PROJECT SUMMARY (F/S)

ASO CHN/A 304/89

Compiled Mar.1991
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY: China

2.NAME OF STUDY: Integrated Agricultural Infrastructure Development in Dong Ting Lake Area in Hunan Province

3.SECTOR: Agriculture/General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Hunan Science and Technology Commision

7.OBJECTIVES OF STUDY: Feasibility study on the comprehensive water utilization and agricultural development plan

8.DATE OF S/W: Apr.1988

9.CONSULTANT(S): Sanyu Consultants Inc.
Japan Engineering Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 14
Period Aug.1988-Feb.1990(18 months)

Total M/M	Japan	Field
53.70	19.60	34.10

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	194,043 (¥'000)
Contracted	160,483

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Northern part of Hunan Province (right bank of Yangzi River middle basin)

2.PROJECT COST

(US$1,000) (US$1=4.1Gen)		Total Cost	Local Cost	Foreign Cost
	1)	28,263	27,883	380
	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)

1)Model Block at Nan-da-ti Area
(15,400ha: Nan-da area 8930ha; Huang Mao Zhou area 6,470 ha)
- Drainage facilities for dike improvement work
- Electric-transmission for Xiang-nan Drainage Pump Station
- New pump station at the Nan-da District
- On-farm level irrigation land in the Huang Mao Zhou district

2)Model Block at Shi-ji-hu-ti Area (105ha)
- Drainage facitilites and Horticultural facilities for technical Development
- Experimental Center
- Pump station land and other auto-irrigation facilitites
- Tunnel house

* Implementation period below is 5 years.

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS: Feasibility: Yes

EIRR1)	13.60	FIRR1)	
EIRR2)	20.10	FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Conditions:
- The evaluation period is 50 years for 1), 20 years for 2).
- The incremental crop production was calculated as the direct benefits of the project.

Development Impacts:
It is expected that agricultural development in Dong-Ting-Lake Reclamation area and urban type vegetable production could become possible.

*The EIRR 1) and 2)are for Nan-da-ti and for Shi-ji-hu-ti

5.TECHNICAL TRANSFER: Transfer of technology for government officials in China and Japan were made.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
- ○ Completed
- ○ Partially Completed
- ● Implementing
- ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

(FY1991 Overseas Survey)
In 1991 a request for a Japanese Grant Aid was made by the Chinese Government. Out of the total project budget of 2.55 billion yen, 1.2 billion yen is expected to be financed by the Grant Aid and the remaining by domestic funds.

(FY1992 Overseas Survey)
The Chinese side is executing the following projects by the local funds and hopes to execute the new pump station project in the Nan-da-ti Area.

1) Nan-da-ti Area
- The dike improvement work is in progress.
- The repair of drainage facilities was completed. (89 places)
- The drainage construction plan was modified in order to reduce the cost of constructing substations.

2) Shi-ji-hu-ti Area
- Construction of the electric-transmission facilities was completed.
- Construction of irrigation canal & farm land is in progress.
- The drainage work was completed. (155km)

(FY1994 Domestic Survey)
Basic Design Study using Japanese grant aid of FY1994 was decided to implement.

2.MAJOR REASONS FOR PRESENT STATUS: In the large-scale agricultural development projects in China, local funds occupies a major part of finance. The request for finance is usually made only for foreign currency portion.

3.PRINCIPAL SOURCE OF INFORMATION: ①、②、③

和名 湖南省洞庭湖地区総合水利及び農業開発計画

{F/S,D/D}

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1992
Revised Mar.1995

ASO CHN/S 202B/90

I. OUTLINE OF STUDY

1.COUNTRY China

2.NAME OF STUDY
Municipal Solid Waste Treatment Plan in Xian City

3.SECTOR
Public Utilities/Urban Sanitation

4.REFERENCE NO.

5.TYPE OF STUDY M/P+F/S

6.COUNTERPART AGENCY
Joint Venture of Study for Municipal Solid Waste Treatment Plan in Xian City

7.OBJECTIVES OF STUDY
Present Condition Analysis & Master Plan
Feasibility Study

8.DATE OF S/W Sep.1988

9.CONSULTANT(S)
Nippon Koei Co., Ltd.
Japan Engineering Consultants Co., Ltd.

10.STUDY TEAM
No.of Members 13
Period Jan.1989-Jun.1990(16 months)

Total M/M	Japan	Field
70.11	38.56	31.55

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	261,310 (¥'000)
Contracted	15,334

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
The old area & a part of expansion area in Xian City (172 sq.km)<M/P>
Inner City in Xian City (Final Disposal Site)
Outer City in Xian City (Intermediate Treatment Site)<F/S>

2.PROJECT COST (US$1,000)
1$US=5 yuan

		Local Cost	Foreign Cost
M/P	1)	14,431	14,431
	2)		
F/S	1)	4,233	4,233
	2)		
	3)		

3.CONTENTS OF MAJOR PROJECT(S)
<M/P> Recommended plans for solid waste management system of the target year 2000 in Xian City are as follows:
(1) Collection system Setting up of collection container and vehicle with a promotion of separate discharge system and establishment of 2 steps transportation system with transfer station.
(2) Final disposal facility construction of final disposal facility (12,000,000 cu.m) assumed 10 years life.
<F/S>The First Phase Project of which the target year is 1995 should be as follows:
1) Construction of controlled type of final disposal facility.
Location : Chian-Sun District
Landfill method : Semi-Anaerobic Metabolism in Landfill
Major facilities : Reservoir type deposit
Water insulation
Underground Water Discharge
Rainwater Discharge
Access road
2) Construction of transfer station.
Contents of Major Project
Targeted Population : 475,343 (1995)
Planned waste collection volume : 477 tons/day
Capacity of Planned Facilities : Compector Container 160 tons/day
Flat Landfill 360 tons/day

Imp. Period: .1991-.1995

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

EIRR1)	25.20	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
<M/P><Impacts>:1) By adopting separate discharging system, flexibility for the future change of the disposal system would be secured. 2) The project would bring about more efficient waste collection and haulage system. 3) The project would make an improvement of environmental preservation.
<F/S>Unit cost;
Operation and Maintenance 11.8 Yuan/ton Total cost 35.7 Yuan/ton
The present waste collection charge is 10 Yuan/ton. For implementation, the subsidy from city budget to the environment management agency is needed.
If the charge to the beneficieries is increased twice and three times, the subsidy amount will be 83% and 66%.

