data by introducing a practical and effective Fisheries Statistics System, within the budget scale of CENDEPESCA
- (Problems) a) Although a statistical system has been introduced, there is no budget b) Lack of data (especially on coastal fisheries) c) CENDEPESCA is not capable make plans for effective fisheries management
- 2) Project in Support of the Formation of Fishermen's Organizations: The objective is formation and development of the organization of fishermen, by voluntary resource management by fishermen themselves, who use coastal resources. The project aims at building successful examples by fishermen groups with high awareness and formulating model cases which could be disseminated throughout the country.
- (Problems) a) The only organization -Fishermen's Union- is dysfunctional b) It is impossible that cooperatives develop by themselves. c) Most fishermen are not organized d) Lack of entity to manage fishery resources and to develop market
- 3) Women's Income Increase Project in Fishing Communities: It aims at the realization of women's independence and development by supporting women's groups which are recently growing. Demonstration projects aim at creating model cases which could be disseminated throughout the country by supporting women's groups with active participation.
- (Problems) a) Lack of employment opportunities for women in fishing communities b) Due to the reduction of the catch, fishing family income is decreasing. c) Women do not have a measure and skill to improve such situation and there is very few organization to support them.
- 4) Artisanal Fisheries Diversification Project:By making use of underexploited fishery resources, catching efforts on targeted species will be relaxed to achieve the goal of well-balanced coastal fishery. Demonstration projects will be conducted to test the validity of the fishing method, which will be introduced as a trial, and the possibility of the distribution and processing of underexploited resources.
- (Problems) a)Limited fish species are caught b) Target fish resources have been depleted c) There are underexploited fish species

CSA SLV/A 110/02 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### Description:

(FY 2003 Overseas Survey)

MAG reported on the traditional fishery development fund to the legislative assembly through CENDEPESCA under the support of FACOPADES. As a result, this program was approved by the assembly as FIDEICOMISO PESCAR and the traditional fishery project will be implemented with annual contribution of 800 thousand US dollars. The research data of the master plan was useful as the material that supports the validity of this fund.

A request was made to JICA for follow-up of the pilot project for the sake of statistics and short-term dispatch of experts toward the training held for the purpose of formation of fishermen's union. As a result, support could be obtained from two experts, Mr. Noriaki Suzuki and Mr. Yasushi Wada. As for the pilot project for the purpose of statistics improvement, a request was made to JICA for assistance to the follow up with amount of 18,816 USD.

During Mr. Wada's stay in El Salvador, the first artificial reef was set up in El Salvador.

#### (FY 2003 Domestic Survey)

- 1. Artificial fish reefs set by artisanal fishermen (2003.09): In September 2003, artificial fish reefs were set by artisanal fishermen's initiative. The artificial fish reefs were funded by the Grass-roots Grant Aid of Japanese Embassy. With cooperation of the Navy, the artificial fish reefs were supplied to a resource conservation zone by using a warship. After one and a-half years past from the completion of the Pilot Project, fishermen and CENDEPESCA have continuously worked.
- 2. Fisheries Statistics System Technical Transfer, Short-term Experts (1.5 months from 2003.07): Technical training has been conducted for the practical use of new fisheries statistics system which was introduced by the Pilot Project.
- 3. Support the Creation of Fishers' Organizations, Short-term Experts (1.2 months from 2003.09): A short-term expert was dispatched for the creation of fishers' organizations to promote the effective implementation of the Master Plan proposed by the Study. The expert gave advice on the way to manage the Artisanal Fishery Promotion Fund which was approved during this period. At the same time, the specialist examined the current conditions of fishers' organization at the time of the pilot project implementation and made suggestions for the future.

#### (FY 2006 Overseas Study)

Implemented project: Development of aquafarming in the estuary region of El Salvador.

Implementing period: March 2003

Objectives: To increase the production of Anadara, local oyster and a new type of oyster introduced to the community in the Jiquilisco Bay. To establish basic technology for aquafarming of Anadara, local oyster and the introduced type of oyster and to improve technology of technical personnel of the El Salvador Fishery Development Bureau (CENDEPESCA) on aquafarming of moluscos.

#### Funding:

Funding party: Japan, self-fund

Japan

Operating cost: USD 176,102.00 Special expenses: USD 81,336.00 Facility provision: USD 435,136.0

Total: USD 692,574.00, which does not include the costs for training experts for long- and short-term in Japan and Chili.

El Salvador side

Operating cost: USD 113,529.73 Wages for technical staff: USD 160,214.51 Infrastructure: USD 767,200.00

Total: USD 1,040,944.24

Status: The implementation of the second phase was agreed with Japan at the completion of the survey on December 20, 2004. An institutional infrastructure for seedling production of moluscos was established, technology on aquafarming and survey of biologists on the counterpart side of the project was improved and basic technologies on seedling production of Anadara and local oyster and on aquafarming of Anadara, local oyster and the introduced type of oyster was established. The operation was conducted in cooperation with the model communities of oyster and Anada production in the regions such as Las Tunas and Negras en Playas in La Union Prefecture and Isla ded Mendez, La Pirrayita, RancyoBiejo, and Los Mancornadosin the Jiquilisco Bay. The social and economic survey of the project estimated that approximately 600 oysters and 2400 Anadara inhabit.

#### Technical cooperation:

Trainings:

Management of fishery resources, organization of women, oyster (bivalve) aquafarming method, invitation to the course specialized in the Science of Fisheries in Nagasaki University Graduate School, and trainings on aquafarming and commercial transaction of moluscos.

Dispatch of specialist:

Long-term experts: 4 personnel for 3 years

Short-term experts: 8 personnel

#### (FY 2007 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2007 Overseas Survey)

The utilisation of the proposed project is 100%. The government of El Salvador established "PESCAR trust" aiming to the development of artisanal fishery workers, based on the master plan. The Ministry of Finance provided USD 800,000.00 (as grant aid) annually as capitals for seeds to the production project of artisanal fishery organization.

(D/D)

|   | $(\mathbf{D}/\mathbf{D})$  | Compiled   | Sep.2003  |
|---|--|--|---|
| SA SLV/S 40   | 03/02  | Revised  | Jul.2009  |
| COUNTRY   | El Salvador  |  |   |
| NAME OF STUDY   | Technical Evaluation and Appraisal for Detailed Design on Port Reactivation Plan of La Union Provin  | ice in El Sal  | vador   |
| SECTOR  | Transportation / Port 4. TYPE OF STUDY D/D   |  |   |
|   | COMISION EJECUTIVA PORTUARIA AUTONOMA(CEPA)  CY AT THE   |  |   |
| PRESENT COUNTERPA   | ART AGENCY   |  |   |
| OBJECTIVES OF THE STUDY   |  |  |   |
| CONSULTANT(S)   | Nippon Koei Co., Ltd.  |  |   |
| STUDY PERIOD  | Jul.2001 ~ Sep.2002 14month(s)   |  |   |
| SITE OR AREA  |  |  |   |
| MAJOR PROPOSED PR   | OJECT(S)   |  |   |
| mponents of major project<br>e container berth (Length<br>e multi-purpose berth (Le<br>e passenger berth (Length<br>ter channel dredging (De<br>ming basin dredging (De | tests is detailed design and preparation of draft tender documents on the following items.  340m, Depth -14.0m, Crown height +5.0m) ength 220m, Depth -14.0m, Crown height +5.0m) n 240m, Depth -9.5m, Crown height +5.0m) pth -14.5m) pth -14.0m)   |  |   |
|   | COUNTRY  NAME OF STUDY  SECTOR  COUNTERPART AGENTIME OF DEVELOPME  PRESENT COUNTERPA  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD  MAJOR PROPOSED PR mponents of major project e container berth (Length e multi-purpose berth (Length e multi-purpose berth (Length e rohannel dredging (Derming basin dredging (Der | COUNTRY  El Salvador Technical Evaluation and Appraisal for Detailed Design on Port Reactivation Plan of La Union Provint  SECTOR  Transportation  Port  COMISION EJECUTIVA PORTUARIA AUTONOMA(CEPA)  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  The operation of Cutuco Port was stopped in 1996 due to the deterioration of the port facilities. But us in location and natural conditions in the region, La Union Province should be developed in the future. project is to carry out detailed design on container, multi-purpose and passenger berths.  CONSULTANT(S)  Nippon Koei Co., Ltd.  CONSULTANT(S)  Jul.2001  Sep.2002 14month(s)  La Union City, La Union Province and its vicinity under the influence of the Project | SA SLV/S 403/02 Revised  COUNTRY EI Salvador  NAME OF STUDY Technical Evaluation and Appraisal for Detailed Design on Port Reactivation Plan of La Union Province in El Sal  SECTOR Transportation / Port 4. TYPE OF STUDY   D/D  COUNTERPART AGENCY AT THE  TIME OF DEVELOPMENT STUDY  The operation of Cutuco Port was stopped in 1996 due to the deterioration of the port facilities. But utilizing efficial in location and natural conditions in the region, La Union Province should be developed in the future. The objective project is to carry out detailed design on container, multi-purpose and passenger berths.  ORSICTIVES OF THE  STUDY PERIOD  Jul.2001 - Sep.2002 14month(s)  La Union City, La Union Province and its vicinity under the influence of the Project  MAJOR PROPOSED PROJECT(S)  Imponents of major projects is detailed design and preparation of draft tender documents on the following items. e container borth (Length 340m, Depth -14.0m, Crown height +5.0m) e passenger berth (Length 240m, Depth -14.0m, Crown height +5.0m) ter channel dredging (Depth -14.5m)  Timp bas in dredging (Depth -14.5m)  Timp bas in dredging (Depth -14.0m) |

CSA SLV/S 403/02 D/D

PRESENT STATUS

Completed

Completed

Partially Completed

Delayed or Suspended

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

(FY 2003 Domestic Survey)

Implemented project: La Union Port Development Project

Implementing body: Comision Ejecutiva Portuaria Autonoma, CEPA

Implementing period:

Construction period: Apr. 2005 to Nov. 2008

Funding:

Funding party: Yen loan (L/A concluded: 25th of Oct. 2001)

Amount: JPY 11.233 bil

Contents:

Package A: Engineering works

Package B: Purchase of two panamax cranes

Package C: Purchase of two tag boats

Progress

(FY 2003 Domestic and Overseas Survey)

The Yen Loan Agreement was signed in October 2002. Contract with consultant, regarding construction supervision, was signed in December 2002 and pre-qualification of applicants (contractors) is underway at present. In terms of the engineering works, for the remaining 25 % funds, BCIE executives acknowledged, and necessary work has been in process for making contract.

Package A: On the process of bidding. Pre-reviewing is done for the bidding companies (three companies have passed).

Package B: All the necessary documents for the pre-reviewing and waiting for the response from JBIC.

Package C: All the necessary documents for the pre-reviewing and waiting for the response from JBIC.

(FY 2004 Domestic Survey)

Package A: Tender has been conducted on 13th April 2004. Toa Corporation and Jan De Hul (joint venture) made a tender. The tender price was 152,128,063 USD. Further, negotiation was held with Toa Corporation until 8th November 2004 and tender price of 131,992,000 USD was presented as a consequence. Currently, request for additional funding is revised by the Presidents office.

(FY 2005 Domestic Survey)

Package A: Negotiation on contract was finished in Dec. 2004 when the bidding was going to launch.

Package B: PQ planned in February 2006. Tender is planned in June 2006.

Package C: PQ planned in April 2006. Tender is planned in Sep. 2006.

(FY 2006 Domestic and Overseas Survey)

Package A: Contract with TOA group in Mar. 2005. Construction was started in April 2005 (construction period: 36months)

Package B: Planned to be excluded from the scope of the Yen loan project. (tender will not be conducted).

Package C: Planned to be excluded from the scope of the Yen loan project. (tender will not be conducted).

(FY 2007 Domestic Survey)

Progress status of construction: 64%

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Jan.2006
CSA SLV/S 101/04
Revised Jul.2009

| 1.  | COUNTRY                            | El Salvador   |  |  |  |  |  |
|-----|------------------------------------|---|--|--|--|--|--|
| 2.  | NAME OF STUDY                      | The Study on Economic Development, Focusing on Eastern Region in the Republic of El Salvador  |  |  |  |  |  |
| 3.  | SECTOR                             | Development Plan / Integrated Regional Development Plan 4. TYPE OF STUDY M/P  |  |  |  |  |  |
| 5.  | COUNTERPART AGENORIES OF DEVELOPME |   |  |  |  |  |  |
|     | PRESENT COUNTERPA                  |   |  |  |  |  |  |
| 6.  | OBJECTIVES OF THE STUDY            | 1) To formulate a master plan for well-balanced economic development through the export recovery, the promotion of foreign investment and the development of east region in pursuit of stronger competitiveness of El Salvador. 2) To improve the capacity on the counterpart side in the countries and regions promoting and leading economic development, so as to ensure the El Salvador government's ownership in conducting the master plan. |  |  |  |  |  |
| 7.  | CONSULTANT(S)                      | RECS International Inc. Nippon Koei Co., Ltd. UNICO International Corporation   |  |  |  |  |  |
| 8.  | STUDY PERIOD                       | Oct.2002 ~ Jun.2004 20month(s)<br>~   |  |  |  |  |  |
|     | SITE OR AREA                       | 4 Eastern districts: San Miguel, La Union, Morazan, and Usulutan  |  |  |  |  |  |
| 10. | MAJOR PROPOSED PR                  | OJECT(S)  |  |  |  |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

6 comprehensive programs, 28 projects

- 1. AIC development (6 projects): AIC Assistance program, 'One Village One Product' pilot project, Establishment of Agrobusiness Center, Research development and production of organic fertilizer, Saint Miguel sugar refining factory power generation, water industry assistance program.
- 2. Basin development management (5 projects): Saint Miguel River basin water resource development/control, small-scale and micro-irrigation, highland coffee expansion/improvement program, Lempa River downstream re-regulating reservoir dam irrigation, urban and rural water supply improvement.
- 3. Environment tourism development (4 projects): Tourism coordinated promotion program, Gulf of Fonseca environment/tourism development cooperation program, environment awareness improvement program, solid waste control program
- 4. Strengthening of spatial structure (5 projects): Logistic line enhancement, logistic facility location plan and promotion, El Amatillo national border facility improvement, establishment of Northern region longitudinal main roadway.
- 5. La Union port development (4 projects): Free Port Economic Zone (FPEZ) establishment program, Gulf of La Union port city development program, Conchagua geothermal heat investigation, La Union electricity transmission line
- 6. Entrepreneur bases improvement (4 projects): Eastern region middle/higher education scholarship, establishment of politechnic, expansion of PAREMAT, Eastern Region Regional Research Center

CSA SLV/S 101/04 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 2005 Domestic Survey)

Eastern region development program design has been conducted as a follow-up of the study from October to November 2004. Technical type cooperation is planned for the implementation of the proposed projects. In addition, construction is planned for container base in La Union port. Furthermore, funding for a replacement of a bridge and construction of related facilities for El Amatillo border facility improvement has been procured from the Japanese government.

(FY 2005 Overseas Survey)

Subsequent study: Bridge construction on Goascoran river

Implementing body: Ministery of Public Works (Ministerio de Obras Publicas)

Objective: To facilitate mobilisation of people and goods

Funding:

Funding party: JICA

Status: Study is being conducted with an assistance from Japanese government

(FY 2006 Overseas Survey)

Of the proposals based on the survey on the title, the basin program has been proceeded to the preliminary stage of the survey for feasibility. This program focuses on the restoration of the basin of San Miguel River and consists of 6 sub-programs, which are forestation of the upper river basin, improvement of river bed, control of the source of flood and overflow, use of irrigation system (14,000 ha), diversion of river bed and construction of multi-purpose dam.

(FY2007 Overseas Survey)

No information to be specifically mentioned.

(F/S)

Compiled Dec.2007 **CSA SLV/S 301/06** Jul.2009 Revised

| 1.  | COUNTRY                 | El Salvador  |   |                |                 |              |             |     |     |
|-----|-------------------------|--|---|----------------|-----------------|--------------|-------------|-----|-----|
| 2.  | NAME OF STUDY           | Feasibility Study on Establishment of the e-Government Platform in the Republic of El Salvador   |   |                |                 |              |             |     |     |
| 3.  | SECTOR                  | Administration   | / I1  | nformation & F | Public Relation | ns <b>4.</b> | TYPE OF STU | JDY | F/S |
| 5.  | COUNTERPART AGENO       |  | National Commission for the Information Society the Technical Secretariat, the Presidential House, of the Republic of El Salvador |                |                 |              |             |     |     |
|     | PRESENT COUNTERPA       |  |   |                |                 |              |             |     |     |
| 6.  | OBJECTIVES OF THE STUDY | The Government of El Salvador requested the Government of Japan to carry out a feasibility study for establishing an e-Government platform for the purpose of making the ICT sector development as the core of national development. |   |                |                 |              |             |     |     |
| 7.  | CONSULTANT(S)           | PADECO Co,. I  | Ltd.  |                |                 |              |             |     |     |
| 8.  | STUDY PERIOD            | Jan.2006 ~   | Nov.2006  | 10month(s)     |                 |              |             |     |     |
|     | SITE OR AREA            |  |   |                |                 |              |             |     |     |
| 10. | MAJOR PROPOSED PR       | OJECT(S)   |   |                |                 |              |             |     |     |

Conduct total designing and establish the execution plan for structuring the platform of e-government in The Republic of El Salvador. Conduct preparation support of necessary procedure for receiving financial aid from foreign countries, in order to conduct the plan by government of El Salvador. In detail, conduct the Survey in view as follows for structuring the platform of e-government, in order to make ICT development as core of national development.

- 1) consider the policy
- 2) consider basic strategy and design standard for structuring e-government
- 3) consider outline of designing and specification
- 4) evaluate the platform of e-government

#### <Suggestion>

The Government of El Salvador should implement this project as a priority project of the country. It should secure budgets for various aspects of the project such as operation, maintenance and management, and human resource development, and adopt means for retaining trained personnel for the purpose of sustainable operation and growth.

**CSA SLV/S 301/06** F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |
| Description .  |                          |                           |

(FY2007 Domestic Survey)

This Survey was conducted with a view of direct link to yen loan, but the opposition party is making objection against foreign loan with political consideration, and the request of the loan is stopping. There is possibility of necessity to wait until the result of the election in 2008 would outcome. Be that as it may, the foreign loan of the government of El Salvador is in competition between donor countries, and it is necessary for Japan side to argue against the government of El Salvador.

(FY2007 Overseas Survey)

No information to be specifically mentioned.

(M/P+F/S)

|     |               | (M/P+F/S) | Compiled | Mar.1993 |
|-----|---------------|-----------|----------|----------|
| CSA | TTO/S 201B/91 |           | Revised  | Jul.2009 |

| 1. | COUNTRY                           | Trinidad and To   |  |    |   |  |
|----|-----------------------------------|---|--|----|---|--|
| 2. | NAME OF STUDY                     | Improvement of  | Water Supply Supervisory System  |    |   |  |
| 3. | SECTOR                            | Public Utilities  | / Water Supply   | 4. | TYPE OF STUDY M/P+F/S                       |  |
| 5. | COUNTERPART AGENTIME OF DEVELOPME |   | Ministry of Settlements and Public Utilit<br>Water and Sewerage Authority (WASA)         |    |   |  |
|    | PRESENT COUNTERPA                 |   |  |    |   |  |
| 6. | OBJECTIVES OF THE STUDY           | Formation of a M/P on the WASA Water Supply Supervisory System (target year: 2000) for the improvement and expansion of the central water operation and management.  Implementation of F/S. |  |    |   |  |
| 7. | CONSULTANT(S)                     | Nihon Suido Co<br>Nippon Koei Co  | nsultants Co., Ltd.<br>o., Ltd.  |    |   |  |
| 8. | STUDY PERIOD                      | Sep.1989 ~  | Aug.1991 23month(s)  |    |   |  |
| 9. | SITE OR AREA                      |   | ea of four main water purification plants (<br>he water supplied population on the Trini |    | propuche, Navet and Hollis) on the Trinidad |  |
| 10 | MAJOR PROPOSED PR                 | OTECT(C)  |  |    |   |  |

#### 10. MAJOR PROPOSED PROJECT(S)

<M/P> The master plan for the Water Supply Supervisory System(WSSS) will be implemented in two stages, viz. The 1st Stage Plan(1992~1995) and the 2nd Stage Plan(1996~2005).

The System comprises two sub-system, namely, the Central Supervisory System(CSS) which covers 4 large systems(Caroni/Arena, North Oropouche, Navet and Hollis) and nearby medium and small systems, and the Local Supervisory System(LSS), which consists of numerous small-sized facilities.

Major Facilities Proposed:

- -Expansion of CSS Building
- -Central equipment of CSS, Repeater Station, Work stations with CRTs at regional offices; RTU stations
- -Remote operation unit of booster pumping stations; Remote control unit with mini-graphic of flow control valves; -Monitoring equipment flow meters, level meters & pressure gauges and flow control valves at strategic points in waterworks and the transmission/disturbution system
- <F/S> Feasibility analysis was undertaken on the 1st Stage Plan proposed in the Master Plan. Major facilities proposed:
- 1.Central data processing system(CDPS)
- 2.48 remote terminal units
- 3. Data radio communication system
- 4. Field instruments and equipment
- 5. Remote control equipment on booster pumping facilities and control valves
- 6.139 flow meters and 106 motor-driven valves on main production and transmission/distribution facilities
- 7.21 level meters and 111 pressure gauges on production and transmission/distribution facilities

CSA TTO/S 201B/91 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

#### Background:

The project will be implemented at three stages. D/D for Phase I-1 was planned to be commenced from the second half of 1992.

#### (FY 1992 Overseas Survey)

The collected data is utilized by IDB and other institutes.

Preparing for D/D to furnish the measuring equipment in the commercial and industrial section.

To fulfill the JICA's prerequisite to the commencement of the project. The Government requested the World Bank for the financial assistance.

As of Sepetember 1993, the fund was not secured.

#### \*Related Projects

Although it is not the proposed project itself, a part of the related projects (Prevention of water leakage), the early implementation of which was recommended by this Study, has been implemented with the IDB loan.

#### (FY 1997 Overseas Survey)

Proposed projects are not realized yet because the proposed system is too expensive and scale is not appropriate.

This study has been used to inform the Authority's water construction and rehabilitation projects up to the present time.

#### (FY 1998 Overseas Survey)

The Water and Sewerage Authority is now managed by a Private Operator (Severn Tre TTWS Trinidad and Tobago Water Services), the contract of which is due to expire at March 31 1999. After then the Government is comtemplating a Long Term Arrangement with a selected Private Operator.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.1990
CSA URY/A 101/87 Revised Jul.2009

| 1.                              | COUNTRY  | Uruguay   |   |                      |  |  |  |
|---------------------------------|--|---|---|----------------------|--|--|--|
| 2.                              | NAME OF STUDY  | Survey for the Establishment of Tree Plantation and Utilization of Timber           |   |                      |  |  |  |
|                                 | SECTOR   | Forestry  |   | 4. TYPE OF STUDY M/P |  |  |  |
| 5.                              |  |   | Forest Department Ministry of Cattle Raising Agricultu        |                      |  |  |  |
|                                 | COUNTERPART AGEN<br>TIME OF DEVELOPME  |   |   |                      |  |  |  |
|                                 | PRESENT COUNTERPA  | ART AGENCY  |   |                      |  |  |  |
| 6.                              | OBJECTIVES OF THE STUDY  | plantation.   | of a forest plan for tree ization of timber produced ntation. |                      |  |  |  |
| 7.                              | CONSULTANT(S)  | Japan Overseas  | Forestry Consultants Association                              |                      |  |  |  |
| 8.                              | STUDY PERIOD   | Jul.1986 ~  | Jun.1987 11month(s)   |                      |  |  |  |
| 10.<br>1)E<br>2)E<br>3)N<br>4)E | MAJOR PROPOSED PRESTABLISHMENT OF a master Measures for improvement Establishment of system to Enhancement of social and | es for wood utiliz<br>plan of reforesta<br>at of wood industr<br>to promote the ref | tion;<br>ries;<br>forestation; and                            |                      |  |  |  |
|                                 |  |   |   |                      |  |  |  |

CSA URY/A 101/87 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

Subsequent Studies:

"Five-Year Plan of National Reforestation"

 $1989-1990 \ \ Upon \ the \ request \ of \ the \ Government \ of \ Uruguay, \ the \ Japanese \ government \ conducted \ F/S \ based \ on \ this \ M/P.$ 

#### Finance

Based on the findings of this Study, the New Reforestation Act was enacted and most of the proposed project was implemented with the World Bank loan and Japanese fund in 1987.

Oct.9.1989 L/A 7,166 mil. yen (Comprehensive Regionnal Development Project)(FY 1994 Overseas Survey)

A JICA expert (tree breeding) was dispatched.

Project Type Technical Cooperation Mar.10.1993~Mar.10.1998

#### Effect:

(FY 1996 Overseas Survey)

Institutional development of Department Forestry in terms of technic and equipment.

The forest zone is growing significantly. Total area of 178,681 ha has been afforested during 1989~95.

New technologies for nursery and afforestation have been introduced.

The growth of forest sector contributed to increase investment and export and create employment.

(F/S)

|    |         |              |      |      |     |       | $(\mathbf{r}/\mathbf{S})$ |  | Compiled | Mar.1991 |
|----|---------|--------------|------|------|-----|-------|---------------------------|--|----------|----------|
| CS | A       | URY/S 301/89 |      |      |     |       |                           |  | Revised  | Jul.2009 |
| 1. | COUNTRY | Urugua       | у    |      |     |       |                           |  |          |          |
|    |         | D 1          | ( DI | Cd T | · · | 1 4 . |                           |  |          |          |

| ı.  | COUNTRY                               | Uruguay         |  |                              |  |  |
|-----|---------------------------------------|-----------------|--|------------------------------|--|--|
| 2.  | NAME OF STUDY                         | Development Pl  | lan of the International Airport of Carrasco                     |                              |  |  |
| 3.  | SECTOR                                | Transportation  | / Air Transportation & Airport                                   | 4. TYPE OF STUDY F/S         |  |  |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME | CY AT THE       | Direccion general de infraestructura aeronautica                 |                              |  |  |
|     | PRESENT COUNTERPA                     | ART AGENCY      |  |                              |  |  |
| 6.  | OBJECTIVES OF THE STUDY               |                 | Frunway, taxiways and apron.<br>rading of navigation facilities. |                              |  |  |
| 7.  | CONSULTANT(S)                         | Japan Airport C | onsultants, Inc.   |                              |  |  |
| 8.  | STUDY PERIOD                          | Apr.1989 ~      | Mar.1990 11month(s)  |                              |  |  |
| 9.  | SITE OR AREA                          | Uruguay: 176,0  | 00 sq.km, population 3.01 million. Montevideo(Capit              | al): population 1.36 million |  |  |
| 10. | MAJOR PROPOSED PR                     | OJECT(S)        |  |                              |  |  |
|     |                                       |                 |  |                              |  |  |

The study examined 3 alternatives of 1)Grade 1, 2)Grade 2, and 3)Grade 3. Major development components are as follows:

- 1)Improvement of main runway, taxiway and apron(rehabilitation of deteriorated portion by means of overly during unoperational night time hours);
- 2)Improvement of secondary runway(day-time pavement overly, Grades 1 and 2);
- 3)Extension of the secondary runway(to meet the take-off distance of the short haul aircraft (from 1,750m to 2,050m) Grade 1 only);
- 4)Renewal or upgrading of navigation facilities; and
- 5)Installation of terminal equipment such as metal detector, etc.

CSA URY/S 301/89 F/S

|                | Completed or In Progress      | Promoting                 |
|----------------|-------------------------------|---------------------------|
| PRESENT STATUS | Completed Partially Completed | Delayed or Suspended      |
|                | Implementing                  |                           |
|                | Processing                    | Discontinued or Cancelled |

#### Description:

#### Subsequent Studies:

Studies on expansion, remodernization, reinforcement and rehabilitation of runway were undertaken.

- 1) F/S on technic, economic, finance, environment
- 2) Basic study on navigation aid facilities
- 3) Final design
- 4) Preparation of international tender document for construction
- 5) Study on passenger terminal, cargo terminal, maintenance(on-going)

#### Finance:

Financial source will be procured during preparation of the study report.

#### Situation:

The project has been suspended after the completion of F/S. The country's GNP per capita rises to US\$2,620 in 1989, which prohibited official development assistance from DAC foreign governments such as Germany, Italy and France.

Project has been suspended since the completion of F/S in March 1990. The worst economic situation has virtually prevented the Government from seeking a new loan from the developed countries.

The following procurement works have been conducted in an extremely small scale:

- 1)There was no duty-free shops inside the terminal building, and the Government has acquired these shop facilities in January 1991 through competitive tendering method.
- 2)Direccion General de Infraestructura Aeronautica (DGIA) invited tenders for procurement of ground support equipment such as passenger and cargo handling equipment and airport support vehicles in February 1992.

#### (FY 1993 Overseas Survey)

The term of reference for the consultants has been made with the cooperation from UNDP and ICAO.

The government approved to allocate some of particular financing. Additionally, financial support from FONPLATA will be available.

It is very urgent to repair the access roads.

#### (FY 1994 Overseas Survey)

The work proposed by this F/S is consisted of 3 grades. Each of them was not implemented, however, F/S, detail design and preparation of tender documents, concerning with arrangement works of the main runway 06/24 for the year of 1994 (in 70% scale of grade 3), are ordered to a consultant. It is planned to commence the designing at the beginning of 1995 and the construction in January, 1996. But the financial resources are not disclosed.

#### (FY 1995 Domestic Survey)

For this project, it has been learnt that the Government is eagerly trying to materialize by means of invitation to the BOT tender and so on, however no news of success come out as yet. For the development of Punta del Este Airport, located at a tourist resort, Canadian cooperation has been dicided by the group which promoted the privatization of Tronto Airport. It is also by means of BOT process. Under the present situation that there are no official foreign financial aid including Yen Credit, it will be inevitable to try to find private financing.

#### (FY 1996 Domestic Survey)

According to the information obtained in June 1996, SEA Technical SpA, the management body of Milano Airport, would undertake the modernization and expansion project of the Carrasco Airport based on M/P formulated with the UNDP fund. The project cost is expected to be US\$ 62mil.(US\$ 35mil.for the modernization of technical infrastructure, US\$ 27mil.for the expansion of a runway, a taxiway and an apron and US\$ 4mil.for installation of the navigation aid facilities). This expansion will result in the 89% increase of air cargoes by 2000 and 11.3% increase of passengers to 1.26 mil. Because nothing has been heard about the adoption of BOT scheme, it seems that various reasons prevented the Government from promoting it.

#### (FY 1997 Domestic Survey)

Modernization and Expansion Project will be funded 60% by IDB and 40% by the government of Uruguay.

(F/S)

Compiled Mar.1992

**CSA** URY/A 301/90 Jul.2009 Revised 1. COUNTRY Uruguay National Reforestation Plan 2. NAME OF STUDY 3. SECTOR / Forestry & Forest Conservation 4. TYPE OF STUDY F/S Forestry 5. INIA COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY To make an implementation plan on national five-year plan of tree planting and to execute the F/S of the plan. **OBJECTIVES OF THE** STUDY Japan Overseas Forestry Consultants Association 7. CONSULTANT(S) Oct.1989 Mar.1991 17month(s) 8. STUDY PERIOD Afforestation promoting area at Paysandu and Tacuarembo Districts. 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) The study proposed the reforestation of some 100,000 ha during five years, by planting eucalypti, pines, poplars and willows. Annual planting targets are as follows. 1991 10,000 ha 1992 15,000 1993 20,000 25,000 1994 30,000 1995

国家造林5ケ年計画

CSA URY/A 301/90 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| DDECENT CTATIC | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

Finance:

World Bank loan

#### Detail:

The newly elected President doubled the target of the National Reforestation Plan from 100,000 to 200,000ha. To response the recent increase of the Eucalyptus export to Europe, the Government of Uruguay tries to find new financial resources, such as bilateral assistance or private investment, other than the present World Bank loan.

#### (FY 1993 Overseas Survey)

The reforested area during 1990 to 1992 was 18,000ha per annum in average and in 1993 it reached to 26,000ha. For the last four years the increase of the reforested area was remarkable. The capital investment for forestry has been considerably expanding and the export of high value added timber was started.

(FY 1994 Domestic Survey)

The Government expects the expansion of foreign investment under the above-mentioned situation.

(FY 1994 Overseas Survey)

Under the Five-Year Reforestation Plan covering 200,000ha, the reforestation project has been steadily promoted. The Government received the fund from the World Bank for the administration of this project.

(FY 1995 Domestic Survey)

The concerned authority has been trying to introduce more foreign fund to promote the project further. The implementation of F/S for the conservation of the natural forest is under consideration.

(FY 1998 Domestic Survey)

The total area of 120,000 ha was reforested during 1990 to 1994, according to year 1996 survey. Domestic companies have mainly conducted reforestation, while foreign company have also conducted reforestation (17,000 ha) in the afforestation promoting area.

(FY 1999 Overseas Survey)

The total of 373,376ha was reforested during 1989 and 1998. Most of the reforestation have been done by domestic companies and foreign companies (in the last two years).

#### Effect:

(FY 1998 Domestic Survey)

Supply timber has been increased. The project for examination of forest products is planned to be started in 1998 with Japanese assistance, for the purpose of promoting forest industry based on the increasing timber products.

\*Project-Type Technical Cooperation

"Project for Examination of Forest Products"

Nov.1996 preliminary Study Team dispatched

1998 Implementation consultation

**(F/S)** 

Compiled Mar.1994

| CS            | SA URY/S 3   | 02/92                            |                         |                  |                         |            |         |            | R          | Revised   | Jul.2009 |
|---------------|--|----------------------------------|-------------------------|------------------|-------------------------|------------|---------|------------|------------|-----------|----------|
| 1.            | COUNTRY  | Uruguay                          |                         |                  |                         |            |         |            |            |           |          |
| 2.            | NAME OF STUDY  | Development of                   | New Port Termin         | als at Montevi   | deo Port                |            |         |            |            |           |          |
|               |  |                                  |                         |                  |                         |            |         |            | I = /a     |           |          |
| 3.<br>5.      | SECTOR   | Transportation                   | / Po                    |                  | (AND)                   | 4.         | TYPE O  | F STUDY    | F/S        |           |          |
| 5.            | COUNTERPART AGEN<br>TIME OF DEVELOPME  |                                  | National Adminis        | stration of Port | s (ANP)                 |            |         |            |            |           |          |
|               | PRESENT COUNTERPA  | ART AGENCY                       |                         |                  |                         |            |         |            |            |           |          |
| 6.            | OBJECTIVES OF THE STUDY  | To prepare a F/S                 | S of the short-term     | development      | plan for main port faci | ilities ii | n Monte | video Port | for the ta | rget year | of 1998. |
| 7.            | CONSULTANT(S)  | The Overseas C<br>TETRA Co., Ltd | oastal Area Devel<br>d. | opment Institu   | te                      |            |         |            |            |           |          |
| 8.            | STUDY PERIOD   | Jan.1992 ~                       | Dec.1992                | 11month(s)       |                         |            |         |            |            |           |          |
|               | SITE OR AREA   |                                  | Montevideo              |                  |                         |            |         |            |            |           |          |
| - G<br>I<br>I | major proposed Propos | oposed project co                |                         |                  |                         |            |         |            |            |           |          |
| I             | Depth: 5m, 6m<br>Length: 415m  | (                                | F3                      |                  |                         |            |         |            |            |           |          |
|               |  |                                  |                         |                  |                         |            |         |            |            |           |          |
|               |  |                                  |                         |                  |                         |            |         |            |            |           |          |
|               |  |                                  |                         |                  |                         |            |         |            |            |           |          |

CSA URY/S 302/92 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| DDECENT CTATIC | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

Subsequent Studies:

M/P review study is scheduled to be carried out.

Financial source: World Bank and Japan Import and Export Bank

Contents of study: Formulation of development strategy including a revision of JICA project.

#### Finance:

BOT scheme and investment from public sector (plan)

#### Situation:

#### (FY 1993 Overseas Survey)

Foreign fishing terminal should be reconsidered based on the expected number of vessels in and out from the terminal.

For Grain terminal, it was suggested to be implemented through out the private investment or joint venture according to the new Port's Policy.

After a new Port's Law approval in 1992, the most of the authorities' energy was devoted to increase the port efficiency with the private sector participation and internal reorganization rather than to develop new infrastructure.

#### (FY 1994 Overseas Survey)

The Government of Uruguay wishes to develop a new port with a deep draft along the Atlantic Coast, and sounded the possibility to get the technical transfer of concerning technologies to the Government of Japan.

#### (FY 1996 Overseas Survey)

Fishery terminal project is more promising than Grain terminal project. Because in Argentine, improvement of transport facility is in progress.

#### (FY 1999 Overseas Survey)

It seems that the review study on M/P was conducted.

# STUDY SUMMARY SHEET (M/P)

 CSA
 URY/S 101/06
 Compiled Dec. 2007

 Revised
 Jul. 2009

| COUNTRY  | Uruguay  |   |  |  |  |
|--|--|---|--|--|--|
| NAME OF STUDY  | The Study on Capacity Developement for Water Quality Management in Montevideo and Metropolitan area  |   |  |  |  |
| SECTOR   | Social Infrastruc  |   |  |  |  |
|  |  | National Direction of Environment, Ministry of Housing, Land Planning and Environment   |  |  |  |
|  |  |   |  |  |  |
| PRESENT COUNTERPA  | ART AGENCY   |   |  |  |  |
| OBJECTIVES OF THE STUDY  | of strengthening<br>river in Montevi<br>to prevent from  | kground of deterioration in water environment, the necessity of conducting development survey in objective gradient gradient capacity was confirmed. The upper target is to improve the water quality of video metropolitan area and to improve the hygienic environment of the residents. Also, the upper target is a deterioration in water quality in future. The project target is to strengthen the water management capacity and relevant agencies in Montevideo metropolitan area. |  |  |  |
| CONSULTANT(S)  | CTI Engineering  | ng International Co., Ltd.  |  |  |  |
| STUDY PERIOD   | Sep.2003 ~   |   |  |  |  |
| dule No.1 : Strengthen the<br>dule No.2 : Strengthen the<br>dule No.3 : Strengthen the | ne capacity of strande management of the monitoring of the capacity of the cap | rategic part of pollution source f environmental water quality  |  |  |  |
|  | NAME OF STUDY  SECTOR  COUNTERPART AGENTIME OF DEVELOPME  PRESENT COUNTERPA  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD  MAJOR PROPOSED PR dule No.1: Strengthen the dule No.2: Strengthen the dule No.3: Strengthen the | NAME OF STUDY  SECTOR  Social Infrastru  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  Due to the back of strengthenin river in Montes to prevent from of DINAMA at CONSULTANT(S)  CTI Engineerin  CONSULTANT(S)  Sep.2003  The river basin of La Plata rive   |  |  |  |

CSA URY/S 101/06 M/P

| PRESENT STATUS | In Progress or In Use     |
|----------------|---------------------------|
|                | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY2007 Overseas Survey)

This project had been completed with the cooperation of CTI consultant mission at December, 2006. Several activities are continued afterward, and the each progresses are in different condition. DINAMA suggested to continue the activities, and therefore applied for new project that would be conducted in same region last year. DINAMA has been utilizing the experience and information gained by this project to national-wide activities.

(FY2007 Domestic Survey)

The water quality management capacity of Oriental Republic of Uruguay has been strengthened through the Survey. But in order to make it more effective of the Development Survey, it is necessary to conduct the Master Plan established for strengthening water quality management capacity, steadily. The Uruguay side has consciousness to conduct the Master Plan in independent-minded stance, but there is still necessity of external input, and there is a request for effective input of technical support by Japan. Specifically, technical support project about pollution source management is necessary. The objective of pollution source management is to strengthen the water quality management capacity of DINAMA and relevant agencies in Montevideo metropolitan area. The achievement is to strengthen the pollution source management capacity in Santa Lucia river basin, and to develop pollution source comprehensive GIS information system and water quality simulation model, as politic measure supporting tools.

Progress: RD mission has been dispatched.

(M/P)

Compiled Mar.1986

| CS         | SA VEN/S 101/S            |                  |                        |                         |                 |                        | Revised                 | Jul.2009  |
|------------|---------------------------|------------------|------------------------|-------------------------|-----------------|------------------------|-------------------------|-----------|
|            | COUNTRY                   |                  | public of Venezuel     | a                       |                 |                        |                         |           |
|            |                           |                  | o Handling Equipme     |                         |                 |                        |                         |           |
| 2.         | NAME OF STUDY             |                  |                        |                         |                 |                        |                         |           |
| 3.         | SECTOR                    | Transportation   | / Port                 |                         |                 | 4. TYPE OF STUI        | ov M/P                  |           |
| <i>5</i> . | SECTOR                    |                  | Institute Nacional d   | e Duertos (INID)        |                 | IIIE OF SIUI           | V = 171/1               |           |
| э.         |                           |                  | institute Nacional d   | e Puertos (INP)         |                 |                        |                         |           |
|            | COUNTERPART AGEN          | ICY AT THE       |                        |                         |                 |                        |                         |           |
|            | TIME OF DEVELOPME         |                  |                        |                         |                 |                        |                         |           |
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|            | PRESENT COUNTERPA         | ART ACENCY       |                        |                         |                 |                        |                         |           |
|            | TREBENT COUNTERED         | IKI MOLNET       |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
|            |                           | To 61            |                        |                         |                 |                        |                         |           |
|            |                           | Preparation of d | lesign criteria and sp | ecifications for major  | r mechanical (  | equipment.             |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
|            | OD TO COMPT TO OUT OF THE |                  |                        |                         |                 |                        |                         |           |
| 6.         | OBJECTIVES OF THE         |                  |                        |                         |                 |                        |                         |           |
|            | STUDY                     |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
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|            |                           |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
|            |                           | Japan Cargo Ha   | ndling Mechanization   | n Association           |                 |                        |                         |           |
| 7.         | CONSULTANT(S)             |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
| ^          | CONTRACT DELICATION       | Aug.1979 ~       | Jul.1980               | 11month(s)              |                 |                        |                         |           |
| 8.         | STUDY PERIOD              | ~                |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  | Puerto Cabello         |                         |                 |                        |                         |           |
|            |                           |                  | r derio Cabello        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
| 9.         | SITE OR AREA              |                  |                        |                         |                 |                        |                         |           |
|            | ~ ·                       |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
| 10.        | MAJOR PROPOSED PR         | ROJECT(S)        |                        |                         |                 |                        |                         |           |
|            | e project recommended th  |                  | loading and unloadir   | no systems at the train | ning facility f | or dockworkers incl    | uding one 5-ton derri   | ck cranes |
|            | 5-ton jib-cranes, a mock  |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  | iei boat to simulate t | ne actual cargo nandi   | ing operation   | i, a set of simulators | ioi tile derrick operat | 1011      |
| inc        | luding electrical equipme | ent.             |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
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|            |                           |                  |                        |                         |                 |                        |                         |           |
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|            |                           |                  |                        |                         |                 |                        |                         |           |
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|            |                           |                  |                        |                         |                 |                        |                         |           |
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|            |                           |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |
|            |                           |                  |                        |                         |                 |                        |                         |           |

**CSA VEN/S 101/80** M/P In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Reasons of Cancellation: The Project was cancelled as a result of the negotiations between the INP and the dockworkers union in that the improved cargo handling operations would cause unemployment. (FY1994 Overseas Survey) It already passes more than 15 years after completion of this M/P. The project had been cancelled as the organization in charge had been privatized and changed, and without any support of the locals.