Charge (Yuan/ton)	Amount of Subsidy ('000/Yuan)
10	82,337
20	68,402

<Impacts>: The project would bring about more efficent waste collection and

5.TECHNICAL TRANSFER
From the view point of the effective transfer of knowledge, all field investigation works were carried out in cooperation with couterpart engineer.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS
☐ Completed or in Progress ■ Promoting
○ Completed
○ Partially Completed ☐ Delayed or Suspended
○ Implementing
○ Processing ☐ Discontinued or Cancelled

(Description)

(FY1991 Overseas Survey)
A detailed design financed by domestic fund has been conducted since 1991.
The project is assigned high priority in the city's eighth Five Year Plan (1991-95), and the city hopes for further cooperation of JICA in continuing the study on the construction of the transfer station.

(FY1994 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②

和名 西安市生活廃棄物処理計画

{M/P+F/S}

PROJECT SUMMARY (F/S)

Compiled Mar.1992
Revised Mar.1995

ASO CHN/S 313/90

I. OUTLINE OF STUDY

1.COUNTRY China

2.NAME OF STUDY
Rapid Railway Construction Project in Tianjin

3.SECTOR
Transportation/Railway

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Tianjin Science and Technology Commission

7.OBJECTIVES OF STUDY
F/S for a new railway line construction between Tianjin and Tanggu, about 50km

8.DATE OF S/W Sep.1988

9.CONSULTANT(S)
Japan Railway Technical Service
Yachiyo Engineering Co., Ltd.

10.STUDY TEAM

No.of Members 14

Period Feb.1989-Jun.1990 (17 months)

Total M/M	Japan	Field
62.28	35.84	26.44

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Local students were used in a supplemental survey for collecting traffic data.(Costs borne by the Chinese side.)

12.EXPENDITURE

Total	189,751 (¥'000)
Contracted	184,186

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Tianjin City
Area: 11312km Population: 8.15 Million (1986)

2.PROJECT COST (US$1,000) US$1=4yuan

	Total Cost	Local Cost	Foreign Cost
1)	396,958	281,875	115,083
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
Construction by Tianjin City of a new passenger railway line of about 50 km between Tianjin and Tanggu --- Major purpose is the development of regions along the route,especially,the improvement of commuter transport in Tianjin and Tanggu,and balanced development of regions along the Hai He River.
-Section to be opened at the 1st Stage(end of 1995): between Shuang Lin and He Bey Lue,38.70km,Structures: viaduct 31.50km,embankment:7.20km,No.of stations:9
rolling stock:58 cars(commuter electric railways),maximum operation speed of trains 120km/h
-Section to be opened at the 2nd stage(early 2000):between He Bey Lue and Tianjin New Port,10.85km,No. of stations:2,rolling stock:84 cars
Operational safety and traffic control systems:cabsignal block system,cab signal system,1st-type electric relay or electronic relay system,automatic train control(ATC)system,centralized train control(CTC) system; Rolling stock base:1)Base facilities:facilities for main part inspection or overhaul,temporary repair,trip inspection,regular inspection(monthly,etc.),car cleaning facilities,storage track,etc.
2)Inspection and repair facilities:management office,inspection building,workshop building,wheel grinding shop,maintenance base,other buildings. Electric facilities:power transformation facilities,contact wire facilities,power transmission and distribution wire

Imp. Period: 1991~1999

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes/No

EIRR1)	7.21	FIRR1)	2.42
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
Preconditions:
1. Inflation : Not considered
2. Exchange rate: 1yuan = 36 yen
3. Residual value: Earmarked for the last year of the project and residual value.
4. Period of analysis: Up to 2020 (30 years from the start of construction).
5. Transport demand: Estimated for 1996, 2000, and 2015.
Fare is assumed to be 0.05 yuan per km.

Development Impacts:
1) greatly increase the passenger transport capacity between Tianjin and Tanggu and reinforce the basic railway network in Tianjin
2) promote comprehensive urban construction projects in Tianjin City, especially, the economic and technical zone development projects, etc.
3) promote harmonized development of areas along the Hai He river as well as the sound development of all of Tianjin.

5.TECHNICAL TRANSFER
1) Technical transfer, via on-site work, concerning demand forecasting, construction standards, train operation planning, electrification, signal and telecommunication facilities and rolling stock.
2) Training one couterpart in demand forecasting (Jan. and Feb., 1990).

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)
At present, it seems that technical sectors are considering the materialization of the project. However, details are unknown.

(FY1991 Overseas Survey)
To date neither a detailed study nor official request for financial cooperation has been made.

Information from Tianjin, as of February 1993:
At the time when the JICA report on the F/S was submitted, it was impossible to implement this project due to the financial difficulty. However, the Tianjin City Government has decided to incorporate the project into a projection on a commercial basis. In this regard, in order to promote the construction, the City Government is planning to dispatch a study team to Japan to conduct observation and discussions concerning the present situation of high-speed auided transport systems in Japan and related technical problems mentioned in the report.

(FY1992 Overseas Survey)
Waiting for the answer.

(FY1994 Domestic Survey)
In this project, Solin station is scheduled to be the starting point, on the precondition that the Tianjin Subway Line No.1 will be extended to Solin. However, request for financial assistance has not yet been made, because the extension work of the subway is being delayed.

(FY1994 Ocerseas Survey)

(Please turn over)

2.MAJOR REASONS FOR PRESENT STATUS
Delay of other related projects (development of economic and technical development areas).