(M/P+F/S)

Compiled Mar.1991

| L OUNTRY    Dollar   Characteristics   Characteristics   Control   Control | CS          |  |   | Revised      | Jul.2009               |
|--|-------------|--|---|--------------|------------------------|
| 3. SECTOR  Social Infrastructure / River & Erosion Control  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  Downstream Basin Flood Control and Upstream Sabo Projects of Chama River.  CTI Engineering Co., Ltd. Nippon Koei Co., Ltd. STUDY PERIOD  Nov.1988 ~ Feb.1990 15month(s)  Entire Chama River Basin (3,785 sq.m)  9. SITE OR AREA  IO. MAJOR PROPOSED PROJECT(s)  AMP> The study proposed at master plan of river and flood control by projecting future development and transportation demands in the basin area through the year 2020.  For wide area disaster prevention, the study recommended the construction of 10 units of Sabo dams, 110 units of torrent works, 1,400 units of hillsi works and also 53.4km in length of river improvement. For the local disaster prevention project, disaster prevention works at 100 of prone to danger locations and river improvement of 5.4km in length we recommended.   | 1.          | COUNTRY  | Bolivarian Republic of Venezuela  |              |                        |
| Ministerio del Ambiente y de los Recursos Naturales Renovables  COUNTERPART AGENCY  PRESENT COUNTERPART AGENCY  Downstream Basin Flood Control and Upstream Sabo Projects of Chama River.  CTI Engineering Co., Ltd. Nippon Koei Co., Ltd. Nippon Koei Co., Ltd. Nippon Koei Co., Ltd. Nippon Koei Co., Ltd. Nov. 1988 - Feb. 1990 15month(s)  Entire Chama River Basin (3,785 sq.m)  9. SITE OR AREA  IO. MAJOR PROPOSED PROJECT(S)  AMP> The study proposed a master plan of river and flood control by projecting future development and transportation demands in the basin area through the year 2020. For wide area disaster prevention, the study recommended the construction of 10 units of Sabo dams, 110 units of torrent works, 1,400 units of hillsi works and also 53.4km in length of river improvement. For the local disaster prevention project, disaster prevention works at 100 of prone to danger locations and river improvement of 5.4km in length we recommended.  -E/S>-Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.  | 2.          | NAME OF STUDY  | Chama River Basin Conservation Project  |              |                        |
| TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  Downstream Basin Flood Control and Upstream Sabo Projects of Chama River.  T. CONSULTANT(S)  CTI Engineering Co., Ltd. Nippon Koei Co., Ltd. Nippon Koei Co., Ltd.  STUDY PERIOD  Nov. 1988 — Feb. 1990 15month(s)  Entire Chama River Basin (3,785 sq.m)  Patter Chama River Basin (3,785 sq.m)  III. MAJOR PROPOSED PROJECT(S)  M/P> The study proposed a master plan of river and flood control by projecting future development and transportation demands in the basin area through the year 2020. For wide area disaster prevention, the study recommended the construction of 10 units of Sabo dams, 110 units of torrent works, 1,400 units of hills works and also 53.4km in length of river improvement. For the local disaster prevention project, disaster prevention works at 100 of prone to danger locations and river improvement of 5.4km in length werecommended.   First Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.  First Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.  First Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.  First Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.  First Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.  First Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.  First Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.  First Construction of 3 units Sabo dams, 18 units of torrent works, 34  | 3.          | SECTOR   |   | F/S          |                        |
| Downstream Basin Flood Control and Upstream Sabo Projects of Chama River.  CTI Engineering Co., Ltd. Nippon Koei Co., Ltd. Nippon Koei Co., Ltd.  Nov.1988 ~ Feb.1990 15month(s)  Entire Chama River Basin (3,785 sq.m)  SITE OR AREA  Io. MAJOR PROPOSED PROJECT(S)  A/P> The study proposed a master plan of river and flood control by projecting future development and transportation demands in the basin area through the year 2020. For wide area disaster prevention, the study recommended the construction of 10 units of Sabo dams, 110 units of torrent works, 1,400 units of hillsiworks and also 53.4km in length of river improvement. For the local disaster prevention project, disaster prevention works at 100 of prone to danger locations and river improvement of 5.4km in length we recommended.  F/S>Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.   | 5.          | II   |   |              |                        |
| 6. OBJECTIVES OF THE STUDY  7. CONSULTANT(S)  Nov.1988 ~ Feb.1990 15month(s)  Entire Chama River Basin (3,785 sq.m)  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S) <mp> The study proposed a master plan of river and flood control by projecting future development and transportation demands in the basin area through the year 2020. For wide area disaster prevention, the study recommended the construction of 10 units of Sabo dams, 110 units of torrent works, 1,400 units of hillsi works and also 53.4km in length of river improvement. For the local disaster prevention project, disaster prevention works at 100 of prone to danger locations and river improvement of 5.4km in length we recommended.  &lt;=/p&gt;  <td></td><td>PRESENT COUNTERPA</td><td>ART AGENCY</td><td></td><td></td></mp>  |             | PRESENT COUNTERPA  | ART AGENCY  |              |                        |
| 7. CONSULTANT(S)  CTI Engineering Co., Ltd. Nippon Koei Co., Ltd.  Nov.1988 ~ Feb.1990 15month(s)  Entire Chama River Basin (3,785 sq.m)  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S)  <  | 6.          | OBJECTIVES OF THE  | Downstream Basin Flood Control and Upstream Sabo Projects of Chama River.   |              |                        |
| Entire Chama River Basin (3,785 sq.m)  9. SITE OR AREA  10. MAJOR PROPOSED PROJECT(S) <m p=""> The study proposed a master plan of river and flood control by projecting future development and transportation demands in the basin area through the year 2020.  For wide area disaster prevention, the study recommended the construction of 10 units of Sabo dams, 110 units of torrent works, 1,400 units of hillsi works and also 53.4km in length of river improvement.  For the local disaster prevention project, disaster prevention works at 100 of prone to danger locations and river improvement of 5.4km in length were recommended.  <f s="">Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.</f></m>  | 7.          | CONSULTANT(S)  |   |              |                        |
| Entire Chama River Basin (3,785 sq.m)  10. MAJOR PROPOSED PROJECT(S) <m p=""> The study proposed a master plan of river and flood control by projecting future development and transportation demands in the basin area through the year 2020.  For wide area disaster prevention, the study recommended the construction of 10 units of Sabo dams, 110 units of torrent works, 1,400 units of hillsiworks and also 53.4km in length of river improvement.  For the local disaster prevention project, disaster prevention works at 100 of prone to danger locations and river improvement of 5.4km in length were recommended.  <f s="">Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.</f></m>  |             | CITATON DEDICO   | Nov.1988 ~ Feb.1990 15month(s)  |              |                        |
| <m p=""> The study proposed a master plan of river and flood control by projecting future development and transportation demands in the basin area through the year 2020. For wide area disaster prevention, the study recommended the construction of 10 units of Sabo dams, 110 units of torrent works, 1,400 units of hillsi works and also 53.4km in length of river improvement. For the local disaster prevention project, disaster prevention works at 100 of prone to danger locations and river improvement of 5.4km in length were recommended. <f s="">Construction of 3 units Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstream river improvement.</f></m>   |             |  | ~   |              |                        |
|  | three Forms | I/P> The study proposed ough the year 2020. or wide area disaster prevertes and also 53.4km in lear the local disaster preveronmended. | a master plan of river and flood control by projecting future development and transportation demands i ention, the study recommended the construction of 10 units of Sabo dams, 110 units of torrent works, 1 ength of river improvement.  Intion project, disaster prevention works at 100 of prone to danger locations and river improvement of 5 ts Sabo dams, 18 units of torrent works, 340 units of hillside works and 35.1 km in length of downstrea | ,400 units o | f hillside<br>gth were |

CSA VEN/S 201B/89 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

Subsequent Study:

(FY 1997 Overseas Survey)

1990~1998 D/D

Implementing Agency/ Ministry of Environment and Renewable Natural Resources

Finance:

(FY 1997 Overseas Survey)

Government budget (200 mil.B for FY 1998)

Construction:

(FY 1997 Overseas Survey)

1990~1998 Works for flood control, conservation of the river basin and sediment prevention have been implemented.

Remaining Projects:

(FY 1997 Overseas Survey)

Construction of Sabo dike (9 nos) and a marginal dike at El Vijia lower stream is remained due to the lack of funds.

Dispatch of an Expert:

A sabo expert was dispatched in June 1990.

Detail:

(FY 1991 Overseas Survey)

< M/P >

IDB Study (Proyecto de Manejo de Cuencas para Venezuela) was conducted.

<F/S>

Initially, this project was given high priority, however, it is not now.

There is no prospect for the fund procurement and this project is not integrated into the National Development Plan. Although there is a possibility for the project to be implemented, a date for the implementation is unknown.

(FY 1994 Overseas Survey)

The Government of Venezuela requested IDB for the financial assistance, however, it was not responded favorably. The Government plans to make a request again after drawing a more detail plan and determining the administrating agency. The Government desires to implement the JICA projects after the completion of the project financed by IDB.

(FY 1995 Domestic Survey)

This project was planned to be implemented with an IDB loan. However, it has been suspended due to the shortage of fund.

(FY 1996 Domestic Survey)

The worsening economic condition in Venezuela makes it very difficult to promote the big project. Also, the counterpart agency has been undertaking the administrative reform with the cooperation of the World Bank. Therefore, it seems difficult to implement the infrastructure project.

(FY 1997 Domestic Survey)

Implementation of large scale project is difficult owing to the deterioration of economic situation.

(FY 1998 Domestic Survey)

It seems difficult to implement the proposed project, considering the economic situation of Venezuela and restructuring of Ministry of Environment and Natural Resources.

(FY 1999 Domestic Survey)

No additional information.

(M/P)

Compiled Mar.1995

**CSA VEN/S 111/93** Revised Jul.2009 1. COUNTRY Bolivarian Republic of Venezuela Comprehensive Improvement of the Apure River Basin 2. NAME OF STUDY / River & Erosion Control 3. SECTOR Social Infrastructure TYPE OF STUDY M/P 5. Ministry of Environment and Natural Resources COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY To formulate the basic concepts and measures for the comprehensive improvement of the Apure River Basin for stabilization of river channels and the mitigation of flood damages. **OBJECTIVES OF THE** 6. STUDY Nippon Koei Co., Ltd. 7. CONSULTANT(S) NIKKEN Consultants, Inc. KOKUSAI KOGYO CO., LTD. Mar.1991 31month(s) Oct.1993 8. STUDY PERIOD The Apure river basin having catchment area of 111,800 sq.km, which is one of the largest tributaries of the Orinoco river. 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) (1) Channel Stabilization Plan 1) Channel Stabilization Measures for Navigation 2)Short-term plan aims to accomplish 8 months navigation from river mouth to San Fernando port and 7 months from San Fernand port to Santos Luzardo port. 3)Mid-term plan aims to accomplish 9 months navigation from river mouth to San Fernando port and 8 months from San Fernand port to Santos Luzardo port. 4)Total cost will be US\$128,793,000(EIRR=13.7%, B/C=1.46) (2) Flood Mitigation Plan 1. Several alternative plans such as dike, dam, retarding basin etc, were formulated and studied from engineering and environmental aspects. 2.Long-term plan aims to accomplish the entire flood management plan consisting of : 1)construction of dike on the right bank of Portuguesa river(187km long). 2)right bank of Guonare river(145km). 3)left bank of Apure river(155km). 3)Short-term plan for priority works in Long-term plan 4)Total cost is US\$93,848,000(EIRR=9.2%,B/C=1.15)

VENI/C 111/02

| CSA VEN/                    | 5 111/93                  | NI/P |
|-----------------------------|---------------------------|------|
|                             | In Progress or In Use     |      |
| PRESENT STATUS              | Delayed                   |      |
|                             | Discontinued or Cancelled |      |
| Description:                |                           |      |
| (1)Channel Stabilization Pl | lan                       |      |

Because the M/P for the navigation financed by IDB was not progressed as expected, this study was unable to utilize its results. Therefore, F/S for the navigation project

#### (2)Flood Mitigation Plan

should be implemented after the completion of the IDB-financed M/P.

The environmental issues have been widely discussed in Venezuela. Therefore, EIA shall be an integral part of F/S.

It is likely that the government of Venezuela will request the Japanese government for the implementation of F/S for the Channel Stabilization Plan and the Flood Mitigation Plan after the completion of IDB-financed M/P because it is interested in the Apure River Navigation Project.

#### (FY 1994 Overseas Survey)

Because M/P for Orinoco Apure Plan is scheduled to be completed in June 1995, the government of Venezuela believes the implementation of the projects proposed by this M/P should be suspended by then. The construction of the waterway, a part of the proposed projects, was implemented with the own fund.

(M/P+F/S)

Compiled Jul.1998 **CSA** VEN/S 217/97 Jul.2009 Revised

| 1.  | COUNTRY   | Bolivarian Republic of Venezuela   |                          |               |             |             |        |         |          |         |          |          |  |
|-----|---|--|--------------------------|---------------|-------------|-------------|--------|---------|----------|---------|----------|----------|--|
| 2.  | NAME OF STUDY                                       | Environmental Improvement Program of the Upper and Middle Stream of the Tuy River Basin  |                          |               |             |             |        |         |          |         |          |          |  |
| 3.  | SECTOR  | Administration   | / E                      | nvironmental  | Problems    |             | 4.     | TYPE OF | FSTUDY   | M/P-    | F/S      |          |  |
| 5.  | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |  | Ministry of En<br>Agency | vironment and | d Renewable | Natural Res | source | s (MARN | IR), Tuy | River I | Basin Ma | nagement |  |
|     | PRESENT COUNTERPART AGENCY                          |  |                          |               |             |             |        |         |          |         |          |          |  |
| 6.  | OBJECTIVES OF THE<br>STUDY                          | Conduct study on sources of water quality pollution etc. of basins in Tuy River which is a source of drinking water supply for metropolitan areas of Caracas, secure drinking water by improvement in water quality etc., make two-stage M/P of emergency measures and a medium-term plan for upper and middle river basins to improve river environment, and conduct F/S for a selected priority project. |                          |               |             |             |        |         | -        |         |          |          |  |
| 7.  | CONSULTANT(S)                                       | CTI Engineering Co., Ltd.  |                          |               |             |             |        |         |          |         |          |          |  |
| 8.  | STUDY PERIOD  | Jan.1996 ~   | Aug.1997                 | 19month(s)    |             |             |        |         |          |         |          |          |  |
| 9.  | SITE OR AREA  | Upper and midd   | lle Tuy River ba         | sin 1,900 km  | 12          |             |        |         |          |         |          |          |  |
| 10. | MAJOR PROPOSED PR                                   | OJECT(S)   |                          |               |             |             |        |         |          |         |          |          |  |

M/P

1. Short-term plan

Measure for drainage in factories, Sewage disposal plants in Ocumale del Tuy and Las Tejerias

2. Medium-term plan

Continuation of a short-term plan, Measure for non-structures

- 1. Plan for the construction of the Ocumale del Tuy sewage disposal plant
- 2. Plan for the construction of the Las Tejerias sewage disposal plant
- 3. Establishment of environmental funds

[Project Period Planned]

M/P:

1. 1998-2003 2. 2004-2010

F/S:

1. 1998-2003 2. 2000-2003 3. 1998-1999

CSA VEN/S 217/97 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 1998 Domestic Survey)

The study was conducted jointly by JICA and the World Bank.

We have explained a report to the World Bank and discussed about it together with the precondition of the implementation of a project with funds of the World Bank after the study finished

Recent policies of the World Bank for Venezuela put emphasis on restructuring such as improvement in structures etc. of the Ministry of Environment and Natural Resource, and there were some negative aspects in a new development project because of low implementation rates of pledged projects, But, there is a view that environmental projects should be promoted, and it is important to make the counterpart government recognize the importance of investment in environmental improvement. Follow-up is necessary since ,the Tuy River Basin Management Agency was broken down and a new agency was put under the Regional Division of MARNR after the study.

(FY 2001 Domestic Survey) Funding party: Canada Funding amount: Unknown

Content of a project financed: Cooperation for improving facilities for sewage in a part of local cities (Las Tejerias) along Tuy River

(FY 2002 Domestic Survey)

A part of measures (improvement in sewer facilities) proposed in the project is now taken with Canadian funds.

(FY 2007 Domestic Survey)

No information to be specifically mentioned.

(M/P+F/S)

Compiled May.2001 **CSA** VEN/S 203/00 Revised Jul.2009

| 1.     | COUNTRY                           | olivarian Republic of Venezuela  |
|--------|-----------------------------------|--|
| 2.     | NAME OF STUDY                     | he Study on Integrated River Improvement of the Orinoco River in the Republic of Venezuela   |
| 3.     | SECTOR                            | ocial Infrastructure / River & Erosion Control 4. TYPE OF STUDY M/P+F/S  |
| 5.     | COUNTERPART AGENTIME OF DEVELOPME |  |
|        | PRESENT COUNTERPA                 |  |
| 6.     | OBJECTIVES OF THE STUDY           | To formulate a Master Plan for integrated river improvement of the Orinoco River for vessel navigationTo conduct the easibility study on river improvement for the priority project identified in the Master PlanTo transfer technology to the bunterpart personnel.   |
| 7.     | CONSULTANT(S)                     | acific Consultants International asco International Inc.   |
| 8.     | STUDY PERIOD                      | ep.1998 ~ Oct.2000 25month(s)<br>~   |
| I<br>F |                                   | I/P: The area at the downstream ofin Ciudad Guayan City surrounded by Rio Grande and Manamo Channel in Orinoco celta (approx. 22,000km2).  /S: The area is in the reach of Guarguapo-Barrancas-Ya-Ya located at the apex of the Orinoco delta where sandbarks and lands are formed and channels are divided due to the deposit of sediment from upstream of the Orinoco River. |

### 10. MAJOR PROPOSED PROJECT(S)

M/P and F/S: (In the M/P, the comprehensive study on river improvement including dredging aspect was conducted, and in the following F/S, it is evaluated and confirmed for the works identified in the M/P by utilizing the semi-dimensional hydraulic analysis. As the result, it is concluded that the structual measures of river improvement is not feasible.)

(1) Structural Measures: It is technically feasible to minimize the periodic dredging requirement in the Rio Grande channel with the provision of structural measures according to the results of two dimensional hydraulic analysis. However, these structural measures are evaluated as economically and financially not viable due to the high construction cost.

Moreover, as a result of the closure of Tortola channel, potential adverse environmental effects on the social environment and ecosystem due to stagnation of water body, sediment deposition in both upstream and down stream of the dike, disturbances on the waterway transportation and fisheries industry of local people are also evaluated as significant.

Furthermore, as the Orinoco river is a huge river in terms of scale and discharge, unforeseen phenomena in long-term view such as river course changes and morphological variations due to the large-scale improvement measures could not be analyzed by presently available tools of hydraulic analysis and remained as unsolved problems. Therefore, it is risky to propose any structural measures without havieng considreably high benefit compared to the

Consequently, in all overall sense, structural measures to deepen the navigation channel in the Rio Grande are evaluated as not feasible.

- (2) Dredging Improvement Measures: The periodic maintenance dredging in the channel is evaluated as the only viable means to meet the navigation requirement from the overall viewpoints of technical, economic, financial and environmental aspects. In order to achieve efficient maintenance dredging and to ensure navigational safety, the following dredging improvements are recommended within the scope of work of this study.
- Provision of RTK/GPS with precision location recording system and drag head positioning system, to locate precisely high spots and shallow reaches required to be dredged in the navigation channel (the feasibility of navigation route recording system: EIRR 493%, FIRR 61%).
- Discharge of dredged material away from the channel by means of barge system introduced, to minimize return of disposed materials. As a result, the deterioration of water quality caused by the present method of agitation dredging would be reduced (the feasibility of berge and pusher boat: EIRR 53%, FIRR 18%).

CSA VEN/S 203/00 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY 2001 Domestic Survey)

In order to susutain the maintenance dredging continuously in the future and to ensure the safe, efficient and reliable waterway transportation system in the Orinoco river, it is recommended to carry out the following. In response to this recommendation, INC has requested to Japanese Government to provide JICA technical cooperation (fiscal year of 2000).

1. Comprehensive Dredging Study:

Implement an integrated dredging study including the executing methods, dredging system, dredging constituent etc., together with the following items.

- 1) Review of institutional structure for maintenance dredging (Administrative Measures).
- 2) Dredging system including dredging methods and techniques, dredge types etc. (Technical Measures).
- 2. Fluff Characteristics Analysis:

Execute and integrated study to examine the physical properties of fluff in order to determine the most appropriate method of dredging operation at the outer channel as there were no studies previously made on fluff properties in Boca Grande. Moreover, investigate the reaches where fluff is easily deposited and the period when fluff deposition is high, for proper planning of maintenance dredging.

3. Establishment of a committee to study the private consignment of maintenance dredging activities under the planning, management and supervision of INC. Establishment of cooperative framework for organizations which manage either waterway or port in an integrated manner, to deal with future transport cargo volume and vessel traffic volume as well as promoting development of Orinoco River basin.

(FY 2004 Domestic survey)

INC, actual implementing body for this project, showed interests to the proposed project and will continue its preparation for the request, says the source.

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

(M/P+F/S)

Compiled Jan.2006 **CSA VEN/S 201/04** Revised Jul.2009

| 1. | COUNTRY                         | Bolivarian Republic of Venezuela  |                            |    |                       |  |  |
|----|---------------------------------|---|----------------------------|----|-----------------------|--|--|
| 2. | NAME OF STUDY                   | The study on disaster prevention basic plan in the Caracas Metropolitan Major District  |                            |    |                       |  |  |
| 3. | SECTOR                          | Transportation  | / Meteorology & Seismology | 4. | TYPE OF STUDY M/P+F/S |  |  |
| 5. | COUNTERPART AGENO               | CY AT THE   | Caracas Capital District   |    |                       |  |  |
|    | PRESENT COUNTERPA               | RT AGENCY   |                            |    |                       |  |  |
| 6. |                                 | 1) To formulate a master plan for protection against disasters; earthquakes and mud sliding targeted in three cities: Libertador, Chacao, and Sucre which are all within Caracas capital ward. In addition, to implement a feasibility study of the priority project. 2) To transfer technology to counterparts through this project. |                            |    |                       |  |  |
| 7. | CONSULTANT(S)                   | Pacific Consulta  | nts International          |    |                       |  |  |
| 8. | STUDY PERIOD                    | Dec.2002 ~  | Mar.2005 27month(s)        |    |                       |  |  |
|    | SITE OR AREA  MAJOR PROPOSED PR | M/P and F/S: Libertador, Chacao, and Sucre of Caracas capital district  |                            |    |                       |  |  |

#### M/P:

- 1) Quake resistance building: To strengthen quake resistance of less quake-resistant buildings in the targeted areas
- 2) Quake Resistance Bridge: To strengthen quake resistance of less quake-resistant bridges in the targeted areas
- 3) Avalanche measures facility: To construct mudslide-control dam, channels, and other facilities
- 4) Resettlement: To relocate residents in the areas at high risk of mudslides
- 5) Warning and evacuation: To warn and evacuate residents in the areas at high risk of mudslides
- 6) Residents education: To provide residents with disaster prevention education, strengthen community associations, particularly those for disaster prevention.
- 7) Emergency command center 1: To construct command center for disaster prevention
- 8) Disaster prevention information center 1: To establish information system for disaster prevention
- 9) Emergency medical center 1: To establish emergency medical center for disasters

#### F/S:

- 1) Quake resistance building: To strengthen quake resistance of less quake-resistant buildings in the targeted areas
- 2) Warning and evacuation: To warn residents in the areas at high risk of mudslides

CSA VEN/S 201/04 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |
| Description :  |                          |                           |

#### **Description:**

(FY 2005 Domestic Survey)

Amoung the proposed projects in this study, soft components such as education for local people and forecast/warning system, are being implemented by the C/P. Hard components, such as reinforcement for earthquake-resistance and soil erosion protection dam are being prepared by the ministries of each jurisdiction.

(FY 2006 Domestic Study)

In the FY 2005 study, the migration of people who were advised to move out of the dangerous areas, which was suggested in the development study, is implemented partially with domestic finance.

(FY 2007 Domestic Survey)

It is unknown whether the project has been implemented.

(M/P+F/S)

Compiled Mar.1994

Jul.2009

Revised

1. COUNTRY Cook Islands Coastal Protection and Port Improvement NAME OF STUDY 3. SECTOR / (Development Plan in) General 4. TYPE OF STUDY M/P+F/S Development Plan Ministry of Planning and Economic Development COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY 1) To formulate a coastal protection along the coastline of Rarotonga Island. 2) To formulate a coastal protection for Avarua/Avatiu area including port improvement plan. **OBJECTIVES OF THE** Pacific Consultants International 7. CONSULTANT(S) The Overseas Coastal Area Development Institute Oct.1991 Aug.1992 10month(s) 8. STUDY PERIOD Coastline of Rarotonga Is. 13.5 km long, population 18,000, 9,000 live on the island. 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) < M/P >1) Coastlines to be protected are as follows: (US\$14,626,000) - Avarua/Avatiu town area - North-east of Matavera/Tupapa village and east end of the airport - West end of the airport - Pokuinu I.R. and north-west of Tokerau/Inava village - South-west of Aroa village - Akapuao and south-east of Tikioki village - Areite, Mukupure, Akoko and east of Avana 2) Plans for port improvement are as follows: (US\$17,421,000) - Extension of container stock yard - Extension of Avatiu east breakwater, widening of port entrance and ship turning basin and deepening of basin and wharf - Rehabilitation of the existing wharf - Providing facilities for fishery activities - Marina for pleasure boats - Protection facilities for small fishing boats during cyclones <F/S>Description of Short-term Plan for 1997 are as follows: (Coastal Protection) US\$5,458,000 Seawall constructions in front of Health Dept. and its adjacent coast, between Avatiu/Avarua town area including reclamation, along the airport's east coast, along the airport's west coast. (Port Improvement of Avatiu port area.) US\$9,974,000 - Extension and strengthening of east and west breakwaters, - Expansion of port area by way of dredging and reclamation, construction of fishing wharf

and related facilities, dredging, rehabilitaion of existing quay and construction

**OCE** 

COK/S 201B/92

OCE COK/S 201B/92 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

Subsequent Studies:

Sep.1993 Additional Study commenced because the removal of the breakwaters of Avarua Harbor changed the physical condition of the coast. Sep.1994 Report Submitted.

\*Results of the Additional Study

It suggests to implement the protection project covering the important facilities only, instead of the whole northern coast.

Detail:

(FY 1994 Domestic Survey)

It is unknown how the Government of the Cook Islands will implement the project.

(FY 1997 Domestic Survey)

There is no plan for implementation of the project so far.

(FY 1997 Overseas Survey)

A private consulting firm has constructed wave dissipating free flow breakwater named Coped Max as experiment.

After this, the government of Cook Islands has constructed above mentioned breakwater at the edge of the runway for the length of 100 m. The installation of the breakwater seems to be useful as the site had less damage from the hurricane compared to the site where there is no breakwater.

(M/P+F/S)

Compiled Sep.1995 **COK/S 202/94** OCE Revised Jul.2009

| 1. | COUNTRY  | Cook Islands  |                |               |        |    |           |        |         |   |
|----|--|---|----------------|---------------|--------|----|-----------|--------|---------|---|
| 2. | NAME OF STUDY  | Additional Study on Coastal Protection and Port Improvement   |                |               |        |    |           |        |         |   |
| 3. | SECTOR   | Transportation  | / ]            | Port          |        | 4. | TYPE OF S | TUDY M | I/P+F/S |   |
| 5. | COUNTERPART AGEN TIME OF DEVELOPME PRESENT COUNTERPA | CY AT THE<br>NT STUDY   | Ministry of Ec | onomical Plan | ning   |    |           |        |         |   |
|    |  |   |                |               |        |    |           |        |         | ļ |
| 6. | OBJECTIVES OF THE STUDY                              | To formulate a coastal protection plan and port improvement plan: 1)Review and revision of M/P, focusing on a protection from hurricane at the northern coast of Ralotonga Island; and 2)Review of a short-term protection plan elaborated by the government of Cook Islands. |                |               |        |    |           |        |         |   |
| 7. | CONSULTANT(S)  | Pacific Consulta<br>The Overseas C  |                |               | titute |    |           |        |         |   |
| 8. | STUDY PERIOD   | Sep.1993 ~  | Sep.1994       | 12month(s)    |        |    |           |        |         |   |
|    | SITE OR AREA  MAJOR PROPOSED PR                      | Coastline of Rarotonga Is. 13.5km long, population 18,000, 9,000live on the island.   |                |               |        |    |           |        |         |   |

#### <M/P>

- 1) Protection of important infrastructures, and domestic and international commercial properties from hurricanes.
- 2) Adoption of design wave for a centry probability.
- 3) Conservation of tourist beaches for future benefit and the tourist industry.
- 4) Preservation of natural coastal scenary and protection of deterioration of coastal environment.

- 1) Health Department Sea bank protection (600 m)
- 2) Beachcomber Off-shore bank (500 m), sea bank protection (500 m)
- 3) Banana Court Marina for pleasure boats
- 4) Westpac Bank Off-shore bank (800 m), sea bank protection (800 m)
- 5) TPP Fuel Depot Off-shore bank (1,400 m), sea bank protection (1,400 m)
- 6) Parliament Bldg. Sea bank protection(1,800 m)
- 7) Airport Runway Off-shore bank (600 m), sea bank protection(500 m)
- West break water (200 m), East break water (200 m) 8) Avatiu Port

OCE COK/S 202/94 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

\*Refer to "Coastal Protection and Port Improvement (M/P+F/S 1992)".

Results of the Additional Study:

It suggests implementing the protection project covering the important facilities only, instead of the whole northern coast.

Detail:

(FY 1994 Domestic Survey)

It is unknown how the Government of the Cook Islands will implement the project.

(FY 1997 Domestic Survey)

There is no plan for implementation of the project so far.

(FY 1997 Overseas Survey)

A private consulting firm has constructed wave dissipating free flow breakwater named Coped Max as an experiment.

After this, the government of Cook Islands has constructed above mentioned breakwater at the edge of the runway for the length of 100 m. The installation of the breakwater seems to be useful as the site had less damage from the hurricane compared to the site where there is no breakwater.

(Basic Study)

Compiled Mar.1990

| <u>U</u> | CE FJI/A 501/7                        | Revised Jul.200   |
|----------|---------------------------------------|---|
|          | NAME OF STUDY                         | Republic of the Fiji Islands Analytical Survey of Coconut Forests in Taveuni Island   |
| 3.       | SECTOR                                | Forestry / Forestry & Forest Conservation 4. TYPE OF STUDY Basic Study  |
| 5.       |                                       | DAFF Fijian Forest Department   |
|          | COUNTERPART AGEN<br>TIME OF DEVELOPME |   |
|          | PRESENT COUNTERP                      | ART AGENCY  |
|          |                                       | To improve coconut plam plantation utilization and to establish the inventory method of the plantation.   |
|          |                                       |   |
| 6.       | OBJECTIVES OF THE STUDY               |   |
|          |                                       |   |
| 7        | CONSULTANT(S)                         | Japan Forest Technical Association KOKUSAI KOGYO CO., LTD.  |
| ,·       | CONSCELLENT(B)                        | Asia Air Survey Co., Ltd.   |
| 8.       | STUDY PERIOD                          | Jul.1977 ~ Mar.1978 8month(s)   |
|          |                                       |   |
|          |                                       | An area of 100 sq.km in and around coconut stands in Taveuni Island   |
|          |                                       |   |
| 9.       | SITE OR AREA                          |   |
|          |                                       |   |
|          |                                       |   |
|          | MAJOR PROPOSED PR                     |   |
|          |                                       | g coconut stands, a forest survey was conducted and its results were analyzed. As a result, a survey manual for coconut<br>ning following components: 1) Survey by sample tree method to prepare a tree volume table; 2) Survey by sample tree  |
|          |                                       | nd volume table; and 3) Preparation of standard interpretation cards.   |
| Ut       | ilization plan of coconut             | palm plantation was formulated through grabbing the growing stock and the wood increment using the aeral photos.  |
|          | · · · · · · · · · · · · · · · · · · · |   |
| yea      | rs. Applying sustainable              | stimated as 750,000 cu.m. The felling plan and the extraction plan are prepared with the assumption of rotation age of 50 feeling system, some 20,000 cu.m of annually felled volume is estimated. By means of transportation, log yard should be g roads and harbours are enough for it. |
| То       | contribute to the planning            | g of such as utilization plan, "Manual for Forest Survey on Coconut Palm Plantation" was formulated.  |
|          |                                       |   |
|          |                                       |   |
|          |                                       |   |
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|          |                                       |   |
|          |                                       |   |
|          |                                       |   |

**OCE** FJI/A 501/78 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** The survey manual is used by the authorities concerned. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) The follow-up study is impossible due to the lack of the related materials.

(Basic Study)

Compiled Mar.1990 OCE F.II/A 502/82 Revised Jul.2009

| 1. | COUNTRY                 | Republic of the                           | e Fiji Islands        |                            |               |                        |                              |
|----|-------------------------|---|-----------------------|----------------------------|---------------|------------------------|------------------------------|
| 2. | NAME OF STUDY           | The Survey for Forest Development in Fiji |                       |                            |               |                        |                              |
| 3. | SECTOR                  | Forestry                                  | / Forestry            | & Forest Conservation      | 4.            | TYPE OF STUDY          | Basic Study                  |
| 5. | COUNTERPART AGENO       | CY AT THE                                 | Fijian Forest Departn |                            |               |                        |                              |
|    | PRESENT COUNTERPA       |   |                       |                            |               |                        |                              |
|    | OBJECTIVES OF THE STUDY | To establish the                          | measurement method    | of forest resources, and J | prepare the b | easic materials for fo | ormulation of working plans. |
| 7. | CONSULTANT(S)           | Japan Forest Tec                          | chnical Association   |                            |               |                        |                              |
| 8. | STUDY PERIOD            | Jul.1980 ~                                | Mar.1982              | 20month(s)                 |               |                        |                              |
|    | SITE OR AREA            |   | sq.km in Koroutari di | strict Nua Levu Island     |               |                        |                              |

The basic materials for the following issues were prepared based on the investigation on natural conditions, especially soil condition. The principles and methods were proposed.

- 1) Inventory method of wood resources.
- 2) Criteria on evaluation of forest productivity using the combination of two factors: species and site conditions.
- 3) Preparation of Forest Productivity Map on the basis of the said criteria.
- 4) Preparation of Suitable Species Map with the use of Forest Productivity Map.
- 5) As to the area in Koroutari District, based on the results of the analysis on pine plantations, it was recommended that the authorities concerned must establish a forest management plans.
- 6) As to the area in Nukurna District, based on the results of the analysis on broad-leaves forests and its productivity, it was recommended to conduct a productivity survey for re-afforestation project in broad-leaves forest near future using the reference materials and the study method in this study.

| OCE                               | FJI/A                         | 502/82   | Basic Study |
|-----------------------------------|-------------------------------|--|-------------|
|                                   |                               | In Progress or In Use  |             |
| PRESENT ST                        | <b>FATUS</b>                  | Delayed  |             |
|                                   |                               | Discontinued or Cancelled  |             |
| Description :                     |                               | 2000 militar di Californa  |             |
| As to Nukurna I                   | lantation in<br>District, the | Koroutari District, the stand density control diagram presented on this study has been utilized for forest planning. results of this study have been utilized for forest planning. It is has delayed due to a lack of basic data, personnel, and the fund. |             |
| FY 1997 Overse<br>The study was u | eas Survey)<br>utilized for   | privatization of the Fiji Pine Ltd. in 1991.   |             |
|                                   |                               |  |             |
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|                                   |                               |  |             |

(Basic Study)

|             |                                       |                                       | (Basic Study)   | Compiled                   | Mar.1990                 |
|-------------|---------------------------------------|---------------------------------------|---|----------------------------|--------------------------|
| 00          | CE FJI/A 503/8                        | 37                                    |   | Revised                    | Jul.2009                 |
| 1.          | COUNTRY                               | Republic of th                        | ne Fiji Islands   |                            |                          |
| 2           | NAME OF STUDY                         | Fisheries Resou                       | rrces Survey in Fiji and Tuvalu   |                            | -                        |
| ۷.          | NAME OF STODI                         |                                       |   |                            |                          |
| 3.<br>5.    | SECTOR                                | Fishery                               | / Fishery 4. TYPE OF STUDY Basic Bureau of Fishery, Ministry of Agriculture and Fishery, Fiji; Bureau of Fishery Min and Natural Resources, Tuvalu  |                            | nmerce                   |
|             | COUNTERPART AGEN<br>TIME OF DEVELOPMI |                                       | and reading resources, ruvaid   |                            |                          |
|             | PRESENT COUNTERPA                     | ART AGENCY                            |   |                            |                          |
| 6.          | OBJECTIVES OF THE STUDY               |                                       |   |                            |                          |
| 7.          | CONSULTANT(S)                         | Hohsui Corpora                        | ation   |                            |                          |
| 8.          | STUDY PERIOD                          | Jul.1983 ~                            | Jun.1986 35month(s)   |                            |                          |
| 9.          | SITE OR AREA                          | In the water bas                      | sin within 200nautical miles of Fiji and Tuvalu   |                            |                          |
| 10          | MA IOR PROPOSED PI                    | POIECT(S)                             |   |                            |                          |
| Bot<br>in t | he surrounding water. U               | d Tuvalu request<br>pon this request, | ed the development of fishing method to explore marine resources and development of Japanese Government conducted the development of fishing places of pelagic fish by urvey including development of demersal fish resources by bottom line. | of unutilized pole and lin | resources<br>ne fishing, |
|             |                                       |                                       |   |                            |                          |

**OCE** FJI/A 503/87 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Utilization of the Study: (FY 1995 Overseas Survey) The findings of the study have been utilized to prepare for the management guideline. And it is proposed to set up a resource management unit. Effect: Following the result of the study, Governments of Fiji and Tuvalu promoted the bottom line fishing method to fishermen who were taking the traditional fishing method, and gave them assistance. The use of this fishing method contributes to the development of fisheries in both countries, by enabling the exports of long tail bream to Hawaii and U.S. mainland.

(M/P+F/S)

Compiled

Jul.1996

**OCE** FJI/S 201/95 Revised Jul.2009 1. COUNTRY Republic of the Fiji Islands North Viti Levu Groundwater Development Project 2. NAME OF STUDY 3. SECTOR Social Infrastructure / Water Resources Development 4. TYPE OF STUDY M/P+F/S Bureau of Mineral resources COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY Elaboration of Ground Water Development Project for the purpose of service water supply and evaluating the existing ground water. OBJECTIVES OF THE STUDY Nippon Koei Co., Ltd. 7. CONSULTANT(S) Jun.1993 May.1995 23month(s) 8. STUDY PERIOD 9 villages in the northern part of Viti-Levu island 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Water Supply Project for 9 villages in the northern part of Viti-Lebu island was elaborated. Water supply for 3 villages as follows was proposed as preferred project. Village Serviced population (2011) Planned volumeof water (m3/day) note 1) Vutuni Creek 314 60 new 2) Vatuyaka 561 108 Extention of existing system 3) Rabulu 930 180 Extention of existing system

OCE FJI/S 201/95 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 1996 Overseas Survey)

(1)Vutuni Creek

No major progress has been made. Funding for the implementation seems to be the major problem at present as bulk of government resources has been directed at other areas.

(2)Vatuyaka

The scheme will involve connecting the borehole to the existing supply and extending the supply to include more consumers in the area. The project implementation will come after the completion of Vanua Levu project.

(3)Rabulu

The water source has been sold to a private company for the packaging of mineral water for export.

Situation:

(FY 1996 Overseas Survey)

Technical transfer was the major output from the project. The equipment and expertise learnt is being used at present for the groundwater development project, which is being implemented with funds from the French Government in Vanua Levu, the second of the two largest islands. Because the implementation of this project is considered urgent, it is given high priority, which is one of reasons for the delay of the proposed project. The Vanua Levu project will be undertaken for another year. A request to continue similar work elsewhere in Fiji was also submitted. Vanua Levu was identified as the next needy area. Southwest Viti Levu is also in similar category.

(FY 1997 Overseas Survey)

Many other areas also need similar studies.

(FY 1998 Domestic Survey)

Since Japanese grant aid assistance is not applied for Fiji, it is planned to implement the proposed projects with their own fund. It seems that other donors have not conducted subsequent studies.

Related projects:

(FY 1998 Domestic Survey)

This study is about water supply project for villages in the northern part of Viti-Lebu. M/P study on water supply in urban area is being conducted with their own fund.

Viti-Levu island Water Supply Project

(FY 1997 Overseas Survey)

Subsequent study:

1997~2000 M/P

\*Contents of the study

Review of JICA study, review of water demand / service and draw up M/P for whole region. JICA proposal was for selected smaller communities. The new project tries to address the whole region.

Implementing organization / Public Works Department

Consulting Company / Private Consultants

Finance:

Government budget (estimate) 1.5mil.

\*Contents

Upgrade regional water supply and extend supply

Construction:

1997~2000

Partly upgraded and extended by the end of 1997.

Related Project:

(FY 1997 Overseas Survey)

"Vanua Levu Groundwater development"

Finance: \$F 0.75mil. French Government

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

(FY 2005 Overseas Survey)

Vutuni and Vatuyaka bowling sites are not included in the village development plan, though they are included in the water pipe network plan. Although Rabulu site had a capacity enough to supply Rabulu city, all of the works has been shelved since the site has been acquired by Fiji Waters Limited.

(M/P+F/S)

Compiled Dec.1999

**OCE** FJI/S 215/98 Revised Jul.2009 1. COUNTRY Republic of the Fiji Islands Watershed Management and Flood Control for Four Major Viti Levu Rivers 2. NAME OF STUDY 3. SECTOR Social Infrastructure / River & Erosion Control 4. TYPE OF STUDY M/P+F/S Ministry of Agriculture, Fisheries and Forests COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. Ministry of Agriculture, Sugar and Land Resettlement PRESENT COUNTERPART AGENCY To formulate a M/P for the watershed management and flood control of Rewa, Sigatoka, Nadi and Ba rivers in Viti Levu Island aiming at the target year of 2015. OBJECTIVES OF THE STUDY Yachiyo Engineering Co., Ltd. 7. CONSULTANT(S) Aug.1996 Oct.1998 26month(s) 8. STUDY PERIOD <M/P> Viti Levu Island(Rewa, Sigatoka, Nadi and Ba watershed) <F/S> Nadi River 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) <M/P> Target year: 2015 Total area: 6,000km2 Total population: 210,000 1.Structural Measures: Dike(Rewa, Ba), Diversion and short cut(Nadi) 2. Non-structural Measures: Improvement of land use regulation Flood forecasting, alarming and evacuation Soil erosion control Afforestation Institutional Improvement <F/S>Nadi diversion channel and short cut channel

OCE FJI/S 215/98 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY 1999 Domestic Survey)

Fiji government has submitted the Implementation Program(I/P) to Japan in April, 1999. However, no reply has been made.

#### (FY 2002 Domestic Survey)

1. Constraints : policy change- project's priority within the development plan has been shifted

Ministry of Agriculture, Fisheries and Forests primarily focuses on drainage and agricultural development, being in charge of dredging work at the estuary region, became C/P of this project. Altogether, the Ministry has no experience of disaster prevention, and the proposed project by F/S was targeted for urban water control of Nadi city. Considering this, the Ministry seems to give lower priority.

2. The prospects: more than 5 years is needed for project implementation.

At the end of the Study, Ministry of National Planning, City of Nadi, and Fiji Tourism Association were enthusiastic about its implementation. However, situations changed afterwards. In May, 2000, armed gunmen seized the Parliament, blaming the political superiority for indigenous Fijians. The administration which took office by the General elections of 2001, is currently under deliberation against a sentence to the effect that the formation of a Cabinet is unconstitutional. Political chaos continues. Accordingly, it is necessary to postpone its implementation pending a more stable political situation.

#### (FY 2002 Overseas Survey)

Constraint: lowering priority, scale of the project

The higher priority of national budget had been on other development plans. It would take more than 5 years to implement the proposed projects.

#### (FY 2003 Domestic Survey)

When the development studies were completed, Ministry of National Planning, Nadi City, Fiji Travel Association were keen on implementation of the project. As a result of the general election held in May 1999, the prime minister of Indian decent took office for the first time in its history and the constitution was revised to permit representatives of Indian decent to occupy a half of the legislative seats and thus the political system turned to the advantage of Indian decent. Nadi City and Fiji Travel Association intended to positively promote the implementation of the project at the time when the bureaucratic organization settles in the new system after the general election. However, in May 2000, the congress was occupied by an armed group who advocates political precedence and the later established interim government was determined to be unconstitutional. Furthermore, the administration born by the general election in 2001 was also accused to be unconstitutional and the justice is on trial at the supreme court. Thus, the political system of Fiji is in a chaotic situation. Therefore, the implementation of the project needs stabilization of politics.

On the other hand, the Ministry of Agriculture, Fisheries and Forests of Republic of Fiji, who basically places its nucleus on irrigation and agricultural development, became the agency in charge of the project because it was the implementation agency of dredging at estuaries. Thus, because the ministry has no experience in disaster prevention projects and the project proposed in the feasibility study is an urban-type water control project for Nadi City, it is probable that the priority of the project in the Ministry of Agriculture, Fisheries and Forests of Republic of Fiji has been lowered.

#### (FY 2003 Overseas Survey)

Constraint: The priority in the government policy shifted to education and health care.

The project does not satisfy the needs because while the flood control policy has been mentioned in the study, the study lack proposal of measures against anti-drought measures, and thus it does not meet the country's needs.

#### (FY 2004 Overseas Survey)

It is difficult to realize the project as written due to flood and dry weather in the area. Though, study report has been helpful for other projects of the area.

#### (FY 2008 Overseas Survey)

Constraint: decline of priority, politics, economy and measures

The government has intention to continue integrated approach of water resource management in the priority area(Nadi river basin) of the project. "Integrated Water Resource Management in Nadi River Basin" has been conducted as relevant study.(Objective: To improve flood preparedness and integrate land and water management plans of Nadi River Basin using an Integrated Flood Risk Management Approach)

As more than 10 years have passed since the impact and survey of climate change, JICA is requested to review its survey results on flood control watershed management for four major rivers in Viti Levu.

(Basic Study)

Compiled Dec.1999

**OCE FJI/S 503/98** Revised Jul.2009 1. COUNTRY Republic of the Fiji Islands The Preparation of Nautical Charts in the Northern Lau Islands Region NAME OF STUDY 3. SECTOR Social Infrastructure / Survey & Mapping TYPE OF STUDY Basic Study 5. Hydrographic Office, Marine Department, Ministry of Infrastructure, Public Works and Transport, Republic of Fiji. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY Hydrographic Office, Marine Department, Ministry of Communication, Works and Energy, Republic of the Fiji Islands (since Aug. 1998). PRESENT COUNTERPART AGENCY 1) To prepare three Fiji nautical charts, Nos. F52, F53, and F54, each on the scale of 1/150,000, covering the Northern Lau Islands region; 2)To report thte recommendation for improvement of operation and management system of hydrographic surveying and nautical charting in Fiji; and 3)To carry out technology transfer through the implementation of the Study with a view to enabling the Fiji counterpart personnel to improve their technique in hydrographic surveying and nautical OBJECTIVES OF THE charting. STUDY Aero Asahi Corporation 7. CONSULTANT(S) Asia Air Survey Co., Ltd.

52month(s)

Suva city, and the sea and coastal areas in the Northern Lau Islands region.

#### 10. MAJOR PROPOSED PROJECT(S)

8. STUDY PERIOD

9. SITE OR AREA

Nov.1994

Recommendations for the improvement of operation and management system of hydrographic surveying and nautical charting in Fiji: (1)Organization and staffing of the Fiji Hydrographic Office: Recommendations were made to improve the organization and staffing of the Fiji Hydrographic Office for its more effective functioning, such as to increase one more senior hydrographer's post; to upgrade the levels of technical

- officers in the Cartographic Section to those equivalent in the Hydrographic Section, etc.