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

和名 天津市津塘快速鉄道新線建設計画

{F/S,D/D}

III. PRESENT STATUS OF STUDIED PROJECT

(Description)

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(FY1992 Overseas Survey)

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(FY1994 Domestic Survey)

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(FY1994 Overseas Survey)

1) Although a loan from Japan was applied to the National Planning Committee, the loan was not admitted as a national project and Tianjin City is seeking for a funding method. At present, BOT method is discussed. The city asked American investment banks and corporations in Hong Kong, Singapore, Germany France, Canada, Thailand or Taiwan for finance. These corporations are inspecting profitability of the project.
2) Since the New Seacoast Development Project (10 years) was expanded and this project became more important, Tianjin City Representative Assembly and Planning Committee determined to promote this project. One of the most critical changes from the F/S is the change of areas for railway construction. Replacing the F/S plan of locating the starting point at the south side of the sea/river, the plan to make Tianjin Station a starting point of the railway and expand the line through Tianjin Airport, development district, bonded warehouse district, and the New Tianjin Harbor is now discussed by the Tianjin City Committee of Arts and Science.

Reasons of the changes are as follows:

(1)the profitability of the line will be raised by cutting unnecessary railway service(11km between Tianjin Station and the starting point at the south side of the sea/river);

(2)accoording to changes of the regional development plan, on which this project is based, demand expectation at present has become largely different from the expectation at the time of F/S.

(Note)

An Australian corporation financed A$ 100mil. for the subway construction at Tianjin City, as a relating project. The section between Tianjin and the original starting point of railway(11km southeast from Tianjin Station) planned in JICA's F/S will be served by the subway after completion.

PROJECT SUMMARY (F/S)

Compiled Mar.1992
Revised Mar.1995

ASO CHN/A 305/90

I. OUTLINE OF STUDY

1.COUNTRY: China

2.NAME OF STUDY: Agricultural Water-use Development Project on Haizi Dam Area in Beijin City

3.SECTOR: Agriculture/General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Ministry of Water Resources

7.OBJECTIVES OF STUDY: To judge the feasibility of this Water Saving Irrigation Project by introducing the modern water management system

8.DATE OF S/W: Nov.1988

9.CONSULTANT(S): Japan Engineering Consultants Co., Ltd.
Sanyu Consultants Inc.

10.STUDY TEAM

No.of Members 9

Period Dec.1989-Mar.1991(15 months)

Total M/M	Japan	Field
58.64	25.70	32.94

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	187,087 (¥'000)
Contracted	172,000

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Beijin city, Pinggu Prefecture

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	37,566	21,856	15,710
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

(1) Rehabilitation of South Main Canal, 1 = 24.3 Km
(2) Rehabilitation and Cosntruction of Appurtenant Facilities of North/South Main Canal, 149 nos.
(3) Cosntruction of Branch Pipeline Canal, 1 - 171.94 Km
(4) Construction of Farm Pond, 238 nos.
(5) Construction of Pump Station and Delivery Pipeline, 105,000 mu
(6) Sprincling Equipment, 2,544 sets
(7) Construction of Road, 1 - 87.5 Km
(8) Installation of Water Management Equipment, L.S.

Imp. Period: .1991~.1995

4.FEASIBILITY AND ITS ASSUMPTIONS: Feasibility: Yes

EIRR1)	38.78	FIRR1)	30.86
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Development Impacts::
1. Promotion of the development of correlated industry
2. Promotion of the development of livestock industry
3. Saving time and cost of distribution for agricultural products
4. Improvement of the living standard
5. The income of a medium size farmer will be increased from 1,500 yuan to 4,500 yuan.

5.TECHNICAL TRANSFER

The technical transfer has been made as follows to the counterparts.
- how to collect and analyze the data
- how to measure the soil moisture
- how to arrange the survey results as F/S Report

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ● Implementing
  - ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

This project consists of two parts: (1) technology transfer for water saving irrigation by the project-type technical cooperation (2) introduction of the water management equipment through Japan's Grant Aid Assistance.
The Government of China had already requested the first one to the Government of Japan in 1991, and the Government of Japan agreed. Consequently, the Government of Japan had executed the long-term investigation from August 24, 1992 to September 17,1992. And the Mission for discussion on the execution has been dispatched from February 22, 1993 to March 4.
For the second one, the Government of China intends to request after finishing the on-going agricultural development project by the Japan's Grant Aid Assistance.
(FY1992 Overseas Survey)
Rehabilitation and construction of the North Main Canal were completed by the local funds in Dec.,1991.
The Government of China invested 6.16 million yuan as construction cost to carry out the following projects: 1) Gate for the main canal (2 places), 2) Branch pipeline canal (30km), 3) Reservoir (15 places), 4)Irrigation areas (10,000 mu)
In order to introduce the Water Saving Irrigation, the Chinese side hopes to finance the water management system by the Japan's Grant Aid. Especially, the local government has a strong wish to implement this project in this way.

(FY1994 Domestic Survey)
Based on the Exection Discussion of 1993, five experts were dispatched in June, 1993 for the technical cooperation.

2.MAJOR REASONS FOR PRESENT STATUS

For the second one mentioned above, this is the plan of the Ministry of Foreign Economic Relation and Trade.

3.PRINCIPAL SOURCE OF INFORMATION

①、②、③

和名 北京市海子ダム農業水利開発計画

{F/S,D/D}

PROJECT SUMMARY (Basic Study)

Compiled Mar.1992
Revised Mar.1995

ASO CHN/S 502/90

I. OUTLINE OF STUDY

1.COUNTRY: China

2.NAME OF STUDY: Groundwater Development Project in Urumuqi

3.SECTOR: Social Infrastructures/Water Resource Development

4.REFERENCE NO.:

5.TYPE OF STUDY: Basic Study

6.COUNTERPART AGENCY: Ministry of Geology & Mineral Resources

7.OBJECTIVES OF STUDY: To conduct the master plan on the groundwater resources development for Su-Shan water source area

8.DATE OF S/W: Aug.1987

9.CONSULTANT(S): Yachiyo Engineering Co., Ltd.