  (2)Improvement of executing work and services of the Fiji Hydrographic Office: Recommendations were made to prepare medium/long-term chart publication plans; to publish charts for short-term needs; to publish reference charts of the small harbors where survey results are available, etc.

  (3)Provision of equipment: Recommendations were made to provide the Fiji Hydrographic Office with modern survey equipment for more effective end precise hydrographic surveying and nautical charting, such as DGPS for navigation and large-scale survey, software and computer for survey data logging and processing, portable type narrow multi beam echo-sounder, co-ordinategraph and software for construction of nautical charts, etc.
- (4)Overseas training: Overseas training for technical officers of the Fiji Hydrographic Office were recommended.

Mar.1999

(5)Survey vessel: Replacement of the existing old survey vessel by a smaller and more affordable hydrographic survey vessel of 200-500 tons carrying a survey launch onboard was recommended, such a vessel being capable of supporting hydrographic survey activities of neighboring island states.

(6)Study on possibility of carrying out tidal current observation and tidal current prediction with a technical cooperation of a foreign government was recommended.

OCE FJI/S 503/98 Basic Study

| PRESENT STATUS | In Progress or In Use     |
|----------------|---------------------------|
|                | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 1999 Domestic Survey)

1.The Fiji Nautical Charts Nos. F52, F53, and F54 produced and their 200 printed copies each furnished to the Fiji Hydrographic Office as the results of this Project are providing the navigating vessels in the region with up-to-date hydrographic information thus to contributing their safer and more economical navigation. This situation is clearly proved by the fact from the amount of sale of these charts as follows (as of 28 Dec.1999):

Chart F52: sold since May 1996. 200 copies have been sold. Out of stock and additional 250 copies are being printed in Fiji.

Chart F53: sold since May 1997. 137 copies have been sold.

Chart F54: sold since May 1998. 67 copies have been sold.

2. Following the recommendations reported by the Project, the requests for provision of the following equipment have been submitted by the Fiji Hydrographic Office, which are currently under consideration by JICA: (1)Co-ordinategraph and associated software; (2)Portable type narrow multi beam echo-sounder.

3.As for the organization and staffing of the Fiji Hydrographic Office, improvement thereof have been partially executed in line with the recommendations concerned.

#### (FY 2001 Domestic Survey)

1. Provision of equipments

The Provision of co-ordinategraph and associated software and portable type narrow multi beam echo-sounder was determined. These equipments were budgeted for the fiscal year 2001 by JICA, however, it has not been mplemented yet because the resubmitted budget for the equipments was over the original budget.

2. Organization and staffing of the Fiji Hydrographic Office

One more senior hydrographer's post has been set up.

3. Situation of progress

Concerning the tidal current observation and forecast, a survey for collecting information and a project formation study were implemented in Dec. 2000 and Nov. 2001 by a grant from JTCA (Japan Transport Cooperation Association). The project is currently under consideration to be implemented as a technical assistance project. Based on the study results, the Fiji Hydrographic Office submitted a request for JICA experts dispatch in tidal current observation/forecast which is currently under consideration by the Japanese government.

4. Survey vessels

The Fiji Hydrographic Office is requesting the provision of survey vessels. They comments even used 20 ton vessel can be used for coastal hydrographical survey.

Survey equipments provided to the Fiji Hydrographic Office

The provided survey equipments in the study are working in good condition and utilized for hydrographic survey.

#### (FY 2002 Domestic Survey)

The Project of development of tidal observation/forecast, as follow-up cooperation of the project, will be required to accept as the wide-area project covering neighboring countries, therefore, the Govt. of Fiji appears to request for dispatch of experts and provision of equipment and facilities.

### (FY 2002 Overseas Survey)

After this study, no forther studies have been donducted. The hydrographic service in order to fullfill major proposed projects need assistance, but it has not been possible due to the political problems.

(Basic Study)

Compiled Mar.1990

| $\mathbf{O}$ | CE KIR/A 501/7                        |  |   |                  | Revised Jul.2009 |
|--------------|---------------------------------------|--|---|------------------|------------------|
|              | COUNTRY                               | Kiribati                                     |   | ·                |                  |
|              |                                       | Fishery Resources in t                       | the Gilbert Islands   |                  |                  |
| 2.           | NAME OF STUDY                         | •  |   |                  |                  |
| 3.<br>5.     | SECTOR                                | Fishery Burea                                | / Fishery<br>au of Marine Resources   | 4. TYPE OF STUDY | Basic Study      |
|              | COUNTERPART AGEN<br>TIME OF DEVELOPME |  |   |                  |                  |
|              | PRESENT COUNTERPA                     | RT AGENCY                                    |   |                  |                  |
| 6.           | OBJECTIVES OF THE STUDY               |  |   |                  |                  |
| 7.           | CONSULTANT(S)                         | Hohsui Corporation<br>Universal Fisheries In | c.  |                  |                  |
| 8.           | STUDY PERIOD                          | May.1978 ~ N                                 | Nov.1978 6month(s)  |                  |                  |
|              |                                       | ~  | re basin between Butaritari Island and Nonouti Is   |                  |                  |
| 10.<br>Tar   |                                       | slands was the base of                       | the study. Resource development study of Skip fry fishing by Stick-held disp net & round haul |                  |                  |
|              |                                       |  |   |                  |                  |

OCE KIR/A 501/78 Basic Study

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

#### Utilization of Outputs:

(FY 1997 Overseas Survey)

The results of the study had been utilized for elaboration of National Development Plan (1979~1982, 1983~1986, 1987~1990)

### Subsequent Studies:

Nov. - Dec. 1979 B/D

Oct.~Nov.1985 Fisheries Channel Survey Consulting Company / Nippon koei

#### Finance:

Based on the findings of the study, as for the Fisherly Resourcers Development around the Btaritari Island, fishing training boat (1982), fishing mother boat (1984), expansion of refrigerating facilities in Becio Port (1988) were provided and the exploitation of the unutilized fishery resources is being prepared.

(1)Fishing Training Boat

Mar.21.1980 E/N 500 mil.yen fishing training boat

May.28.1982 E/N 500 mil.yen fishing training boat

May. 3.1983 E/N 200 mil.yen fishing training boat

\*Contents of the project

Provision of 3 training boats.

(2)Fishing Mother Boat

Sep.26.1984 E/N 580 mil.yen fishing mother boat

(3)Fisheries Channel

Sep.30.1985 E/N 939 mil.yen channel development for fishing boats

Aug.26.1986 E/N189 mil.yen channel development for fishing boats

\*Contents of the project

Construction of the Betio-Bairiki causeway and fisheries channel

Construction: 1986~1987

#### (4) Extension of Refrigerating

Apr.27.1988 E/N 253 mil.yen expansion of refregerating facilities

(5)Afterward

Nov.11.1988 E/N 130 mil.yen training of fishermen

Apr.30.1990 E/N 90 mil.yen (Outer Island Aquaculture Development)

May.14.1991 E/N 145 mil.yen (Outer Island Artisanal Fisheries Development)

Apr.10.1995 E/N 224 mil.yen (Fisheries Resources Development II)

Jun.26.1995 E/N 209 mil.yen (Fisheries Resources Development III)

#### Effect

The Governments of both countries commenced to exploit the bonito resources using the fishing training boats provided by Japanese Grant Aid, and contribute to obtain the foreign currency by exporting the catches.

#### Situation:

(FY 1995 Overseas Survey)

As a result of the study a Pole and Line Fishing Company was established to exploit the wild bait fish resources.

#### (FY 1997 Overseas Survey)

Restoration work of vessels had been carried out in Jan~Mar.1996 financed by OECF. Three vessels provided are used not only for training but also for commercial fishing.

The fishing mother boat is currently used by the company TML for transshipment of fish for a foreign company.

The refrigerating facilities are used for storing fish. Evaluation of cold storage is necessary.

(M/P+F/S)

Compiled Aug.1995

**OCE** KIR/S 201/94 Revised Jul.2009 1. COUNTRY Kiribati Ports Development in Kiribati 2. NAME OF STUDY 3. SECTOR / Port TYPE OF STUDY M/P+F/S Transportation Ministry of Transportation, Communication and Tourism COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY Implementation of Feasibility Study to improve the conditions and capacity of the old Besio Port which had been left without any arrangement for a long period. OBJECTIVES OF THE STUDY TETRA Co., Ltd. 7. CONSULTANT(S) Mar.1994 May.1994 2month(s) 8. STUDY PERIOD Jul.1994 Mar.1995 8month(s) Port Besio, Tarawa Is., Kiribati 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) (2)Plan Within Short Period (1)Port Improvement Idea (up to 2005) (up to 2000) For Port Besio: For Port Besio: Dredging/settle nautical marks -ditto-6.0m wharf (extension 80m) -ditto-Repairment of 3.0m existing wharf -ditto-(extension 130m) Set a container yard with pavement Set a container yard Shed (2,300sq.m) Shed (800sq.m) Terminal for passengers (650sq.m) Terminal for passengers (560sq.m) Loading/dredging equipment For London Wharf: Maintenance works (3)Improvement Action Plan (Aug. 1997-July 2004) For Port Besio: Dredging/settle nautical marks - 6.0m wharf (extension 80m) Repairment of -3.0m existing wharf (extension 120m) Set a container yard (1,700sq.m) Shed (800sq.m) Administrative Office (350sq.m) Terminal for passengers (120q.m) Loading equipment

OCE KIR/S 201/94 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

F/S covers whole proposed projects of M/P.

Subsequent Studies:

Jul.1996~Mar.1997 B/D

1996 E/N 46 mil.yen (Project for Improvement of Betio Port)

Finace

May.1997 E/N 2,349 mil.yen \*Contents (Project was down sized) Wharf (extension 80m, depth 6m) Container Yard (17,000m2)

Anchorage

Access Road (630m)

Navigation Mark (Light buoy 8, Light beacon 1)

Rehabilitation of existing port Administration office (350m2) Cargo storehouse (800m2) Loading equipment (Mobil crane, Fork lift)

(FY 1998 Domestic Survey)

All proposed projects are to be implemented with the above Japan's grant aid.

Construction:

Nov.1997 started

Mar.2001 (National Debt A)

Contractor/Dainihon Doboku co., Ltd.

Term I 1997.6.11~1998.3.31 Term II 1998.4.1~1999.3.31 Term III 1999.4.1~2000.3.31 Term IV 2000.4.1~2001.3.31 (FY 1998 Domestic Survey)

53 % of the construction works had been completed by October 1998.

Japanese Technical Cooperation:

(FY 1998 Domestic Survey)

Acceptance of a trainee (training course on the container pier project).

Situation:

(FY 1997 Overseas Survey)

The issue of basic wage rate for unskilled laborers for the project is still negotiated between the contractor and Ministry of Labor, Employment and Cooperations. The Ministry of Information, Communication & Transport who is the parent Ministry for the project is actively involved in resolving the issue to complete the project successfully within the time span and budget.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled May.2001
OCE PLW/S 119/00
Revised Jul.2009

| $\sim$ |   | We visca Sui. 2002   |  |  |
|--------|---|--|--|--|
| 1.     | COUNTRY   | Palau  |  |  |
| 2.     | NAME OF STUDY   | Development Study for Promotion of Local Economy in the Republic of Palau    |  |  |
| 3.     | SECTOR  | Development Plan / Integrated Regional Development Plan 4. TYPE OF STUDY M/P |  |  |
| 5.     | COUNTERPART AGEN<br>TIME OF DEVELOPME   |  |  |  |
|        | PRESENT COUNTERPA   | ART AGENCY   |  |  |
| 6.     | OBJECTIVES OF THE STUDY   |  |  |  |
| 7.     | CONSULTANT(S)   | Pacific Consultants International SULTANT(S)                                 |  |  |
| 8.     | STUDY PERIOD  | Feb.2000 ~ Aug.2000 6month(s)  |  |  |
| 9.     | M/P: Allover the nation excluding Hatohobei and Sonsorol Islands. F/S: Tourism Development Plan: Peleliu Island |  |  |  |
| 10.    | MAJOR PROPOSED PR   | OJECT(S)   |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

M/P:

Agriculture: Improvement of Plant Nursery, Establishment of Hygiene Slaughterhouse, Emergency Treatment of Fruit Fly-Eradication and Strengthening of Quarantine Control.

Fishery: Small Fishing Boat Maintenance Training, Marine Product Processing in Palau.

Tourism: Ngarchelong Tourism Base Development, Kayangel Island Resort Development, Peleliu Tourism Promotion Zone Development.

Environmental Management: Integrated Watershed Management.

Social: Consolidation of Elementary Schools in Babeldaob Island.

Urban Management: Marine Center Development.

Road Transportation: Improvement of Connecting Road, National Road Rehabilitation.

Air Transportation: Extension of Runway at Palau International Airport.

Sea Transportation: Extension of Malakal Port. Wastewater: Sanitation Improvement Project.

Waste Management: Development of a New Final Disposal Site for Koror and Babeldaob. Telecommunication: PNCC Service Improvement Program, Radio Tower Marine Safety.

F/S: Pre F/S

Peleliu Tourism Development

solid Waste Managemant Program for Koror and Babeledadob.

OCE PLW/S 119/00 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 2001 Domestic Survey) New administration after the election in Oct. 2000 had decided to reduce 25% of governmental expenditure, and is implementing it. Japanese government has provided three large-economic scale of Palau.

(FY2001 Overseas Survey) The U.S. is to provide US\$ 412 million through the Compact of Free Association (COFA) but lasting by 2009.

(FY2003 Overseas Survey)

M/P:

1) Agriculture:

- 1-1. Projects in progress:
- (i) Improvement of seedling providing facilities: The Ministry of Agriculture has launched this project with the department in charge relocated to the Nekeen Farm region and is implementing it continuously. However, priority projects and fund allocation is being reviewed inside the government in light of the prospective decrease in revenues. The transfer of facilities to the Nekken Farm is expected to be completed in the middle of 2004. (ii) Extermination of fruit flies: Financing and other supports have been implemented from USDA and other US organizations for the sake of extermination measures against fruit flies and mealy bugs. In October of last year, experts were dispatched from USDA to provide training on extermination of mealy bugs. This project is expected to be continued until the extermination is completed. (iii) Strengthening of quarantine: The Palauan Congress (OEK) moved a bill to permit import of vegetables and fruits from Japan, Philippine and other countries with its quarantine system modified. At present, Palau permits import of vegetables and fruits from the United States and its territory. The bill is expected to pass at the beginning or in the middle of 2004.
- 1-2. Delayed projects
- (i)Construction of sanitary slaughter house: It is inevitable that the current economic situation and the prospective shortage of local budgets in future (difficulties in fund raising) will hinder the progress of the project. It is expected that this program will be implemented in FY2005 at earliest as a result of the review of expenditures and priorities in fund allocation by the government and among ministries. M/P correspondence: PNCC service improvement program, radio antenna improvement and maritime safety facilities. Present condition: delayed. Fund shortage resulted in the delay of the project. While PNNC intends to resume the aforementioned project, planned execution periods have not been determined at this point.
- 2) Tourism: Improvement of tourist bases in ARUKORON, Peleliu, Kayangel (delayed): Three tourist base improvement projects have been delayed due to the following reasons: 1) While the development needs vast expense, the financial resource of the government is insufficient. 2) The transportation and the access to those regions are extremely difficult. 3) ARUKORON remains developing with the "Compact Road" under construction. These regions are supposed to need the largest time for development in five to ten years from now on.
- 3)Land utilization: integrated basin management (delayed): Due to lack of revenue source, financing from donors is required. Under the current economic situation, securing of revenue source within 4-8 years from now on is difficult.
- 4) Sewage disposal: project for improving sanitary situation of local regions (in progress): A new sewage disposal system that purifies sewage by providing mechanical treatment will be constructed by use of aids from US organizations. The project is expected to be completed at the beginning of 2004.
- 5) Society: integration of elementary schools in Babeldaob Island (delayed): While Aimeliik and Ngatpang reorganized and integrated schools in FY2000, the construction of compact roads is retarding the integration of the schools. The integration is expected to be resumed after the construction of the compact roads is completed in 2006 2007
- 6)Improvement of roads and highways (in progress): Inspection teams from Japan visited the sites in August and October and implemented an assessment and various studies on the road condition.
- 7) Airport: extension of international airport runways (in progress): Although the runway extension project has not been incorporated into the development program of recent years, a loan from China will be borrowed to allocate the fund to pavement of the runways and the project for rehabilitation of the mains with the objective of improving the safety within the runway. A public tender for design proposals will be invited in October with the contract conclusion expected to be announced around the beginning of December 2003. The construction is expected to be implemented around the beginning of 2004.
- 8) Harbor: extension of Malakal Port: (1) The grant aid was requested to the Japanese government in 2002; (2) Awaiting a response from the Ministry of Foreign Affairs of Japan
- 9)Urban development: Marine Center Development Project: The application was rejected by the Japanese government (refer to "Embassy of Japan-Koror", Diplomatic Note No.116/03 dated July11, 2003). Predictable problems in maintenance and management on the side of Palau were indicated.
- 10) Fishery: (1) Construction of small-scale fish processing plants: Procurement of additional funds is difficult. The schedule is expected to be delayed for 3 5 years. (2) Training of repair technology of small fishing boats: Procurement of additional funds is difficult. Fund shortage is expected to result in delay for 4 5 years.

F/S:

- 1) Projects in progress
- (1) Solid waste disposal: construction of final disposal sites in Koror and Babeldaob: In November 2003, JICA's experts and a representative of Japanese Embassy visited a final disposal site in Aimeliik State. The project is waiting for the result of field analysis survey implemented by JICA and the Ministry of Foreign Affairs. (2) Tourism: Peleliu Island Tourism Development Project: Awaiting the result of the field analysis survey.

(FY 2004 Overseas Survey)

- 1. F/S for Palau market: 1) Content: Research and review on consumer demands for sustainability of the target area. 2) Periodd: July 2004
- 2. New Palau National Museum: 1) Funding request: Grant Aid (China) October 2001 Amount: 2.6 million USD. 2) Content: Improvement of entrance road and parking, design and construction of new Palau National Museum including other improvements.
- 3. Airport-Ngerikiil Connecting Road (improvement of connecting road including missing link) 1) Funding request: Grant Aid (China) Amount: 2.6 million USD. 2) Contents: Design and construction of all weather bidirectional one side two lane road with the same design standard and quality of compact road including paving, hill excavation, dam construction, pavement display, road sign, irrigation of crossing and sidewalks, guardrail construction along steep hill, and others.
- 4. Palau International Airport Navigational Aid Facilities and Runway Pavement Improvement (Ocerlay of Runway at Palau International Airport) 1) Funding request: ICBC June 2004 Amount June 2004. 2) Content: Project to improve existing runway by paving appropriate amount of asphalt on the surface of runway and conducting F/S for the feasibility of introducing airport navigational aid facilities to improve safety of the aircraft.

(FY 2005 Domestic Survey)(FY 2005 Overseas Survey)

No information to be specifically mentioned.

(F/S)

Compiled Mar.1990 OCE PNG/A 301/77 Revised Jul.2009 1. COUNTRY Papua New Guinea Fishing Base Construction Project 2. NAME OF STUDY 3. SECTOR Fishery / Fishery 4. TYPE OF STUDY F/S 5. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY OBJECTIVES OF THE STUDY 7. CONSULTANT(S) Dec.1976 Nov.1976 1month 8. STUDY PERIOD Rabaul, Kavieng 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) Following the idea that Bonito pole and line fishing method is to be transferred to fishing based on fishing base, a fishing base will be established.

漁業基地建設計画

OCE PNG/A 301/77 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |
|                |                          |                           |

Description:

A follow-up study was conducted in Apr. 1977.

(FY1995 Domestic Survey)

No information available since the name of consultant in charge has been lost.

(F/S)

Compiled Mar.1991 **OCE** PNG/S 301/89 Revised Jul.2009

| 1.  | COUNTRY                               | Papua New Guinea   |  |  |
|-----|---------------------------------------|--|--|--|
| 2.  | NAME OF STUDY                         | Rural Telecommunication Development Plan in Papua New Guinea   |  |  |
| 3.  | SECTOR                                | Communications & Broadcasti / Telecommunication 4. TYPE OF STUDY F/S   |  |  |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME |  |  |  |
|     | PRESENT COUNTERPA                     | T AGENCY   |  |  |
| 6.  | OBJECTIVES OF THE STUDY               | 1)Nationwide Rural Telecommunication Development Plan by year of 1997. 2)Initial Plan to selected areas which have priority. |  |  |
| 7.  | CONSULTANT(S)                         | NTT International Corporation  |  |  |
| 8.  | STUDY PERIOD                          | Mar.1989 ~ Nov.1989 8month(s) ~  |  |  |
| 9.  | SITE OR AREA                          | Rural areas (population 2.6million)  |  |  |
| 10. | MAJOR PROPOSED PR                     | JECT(S)  |  |  |
| г 1 |                                       | 4 1 2 6 11 2 71 4 7771   |  |  |

Following criteria are given to the selection of objective villages: 1)Villages with population more than 500, 2)Villages with government organization or private industries.

Rural telecommunications development plan was prepared for 374 villages to where the radio telecommunications systems are applicable. The outline of the plan is as follows:

- 1) 738 telephone sets including pay phones will be installed in 374 villages.
- 2) The entire project will be divided into five phases through 1997 by giving attention to the schedule of finance and construction as well as to the establishment of a smooth operating system.
- 3) 75 telephone sets will be installed in 40 villages of 3 provinces during the first phase.

OCE PNG/S 301/89 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

Reasons for delay or stoppage:

The project is considered as lower priority than the others (schools and hospital) by the Japanese Ministry of Foreign Affairs.

The project is unlikely to be implemented in the foreseeable future.

#### (FY 1995 Overseas Survey)

Because the development plans on communications network was changed and this project is considered not to be suitable for the PNG environment, it is unlikely that this project will be implemented.

#### (FY 1996 Overseas Survey)

It is unlikey that this project will be implemented.

#### (FY 1997 Overseas Survey)

It is unlikey that this project will be implemented.

#### (FY 1998 Domestic Survey)

It is unlikely that the request will be submitted for the time being. However, since the situation that there are no telecommunication facilities has not been improved, this project is not cancelled.

#### (FY 1999 Overseas Survey)

Technological innovation in telecommunication in 1990's has mede the ten-year old project concept obsolete and irrelevant. Therefore, the project is virtually cancelled.

|     |                         |                    | (D/D)                                  |                                   | Compiled Mar.1991 |
|-----|-------------------------|--------------------|--|-----------------------------------|-------------------|
| 0   | CE PNG/S 4              | 01/89              |  |                                   | Revised Jul.2009  |
| 1.  | COUNTRY                 | Papua New Gu       | nea                                    | N/11                              |                   |
| 2.  | NAME OF STUDY           | Detailed Design    | n on Road Construction Project in Bere | na-Malalaua                       |                   |
| 3.  | SECTOR                  | Transportation     | / Road                                 | 4. TYPE OF STUD                   | y D/D             |
| 5.  | SECTOR                  | Transportation     | OIDA(DOFP) DOW                         | iii THE OF STOP                   | 1   D/D           |
|     |                         |                    |  |                                   |                   |
|     | COUNTERPART AGEN        |                    |  |                                   |                   |
|     | TIME OF DEVELOPME       | ENI SIUDY          |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
|     | PRESENT COUNTERPA       | ART AGENCY         |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
|     | <u> </u>                | Road Construct     | ion.                                   |                                   |                   |
|     |                         |                    |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
|     | OBJECTIVES OF THE       |                    |  |                                   |                   |
| 6.  | STUDY                   |                    |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
|     |                         | Nippon Koei C      | o., Ltd.                               |                                   |                   |
| 7.  | CONSULTANT(S)           |                    | ineers International                   |                                   |                   |
|     |                         | Pasco Internation  |  |                                   |                   |
| 8.  | STUDY PERIOD            | Oct.1987 ~         | Feb.1990 28month(s)                    |                                   |                   |
|     |                         |                    | way between Bareina in Central Provin  | ce and Malalaua in Gulf Province  |                   |
|     |                         | ookiii iolig iligi | way between Barenia in Central 110vii  | ce and Maiaiada in Gail 110 vince |                   |
|     |                         |                    |  |                                   |                   |
| Q   | SITE OR AREA            |                    |  |                                   |                   |
| ٠.  | SHE OR AREA             |                    |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
| 10. | MAJOR PROPOSED PR       | ROJECT(S)          |  |                                   |                   |
|     | km is broken down into  |                    | J                                      |                                   |                   |
|     | tI: 33.5km: Excavation  |                    | olume 1,570,000cu.m                    |                                   |                   |
|     | Bridges 3               |                    |  |                                   |                   |
| Lo  | tII: 47.1km: Excavation |                    | rolume 12,000,000cu.m                  |                                   |                   |
|     |                         | 70,000cu.m         |  |                                   |                   |
|     | Bridges 6               |                    |  |                                   |                   |
|     |                         |                    |  |                                   |                   |
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| 1   |                         |                    |  |                                   |                   |

横断道路建設計画(ベレイナ・マララウア間)

OCE PNG/S 401/89 D/D

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

The government is keen to develop the Transport Infrastructure as a means of Economic and Social Development.

An Australian consulting company conducted technical survey and B/D on crossing road construction between Bereina ~ Mararaua, from Dec.1980 to Sep.1982. As a consequence of the studies above mentioned PNG Government had requested a D/D study to Japanese Government, and this study was carried out.

#### Proposed Projects:

Bereina-Malalaua Construction of 81km-long road and nine bridges

#### Subsequent Study:

Feb.1990 D/D (JICA)

Aug.1994 The contract for E/S was signed.

(Consulting firm: Nippon Koei Co.,Ltd)

#### Finance:

19 Mar. 1991 L/A  $\,$  4,691 mil. Yen (Trans-island Highway Project (I))

19 Mar. 1991 L/A 5,461 mil. Yen (Trans-island Highway Project (II))

\*Contents:Bereina-Malalaua(1)road construction (81km)

(2)bridge construction (9 bridges)

(3)consulting service

Construction Trader: COVEC (China)

Consultant: Nippon Koei

Construction:

Dec.1994 Scheduled to start bidding

May.1995 Commenced (scheduled to be completed in May, 2000).

(FY 1999 Overseas Survey)

Lot 1 of the highway was completed in 1999. It gives the region socio-economic benefits.

Construction of the Lot 2 is on schedule.

(FY 2000 Domestic Survey)

Lot 2 of the highway was completed in May 2000.

#### Impact:

(FY 2000 Domestic Survey)

Due to the completion of the highway, it is expected to ensure the stability of the transportation service between the Capital city, Port Moresby and the western seaside area. The completed highway is the part of the traverse road of PNG, furthermore, in case of extending this highway to the north, the comprehensive road network troughout the mainland of PNG will be completed.

### Maintenance & Operation:

(FY 1996 Domestic Survey)

DOW is to be in charge of M&O.

#### Description:

(FY 1996 Overseas Survey)

Awaiting further studies to connect from Malalaua to Lea. The connecting Link will enable a comprehensive road network throughout the mainland of Papua New Guinea. Feasibility studies and design funds are sought.

(FY 2000 Domestic Servey)

PNG government expects JICA to conduct Feasibility Studies of the comprehensive road network throughout the mainland of PNG.

**(F/S)** 

Compiled Mar.1993

| 0   | CE PNG/S 3  |  |   | Revised Jul.200  |
|---|---|--|---|--|
| 1.  | COUNTRY   | Papua New Gui  |   |  |
| 2.  | NAME OF STUDY   | Tokua Airport I  | Development Project                                 |  |
| 3.  | SECTOR  | Transportation   | / Air Transportation & Airport                      | 4. TYPE OF STUDY F/S                                     |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME   |  | Department of Civil Aviation (D.C.A.)               |  |
|   | PRESENT COUNTERP  | ART AGENCY   |   |  |
| 6.  | OBJECTIVES OF THE STUDY   | To develop Tok   | ua Airport as the substitute of existing Rabaul Air | port in order to avoid the danger of volcanic eruptions. |
| 7.  | CONSULTANT(S)   | Nippon Koei Co<br>Pasco Internation  |   |  |
| 8.  | STUDY PERIOD  | Feb.1991 ~   | Mar.1992 13month(s)                                 |  |
| R<br>R<br>R<br>A<br>Pa<br>C<br>C<br>A<br>Fr | MAJOR PROPOSED PR kua Airport Development jor contents are as follow unway unway Strip pron assenger Terminal Buildin argo Terminal Building ontrol Tower dministration Building alel Farm arking Lot peration Equipment tilities | 2,200m x 45m<br>2,320m x 150m<br>205m x 140m<br>ng 5,000m2<br>635m2<br>778m2<br>4,000m2<br>5,200m2<br>VOR/DME, |   | Rabaul Airport due to the danger of volcanic eruptions.  |
|   |   |  |   |  |

OCE PNG/S 302/91 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

Subsequent Studies: Aug.~Nov.1995 B/D

Jan.1996 E/N 60 mil.yen (Upgrading of New Rabaul Airport D/D)

Feb.~Sep.1996 D/D

Finance:

1996 E/N 2,537 mil.yen (Upgrading of New Rabaul Airport) (due to the volcanic eruption that devastated Rabaul in 1994)

Construction:

Nov.15 1996~Mar.15 1998

Construction Trader:Fujita Kogyo Consultant:Nippon Koei

Components

Runway extension and upgrading to cater for F28 jetliner.

(FY 1997 Domestic Survey)

A runway started its operation in Sep.1997. 4 flights of F28-4000 have entered service. There is no schedule for further rehabilitation so far.

(FY 1999 Overseas Survey)

The airport started in full operation in March 1998.

#### Effects/Impacts:

(FY 1999 Overseas Survey)

New Rabaul (Tokua) Airport substitutes the function of old Rabaul Airport which was abandoned in 1994 due to volcanic eruption disaster. The project is significantly contributing to rehabilitation and revitalization process of Rabaul Region.

#### Remaining Projects:

(FY 1997 Overseas Survey)

Phase 2 (design for airbus standard), Phase 3 (international B747 standard) have not been realized because of the lack of direction from Dept. of National Planning & Implementation. Government policy direction is required. Revision and update of M/P is necessary also.

#### (FY 1998 Domestic Survey)

F/S initially includes the construction of a substitute airport for the purpose of avoiding the risk of damage by volcanic eruption. However, Rabaul Airport was damaged by the volcanic eruption occurred in Sep. 1994. Therefore, New Rabaul (Tokua) Airport Development Project had been implemented with a grant aid assistance from Japan from Aug. 1995 to March 1998.

Old town of Rabaul is still buried in the volcanic ashes and the state government (East New Britain) seems to give up rehabilitating this old town of Rabaul. Since it takes further time to rehabilitate this area although the transfer of the airport has completed, it is not necessary for the time being to develop the airport for international use.

(M/P+F/S)

Compiled Mar.1995 **OCE** PNG/S 217/93 Revised Jul.2009 1. COUNTRY Papua New Guinea Port Moresby Water Supply Development Plan 2. NAME OF STUDY 3. SECTOR Public Utilities / Water Supply 4. TYPE OF STUDY M/P+F/S National Capital District Commission (NCDC) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY Formulation of M/P and F/S on the water supply system, and further basic study on the immediate remedial measures. 6. OBJECTIVES OF THE STUDY Tokyo Engineering Consultants Co., Ltd. 7. CONSULTANT(S) Pacific Consultants International Aug.1992 Mar.1994 19month(s) 8. STUDY PERIOD National Capital District (Port Moresby) 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) 1)M/P 1.1 Intake weir and mouth 1.2 Raw water main 1.3 Pumping station 1.4 Expansion of Mt.Eriama plant 1.5 New 9-mile plant 1.6 Three service reservoirs 1.7 Transmission and distribution pipes 2)F/S 2.1 Same as 1.1 2.2 Same as 1.2 2.3 Same as 1.3 2.4 Same as 1.4 2.5 Part of 1.5 2.6 One service reservoir 2.7 Part of 1.7 3)B/D Transmission Pipe(1100mm X2.59km, 600mm X 7.19km)

OCE PNG/S 217/93 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

(1)Emergency Pipeline Subsequent Studies: May.1994~Oct.1994 D/D

Finance:

Oct.1994 E/N 1,544 mil.yen

(Port Moresby Water Supply Development Project)

Construction:

Dec.1994 Contract with construction trader signed

(Dai Nippon Construction)

Mar.1996 Completed and turned over to the City Government

Operation and Maintenance:

The facility is well maintained.

Effect:

Water supply for coastal area has increased.

(2)Bomana Pump Station

Subsequent Studies:

Nov.1996-Feb.1997

Finance:

Feb.2.1996 E/N 1,000 mil.yen (non-project type)

Construction:

Consultant JICS

(FY 1999 Overseas Survey)

Completed in 1998.

#### (3)Water Pipeline System

A part of the project proposed by F/S will be implemented with the BOT scheme and NCDC examines the proposals.

Jul.1995 BOT contract signed (JC KRTA Consulting Group (Malaysia))

Project Cost:159mil.K (Foreign Currency 145 mil.K, Local Currency 14 mil.K)

1996 Construction scheduled to be commenced

#### (4)Mt.Eriama plant and Ninemile plant

(FY 1997 Domestic Survey)

Finance: BOT

Construction: 1997 started Difference with JICA's proposal:

In JICA's plan, both plants were planed as distribution reservoirs for highland and lowland, but the altered plan has no definition of highland or lowland and expansion of Mt. Eriama only is scheduled.

(FY 1999 Overseas Survey)

BOT is under consideration for Mt. Eriama.

#### Situation:

(FY 1995 Overseas Survey)

The proposal presented by JC KRTA was considerably different from the JICA plan. However, in general, it takes long that the request for the soft loan is approved, therefore, this proposal was accepted considering the urgency of the project.

#### \*OECE Loon

NCDC is examining the possibility to implement with an OECF loan a part of the project proposed by F/S.

#### Situation of Privatization:

EDA RANU, which was privatized from Dep. of Water Supply, NCDC in Nov.1996, is responsible for development, maintenance, and operation of water supply and sewage in Metropolitan Area. EDA RANU was commissioned to operate the water treatment plants and to collect water charges for 30 years.

(M/P+F/S)

Compiled Dec.1999

**OCE** PNG/S 216/98 Revised Jul.2009 1. COUNTRY Papua New Guinea Sewerage System of Port Moresby NAME OF STUDY 3. SECTOR 4. TYPE OF STUDY M/P+F/S Public Utilities / Sewerage National Capital Water & Sewerage Pty Ltd. (EDA RANU). COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. National Capital District Water & Sewerage Ltd. (EDA RANU) PRESENT COUNTERPART AGENCY 1)To formulate a M/P for the target year 2015 for improving wastewater management and upgrading the sanitary and environmental conditions of Port Moresby with the view of reviewing existing plans. 2)To conduct a F/S on priority project(s) selected from M/P. 3)To transfer technology to the C/P. OBJECTIVES OF THE STUDY Tokyo Engineering Consultants Co., Ltd. Nippon Jogesuido Sekkei Co., Ltd. 7. CONSULTANT(S) Mar.1997 May.1998 14month(s) 8. STUDY PERIOD <M/P> The study area (coastal and inland areas) is 15,000ha based on the land use plan in 2015. <F/S> The study area is 5,600ha given priority mainly due to the degradation of the water quality along the coast. 9. SITE OR AREA

### 10. MAJOR PROPOSED PROJECT(S)

<M/P> (Phase 1~4 below)

The study area is geographically divided into two catchment areas, viz., coastal and inland. The inland sewerage system of the 3 existing zones has to be upgraded and improved to meet the increased wastewater volume. The existing smaller catchments along the coastal areas will be incorporated into two zones. The collected sewage from the two zones will pass through a primary treatment process before discharge through an outfall into the lagoon.

### <F/S>(Phase 1~2 below)

As a result of the study on the M/P, the F/S of the Coastal Region was given priority mainly due to the degradation of the water quality along the coast. The sewerage collected from the Paga Point Zone will be successively pumped (8 stations) towards Paga Pint STP intercepting locally gravitated load. Similarly, the sewerage collected from the Kila Kila Zone will be successively pumped towards the Kila Kila STP.

Phase 1 (2000~2002): 1 sewage treatment plant (STP) at Kila Kila Zone, 11 pumping stations, Trunk sewer & force main in Coastal Area.

Phase 2 (2003~2005): 1 STP at Paga Point Zone, 7 new PS and 6 improved PS, Trunk sewer & force main in Eastern Coastal Area.

Phase 3 (2006~2010): Improvement of 3 STP in Inland Area, Improvement of 1 PS, Extension of trunk sewer in Inland Area.

Phase 4 (2011~2015): 3 STP, 8 PS, Extension of sewers in Inland and Coastal Areas.

OCE PNG/S 216/98 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### Description:

(FY 1999 Domestic Survey)

EDA RANU started the operation of both the water supply and sewerage systems for the NCD on 1 Nov. 1996. Investment fund is assumed available at an interest rate of 2.7% annually payable in thirty years (with ten years grace period). The depreciation is calculated using the straight-line method (no salvage value). The life of machine and electric equipment are assumed at fifteen years whilst the civil works are assumed at fifty years. The FIRR of the investment plan for the FS period is 6.21% until 2015 and eventually improves thereafter. The cause of the improved FIRR is the change of the sewerage charge systems based on water consumption and control of O/M cost within affordable level. If the condition mentioned earlier are met, the proposed investment of the F/S will be financially feasible and desirable.

Therefore, Government of Papua New Guinea has requested Japan's grant aid for implementing the projects for the area along the coast. However, the projects have not yet realized.

(FY 1999 Overseas Survey)

EDA RANU, through PNG Government, is seeking financial assistance for the project from the Government of Japan. As GOJ's negative response to this request for a grant aid, EDA RANU is considering to submit ODA loan.

(FY 2000 Overseas Survey)

Government of Papua New Guinea has requested Japan's grant aid for implementing the projects for the area along the coast. However, as the negative response to this request for grant aid, they are preparing the ODA loan application.

#### (FY 2002 Overseas Survey)

Subsequent Study: Sewerage System Development in Port Moresby (F/S) by JETRO (Itochu Copr. & NJS Consultants.)

Contents: Follow up study for the changes of socio-economic conditions in PNG such as depreciation of the local currency, rapid deterioration of the living environment etc. have been taken into account after the JICA's Study. To identify and screen candidate areas/ zones and development F/S toward and application of project loans for the IBIC

Period: Oct. 2002- Jan. 2003 Major proposed projects:

Priority 1: Paga Point STP & Trunk sewer, Ocean outfall Priority 2: Kilakila STP & Trunk sewer, Ocean outfall

Implementation Schedule

Pre-construction stage: mid 2004 - mid 2006

Costruction: Start late 2006

Target completion: 2010 (all facilities)

(FY 2003 Domestic Survey) Condition of request for funds: Requested to: JBIC (yen loan)

Time of request: the request was made in 2002, which has been under coordination and consultation with JBIC

.Details of request: (Amount) approximately 28 billion yen (Details) sewage treatment plant, relay pump, sewerCondition of request realization: raise of the priority is groped for on the side of Papua New Guinea

### (FY 2003 Overseas Survey)

Although implementation of the priority project is progressing at a pace slower than the schedule due to delay in fund raising, the procedure for land acquisition started in November 2003 in regions of the project sites.

|    |                | (M/P)   | Compiled | Oct.2002 |
|----|----------------|---|----------|----------|
| 00 | CE PNG/S 132/0 | 01  | Revised  | Jul.2009 |
| 1. | COUNTRY        | Papua New Guinea  |          |          |
| 2. | NAME OF STUDY  | Investigation and Development of Underground Water Sources for Water Supply Project |          |          |

| 2. | NAME OF STUDY                                       | Investigation and Development of Underground Water Sources for Water Supply Project  |                        |             |    |               |     |
|----|---|--|------------------------|-------------|----|---------------|-----|
| 3. | SECTOR  | Public Utilities   | / Water                | Supply      | 4. | TYPE OF STUDY | M/P |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |  | Papua New Guinea       | Waterboard  |    |               |     |
|    | PRESENT COUNTERPA                                   |  |                        |             |    |               |     |
| 6. | OBJECTIVES OF THE STUDY                             | 1. Formulating a water supply master plan following potencial study of groundwater in 2 provincial capitals and 6 districts centers. 2. Constructing and repairing water supply facilities as a pilot project in selected 1 provincial capital and 3 districts centers. 3. Engaging technology transfers to C/P through the study. |                        |             |    |               |     |
| 7. | CONSULTANT(S)                                       | Japan Techno Co.,LTD.  |                        |             |    |               |     |
| 8. | STUDY PERIOD  | Mar.2000 ~   | Feb.2002               | 23month(s)  |    |               |     |
| 9. | SITE OR AREA  | Two provincial   | capitals and six distr | ict centers |    |               |     |

### 10. MAJOR PROPOSED PROJECT(S)

After the completion of M/P, the pilot project was launched following the F/S was cancelled due to the revised S/W. Implementing agencies implement their autonomous proposed project based on a monitoring and assessment results of management/maintenance status of the pilot project for a year. Therefore, there are no specific proposed projects due to the estimation of C/Ps autonomy.

OCE PNG/S 132/01 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

### **Description:**

(FY 2002 Domestic Survey)

The Study was consist of 2 phases as follows commenced from March 2000 in Japan and was completed in February 2002.

Phase-1: Investigation of Groundwater and Formulation of Water Supply Plan(M/P)

1)Work in PNG(1): Formulation of Water Supply Plan and groundwater development including physical investigation and trial digging.

Phase-2: Improvement plan of Water Supply System was a pilot project

- 1) Work in PNG (2): Pilot Project
- 2) Analysis work in Japan (1): Preparation for Draft Final Report
- 3) Work in PNG (3): Explanation and Discussion on Draft Final Report, Implementation of the Seminar for Technology Transfer, and Evaluation for Pilot Project.
- 4) Analysis work in Japan (2): Completion of Final Report.

The M/P, Phase-1 for Water Supply Plan was completed at 2 provincial towns and 6 district towns on September 2000, and the Pilot Project, Phase-2 involved a new concept, with 3 particular aspects.

- 1) Experimental and trial studies of District Water Supply at Bereina, Kwikila and Mutzing consisting of construction and rehabilitation of existing water supply facilities and operation, management and maintenance by the PNG Waterboard.
- 2) The trial studies of a Water Vending Unit system supplying clean drinking water for lower income groups on Daru Island as part of the Provincial Town Water Supply.
- 3) The involvement and participation of villagers in a water supply project as part of the Rural Water Supply Project.

The pilot project, consist of construction and restoration of the water supply facilities, were successfully implemented from Dec. 2000 to July, 2007 and implemented evaluation and monitoring management/maintenance management. The project was handed over to the counterpart, regarding PNG Japanese embassador and head of PNG-JICA in order to dependent management and maintenance by PNG Waterboard and villagers. This made it clear that several issues such as community-based organization, residents' willingness to pay for water, establishment of capable management of water supply services and subsidy from Provincial Government were exist in current management system. The Study Team provided coordination and facilitation to seek solution with managerial and financial viewpoint including organization and institutional reinforcement. The Study Team conducted the Seminars for Technology Transfer introducing the results of the Study.

### (FY 2005 Domestic Survey)

There is no project proposed in the study, since the restoration and construction of water facilities were implemented as pilot projects.

(FY 2005 Overseas Survey)

Subsequent study: The Study on Ground Water Development for Water Supply System in Papua New Guinea

Funding:

Funding party: Yen Grant Aid Cooperation

Amount: 435.633 million JPY

Content: Implementation of water supply in 3 regions; Berenia, Kwikila, and Mutzing.

Design/Construction progress: 100% (to be completed in December 2002)

Status: Great efforts were put to solve the problem that many system in the pilot projects in Bereina, Kwikila and Mutzing have water leaking. The financial aid has not been provided as financial aid by MOA, local government, and LLG are not effective. PNG Water Utilisation Committee has helped the management cost of these 3 centres.

Technical cooperation:

Training: project related water supply development training (2000, 2 personnel)

Dispatch of experts: (1) Water supply master planning and design, (2) Ground water investigation and development, (3) Environmental and socio-economic analysis, (4) Finance, legal, and institution

### (FY 2006 Domestic Survey)

At the World Water Forum of last year, implementing agencies explained that there was progress regarding self-reliant water projects which provincial governments and inhabitants were involved in and 3 types of water supply for rural cities (1. solar power, 2. commercial power, 3. diesel power generator). Also, the implementing agencies indicated that a follow-up study should verify outcome of participatory assistance for environmental reform in Pinaturi.

### (FY 2007 Domestic Survey)

The subsequent study related to (1) water supply improvement for rural city residents by implementing projects in 3 object sites which are proposed at development study, (2) improvement of follow-up for 4 sites in which pilot projects were implemented, (3) construction of sustainable maintenance management system by collecting water charge, and etc. These are related to improvement of pilot project implemented at the development study and of water supply in new sites in which project has not yet launched.

**(F/S)** 

Compiled Mar.1986

| OCE SLB/S 301/79 Revised Ju |                                       |                   |  | Jul.2009 |  |  |  |
|-----------------------------|---------------------------------------|-------------------|--|----------|--|--|--|
| 1.                          | COUNTRY                               | Solomon Islands   |  |          |  |  |  |
| 2.                          | NAME OF STUDY                         | Telecommunicat    |  |          |  |  |  |
|                             |                                       |                   | Communications & Broadcasti / Telecommunication 4. TYPE OF STUDY   F/S |          |  |  |  |
| 3.<br>5.                    | SECTOR                                |                   |  |          |  |  |  |
| 5.                          |                                       |                   | Ministry of Transport and Communications                               |          |  |  |  |
|                             | COUNTERPART AGEN<br>TIME OF DEVELOPME |                   |  |          |  |  |  |
|                             |                                       |                   |  |          |  |  |  |
|                             | PRESENT COUNTERPA                     | ART AGENCY        |  |          |  |  |  |
|                             |                                       | F/S on the teleco | munication network construction project.                               |          |  |  |  |
|                             |                                       |                   |  |          |  |  |  |
| 6.                          | OBJECTIVES OF THE STUDY               |                   |  |          |  |  |  |
|                             |                                       |                   |  |          |  |  |  |
|                             |                                       | Nippon Telecom    | munication Consulting Co., Ltd.  |          |  |  |  |
| 7.                          | CONSULTANT(S)                         |                   |  |          |  |  |  |
| 8.                          | STUDY PERIOD                          | ~ ~               | Apr.1980   |          |  |  |  |
|                             |                                       |                   |  |          |  |  |  |
|                             |                                       |                   | Solomon Island   |          |  |  |  |
| 0                           | SITE OR AREA                          |                   |  |          |  |  |  |
| ٠.                          | SITE ON AREA                          |                   |  |          |  |  |  |
|                             |                                       |                   |  |          |  |  |  |
|                             | MAJOR PROPOSED PR                     |                   |  |          |  |  |  |
| Co                          | ntents Scale Construction             | of over OH syste  | m 7 sections horizontal telecommunications network                     |          |  |  |  |
|                             |                                       |                   |  |          |  |  |  |
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|                             |                                       |                   |  |          |  |  |  |
|                             |                                       |                   |  |          |  |  |  |

OCE SLB/S 301/79 F/S

|                | Completed or In Progress | Promoting                 |  |
|----------------|--------------------------|---------------------------|--|
| PRESENT STATUS | Completed                |                           |  |
|                | Partially Completed      | Delayed or Suspended      |  |
|                | Implementing             |                           |  |
|                | Processing               | Discontinued or Cancelled |  |
| Description :  |                          |                           |  |

Discontinued after the completion of F/S

Reason for Cancellation:

Agreement was not reached on the amount of yen credit.

(FY 1991 Overseas Survey) No additional information.

(FY 1994 Domestic Survey)

No information.

(F/S)

Compiled Mar.1993 **OCE** SLB/S 302/91 Revised Jul.2009

| 1.  | COUNTRY                 | Solomon Islands  |  |                      |                |    |              |       |  |
|-----|-------------------------|------------------|--|----------------------|----------------|----|--------------|-------|--|
| 2.  | NAME OF STUDY           | Development P    | Development Project of Henderson International Airport |                      |                |    |              |       |  |
| 3.  | SECTOR                  | Transportation   | / /  | Air Transportation & | & Airport      | 4. | TYPE OF STUD | Y F/S |  |
| 5.  |                         |                  | Civil Aviation D                                       |                      |                |    |              |       |  |
|     | PRESENT COUNTERPA       | ART AGENCY       |  |                      |                |    |              |       |  |
|     |                         | Preparation of N | M/P and F/S on the                                     | e short-term develo  | pment project. |    |              |       |  |
| 6.  | OBJECTIVES OF THE STUDY |                  |  |                      |                |    |              |       |  |
|     |                         | Pacific Consult  | ants International                                     |                      |                |    |              |       |  |
| 7.  | CONSULTANT(S)           |                  |  |                      |                |    |              |       |  |
| 8.  | STUDY PERIOD            | Sep.1990 ~       | Oct.1991   | 13month(s)           |                |    |              |       |  |
|     |                         | Her              | nderson Internatio                                     | onal Airport, Honiar | a              |    |              |       |  |
| 9.  | SITE OR AREA            |                  |  |                      |                |    |              |       |  |
| 10. | MAJOR PROPOSED PR       | OJECT(S)         |  |                      |                |    |              |       |  |

1) Civil Works

Runway strengthening (maintaining the current scale), taxiway(242.5m long and 23m wide) apron(130m wide and 105 deep), GSE road(20mwide), access road extension, terminal road and car parking sloping, drainage, asphalt pavement, fence(2.4m high) and security.

2) Architectural Works

Passenger terminal building: one-floor terminal building with a floor space of 4,000 sq. m.; Other works include repair of the existing terminal building and construction of fire station garage.

3) Aviation Safety Facilities

Radio system: Installation of ILS localizer(LLZ), glidepath(GP)antenna and DME and renewal of the existing NDB.

Other plans include aviation radio facilities, navigation control system, approaching lights, and relocation of weather observation facilities.

4) Municipal Service Facilities

Fuel depots, electric power facilities, water supply facilities, sewage disposal facilities, incinerator, and telephone system.

\* The items of the above project costs are 1)costs of the whole projects, 2) costs of priority I projectes and 3) costs of priority II projects.

OCE SLB/S 302/91 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

### **Description:**

Subsequent Studies:

Nov.1992 Dispatch of Project Finding Mission concerning the provision of grant aid assistance

Nov.1995 E/N 79 mil.yen (Development Project of Henderson International Airport D/D)

Difference with proposal of JICA:

The project was modified due to the devaluation of the yen against the U.S. dollar. The fire station is to be relocated and the public car park to be reduced in size.

### Finance:

May.1996 E/N 1,826 mil.yen

(Development Project of Henderson International Airport)

\*Project Components

Construction of international passenger's terminal, apron, taxiway, parking lot, electricity supply facilities, water supply facilities and telecommunication facilities. (installation of aviation safety facilities is not included)

### Construction:

Nov.1996 Commenced (Scheduled to be completed in Mar.1998)

Construction Trader:Kitano Construction

Nov.~Dec.1998 Additional construction work for improving the ventilation of the terminal building.

### (FY 1997 Domestic Survey)

Terminal Building

Structure was completed.

Under construction of interior and finishing works.

Pavement of Apron and Taxiway

The roadbed was completed.

Under construction of asphalt layer.

Road and Parking Area

Almost completed.

### Remaining Proposed Projects:

(FY 1997 Overseas Survey)

Strengthening of runway

Communication equipment

Navigational aid

New control tower

### (FY 1998 Domestic Survey)

The request for "Development Project of Henderson International Airport and Improvement Project of Navigation Facilities" was submitted in 1997. The contents are as follows:

- a) Improvement and pavement of runway;
- b) Construction of a new control tower;
- c) Development of the national VORIDME;
- d) Development of the national VHF communication networks.
- \* c) and d) are not included in the proposed projects.

### (FY 1999 Domestic Survey)

Finance:

Jul.1999-Feb.2000 B/D

### Japanese technical cooperation:

(FY 1998 Domestic Survey)

25 Aug. ~ 15 Oct. 1998 Acceptance of a trainee (aeronautical engineering)

(M/P+F/S)

Compiled Sep.1995

| 00   | CE SLB/A 20  | 01/94  |   |   |                     | Revised | Jul.2009 |
|--|--|--|---|---|---------------------|---------|----------|
| 1.   | COUNTRY  | Solomon Island   |   |   |                     |         |          |
| 2.   | NAME OF STUDY  | Development St   | udy on Improvement of Nationwide I                  | Fish Marketing Syste  | em                  |         |          |
| 3.   | SECTOR   | Fishery  | / Fishery   | 4.  | TYPE OF STUDY       | M/P+F/S |          |
| 5.   | COUNTERPART AGEN TIME OF DEVELOPME PRESENT COUNTERPA   | ENT STUDY  | Fisheries Department, Ministry of Natural Resources |   |                     |         |          |
| Elaboration of a M/P on fish marketing improvement in order to increase fishermen's income and marine products to the urban area. Implementatin of pre-Feasibility Study on improvement of dismarine products.  6. OBJECTIVES OF THE STUDY |  |  |   |   |                     |         |          |
| 7.   | CONSULTANT(S)  | -  | Consultants Inc.                                    |   |                     |         |          |
| 8.   | STUDY PERIOD   | Mar.1993 ~   | Mar.1994 12month(s) ne Solomon Islands              |   |                     |         |          |
| 9.   | SITE OR AREA   |  |   |   |                     |         |          |
| 5 m  1)In reg end 2)M  T  3)M  E  4)M  E  5)M  | mprovement of the organulations to make more so courage the marine industional fodel zone-1 (type-1): Eco constant are the Honiara Ceo establish and to manage fodel zone-2 (type-1): Flustablish a basement in Tufodel zone-3 (type-2): We stablish Noro basement would do to the constant of the constant are the constant and the constant of the constant are the constant of the constant | hed. The content<br>ization and the re<br>nooth and effectively.<br>conomic zone of<br>entral Market<br>e a corporation of<br>orida archipelago<br>alagi with 5 satell<br>festern Province<br>with 6 satellites to<br>ennel Island | f marine products distribution in Hon               | tablish a conference<br>and to introduce fina<br>ara<br>rage, communication | ncial assistance to |         | ation/   |

OCE SLB/A 201/94 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### Description:

In this study, a lot of national and regional level strategies and alternative plans for the fish marketing system improvement were proposed. In the national level, organization improvement plan for the effective management of fish marketing system was presented, and in the regional level, the whole country was divided into three types (Type 1 Honiara economic area, Type 2 regional promotion zone, Type 3 isolated islands promotion zone) depending on 1 the natural, geographic social and economic circumstances and infrastructure installation, 2 fish production, fish marketing, inter-islands and inside island transportation structure, 3 future potential. And out of each types, most feasible and effective areas were selected as a model area.

The reasons for realizing the proposed projects are as follows:

- 1)Big socio-economic impacts are expected by the improvement of environments not only for products but consumers;
- 2)Promotion of the fishery port development as for the basepoint of the widespread commercial area; and

Because there has been no proper fish market in the studied area, the government has given top priority to this project.

(1)Honiara Central Market Improvement

1.Unloading Facility Subsequent Studies:

Oct.~Nov. 1993 B/D

Finance

Jan.1994 E/N 248 mil.yen (Honiara Fish Market Improvement Plan)

\*Components: Improvement of Fish Market to promote coastal fishery.

Unloading pier improvement for the 1st stage.

Construction:

May.1994~Mar.1995 Pier and unloading facilities completed.

Contractor/Toyo Construction

2.On-shore facilities

(Market hall, ice manufacturing, freezing facilities)

Subsequent Study:

Jun.1995 B/D

Finance:

Dec. 1995 E/N 785 mil.yen (Honiara Central Market Improvement Plan)

Construction:

May.1996~Mar.15.1997 (completed)

Contractor/Toyo Construction and CRC

Management & Operation:

Honiara town council will take over the management of the market facilities.

(2)Remaining Projects

(FY 1996 Overseas Survey)

While the project implementation has been yet decided because new proposals have come up, the Japanese government has shown keen interest in financing future fisheries development projects.

(FY 1997 Overseas Survey)

No action has been taken to materialize remaining projects (Model Zone 2,3,4)

(M/P+F/S)

Compiled Mar.1990

| OCE SMA/S  | 5 201B/87                               |                  |                            |                        |                               | Revised | Jul.2009 |
|--|---|------------------|----------------------------|------------------------|-------------------------------|---------|----------|
| 1. COUNTRY   | Samoa                                   |                  |                            |                        |                               |         |          |
| 2. NAME OF STUDY   | Development o                           | f the Ports in W |                            |                        |                               |         |          |
| 3. SECTOR  | Transportation                          |                  | Port                       |                        | 4. TYPE OF STUDY M/I          | P+F/S   |          |
| COUNTERPART AGI TIME OF DEVELOPS 5.  |   | Ministry of Tr   | ransport                   |                        |                               |         |          |
| PRESENT COUNTER  |   |                  |                            |                        |                               |         |          |
|  | Formulation of                          | M/P up to the y  | year 2005 Preparation      | n of a first stage pla | n within the framework of the | ne M/P  |          |
| 6. OBJECTIVES OF TH  | E                                       |                  |                            |                        |                               |         |          |
| 7. CONSULTANT(S)   | The Overseas O                          |                  | evelopment Institute       |                        |                               |         |          |
| 8. STUDY PERIOD  | Jan.1987 ~                              | Oct.1987         | 9month(s)                  |                        |                               |         |          |
| 9. SITE OR AREA  10. MAJOR PROPOSED  M/P>  | PROJECT(S)                              |                  |                            |                        |                               |         |          |
| Long-term development; 1) Apia Port as commerci; 2) Asau Port as commerci; 3) Saleleroga Port and Mu | al port, ferry terminial port.          | nal, marina.     | as proposed in the stud    | dy.                    |                               |         |          |
| <f s=""><br/>To maintain and improve</f>   | e Apia port, the foll                   | owing items are  | e listed as the first stag | ge development pla     | n.                            |         |          |
| Breakwater Ferry terminal 3,   | 185m<br>100m<br>600sq.<br>6,000sq.<br>1 |                  |                            |                        |                               |         |          |
|  |   |                  |                            |                        |                               |         |          |

OCE SMA/S 201B/87 M/P+F/S

| PRESENT STATUS | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
|                | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

Subsequent Studies: Mar.~Apr.1988 B/D

Consulting Firm/Nippon Tetrapod Co., Ltd.

Finance

Oct.1988 E/N (Project for the Development of Apia Port (I), 690 mil.Yen) Jun.1989 E/N (Project for the Development of Apia Port (II), 913 mil.Yen)

Realized Project:

Phase I: Wharf repair 185m, wharf extension and one tug boat

Total cost US\$ 5.28 million (US\$1=130.7yen)

Phase II:Yard expansion, ferry terminal and breakwater 80m

Total cost US\$ 6.96 million

(M/P+F/S)

Compiled Dec.1999

**OCE SMA/S 217/98** Revised Jul.2009 1. COUNTRY Samoa Improvement of Apia Port 2. NAME OF STUDY / Port 3. SECTOR 4. TYPE OF STUDY M/P+F/S Transportation Ministry of Transport COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY In order to promote the economic development of Samoa; the objectives of the study are 1) to formulate a new M/P on the Apia Port, which is the only international port in Samoa, up to the year 2015 based on the previous M/P and 2) to conduct a F/S on urgent projects. OBJECTIVES OF THE STUDY TETRA Co., Ltd. 7. CONSULTANT(S) Jun.1998 Dec.1998 6month(s) 8. STUDY PERIOD Apia Port 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) < M/P >Dredging : 210,000m3 Improvement of breakwate : 70m Rehabilitation of existing wharf: 185m New wharf : 190m Minor repair works Small boat jetty : 20m Relocation of mooring buoy for tanker Container yard : 21,000m2 Renovation of existing gate Marina : 10,000m2 Green area : 4,500m2 **CFS** : 1,600m2 Shed : 1,800m2 : 200m2 Maintenace shop Oil tanks Administration office : 450m2 Tug boat : 1 Improvement of breakwater: 70m, Rehabilitation of existing wharf: 185m, New wharf: 190m, Minor repair work, Pavement of staging area: 4,500m2, Administration office: 450m2, Tug boat: 1

OCE SMA/S 217/98 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

### **Description:**

1. The Project for Construction of a Tugboat

Subsequent Study

(FY 2001 Domestic Survey)

Jan. 2000 JICA B/D

Finance:

(FY 2001 Domestic Survey)

26 Jul. 2000 E/N (The Project for Construction of a Tugboat for Apia Port)

Construction:

Consultant: Fisheries Engineering Co., Ltd.

(FY 2002 Overseas Survey)

Construction: Jan. 2001 - Jul. 2001

Proficient impacts:

Direct impact: calling ships (240/year) Indirect impact: Samoa nations (170,000)

Japanese Technical Cooperation:

(FY 2002 Overseas Survey)

JICA Short- Term Expert: Radio and navigation equipment (Jan. 2002 - Feb. 2002)

(FY 2003 Overseas Survey)

Training in Japan: Marine Texhnique (Engineer, 2001.7.10 ~ 2001.12.16), Coastal Shipping (2000.5.16 ~ 2000.7.1)

2. The Project for the Second Development of Apia Port

Subsequent Study

(FY 2001 Domestic Survey)

23 Feb. 2000 -25 Sep. 2000 JICA B/D

Contents (Rehabilitation of existing wharf: 185m, New wharf: 190m, Improvement of breakwate, Green area: 4,500m2, Administration office)

Finance:

(FY 2001 Domestic Survey)

29 May 2001 E/N (The Project for the Second Development of Apia Port)

Construction:

(FY 2001 Domestic Survey)

Period: D/D 15 Feb. 2001 - 31 Jul. 2001 Term.1 15 Aug. 2001 - 31 Mar. 2002 Term.2 1 Apr. 2001 - 31 Mar. 2003 Term.3 1 Apr. 2003 - 31 Oct. 2003 Situation of Progress: 1 Nov. 2001 Commenced

(FY 2002 Overseas Survey)

Situation of Construction: Sep. 2001 - Oct. 2003

(FY 1999 Domestic Survey)

Preliminary survey for improvement of Apia Port related to Japan's grant aid was carried out in September, 1999.

After that a real survey is being carried out from January, 2000 for upgrading tug boat in the phased improvement plan for Apia Port.

Also, the official announcement of conducting the basis design survey which covers other parts besides upgrading of tugboat was made in the short-term upgrading plan.

**(F/S)** 

Compiled Jul.1998

| EF  |  |  |   |   | Revised      | Jul.2009 |
|---|--|--|---|---|--------------|----------|
| 1.  | COUNTRY  | Albania<br>Sewerage System   | m in Metropolitan Tirana  | _   |              |          |
| 2.  | NAME OF STUDY  | Sewerage Byster  | m m wearopointain Thailt  |   |              |          |
| 3.<br>5.  | SECTOR   | Public Utilities   | / Sewerage Ministry of Public Works and Tourism                     | 4. TYPE OF STUDY F/S                        |              |          |
|   | COUNTERPART AGEN<br>TIME OF DEVELOPME  |  |   |   |              |          |
|   | PRESENT COUNTERP   | ART AGENCY   |   |   |              |          |
| 6.  | OBJECTIVES OF THE  |  | bility study on public sewage system in Tirace target year of 2010. | una Metropolitan Area (population of 400,00 | 0-500,000) i | in       |
|   | STUDY  |  |   |   |              |          |
| 7.  | CONSULTANT(S)  | Nippon Jogesuio<br>Deloitte Touche   | do Sekkei Co., Ltd.<br>Tohmatsu                                     |   |              |          |
| 8.  | STUDY PERIOD   | Jul.1996 ~  Tirana Metropol  | Mar.1998 20month(s)<br>litan Area (2,700ha)                         |   |              |          |
| 9.  | SITE OR AREA   |  |   |   |              |          |
| (1) 1) 2) 3) 4) I (2) 2) 2 2 3 4) 5) (3) Co Ecc To In | MAJOR PROPOSED PROUITING TAILS AND TOUTING TOU | D000 5,000 m3/day S 200 mg/l S 35 mg/l ities od: Aerated Lagoon tted Lagoon in amber iipment | on Method   |   |              |          |

ティラナ首都圏下水道整備計画調査

ERP ALB/S 304/97 F/S

|                         | Completed or In Progress | Promoting                 |
|-------------------------|--------------------------|---------------------------|
| DD FOCED VE OVE A VENTO | Completed                |                           |
| PRESENT STATUS          | Partially Completed      | Delayed or Suspended      |
|                         | Implementing             |                           |
|                         | Processing               | Discontinued or Cancelled |

### **Description:**

(FY 1998 Domestic Survey)

It is difficult to implement the project with loan of Japan since FIRR is -4.2%. Financial assistance from other countries is examined.

### (FY 1999 Domestic Survey)

The planned facilities were cut down to "Public Sewer Pipe and Drain Facilities and Cleaning Equipment" excluding construction of sewage facilities in order to apply the Japan's Grant Aid Cooperation Project, and the preparation of request has been on going.

Project Impact: Improving river water quality at the metropolitan area and reducing flood damage by intercepting sewerage and releasing at downstream of rivers.

### (FY 2007 Domestic Survey)

Subsequent study: the Study on the Development Plan for Sewerage System and Sewage Treatment Plant for Greater Tirana in the Republic of Albania.(ALB/S 201/06) Implementing period: July 2005 - October 2006

Implementing institutions: General Directorate of Water Supply and Sewerage (Ministry of Public Works, Transport & Telecommunications), JICA Funding:

Funding body: JICA (development study, S/W concluded: 15 February 2005)

Objective:

The objectives of the Study are:

- 1) To prepare a M/P for improving the sewerage system for Greater Tirana by reconsidering "Greater Tirana Sewerage System Maintenance Plan" refunding "Strategic Plan for Greater Tirana (2002)"; up-stream plan, and other sewerage system plan.
  - 2) To conduct a F/S for priority project(s) identified in the M/P
  - 3) To transfer technology to the Albanian counterpart personnel

(M/P+F/S)

Compiled Dec.2007

|            |   |                                     |  | ,                                     | Compiled Dec.2             |
|------------|---|-------------------------------------|--|---------------------------------------|----------------------------|
| EF         | RP ALB/S 2  |                                     |  |                                       | Revised Jul.20             |
| 1.         | COUNTRY   | Albania                             | and Sewage Treatment Plant for Gre   | oton Timono                           |                            |
| 2.         | NAME OF STUDY   | Sewerage System                     | and Sewage Treatment Plant for Gre   | ater Tirana                           |                            |
| 3.         | SECTOR  | Public Utilities                    | / Sewerage   | 4. TYPE OF STUI                       | DY M/P+F/S                 |
|            | COUNTERPART AGEN<br>TIME OF DEVELOPME                         |                                     |  |                                       |                            |
| 5.         |   |                                     |  |                                       |                            |
|            | PRESENT COUNTERPA   | ART AGENCY                          |  |                                       |                            |
|            |   | The objectives of 1) To prepare a M | I/P for improving the sewerage system  | n for Greater Tirana by reconsidering | g "Greater Tirana Sewerage |
| 6.         | OBJECTIVES OF THE STUDY                                       | system plan. 2) To conduct a F      | nce Plan" refunding "Strategic Plan for Strategic Plan for Plan fo | the M/P                               | plan, and other sewerage   |
|            |   |                                     |  |                                       |                            |
| 7.         | CONSULTANT(S)   | Nihon Suido Con<br>Tokyo Engineerin | sultants Co., Ltd.<br>ng Consultants Co., Ltd.   |                                       |                            |
| 8.         | STUDY PERIOD  | Jul.2005 ~ ~                        | Oct.2006 15month(s)  |                                       |                            |
|            |   |                                     |  |                                       |                            |
| 9.         | SITE OR AREA  |                                     |  |                                       |                            |
|            |   |                                     |  |                                       |                            |
| 10.<br>M/l | MAJOR PROPOSED PR   | ROJECT(S)                           |  |                                       |                            |
|            | rget year : 2020  |                                     |  |                                       |                            |
|            | Facility Pran:  |                                     |  |                                       |                            |
| 1          | 1) Kashar STP Sewerage  |                                     |  |                                       |                            |
|            | Pumping Station Capac<br>Sewage Treatment Plan                |                                     | ly Flow): Kashar PS(213,500 m3/day)  | )                                     |                            |
| 2          | 2) Berxulle STP Sewerag                                       | · ·                                 | 7,400 III.5/day)   |                                       |                            |
|            |   |                                     | ly Flow):Kamza PS(50,700 m3/day)   |                                       |                            |
| 2          | Sewage Treatment Plan   |                                     |  | 6.11                                  | · · 4 C · T'               |
|            | -   |                                     | lish a Joint Authority for Greater Tira<br>ed UKT (GTW&SA) as the service pro  | -                                     | les in the Greater Tirana, |
| F/S        | 5:  |                                     |  |                                       |                            |
| 1.         | Basic Design of the Facil  Kashar STP                         | ility:                              |  |                                       |                            |
| 2          | 2) Capacity: 95,900 m3/d                                      | -                                   | rit Removal, Primary Sedimentation,  | Trickling Filter, Final Sedimentation | n, Chlorination)           |
|            | Implementation plan  1) Tender and evaluation:                | : 2009, 2) Construc                 | etion start: mid 2010, 3) Construction   | period: 3 year and half               |                            |
| 4.         | Environmental considera                                       |                                     | and Sewerage Enterprise of Tirana (U   | JKT)                                  |                            |
|            | Negative Impact:<br>1) Land acquisition/rese<br>Project Cost: | ttlement and waste                  | , 2) Mine, 3) Water dischargeing area  |                                       |                            |
| То         | otal: 9,268 million ALL(F                                     |                                     | ALL, LC: 4,326 million ALL)  |                                       |                            |
| Di         | rect Construction Cost: 6                                     | ,380 million ALL(                   | FC:4,038 million ALL, LC:2,342 mil   | lionALL)                              |                            |
|            |   |                                     |  |                                       |                            |

ERP ALB/S 201/06 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |
| Description:   |                          |                           |

(FY 2007 Domestic Survey)

Request for the Yen Loan have been made to implement the proposed project, which are now prepare for concluding L/A.

(M/P+F/S)

Compiled Sep.1995

| Ł                | RP BGR/S 2   | W1/94  |   | Revis   | sed Jul.2009     |
|------------------|--|--|---|---|------------------|
| 1.               | COUNTRY  | Bulgaria   |   |   |                  |
| 2.               | NAME OF STUDY  |  | nagement for the Territory of the Sof   | ia Greater Municipality                                   |                  |
| 3.               | SECTOR   | Public Utilities   | / Urban Sanitation                      | 4. TYPE OF STUDY M/P+F/S                                  |                  |
| -                | 5201011  | r done o dinaes  | City of Sofia                           | 1112 01 51 62 1 111 11/5                                  |                  |
| 5.               | COUNTERPART AGEN<br>TIME OF DEVELOPMI  |  |   |   |                  |
|                  | PRESENT COUNTERP   | ART AGENCY   |   |   |                  |
|                  | 1  | To draw the bas  | ic plan of the waste treatment, to sele | ect high priority project and to make F/S on the project. | . Technical      |
| 6.               | OBJECTIVES OF THE STUDY  | transfer to the c  |   |   |                  |
| 7.               | CONSULTANT(S)  | Yachiyo Engine   | ering Co., Ltd.                         |   |                  |
| 8.               | STUDY PERIOD   | Oct.1993 ~   | Sep.1994 11month(s)                     |   |                  |
|                  |  | City of Sofia  |   |   |                  |
| 9.               | SITE OR AREA   |  |   |   |                  |
| Fo city 1) 2) 3) | MAJOR PROPOSED PI<br>llowing projects are select<br>y of Sofiya:<br>Improve collection of wa<br>Construction of final was<br>Promote the recycle of w<br>Establish cleaning corpor | eted and recomments ste (collection seste disposal in Karasted materials | vice in whole area)                     | for sake of improvement of the urban wasted material      | treatment of the |
| Т                | he Master Plan has recon   | nmended the intro  | duction of incinerator as for long-ter  | m plan.   |                  |
|                  |  |  |   |   |                  |
|                  |  |  |   |   |                  |
|                  |  |  |   |   |                  |
|                  |  |  |   |   |                  |
|                  |  |  |   |   |                  |
|                  |  |  |   |   |                  |
|                  |  |  |   |   |                  |

ERP BGR/S 201/94 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

### **Description:**

(1)Improvement of waste collection (proposed project 1)

(FY 1998 Overseas Survey)

Services of waste collection in four regions (Lulin, Vitosha, Ovcha Kupel, and Triaditsa) were given by a competition at a concession. Forthcoming is a concession to maintain the cleanness in the rest 20 regions.

(FY 2000 Domestic Survey)

No information.

(2) Recycle of wasted materials (proposed project 3)

(FY 1998 Overseas Survey)

This project is an element of the development of the National Strategy of the recycling. The examination of the quantity and morphological composition of the solid wastes was conducted.

(FY 2000 Domestic Survey)

No information.

(3)Establishment of cleaning corporation (proposed project 4)

(FY 1998 Overseas Survey)

A municipal company "cleanness-Sofia" Jsc. was established.

Impact:

(FY 2000 Domestic Survey)

Decrease the personnel expense and the effective use of facilities

Strengthen of the financial basis for the waste collection service by increasing charge

(4)Construction of final waste disposal (proposed project 2)

The reasons for the delay or the stoppage:

The project is suspended because the inhabitants of surrounding area and the concerned authorities have not given the consent to the construction of final waste disposal in Katina.

(FY 1997 Domestic Survey)

The site of waste disposal plant has not been determined yet.

(FY 1997 Overseas Survey)

Social reason and administrative reason.

(FY 1996 Domestic Survey)

An alternative site must be determined. However, no possible site has been named.

(FY 1996 Overseas Survey)

The counterpart has an intention to implement a project for a thermal method (combustion of waste) for making solid waste harmless, which was proposed in this study. Also, as new projects, the closing of solid waste disposal site in Sophia with the minimum environment risk, the elimination of biogas and the total recultivation of the land have been proposed.

(FY 1997 Domestic Survey)

At present, waste is disposed in Rudinata, which is one of alternative sites for waste disposal plant.

(FY 1998 Overseas Survey)

It was planned that parts of the two waste disposal in Dolni Bogrov would be gathered in one body. Preliminary study on the technology for sanitation and recultivation of the solid waste disposal will be conducted in 1999~2000. Regarding the project implementation, the request for finance will be submitted after the decision of the expert council on the environmental impact evaluation (March 1999).

(FY 1999 Overseas Survey)

The provisional cost to implement the development of Dolni Bogrov landfill is 25 mil. Lv. and Bulgarian side is looking for investment.

Related project:

(FY 1998 Overseas Survey)

Regarding the conceptions and design of the regional management of the solid waste (transfer station, separation of the useful components, etc.), the request for financial assistance was submitted to the EU.

(M/P)

Compiled

Jul.1998

| EF | <b>RP</b> BGR/S 107/2                 | 97  | Revised | Jul.2009 |
|----|---------------------------------------|---|---------|----------|
| 1. | COUNTRY                               | Bulgaria  |         |          |
| 2. | NAME OF STUDY                         | Long Term Management of Bulgarian Railways  |         |          |
| 3. | SECTOR                                | Transportation / Railway 4. TYPE OF STUDY M/P   |         |          |
| 5. | COUNTERPART AGEN<br>TIME OF DEVELOPME |   |         |          |
|    | PRESENT COUNTERPA                     |   |         |          |
| 6. | OBJECTIVES OF THE STUDY               | Based on a request of the government of Bulgaria, review state railway company management which for the introduction of market economy and conduct a survey to make a long-term management plan in network system including cooperation with neighboring countries. |         |          |
| 7. | CONSULTANT(S)                         | Daiwa Institute of Research Ltd. Yachiyo Engineering Co., Ltd. Japan Railway Technical Service  |         |          |
| 8. | STUDY PERIOD                          | Oct.1996 ~ Mar.1998 17month(s)  |         |          |
| 9. | SITE OR AREA                          | Entire Bulgaria (4,000 km)  |         |          |

### 10. MAJOR PROPOSED PROJECT(S)

- 1. Complete implementation of open access system
- 2. Accounting separation as well as organization separation
- 3. Establishment of three management in the integrated railway; infrastructure, freight and passenger, each being highly autonomous and market-oriented
- 4. Successive raise in passenger fares in coordination with an increase in GDP per capita
- 5. Integrated freight transport system and infrastructure development
- 6. Focus on reinstatement of normal maintenance levels

ERP BGR/S 107/97 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

### **Description:**

(FY 1998 Domestic Study)

This study proposed that BDZ should conduct accounting separation as soon as possible, shift to organizational separation (at the latest by 2005), prepare for institutional separation, and make efforts to reduce their staff from current 51,000 to 23,000.

The government of Bulgaria was recommended to have financial responsibility for the maintenance and development of railway infrastructure from the moment of open access; clarify road user charge and equilibrate the burden between railways and roads; and make efforts to make the BDZ' passenger service financially independent. The government of Bulgaria is making efforts to restructure and modernize public enterprises, especially BDZ, in order to correspond to transition into market economy and joining into EU. Affiliated organizations of BDZ, a concrete sleeper factory, a signal and communication factory, and an institute of railway technology are under privatization.

(FY 2003 Overseas Study)

Subsequent Study: Rationalization of railroads transportation networks and management, establishment of POC contract and research for marketing improvement. Funding amount: USD 200,000

Objective: 1) Rationalization of BDZ network and operation 2) Establishment of PCO contracts 3) Strengthening of the commercial and marketing capacity of BDZ Beneficiary of the project: BDZ

Implemented project: Turkey/Greece (Plovdir-Dimitrovgrad-Svilengrad) Cross border railway line electrification and 160km/h operating speed upgrade project Implementing period; October, 2004. June, 2009

Beneficiaries: State railway infrastructure company

Objective: 1) Improvement of railway operating speed, 2) Improvement of efficiency and quality of transportation service, 3) Improvement of safety and environment. Contents: Improvement of railway function between Plovdir-Dimitrovgrad-Svilengrad (Turkey and Greece cross border line) and upgrade the standard operating speed to 160km/h by electrification and axle load will be improved to 22.5 tons. There is a consideration for further upgrading operating speed in the future. There will be an extension of the railway in five zones.

Implemented project: Technical cooperation for improvement of function on Vidin-Mezdra railway line.

Implementing period: January, 2005. January, 2007

Beneficiaries: State railway infrastructure company

Objective: Provide technical cooperation needed to establish construction, regulation and procedure of railway transportation infrastructure within the EU policy regulations. Preparation of the document for bidding procedure and analyze alternative procedures for the railway along with Vidin-Sofia-Kulata. This alternative proposal will specify the location and method of Vidin-Mezdra railway construction.

(FY2007 Domestic Survey)

No information to be specifically mentioned.

(FY2007 Overseas Survey)

Project aiming to improve travelling time, reliability, cost efficiency and support service by increasing transportation volume of BDZ, in which the EU funding was utilized. This project corresponds to transportation management project proposed in the mentioned study.

**(F/S)** 

Compiled Jul.1998

| RP BGR/A 3   | 18/97  |  | F                    | Revised  | Jul.2009   |
|--|--|--|----------------------|--|--|
| COUNTRY  |  |  |                      |  |  |
| NAME OF STUDY  |  | al Reform  |                      |  |  |
| SECTOR   |  |  | 4. TYPE OF STUDY F/S |  |  |
| TIME OF DEVELOPME  | CY AT THE<br>NT STUDY  | ary of Agriculture and Forestry  |                      |  |  |
| OBJECTIVES OF THE STUDY  | from them as for a pilo  |  |                      |  |  |
| CONSULTANT(S)  |  |  |                      |  |  |
| STUDY PERIOD   | May.1996 ~   | Jul.1997 14month(s)  |                      |  |  |
| MAJOR PROPOSED PR<br>Construction of an agricul<br>Construction of an agricul<br>Construction of an on-fari<br>Improvement in a Korten | nural information center<br>nural machinery worksh<br>a storage facilities for goollecting point   | hop  |                      |  |  |
|  | COUNTRY  NAME OF STUDY  SECTOR  COUNTERPART AGENCY TIME OF DEVELOPMENT  PRESENT COUNTERPA  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD  MAJOR PROPOSED PROCEOUSTRUCTION of an agricult Construction of an agricult Construction of an on-farm improvement in a Korten of the construction of an on-farm improvement in a Korten of the construction of the constructi | NAME OF STUDY  SECTOR  Agriculture  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  To conduct survey in from them as for a pile the country.  OBJECTIVES OF THE STUDY  Sanyu Consultants Inc. Daiwa Institute of Res.  STUDY PERIOD  May.1996  Petrich (6,600ha), Ros.  SITE OR AREA  MAJOR PROPOSED PROJECT(S)  Construction of an agricultural information center.  Construction of an agricultural machinery works. | NAME OF STUDY        | NAME OF STUDY  SECTOR  Agriculture  Agriculture  Agriculture  Agriculture  Agriculture  Agriculture  Agriculture  Agriculture in) General  A. TYPE OF STUDY  F/S  Ministry of Agriculture and Forestry  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  To conduct survey in Petrich, Rositza, and Sredna Tsunja where the government of Bulgaria selected, se from them as for a pilot district, and make an integrated agricultural improvement plan appropriate to the the country.  CONSULTANT(S)  Sanyu Consultants Inc.  Daiwa Institute of Research Ltd.  STUDY PERIOD  May.1996  Jul.1997  Jul. | NAME OF STUDY  Project for Agricultural Reform  SECTOR  Agriculture  Agriculture  Agriculture and Forestry  Ministry of Agriculture and Forestry  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  TO conduct survey in Petrich, Rositza, and Sredna Tsunja where the government of Bulgaria selected, select one loc from them as for a pilot district, and make an integrated agricultural improvement plan appropriate to the actual situ the country.  CONSULTANT(S)  Sanyu Consultants Inc. Daiwa Institute of Research Ltd.  STUDY PERIOD  May.1996   May.1996   Jul.1997   14month(s)  Petrich (6,600ha), Rositza (50,700ha), and Sredna Tsunja (96,700ha)  STE OR AREA  MAJOR PROPOSED PROJECT(S)  Jonstruction of an agricultural information center and an extension service office Construction of an agricultural machinery workshop Construction of an on-farm storage facilities for grains improvement in a Korten collecting point |

ERP BGR/A 318/97 F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### Description:

(FY 1998 Domestic Survey)

1. Economic Situation and Aid Type

Economic situation is deteriorating further in 1996. The monthly rate of increase in consumer price leaped to 23.3% in July 1996 from 2.4% in April 1996 because of a hike in fuel price of 17-20% in a month due to the depreciation of BGN to USD. On the first of June, the value added tax increased from 18 % to 22% and power and heating prices were raised in line with arrangements with international financial institutions. The government introduced an import tax of 5% and raised excise tax for tobacco and alcohol to increase revenue. According to a report of the National Statistical Institute (NSI), the annual inflation rate reached 311% in 1996. But, inflation rate been accelerated more and more after that, and the monthly inflation rate jumped to 43.8% in January 1997 and 243% in February 1997, which is the highest inflation rate after the transition into market economy of Bulgaria.

After the formation of a new cabinet, economic situation is rather stable, but economic situation in the future depends on policies taken by a new government in the future and the establishment of a currency board of IMF. With measures for the stabilization of exchange rates and the adoption of the Currency Board Arrangement (CBA), the inflation rate is expected to decline to monthly rates below 2% in a month at the end of 1997.

The lev, which is the currency of Bulgaria, is losing value for dollar rapidly, reflecting the extensive and unstable financial situation of Bulgaria. 1 dollar was traded with around 156 levs at the end of July 1996, but the exchange rate reached 500 levs/USD in December 11. It depreciated to 3,000 levs/USD in the middle of February 1997 and appreciated to 1,500 levs/USD in the middle of March 1997.

Judging from such economic situation, it seems that it is very difficult to implement the project with loan and grant aid is the only way for the implementation. Yet, Bulgaria is not a target country for grant aid now. It meets sufficient conditions for target countries for grant aid, but it can become a target country for grant aid if a category for DAC countries changes from the perspective of economic situation stated above.

### 2. Trend of the Implementation of the Project

For these backgrounds, the Ministry of Agriculture and Food Industry of Bulgaria strongly requests to implement the project as a grant aid project and announced to a mayor of Nova Zagora in a pilot district that it would cooperate actively for the implementation of the project.

Considering the economic crisis of Bulgaria, the embassy of Japan in Bulgaria will examine the implementation as general grant aid if they request grant aid. For this, it seems that the Ministry of Agriculture and Food Industry immediately makes a request for grant aid for this project and starts preparing for bringing it to the embassy of Japan.

Progress situation of the proposed project:

### (FY 2001 Overseas Survey)

Agricultural extension centers were established in the area. These centers give advice to farmers at free of charge and assist them with the preparation of business plans and their applications to different programs.

Request situation:

### (FY 2001 Overseas Survey)

At present, there have been no requests made for a grant aid project.

### (FY 2003 Overseas Study)

Japanese technical cooperation:

- 1) Acceptance of trainees: 1 person
- 2) Dispatch of experts: 2 persons (Oct. 21, 2002-Dec. 6, 2002)

### (FY 2007 Domestic and Overseas Survey)

No information to be specifically mentioned.

(M/P+F/S)

Compiled Dec.1999

| EI   | RP BGR/S 2  | 18/98   |   | Revised                               | Jul.2009 |
|--|---|---|---|---------------------------------------|----------|
| 1.   | COUNTRY   | Bulgaria  |   |                                       |          |
| 2.   | NAME OF STUDY   | Environmental I   | Management for Water Pollution Control in Maritza R   | ver Basin                             |          |
| 3.   | SECTOR  | Administration  | / Environmental Problems  | 4. TYPE OF STUDY M/P+F/S              |          |
| 5.   | COUNTERPART AGEN<br>TIME OF DEVELOPME   |   | Ministry of Environment and Waters, Republic of Bu  | garia                                 |          |
|  | PRESENT COUNTERPA   | ART AGENCY  |   |                                       |          |
| 6.   | OBJECTIVES OF THE STUDY   | 2)To conduct a  | a M/P for integrated environmental management for the F/S on the priority projects identified in the M/P chology transfer to the counterpart in the course of the |                                       |          |
| 7.   | CONSULTANT(S)   | Pacific Consulta  | ants International  |                                       |          |
| 8.   | STUDY PERIOD  | Mar.1997 ~  | Mar.1999 24month(s)   |                                       |          |
| 9.   | SITE OR AREA  |   | River Basin(21,000km2)<br>k City, Dimitrovgrad City and Stara Zagora City   |                                       |          |
| <m<br>1.C<br/>2.R<br/>3.F<br/>4.S<br/>5.F<br/><f,<br>1.<br/>2.<br/>3.</f,<br></m<br> | egulation of waste water orest conservation for wasterengthening of monitoring the development study. S> Construction of wasterength City : Desirent Dimitrovgrad City : Desirent Zagora City : Desirent City | er treatment plant<br>from industry livater resources<br>ing systems for way<br>for river basin in<br>the water treatment<br>ign population<br>ign population<br>ign population | ater resources, water use and water quality   | y(10 towns), Third priority(19 towns) |          |
|  |   |   |   |                                       |          |

ERP BGR/S 218/98 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

Subsequent Study:

(FY 2003 Domestic Survey)

Detailed design for the construction of waste water treatment plants for the three priority towns (Pazardjik, Dimitrovgrad, Stara Zagora) was implemented.

### Funding:

(FY 1999 Domestic Survey)(FY 1999 Overseas Survey)

Financial assistance for the implementation of the first priority towns of Stara Zagora, Haskovo, Dimitrovgrad and Pazardjik was requested to EU in May 1999.

Stara Zagora, Haskovo, Dimitrovgrad: Financial assistance was promised.

Pazardjik: Financial assistance was postponed.

(FY 2001 Domestic Survey)

Stara Zagora, Dimitrovgrad: Joint finance of EIB (concluded in 2000)

Pazardjik: Finance of ISPA (FY 2001 Overseas Survey)

1) Stara Zagora: Instrument for Structural Pre Association (ISPA) 75% (17,890,208 EUR), European Investment Bank 18% (4,293,360 EUR), National budget 7% (1,669,640 EUR). Total: 23,853,208 EUR.

- 2) Haskovo: European Investment Bank 100%, Total: 18,013,494 EUR.
- 3) Dimitrograd: ISPA 75% (14,659,558 EUR), European Investment Bank 18% (3,556,562 EUR), National budget 7% (1,330,360 EUR) . Total: 19,545,480 EUR
- 4) Pazardjik: ISPA 65% (12,400,000EUR), National budget 35% (6,700,000 EUR), Total 19,100,000 EUR

#### Construction:

(FY 2001 Domestic Survey)

Stara Zagora, Dimitrovgrad: D/D and T/D were completed and to be commenced construction from early 2002.

Pazardjik: D/D and T/D were completed and to be bidding from early 2002.

(FY 2001 Overseas Survey)

- 1) Stara Zagora: 2002 2005. The tender of full engineering of the WWTP will be held in 2002. Construction is expected to start in the same year.
- 2) Haskovo: 2002 2005. The tender ful engineering of the WWTP will be held in 2002. Construction is expected to start in the same year.
- 3) Dimitorigal: 2002 2005. The tender of full engineering of the WWTP will be held in 2002. Construction is expected to start in the same year.
- 4) Pazardiik: 2002 2005.

(FY 2003 Domestic Survey)(FY 1999 Overseas Survey)

Bidding for the construction for Dimitorigal City and Stara Zagora City were completed.

### Status of Utilization:

(FY 1999 Domestic and Overseas Survey)

- \* The recommendations by the study were taken into account in the formulation of new Water Act. The new Water Act was adopted by the parliament in July 1999 which will be implemented from January 2000.
- \* National monitoring plan is now under formulation and the proposed study is been taken into account.

(FY 2001 Domestic Survey)

\* Although the draft plan of national monitoring was under the consideration is included in this study, the exact monitoring has been conducting by the previous manner.

### Trend of the Related Study:

(FY 1999 Domestic Survey)

The implementation of the following two studies were requested to the Government of Japan.

- 1. Study on Integrated Water Resources Management in Bulgaria (requested by the Ministry of Environment and Waters)
- 2. Study on Agricultural Development in Upper-Middle part of Maritza River Basin (requested by the Ministry of Agriculture, Forestry and Agricultural Reform) (FY 2001 Domestic Survey)(FY 2003 Domestic Survey)
- 1. Study on Integrated Water Resources Management in Bulgaria: S/W was visited in March 2000 and signed in October 2000.
- 2. Study on Agricultural Development in Upper-Middle part of Maritza River Basin:, S/W was visited in May 2000 but was ended in failure because of the consensus between persons in charge.

(FY 2004 Domestic Survey)

After the implementation of the F/S, construction of waste water treatment plants for the three towns (Pazardjik, Dimitrovgrad, Stara Zagora) are planned to be implemented with the assistance of the EU.