10.STUDY TEAM

No.of Members 7

Period Jun.1988-Jul.1990(25 months)

Total M/M	Japan	Field
43.96	16.06	27.90

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY: None

12.EXPENDITURE

Total	445,584 (¥'000)
Contracted	161,643

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Su-Shan water source area

2.PROJECT COST

		Total Cost	Local Cost	Foreign Cost
(US$1,000)	1)	16,500	2,500	14,000
US$1=135yen	2)			

3.CONTENTS OF MAJOR PROJECT(S)

Groundwater Development:
30000t/day (15 drilling production wells with pump equipment)

Water Supply System:
Su-Shan, Urumuqi City
Diameter 500mm Ductile iron pipe; 16000m
Distribution in Reservoir; 6000 sq.m

4.CONDITIONS AND DEVELOPMENT IMPACTS

Urumuqi City has a water supply system of 160,000t/day capacity with a population of about 1200,000. 850,000 people out of it are recieving 80 litter per day.
By this project, about 30% of the capacity will be increased and more than 100,000 people will be newly benefitting by conducting developed water to the worse areas.

5.TECHNICAL TRANSFER

1)Know how to drive the high speed drilling rig and to manipulate progressed logging devices.
2) Know how to simulate the groundwater flow using the computer.

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

- ■ In Progress or In Use
- ☐ Delayed
- ☐ Discontinued

(Description)

The local government hopes for the project implementation by the grant aid from the Japanese Gavernment. However, the priority of the project at the national level is reportedly not high enough to be included in the project list for the Japanese grant aid program.
Although the local government is keen to implement the project, no action has been taken because of the budgetary limitations.

(FY1994 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS: Financial problem.

3.PRINCIPAL SOURCE OF INFORMATION: ①、②

和名 ウルムチ地下水開発計画

{M/P,Basic Study,Other}

PROJECT SUMMARY (F/S)

ASO CHN/S 314/91

Compiled Mar.1993
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY: China

2.NAME OF STUDY: Telephone Network Automatizaiton Plan in Dehui County, Jilin Province

3.SECTOR: Communications & Broadcasting/Telecommunication

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Posts and Telecommunications Administration of Jilin Province

7.OBJECTIVES OF STUDY: To formulate a telephone network automatization plan in Dehui County, Julin Province. Through the study, in addition, some technology will be transferred to the Chinese counterparts.

8.DATE OF S/W: Mar.1990

9.CONSULTANT(S): NTT International Corporation

10.STUDY TEAM

No.of Members 8

Period Jul.1990-Sep.1991(13 months)

Total M/M	Japan	Field
57.96	23.28	34.68

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	168,499 (¥'000)
Contracted	110,175

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Whole area of Dehui County in Jilin Province (Population 820,000; Area 3,435 sq.km)

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	17,500	11,908	5,592
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

This telephone automatization and expansion plan designates 1995 as the targets. In Dehui county, the telephone sets for the areas, where 24 local government offices are located, are installed so as to cope with the demands until 1995. For about 300 villages, 5 telephone sets are installed for office in every 5 hamlets. The total number of telephone sets will be about 8,100. The necessary facilities for implemantation of this project are following.

1. Exchange	1 Toll/ Local switch Unit	4,700 L.U.
	11 remote switch Unit	3,160 L.U.
2. Transmission	11 sections 33 systems	4,800 pair-km
3. Subscriber Cable	55,500 pair-km	
4. Others Building, Power	12 locations	

This implementation plan will be divided into two(2) terms. In first term, subscriber cables for the areas where local government offices are located, buildings, power, exchanges and transmission facilities will be expanded. In second term, subscriber cables for official institutions and hamlets will be installed. Implementation period below is 3 years.

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS: Feasibility: Yes

EIRR1)	8.85	FIRR1)	2.64
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Assumptions:
- Telephone automatization plan is to be completed in 1994 for local telephones and in 1995 for rural telephones.
- The incremental revenues and costs, which are calculated by multiplying the number of pay subscribers with the corresponding charges, between before and after automatizaiton are taken into account.
- Project life is 20 years.

Development Impacts:
- To increase agricultural production by improving the function of conveying information.
- The acquisition of market and commercial information will lead to increase profits and create job opportunities in the district.
- To provide a means of communicaiton in case of emergency, which will minimize damage to be brought about by accidents, disasters, sudden illness, etc.

5.TECHNICAL TRANSFER

- Method of survey and data analysis
- Formulation of automatization plans
- 2 counterparts took a training in Japan

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)

On July 1991, the Commitee constructed by "The Association for the Promotion of International Trade, Japan" visited in China, vice-president of Ministry of Posts and Telecommunication of China and requested promotion of this project.

Chinese Government has not yet requested the implementation of this project to Japanese Government.

(FY1992 Overseas Survey)

A request has been made to the Ministry of Foreign Economic Relations and Trade for the uilization of Japanese Grant Aid and presently in progress toward ratification.

(FY1994 Domestic Survey)

No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

Chinese Government hold a lot of projects, therefore implementation of this project has been delayed.

3.PRINCIPAL SOURCE OF INFORMATION

①、②

和名 吉林省徳恵県電話網自動化計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

ASO CHN/A 306/91

Compiled Mar.1993
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY: China

2.NAME OF STUDY: Improvement of Agricultural Land Reclamation Dike and Agriculture Development Project, Qinzhou Region, Guangxi Zhuang Autonomous Region

3.SECTOR: Agriculture/General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: China Guangxi Water and Power Department

7.OBJECTIVES OF STUDY: Feasibility Study of the improvement of Agricultural Land Reclamation Dike and Agriculture Development in two selected typical regions.