- 1) Pazardjik: October 2004 agreement with consultant, INFILCO Espanola, S.A and Bulgaria
- 2) Stara Zagora: November 2002 agreement with consultant, Haitkamp, Germany
- 3) Dimitrovgdrad: November 2004 agreement with consultant, Haitkamp, Germany

(FY 2008 Domestic Survey)

Related Study: The Study on Integrated Water Management in the Republic of Bulgaria

Objectives:

- 1) River basin management plans which meet EU-WFD's requirements are prepared through collaboration with the counterpart personnel for two basins (East and West Aegean Sea River basins).
- 2) Guidelines for developing GIS system, monitoring, planning and basin integration analysis method are formulated through collaboration with the counterpart personnel.
- 3) Technology is transferred to the counterpart personnel in conducing the two tasks above.

Cooperation Period: 5 June, 2006 - 15 March, 2008.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Apr.2009
ERP BGR/S 101/07
Revised Jul.2009

| 1.   | COUNTRY   | Bulgaria          |   |           |                |           |           |       |             |         |           |            |         |
|--|---|-------------------|---|-----------|----------------|-----------|-----------|-------|-------------|---------|-----------|------------|---------|
| 2.   | NAME OF STUDY                                       | The Study on Int  | he Study on Integrated Water Management in the Republic of Bulgaria |           |                |           |           |       |             |         |           |            |         |
| 3.   | SECTOR  | Social Infrastruc | ture / W  | ater Reso | ources De      | velopment | 4.        | . Т   | YPE OF ST   | UDY 1   | M/P       |            |         |
| 5.   | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                   | MINISTRY OF<br>West Aegean Se                                       | ENVIR     | ONMENT         | AND WA    | TER, East | t Aeg | gean Sea Ri | ver Bas | in Direct | orate (EAI | BD) and |
|  | PRESENT COUNTERPA                                   | ART AGENCY        |   |           |                |           |           |       |             |         |           |            |         |
| 1) To assist the MoEW in the implementation of the requirements of the EU Water Framework Directive (hereinal referred to as "WFD") which includes: a) Preparation of the River Basin Management Plans for EABD and WAE selected areas, b)Development of GIS, Monitoring Programmes and Water Balance for the whole country.  2) To transfer technology and conduct training on Integrated Water Management to the counterpart personnel in the Study. |   |                   |   |           | and WABI<br>y. | O as      |           |       |             |         |           |            |         |
| 7.   | CONSULTANT(S)                                       | CTI Engineering   | International Co  | o., Ltd.  |                |           |           |       |             |         |           |            |         |
| 8.   | STUDY PERIOD  | May.2006 ~        | Mar.2008  |           | 22month(       | s)        |           |       |             |         |           |            |         |
| 9.   | SITE OR AREA  | East Aegean Sea   | River Basin and   | l West A  | egean Sea      | River Ba  | sin       |       |             |         |           |            |         |

### 10. MAJOR PROPOSED PROJECT(S)

- 1) Structural Measures
- (1) EABD Areas: 22 towns

Construction of New WWTPs (18 towns) and rehabilitation of sewer networks: Maritsa River: 13 towns, Tundzha River: 4 towns, Arda River: 1 town Rehabilitation of existing WWTPs (4 towns) and rehabilitation of sewer networks: Maritsa River: 3 towns, Tundzha Rivers: 1 towns

(2) WABD Areas: 9 towns

Construction new WWTPs (6 towns) and rehabilitation of sewer networks:Struma River: 3 towns, Mesta River: 2 towns, Dospat River: 1 town Rehabilitation of existing WWTPs (3 towns) and rehabilitation of sewer networks:Struma River: 3 towns

- 2)Non-structural Measures
- . Review and improvement of water use permission for optimum water intake and use, and also water transfer to the other river basins;
- . Monitoring of water intake volume by installing measurement devices by water users for intake sides as well as Basin Directorate at key locations in the rivers; and,
- . Improvement of quality of data required for water quantity management, including collaboration with NIMH as well as other relevant institutes.
- 3) Groundwater Management Plan
- . Main ore mineralization is concentrated in EABD. There are old tailings that present threat to ecological safety. Database and GIS-map of old pollutions,

especially tailings, is necessary. Abandoned mine sites inventory and cleanup program for remediation are especially important for EABD. An appropriate

cleanup program will improve water quality and enhance public safety.

- . The problem with arsenic in drinking waters in Poibrene village is not yet solved. Urgent measures are required to solve this problem.
- . Application of good agricultural practices is necessary to reduce nitrate content in the region of Stara Zagora.
- . A plan for regional model of the groundwater flow in the region of Yambol-Elhovo area is needed.
- . Special attention should be paid to quantitative monitoring of Blagoevgrad GWB . At risk .
- . Assessment of specific natural groundwater quality in mountain regions impacted by ore mineralization . for reference should be conducted.
- . It is necessary to carefully control groundwater abstractions in the region of the winter resort Bansko.

**ERP BGR/S 101/07** M/P In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** (FY 2008 Domestic Survey) No information to be specifically mentioned.

(F/S)

Compiled Jun.2000 BHG/S 312/99 **ERP** Revised Jul.2009

|  | Coosibility Ctud  | 1 111 11   |  |   |  |   |  |
|--|---|--|--|---|--|---|--|
| NAME OF STUDY  | reasibility Stud  | easibility Study on the Waste Water Treatment Plant of Sarajevo City   |  |   |  |   |  |
| SECTOR   | Public Utilities  | / S  | Sewerage   | 4.  | TYPE OF STUDY  | F/S   |  |
|  |   | Enterprise   | -  | _   |  |   |  |
| PRESENT COUNTERPA  |   |  |  |   |  |   |  |
| 1) To conduct a feasibility study for the rehabilitation of the Sarajevo WWTP that contributes to the recovery of the sani and environmental conditions. 2) To transfer technology on planning methods and skills to counterpart personnel in the course of the study.  6. OBJECTIVES OF THE STUDY |   |  |  |   |  |   |  |
| CONSULTANT(S)  |   | -  |  |   |  |   |  |
| STUDY PERIOD   | Jan.1999 ~  | Dec.1999   | 11month(s)   |   |  |   |  |
| SITE OR AREA   | -   | nent Plant Central   | , Bogska and Iridja Z  | one   |  |   |  |
|  | COUNTERPART AGEN TIME OF DEVELOPME  PRESENT COUNTERPA  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  1) To conduct a and environmer 2) To transfer to CONSULTANT(S)  Tokyo Enginee: Nihon Suido Consultant(S)  STUDY PERIOD  Jan.1999  Sarajevo Treatments  SITE OR AREA | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  1) To conduct a feasibility study and environmental conditions. 2) To transfer technology on plant of the STUDY  Tokyo Engineering Consultants Consultant | Federal Ministry of Agriculture, Water Enterprise "Vodovod i Kanalizacija Sarajevo", Ca Sarajevo  PRESENT COUNTERPART AGENCY  1) To conduct a feasibility study for the rehabilitation of and environmental conditions. 2) To transfer technology on planning methods and skill objectives of the STUDY  Tokyo Engineering Consultants Co., Ltd. Nihon Suido Consultants Co., Ltd. STUDY PERIOD  Tokyo Engineering Consultants Co., Ltd. STUDY PERIOD  Jan. 1999 ~ Dec. 1999 11 month(s)  Sarajevo Treatment Plant Central, Bogska and Iridja Zoustie Consultants Co.  STIE OR AREA | Federal Ministry of Agriculture, Water Management and F Enterprise "Vodovod i Kanalizacija Sarajevo", Cantonal Ministry of U Sarajevo  1) To conduct a feasibility study for the rehabilitation of the Sarajevo WWT and environmental conditions. 2) To transfer technology on planning methods and skills to counterpart per  OBJECTIVES OF THE STUDY  Tokyo Engineering Consultants Co., Ltd. Nihon Suido Consultants Co., Ltd. STUDY PERIOD  Jan.1999 ~ Dec.1999 11month(s)  Sarajevo Treatment Plant Central, Bogska and Iridja Zone  SITE OR AREA | Federal Ministry of Agriculture, Water Management and Forestry, Water Supply Enterprise "Vodovod i Kanalizacija Sarajevo", Cantonal Ministry of Urban Planning , Housi Sarajevo  PRESENT COUNTERPART AGENCY  1) To conduct a feasibility study for the rehabilitation of the Sarajevo WWTP that contributes to and environmental conditions. 2) To transfer technology on planning methods and skills to counterpart personnel in the course of OBJECTIVES OF THE STUDY  Tokyo Engineering Consultants Co., Ltd. Nihon Suido Consultants Co., Ltd. STUDY PERIOD  Jan. 1999 ~ Dec. 1999 11month(s)  Sarajevo Treatment Plant Central, Bogska and Iridja Zone  SITE OR AREA |  |

The first and second field assessment survey of the WWTP has identified the following matters;

- 1) If the project is implemented, the treatment capacity of the WWTP may return to the condition before the War and can correspond to the planned sewage volume in 2015.
- 2) It became clear after applying calculation model that the civil and architectural structure of the wastewater treatment facilities has sufficient capacity. Repairs of construction joints, expansion joints, reinforced concrete protection, partial structural reinforcement are required. It is also concluded that most of the existing mechanical equipment can be used provided that cleaning, overhauling, and replacement of damaged and missing arts are done. Moreover, it is impossible to use electric facilities at all.
- 3) From the point of view of structural aspects, the sludge treatment facilities can be utilized provided that appropriate repair measures are applied in the same manner as the wastewater treatment facilities. Except for a total replacement of the sludge dehydration and boiler facilities, most of the existing mechanical equipment can be used provided that cleaning, overhauling and replacement of damaged and missing parts are done. However, total replacement of the electrical equipment is required.

ERP BHG/S 312/99 F/S

|                | Completed or In Progress      | Promoting                 |
|----------------|-------------------------------|---------------------------|
| PRESENT STATUS | Completed Partially Completed | Delayed or Suspended      |
|                | Implementing Processing       | Discontinued or Cancelled |
|                | Flocessing                    | Discontinued of Cancened  |

### **Description:**

(FY 2000 Domestic Survey)

1. The WWTP Rehabilitation Project and Costs

Based on the assessment work, the fundamentals for WWTP rehabilitation were formulated as follows;

- 1) Installation of new pre-treatment and pre-screening facilities that will remove heavier grit particles before they are lifted by the screw pumps.
- 2) Existing facilities would be basically rehabilitated and improved to bring them back to the pre-war condition.
- 3) All mechanical equipment and electric facilities, except some parts of the clarifies would be newly replaced.
- 4) As an architectural work, a new boiler room and generator building will be constructed, and the others will be rehabilitated.

Based on these improvement fundamentals, the preliminary design of the Project is formulated with the estimated cost as follows;

- 1) The Total Project Costs is estimated at DEM 76 million, consisting of the construction cost, and engineering plus contingency cost at DEM 64 million and DEM 12 million, respectively.
- 2) Annual O&M cost is estimated at about DEM 6.1 million.

### 2. Economic and Financial Evaluation

Economic and financial evaluation is done with some assumptions in consideration with preliminary design and estimation, and O&M cost. The calculation shows Financial Internal Rate of Return (FIRR) of 5.9%. The result indicated that the project is feasible as a loan project, provided that revenue collection of the improved vy raising tariff rates. The economic benefit of the Project is justified by the calculation of the Economic Internal Rate of Return (EIRR), which is 17.6%. According to the result of questionnaire survey done on the domestic and non-domestic water uses in Sarajevo, recognition on the improvement of the environment and the water quality of Bosna and Miljacka Rivers was considerably high. The survey resulted to a relatively high amount of Willingness to Pay (WTP) at KM 3.0 to 4.1 per household per month.

(FY 2003 Domestic Survey)

Bosnia and Herzegovina is negative about fund raising by other means than the grant aid.

(FY 2005 Domestic Survey)

No information to be specificary mentioned.

## STUDY SUMMARY SHEET (M/P)

Compiled May.2001 **ERP** BHG/S 108/00 Revised Jul.2009

| 1.  | COUNTRY                           | Bosnia-Herzegovina   |   |                      |                      |  |  |
|-----|-----------------------------------|--|---|----------------------|----------------------|--|--|
| 2.  | NAME OF STUDY                     | The Study on the Transport Masterplan in Bosnia and Herzegovina  |   |                      |                      |  |  |
| 3.  | SECTOR                            | Transportation   | / (Transpo  | ortation in) General | 4. TYPE OF STUDY M/P |  |  |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME | CY AT THE  | Ministry of Civil Affairs and Communications of Bosnia and Herzegovina, Ministry of Transport and Communications of the Federation of Bosnia and Herzegovina, Institute of Urbanism of the Republic of Srpska |                      |                      |  |  |
|     | PRESENT COUNTERPA                 | ART AGENCY   |   |                      |                      |  |  |
| 6.  | OBJECTIVES OF THE STUDY           | -Formulation of an integrated, multi-model (road, rail, waterway, air)transport master plan extending over a twenty year planning horizon to year 2020.  -Identification, within the overall master plan framework, of urgent projects whose implementation is to be achieved by year 2005, and whose merit is determined via pre-feasibility studies. |   |                      |                      |  |  |
| 7.  | CONSULTANT(S)                     | Pacific Consultants International  |   |                      |                      |  |  |
| 8.  | STUDY PERIOD                      | Mar.1999 ~   | Mar.2001  | 24month(s)           |                      |  |  |
|     | SITE OR AREA                      |  |   |                      |                      |  |  |
| 10. | MAJOR PROPOSED PR                 | OJECT(S)   | 1   |                      |                      |  |  |

(1) Road Sector (Project Cost Local Cost:3,487.6KM, Foreign Cost:1,499.7US\$)

BiHTMAP project proposals including construction of new bypasses/expressways, improvement/widening/pavement of the existing roads, are based on sufficiency analysis and are intended to expand the road network.

(2) Railway Sector (Project Cost Local Cost513.9KM, Foreign Cost:221.0US\$)

With a target being functional modernization of BiH railway, a package improvement is proposed, whose focus is Corredor Vc and the line parallel to Corridor X. The highest priority should be given to immediate actions for; 1) rehabilitation of rolling stock, including rehabilitation of workshops and maintenance functions; 2)improvements of infrastructure, including signal and communications, as well as recovery of disconnected catenary system.

(3) Air Transport Sector (Project Cost Local Cost:20.5KM, Foreign Cost:8.8US\$)

Those project components which need to be addressed in the short-term to meet ICAO standards with respect to safety and security, and meet future international demand have been identified as priority projects.

(4) Waterway Transport Sector (Project Cost Local Cost:167.7KM, Foreign Cost:72.1US\$)

The urgent reconstruction projects shold be focused on making the Sava River transport system operational as soon as practicable.

(5) Transport Training Institute(TTI) (Project Cost Local Cost:4.5KM, Foreign Cost:1.9US\$)

The Transport Training Institute is proposed as an important urgent program.

ERP BHG/S 108/00 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

### **Description:**

(FY 2001 Domestic Survey)

Special Training of "Development of Personnel in Transport Sector" for Bosnia and Herzegovina is to be started by the end of FY2001. It is to be held once every year, and 3 persons are invited from each Entity and the State, totaling 9 persons per year. It continues for five year and currently the details of the first-year program are being created

(FY 2004 Domestic survey)

No information

(FY 2005 Domestic survey)

Subsequent Study: By-pass, Motorway and Support Regional Integration Program and Rail Rehabilitation Project

Implementing period: 2003 - 2005 Implementing body: EBRD

Objective: For a peaceful development in Bosnia Herzegovina, rehabilitation of infrastructural facilities and maintenance in the transport and traffic sectors are required where various sized transport and traffic infrastructural projects are in progress by EBRD, EU, and WB, etc. The M/P is referenced as a guideline to enhance rationalisation.

Funding:

Funding party: EBRD

Amount:

Road sector - First stage: 70 mil EUR Railway sector - First stage: 21 mil EUR

Content: Rehabilitation projects of infrastructural facilities in the road and railway sectors.

Technical cooperation:

Training: Part of special country research programme in transportation sector.

Number of dispatched trainees: 8-9 people each from 3 ethnic groups and 3 governments.

Period: 2002, 2003, 2004, and 2005 (suspended due to coordination)

(Basic Study)

Compiled Feb.2007

| EF  | RP BHG/S 501/   | 05                 |  |                 |               | Revised     | Jul.2009 |
|-----|---|--------------------|--|-----------------|---------------|-------------|----------|
| 1.  | COUNTRY   | Bosnia-Herzegovina |  |                 |               |             |          |
| 2.  | NAME OF STUDY   | The study on est   | ablishing digital topographic maps for Bo  | nia and Herzego | ovina         |             |          |
| 3.  | SECTOR  | Social Infrastruc  |  | 4.              | TYPE OF STUDY | Basic Study |          |
| 5.  | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY   |                    | Ministry of Civil Affairs  |                 |               |             |          |
|     | PRESENT COUNTERPA   | ART AGENCY         |  |                 |               |             |          |
| 6.  | OBJECTIVES OF THE STUDY   | digitize previous  | geographical map, develop nationwide aer<br>s national topographical map.<br>chnology on topographical dataset develop |                 |               |             |          |
|     |   | Pasco Internatio   | nal Inc.   |                 |               |             |          |
| 7.  | CONSULTANT(S)   |                    |  |                 |               |             |          |
| 8.  | STUDY PERIOD  | Feb.2003 ~         | Sep.2005 31month(s)  |                 |               |             |          |
|     |   | Nationwide incl    | uding 21 major cities  |                 |               |             |          |
| 9.  | SITE OR AREA  |                    |  |                 |               |             |          |
| Co: | MAJOR PROPOSED PRotents:  Basic geographical data of Γopographical map developed the map developed th | levelopment, upd   |  |                 |               |             |          |

**ERP** BHG/S 501/05 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** (FY 2006 Domestic Survey) No information to be specifically mentioned. (FY 2007 Domestic Survey) No information to be specifically mentioned.

# STUDY SUMMARY SHEET (Other Studies)

|                                     |                         |                                  | (Other Studies)  |           |                |       | Compiled            | Mar.1991 |
|-------------------------------------|-------------------------|----------------------------------|--|-----------|----------------|-------|---------------------|----------|
| El                                  | RP GRC/S 601/           | 89                               |  |           |                |       | Revised             | Jul.2009 |
| 1.                                  | COUNTRY                 | Greece                           |  |           |                |       |                     |          |
| 2.                                  | NAME OF STUDY           | Tourism Promo                    | tion   |           |                |       |                     |          |
| 3.                                  | SECTOR                  | Tourism                          | / (Tourism in) General                                 | 4.        | TYPE OF ST     | UDY   | Other Studies       |          |
| 5.                                  |                         |                                  | Greek National Tourism Organization (E.O.T)            | "         |                |       |                     |          |
| COUNTERPART AGE<br>TIME OF DEVELOPM |                         |                                  |  |           |                |       |                     |          |
|                                     | PRESENT COUNTERPA       | ART AGENCY                       |  |           |                |       |                     |          |
|                                     |                         | Proposal of pos                  | sible measures to increase Japanese tourists to Gree   | ece.      |                |       |                     |          |
| 6.                                  | OBJECTIVES OF THE STUDY |                                  |  |           |                |       |                     |          |
| 7.                                  | CONSULTANT(S)           | ALMEC Corpor<br>Pacific Consulta | ration<br>ants International                           |           |                |       |                     |          |
| 8.                                  | STUDY PERIOD            | Sep.1988 ~                       | Jul.1989 10month(s)                                    |           |                |       |                     |          |
|                                     |                         | The areas specif                 | fied in Greece as destination the areas in Japan as o  | origin of | tourist        |       |                     |          |
| 9.                                  | SITE OR AREA            |                                  |  |           |                |       |                     |          |
| 10                                  | MA IOD DDODOSED DD      | POIECT(S)                        |  |           |                |       |                     |          |
|                                     | MAJOR PROPOSED PR       |                                  | <br>Promotional activities; 3) Improvement plans by ta | raet area | ar and 4) Impr | oveme | nt of transport se  | rvice    |
|                                     |                         |                                  | out only as example. That's why no cost calculation    |           |                |       | in or transport sea | vice.    |
|                                     |                         |                                  |  |           |                |       |                     |          |
|                                     |                         |                                  |  |           |                |       |                     |          |
|                                     |                         |                                  |  |           |                |       |                     |          |
|                                     |                         |                                  |  |           |                |       |                     |          |
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|                                     |                         |                                  |  |           |                |       |                     |          |
|                                     |                         |                                  |  |           |                |       |                     |          |

PRESENT STATUS

In Progress or In Use

Delayed

Other Studies

### **Description:**

In accordance with the recommendations of the study, GNTO has increased their promotional budget in Japan, and various promotional activities are being implemented mainly in Tokyo metropolitan area. As a result, 130 thousand Japanese tourists visited Greece in 1989, exceeding the record 129 thousand in 1979 (the Aegean boom). GNTO Tokyo office continues their efforts to promote Japanese tourists to Greece. In addition to their efforts, the official schedule flights directly to Greece from Tokyo was opened by Olympic Airways from 1990, and a desirable increase of Japanese tourists in observed in 1991.

### (FY 1994 Domestic Survey)

The number of Japanese tourists visiting Greece has been increasing except for that in 1991, because of Gulf War.

Discontinued or Cancelled

Tokyo office of GNTO continues their efforts for tourism promotion through advertising Greek attractiveness by large pictures at railway stations, etc. However, as the representative of GNTO in Tokyo was replaced in mid of this year, it is not clear whether they are willing to change the promotion strategy or not.

### (FY 1995 Domestic Survey)

Once GNTO Tokyo Office unofficially sounded to JICA about a request for the new promotion survey for this project, after that, however, no activity is observed as yet.

### (FY 1995 Overseas Survey)

The recommendations of the study have been in use to formulate the tourism promotion policies. However, because of the termination of the direct flight between Athens and Tokyo, it is expected to be difficult to increase the number of the Japanese tourists.

(M/P+F/S)

Compiled Mar.1995

| E   | RP HUN/S 2                   | <b>18/93</b> Re  | evised J       | Jul.2009 |  |
|-----|------------------------------|--|----------------|----------|--|
| 1.  | COUNTRY                      | Hungary  |                |          |  |
|     |                              | Municipal Solid Waste Management in Budapest   |                |          |  |
| 2.  | NAME OF STUDY                | Walled Ford Waste Wallagement in Bacapest  |                |          |  |
| 2   | CECTOD                       | Dublic Heiliging / Habor Conjection 4 (TWDE OF COVERY M/D. E/S   | •              |          |  |
| 3.  | SECTOR                       | Public Utilities / Urban Sanitation 4. TYPE OF STUDY M/P+F/S   | 1              |          |  |
|     |                              | Ministry for Environment and Regional Policy (Budapest Capital City Government)                                |                |          |  |
|     | CONTREEDDADE ACEN            | COV. A TO TOWN   |                |          |  |
|     | COUNTERPART AGEN             |  |                |          |  |
|     | TIME OF DEVELOPME            | ENT STUDY  |                |          |  |
| 5.  |                              |  |                |          |  |
|     |                              |  |                |          |  |
|     | DDEGENER GOLDWEIDD           | A DIT A CENTON   |                |          |  |
|     | PRESENT COUNTERPA            | ARI AGENCY   |                |          |  |
|     |                              |  |                |          |  |
|     |                              |  |                |          |  |
|     |                              | 1.To formulate a M/P for the improvement of the municipal solid waste management in Budapest.                  |                |          |  |
|     |                              | 2.To conduct the F/S on the first priority project.  |                |          |  |
|     |                              |  |                |          |  |
|     |                              |  |                |          |  |
| 6.  | OBJECTIVES OF THE            |  |                |          |  |
| ٠.  | STUDY                        |  |                |          |  |
|     |                              |  |                |          |  |
|     |                              |  |                |          |  |
|     |                              |  |                |          |  |
|     |                              |  |                |          |  |
|     |                              | Environmental Technologic Consultants Co., Ltd.  |                |          |  |
| 7.  | CONSULTANT(S)                | ,  |                |          |  |
|     | 0 0 1 12 0 = 1 - 1 (2)       |  |                |          |  |
|     |                              | Mar.1992 ~ Aug.1993 17month(s)   |                |          |  |
| 8.  | STUDY PERIOD                 | Mar.1992 ~ Aug.1993 17month(s)   |                |          |  |
|     |                              | ~  |                |          |  |
|     |                              |  |                |          |  |
|     |                              | District-XV Budapest (at the same site with the existing incineration plant)                                   |                |          |  |
|     |                              |  |                |          |  |
|     |                              |  |                |          |  |
| 9.  | SITE OR AREA                 |  |                |          |  |
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|     |                              |  |                |          |  |
|     |                              |  |                |          |  |
|     |                              |  |                |          |  |
| 10. | MAJOR PROPOSED PR            | OJECT(S)   |                |          |  |
| Co  | nstruction of new incinera   | ation plant  |                |          |  |
|     | umber of furnaces: 480 t/    |  |                |          |  |
|     |                              | t/day(24hour/day operation)  |                |          |  |
|     | ocation : District-XV        | buly (2-moun day operation)  |                |          |  |
|     |                              |  | c <del>-</del> | 71       |  |
|     |                              | eiving and feeding facilities, Combustion facilities, Drafting facilities, Boiler facilities, Power generation | facilities, F  | due gas  |  |
|     | atment facilities, Building  | g facilities.  |                |          |  |
|     | rchase of vehicles.          |  |                |          |  |
| Fin | al disposal facilities (bull | ldozer)  |                |          |  |
|     |                              |  |                |          |  |
|     |                              |  |                |          |  |
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ERP HUN/S 218/93 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

F/S includes all the projects proposed by M/P.

\*The reconstruction of the flue gas treatment system installed in the existing incineration plant.

Prior to the first priority project execution, the reconstruction of the existing flue gas treatment system was politically decided to satisfy the new national environmental regulations which were legislated during JICA study was still being carried out (As a matter of course the first priority project was designed to meet the new regulations).

#### Reasons for Delay or Suspension:

The reconstruction of the flue gas treatment system in the existing incineration plant is the precondition for the implementation of the proposed project (construction of a new incineration plant). However, financial constraints have hindered the implementation of the reconstruction project. Therefore, no action has been taken to implement the proposed project.

(FY 1997 Domestic Survey)

One of factors caused delay is cost sharing problem.

(FY 1997 Overseas Survey)

Change in policy.

#### Detail:

The reconstruction (new construction) of the existing flue gas treatment is still under the status of promoting for materialization. The Hungarian Government has submitted the formal request to the Japanese Government for raising loan to materialize the construction of the flue gas treatment facilities for the existing incineration plant.

(FY 1995 Domestic Survey)

The City Congress of Budapest will decide again to promote the wasted gas treatment project at the end of August, 1995. Responding to this decision, OECF will begin the implementation of SAPROF.

Simultaneously, the City Congress will start to take measures in order to construct new wasted materials combustion plant based on the results of this survey works. (FY 1996 Domestic Survey)

The Ministry of Environment and Regional Policy and the Budapest Capital City government consider this reconstruction project urgent and important. Thus, they concluded I/P (draft) of SAPROF with the dispatched OECF mission in June 1996. However, the central government and the Budapest Capital City government has not agreed how to secure the local fund to implement the project, which will be equivalent to 40% of total project cost. Because they are reluctant to undertake SAPROF before they confirm the financial source for the project, it has been suspended.

#### Others:

(FY 1999 Overseas Survey)

The construction of new controlled landfill is in progress. It is very likely that the construction of a new incineration plant will be needless in the next 5-10 years.

### Perspective:

(FY 1997 Domestic Survey)

There is possibility to realize the project in case that ODA's interest for environment projects lower.

(FY 1997 Overseas Survey)

To materialize the project, Procurement of fund is necessary.

(FY 1998 Domestic Survey)

If the flue gas treatment system is established, implementation of the proposed project will be considered (probably after 2~3 years).

(FY 1999 Overseas Survey)

A tender for the reconstruction of flue gas treatment system in the existing incineration plant will be implemented. in 2000.

# STUDY SUMMARY SHEET (M/P)

(M/P) Compiled Sep. 1995 CRP HUN/S 101/94 Revised Jul. 2009

| Lŀ  | <u> </u>                               |                                  |  |                                | Revised .       | Jul.2009 |
|-----|--|----------------------------------|--|--------------------------------|-----------------|----------|
| 1.  | COUNTRY                                | Hungary                          |  |                                |                 |          |
| 2.  | NAME OF STUDY                          | Integrated Air F                 | Pollution Control Plan for Sajo Valley Area                      |                                |                 |          |
| 3.  | SECTOR                                 | Administration                   | / Environmental Problems   | 4. TYPE OF STUDY M             | P               |          |
| 5.  |  |                                  | Ministry for Environment and Regional Policy                     |                                |                 |          |
|     | COUNTERPART AGEN<br>TIME OF DEVELOPMI  |                                  |  |                                |                 |          |
|     | PRESENT COUNTERP                       | ART AGENCY                       |  |                                |                 |          |
|     | OBJECTIVES OF THE                      | Survey and ana pollution control | llyze the relation between local socio-economic activit ol plan. | ies and the air pollution. Dra | wing up general | air      |
| 6.  | STUDY                                  |                                  |  |                                |                 |          |
| 7.  | CONSULTANT(S)                          | Pacific Consulta                 | ants International   |                                |                 |          |
| 8.  | STUDY PERIOD                           | Sep.1992 ~                       | Jan.1995 28month(s)  |                                |                 |          |
|     |  | Sajo Valley are                  | a in Borsod, Abauj and Zemplen Districts                         |                                |                 |          |
| 9.  | SITE OR AREA                           |                                  |  |                                |                 |          |
| 10. | MAJOR PROPOSED PI                      | ROJECT(S)                        |  |                                |                 |          |
|     | Thermal power plant:                   |                                  | _  |                                |                 |          |
| In  | troduce the combustion                 | boiler with circul               | ated flowing floor to Borsod power plant, and convert            | the existing boilers to the hy | brid combustion | system   |
|     | h flowing floor.                       |                                  |  |                                |                 |          |
|     | Factory :<br>Convert the fuel from coa | al to notural gas (I             | Poilor Tunnor Viln   |                                |                 |          |
|     | Jse low Nox burner (Cer                |                                  | bolici, Tullicii Killi)  |                                |                 |          |
|     | Convert the heat treatmen              |                                  | h" type  |                                |                 |          |
|     | nstall a denitrization faci            | lity to the nitric a             | acid producing line  |                                |                 |          |
|     | People's life :                        |                                  |  |                                |                 |          |
| Co  | onvert the fuel from coal              | to natural gas.                  |  |                                |                 |          |
|     |  |                                  |  |                                |                 |          |
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ERP HUN/S 101/94 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

### (1) Steam Power Plant

Subsequent Study:

Hungarian side requested to a JICA a F/S for reconstruction of the boilers at Borsod Power Plant to control air pollution. Mining and Industrial Department of JICA has dispatched a contact mission to carry out the preliminary survey for the implementation of F/S on July, 1995.

#### (FY 1997 Overseas Survey)

1995~July 1998 F/S on facility improvement and environmental protection of Borsod Power Plant was undertaken.

### (FY 1998 Domestic Survey)

This steam power plant was sold to AES on an American private company when F/S was conducted. Therefore there is no possibility to implement the project with an assistance from Japan.

#### (2) Factory

Subsequent Study:

(convert the heat treatment furnace to Rath type)

1995~96 own fund

#### (3) People's Life

(convert the fuel from coal to natural gas)

1995~97 3300 mil. Forint (consumers' own source and governmental financial aid, 67.9 mil.Forint)

(M/P+F/S)

Compiled Jun.2001 **ERP** HUN/S 209/98 Revised Jul.2009

| 1. | COUNTRY                           | Hungary                     |                  |                |               |              |          |              |            |             |           |
|----|-----------------------------------|-----------------------------|------------------|----------------|---------------|--------------|----------|--------------|------------|-------------|-----------|
| 2. | NAME OF STUDY                     | The study on the            | e Environment    | al Improveme   | nt of Lake Ba | laton in the | e Repul  | blic of Hung | gary       |             |           |
| 3. | SECTOR                            | Administration              | /                | Environmenta   | l Problems    |              | 4.       | TYPE OF S    | TUDY N     | M/P+F/S     |           |
| 5. | COUNTERPART AGENTIME OF DEVELOPME | CY AT THE                   | Balaton Deve     |                |               |              |          |              |            |             |           |
|    | PRESENT COUNTERPART AGENCY        |                             |                  |                | •             |              |          |              |            |             |           |
| 6. | OBJECTIVES OF THE STUDY           | To formulate a l necessary. | M/P for water of | quality improv | ement of Lak  | te Balaton a | and to o | conduct a F  | S for prop | posed proje | ect(s) if |
| 7. | CONSULTANT(S)                     | Pacific Consulta            | nnts Internation | nal            |               |              |          |              |            |             |           |
| 8. | STUDY PERIOD                      | Jan.1996 ~                  | Feb.1999         | , ,            |               |              |          |              |            |             |           |
|    | SITE OR AREA                      |                             |                  |                |               |              |          |              |            |             |           |
| 10 | MA IOR PROPOSED PR                | O IECT(S)                   |                  |                |               |              |          |              |            |             |           |

#### M/P

- 1. Institutional measures
- Establish Lake Balaton Policymaking Chamber that handles coordination, policymaking, and information control.
- Promote residents participation.
- Examine introduction of environment usage fee.
- 2. Construction measures
- Implement the existing sewerage project in the catchment.
- Implement the Kishbalaton project Phaze II in a early stage.
- Dredge the KESTOHEI and SHIGRIGET lake basins.
- Construct 33 vegetation based water purification facilities.
- 3. Non-constuction measures
- Promote environmental education.
- Introduce products surcharge
- Establish systems to popularize public sewerage connection and purification.

#### F/S

Construction of vegetation based water purification systems is one of the objectives of the F/S.

### Study Areas:

- River water purification system (vegitation based water purification system): NYUGATY on UBUCHATORNA River and KERETY on HOZOTO River
- Urban sewerage treatmen system (coagulation sedimentation fileration method): KESTHEI downtown.

ERP HUN/S 209/98 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

### **Description:**

(FY 2001 Domestic Survey)

The proposed organization for the restoration and development of Lake Balaton was established under the name of Balaton Development Authority.

JICA's technical cooperation, upgrading of Pollution Load Database (PLDB) and Water Duality Simulation Model (which were provided by the Study as tools for the policy decision making), is being implemented by the request of the Authority.

(FY 2002 Overseas Survey)

Two Short-term JICA experts were dispatched to the LBDCA: Water quality simulation modeling, Water pollution load analysis(11 Nov.2001-10. Dec. 2001, 25 Jan. 2002-25. Mar. 2002, 27. Jan. 2003-26 Mar. 2003)

Due to the unforeseen environmental changes (low water level and associated issues), LBDCA further requested for a follow up study to continue the water quality simulation.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2008 Domestic Survey)

No information to be specifically mentioned.

### STUDY SUMMARY SHEET (M/P)

Compiled Jun.2000 **ERP** MKD/S 114/99 Revised Jul.2009

| 1. | COUNTRY                           | Macedonia   |                         |  |    |                      |     |
|----|-----------------------------------|---|-------------------------|--|----|----------------------|-----|
| 2. | NAME OF STUDY                     | The Study on A  | ir Pollution Monitori   | ng System  |    |                      |     |
| 3. | SECTOR                            | Administration  | / Enviro                | nmental Problems                                     | 4. | TYPE OF STUDY N      | M/P |
| 5. | COUNTERPART AGENTIME OF DEVELOPME |   |                         | lanning, Construction an ment(at the last stage of t |    | at(during the Study) |     |
|    | PRESENT COUNTERPA                 |   | -                       | ment and Physical Plann                              |    |                      |     |
| 6. | OBJECTIVES OF THE STUDY           | 1) To provide recommendation on the establishment of a nationwide air pollution monitoring system.  2) To formulate a detailed plan for pollution monitoring with respect to a selected model city.  3) To carry out technical transfer to the counterpart personnel of the Macedonian government during the study  4) To support the decision-making on environmental policies of the Macedonia. |                         |  |    |                      |     |
| 7. | CONSULTANT(S)                     |   |                         |  |    |                      |     |
| 8. | STUDY PERIOD                      | Oct.1997 ~  | Aug.1999                | 22month(s)   |    |                      |     |
|    | SITE OR AREA                      |   | odel city: Skopje city, | capital of Macedonia                                 |    |                      |     |
| 10 | MA IOR PROPOSED PR                | OTECT(S)  | 1                       |  |    |                      |     |

- 1. The air quality monitoring station of 4 stations and the mobile monitoring station of one station have been installed for Skopje City in this project.
- 1) Setting up of additional 10 Air Quality Monitoring(AQM) stations(2 places are addition to Skopje City)
- 2) Installation of 5 Continuous Emission Monitoring(SEM) Stations
- 3) Introduction of one mobile monitoring system
- 4) Establishment of Air Pollution Monitoring Center(APMC) including data bank system
- 5) Introduction of auto-exhaust gas inspection system
- 6) Up-grading analytical instruments of the Institute of Environment "Zelezara"
- 2. Organization and Institution Planning

Submitted our proposal to the Environment Consulting Center of the Ministry of Environment, the establishment of APMC, including the responsible work, organizational system, personnel plan, personnel training system.

- 3. Suggestion about the maintenance and management plan such as the monitoring equipment
- 4. Personnel Development Planning
- 5. Implementation Schedule Plan for Nation Wide Monitoring System

The proposal was submitted for the implementation schedule plan in the installation of the nationwide monitoring system, procurement of equipment and material, and so on.

ERP MKD/S 114/99 M/P

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 2000 Domestic Survey)

The counterpart of this Study said that the Macedonian government newly requested to the Japanese government. The major contents of that are requested are as follows;

- 1) 2 monitoring stations are to be increased in capital Skopje City. Then, it will have 6 stations which has already been supplied by JICA project.
- 2) Introduction of 2 new monitoring stations in Bitola City where the coal thermal power plant is being operated.
- 1. Establishment of air quality monitoring station system

(FY 2001 Domestic Survey)

The grant aid was requested to the government of Japan but not adopted yet. The Ministry of Environment of Macedonia is willing to proceed establishing the air quality monitoring station system under the decision by the government of Japan and JICA in Dec.2001 or Jan.2002.

Contents of request:

Procurement source: Japanese grant aid is expected.

Procurement amount: 45 million Yen is demanded.

Loan project content:

- --- 2 additional installation of the monitoring stations in Capital Skopje City and 2 establishments of them in Bitola City where the coal thermal power plant is located.
- --- Version up of the computers and other equipment at the central station (The Ministry of Environment and Nature Planning, Environment Information Center)
- Personnel Development Planning

(FY 2001 Domestic Survey)

The expert by JICA (Mr.Okuno from Institute of Environment of Hyogo) has been giving a technical transfer, the young and middle experts on environment have been participating in the JICA training and the ministry itself has been also promoting the human resources, however there may possibly be shortage of them.

3. Organization and Institution Planning

(FY 2001 Domestic Survey)

Organization reform: Oct.2000, The ministry of Environment has changed its name to the Ministry of environment and Nature Planning.

Environment related laws: The Act on Environment and Nature Protection and Promotion came in force in Oct.1997 is still in force. Although it does not stipulate the measure to proof the control standard, the related laws have been introducing positively according to the latest information.

4. Suggestion about the maintenance and management plan such as the monitoring equipment

(FY 2001 Domestic Survey)

- 1) Maintenance and management of the provided equipment:
- -- Equipment at the Air Pollution Monitoring Station (4 stations): They are maintained well under the maintenance contract with the Australian Firm.
- -- The other equipment are also frequently utilized and operated well.
- 2) Inauguration of the Air Pollution Monitoring Center with the Data Bank System:

Although the EIC of Ministry of Environment are representing to it, more development on staff, equipment and technical level are necessary. It seems that the request on version up of the computers at EIC and dispatch of experts are one link of it.

Furthermore, the proposed projects like, the installation of continuous emission monitoring stations, and mobile monitoring system, the introduction of auto-exhaust gas inspection system, up-grading analytical instruments of the Institute of Environment, are under discussion based on the proposed projects, however they faces difficulty to make them forward because of the financial problem.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(M/P)

Compiled

Jun.2000

**ERP** MKD/S 115/99 Revised Jul.2009 1. COUNTRY Macedonia Master Plan Study on Integrated Water Resources Development and Management 2. NAME OF STUDY 3. SECTOR Social Infrastructure / Water Resources Development TYPE OF STUDY M/P 5. Ministry of Development (MOD) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY PRESENT COUNTERPART AGENCY 1) To formulate an integrated water resources development and management master plan for the target year 2025 in the whole area of The Yugoslav Republic of Macedonia. 2) To transfer technology to the counterpart personnel in the course of the Study **OBJECTIVES OF THE** STUDY Nippon Koei Co., Ltd. 7. CONSULTANT(S) KRI International Corporation Dec 1997 Inl 1999 19month(s) 8. STUDY PERIOD Whole area of Macedonia 9. SITE OR AREA

### 10. MAJOR PROPOSED PROJECT(S)

The master plan was formulated for the target year 2025.

In the Master plan, 42 projects were selected, among which 12 projects were proposed to be implemented in the First I phase (1999 to 2005) as a result of comprehensive evaluation. The following are purpose / feature, estimated project cost and economic/ financial internal rate of return(EIRR/FIRR).

Project Name(Purpose/ Features)

- 1. Water supply project for Tetovo (M.I. (200 l/s))
- 2. Kichevsko Reka Water Supply (1,500 ha)
- 3. Patishka Reka Water Supply Project (M. (80 l/s))
- 4. Slupchanka Dam Project (M.I.(2601/s))
- 5. Treska River Upper Reach Rural Water Supply Project (RWS(Population: 15\*1,000))
- 6. Skopje Circle Rural Water Supply Project (RWS (Population: 37\*1,000))
- 7. Kriva Palanka/Kumanovo Circle Rural Water Supply Project (RWS (Population: 35\*1,000))
- 8. Zletovica Dam Project(M.I (300 l/s)
- 9. Valandovo Area Irrigation Rehabilitation Project(3,600 ha)
- 10. Pelagonia Circle Rural Water Supply Project(RWS (Population: 24\*1,000))
- 11. Irrigation System Betterment in Resen(5,200 ha)
- 12. Oraovica Dam Project(M.E(200 l/s))
- M: Municipal water, I: Industrial water, E: Environmental Water Supply

全国総合水資源開発·管理計画調査

ERP MKD/S 115/99 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 2000 Domestic Survey)

It is informed that some procedure for implementation of the Zletovicha Dam Project, one of the projects to be implemented in the first Phase, has been taken by Macedonia side. Except the Project, however, there is no information on implementation of ther projects.

(FY 2001 Domestic Survey)

Although the local study was started on the Zletovicha Dam Project by JBIC from Apr.2001, it has been suspended after 1 month study due to the local political instability.

(FY 2002 Domestic Survey)

The local study is going on the Zletovicha Dam Project by JBIC.

(FY 2003 Domestic Survey)

20 Nov.2003 L/A about 9,600 mil. yen (The Zletovicha Dam Project)

(FY 2004 Domestic Survey)

Bid for the consultants in Yen Loan project was held (deadline of the proposal, 5th March, 2005)

(FY 2005 Domestic Survey) Now in implementation phase.

(Basic Study)

Compiled Dec.2007

| LI  |                             |  | Jul.2009 |
|-----|-----------------------------|--|----------|
| 1.  | COUNTRY                     | Macedonia  |          |
| 2   | NAME OF STUDY               | The Study for Establishment of State Base Maps for GIS in the Former Yugoslav Republic of Macedonia              |          |
| ۷.  | TAME OF STUDI               |  |          |
| 3.  | SECTOR                      | Social Infrastructure / Survey & Mapping 4. TYPE OF STUDY Basic Study  |          |
| 5.  |                             | State Authority for Geodetic Works   |          |
|     |                             |  |          |
|     | COUNTERPART AGEN            |  |          |
|     | TIME OF DEVELOPME           | ENT STUDY  |          |
|     |                             |  |          |
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|     |                             |  |          |
|     | PRESENT COUNTERPA           | ADT ACENCY   |          |
|     | PRESENT COUNTERP            | ARI AGENCI   |          |
|     |                             |  |          |
|     |                             | 1) D 1   |          |
|     |                             | 1) Development of national basic map(basis of spatial data), 2) Technical transfer, 3) Diffusion of geographical |          |
|     |                             | information  |          |
|     |                             |  |          |
|     | OBJECTIVES OF THE           |  |          |
| 6.  | STUDY STUDY                 |  |          |
|     | 51021                       |  |          |
|     |                             |  |          |
|     |                             |  |          |
|     |                             |  |          |
|     |                             | KOKUSAI KOGYO CO., LTD.  |          |
| 7.  | CONSULTANT(S)               |  |          |
|     | 0 01 10 0 = 1111 (0)        |  |          |
|     |                             | Mar.2004 ~ Nov.2006 32month(s)   |          |
| 8.  | STUDY PERIOD                | 7 1.07.2000 Janonings  |          |
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|     |                             |  |          |
| 9.  | SITE OR AREA                |  |          |
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|     |                             |  |          |
|     |                             |  |          |
| 10. | MAJOR PROPOSED PR           | ROJECT(S)  |          |
| Ac  | hievements are report of    | survey operation, and as follows.  |          |
|     | Aerial photograph           |  |          |
|     | On-site location survey ac  | chievement   |          |
|     | Result of aerial triangulat |  |          |
|     |                             | raphic map in scale of 1/25,000  |          |
|     |                             | raphic map in scale of 1/25,000  |          |
|     | Digital data file           | 1425,000   |          |
| 1   | Digital data file           |  |          |
| TI. | augranted mait              | os fallows (in order of precedence)  |          |
|     |                             | as follows.(in order of precedence)  |          |
|     |                             | l basic map in country-wide level(project1)  |          |
|     | Advanced use of Ortho I     |  |          |
|     |                             | service of topographic map(project5)   |          |
|     |                             | g point and changing geodetic reference system(project2)   |          |
|     |                             | l-term and long-term plan(project4)  |          |
| (6) | Development of map con      | mpiled in downscale(project7)  |          |
| (7) | Build up WebGIS(project     | ct6)   |          |
|     |                             |  |          |
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**ERP** MKD/S 501/06 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** (FY2007 Domestic Survey) Suggested project as follows was conducted. Implemented Project: Development of Geographical Information Database of Macedonia(dispatch experts) Implementing Period: from January, 2007 to March, 2007 Implementing Body: Department of Location Survey Contents: reinforcement of GIS/database making capacity Successful Bidder: PASCO Corporation

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Jun.2009
ERP MKD/S 101/07
Revised Jul.2009

| 1. | COUNTRY                 | Macedonia                          |                         |   |                          |                     |
|----|-------------------------|------------------------------------|-------------------------|---|--------------------------|---------------------|
| 2. | NAME OF STUDY           | The Study on Ca<br>Repubclic of Ma |                         | or Soil contamination Managem   | ent Related to Mining in | the Former Yugoslav |
| 3. | SECTOR                  | Mining                             | / Mining                |   | 4. TYPE OF STUDY         | M/P                 |
| 5. | COUNTERPART AGENO       |                                    | MINISTRY OF AGR         | ICULTURE, FORESTRY AND  | WATER ECONOMY (          | MAFWE)              |
|    | PRESENT COUNTERPA       |                                    |                         |   |                          |                     |
| 6. | OBJECTIVES OF THE STUDY |                                    | •                       | ct technical assistance for capaci<br>nal structure, for soil contaminati | •                        |                     |
| 7. | CONSULTANT(S)           | Mitsubishi Mate                    | erials Natural Resource | es Development Corp.  |                          |                     |
| 8. | STUDY PERIOD            | Dec.2005 ~                         | Mar.2008                | 27month(s)  |                          |                     |
|    | SITE OR AREA            | The whole area                     | of Macedonia            |   |                          |                     |

#### 10. MAJOR PROPOSED PROJECT(S)

- 1. Master Plan on the Soil Contamination Management
- (1) Institution Level of Capacity Development on Soil Contamination Management

On the legal framework of soil contamination management in Macedonia, the MEPP should take the initiative on soil contamination management and establish the "Basic Law on Soil Contamination Management" as the leading ministry.