8.DATE OF S/W: Feb.1990

9.CONSULTANT(S): Taiyo Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 11

Period Aug.1990-Sep.1991(13 months)

Total M/M	Japan	Field
52.50	32.93	19.57

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	245,618 (¥'000)
Contracted	170,591

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA

Qinzxhou Region, Guangxi Zhuang Autonomous Region
Area: 34,363 ha, Population: 135(thousand) (1990)

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	240,742	178,894	61,847
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

	Baiqumei	Kangxilingwei	Total
* Reclamation Area	: 7,930 ha	3,333 ha	11,263 ha
* Reclamation Dike	: 23.4 km	12.4 km	35.8 km
* River Embankment Improvement	: 43.8 km	39.6 km	38.4 km
* Headworks	: - unit	1 unit	1 unit
* Main Irrigation Canal	: 31 km	9.6 km	12.7 km
* Roads	: 463 km	40.0 km	86.3 km

Imp. Period: Jan.1991~Dec.2012

4.FEASIBILITY AND ITS ASSUMPTIONS: Feasibility: Yes

EIRR1)	11.20	FIRR1)	9.20
EIRR2)	10.20	FIRR2)	8.30
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Conditions:
The project sites are in Baiquwei and Kangxilingwei along the Qinzhou bay. The project is to reclaim dikes to protect cultivated land (reclamated water areas) from billows by typhoons and flood waters from back marshes and to promote agricultural development.
Period for construction: 12 years.
Period for settlement : 2 years.
Start farming in 15 years

Development Impacts: Flood control, Settlement to new land, Increase agricultural, fisheries and animal products , Improve rural living conditions.

The economic and financial evaluation is as follows:

	Baiquwei		Kangxilingwei	
	Economic	Financial	Economic	Financial
IRR	11.2%	9.2%	10.2%	8.3%
B/C ratio (discount ratio 8%)	1.46	1.15	1.29	1.04

5.TECHNICAL TRANSFER

Technical Transfer of Design Criteria on Reclamation Dike was done.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)

The project implementation requires approval from the Provincial Planning Committee. An application was filed in Jan. 1992. The Guangxi Water and Power Department applied to register the project to the National 8th Five Year Plan. At the same time, the environmental studies were being carried out. In consideration of the peculiarities of the project, the cost for the D/D would be requested to the JICA. Local costs for the implementation would be provided by the local funds, and foreign costs by the OECF loan.
In June 1992, the sea dike in Baigumei suffered damage from the 4th typhoon.
On the other hand, Beibai city, adjoining Baigumei, which is selected as a special economic development zone, is recognized as an important trading point in the south-western part of China due to its role for national border trade with Vietnam and domestic trade within adjoining provinces. Therefore, the Guangxi Regional Planning Committee emphasizes on the expansion of the Beihai harbor, development of railways and roads, and the construction of a new harbor at the entrance of the Qinzhou bay in the National 8th Five Year Plan. However, the Guangxi Regional Planning Committee also recognized importance of this agricultural development project. The committee will register this project to the National 9th Five Year Plan (1996/2000), once the environmental study is finished.
(FY1992 Overseas Survey) Waiting for the answer.

(FY1994 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

At the beginning, the Guangxi Regional Planning Committee was trying to implement the project in the National 8th Five Year Plan. However, the project requires adjustment to an integrated rural development plan, especially the harbor development plan. Besides, this project is not excecuted without the results of an environmental study which is currently in process.

3.PRINCIPAL SOURCE OF INFORMATION

①、②

和名 広西壮族自治区欽州地区農業海河堤整備及び農業開発計画

{F/S,D/D}

PROJECT SUMMARY (M/P+F/S)

ASO CHN/A 202B/92

Compiled Mar.1994
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY: China

2.NAME OF STUDY: The Integrated Agricultural and Animal dry Development Project in Xiangxi Nanzhi Shanno Are

3.SECTOR: Agriculture/General

4.REFERENCE NO.:

5.TYPE OF STUDY: M/P+F/S

6.COUNTERPART AGENCY: Ministry of Agriculture, Hunan province

7.OBJECTIVES OF STUDY:
Elaboration of M/P on Integrated Agricultural and Animal Husbandry Development Project in Xiangxi Shinjiazu Miaozu autonomous district.
Elaboration of F/S on priority projects in the model region of approx 5,000ha

8.DATE OF S/W: Nov.1990

9.CONSULTANT(S): Japan Agricultural Land Development Agency

10.STUDY TEAM

No.of Members 12

Period Feb.1991-Jul.1992(17 months)

Total M/M	Japan	Field
88.00	32.00	56.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY: LANDSAT image : Processing

12.EXPENDITURE

Total	244,051 (¥'000)
Contracted	210,973

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA:
M/P Site of area: 202,260 ha of Project area located in the center of mentioned autonomous district.
F/S Model project area: 4,943ha in Changle region Huayaon prefecture

2.PROJECT COST (US$1,000)

		Local Cost	Foreign Cost	
M/P	1)			
	2)			
F/S	1)	76,306	10,961	65,345
	2)	4,349	3,757	592
	3)			

3.CONTENTS OF MAJOR PROJECT(S)

(M/P) Pasture development 31,000ha
Farm road development 282km
Agricultural instrument introduction 48,000 units live stock barn establishment, Livestock introduction. Meat processing facility (7 centers), Establishment or improvement of technical verification and promotion center for agriculture and animal husbandry
Agricultural and rural development
(Irrigation 1,345ha, Dranage 562ha, Rural water supply, school, Library, Marketing center, Medical Service and equipment, Rural electrafication
(F/S)
Pasture development 973ha, Farm road development 30.9km, Agricultural instrument introduction 1,882 units. Live stock barn establishment. Livestock introductin, Agricultrai and animal Husbandry development center, Sub-secter, Agricultural and rural development (Irrigation 47ha, Rural water supply, School, Library, Marketing center, Rural electrification

Imp. Period: .1993-.1995

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes/No

EIRR1)	14.20	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

(M/P, F/S)
It is expected that in 2005 net average income will be increased from actual 210 yuan to 400 yuan per farmer as well as food crop production from 253kg to 325 kg per farmer in order to improve percentage of the poor farmers from actual 89.9 to 50.

5.TECHNICAL TRANSFER:
Cooperative works for making reports reception of counterport staff into JALDA.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)
It is only one year after completion of the study. Accordingly the Chinese Government is considering next step for the excution of the project.

(FY1994 Domestic Survey)
As a project based on this study, the Chinese Government is preparing for the agricultural and animal husbandry developmenn project in the model region (5,000ha), and dispatch of expert.

2.MAJOR REASONS FOR PRESENT STATUS:

3.PRINCIPAL SOURCE OF INFORMATION:
①

和名 湘西南支山脈地区農牧畜業総合開発計画

(M/P+F/S)

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1994
Revised Mar.1995

ASO CHN/A 203B/92

I. OUTLINE OF STUDY

1.COUNTRY: China

2.NAME OF STUDY: Liao- Ho Delta Agricultural Resources Integrated Development Project in the Liaoing Sheng

3.SECTOR: Agriculture/General

4.REFERENCE NO.:

5.TYPE OF STUDY: M/P+F/S

6.COUNTERPART AGENCY: Water Resources and Electric Power Liaoning Province

7.OBJECTIVES OF STUDY: M/P for the agricultural development and F/S for Bui-Sui-Shi Dam Construction Project and Da-Wa Delta Agricultural Development Project

8.DATE OF S/W: Sep.1990

9.CONSULTANT(S): Nippon Koei Co., Ltd.
Hokkaido Engineering Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 18

Period Dec.1990-Jan.1993(25 months)

Total M/M	Japan	Field
116.49	35.94	80.55

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	458,221 (¥'000)
Contracted	419,126

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Liao-Ho Delta, Liaoing Province 1,140,000ha

2.PROJECT COST (US$1,000)

	Local Cost	Foreign Cost	
M/P 1)			
2)			
F/S 1)	35,200	11,500	19,600
2)	3,234	3,234	
3)			

3.CONTENTS OF MAJOR PROJECT(S)

*Project costs are shown in "million yen" instead of US$ 1,000

<M/P>
1) Bai-shi Multipurpose Dam Project for irrigation, municipal and industrial water supply, hydropower and flood control. Concrete gravity type having the dam volume of 560,000m3. Reservoir storage capa. 1,600 MCM. Effective storage 660 MCM.
2) Da-ling-he Delta Agricultural Development Project (Irrigation and drainage development with land consolidation of the existing up land field of 9,000ha for paddy cultivation and irrigation water supply to the existing paddy fields of 8,000ha)
3) Impovement of existing three ponds located in the paddy field of Liao Ho Delta. (Storage capa. 7.5 MCM increased by 2.4 NCM)
4) Irrigation and drainage development for the existing feed fields about 69,000ha.
5) Da-Wa Delta Agriculutural Development Project. (land reclamation and consolidation for 10,000ha for paddy.)

<F/S>
Hai-shi Multipurpose Dam Project for irrigation, municipal and industrial water supply, hydropower and flood control. Concrete gravity type having the dam volume of 560,00m3. Reservoir storage capa. 1,600 MCM.
Da-Wa Delta Agriculutural Development Project. (land reclamation and consolidation for 1,000ha for paddy.)

Imp. Period: .1996-.2000

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes/No

EIRR1)	FIRR1)
EIRR2)	FIRR2)
EIRR3)	FIRR3)

Conditions and Development Impacts:

(M/P)	IRR (%)
1) Bas-shi Multipurpose Dam Project	14.6
2) De-ling-he Delta Agricultural Development Project	included in 1)
3) Improvement of existing three ponds	20.2
4) Irrigation and drainage development for road fields	21.1
5) Da-Wa Delta Agricultural Development Project	12.2

(F/S)
Bai-Shi Dam Project
Present water shortage in Liao-Ho Delta will de drastically improved and flood damage in the Da-Ling He Delta will much decrease.

Da-Wa Project
Production of 60,000 tons of paddy, which contributes to the self-sufficiency in Liaoning Province is expected.

5.TECHNICAL TRANSFER

Survey, investigation and study method for development planning and evaluation thtrouth on-the-job training

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)

The Government of China (GOC) has requested technical assistance to GOJ for the hydraulic model test of Bai-Shi Dam, of which construction is scheduled to commence in 1996. GOC expects OECF loan (fourth loan 1996~2000).

(FY1994 Domestic Survey)
Chinese government requested financial assistance for Bai-Shi Dam in forth OECF loan, and technical assistance for hydraulic test of the dam model to JICA. Japanese side is under consideration of this request.

2.MAJOR REASONS FOR PRESENT STATUS

Hydraulic model tests has to be executed in order to confirm or improve the design of bottom gates and intake gates in terms of flushing sediments deposited in the reservoir as well as hydraulic condition at the flood time.

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 遼河三角州農業資源総合開発計画

{M/P+F/S}

PROJECT SUMMARY (F/S)

ASO CHN/S 315/92

Compiled Mar.1994
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY: China

2.NAME OF STUDY: Flood forecasting and warning system in the middle and lower reaches in the Chang Siang

3.SECTOR: Social Infrastructures/River & Erosion Control

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Chang Siang Water Resources Development Authority

7.OBJECTIVES OF STUDY: The objective of study is to carry out feasibility study on the flood forecasting and warning system in the middle and lower reaches in the Han Jiang

8.DATE OF S/W: Mar.1990

9.CONSULTANT(S): Nippon Koei Co., Ltd.

10.STUDY TEAM

No.of Members 8

Period Jul.1990-Jul.1992(25 months)

Total M/M	Japan	Field
56.33	20.58	35.75

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	218,669 (¥'000)
Contracted	197,801

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA

Cathement area and river length of Hang Kou: 159,000 sq.km and 1,577 km respectively

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	99,600	8,270	91,330
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

* Proposed project costs are shown in 1,000 yuan instead of US$ 1,000

Provision of flood forecasting and warning system with the following sub-systems was proposed:

1) Data observation and collection system:
Control center (1), sub-control center (3), repeater station (18), tele-meter station (61)

2) Data processing system:
computer system with file server (1), work-station (2), display (3), hard disk, printer, and so on.

3) Data transmission system:
transmission of data and information by multiplex transmission line including facsimile and telephone

Imp. Period: Apr.1993-Mar.1994

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes/No

EIRR1)	13.90	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

1)Economic benefit: decrease of cost for flood fighting work and increase of movable households in flooding areas due to shortening of times for data collection, processing and transmission with higher accuracy.