(2) Society Level of Capacity Development on Soil Contamination Management

The main components of capacity development at society level are public awareness, social education/research/training concerning soil environment, risk communication and resident participation. Risk communication is an important aspect of the implementation of the remedial and management measures to mitigate soil contamination. It should be mentioned in the "Basic Law on Soil Contamination Management" that stakeholder meetings should be held for prompt disclosure and information sharing between stakeholders.

- (3) Organization Level of Capacity Development on Soil Contamination Management
- CD at organizational level will be necessary to ensure the successful implementation of the M/P and implementation of improvements in SCM on an ongoing and sustainable basis.
- (4) Technical (Individual) Level of Capacity Development on Soil Contamination Management
- 2. Working Programme on Survey and Counter-measures of Soil Contamination in Whole Area of Macedonia
- (1) Hot Spot Survey
- (2) Soil Contamination Inventory Survey in the Whole Area of Macedonia
- (3) Organisation of Counter-measures Implementation
- Temporary Counter-measures: In the case of permanent counter-measure can not be carried out immediately, temporary counter-measure is conducted to mitigate risks of human health and to prevent spreading of contamination to the surrounding environment.
- Permanent Counter-measures : It is conducted to prevent the spreading of contamination to the soil and groundwater to surrounding area in the future.

**ERP** MKD/S 101/07 M/P In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** (FY 2008 Domestic Survey) The additional monitoring study on soil/groundwater contamination will be implemented by the Ministry of Agriculture, Forestry and Water Economy of Macedonia. In accordance with the results of the study, measures against soil/groundwater contamination will be taken. However, details of the current progress are unknown.

(M/P)

Compiled Mar.1994

| EF               | <b>POL/S 101/</b>  |   |
|------------------|--|---|
| 1.               | COUNTRY  | Poland  |
| 2.               | NAME OF STUDY  | National Transport Plan   |
| 3.               | SECTOR   | Transportation / (Transportation in) General 4. TYPE OF STUDY M/P   |
| 5.               | SECTOR   | Ministry of Transport and Maritime Economy (MTME)   |
|                  | COUNTERPART AGEN<br>TIME OF DEVELOPMI                                      | CY AT THE   |
|                  | PRESENT COUNTERPA  | RT AGENCY   |
| 6.               | OBJECTIVES OF THE STUDY  | Elaboration of a M/P and short/middle term priority plans for the National Transport Plan which will effectively encoura the economic restruncturing toward a free market economy.  |
| 7.               | CONSULTANT(S)  | Pacific Consultants International The Overseas Coastal Area Development Institute Japan Railway Technical Service   |
| 8.               | STUDY PERIOD   | Mar.1991 ~ Dec.1992 21month(s)  |
| 10.              | SITE OR AREA  MAJOR PROPOSED PR  | Population of 38.2 million  OJECT(S)  |
| 1.               |  | Cerm Actions (1993 - 1996) Medium Term Actions (1997 - 2000)  |
| Ma<br>Roa<br>Por | intenance of existing roa<br>ad Transport<br>ts & Mari- Preparation        | ation and Modernization of PKP  High speed service and encouragement of international transport Roads & is and prepartation  Encouragement of Road administration and construction  of road development plan  of highways  n of port development policy  Encouragement of competitiveness of Polish ports |
|                  |  | tion of airport infrastructure Encouragement of international air transport r transport administration  |
|                  | oan Transport Rationaliz   | tion of urban transport entities Completion of suspended projects tion of transport administration Preparation towards the EC integration   |
| Imp              | Projects and Programs<br>provement Program of th<br>F/S on General Cargo T | Transport Administration, Pre F/S on the CMK Railway Line Road Financing System, Port Cargo Information System, rminals   |
|                  |  |   |

ERP POL/S 101/92 M/P

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### Description:

Implementation of the project (FY 1993 Overseas Survey)

1.Improvement program of the Transport Administration.

Essential structural change was carried out in MTME. It will continue.

Reorganization MTME

One of the recommendations by the study team was "Reorganization of MTME" which includes an introduction of "model organization system" to the existing "functional organization system"

Polish government has reacted to the recommendations as follows:

1)Establishment of new departments

- -Department of Railways
- -Department of Civil Aviation
- 2)Reorganization of the existing departments
- -Department of Transport Policy

Reorganization of former Department of Transport systems and Department of International Cooperation

-Department of Motorcar Transport

Former Department of Land Traffic Administration

2.CMK railway line improvement

F/S was requested to JICA

3.Port Cargo Information System & General Cargo Terminal

They were used to draft the Maritime State Policy toward 2000.

4. The training program of PKP Management staff

This is in implementation phase. The firm to conduct training course has been chosen.

5.Restructuring of PKP

1995 "The Study on Restructuring of Polish State Railways in Poland" (JICA)

#### Utilization of the outputs:

The Government utilized the study results to formulate following two documents.

-Transport Policy and Realization Steps on the way of Transforming

Polish Transport System into adopted one to the market economy and new cooperation conditions in Europe

-Polish Transport System's Integration with EC Transport Systems

### Situation:

(FY 1997 Domestic Survey)

Development study on privatization of national railway was carried out by JICA in 1996.

(FY 1997 Overseas Survey)

There are no changes in situation.

(FY 1998 Domestic Survey)

Oct.1996~Jan.1998 JICA M/P "Privatization of Polish State Railway"

(M/P+F/S)

Compiled Mar.1995

| EF          | RP POL/S 2   | 19/93            |   |        |               | Revised | Jul.2009 |
|-------------|--|------------------|---|--------|---------------|---------|----------|
| 1.          | COUNTRY  | Poland           |   |        |               |         |          |
| 2.          | NAME OF STUDY  | Solid Waste Ma   | nagement for Poznan City  |        |               |         |          |
| 3.          | SECTOR  COUNTERPART AGEN   | Public Utilities | / Urban Sanitation -Ministry of Physical Planning and Construction -Poznan Municipality | 4.     | TYPE OF STUDY | M/P+F/S |          |
| 5.          | TIME OF DEVELOPME  |                  |   |        |               |         |          |
|             | PRESENT COUNTERP   |                  |   |        |               |         |          |
| 6.          | OBJECTIVES OF THE STUDY  |                  | of solid waste management Master Plan     tripriority projects                          |        |               |         |          |
| 7.          | CONSULTANT(S)  |                  | GYO CO., LTD.<br>ants International   |        |               |         |          |
| 8.          | STUDY PERIOD   | Mar.1992 ~       | May.1993 14month(s)   |        |               |         |          |
| 9.          | SITE OR AREA   | east of Poznan   | olant and Sanitary landfill:Flanowo Michalowo area, song center:Eight places in Poznan  | south- |               |         |          |
| -8 1<br>-In | MAJOR PROPOSED PR<br>number of public recyclin<br>cineration plant<br>unitary landfill |                  |   |        |               |         |          |

ERP POL/S 219/93 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

#### Finance:

(FY 1994 Domestic Survey)

GNP per person (1,790 US\$ in 1991, 1,910 US\$ in 1992) was once decreased and is increasing again. So far (1954~94), Japanese grant aid and loan are very few (urgent food aid, equipment for the Opera house, commodity loan). The possibility of the Japanese aid for this project seems not so high.

#### Situation:

The equipment for solid waste management (25 million yen) was provided JICA in FY 1995. The preservation of environment is very emphasized in Poland nowadays, so the implementation of this project is desired.

#### (FY 1995 Overseas Survey)

The implementation of the project is considered to be difficult due to the lack of fund of the Poznan Municipality. However, based on the finding of the study, the project to improve the recycling rate is being implemented.

#### (FY 1996 Domestic Survey)

In 1995 the provision of OECF loan was resumed. The priority order of project in Poznan is 1)Railway Construction Project (once commenced with the World Bank loan, but it is now suspended), 2)construction of sewerage and 3)construction of incineration plants. Thus, no step will be taken to implement this Project before 1) and 2) are implemented.

#### (FY 1997 Overseas Survey)

Poznan City can't find legal tenders for implementing these projects, because the priority order of projects in Poznan is center sewage-treatment Plant.

#### (FY 1998 Domestic Survey)

This project will desirable as the sales profit can be expected practically. However, Poznan Municipality gives third priority to this proposed project. Unless the projects given first and second priorities are realized, this project will not be implemented.

### STUDY SUMMARY SHEET (M/P)

Compiled Jul.1998 **ERP** POL/S 108/97 Revised Jul.2009

| COUNTRY  | Poland   |   |   |  |               |   |
|--|--|---|---|--|---------------|---|
| NAME OF STUDY  | Privatization of   | Polish State Railways   |   |  |               |   |
| SECTOR   | Transportation   | / Railway   |   | 4. TYPE                                | OF STUDY      | M/P   |
| 5. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |  | Ministry of Transport a   | and Maritime Economy (MOTM  | Æ)                                     |               |   |
| PRESENT COUNTERPA                                      |  |   |   |  |               |   |
| OBJECTIVES OF THE STUDY                                | Based on the request of the government of Poland, review a program to privatize the national railways which is a part of the policies to promote market economy in the country. And, conduct a study for making an adequate plan to improve management and shift toward privatization, with the consideration of an integrated transportation network system including cooperation with neighboring countries. |   |   |  |               |   |
| CONSULTANT(S)  | Daiwa Institute  | of Research Ltd.  |   |  |               |   |
| STUDY PERIOD   | Oct.1996 ~   | Feb.1998  | 16month(s)  |  |               |   |
| SITE OR AREA  MA IOR PROPOSED PR                       |  | Total extension 23,000 l  | cm (Warsaw, Gdansk, Szczecin  | , Poznan, V                            | Wroclaw, Kat  | owice, Krakow, Lublin etc.)   |
|  | NAME OF STUDY  SECTOR  COUNTERPART AGENT TIME OF DEVELOPME  PRESENT COUNTERPA  OBJECTIVES OF THE STUDY  CONSULTANT(S)  STUDY PERIOD  | NAME OF STUDY  Privatization of  SECTOR  Transportation  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  PRESENT COUNTERPART AGENCY  Based on the rec the policies to p management and including coope including coope  STUDY  Japan Railway T Daiwa Institute Tonichi Enginee Oct. 1996  Whole Poland T | SECTOR Transportation COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  Based on the request of the government the policies to promote market economy management and shift toward privatizat including cooperation with neighboring study  Japan Railway Technical Service Daiwa Institute of Research Ltd. Tonichi Engineering Consultants, Inc.  STUDY PERIOD  Japan Railway Total extension 23,000 In Whole Poland Total extension 23,000 In SITE OR AREA | Privatization of Polish State Railways | NAME OF STUDY | NAME OF STUDY   Privatization of Polish State Railways   SECTOR   Transportation   / Railway   4. TYPE OF STUDY |

1. Management Form of Privatization

Separate Polskie Koleje Pa?stwowe (Polish State Railways, PKP) into an infrastructure sector and a transport sector as an independent entity for each,, and privatize them. It is proposed that a final management form should be a stock company which consists of 1 infrastructure company and 8 other companies (3 passenger companies, 2 freight companies, an affiliated business company, an information and telecommunication company, and a data processing company).

#### 2. Plan to Shift toward Privatization

Maintenance of rail transport, Environmental preservation, Fares revision (price increase), Separation of assets (separate an infrastructure sector from PKP and change it into a new state-owned enterprise), Treatment of low-density lines (abolition of lines), Treatment of surplus workers (early retirement system, reshuffling of personnels), Introduction of Related businesses, Investment plans, Subsidies by the government (analyses of its necessity and effects), Human resource development, Management of Passenger management (between cities, in metropolitan areas, in local lines), Freight management (rail transport of general freight, transport of compound freight)

ERP POL/S 108/97 M/P

PRESENT STATUS
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 1998 Domestic Survey)(FY 2001 Domestic Survey)

Market economy has been promoted in Poland since 1989, and the privatization of the national railways (PKP) in the country has also been examined since 1991 as a part of the promotion of market economy. The government of Poland has positively tackled with the reform of the Poland national railways. It newly established the department of railways in MOTME in 1992, and clarified a direction of the reform by approving transport policies in a Cabinet meeting and making the "New Poland National Railways Law" effective etc. in 1995. The mentioned study is highly evaluated by MOTME and the national railways, etc. As the content of the report is comprehensive and the completion is the same with the time when the privatization of the national railways has been reviewed, the report is distributed to those concerned in the parliament and high-ranking government officials such as a presidential aide, and it has been used widely as a reference for the examination of the privatization of the national railways. The content of the proposal for Poland was enriched because Poland had a great interest in experiences of the privatization of the Japanese National Railways (JNR) and many unique policies in the reform of JNR such as the privatization and division of JNR, deregulation, the treatment of long-term debt, a reduction in surplus workers, the abolition of low-density lines and the establishment of the Settlement Corporation were applicable to the PKP's case, especially in the implementation of the study. Poland requested Japan to dispatch experts on the subjects stated below to raise effectiveness of a report which is the outcome of the study on privatization stated above, and the experts were dispatched by a JICA base.

#### Technical cooperation:

Dispatch of experts: It is evaluated by Polish side that the appropriate advice by the experts contributes to promote privatization of the Polish national railways when the privatization of PKP is in progress.

- 1. April 1998 (18 days): "Support for the Reform of Railways (training for staff)" 2 persons (Japan Railway Technical Service)
- 2. October-November 1998 (21 days): "Support for the Reform of Railways (technical guidance)" (Seminars were held.) 3 persons (2 for Japan Railway Technical Service, 1 for Japan Telecom Co., Ltd.)
- 3. April 1999- "Support for the Reform of Railways (training for staff)"
- 4. February 2001- "Support for the Reform of Railways (technical guidance)"

#### (FY 2001 Domestic Survey)

After the submission of the report in February 1998, the PKP Reform Law was established, PKP became a special corporation, and accounts were separated in passenger, freight and infrastructure sectors in the special corporation, and the 3 sectors are supposed to be divided into the companies in the future. The direction of the privatization of PKP is same with the proposal of the development study, and the result of the study is used as a reference.

On the other hand, in implementing the privatization of railways concretely, Poland requested the government of Japan in April 2000 to conduct a JICA's development study again about adequate methods to privatize passenger and freight companies and the examination of the content of financial restructuring etc. since the development study was useful. However, it has not been conducted yet due to a problem of tax for the JICA's development study in Poland.

(FY 2002 Domestic Survey) (FY 2003 Domestic Survey)

Subsequent study: "Study on the Privatization of the Poland National Railways" (F/S)

Implementing period: March 2003 to March 2004 (Phase I), May 2003 to March 2004 (Phase II)

(FY 2003 Domestic Survey)

Technical cooperation:

Training in Japan: Privatization of Railways-training of Japanese case studies (September-October 2003)

(FY 2003 Overseas Survey)

- 1) September 1999, Revised a national railways program.
- 2) September 2000, Revised a law for privatization.
- 3) Reduced employees to 147,000 people by the end of 2002.
- 4) Stopped the operation of low profitability 3,900km sections by the end of 2002.
- 5) Established a labor preparation fund.

(FY 2007 Domestic Survey)

No information to be specifically mentioned.

### STUDY SUMMARY SHEET (M/P)

Compiled Dec.1999 **ERP** POL/S 115/98 Revised Jul.2009

| 1.  | COUNTRY                 | Poland  |  |  |
|---|-------------------------|---|--|--|
| 2.  | NAME OF STUDY           | Integrated Regional Development of Konin Province in Poland |  |  |
| 3.  | SECTOR                  | Development Pla   | n / Integrated Regional Development Plan 4. TYPE OF STUDY M/P  |  |
| 5.  COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                         |   |  |  |
|   | PRESENT COUNTERPA       | ART AGENCY  | Government Centre for Strategic Studies, Konin Vaivodeship Office.   |  |
| 6.  | OBJECTIVES OF THE STUDY |   | onal development master plan in order to propose new directions for the future development of Konin identify high priority projects selected from a long list to be prepared in the master plan. |  |
| 7.  | CONSULTANT(S)           | UNICO Internati<br>International Dev                        | onal Corporation relopment Center of Japan   |  |
| 8.  | STUDY PERIOD            | Jul.1997 ~  | Jul.1998 12month(s)  |  |
|   | SITE OR AREA            | Konin Province a  | and its vicinity.  |  |
| 10.   | MAJOR PROPOSED PR       | OJECT(S)  |  |  |

From the 75 projects on the long list, 21 were identified as having high priority. Among the latter are many projects involving reform of governmental entities or systems. Investment requirements for these projects were not estimated.

The average annual investments required in the case of a 6.0% growth rate for Konin's GRDP are:

1995-2000 PLN 628 million

2000-2005 PLN 864 million

2005-2010 PLN 1,156 million

#### 21 priority projects

Agriculture: 1. Strengthening of agriculture technologies in Konin, 2.Establishment of comprehensive irrigation management system, 3.Promotion of group sales activities, 4. Promotion of agro-tourism.

Three key industries: 5.Promotion of aluminum down stream industries, 6.Promotion of heat utilization industries, 7.M/P study for utilization of underground water.

Industry: 8.Establishment of a one-stop investment service center, 9.Construction of a Konin woodworking industrial park, 10.Establishment of SMEs supporting system, 11.Establishment of financing assistance scheme for new entrepreneurs, 12.Organization of "Economic Forum 2010".

Physical distribution and transportation: 13. Construction of a distribution center for construction materials, 14. Construction of a service area for long distance drivers, 15. Construction of a distribution center for fruits and vegetables.

Tourism: 16.Development of hot spring resources.

Land use and infrastructure: 17.Improvement of transportation infrastructure, 18.Supply of a low cost housing, 19.Construction of a centralized waste treatment and disposal facilities, 20. Construction of industrial parks for general use.

Man power development: 21. Establishment of the schools for higher education.

ERP POL/S 115/98 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### Description:

(FY 1999 Domestic Survey)

Subsequent to the study, Konin was merged with the neighboring province of Poznan. The recommended industrial and agricultural development projects are being implemented with EU assistance. Privatization is progressing in the province's three basic industries (coal, power, aluminum) and the new entities are making progress in realization of the recommendations of the Study.

(FY 2003 Overseas Survey)

Konin Regional Development Agency provided the following services chiefly to small and medium enterprises for four years from 1999 to 2002.

- 1) Training activities: Training of various fields such as marketing, financing and quality management were provided to 400 small and medium enterprises all over Wielkopolska.
- 2) Advice: Seven bases to support small and medium enterprises were instituted in Wielkopolska, where supporting service was provided to 2,000 companies in a year.
- 3) Information service: Various information on accession to EU was provided. Technical cooperation of Japan:

Technical cooperation of Japan:

(FY 2003 Overseas Survey)

- 1) Dispatch of Experts: FY1998 (2 persons), FY2000(3 persons), FY2002(1 person)
- 2) Acceptance of Technical Training Participants: FY1998, FY1999, FY2000, FY2002 (one person for respective fiscal years)

### STUDY SUMMARY SHEET (M/P)

Compiled Jan.2006 POL/S 101/04 **ERP** Revised Jul.2009

| 1.   | COUNTRY                 | Poland                            |                               |   |           |                      |   |
|--|-------------------------|-----------------------------------|-------------------------------|---|-----------|----------------------|---|
| 2.   | NAME OF STUDY           | Feasibility Stud                  | y on Polish State Rail        | ways S.A. (PKP S.A.) Praiva   | atization | in Poland            |   |
| 3.   | SECTOR                  | Transportation                    | / Railwa                      | V   | 4.        | TYPE OF STUDY        | M/P   |
| 5. COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                         | CY AT THE                         | Ministry of Infrastruc        |   |           |                      |   |
|  | PRESENT COUNTERPA       | ART AGENCY                        |                               |   |           |                      |   |
| 6.   | OBJECTIVES OF THE STUDY | measures, mana                    | gement strategies, cor        | n and reformation of the Ponpetitiveness improvement of an agement etc in accord with | of PKP gr | oup and optimization | lowing formulation of fiscal<br>on of management size |
| 7.   | CONSULTANT(S)           | Japan Railway T<br>Nippon Koei Co | Technical Service<br>o., Ltd. |   |           |                      |   |
| 8.   | STUDY PERIOD            | Mar.2003 ~                        | May.2004                      | 14month(s)  |           |                      |   |
| 9.   | SITE OR AREA            | Entire Poland (e                  | especially Warsaw)            |   |           |                      |   |
| 10   | MAJOR PROPOSED PR       | OIECT(S)                          |                               |   | -         | -                    |   |

- 1. Proposal on policies and prospect of PKP Group reform/privatization
- 1) Scaling down of the business (future railroad scale: 11 thousand kilometers)
- 2) Surplus employee measures (early retirement program, allocation)
- 3) Surplus asset utilization (assets registration and assets division, development and disposal of unused lands)
- 4) Accumulated debts settlement (sales income by real estate redevelopment)
- 5) Modernization of the railway infrastructure (cancellation of the lack of infrastructure facilities maintenance and maintenance bug log)
- 6) Improvement of administrative institutions
- 7) Legislative reform
- 8) Revision of regional transportation service and abolishment of unprofitable line
- 9) Reinforcement of a corporate structure of three PKP services, update of train compartments
- 2. Schedule of reform and privatization

First stage (2004-2006): Correspondence to urgent problems

Second stage (2007-2010): Correspondence to midterm problems

Third stage (2011-): Correspondence to long term problems

ERP POL/S 101/04 M/P

PRESENT STATUS
In Progress or In Use
Delayed
Discontinued or Cancelled

#### **Description:**

(FY 2005 Domestic and Overseas Survey)

Proposals made in the study were adopted in "The restructuring of PKPS.A group and privatization promotion plan towards 2007" prepared by the Polish government, which were reflected to the Polish Railway policy. The study has been considered highly evaluated by Polish side. In addition, 3 experts were dispatched for a follow-up of the study to advise on privatization of national railway.

2004: Polish railway restructuring and privatization plan prepared, taking the result of study in account.

2004/Dec: JICA has dispatched 3 experts to make a comment on the plan

2005/Feb: The plan was approved by a cabinet, which was recognized as a formal government plan

2005: Related legislation are under consideration in national assembly.

#### (FY 2006 Domestic Study)

Poland, which became a member of EU 2 year ago, adopts proposals in the main study into Polish railway policies and promotes privatization and railway corporate downsizing of PKP.

#### (FY 2006 Overseas Survey)

In 16 Dec. 2003 which was a period of the report making, the Council of Ministers approved the "program for privatization and reorganization of the PKP group toward 2006". However, as speed of reorganization was too slow, the Council of Ministers approved the "strategy for privatization and reorganization of the PKP SA group" in 22 Feb. 2005

The government allocated more national budget to support the railway transport which is aiming at its modernization and infrastructure development. The "railway foundation" was established based on the new gazette law chapter 12, article 61 which became effective from 2006. The foundation is a new capital source for railways in the sense of extra budget.

Surplus of PKP SA and Polish Railway Lines (PLK SA) were transferred to regional governments.

Subsequent study: F/S on a privatization plan of the Polish Railway (PKP S.A.)

Implemented period: 14 months from Mar. 2003 to May. 2004 Implementing agency: The Ministry of Transport Railway Department

Objective: Implementation of studies and proposals which can be reflected into Polish railway policies and which can be combined into the "plan for PKP S.A. group reorganization and privatization toward 2007" established by the Polish government

Beneficiaries: PKP S.A. Funding party: own fund

Technical cooperation: Dispatch of experts (Short-term expert): 3 experts in Dec. 2004

### (FY 2007 Domestic Survey)

Poland seems to continue to adopt the contents proposed in mentioned study into Polish railway policy and encouraging restructuring and privatization of railways.

(M/P+F/S)

Compiled Jul.1996

| EF        | RP ROM/S 2                            | 201/95                      |   |                    | Revised | Jul.2009 |
|-----------|---------------------------------------|-----------------------------|---|--------------------|---------|----------|
| 1.        | COUNTRY                               | Romania                     |   |                    |         |          |
| 2.        | NAME OF STUDY                         | Solid Waste Ma              | nagement System for Bucharest Municipality  |                    |         |          |
| 3.        | SECTOR                                | Public Utilities            | / Urban Sanitation  | 4. TYPE OF STUDY   | M/P+F/S |          |
| 5.        | COUNTERPART AGEN<br>TIME OF DEVELOPME | CY AT THE                   | Municipality of Bucharest Public Works B     Ministry of Public Works Department of U     Service | ureau              |         |          |
|           | PRESENT COUNTERPA                     |                             |   |                    |         |          |
| 6.        | OBJECTIVES OF THE STUDY               |                             | un Urban Waste Control Improvement Plan.  |                    |         |          |
| 7.        | CONSULTANT(S)                         | Yachiyo Engine              |   | rch and Consulting |         |          |
| 8.        | STUDY PERIOD                          | Aug.1994 ~                  | Dec.1995 16month(s)   |                    |         |          |
|           | SITE OR AREA                          | Bucharest                   |   |                    |         |          |
| 1.C<br>(B | MAJOR PROPOSED PR                     | ion disposal plan<br>Glina) | pipe for surrounding villages of 3 plants.  |                    |         |          |
|           |                                       |                             |   |                    |         |          |

ERP ROM/S 201/95 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

Subsequent studies:

(FY 1998 Overseas Survey)

Sep.1997~March 1998 Redraw of F/S for the development of Glina Landfill

US\$ 10.000 (own fund)

\* Pre F/S for new landfill sites (Giulesti-Sarbi, Vidra) were conducted in July~Sep.1998 with their own fund (US \$10,000 each).

#### Background:

#### (FY 1996 Overseas Survey)

May.1996, Municipality of Bucharest submitted to Ministry of Finance to request OECF loan. In Dec.17.1996, the Municipality of Bucharest received the reply from both the Ministry of Finance and the Ministry of Public Works that both Ministries were willing to assist the implementation of this project. The municipality is to submit the detailed documents in order to obtain their final consent as the Government of Romania.

#### (FY 1997 Domestic Survey)

The Government of Romania has requested OECF loan to construct a disposal plant. In July of 1997, Romanian president visited Japan and submitted a letter to the Japanese Government to request a loan.

#### (FY 1997 Overseas Survey)

The Municipality of Bucharest permits and authorizes only the Glina landfill site, because of the opposition shown by the local councils and others for Balaceanca and Cretuleasca

OECF loan is to be applied for 75% of project cost, and government budget for remained part.

It is necessary to conduct F/S in accordance with the Romanian Law.

Technical assistance for the implementation of The Sanitation Tax was accomplished by own means.

#### (FY 1998 Domestic Survey)

In addition to this proposed project, the government of Rumania has requested OECF loan for the construction of harbor on the coast of the Black Sea and also the highway that leads to the harbor. It seems that higher priority is given to those harbor and highway construction projects.

#### (FY 1999 Domestic Survey)

Romanian President submitted a letter to the Japanese Government to request a loan on disposal plant when he visited Japan in 1997. However, this project has not been included in the official request which has been submitted from Rumanian government to Japanese government.

#### (FY 2005 Domestic Survey)

Subsequent project: Urban waste reclamation site development

Implementation period: 2000 to 2002

Implementing party: Bucharest municipal and private companies

Relationship with the study:

- 1. After the completion of study, although loan request from the Romanian Government to JBIC was anticipated, request have never been submitted.
- 2. Glina disposal sites have implemented expansion construction with funds from Bucharest municipality.
- 3. Complete privatisation of logistics system and introduction of the private funds for the disposal system has rapidly progressed. Reclamation sites have followed collection logistics services to be privatised which as a result, all of the collection services and disposal sites except Glina are conducting developments and operations with the private fund.

**(F/S)** 

Compiled Jul.1996

| EI<br>1.                           | RP ROM/A COUNTRY   | 301/95<br>Romania   | Re   | vised Jul.  | 2009 |
|------------------------------------|--|---|--|-------------|------|
|                                    |  |   | ct in Ruginesti-Pufesti-Panciu District Vrancea  |             |      |
| 2.                                 | NAME OF STUDY  |   |  |             |      |
| 3.<br>5.                           | COUNTERPART AGEN<br>TIME OF DEVELOPME  |   | / (Agriculture in) General 4. TYPE OF STUDY F/S  Ministry of Agriculture and Food  RAIF (Regia Autonoma a Imbunatatirilor Funciare-Land Reclamation Autonomy)  |             | -    |
|                                    | PRESENT COUNTERPA  | ART AGENCY  |  |             |      |
| 6.                                 | OBJECTIVES OF THE STUDY  | Formulation of (including soil                                  | a F/S on Irrigation Improvement Project in the target area as well as Agriculture Developm preservation).  | ent Project |      |
| 7.                                 | CONSULTANT(S)  | Pacific Consult<br>Sanyu Consulta                               | ants Inc.  |             |      |
| 8.                                 | STUDY PERIOD   | Mar.1994 ~  | Jul.1995 16month(s) nce, Ruginesti, Pufesti, Panciu Area   |             |      |
| 9.                                 | SITE OR AREA   |   |  |             |      |
| 1. I<br>2. I<br>3. S<br>Co<br>4. I | Orainage Facility: drainage Facility: drainage Facility untermeasure Work (8km | site (10), pressuri<br>ge canal (136.0ki<br>: level terraces (1 | Ing site (49), drainage canal(76.4km), water supply pipe (418.6km) m) 1,839ha), grass-grown canal (33km), boundary drainage canal (16.4km), sabo damu (6), Erobranch road (53.8km), road for management (97.1km) | sion Valley |      |
|                                    |  |   |  |             |      |

ERP ROM/A 301/95 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### Description:

A part of trunk water canals are under construction slowly using Romanian fund, however, due to a lack of fund, the construction plan of F/S is behind time.

#### (FY 1998 Domestic Survey)

Small-scale construction is on-going with own funds.

#### (FY 2001 Overseas Survey)

(There is no comment in the questionnaire regarding the progress situation of each separated project work with the following reason.)

Concerning the projects divided into works of irrigation, drainage, soil preservation and road improvement, the Study conducted by JICA, has not separated funds for the divided projects. All of them constitutes capacities in the frame of the same objective.

#### Perspective for Remaining Projects:

(FY 1997 Domestic Survey)

Romanian Government has requested OECF loan for other projects on rehabilitation of port and road.

#### (FY 1997 Overseas Survey)

Romanian Government will allocate budget for the project and at the same time will request grant aid assistance for Phase B and D/D to Japanese Government in January 1998.

There is no plan for conducting subsequent study but detailed study is necessary.

#### (FY 1998 Domestic Survey)

Rehabilitation of port and road has not progressed.

#### (FY 1998 Overseas Survey)(FY 1999 Domestic Survey)(FY 1999 Overseas Survey)

The OECF loan request has not been approved yet.

#### (FY 2001 Domestic Survey)

The Yen loan for the rehabilitation of port and road is not adopted.

The progress situation of the grant aid request concerning the phase B and D/D is not confirmed yet.

#### Situation

M/P is being undertaken to request OECF loan but is delayed. Things are in confusion such as reformation of Ministry of Agriculture & Food in the end of survey period and independence of Land Improvement Bureau (counterpart at that time) as a public corporation.

#### (FY 2005 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2005 Overseas Survey)

Neither subsequent study nor projects have been implemented due to financial constraints.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Dec.1999
ERP ROM/S 111/98
Revised Jul.2009

|     | 1101110 1111            | •  |
|-----|-------------------------|--|
| 1.  | COUNTRY                 | omania   |
| 2.  | NAME OF STUDY           | Iaster Plan for Environmental Water Management on the Prahova River Basin  |
| 3.  | SECTOR                  | dministration / Environmental Problems 4. TYPE OF STUDY M/P  |
| 5.  | COUNTERPART AGENO       |  |
|     | PRESENT COUNTERPA       |  |
| 6.  | OBJECTIVES OF THE STUDY | To formulate the master plan for water environment management on the Prahova River Basin for the target year 2015; and 2)To carry out technology transfer to the counterpart personnel in the course of the Study. |
| 7.  | CONSULTANT(S)           | TI Engineering Co., Ltd. entral Consultant, Inc.   |
| 8.  | STUDY PERIOD            | ec.1997 ~ Jan.1999 13month(s)<br>~   |
|     | SITE OR AREA            | rahova River Basin (3,738km2).   |
| TU. | MAJOR PROPOSED PR       | IECT(8)  |

- 1. Sewerage development for 2 cities, 12 towns and 2 villages in the basin.
- (1) Sewer networks: extension (2 cities, 11 towns) and new installation (1 town).
- (2) Treatment plant: improvement (2 cities, 8 towns, 2 villages) and new installation (3 towns).
- $2. \ Was tewater \ treatment \ development \ for \ 79 \ factories \ mainly \ consisting \ of \ oil \ refinery.$
- (1) Improvement (70 factories).
- (2) New installation (9 factories).
- 3. Replacement of the old oil pipeline (15.7km) to prevent accidental water pollution caused by oil leakage.
- 3. Installation of a new laboratory to strengthen the water quality monitoring of the river and wastewater effluent.

ERP ROM/S 111/98 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 1999 Domestic and Overseas Survey) No major progress has been made thereafter. (FY 2001Domestic Survey)

Unknown.

(FY 2001 Overseas Survey)

The present status of M/P is described as "in progress or in use" rather than "delayed" or "discontinued." The Study was finished in March 1999 and a Proposed List of Recommendations was included in the Final Report in order to improve the Prahova River quality.

Those measures (extension and construction of sewerage networks and treatment plants, replacement of the old oil pipeline in Doftana River area, installation of a new laboratory for river and wastewater monitoring) were targeted in 2015. The only action undertaken is in the direction of conducting the studies and obtaining the necessary permits for some treatment plants in Prahova County. All other efforts to improve the River Water Quality were delayed by the lack of financial resources. That is the reason that the Study is considered as finished with the measures included in the proposed M/P under continuation and achievement.

(FY 2004 Domestic Survey)No information to be specifically mentioned.(FY 2008 Domestic Survey)

No information to be specifically mentioned.

(M/P+F/S)

|  |                                  | (NI/P+F/S)  | Compiled Jun.2000               |
|--|----------------------------------|---|---------------------------------|
| EI   | RP ROM/S                         | 220/99  | Revised Jul.2009                |
| 1.   | COUNTRY                          | Romania   |                                 |
| 2.   | NAME OF STUDY                    | The Comprehensive Urban Transport Study of Bucharest City and its Metropolitan Area   |                                 |
| 3.   | SECTOR                           | Transportation / Urban Transportation 4. TYPE OF ST   | UDY M/P+F/S                     |
| 5.   | COUNTERPART AGENTIME OF DEVELOPM |   |                                 |
|  | PRESENT COUNTERP                 |   |                                 |
| 6.   | OBJECTIVES OF THE STUDY          | <ol> <li>To conduct a comprehensive study of urban transport in Bucharest City and its Metrog</li> <li>To conduct a further study on priority projects and programs which should be implementated after completion of the study</li> <li>To carry out technology transfer.</li> </ol> |                                 |
| 7.   | CONSULTANT(S)                    | Central Consultant, Inc. PADECO Co,. Ltd.   |                                 |
| 8.   | STUDY PERIOD                     | Jul.1998 ~ Mar.2000 20month(s) ~  |                                 |
| 9.   | SITE OR AREA                     | Bucharest City and its metropolitan area (61,681ha)   |                                 |
| 1) 1<br>The<br>Pat<br>- se<br>- cr<br>- fc<br>- pr<br>2) 1<br>- Ir<br>- B<br>- P | -                                | ransport Master Plan was formulated in which the Ring Road Reinforcement as a basic network pattern was com t network pattern for the purpose of followings; lity center ers comment, etc  y Basarab overpass ement ent in central area on  | bined with the Multi-Modal Axis |

ERP ROM/S 220/99 M/P+F/S

|                | Completed or In Progress | Promoting                 |  |  |
|----------------|--------------------------|---------------------------|--|--|
|                | Completed                |                           |  |  |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |  |  |
|                | Implementing             |                           |  |  |
|                | Processing               | Discontinued or Cancelled |  |  |

#### **Description:**

(FY2000 Domestic Survey)

There is no information after this project.

(FY 2001 Domestic Survey)

About Inner Ring Road (Baserab overpass) which is the priority project of this Study, by self-finance etc., these results of the Study are utilized (unknown for details), and construction work is carried out. Moreover, maintenance of a subway is advanced in response to the result of the Master Plan of this Study.

(FY 2002 Overseas Survey)

Construction:

- 1) Basarab Overpass: Inner Ring Road has been completed.
- 2) Urban roads rehabilitation: 5% finalized
- 3) Modernization of the trams railway infrastructure in South-West area of Bucharest City: 30% finalized.

Bucharest municipality has placed sub-project coordinator by establishing Projects Implementation Unit (PIU) to make various decisions.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

**(F/S)** 

Compiled Jun.2000

| EF  |   |   | Revised    | Jul.2009 |  |
|-----|---|---|------------|----------|--|
| 1.  | COUNTRY                                     | Romania Feasibility Study on Wastewater Treatment along the Danube River Downstream Reach   |            |          |  |
| 2.  | NAME OF STUDY                               | Leasionity Study on wastewater freatment along the Dahitue River Downstream Reach   |            |          |  |
|     | SECTOR                                      | Public Utilities / Sewerage 4. TYPE OF STUDY F/S  |            |          |  |
| 5.  | COUNTERPART AGENTIME OF DEVELOPME           |   |            |          |  |
|     | PRESENT COUNTERPA                           | PART AGENCY   |            |          |  |
| 6.  | OBJECTIVES OF THE STUDY                     | 1) To conduct a basic study on wastewater treatment in the selected 7 cities. 2) To conduct a Feasibility Study for wastewater treatment of the targeted 3 cities, namely Tulca, Galati the selected 7 cities 3) To carry out technology transfer to the Romanian counterpart personnel in the course of the Study. | and Braila | a, among |  |
| 7.  | CONSULTANT(S)                               | Pacific Consultants International Nihon Suido Consultants Co., Ltd.   |            |          |  |
| 8.  | STUDY PERIOD                                | Jan.1999 ~ Jan.2000 12month(s)  |            |          |  |
| 10. | MAJOR PROPOSED PROSTRUCTION OF WASTEWATER T | PROJECT(S) r treatment facilities in Tulcea, Galati, Braila and Derobeta Turnu-severin.   |            |          |  |
|     |   |   |            |          |  |

ERP ROM/S 313/99 F/S

|                | Completed or In Progress         | Promoting                 |  |  |
|----------------|----------------------------------|---------------------------|--|--|
|                | Completed                        |                           |  |  |
| PRESENT STATUS | Partially Completed Implementing | Delayed or Suspended      |  |  |
|                |                                  |                           |  |  |
|                | Processing                       | Discontinued or Cancelled |  |  |

#### Description:

(FY 2000 Domestic Survey)

Tulcea: Official request letter for implementation of the Project by Japanese Grant aid has been submitted.

Galati and Braila: To implement the project by Phare's fund, the financial arrangement is in progress.

#### (FY 2001 Domestic Survey)

- 1. The request procedure was not made for the grant aid on the sewage disposal plant construction in Tulca due to the change of the mayor at the election in May 2000, though the draft request form has been prepared.
- 2.It seems that the materializing plan of the sewage disposal plant constructions in Galati and Braila financed by EU do not have any specific progress.
- 3.Subsequent Studies:Fund of EU

Subsequent Study:

(FY 2001 Overseas Survey)

Implementation period: 2000-2004 (four years)

Study type: F/S

Financial sources: EBRD (30%) and ISPA (70%) Amount: 173,902,000 US\$ (approved in 2000)

Contents: Seven cities located along the Danube River (namely Tulca, Galati, Braila, Calarasi, Giurgiu, Turnu-Magurele and Drobeta-Turnu Severin) were selected as higher priority cities in the nation wide development of wastewater treatment from the view points of the government policies to fulfill the EU Environmental Directives as one of EU applicant countries.

While wastewater collection system are considerably developed in the selected cities, none of them have proper treatment facilities. They are discharging wastewater to the Danube River without proper treatment.

Objectives: 1) To conduct a basic study on wastewater treatment in the selected seven cities. 2) To conduct a feasibility study for wastewater treatment of the targeted three cities, namely Tuleca, Galati, and Broila among the seelected seven cities. 3) To carry out technology transfer to the Romanian counterpart personnel in the course of the study.

#### (FY 2002 Overseas Survey)

- 1) Galati: The international tender for selecting the consulting is scheduled in Jan.2003.
- 2) Braila: The project has been approved and the consultant has been selected. The consultant will prepare the application for the city collector, in order to obtain the funds under ISPA. The city collector has not been included in the feasibility study for the treatment facility.
- 3) Tulcea: The application is in the approval process in Brussels.
- 4) Drobeta Turnu-Severin: The international tender for selecting the consulting is scheduled in Jan.2003.

#### (FY 2004 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2005 Domestic Survey) (FY 2005 Overseas Survey)

Galati: A tender for the selection of consultants for management and supervision is under preparation.

Tulcea: An application for the Cohesion Fund of the EU is under preparation and is to be completed in 2007. The preparation of the application is financed by ISPA. Braila: Construction has started.

Droba Turnu-Severina: A tender for the selection of consultants for technical assistance, management, and supervision has been completed.

(F/S)

Compiled Jun.2000 **ERP ROM/A 317/99** Jul.2009 Revised

| 1.  | COUNTRY                               | Romania   |   |                |                  |    |  |  |
|-----|---------------------------------------|---|---|----------------|------------------|----|--|--|
| 2.  | NAME OF STUDY                         | Forests Restoration in Romanian Plain   |   |                |                  |    |  |  |
| 3.  | SECTOR                                | Forestry  | / I   | orestry & Fore | est Conservation | 4. | TYPE OF STUDY F/S                          |  |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME | CY AT THE   |   |                |                  |    | WFEP), National Forest Administration(NFA) |  |
|     | PRESENT COUNTERPA                     |   | Ministry of Agriculture, Food and Forests, National Administration of Forest  GENCY |                |                  |    |  |  |
| 6.  | OBJECTIVES OF THE STUDY               | 1) To investigate the state of the forest decline, types and level of damage and vegetation in the study area using aerial photographs and the field survey results.  2) To formulate a forest restoration plan by analyzing the existing measures to deal with the phenomenon of forest decline in Romania.  3) To transfer technology to counterpart organization through enquiry activities. |   |                |                  |    |  |  |
| 7.  | CONSULTANT(S)                         | -   | apan Forest Civil Engineering Consultants Foundation asco International Inc.        |                |                  |    |  |  |
| 8.  | STUDY PERIOD                          | Sep.1997 ~  | Feb.2000  | 29month(s)     |                  |    |  |  |
|     | SITE OR AREA                          | Olt County and  | Dolj County   |                |                  |    |  |  |
| 10. | MAJOR PROPOSED PR                     | OJECT(S)  |   |                |                  |    |  |  |

In this plan, the subject forests of the Plan were classified into the following 2 groups;

- 1) forests of which the damage must be restored(damaged forest)
- 2) forest of which the decline must be avoided(prevention forest)
- 1. The basic principles of damaged restoration measures:
- 1) Establishment of regeneration methods
- 2) Establishment of environmental conservation function of forests
- 3) Promotion of efficient forest restoration
- 2. The basic principles of decline restoration measures:
- 1) prevention of damage by drought and excessively wet conditions
- 2) restoration of forest mantle
- 3. The main planning items of restoration measures:
- 1) cutting of standing trees mainly featuring damaged trees and declined trees
- 2) reforestation
- 3) nursing
- 4) construction of drainage and infiltration
- 5) supplementary planning to prevent damage of forest mantle
- 6) improvement of forest roads
- 7) forestry machinery
- 8) establishment of a general arboretum and forestry work demonstration forests for local development
- 9) technical development to breed highly resistance species
- 4. The main planning items of prevention measures:
- 1) construction of drainage and infiltration works
- 2) supplementary planting to prevent damage of forest mantle

ERP ROM/A 317/99 F/S

|                | Completed or In Progress         | Promoting                 |  |  |
|----------------|----------------------------------|---------------------------|--|--|
|                | Completed                        |                           |  |  |
| PRESENT STATUS | Partially Completed Implementing | Delayed or Suspended      |  |  |
|                |                                  |                           |  |  |
|                | Processing                       | Discontinued or Cancelled |  |  |

#### Description:

#### (FY 2000 Domestic Survey)

The MWFEP hopes that the Plan will play a pioneering role in the restoration of degraded forest in Romania. While Romania is aiming at joining the EU, many environmental and legal issues must firstly be solved. It is hoped that the implementation of the Plan will contribute to the solving of some such issues.