2)Social impacts: contribution for saving lives in flooding areas, stabilization of social lives, and introduction of new communication and flood forecasting/warning technologies

3)Construction period: 2 years

4)Project life: 15 years

5.TECHNICAL TRANSFER

Counterparts Training in Japan-Holding Seminar
Technical Transfer for Method of Flood Control and Sabo

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)

(There has been no information from the executing agency after the completion of the study.)

(FY1994 Domestic Survey)
The chinese government is now taking actions to promote as Japanese grant aid project.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 漢江中下流区間洪水予警報計画

(F/S,D/D)

PROJECT SUMMARY (F/S)

Compiled Mar.1994
Revised Mar.1995

ASO CHN/S 316/92

I. OUTLINE OF STUDY

1.COUNTRY China

2.NAME OF STUDY
Jilin Fengman Dam Rehabilitation Project

3.SECTOR
Social Infrastructures/Water Resource Development

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Fengman Power Plant, Northeast China Electric Power Administration, Ministry of Energy

7.OBJECTIVES OF STUDY
- To review the safety of the Dam
- To review the Flood Control Volume (Discharge)
- To formulate the Immediate and the Longterm Dam Rehabilitation Plan.

8.DATE OF S/W Oct.1990

9.CONSULTANT(S)
INA Civic Engineering Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 11
Period Mar.1991-Mar.1993(5 months)

Total M/M	Japan	Field
56.30	22.80	33.50

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Seismic Tomography Analysis, Upstream surface observation, Core Boring, Compression Test and Bore Hole Observation

12.EXPENDITURE

Total	303,148 (¥'000)
Contracted	242,438

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Fengman Dam, upstream and relevant lower reaches

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	80,835	35,580	45,255
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
<Immediate Measures>
- Grouting
- Pre-stressing work
- Additional drain hole
- Rearrangement of dam observation facility
- Reservoir capacity survey
- water stop measure for upstream surface of dam
- Rehabilitation for penstock
- Dam crest pavement, rehabilitation for gallery & handrails

<Long-term measures>
- Spillway expansion
- Dam stability measures
- Anti-frozen measures of dam

Imp. Period: .1994~.1998

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes/No

EIRR1)	13.70	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
<Impact>
- Contribution to the safety for the steady power supply
- To grevent the damage on Jilin City, farmland along the Songhua River and the bridges by means of flood control

5.TECHNICAL TRANSFER
- On-the-job training and seminar during the field investigation
- Counterpart training in Japan (two counterpart)

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)
-Inquiry for the project from Fengman Power Plnt on 16, March 1993
-The detailed cost was sent to Fengman Power Plant on 22, March

(FY1994 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 吉林豊満ダム修復強化計画

{F/S,D/D}

PROJECT SUMMARY (M/P)

ASO CHN/S 102/93

Compiled Mar.1995
Revised

I. OUTLINE OF STUDY

1.COUNTRY China

2.NAME OF STUDY
Integrated Regional Development Planning Study on jiujiang City, Jiangxi Province

3.SECTOR
Development Plan/Integrated Regional Development Plan

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Economic Planning Committee, Jiujiang People's Government, Jiangxi Province

7.OBJECTIVES OF STUDY
Setting masterplan of Jiujiang City. This masterplan consists of four sectors; transport, distribution, tourism and industry. The target year is 2010.

8.DATE OF S/W Apr.1992

9.CONSULTANT(S)
International Development Center of Japan
Pacific Consultants International

10.STUDY TEAM

No.of Members 12
Period Sep.1992-Jan.1994(17 months)

Total M/M	Japan	Field
78.10	2.50	75.60

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 340,961 (¥'000)
Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Two Wards (Xunyang Ward and Lushan Ward) in Jiujiang City, Jiangxi Province. Total area is 669 km2.

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	2,010,901		
2)			

3.CONTENTS OF MAJOR PROJECT(S)
This study selected 18 priority projects which are necessary to achieve development goals and strategies and are expected to lead the reform of economic and social structure of Jiujiang City. The selected sectors and projects are as follows.

Industry : 1)Industrial Estate for Small Scale Enterprises Bonded Area Development 2)Balihu Special Area for Industrial Development and Institutional Building to Attract Foreign Enterpreises 3)Jiujiang Technical Center
Tourism : 1)Jiujiang-Lushan Convention City 2)Lushan Resort Development
Distribution : 1)Truck Interchange Terminal 2)Freight Through Transit Terminal 3)Wholesale Estate
Transport : 1)changjiang River South Bank High Standard Highway 2)Jiujiang City Road 3)Jiujiang New Port 4)Port District Trunk Road
Urban Development and Environment : 1)Sanitary Facilities Improvement 2)Solid Waste Treatment Facilities
Human Resources : 1)Industrial Management Development in Central China 2)Jiujiang University

4.CONDITIONS AND DEVELOPMENT IMPACTS
Most important assumption for the proposals above is that Jiujiang's economy in 2010 will grow as large as 4.3 times in 1990. Its annual growth rate is 7.5%. Implementation of the projects with high priority will lead Jiujiang to a Networking City. Based on interregional function in physical destribution, industrial linkage and human resources exchange, the Networking City can be described as a city to combine regional center function supported by economic development of its hinterland and geteway function of Jiangxi Province.

5.TECHNICAL TRANSFER
1)two seminars on Japan's development experiences and reagional planning scheme during this study. 2)two training programs in Japan. 3)A technology transfer seminar at Nanchang.