The following necessities have been identified in connection with the implementation of the Plan.

- 1) Necessity of firmly identifying new target forests and preparing environmental standards by the year 2003.
- 2) Necessity for international aid to enable activities in line with the environmental as well as forestry strategies.
- 3) Necessity for international aid to enable Romanian to comply with the environmental standards of the EU in 3-4 years time.

The prospects for implementation of the Plan are still far from certain as of November 2000. However, recently, some organization of the Netherlands dispatched a party to Romania for the data collection and the negotiations over the conditions of the forest in the placed area.

#### (FY 2001 Overseas Survey)

F/S on Forest Restration in Romania Plain is being planned as follows,

Implementation Period: 10 operation years. Financial sources: Not yet identified.

Amount: 10,709,386 US\$ Total cost inclusive of indirect cost.

Contents: The project covers 115,806 ha forest area located in two countries in the Danube Plain, afected by forest decline and consists in the implementation of the Forest Restoration Plan. The main activities refer to production works, reforestation, drainage and infiltration works, supplementary planting at forest mantles, improvement of forest roads, procurement of machinery and decline prevention measures.

#### (FY 2002 Domestic Survey)

Received financial assistance by the World Bank, Forest Policy and Management of the Gov. of Rumania was prepared in 2000. One of its strategic actions was afforestation of denuded agricultural land. World Bank prepared the project information document for 'Romania-Afforestation of Degraded Agricultural Land Project', dated 28th of Oct., 2002, and announced its financial assistance of 3.67 US dollars from the Prototype Carbon Fund.In this project, construction method proposed by the last report of this Development Study, including utilization of machines (plough, disk harrow) and effective drilling auger, was adopted, therefore, it can be assumed that a part of the project was prepared, based on the Study result. The recipient: National Forest Administration (NFA)The implementing agency: NFAFunded by: World Bank, Prototype Carbon Fund.Amount of funds: 10.09 US dollarsThe site: 7 prefectures in Southwestern and Southeastern region (including Olt Prefecture and Dolj Prefecture in which Development Study was conducted).

#### (FY 2003 Domestic Survey)

The project by the World Bank reported in the Domestic Study for 2002 was found to be irrelevant to this project. However, partly because the C/P at the time of the Development Studies had been involved in the preparation of proposal for the World Bank project, it is definite that a part of the proposed project has been incorporated into the World Bank project. The proposed project itself temporarily sought a budget toward the implementation but could not procure a budget and has not been implemented yet.

### (FY 2004 Domestic Survey)

The proposed project has once requested for a budget for its implementation, though it has not been implemented due to the failure of securing the budget.

#### (FY 2005 Domestic Survey)

The project have been delayed due to political factors such as decline of priority of development project, organisational change of counterpart, and administrative factor such as imperfect administration of implementing body.

Several reorganisations confounded the C/P. In addition, emergence of environment related institutions have let degrade political power of forestry related institutions. Thus, although the project have once requested for a fund, it is considered to be difficult in realising the project.

#### (FY 2005 Overseas Survey)

During the last 4years, following measures were taken without additional costs:

- 1. Adoption of technical solutions for forest management plans
- 2. Reference for specific research in area studies
- 3. Validation of existing technologies

Although having a favourable climate conditions in the past, it is difficult to state that the efforts were made to finance coming 5 to 7 years.

(M/P+F/S)

|     |  |       | (M/P+F/S) | Compiled | Oct.2002 |  |  |
|-----|--|-------|-----------|----------|----------|--|--|
| ERP | <b>ROM/S 22</b>  | 23/01 |           | Revised  | Jul.2009 |  |  |
|     | The state of the s |       |           |          |          |  |  |

| 1.                         | COUNTRY   | Romania   |  |   |   |               |         |
|----------------------------|---|---|--|---|---|---------------|---------|
| 2.                         | NAME OF STUDY   | The Feasibility   | The Feasibility Study on the Development Project of the Port of Constantza |   |   |               |         |
| 3.                         | SECTOR  | Transportation  | / Port   |   | 4.  | TYPE OF STUDY | M/P+F/S |
| 5.                         | COUNTERPART AGEN<br>TIME OF DEVELOPME   |   | Ministry of Transport, Romani  | a |   |               |         |
| PRESENT COUNTERPART AGENCY |   |   |  |   |   |               |         |
| 6.                         | In order to make the port Constantza to have modernized function with high handling capacities and in order to contribute all-round viewed development of Romania which is making the transition to a market economy, the project aim to formulate 2010 target year master plan and to implement F/S of the proposed projects in 2010 target year short term development plan for the port of Constantza which is a largest port in Romania as well as a largest trading port in the black sea. |   |  |   | y, the project aim to<br>target year short term |               |         |
| 7.                         | CONSULTANT(S)   | The Overseas Coastal Area Development Institute Pacific Consultants International |  |   |   |               |         |
| 8.                         | STUDY PERIOD  | ERIOD Aug.2000 ~ Jan.2002 17month(s)  |  |   |   |               |         |
| 9.                         | M/P The port of Constantza/south port and north port F/S: The port of Constantza/south  9. SITE OR AREA   |   |  |   |   |               |         |

#### 10. MAJOR PROPOSED PROJECT(S)

M/P (Targeted fiscal year: 2020):

- 1. Demand increase
- 1) Container Terminal Expansion: Construction of an additional berth to the second dock in the south port where the first phase of container terminal project is currently in progress. 2) Construction of the grain terminal.
- 2. Improvement of dock management:
- 1) Steel product terminal consolidation, 2) Timber terminal consolidation, 3) Re-organization of general merchandise dock.
- 3. Improvement of access
- 1) Barge terminal improvement, 2) Harbor road improvement, 3) Harbor railway improvement.

Short term improvement plan (Targeted fiscal year: 2010):

- 1. Demand increase
- 1) Construction of the grain terminal: 1 berth (300m) in the third dock in South port, 2 berths (250m) for barges, silo, ship loader, un-loader, superstructure such as cargo facilities are expected to be invested by private sector.
- 2. Improvement of access
- 1) Improvement of barge terminal: Barge moorage pier (1800m) in south port, barge dolphin (1400m), pusher/tugboat moorage pier (450m), 2) Harbor road improvement: Construction of by-pass road in north port (No.5 gate area)

F/S

- 1. Demand increase
- 1) Construction of the grain terminal: 98million USD, Year of construction completed: 2007, EIRR: 18.9%, FIRR: 6.6%
- 2. Improvement of access
- 1) Improvement of barge terminal: 32million USD, Year of construction completed: 2007, EIRR: 23.9%, FIRR: 7.9%

ERP ROM/S 223/01 M/P+F/S

PRESENT STATUS

Completed or In Progress

Completed

Partially Completed

Partially Completed

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

#### 1. Container Terminal Expansion

(FY 2005 Domestic Survey) Container terminal construction which is the main proposed facility, has been completed in 2003 with JBIC loan. The container is already exceeding its capacity due to much greater handling cargo volumes than expected (Present estimation from the first half, cargo volume in 2005 is estimated to reach 800 thousands TEU despite the JICA's estimation in a development study was 220 thousands TEU in 2005.) As a prioritized project, it could not estimate this explosive expansion due to the estimation of gradual increase of cargo volumes with gradual economic growth based on past experience. Therefore, the project does not establish a plan of large container terminals compatible with present growth despite the project recommends to expand terminals with approximately 1 million tons handling capacities in adjacent blank area as the second phase terminals.

(FY2006 Domestic and Overseas Survey)

Implemented Project: Second phase development of container terminals

Implementation period: April, 2006 - November, 2007 (Second phase) Implementing agency: Constantza Ports and Harbours Bureau

Objective: The completion of the second phase enables to handle estimated 1 million tons container cargo handling volume in 2006.

Relation to the mentioned study: Despite the project is in progress following the content of the report, the third phase development is necessary in order to handle 2010 estimated 2 million TEU due to much larger demands of container cargo than estimated in the report.

Funding body: Own fund (Dubai port)

Others: The Constantza Ports and Harbours Bureau and the Dubai Port concluded an agreement of land re-lease. The construction will begin in 2008 following detail design in 2007 with EUR 80 million own fund of the Dubai Port.

Progress: (FY 2006 Domestic and Overseas Survey) The Greek enterprise Mochlos SA Grecia accepted an order

(FY2007 Domestic and Overseas Survey)

Implemented project: Phase III container terminal improvement

Implementing period: 2008 - 2021 Implementing body: CSCT, DPW

Funding body: Private funds (FY2007 and FY2008 expense: 72 million EUR)

Purpose: By 2007, it became the biggest container hub port in the Black Sea with a transaction volume of 1.2million TEU. The terminal devised a comprehensive master plan aimed at developing the institution by 2021. Primary costs for the engineering work of the second phase project, such as quay cranes and gantry cranes for the yard, the secondary expenses were incorporated. For the construction, 520m of quay which makes the 1500m in total, and it will make the yard space dealing the transaction volume of 1.7million TEU.

#### 2. Grain terminal construction

(FY2005 Domestic Survey) Handling volume of grains has been fluctuating about 4 million tons in these 3 years which are 4 times larger than 1 mil tons in 2000. Despite there are grain terminals in the north port and a part of PIER 1, most of cargo handlings are inefficient such as that many barge operation are done from depot ships in offing due to deficiency of capacity of terminals. CPPA prioritize the project based on an estimation of future cargo volume growth. EBRD did not approve a loan request together with berg terminal. The tender was malfunction at preparation of implementation process by mobilizing private resources. At the moment of 2005, tender is under an assessment regarding barge terminal constructions.

(FY2006 Domestic and Overseas Survey) There is a plan to change the pier 3 to a container terminal, and build a grain terminal on terminal 1. SILO Trans SRL (Romanian company) has submitted a building certification and from April next year, construction will be started with SILO Trans SRL's own funds.

(FY2007 Domestic Survey) Bidding for the maintenance work is currently in progress. There will be an expansion of 6 new deep berths and the area of 34ha for a special terminal after the completion of the work.

#### 3. Barge terminal improvement

(FY2003 Domestic Survey) EBRD is reviewing the fund (application submitted around April 2003). However, the review of a scope/project expense, reviewing the economic assessment are necessary. The consulting company contracted by EBRD will be implementing CPA including the administrative control structure (Draft report will be completed by March next year). E/S operation is not included in the funding, so, it is necessary for CPA to budget for the consultant employment expense. (FY2004 Domestic Survey) EBRD loan is used for the construction (20 million EUR), design work will be donated from the Dutch government. Construction will be started in FY2005.

(FY2005 Domestic Survey) Rating the bidding (2005).

(FY2006 Domestic and Overseas Survey)

Implementing project: Berg terminal development

Implementing period: July, 2006 - December, 2007 Implementing body: Constantza Ports and Harbours Bureau

Funding party: Romanian government (20%), EBRD (80%)

Contents: Berg mooring pier: 1200 - 1500m x -7.0m, Berth 99 - 101 pusher/ tug mooring pier, Depth of the sea -5.0m

Progress:

(FY2006 Domestic and Overseas Survey) 95% completed, work is expected to be completed in July, 2007.

(FY2007 Overseas Survey) Rest of the work proposed in the mentioned study will be completed in the Phase 3 of the project. However, funding has not been raised.

4. Harbor road improvemen

(FY2002 Overseas Survey) Funding and a part of D/D are requested.

(FY2007 Overseas Survey) F/S of Constantza South Port (Road bridge over access canals in sea canal area, network roads in and out of the port), and improvement of the road bridge over Danube/Black sea canal in Constantza Port are implemented. The project is included in SOP-T(Sectorial Operational Programme for Transport) and solidarity funding and structure funding from Europe were requested.

#### 5. Harbor railway improvement

Implemented project: Harbor railway improvement Implementing body: SC INSTITUTUL DE STUDII SI PROIECTARI CAI FERATE S.A.- BUCURESTI-ISPCF Funding: Own fund Contents: Railroading construction to the Rail 3, Railroading construction to the Rail 6, Construction of railway connection point between Ferry Boat Station termination X in Constantza South Port and Ajijea South Station.

6. Other

(FY2006 Overseas survey) In May, 2004, Constantza Port development work and commercialization plan were implemented. Cargo volume is analyzed by Jacobs Gibb and implemented study in 1999 and 2002. JICA and Jacobs Gibb analyzed operation volume. Both analysis stated fluctuation of operation volume followed by trade development in a past decade as characteristics. Followed by renewal of operation volume estimation, consultants adopted 2 case scenarios, pessimistic scenario which takes various risks related to economic development estimation in Asia and Europe into account, and basic case scenario which almost follow JICA operation volume estimation. Work is halted for the integration of Iron/steel articles terminals and Timber terminal and road improvement is in progress. Construction of grain terminal is opposed to receive funding from the EU Structural Funds.

# STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Jun.2000 ERP SVK/S 116/99 Revised Jul.2009

| 1.   | COUNTRY   | Slovakia         |                          |  |           |  |
|--|---|------------------|--------------------------|--|-----------|--|
| 2.   | NAME OF STUDY   | The Study on R   | egional Environmental    | Management Plan for the                              | Hron Rive | er Basin                                 |
|  | SECTOR  | Administration   | T .                      | mental Problems                                      | 4.        | TYPE OF STUDY M/P                        |
| 5.   | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY   |                  | Slovak Environmental     | Agency   |           |  |
|  | PRESENT COUNTERPA   |                  |                          |  |           |  |
|  | OBJECTIVES OF THE<br>STUDY  | 2) To pursue ted | chnology transfer to the | nal environmental manage<br>counterpart personnel in |           | he area of Hron River Basin of the study |
| 7.   | CONSULTANT(S)   | Pacific Consulta | ants International       |  |           |  |
| 8.   | STUDY PERIOD  | Mar.1998 ~       | Jan.2000                 | 22month(s)   |           |  |
| 9.   | SITE OR AREA  | Hro River Basir  | n                        |  |           |  |
|  |   | OJECT(S)         |                          |  |           |  |
| 1) 1<br>2) 3<br>4) 1<br>5) 1<br>6) 1<br>2. S<br>1) 1<br>2) 0<br>3) 1<br>4) 1 | 10. MAJOR PROPOSED PROJECT(S)  1. Core plan  1) River water quality management: 14 measures  2) Soil and groundwater quality management: 12 measures  3) Air quality management: 13 measures  4) Waste management: 10 measures  5) Ecology and forests management: 9 measures  6) Heritage and tourism resources management: 20 measures  2. Supporting plans  1) Institutional measures  2) Community participation and information dissemination plan  3) Environmental education plan  4) Environmental information network plan  5) Environmental monitoring plan |                  |                          |  |           |  |
|  |   |                  |                          |  |           |  |

ERP SVK/S 116/99 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
| D 14           | Discontinued or Cancelled |

#### **Description:**

(FY 2000 Domestic Survey)

According to information from the Ministry of Environment, Slovakia, they are preparing to apply ISPA fund of the EU for some projects, and the Final Report of this Study is used for the preparation of the applications.

(FY 2001 Domestic Survey)

1.It seems that EU may provide more than 5 million Euro(provably 10 ~ 15 million Euro) to the drainage projects of mid-small sized in Hron River basin. 2.The DfID of England assists the establishment of the Clean Hron Association of Mayors.

(FY 2004 Domestic Survey)

No information.

(FY 2005 Domestic Study)

No request has been made for a Japanese assistance since 2003.

### STUDY SUMMARY SHEET (M/P)

Compiled Sep.2003 ERP SVK/A 111/02 Revised Jul 2009

| Ŀ   | KP  | 02                                 |                    |                           |              |                          | Revised | Jul.2009 |
|-----|---|------------------------------------|--------------------|---------------------------|--------------|--------------------------|---------|----------|
| 1.  | COUNTRY   | Slovakia                           |                    |                           |              |                          |         |          |
| 2.  | NAME OF STUDY   | The Study for S<br>Slovak Republic |                    |                           |              |                          |         |          |
| 3.  | SECTOR  | Agriculture                        | / (Agric           | ulture in) General        | 4.           | TYPE OF STUDY M/         | /P      |          |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME   |                                    | Slovak Water Manaş | gement Enterprise, Brancl | h Office irr | igation and Drainage (SV | VME-ID) |          |
|     | PRESENT COUNTERPART AGENCY  |                                    |                    |                           |              |                          |         |          |
| 6.  | To formulate technical guidelines for suitable soil and water management, which is the priority subject of Slovak agriculture for the improvement of agricultural production both quantitatively and qualitatively, and to promote agricultural development in the Zahorska Lowland, which is considered as a priority development area.  To carry out technical skill transfer to Slovak counterpart personnel, through on-the-job training, sufficient discussion are communication during the course of the Study. |                                    |                    |                           |              |                          |         |          |
| 7.  | CONSULTANT(S)   | Pacific Consultants International  |                    |                           |              |                          |         |          |
| 8.  | STUDY PERIOD  | Jun.2001 ~                         | Mar.2003           | 21month(s)                |              |                          |         |          |
|     | 9. SITE OR AREA   |                                    |                    |                           |              |                          |         |          |
| 10. | MAJOR PROPOSED PR   | OJECT(S)                           |                    |                           |              |                          |         |          |

The case study was conducted with the purpose of reinforcing the Guidelines through detailed investigation and examination in a limited area and with the purpose of helping user's understanding by introducing ideal case of using the Guidelines. Two sites, i.e., Site-A, of which area is around 3,000 ha, in the Male Levare and Velke Levare villages and Site-B, of which area is around 400 ha, in the Gajary village were selected for the Study. Case Study of 1) Farmland management, 2) irrigation and drainage management and 3) Cultivation and farm management was formulated in the Case Study area. The biggest limitation factor to actually apply the farming technology proposed in the Guideline is improvement of the field irrigation machine parts by farmers in the region where irrigation is recommended. Therefore, the scenario was set by three cases according to the investment level to the field irrigation machine parts such as the reel hoses by the farmer.

Scenario A: The irrigation agriculture expands to use all the irrigation systems which can be used to its maximum. Regional agriculture develops by a high profitability by which irrigation is assumed to be a base. In this scenario about 850 ha ca be irrigated. Main target crops when irrigation is used are vegetable, sun flower, and spring barley, if there is a surplus in the irrigation water, wheat, maize and alfalfa can be irrigated.

Scenario B:This is set as the middle development level between scenario A and C. In this scenario about 400 ha is irrigated. Irrigation is executed to the vegetable and cash crops.

Scenario C: This is set as a level of the existing irrigation machine parts or that which new machine parts is added on to it even if repairs be done if it is necessary. Irrigation is assumed to be limited to crops being irrigated now and the vegetable with the highest profitability, and there not be remarkable increase in an initial investment and the farming cost. About 180ha can be irrigated in this scenario.

The following plans were formuklated for each scenario.

- 1. Farmland Management: Land Use Plan, Possible Crop Rotation, Soil Consevation, Water Management of Soil, and Soil fertility Management 2. Irrigation and Drainage Management: Irrigation Recovery Plan, Restoration of Irrigation Facilities, Irrigation Plan, Improvement of Field Irrigation,
- Improvement Plan of Drainage Management 3. Cultivation and Farm Management: Profitable and stable farm management through the combination of cultivation techniques according to the
- characteristic of firm field

ERP SVK/A 111/02 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY 2003 Domestic Survey)

After July 1, 2003, "Water Management Enterprise, Branch Office Irrigation and Drainage" which was the counter part organization became an independent business body by administrative reformation.

The final report was distributed to the local government, the farmer, the government, the chamber, and the university, etc. The translation from English to the Slovakian word is now advanced

It is planned to do the agricultural development project in the Zahorska Lowland by the European capital in the cooperation of three countries of Czech Republic, Austria, and Slovakia, and the report will be used at this time.

(FY 2006 Domestic Survey)

No information to be specifically mentioned.

(FY2007 Domestic Survey)

No information to be specifically mentioned.

(M/P+F/S)

Compiled Oct.2002

| EI  | RP CRO/S 2  | 24/01  |   |                       | Revised | Jul.2009 |
|---|---|--|---|-----------------------|---------|----------|
| 1.  | COUNTRY   | Croatia  |   |                       |         |          |
| 2.  | NAME OF STUDY                                       | Study on Water   | Pollution Reduction at the River Sava Basin           |                       |         |          |
| 3.  | SECTOR  | Public Utilities   | / Urban Sanitation                                    | 4. TYPE OF STUDY M/P+ | F/S     |          |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  5.  PRESENT COUNTERPART AGENCY   |   |  | State Water Directorate (Policy), Croatian Waters (Im | plementation)         |         |          |
|   |   |  |   |                       |         |          |
| (1) To formulation a master plan for water environmental management of the Sava River Basin including pollution loading reduction up to the target year 2015. (2) To conduct the feasibility study on wastewater treatment of the selected towns neighborin  6. OBJECTIVES OF THE STUDY |   |  |   |                       |         |          |
| CTI Engineering International Co., Ltd.  7. CONSULTANT(S)  Nihon Suido Consultants Co., Ltd.  |   |  |   |                       |         |          |
| 8.  | STUDY PERIOD  | Sep.2000 ~   | Aug.2001 11month(s)                                   |                       |         |          |
| 9.  | 9. SITE OR AREA                                     |  |   |                       |         |          |
| M/. (1) (2) F/S (1) (2) (3) (4)   | ) Improvement of Industr<br>) Improvement of Sewera | ial Wastewater T<br>ge Treatment Sy<br>age Treatment Sy<br>g period: 2003-2<br>period: 2003-206,<br>period: 2003-2006,<br>period: 2003-200 | 77, FIRR 5.98)<br>FIRR 5.48)<br>7, FIRR Large)        |                       |         |          |
|   |   |  |   |                       |         |          |

ERP CRO/S 224/01 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY 2002 Domestic Survey)

After six month of the project completion, the counterpart side made a subsequent request for JICA to conduct necessary study about D/D as a successive project of F/S. With regard to this matter, the Croatian government was notified that they need to follow the official procedures including the creation of the statement of request to the Japanese government. There is no information available about the subsequent progress of the project.

(FY 2002 Overseas Survey)

The letters confirming the cooperation for the detailed design including five major cities was sent to Japan.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2004 Overseas Survey)

The Commission for the Protection of the Danube River, the Commission for the Protection of the Black Sea, and EU jointly took action in the form of the DABLAS task-force. This task-force commits to the following activities: Studying, explaining, and proposing and supporting concerning the project fund and preparation of infrastructure projects for alleviation of water pollution in the area of Danube /the Black Sea. In this framework, the Croatian government proposed 19 projects, of which 15 projects are related to public sewage system and 4 projects are concerned with industry.

Towns of Karlovac and Sisak in which JICA conducted surveys are proposed in the DABLAS framework. Karlovak was approved to be included to the Danube Investment Support Facility programme by the EU.

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

(FY 2006 Domestic Survey)

No information to be specifically mentioned.

(FY2007 Domestic survey)

No progress has been made on the proposed project in the headed study. Also, the possibility of development of the project is unclear.

## STUDY SUMMARY SHEET (M/P)

(M/P) Compiled May.2001 ERP LAT/S 112/00 Revised Jul.2009

| 1.  | COUNTRY                 | Latvia  |                         |                        |                 |                |     |
|-----|-------------------------|---|-------------------------|------------------------|-----------------|----------------|-----|
| 2.  | NAME OF STUDY           | Study on Environmental Management Plan for Lubana Wetland Complex in the Republic of Latvia |                         |                        |                 |                |     |
| 3.  | SECTOR                  | Administration  | / Environ               | mental Problems        | 4.              | TYPE OF STUDY  | M/P |
| 5.  | COUNTERPART AGENO       |   | Ministry of Environme   | ental Protection and R | Regional Develo | opment (MEPRD) |     |
|     | PRESENT COUNTERPA       |   |                         |                        |                 |                |     |
| 6.  | OBJECTIVES OF THE STUDY | Formulation of I  | Environmental Manage    | ment Plan              |                 |                |     |
| 7.  | CONSULTANT(S)           | Nippon Koei Co<br>KOKUSAI KOO   | GYO CO., LTD.           |                        |                 |                |     |
| 8.  | STUDY PERIOD            | Jul.1999 ~  | Jan.2001                | 18month(s)             |                 |                |     |
|     | SITE OR AREA            |   | l, The Repblic of Latvi | a                      |                 |                |     |
| 10. | MAJOR PROPOSED PR       | OJECT(S)  |                         |                        |                 |                |     |

- 1. Wetland Conservation Plan
- 1) Environmental Management Center Construction Project, 2) Biotope Conservation Program, 3) Environmental Research and Monitoring Program,
- 4) Environmental Education and Public Awareness Program.
- 2. Eco-tourism Development Plan
- 1) Indrani / Lubana Eco-tourism Development Project, 2) Ngli/ Gaigalava Eco-tourism Development Project.
- 3. Fishery Development Plan
- 1) Fish Hatchery Development Project, 2) Angling Promotion Project

ERP LAT/S 112/00 M/P

PRESENT STATUS

Delayed

Discontinued or Cancelled

#### **Description:**

(FY 2001 Domestic Survey)

After completion of the M/P, JICA dispached a short-term expart.

(FY 2001 Overseas Survey)

Final Report was published and distributed to concerned organizations such as local organizations and sience organizations.

(FY 2002 Overseas Survey)

Name of proposed project: Lubana Project

Period of Study: 2001-2002

Finance: Denmark (Ministry of Labor), Latvian State Budget

Amount of fund: 58,153 LVL

Contents: Sustainable Eco-tourism in the Lubana Wetland Complex by implementing the 21 concepts and supporting employment initiative.

(FY 2003 Overseas Survey)

- -20 persons trained in construction of wooden facilities for eco-tourism purposes
- 6 persons trained as nature guides
- -2 bird watching towers built in Nagi and Graigalava parishes
- Boardwalk of 850 m built in Teirunnieki dog
- Information materials printed and information signs installed
- -experience exchange with Jarva community in Estonia

#### (FY 2003 Overseas Survey)

In 2003 Lubana wetland complex was proposed to be included in the list of internationally import wetlands under Ramsar convention. Respective amendments to the Law on the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar, Februry 2, 1971) were adopted on November 13, 2002. Ministry of Environment of Latvia is preparing the Information Sheet on Ramseur Wetlands to be sent the Secretariat of the Ramseur Convention.

Name of Project: Management of the Lubana Wetland COmplex, Latvia

Financing: EU LIFE Nature program

#### (FY 2004 Domestic survey)

- 1. Nest step overseas survey
- 1) Natural wetland's water quality restoration management plan in Lubana Wetland (LWC).

This survey was implemented by the hydrology experts between 2003 December and June 2004. Funded by EU LIFE NATURE Program.

2) Maintenance planning of restoration of morphology, trimming of bush, /lawns on the basis of hydrology in LWC.

This survey was implemented between 2003 December and 2004 June. Implemented by two experts (herborists, ornithologists)

3) Improvement plan for habitat of aquatic birds and snipes.

This survey was implemented between 2003 December and 2004 by the experts (ornithologists).

- Funding
- 1) Receiving funds: Madona province assembly.
- 2) Financing: EU Life Nature (2003 October 28 treaty concluded)
- 3. Designing/Construction
- 1) A total maintenance plan in Lubana wetland in Latvia
- Construction started: 2004 June
- Construction completed 2004 September
- Details: Two nature supervision towers in LWC area
- 2) A total maintenance plan in Lubana wetland in Latvia
- Reconstruction of Aovoelste water gate (2005)
- Building information center (2005)
- Rebuilding of Kalnagala water gate (2006)
- 4. Technical cooperation: after 2001, no technical cooperation is received

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

**(F/S)** 

Compiled Dec.1999

| ER   | P LTU/S 30  | 09/98              |  | Revised J                                     | Jul.2009   |
|--|---|--------------------|--|---|------------|
| 1.   |   | Lithuania          |  |   |            |
| 2.   | NAME OF STUDY   | Sewerage System    | n Improvement of Birzai and Skuodas town                             |   |            |
| 3.<br>5.   | SECTOR  | Public Utilities   | / Sewerage<br>Ministry of Environment, Birzai Vandenys (Water Com    | 4. TYPE OF STUDY F/S pany), Skuodas Vandenys. |            |
|  | COUNTERPART AGEN<br>TIME OF DEVELOPME                                 |                    |  |   |            |
|  | PRESENT COUNTERPA   | ART AGENCY         |  |   |            |
| Due to the capacity shortage of the existing sewage treatment plants, receiving water bodies in both Towns have alrea been polluted heavily. In Birzai Town, lake's water was polluted and it caused groundwater pollution due to the high permeable Karst Topography. While in Skuodas, river receiving the treated sewage is flowing down to the neighboric country, Latvia and it caused bilateral problem. The study was conducted to relieve these circumstances by improving treatment plants. |   |                    |  |   | gh<br>ring |
| 7.   | CONSULTANT(S)   |                    | lo Sekkei Co., Ltd.  |   |            |
| 8.   | STUDY PERIOD  | May.1998 ~         | Jan.1999 8month(s)   |   |            |
| <b>10.</b> 1)B   | MAJOR PROPOSED PR<br>irzai Town: Sewage Trea<br>kuodas Town: Sewage T | atment Plant (5,00 | 00 m3/day), Effluent Pipe (Dia. 400 mm, L = 3,250 m). 1,600 m3/day). |   |            |
|  |   |                    |  |   |            |

ERP LTU/S 309/98 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### Description:

(FY 1999 Domestic Survey)

Both Towns needed the immediate project implementation to cope with the current water pollution. Due to the time constrains needed for various transactions in Japanese Assistance, Lithuanian Government has decided to receive the loan from Nordic Investment Bank (NIB). Reportedly, the transaction with NIB has started right after the completion of this F/S.

#### 1. Birzai Waste Water Treatment Plant

Subsequent Study:

(FY 2001 Overseas Survey)

Implementation Period: 9 Mar. 2001 - 30 Sep. 2002

Study Type: Construction by FIDIC " Design & Build and Turnkey Project ".

Difference with JICA's proposal: Maximum capacity reduced from 5,000 m3/d to reduction in 3,300 m3/d due to reduction in water consumption and limited funds available .

Procurement of funds: (FY 2001 Overseas Survey) Source(s): NIB, State Grant Pledged in: NIB loan / 9 Jun. 2000

State Grant / 20 Mar. 2001

Contents of the project to be funded: Construction works for Waste Water Treatment Plant , including construction supervision .

(FY 2002 Overseas Survey)

26 Sept., 2002 state inspection board signed accomplishment act and the plant was taken over by special purpose joint stock company 'Biruzai vandenys'.

Current capacity of the plant: 2000-2100 m3/day

The influent parameters are BOD7, 500-800 mgO2/l is much higher the standard.

#### 2. Skuodas Waste Water Treatment Plant

Subsequent Study:

(FY 2001 Overseas Survey)

Implementation Period: 11 Jun. 2001 - 7 Nov. 2002

Study Type: Construction by FIDIC " Design & Build and Turnkey Project ".

Procurement of funds: (FY 2001 Overseas Survey)

 $Source(s)\hbox{: }NIB,\,Finland\,\,grant\,\,,\,State\,\,Grant$ 

Pledged in: NIB loan / 9 Jun. 2000

Finland grant / 10 May 2000

State Grant / 20 Mar. 2001

 $Contents\ of\ the\ project\ to\ be\ funded:\ Construction\ works\ for\ Waste\ Water\ Treatment\ Plant\ ,\ including\ construction\ supervision\ .$ 

Construction:

(FY 2002 Overseas Survey)

Period: Apr. 2001 - Apr. 2003

Bidder: Lemminkainen Construction Ltd. (Finish company)

One of the construction, 'Soil and Water' is performed by the local consultants.

(FY 2008 Overseas Survey)

No information to be specifically mentioned.

(M/P+F/S)Compiled Jan.2006 **ERP** LTU/S 201/04 Jul.2009 Revised 1. COUNTRY Lithuania The Study for the Port Development Project in Lithuania 2. NAME OF STUDY 3. SECTOR / Port 4. TYPE OF STUDY M/P+F/S Transportation COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY 6. OBJECTIVES OF THE STUDY Nippon Koei Co., Ltd. 7. CONSULTANT(S) Mar.2002 Aug.2004 29month(s) 8. STUDY PERIOD Northern entrance and surrounding area of Klaipeda port 9. SITE OR AREA 10. MAJOR PROPOSED PROJECT(S) M/P: 1. Outer port development project:

- 1) Expansion and construction of breakwater
- 2) Wharf facility and terminal construction
- 3) Construction of ship line assistance facility, and cargo bay facilities
- 4) Pauoscio yard expansion, railway access line construction
- 2. Southern harbor railroad project
- 1) Railway, bridge, and facility construction

#### F/S:

- 1. Outer port development project
- 1) Expansion and construction of breakwater
- 2) Wharf facility and terminal construction
- 3) Construction of ship line assistance facilities and cargo bay facilities
- 4) Pauscio yard expansion
- 2. Southern harbor railroad project
- 1) Expansion and construction of breakwater

港湾開発計画調査 (社会開発部)

ERP LTU/S 201/04 M/P+F/S

PRESENT STATUS

Completed

Completed

Partially Completed

Delayed or Suspended

Implementing

Processing

Discontinued or Cancelled

#### **Description:**

(FY 2005 Domestic Survey)

The Lithuanian government makes no request for yen loans. The project is prospected to be implemented with EU fund.

(FY2006 Domestic Survey)

Implemented project: Klaipeda seaport outer harbour maintenance project

Implementing period:

Verification review: 2005 - 2007

Commencement of implementation design: 2008

Construction: 2010

Implementing body: Klaipeda Seaport Authority

Objective: Shortage of container berth and difficulty in docking large ships is expected by 2010 to 2015, if there is steady increase of cargo demand in Klaipeda port. This project will provide economic stability in Lithuania by maintain stable and a high standard of port service, and competing against harbours in neighboring countries. This is short-term maintenance project in the mentioned study.

Situation: This proposed project in the mentioned study was approved by Lithuania strategic plan meeting on 25 January, 2005, and listed on Klaipeda seaport investment plan. Preparation works listed below have been implemented for the completion of the outer harbour maintenance project. 1) Amendment of Klaipeda urban development plan (by Klaipeda city), 2) implementing detailed environment assessment (by Klaipeda city, KSSA), 3) review of the facility details on the project (KSSA).

(FY2007 Domestic survey)

Subsequent study: Development of general plans of Klaipeda city

Implementing period: 2003 - 2004 (not known)

Implementing body: the Lithuanian government, Klaipeda city, Klaipeda state seaport authority

Objective: Discussion of the direction of Klaipeda seaport development and environmental impact assessment. Environmental assessment is an essential step for the new seaport maintenance and expansion for the outer harbour project, which was proposed by JICA.

Situation: Klaipeda sea harbour Strategic Environment Impact Assessment (SIA), including new seaport maintenance and expansion of the outer harbour project proposed by JICA, has been implemented.

(M/P+F/S)

Compiled

Revised

Sep.2003

Jul.2009

1. COUNTRY Moldova The Study on Water Supply System in the Northern Region in the Republic of Moldova NAME OF STUDY 3. SECTOR / Water Resources Development 4. TYPE OF STUDY M/P+F/S Social Infrastructure Apele Moldovei (The State Water Resources Management Concern) COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY 5. PRESENT COUNTERPART AGENCY 1) To formulate a master plan for water supply systems for four cities/towns (Balti, Soroca, Falesti and Riscani) in the northern region of Moldova with the target year of 2015. 2) To conduct a feasibility study on priority project(s) which will be selected from projects constituting the master plan. To pursue technology transfer to the Moldova counterpart personnel in the course of the Study. OBJECTIVES OF THE STUDY Pacific Consultants International Tokyo Engineering Consultants Co., Ltd. 7. CONSULTANT(S) Mar.2001 Nov.2002 20month(s) 8. STUDY PERIOD

#### 10. MAJOR PROPOSED PROJECT(S)

Project Cost(US\$ 1,000)

9. SITE OR AREA

**ERP** 

MLD/S 225/02

M/P: Local Cost 6,300 Foreign Cost 14,700 F/S: Local Cost 7,590 Foreign Cost 17,710

M/P: 1) Improvement of intake facility and water transmission pumps and rehabilitation of the existing water transmission mains of Apa-canal Soroca-Balti water supply system

M/P: Balti, Soroca, Falesti, Riscani and villages along the water transmission pipelines

- 2) Improvement of the existing water treatment plant
- 3) Completion of the two existing reservoirs in Balti
- 4) Extension of the transmission pipeline to Falesti and Riscani and construction of the new reservoirs in Falesti and Rscani
- 5) Completion of the existing reservoir in Soroca

Water demand of M/P includes the water demand of the villages along the water transmission pipelines.

F/S: Balti, Soroca, Falesti and Riscani

F/S: 1) Improvement of intake facility and water transmission pumps and rehabilitation of the existing water transmission mains of Apa-canal Soroca-Balti water supply system

- 2) Improvement of the existing water treatment plant
- 3) Completion of the one existing reservoirs in Balti
- 4) Extension of the transmission pipeline to Falesti and Riscani and construction of the new reservoirs in Falesti and Rscani Water demand of F/S includes only for 4 cities/towns (Balti,Soroca,Falesti and Riscani)

北部地域給水計画調査

ERP MLD/S 225/02 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| Completed      |                          |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

(FY 2003 Domestic Survey)

The situations of the Government of Moldova(GOM) and the study area consisting of Soroca, Balti, Falesti and Riscani after the Study are described below.

- Apa-canal Soroca- Balti and electricity supplier of Red Nord of Moldova agreed upon under the assistance of GOM that the payment of previous unpaid electricity bill be suspended and that the repayment period for the present debt be extended.
- The World Bank granted the soft loan of 2.5 million US\$ to the Soroca city for the rehabilitation and the expansion of the water supply networks.
- The city of Falesti has been rehabilitating the sewerage and the water supply networks based on the JICA study report.
- The villages along the Apa-canal Soroca- Balti water supply pipeline is trying to find the fund for the connection to the water supply pipeline.
- Thogh the Balti water works raised the water tariff, improved water tariff collection system increased the collection rate.

As mentioned above, these municipalities in the Study area have currently made every effort to supply the quality water to the residents. Besides, GOM has requested GOJ through the Embassy in Ukraine to furnish GOM with grant-in-aid program for the ater supply system for the northern region in the republic of Moldova.

#### (FY 2004 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2004 Overseas Survey)

Due to unfavourable condition, stable water supply has been disturbed, which daily distressing people in the target region. Sporadic water supply forces people to use water from the well. It has been indicated that water, either from deep well or shallow well, includes fluoride nitric acid, which is harmful to health. The Ministry of Health of Moldova recognises correlation between polluted water and high medical disorder rate. High rate of medical disorder observed in the target region is considered to be caused by drinking water from shallow wells.

Japanese government is one of the major donors in assisting in improving social infrastructure in Moldova, which is also stimulating the economy. Japanese government is implementing assistance in various fields through the following project.

- 1) Project for Improvement of Medical Equipment for Mother and Child Republican Hospital
- 2) Project for Improvement of Maternal and Child Care ystem in the Secon level hospital
- 3) KR Project
- 4) Instalment of sound equipment to Mihai Eminescu
- 5) Emergency assistance in natural disasters

Moldovan government considers Japanese assistance to be understanding and strategic, with contract to be implemented without delays. Thus, Moldovan government is seeking for a Japanese Grant Aid assistance in improving northern water supply system.

#### (FY 2005 Domestic Survey)

No information to be specifically mentioned.

#### (FY 2006 Domestic Survey)

- "Request of Grant Aid for the Water Supply Plan of the Northern Area" was submitted to the Embassy of Japan in Ukraine in Jun. 2005. This is a second request as the request submitted in the following year after the completion of the subject study was not adopted.
- In the northern 4 areas of the Republic of Moldova, the surface water which can be a water source is only 2 rivers flowing along the border of the country and only 1 river can be used as a water source in practice. A water supply plan to the area concerned by the improvement in the existing water purification plant and water pipe using the river considered by the study to have high potentialities as a water source is thus strongly requested.

## STUDY SUMMARY SHEET (M/P)

|     |              | (1741) | Joinpheu . | Mar.1980 |
|-----|--------------|--------|------------|----------|
| PLU | PLU/S 101/77 |        | Revised    | Jul.2009 |

| 1.                       | COUNTRY  | Plural countrie  |  |
|--------------------------|--|--|--|
| 2.                       | NAME OF STUDY  | Establishment of Electronic and Navigational Aid Systems Project |  |
|                          |  |  |  |
|                          | SECTOR   | Transportation   | / Marine Transportation & Ships 4. TYPE OF STUDY M/P                               |
| 5.                       | COUNTERPART AGENO  |  | Transportation Ministry Directorate General of Maritime Transportation (Indonesia) |
|                          | PRESENT COUNTERPA  | ART AGENCY   |  |
| 6.                       | OBJECTIVES OF THE STUDY  | Traffic volume   |  |
| 7.                       | CONSULTANT(S)  | Pacific Consulta   | ants International   |
| 8.                       | STUDY PERIOD   | Oct.1976 ~   | Aug.1978 22month(s)  |
|                          | Strait of Malacca, Strait of Lombock  9. SITE OR AREA                |  |  |
| 10.                      | MAJOR PROPOSED PR  | OJECT(S)   |  |
| Inst                     | tallation of electronic nav  | rigation system to   | o cover the strait of Malacca - Singapore and the strait of Lombock - McCastle.    |
| Dec<br>Ray<br>Rac<br>Lig | ccz Medium wave beaco<br>Mark 11<br>dar beacon<br>ht house new const |  | ovement 2  |
|                          |  |  |  |

**PLU** PLU/S 101/77 M/P In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Implementation of the project (FY 1995 Overseas Survey) 18 Medium Wave Radio Beacon Stations installed by Japanese yen credit 5 Differential Omega Stations installed by French loan. Experts were dispatched following the report recommendations.

## STUDY SUMMARY SHEET (Basic Study)

PLU PLU/S 501/78

(Basic Study)

Compiled Mar.1986

Revised Jul.2009

|     | ic identification                                   | U                                 |   |                           |        |                     | 1te (15ea 5ai.200)    |
|-----|---|-----------------------------------|---|---------------------------|--------|---------------------|-----------------------|
| 1.  | COUNTRY   | Plural countrie                   | S   |                           |        |                     |                       |
| 2.  | NAME OF STUDY                                       | ASEAN Submar                      | rine Cable Project: Thailan                       | d-Malaysia-Singapore Rout | e      |                     |                       |
| 3.  | SECTOR  | Communications                    | s & Broadca / Telecommu                           | nication                  | 4.     | TYPE OF STUDY       | Basic Study           |
| 5.  | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                                   | Communication Authority<br>Authority of Singapore | of Thailand, Telecommunio | cation | n Dept. of Malaysia | and Telecommunication |
|     | PRESENT COUNTERPA                                   |                                   |   |                           |        |                     |                       |
| 6.  | OBJECTIVES OF THE STUDY                             | Hydrographic su                   | rvey for submarine cable i                        | route                     |        |                     |                       |
| 7.  | CONSULTANT(S)                                       | Sanyo Techno N<br>Kokusai Denshii | Iarine,Inc.<br>n Denwa Co, Ltd.                   |                           |        |                     |                       |
| 8.  | STUDY PERIOD  | Apr.1978 ~                        | Sep.1978  | 5month(s)                 |        |                     |                       |
| 9.  | SITE OR AREA  | 1,158km along                     | the offshore of the east coa                      | ast of Malay Peninsula    |        |                     |                       |
| 10. | . MAJOR PROPOSED PROJECT(S)                         |                                   |   |                           |        |                     |                       |

The study undertook the hydrographic survey to establish the submarine cable route in order to improve telecommunication services among ASEAN countries.

- Routes studied: Pechaburi (Thailand)-Songkhla (Thailand)-Kuantan (Malaysia)-Katon (Singapore)
- $\hbox{-} Sounding survey on sea-bed deposits, presence of base rock, sea-bed obstacles, sampling of deposits, etc.\\$
- Cable route length 1,574.4km (850.1nm).
- The cable is to be buried for the entire route.

PLU PLU/S 501/78 Basic Study
In Progress or In Use

PRESENT STATUS

Delayed

Discontinued or Cancelled

#### **Description:**

#### Construction:

The recommendation of the study was fully adopted and the installation was completed in 1983.

This MST Cable which connects three countries took Japanese submarine cable system and was constructed by Japanese company.

Pechaburi (Thailand)-Songkhla (Thailand)

CS-12M, Japanese method (1,200 lines), 74% buried

Songkhla (Thailand)-Kuantan (Malaysia)-Katon (Singapore)

CS-5M, Japanese method (480 lines), 85% buried

Total cable length: 1,711km

#### After the implementation:

(FY 1994 Domestic Survey)

The telecommunication system has been operated in a good condition since the completion of it.

#### (FY 1995 Domestic Survey)

Operated in a good condition continuously.

(Basic Study)

Compiled Mar.1990

| PI  | LU PLU/S 502/   | <b>78</b>        |   |                            | Revised             | Jul.2009 |
|-----|---|------------------|---|----------------------------|---------------------|----------|
| 1.  | COUNTRY   | Plural countrie  |   |                            |                     |          |
| 2.  | NAME OF STUDY   | Joint Hydrograp  | phic Survey in Malacca and Singapore Straits (One Fat           | hom Bank Area)             |                     |          |
| 3.  | SECTOR  | Transportation   | / Marine Transportation & Ships                                 | 4. TYPE OF STUDY           | Basic Study         |          |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME                                       | ICY AT THE       | Directorate of Marine Hydrography (Indonesia), Min (Singapore). | istry of Communications (  | (Malaysia), Port A  | uthority |
|     | PRESENT COUNTERPA   | ART AGENCY       |   |                            |                     |          |
| 6.  | OBJECTIVES OF THE STUDY   | Survey of the w  |   |                            |                     |          |
| _   | ~~~   | Malacca Strait   | Council   |                            |                     |          |
| 7.  | CONSULTANT(S)   |                  |   |                            |                     |          |
| 8.  | STUDY PERIOD  | Sep.1978 ~       | Dec.1978 3month(s)  |                            |                     |          |
| 9.  | SITE OR AREA  |                  |   |                            |                     |          |
| Jap | major proposed per an and three countries (It one fathom area and instance) | ndonesia, Malays | ia, Singapore) jointly undertook the channel survey in aids.    | order to establish the nav | igable channel of - | -23m in  |

**PLU** PLU/S 502/78 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** (FY1995 Domestic Survey) No information. (FY1995 Overseas Survey) As a perfomance of this project, the Command Datum Chart has been published.

**(F/S)** 

|                                  |   | (F/S)  | Compiled                               | Mar.1992                      |
|----------------------------------|---|--|--|-------------------------------|
| ΡI                               | U PLU/S 30  | 01/79  | Revised                                | Jul.2009                      |
|                                  | COUNTRY   | Plural countries   |  |                               |
|                                  |   | Construction of Indo-Chinese Refugee Camps   |  |                               |
| 2.                               | NAME OF STUDY   |  |  |                               |
| 3.                               | SECTOR  | Social Infrastructure / Architecture & Housing 4. TYPE OF STUDY F/S  |  |                               |
| 5.                               | COUNTERPART AGEN<br>TIME OF DEVELOPME   |  |  |                               |
|                                  | PRESENT COUNTERP  | ART AGENCY   |  |                               |
| 6.                               | OBJECTIVES OF THE STUDY   | To formulate the plan for constructing the Processing Centers for Indo-China Refugees at the request or respective government of Indonesia and Philippines.  | f UNHCR,                               | and the                       |
| 7.                               | CONSULTANT(S)   |  |  |                               |
| 8.                               | STUDY PERIOD  | Jun.1979 ~ Oct.1979 4month(s)  |  |                               |
|                                  | SITE OR AREA  | Island of Galang, Riau Archipelago in Indonesia, and Tara Island in Philippines  |  |                               |
|                                  |   |  |  |                               |
| Thi<br>per<br>the<br>kite<br>adr | manent settlement. 1) Re<br>administration buildings<br>then facilities. 2) Tara Re | apposed to provide the Indo-China refugees with a temporary place before they could actually depart to the fugee Processing Centre in Indonesia Presently the camp is planned to have a capacity to shelter 10,00 as accommodate 150 persons. The temporary refugees will share a number of services such as public I efugee Processing Center The development plan was designed to provide the basic needs for 5,000 re However, the authorities only submitted its provisional plan to the Jakarta meeting, and no further action of the provide the | 0 person<br>nealth, stor<br>fugees and | ns while<br>age, and<br>l 150 |
|                                  |   |  |  |                               |

**PLU** PLU/S 301/79 F/S Completed or In Progress Promoting Completed PRESENT STATUS Partially Completed Delayed or Suspended Implementing Processing Discontinued or Cancelled Description:

(Basic Study)

|     |  | (Basic Study)  | Compiled                      | Mar.1986 |
|-----|--|--|-------------------------------|----------|
| PL  |  |  | Revised                       | Jul.2009 |
| 1.  | COUNTRY  | Plural countries   |                               |          |
| 2.  | NAME OF STUDY  | Joint Production of Common Datum Charts of the Straits of Malacca and Singapore  |                               |          |
|     | SECTOR   | Social Infrastructure  | Basic Study                   |          |
|     | COUNTERPART AGEN<br>TIME OF DEVELOPME                    |  |                               |          |
|     | PRESENT COUNTERPA  | ART AGENCY   |                               |          |
|     |  | Drawing of marine charts and tidal current survey  |                               |          |
| 6.  | OBJECTIVES OF THE STUDY                                  |  |                               |          |
|     |  | Malacca Strait Council   |                               |          |
| 7.  | CONSULTANT(S)  |  |                               |          |
| 8.  | STUDY PERIOD   | May.1978 ~ May.1982 48month(s)   |                               |          |
|     |  | Malacca and Singapore Straits  |                               |          |
|     |  |  |                               |          |
| 9.  | SITE OR AREA   |  |                               |          |
|     |  |  |                               |          |
|     |  |  |                               |          |
|     |  |  |                               |          |
|     | MAJOR PROPOSED PR  |  |                               |          |
| apa | an and three countries ur<br>ellite observation; 2) Data | dertook a joint hydrographic survey on the common datum points: 1) Hydrographic survey on co<br>a computing and analysis; 3) Drawing of common datum charts; and 4)Drawing of land character | ommon datum poristics charts. | ints by  |
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| PLU 1                                | PLU/S 503/82   | Basic Study |
|--------------------------------------|--|-------------|
|                                      | In Progress or In Use  |             |
| PRESENT STA                          | TUS Delayed  |             |
|                                      | Discontinued or Cancelled  |             |
| escription :                         |  |             |
|                                      | of the most difficult places to navigate, and it is necessary to obtain accurate information of the straits. |             |
| fect:<br>Detailed marine cl          | harts of the entire Malacca and Singapore Straits contributed to the safe passage of large vessels.          |             |
| Y 1994 Domestic<br>he navigation sat | e Survey) fety which was achieved at the completion of the project has been maintained.                      |             |
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(Basic Study)

|          |  | (Basic Study)   | Compiled     | Mar.1990  |
|----------|--|---|--------------|-----------|
| PΙ       | LU PLU/S 504/8                             | 84  | Revised      | Jul.2009  |
| 1.       |  | Plural countries  |              |           |
| 2.       | NAME OF STUDY                              | Medan (Indonesia) - Colombo (Sri Lanka) Submarine Cable Project                                     |              |           |
| 3.<br>5. | SECTOR  COUNTERPART AGEN TIME OF DEVELOPME |   |              | on (Sri   |
|          | PRESENT COUNTERPA                          | ART AGENCY  |              |           |
|          |  | Hydrographic survey, route selection and financial analysis.  |              |           |
| 6.       | OBJECTIVES OF THE STUDY                    |   |              |           |
| 7.       | CONSULTANT(S)                              | Kokusai Denshin Denwa Co, Ltd.<br>Sanyo Techno Marine,Inc.  |              |           |
| 8.       | STUDY PERIOD                               | Aug.1983 ~ Mar.1984 7month(s)   |              |           |
|          |  | The marine cable route between the landing site (Pantaicermin) of Indonesia and the landing site (C | olombo) of S | ri Lanka  |
| 9.       | SITE OR AREA                               |   |              |           |
| 10.      | MAJOR PROPOSED PR                          | ROJECT(S)   |              |           |
| Ins      |  | e cable between the landing sites of Indonesia and Sri Lanka -Total route length 1,384.1nm -Average | cable slack  | 3% -Total |

**PLU** PLU/S 504/84 **Basic Study** In Progress or In Use PRESENT STATUS Delayed Discontinued or Cancelled **Description:** Finance: Japanese Commercial Credit (13,900 million yen) Construction: (FY 1994 Overseas Survey) Medan-Colombo Implemented as one segment of SWE-WE-ME I project (Marseille-Singapore) in 1986. Number of circuits for PT. Indosat is 133 (Total No. of circuits cable is 2160).

(F/S)

Compiled Jul.1998 **PLU** PLU/S 306/97 Revised Jul.2009

| 1. | COUNTRY   | Plural countries |                               |                              |  |
|----|---|------------------|-------------------------------|------------------------------|--|
| 2. | NAME OF STUDY                                       | Proposed New I   | Bridge over the Zambezi R     | iver at Chirundu Border Post |  |
| 3. | SECTOR  | Transportation   | / Road                        |                              | 4. TYPE OF STUDY F/S   |
| 5. | COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY |                  | Energy (MTE) of Zimbab        |                              | pply (MWS) of Zambia, Ministry of Transport and  |
|    | PRESENT COUNTERPA                                   |                  | Ministry of Transport and     |                              |  |
| 6. | OBJECTIVES OF THE STUDY                             | implement F/S (  | (target year 2010) related to |                              | oorder point between Zambia and Zimbabwe and cilities. Also, design and estimate for the bridge or custom works. |
| 7. | CONSULTANT(S)                                       | Chodai Co., Ltd  | l.                            |                              |  |
| 8. | STUDY PERIOD  | May.1997 ~       | Mar.1998 10mont               | h(s)                         |  |
| 9. | SITE OR AREA  | Zambezi River    | in Chirundu                   |                              |  |
| 10 | MA IOD DDODOGED DD                                  | OTECT(C)         |                               |                              |  |

#### 10. MAJOR PROPOSED PROJECT(S)

1. Construction of a Bridge

Length of a bridge: 400 m, Width of a bridge: 10.5 m Upper part: PH5 PH8 continuous PC box section girder

Lower part: Reversed T-type abutment (direct foundation) 2, Wall-type direct foundation

2. Construction of Access Roads

Length 800 m

3. Construction of Border Facilities

Facilities in a cargo terminal, Facilities in a passenger terminal, Facilities in a terminal for traffic management for pedestrians, Surveillance center for the loading of freight cars, Facilities for stores and snack restaurants, Facilities for guard

ザンベジ川チルンド橋建設計画調査

PLU PLU/S 306/97 F/S

|                   | Completed or In Progress | Promoting                 |
|-------------------|--------------------------|---------------------------|
| DDECENTE CEL ENTC | Completed                |                           |
| PRESENT STATUS    | Partially Completed      | Delayed or Suspended      |
|                   | Implementing             |                           |
|                   | Processing               | Discontinued or Cancelled |

#### Description:

(FY 2003 Domestic Survey)

The proposed project of the study was implemented by grant aid of Japan and was completed in November 2002. A completion ceremony was implemented in December 2002. They plan to conduct a defect test in November 2003 when a year has passed after the completion of the bridge.

The Zimbabwean side newly established border facilities with their own funds, while the Zambian side uses existing facilities.

1. Construction of a Bridge

#### Funding:

(FY 1999 Domestic Survey)

March 16, 1999 E/N 36 million yen "Chirundu Bridge Construction Plan D/D" (Zambia)

March 24, 1999 E/N 36 million yen "Chirundu Bridge Construction Plan D/D" (Zimbabwe).

May 18, 1999 E/N 1,478 million yen "Chirundu Bridge Construction Plan" (Zambia).

June 11, 1999 E/N 1,478 million yen "Chirundu Bridge Construction Plan" (Zimbabwe)

#### Construction:

(FY 1999 Domestic Survey) (FY 2001 Domestic Survey)

Period of construction: February 2000-February 2003

Content of construction: Length of a bridge 400m, PH5 PH8 PC box section girder, Length of access roads 540m

Constructor: Kajima Corporation Co., Ltd.

Progress situation: Construction works are in progress as planned.

(FY 2003 Overseas Survey)

Period of construction: February 2000-October 2003 Completion of construction

(FY 2002 Overseas Survey)

Chirundu Bridge: They began to use it.

#### 2. Construction of Border Facilities

(FY 2001 Domestic Survey) Both Zambia and Zimbabwe started construction works respectively. People to live in future border facilities areas started migration in the Zambian side. Also, constructor was determined and land development and road construction are in progress in the Zimbabwean side.

(FY 2007 Domestic Survey) Preparing border facilities of both sides has been delayed due to the shortage of fund. Border facilities are to be respectively constructed by Zambia and Zimbabwe.

#### 1) Cargo terminal

(FY 2003 Overseas Survey by an Office in Zimbabwe)

A fund of Z\$2 billion was provided for the project, and it will be increased further in the future. They need a fund of Z\$54 billion by the completion. They have a policy to complete Phase I by the beginning of next year and start Phase II. The problem is that there is lack of foreign exchange for procuring fuels and import products such as machinery and electronic equipments.

Progress: Building: 80%, Construction works of runways for arrival: 63.5%, Construction works of runways for departure: 51%, Parking lot: 49.41%, Total: 65.89% 2) ZRA administrative division

(FY 2003 Overseas Survey by an Office in Zimbabwe) 85% of the total project was completed. The construction will be completed by the end of February 2004, taking the present progress situation into consideration. Only Z\$36.7 million is appropriated to the project, and there is no money left in the fund. We will make up the fund from housing expenses of Z\$75 million and revised budget of Z\$8 million and allocate them to the project.

3) ZIMRA apartment

(FY 2003 Overseas Survey by an Office in Zimbabwe)

Progress: Building: 100%, Construction of sewage: 100%, Parking lot: Uncompleted

4) Housing facilities for the Zimbabwean police will be constructed after the construction for administrative division.

#### Others:

(FY 1999 Domestic Survey)(FY 2007 Domestic Survey)

They held a seminar on bridge construction including the Chirundu Bridge Construction Plan in the capital of Zimbabwe, Harare in February 7-February 12, 2000. Bridge engineers in both Zimbabwe and Zambia participated in the seminar.

#### Background:

(FY 1998 Domestic Survey)(FY 2007 Domestic Survey)

F/S was finished in March 1998, and B/D was finished in September 1998.

We prepare for implementing D/D as of December 1998. E/N is planned to be implemented in the middle of December, and construction works will start in August 1999. "Study for Proposed New Bridge over the Zambezi River at Chirundu Border Post" (July. 1998 to Nov. 1998)

Funding: Grant Aid cooperation (E/N concluded: 18th of May. 1999) amount: JPY 2,956,000,000

(Basic Study)

Compiled Dec.1999 **PLU** PLU/S 504/98 Revised Jul.2009 1. COUNTRY Plural countries

| 2.  | NAME OF STUDY                     | The Four Nation Joint Re-Survey of Critical Areas and Investigation of Dangerous/Uncinformed Shoals and Wrecks in the Straits of Malacca and Singapore   |
|-----|-----------------------------------|--|
| 3.  | SECTOR                            | Social Infrastructure / Survey & Mapping 4. TYPE OF STUDY Basic Study  |
| 5.  |                                   | Malaysia: Ministry of Transport (MOT); Indonesia: Ministry of Communication; Singapore: Maritime   |
|     | COUNTERPART AGENTIME OF DEVELOPME |  |
|     | PRESENT COUNTERPA                 | ART AGENCY   |
|     |                                   | To conduct a hydrographic survey of critical areas, including the investigation of dangerous/unconfirmed shoals and wrecks, to promote maritime safety in the straints of Malacca and Singapore. |
| 6.  | OBJECTIVES OF THE STUDY           |  |
|     |                                   | WOMING AT WOODING GO. I TID  |
| 7.  | CONSULTANT(S)                     | KOKUSAI KOGYO CO., LTD. Sanyo Techno Marine,Inc.   |
| 8.  | STUDY PERIOD                      | Oct.1996 ~ Mar.1998 17month(s) ~   |
|     |                                   | 12 sub-areas and 13 points in the Straits of Malacca and Singapore.  |
| 9.  | SITE OR AREA                      |  |
| 10. | MAJOR PROPOSED PR                 | (OJECT(S)  |
|     | Control point survey.             | OODE I(b)  |
|     | bb tide survey.                   |  |
| 3.H | lydrographic survey (subi         | merged ship, sandy shoal, sand wave, etc.).  |
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PLU PLU/S 504/98 Basic Study

| PRESENT STATUS | In Progress or In Use     |
|----------------|---------------------------|
|                | Delayed                   |
|                | Discontinued or Cancelled |

#### Description:

#### (FY 1999 Domestic Survey)

The survey results were used as reference for the establishment of a new navigational route (expansion of the old route) in the Straits of Malacca and Singapore. Information on sunken vessels and shoals verified through the survey will be annotated on the new nautical chart to be produced to ensure safety in navigation. Each nation independently carries out the revision of their respective nautical charts.

Using the results of this survey, a digital nautical chart will be produced with the joint cooperation of the three coastal nations. Digitizing the nautical chart is, however, expected to undergo some rough patches based on conditions observed at this period. The production of a digital chart requires constant data update. However, Indonesia and Malaysia are not fully equipped with the required technology, as well as the software for data update. The implementation of follow-up surveys was recommended to find ways to counteract this problem.

#### (FY 1999 Overseas Survey)

The final updating of the electric navigation charts (ENCs) covering the Straits of Malacca and Singapore is being carried by the three littoral states. The updating will be completed by the end of Jan. 2000. From Feb.2000, the ENCs will be installed on Electronic Chart Display and Information System (ECDIS) for sea trials. Any feedback from the trials will be used to further improve the quality of the ENCs. The ENCs will be commercially released from July 2000 and sold through an agent to be appointed.

#### (FY 2001 Domestic Survey)

The result of the Study was referred for the establishment of a new navigational route in the Straits of Malacca and Singapore. Moreover the revision of nautical charts was made nationally and the electric charts were completed and on sale.

#### (FY 2002 Overseas Survey)

The Authority needs to research the data which concerns proposed project such as the number of marine accident, traffic volume, dangerous of the area and so forth.

#### (FY 2008 Domestic Survey)

No information to be specifically mentioned.

(D/D)

Compiled May.2001

|     |  |                                      |                                     | `                                   |                        |                           | Compilea       | 11149.2001 |  |
|-----|--|--------------------------------------|-------------------------------------|-------------------------------------|------------------------|---------------------------|----------------|------------|--|
| PI  | LU PLU/S 40  |                                      |                                     |                                     |                        |                           | Revised        | Jul.2009   |  |
| 1.  | COUNTRY  | Plural countries                     |                                     |                                     |                        |                           |                |            |  |
| 2.  | NAME OF STUDY  |                                      |                                     |                                     | national Bridge Constr | uction Project in the Lao | People's Democ | ratic      |  |
| ۷.  | NAME OF STODI  | Republic and The Kingdom of Thailand |                                     |                                     |                        |                           |                |            |  |
| 3.  | SECTOR   | Transportation                       | /]                                  | Road                                |                        | 4. TYPE OF STUDY          | D/D            |            |  |
| 5.  | COUNTERPART AGEN<br>TIME OF DEVELOPME  |                                      | nmunication, Tra<br>Highways (Thail | nsport, Post and Const<br>and side) | ruction (Lao P.D.R.),  |                           |                |            |  |
|     | PRESENT COUNTERPA  |                                      |                                     |                                     |                        |                           |                |            |  |
| 6.  | The objective of the project is to review the SAPROF of OECF, study on the most suitable alternative of the project, followed by conducting the detailed design, environmental impact analysis, cost estimate, the construction planning, and maintenance planning and preparing the draft bidding documents as well as undertake the technology transfer to counterparts. |                                      |                                     |                                     |                        |                           |                |            |  |
| 7.  | CONSULTANT(S)  | Oriental Consul<br>Nippon Koei Co    |                                     |                                     |                        |                           |                |            |  |
| 8.  | STUDY PERIOD   | Mar.1999 ~                           | Jul.2000                            | 16month(s)                          |                        |                           |                |            |  |
|     | SITE OR AREA   |                                      | hailand and Sava                    | annakhet in Lao l                   | PDR                    |                           |                |            |  |
| 10. | MAJOR PROPOSED PR  | OJECT(S)                             |                                     |                                     |                        |                           |                |            |  |

#### 10. MAJOR PROPOSED PROJECT(S)

The Second Mekong International Bridge crosses the Mekong River running between Lao PDR and Thailand for the link of the Indochina East-West Corridor, from Myanmar to Vietnam. This bridge, followed from the First International Bridge (the Friendship Bridge) between Lao PDR and Thailand, is also one of the major projects for the Great Mekong River Area Development.

The Japan Bank for International Cooperation (JBIC), the execution organization of Japanese Government (GOJ), has already pledged the fund of the Second Mekong International Bridge Project, to the Government of Lao PDR (GOL) and Government of Thailand (RTG), December 1998.

After that, the detailed design by the study team of Japan International Cooperation Agency (JICA) was undertaken, with series of the meetings with the execution organizations of GOL and RTG from March 1999 to June 2000.

The location of the Second Mekong International Bridge is located 5km north from Savannakhet and 7.5km north from Mukudaharn was selected at the SAPROF of JBIC, 1998.

#### <Contents>

The contents of this project as follows;

(1) Road

Basic Design for alignment of the road, traffic lane, access to local roads, border control facility, and detailed design for them (2) Bridge

The PC Sail Type Continuous Box Girder Bridge was selected in consideration with the climate, topoglraphic condition, procurement of materials and local construction industry.

PLU PLU/S 402/00 D/D

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
| PRESENT STATUS | Completed                |                           |
| TRESENT STATES | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### **Description:**

(FY2001 Domestic Survey)

The pledge of Japanese Yen Loan of ODA has already agreed among Japanese Government and Counterpart. The early commencement of this project is expected. As of November 2001, the each Government negotiates about the Loan Agreement, and the conclusion of the Loan Agreement is being prepared now.

After the conclusion of the Loan Agreement, the Consultant Procurement by the both Governments and Contractor Procurement will be followed.

#### Finance:

(FY2002 Domestic Survey)(FY 2002 Overseas Survey)

27 Dec. 2001 L/A 8,090 mil. Yen

(To Thairand: 4,079 mil. Yen, To Lao: 4,011 mil. Yen)

#### Construction:

The planned tendet processing including its evaluation: Jul. -Dec. 2002

The planned start of construction: Aug. 2003 (planned completion: Feb. 2006)

(FY2002 Domestic Survey)(FY2002 Overseas Survey)(FY2003 Domestic Survey)

July 2002 Preparation for bidding started May 2003 Implementation of bidding

Package 1 (the section for the international bridge construction will be jointly born by Laos and Thailand): 5 companies bid,

Package 2 (international border control facilities of the Laos side and the section for the access road construction will be born by Laos): 10 companies bid,

Package 3 (international border control facilities of the Thailand side and the section for the access road construction will be born by Thailand): 9 companies bid. Construction commencement schedule: the construction for Package 1 is expected to start in December 2003, and the construction for Package 2 and 3 is expected to start in February 2004O&M:DOH and MCTCP are expected to join in maintenance and management of the bridge

\*Because this project is a construction of an international bridge spanning two nations, it took a little more than one year before the exchange of notes (E/N) and conclusion of loan agreement (L/A) to prepare and conclude the agreement between two nations on the joint execution of the project in Laos and Thailand after the collaboration D/D completed in June 2000.

#### Operation and Maintenance:

Both DOH and MCTPC shall be jointly responsible for bridge and maintenance.

(FY 2004 domestic survey) (FY 2004 overseas survey)

Next step survey: The second Mekong International Bridge Construction project (currently on-going)

Funding: yen-loan (L/A was concluded 27 December 2001)

Amount: 4,011 million YEN

Bid: Mitsui Sumitomo Construction (bidding, construction work started)

Construction period: December 2003- December 2006

#### (FY 2005 Domestic Survey)

Progress of design/construction: approximately 65%

## STUDY SUMMARY SHEET (M/P)

PLU PLU/S 111/01 Compiled Oct.2002

Revised Jul.2009

| 1. | COUNTRY                 | Plural countries   |  |  |  |  |  |  |
|----|-------------------------|--|--|--|--|--|--|--|
| 2. | NAME OF STUDY           | The Integrated De  | The Integrated Development Plan for the Border Region in Thailand and Lao PDR  |  |  |  |  |  |
| 3. | SECTOR                  | Development Plan   | n / Integrated Regional Development Plan 4. TYPE OF STUDY M/P  |  |  |  |  |  |
| 5. | COUNTERPART AGENO       | CY AT THE  | Thailand: Office of the National Economic and Social Development Board.  Lao PDR: Committee for Planning and Cooperation |  |  |  |  |  |
|    | PRESENT COUNTERPA       | RT AGENCY  |  |  |  |  |  |  |
| 6. | OBJECTIVES OF THE STUDY | Formulating regional comprehensive development plan targeting on inter-state regions between Thailand and Laos which are crucial for ongoing east-west cloister project. (Thailand: Mukdahan, Nakhon Phanom, Sakon Nakhon and Kalasin. Laos PDR: Savannakhet and Khammounan) |  |  |  |  |  |  |
| 7. | CONSULTANT(S)           | International Development Center of Japan KRI International Corporation Pacific Consultants International  |  |  |  |  |  |  |
| 8. | STUDY PERIOD            | Mar.2000 ~   | Sep.2001 18month(s)  |  |  |  |  |  |
| 9. | SITE OR AREA            |  | han, Nakhon Phanom, Sakon Nakhon and Kalasin<br>et and Khammounan.   |  |  |  |  |  |

#### 10. MAJOR PROPOSED PROJECT(S)

Common programs for Thailand/Lao PDR:

- 1. Business Development Forum (USD 223,000/ year): Establishment of a forum which aims at implementing necessary cooperation and actions for industrial development of target areas with participation of private entrepreneur and government officers of Laos and Thailand. 2. Savannakhet Airport Utilization (USD3.48 million): Opening and sharing the existing Savannakhet Airport to both types of passengers from Laos which depart to Mukdahan, and passenger from Mukdahan. 3. Route 9 Joint Maintenance: The rout 9 in Laos is a part of the east-west cloister which connects Thailand and Laos. The Route 9 Joint Maintenance is an experiment to implement repairing and maintenance of the rout through an international cooperation. Programs for Thailand include:
- 1. Integrated faming in rain-fed areas (USD 4,348 of initial investment): The plan attempts improving and stabilizing incomes of agricultural communities through raising yields by implementation of new farming methods. 2. Local Industry Platform (USD 1.27 million): The project aims to establish new supporting agencies aiming at development of regional indigenous industry.
- 3. Human resource development a) Expansion of Rajamangala Institute, Kalasin (USD1.81 million): Course establishment project for engineer cultivation concentrating on IT. b) Establishment of new Rajabhat Institute, Mudahan (USD19.88 million): Establishing a new university for engineer cultivation in the region. 4. Mukdahan goods distribution and processing center (USD4.54 million): Establishing the Goods Distribution Center which can respond regional demands as well as promotes regional commodity distribution for the east-west cloister development.

  Programs for Lao PDR include:
- 1. New village initiative (USD5.8 million for 10 years): New type of economic development projects in the area which attempt poverty reduction, regional development and income improvement of local inhabitants centering on development of indigenous industries and agriculture etc. 2. Primary education expansion and improvement program (USD12.8 million): Project on new construction and renovation of elementary schools for primary education promotion. In this regard, the project proposes to parallel establishment of small farms with schools so that harvest income from farms enables to cover administrative and maintenance cost of schools. 3. Savannakhet agriculture college program (USD11.4 million): The project aims to revive the school of agricultural technologies in Savannakhet in order to cultivate experts of agriculture. 4. Savannakhet technical school renovation program (USD6.9 million): The project aims to expand and develop the school of technology in Savannakhet in order to cultivate broad range of industrial engineers. 5. Degraded NBCA Forest areas rehabilitation program: The project aims to conserve and improve forestry which environmentally destruction is ongoing.

PLU PLU/S 111/01 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |

#### **Description:**

(FY2002 Domestic Survey)

Both governments have admitted the significance of proposed projects; however, there have been some factors, delaying their implementation. On the other hand, the project of East-West Corridor has been promoted by the ADB; the proposed projects, especially formulated for Thai, seem to be simultaneously carried forward. Although Lao government has emphasized the projects, the targeted area has not been given priority. The government prioritizes firstly Venetian, its capital, and secondly the Southern area around Pakuse. Therefore, it requires considerable time to launch the projects.

(FY2003 Domestic Survey)

The progress is as follows.

Common in Thailand and Laos:

- 1. Businessperson Forum: the project, implemented by utilizing a part of funds provided by the Japanese government for ESCAP, has been made full use for business forum activities in support of ADB/ESCAP.
- 2. Savanakhet Airport Utilization: approval from the Immigration Bureaus of both nations, which is imperative for implementation of the project, will take long (three to five year period will be required before putting the project into effect).
- 3. Route 9Joint Maintenance: it has become one of priority issues in the East-West Corridor Program under the support of ADB

#### Thailand

- 1. Integrated Farming in Rain-fed Area: it became a prioritized program for the Thai government and each project has been implemented by related ministries.
- 2. Local Industry Platform: it has been used in the contents of small- to medium-sized businesses cluster program (Ministry of Technology) under the support of JICA.
- 3. Human Resource Development: it is expected to be positioned as an object of a private business under the current policy. However, actual privatization of the project requires further development of the regional economy.
- 4. Mukdahan Goods Distribution and Processing Center: it is expected to be positioned as an object of a private business under the current policy. However, actual privatization of the project requires further development of the regional economy.

#### Laos

- 1. New Village Initiative: as soon as a donor provides support that can be systematically contributed to the revolving funds.
- 2. Primary Education Expansion and Improvement Program: it aims for implementation within one to two years as a part of formulation of an educational master plan.
- 3. Savannakhet Agricultural College Program: three to five year period will be required before put into effect.
- 4. Savannakhet Technical Rehabilitation School Program: three to five year periods will be required before put into effect.
- 5. Degraded NBCA Forest Rehabilitaiton Program: three to five year period will be required before put into effect.

#### (FY2003 Overseas Survey)

#### Thailand:

The Thai government incorporated "Mukdahan goods distribution and processing center project" into short-term project that will be implemented under ECS between Cambodia, Laos, Myanmar, and Thailand. IEAT is going to implement feasibility study and D/D in FY 2004.

(FY 2006 Domestic Survey)

No information to be specifically mentioned.

(FY 2007 Domestic Survey)

No information to be specifically mentioned.

## STUDY SUMMARY SHEET (M/P+F/S)

(M/P+F/S) Compiled Oct.2002
PLU PLU/S 225/01 Revised Jul.2009

| PL  | LU PLU/S 22                | 25/01   |   |               |               |                 |        |              |              | Revis       | ed      | Jul.2009  |
|---|----------------------------|---|---|---------------|---------------|-----------------|--------|--------------|--------------|-------------|---------|-----------|
| 1.  | COUNTRY                    | Plural countries                                  |   |               |               |                 |        |              |              |             |         |           |
| 2.  | NAME OF STUDY              | Scholarship Pro                                   | nolarship Program for International Students Studying in Japan at Their Own Expense |               |               |                 |        |              |              |             |         |           |
| 3.  | SECTOR                     | Human Resourc                                     | es Developn / E   | ducation      |               |                 | 4.     | TYPE OF S    | TUDY         | M/P+F/S     |         |           |
| COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY  5.  PRESENT COUNTERPART AGENCY |                            | ENT STUDY   | United Nations  | University F  | Financial Ass | istance Progr   | am     |              |              |             |         |           |
|   |                            |   |   |               |               |                 |        |              |              |             |         |           |
| 6.  | OBJECTIVES OF THE STUDY    | The project aims implementing be to Japan through | ody UNU regard<br>1 scholarship len   | ing a suppor  |               |                 |        |              |              |             |         |           |
| 7.  | CONSULTANT(S)              | Shin Nihon & C                                    | o.  |               |               |                 |        |              |              |             |         |           |
| 8.  | STUDY PERIOD               | Jul.2001 ~  | Mar.2002  | 8month(s)     | )             |                 |        |              |              |             |         |           |
| 9.  | SITE OR AREA               | Japan   |   |               |               |                 |        |              |              |             |         |           |
| 10.   | MAJOR PROPOSED PR          | OJECT(S)  |   |               |               |                 |        |              |              |             |         |           |
|   | the objective of the study |   | irnose of this sti  | ıdv was to fo | ormulate bus  | ness nlan the   | erefor | re neither M | /P nor E     | S were carr | ed ou   | ıt within |
|   | and defective of the study |   | inpose of time sit  |               | Jiiidide ous  | iicoo piuii, uk |        |              | , 1 1101 1 / | . were carr | - Cu 0t |           |

As the objective of the study stipulates, the purpose of this study was to formulate business plan, therefore neither M/P nor F/S were carried out within the study. The proposed business plan was formulated based on the premise that the project would be lunched as a 3-year pilot project where number of borrower students are limited, and then implemented as a post pilot project expanding the project size in full scale. The outline of the proposed plan is as follows:

In order to select responsible and reliable borrower students, screening should be on a recommendation basis by educational institutions. In order to keep lending loss risk low, the loan amount should not exceed repayment capacity of an overseas student which is clarified by the fact-finding survey as well as the project should implement fund collection via automatic debit transfer and livelihood support using consultants which have experience of overseas students supporting project. Development and implementation of information system is necessary for a credit management in order to reduce operative duty of UNU Financial Assistance Programme.

PLU PLU/S 225/01 M/P+F/S

|                | Completed or In Progress | Promoting                 |
|----------------|--------------------------|---------------------------|
|                | Completed                |                           |
| PRESENT STATUS | Partially Completed      | Delayed or Suspended      |
|                | Implementing             |                           |
|                | Processing               | Discontinued or Cancelled |

#### Description:

#### (FY 2002 Domestic Survey)

The form of financial assistance was transformed from originally intended Yen loan into capital injection as a result of the discussion between JBIC and UNU which was conducted during the study. Because of condensed scale of the project in association with the formational change, the contract of the project implementation was changed due to the result of the reconsideration of subjected study and implementation method. After the change of financial assistance formation, the UNU and Japan government deepened their consideration of credit schemes responding to difficulty of ending loss control and repayment capacity limit of self-funded overseas students which was clarified in the study.

The transformed lending method which goes through universities was determined to be implemented privatively as a pilot project as a result of shelved individual lending without a bond which was a condition in the study phase.

#### (FY 2003 Domestic Survey)

Implemented project: Privately Financed Foreign Students Supporting Program (pilot programme)

The consensus document which stipulated that JBIC invest for UNU trust fund established in Mar. 2003 was ratified. The Japanese ministry of Foreign Affair capitalize project operating budget.

JBIC investment amount: Up to JPY 486 million

Management and operation: UNU Financial Assistance Program

Contents: A pilot project started in FY2003 as a loan project executed through a university. In addition to five universities participating in this project at present, more universities are expected to participate in the pilot project in the future.

#### (FY 2004 Domestic Survey)

The project for self-funded overseas students was launched as a 3 years pilot project from 2003 followed by the result of the subjected study. On one hand, the project is funded by the JBIC and on the other hand, operation funds are covered by the Ministry of Foreign Affairs. The UNU Financial Assistance Program plays central role for project management and project implementation. The subjected project is implemented based on cooperation with universities. Regarding private universities, several universities already get involved to the pilot project. Currently, discussions with national universities which may cooperate to the subjected project are in progress regarding details.

Beneficial impact: Beneficial impact is not evaluated because the project is in progress.

#### (FY2007 Domestic survey)

The project was started in 2003 as a three-year pilot project as a result of the survey. The project targeted privately-financed overseas students were extended and is currently being implemented.

Implemented project: Financial Assistance Program for Student from Developing Country (Extended)

Implementing period: April, 2004 - March, 2008

Implementing body: United Nations University Student Association

Description: The loan for the pilot project was agreed through cooperating Universities. Cooperating universities are national or private university or junior college which approves the purpose and idea of Financial Assistance Program for Students from Developing Country, and exchanges contracts to give the loan of funds to a student studying abroad at their own expense. Cooperating universities have responsibility for recruiting and selecting the students for the loan entitlement, receive the repayment of the funding and monitoring. Therefore, for the pilot project, growth of the cooperating university numbers will be the key for success of the project.

According to the web-site of the United Nations University, 26 Universities and four junior colleges participated in this project as cooperating Universities (15 November, 2007), and since the start of the project in March, 2003, scholarship fund has lent to 592 foreign students. However, direction of the project after ending the pilot project has not been officially given. (http://www.fap.hq.unu.edu/FAPS/u/fund\_details.html)

**(F/S)** 

Compiled Oct.2002 PLU/S 304/01 PLU

| 1 1                  | 1                                      | J-7/ U.I.                         |  |                     |                      |        | RCVI                          | scu     | Jui.2007 |
|----------------------|--|-----------------------------------|--|---------------------|----------------------|--------|-------------------------------|---------|----------|
| 1.                   | COUNTRY  | Plural countries                  |  |                     |                      |        |                               |         |          |
| 2.                   | NAME OF STUDY  | Feasibility Study<br>Zambia       | y on the Kazungul                      | a Bridge over the Z | Zambezi River betw   | een tl | he Republic of Botswana and t | ne Repu | ublic of |
|                      | SECTOR   | Transportation                    | / Re                                   | oad                 |                      | 4.     | TYPE OF STUDY F/S             |         |          |
| 5.                   | COUNTERPART AGEN<br>TIME OF DEVELOPME  |                                   | Botswana: Ministry<br>Zambia: Ministry |                     | portation and Com    | munio  | cations                       |         |          |
|                      | PRESENT COUNTERPA  |                                   |  |                     |                      |        |                               |         |          |
|                      |  |                                   |  |                     |                      |        | ction with access roads which | ross Za | ambezi   |
| 6.                   | OBJECTIVES OF THE STUDY  |                                   |  |                     |                      |        | ment with those 2 countries.  |         |          |
| 7.                   | CONSULTANT(S)  | Nippon Koei Co<br>Oriental Consul |  |                     |                      |        |                               |         |          |
| 8.                   | STUDY PERIOD   | Aug.2000 ~                        | Mar.2001                               | 7month(s)           |                      |        |                               |         |          |
| 9.                   | SITE OR AREA   | Kazungula: Sun                    | rounding area of Z                     | ambezi River alonş  | g the border with Bo | otswa  | ana, Zambia, Zimbabwe and Na  | mibia   |          |
| 10.                  | MAJOR PROPOSED PR  | OJECT(S)                          |  |                     |                      |        |                               |         |          |
| 1. N<br>2. S<br>3. A | Main Bridge<br>Span Bridges<br>Approach roads<br>Border control facilities d |                                   | ī                                      |                     |                      |        |                               |         |          |

PLU PLU/S 304/01 F/S

|                                    | Completed or In Progress | Promoting                 |
|------------------------------------|--------------------------|---------------------------|
|                                    | Completed                |                           |
| PRESENT STATUS Partially Completed | Delayed or Suspended     |                           |
|                                    | Implementing             |                           |
|                                    | Processing               | Discontinued or Cancelled |

#### Description:

(FY 2002 Domestic Survey)

- 1. Aimed at building cross border bridge linking Botswana, Zambia and Zimbabwe, the projects faces difficulty in raising funds from the beginning. More specifically, Zambia belongs to low income country, eligible for receiving grant aid, while Botswana, a middle income country, is not eligible.
- 2. Even though various alternative proposals were submitted, final decision has not been made, and the project is not to be implemented.
- 3. On the other hand, the government of Botswana has proposed to implement the project based on their own funds, and has requested Nippon Koei.,Ltd. who conducted F/S study, technical assistance to the project.

#### (FY 2002 Overseas Survey)

Additional studies including railway components, is stacked. The study will be implemented when Botswana and Zambia solve their boundary problem.

#### (FY 2003 Overseas Survey)

Botswana:

Although this project was added to the Ninth National Development Project, the Botswanan government is studying a plan to construct the bridge without the railway components because of its doubtful financial feasibility. In June 2003, the Botswanan government requested the Japanese government for financing on the occasion of implementing the auxiliary study on the project including the railway components, but the Japanese government responded that it is not prepared for financing on the study.

At present, the Botswanan government is in the process of determining the revenue resource for implementation of the project out of options including the Domestic Development Fund (DDF).

#### (FY 2004 Domestic Survey)

- 1. Funds request: Co finance with Buyers Credits (JBIC), and city bank
- 2. Request period: Application of an official loan has not been submitted but introducing of the initiatives anytime.
- 3. Other situations: The second presentation has been done for the both leaders of Zambia, and the Republic of Botswana in February 2004. Also, another presentation is planned in later dates.

#### (FY 2004 Overseas Survey)

1. Next step survey:

There is less possibility of which the nest step survey would be implemented. The Botswana government has been discussing the construction of a bridge without considering the railways because they had no secure statements that whether the possibilities of financial implementation would increase by the railways.

2. Funds raising, etc.

The Botswanan and the Zambian government management committee held a meeting in Lusaka Zambia in order to discuss about fundsraising for the project and cooperation method of both countries in November 30 2004. The management committee arrived at an agreement of their directionality such as following the Public-Private sector Partnership (PPP) approach, detaching persons to potential donors in case PPP approach does not work efficiently. The management committee was agreed to hold a meeting in march 2005 to discuss the result of PPP approach, and its directionality. Currently, seeking for the potential investors for this project.

#### (FY 2005 Domestic Survey)

The project has a possibility to be implemented with BOT method after absolute resolution of boundary issues between Botswana and Zambia in case of a bridge without railways even though feasibility of the project has been quite small due to financial problem of Botswanan government.

#### (FY 2006 Domestic Survey)

AfDB determined their funding for the subjected bridge following their F/S implementation. Botswana, Zambia, and Zimbabwe which is rated by JBIC as an inappropriate lending outlet country formed a committee to discuss about the subjected bridge development plan.

#### (FY 2007 Domestic Survey)

As a F/S of shift from view of placing importance to north-south transportation maintenance in SADAC, to measure of placing importance to east-west corridor, conducted issues as follows. Conduct in objective of enhancement of intraregional transportation system that respond to development of African east-west corridor(Mozambique, Maputo, Beira ~ Namibia) in SACAC.

Implemented study: The SADAC North-South Transport Corridor Improvement Study, Consulting Services for the Proposed Kazungula Bridge Project and Boarder Facilities

Implementing period: from January, 2008 to December, 2008

Implementing body: Southern African Development Community Secretariat

Funding party: unknown

Condition: It is in procedure to select consultants. By the F/S of JICA, construction of the bridge itself is able to be conducted, but due to the restriction that Botswana is loan assistance targeted country and Zambia is grant aid assistance country for Japan, funding method had been a problem. In the conduction of Survey this time, it is expected that concrete funding method in international view would be suggested.

## STUDY SUMMARY SHEET (M/P)

(NI/P) Compiled Mar.2005
PLU PLU/S 101/03
Revised Jul.2009

| 11   |                                    | 3   |   |                       |             |                     | Revised         | Jui.2007 |  |
|------|------------------------------------|---|---|-----------------------|-------------|---------------------|-----------------|----------|--|
| 1.   | COUNTRY                            | Plural countrie   | es  |                       |             |                     |                 |          |  |
| 2.   | NAME OF STUDY                      | The Study on H  | The Study on Hydro-meteorological Monitoring for Water Quantity rules |                       |             |                     |                 |          |  |
| 3.   | SECTOR                             | Social Infrastruc   | cture / River   | & Erosion Control     | 4.          | TYPE OF STUDY       | M/P             |          |  |
| 5.   | COUNTERPART AGENORIME OF DEVELOPME |   | Mekong River Com  | mittee                |             |                     |                 |          |  |
|      | PRESENT COUNTERPA                  |   |   |                       |             |                     |                 |          |  |
| 6.   | OBJECTIVES OF THE STUDY            | This survey is conducted to contribute to the preparation of the "Water Utilization Programme (WUP)" (one of the major policies of the Mekong River Committee (MRC)), which is designed to regulate the quantity and quality of water to be secured in considering the river ecological system and the environment so as to realize a reasonable and fair water use of the Mekong River. The purposes are 1) to understand the condition of the Mekong River, 2) to support for preparing the proposal of the water volume regulation established by MRC and 3) to develop the human resources of the counterpart side. |   |                       |             |                     |                 |          |  |
| 7.   | CONSULTANT(S)                      | CTI Engineering<br>Nippon Koei Co   | g International Co., I<br>o., Ltd.                                    | .td.                  |             |                     |                 |          |  |
| 8.   | STUDY PERIOD                       | Mar.2001 ~  | Mar.2004  | 36month(s)            |             |                     |                 |          |  |
|      | SITE OR AREA                       | F/S: N.A.   | s along Mekong river  | basin                 |             |                     |                 |          |  |
|      | MAJOR PROPOSED PR                  | ` '   |   |                       |             |                     | D. G.           |          |  |
| In c | order to support the prepa         | ration of the "Wa   | ater Utilization Progr  | amme" undertaken by 4 | member coun | tries of the Mekono | River Committee |          |  |

In order to support the preparation of the "Water Utilization Programme" undertaken by 4 member countries of the Mekong River Committee, technological assistances for the planning was provided by transferring technical experience of our water utilization planning, establishing a network of water monitoring, a basis of the program, and preparing the data on water volume based on the observation of the water volume in Cambodia where

such data is insufficient. Accordingly, no new projects are proposed in this survey for the planning.

**PLU** PLU/S 101/03 M/P

|                | In Progress or In Use     |
|----------------|---------------------------|
| PRESENT STATUS | Delayed                   |
|                | Discontinued or Cancelled |
| Description :  |                           |

(FY 2004 Domestic Survey)

Follow-up of formulating Water Utilization Program and hydro-meteorological monitoring including stream flow observation is strongly recommended, but it has not been realized yet.

(FY 2006 Domestic Survey)

No information to be specifically mentioned.

(FY 2007 Domestic Survey)

Regarding the Water Utilization Program which was the main point of the study, the program was finished in the committee.

(FY 2008 Domestic Survey)

Although the Ministry of Water Resources and Meteorology requested for a development study on "strengthening hydro-meteorological monitoring" for FY 2005, it has not yet been materialized. The ministry is still expecting the support from donors in this field. It is highly likely that it will request other donors such as Korea, ADB, and WB to provide assistance, in case Japan does not support it.