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS
- ■ In Progress or In Use
- ☐ Delayed
- ☐ Discontinued

(Description)
Counterpart team is following up the study results.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 九江市総合開発計画調査

{M/P,Basic Study,Other}

PROJECT SUMMARY (M/P)

Compiled Mar.1995
Revised

ASO CHN/S 101/93

I. OUTLINE OF STUDY

1.COUNTRY China

2.NAME OF STUDY
Water quality protection for Poyan Lake in China

3.SECTOR
Administration/Environmental Problems

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
National Environment Protection Bureau

7.OBJECTIVES OF STUDY
Preparation of master plan of water quality conservation for Poyan Lake

8.DATE OF S/W Apr.1990

9.CONSULTANT(S)
Yachiyo Engineering Co., Ltd.
Shin Nihon kisyo kaiyo Co.,Ltd

10.STUDY TEAM
No.of Members 19
Period Mar.1992-Sep.1993(19 months)

Total M/M	Japan	Field
128.13	38.20	89.93

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Landsat Interpretation

12.EXPENDITURE

Total	538,600 (¥'000)
Contracted	406,150

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Poyan Lake and its basin(162,000km2)

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	284,000		
2)	623,000		

3.CONTENTS OF MAJOR PROJECT(S)

Plan-A : To maintain present water quality level
(1)Waste water-treatment for large-scale factory
(activated sludge process)
(2)Waste water-treatment for small-scale factory
(natural settling process)
(3)Improvement of Sewer System
(capiltal of city 40% main cities 30%)

Plan-B : To improve up to inter national level
(1)Waste water-treatment for large-scale factory
(activated sludge process)
(2)Waste water-treatment for small-scale factory
(activated sludge process)
(3)Improvement of Sewer System
(capital of city 40% main cities 30%)

4.CONDITIONS AND DEVELOPMENT IMPACTS

1. the target year : A.D.2000
2. Effect of measure
   1) Plan - A
      : To decrease waste road and
        to maintain present water quality in lake
        (Shintsu-Point / COD:3.2mg/l)
   2) Plan - B
      : To decrease waste road and
        to improve water quality up to international level
        (Shintsu-Point / COD:3.2mg/l)

5.TECHNICAL TRANSFER
Water quality simulation using computer model

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS
- ■ In Progress or In Use
- ☐ Delayed
- ☐ Discontinued

(Description)
Local government is taking, using national budget, to accomplish the Plan-A proposed by the study team.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 中国は陽湖水質保護対策計画調査

{M/P,Basic Study,Other}

PROJECT SUMMARY (M/P+F/S)

ASO CHN/S 202/93

Compiled Mar.1995
Revised

I. OUTLINE OF STUDY

1.COUNTRY China

2.NAME OF STUDY
Waiqaochao District in Pudong New Economic Zone in Shanghai

3.SECTOR
Social Infrastructures/Urben Planning & Land Development

4.REFERENCE NO.

5.TYPE OF STUDY M/P+F/S

6.COUNTERPART AGENCY
Shanghai Urban Planning and Design Institute

7.OBJECTIVES OF STUDY
To formulate master plan for Waiqaochao district with the target year of 2000 and 2020.

8.DATE OF S/W Jun.1991

9.CONSULTANT(S)
Pacific Consultants International
ALMEC Corporation
Overseas Coastal Area Development Institute

10.STUDY TEAM
No.of Members 14
Period Jul.1992-Oct.1993(16 months)

Total M/M	Japan	Field
76.38	30.88	45.50

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Manufacturing Firm Qnestionnaire Survey

12.EXPENDITURE

Total	304,473 (¥'000)
Contracted	279,165

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Waiqaochao District in Pudong New Economic Zone in Shanghai

2.PROJECT COST (US$1,000)

		Local Cost	Foreign Cost
M/P	1)		
	2)		
F/S	1)	750,000	
	2)	325,000	
	3)	1,350,000	

3.CONTENTS OF MAJOR PROJECT(S)
1) Ports Development
Containarization of existing 2 berthes, new ports, ship building
2) Industrial Development
Freetrade Zone development
3) Urban Development
loop road, arterial road natwork, LRT, residential area development, town center, urban utilities development

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes/No

EIRR1)	FIRR1)
EIRR2)	FIRR2)
EIRR3)	FIRR3)

Conditions and Development Impacts:

5.TECHNICAL TRANSFER
Receipt of Trainees
Holding seminar

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)
1. Development of Pudong New Economic Zone is now paid remarkable attention as a new industrial base, in accordance with Shanghai's rapid economic growth due especially to increase of foreign direct investment, In reflect this situation, the first phase of the free trade zone has been successfully sold out, This study focuses mainly on the second phase of the free trade zone including recommendations regarding management and organization, Some of the recommendations have already approved and applied.
2. The LRT recommended in the study is forwarded to next step of the study by Shaghai itself.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 上海市浦東新区外高橋地区開発計画調査

(M/P+F/S)

PROJECT SUMMARY (F/S)

ASO CHN/S 301/93

Compiled Mar.1995
Revised

I. OUTLINE OF STUDY

1.COUNTRY: China

2.NAME OF STUDY: Rapid Guided Transport System Planning in Chongqing

3.SECTOR: Transportation/Railway

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Science and Technology Commission of Chongqing Municipality

7.OBJECTIVES OF STUDY: Feasibility study on urban guided transport system planning in Chongqing

8.DATE OF S/W: Jun.1992

9.CONSULTANT(S):
Japan Railway Technical Service
Pacific Consultants International

10.STUDY TEAM

No.of Members 16

Period Dec.1992-Jan.1994(14 months)

Total M/M	Japan	Field
64.78	32.51	32.27

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	238,161 (¥'000)
Contracted	226,000

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA

Chongqing City : area 120km
Population 2,100,000(year 1990)

2.PROJECT COST

(US$1,000)
1yuan=22yen 1us$=126yen

	Total Cost	Local Cost	Foreign Cost
1)	400,214	141,334	258,880
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1)New line construction for a straddle-type monorail system between Jiao chang ko and Xin shan cun,about 17.4km
Stations : 17 stations
Main civil stuructures : viaduct(about 14km),tunnel(about 2.2km), depot(one place)
Electrification system : DC 1500V
Rolling Stock : 64 cars(year 2000),112 cars(2010), 160cars(2020)

2)Construction and opening schedules
1996 : Start of construction
End of 2000 : opening of the section between Jiao chang kou and Da yan cun(about 13.5km,the 1st phase construction)
End of 2010 : opening of the section between Da yan cun and Xin shan cun(about 3.9km, 2nd phase construction)

Imp. Period: .1996~.2010

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes/No

EIRR1)	12.23	FIRR1)	3.80
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Conditions and Development Impacts :
The introduction of the guided transport system will serve for the alleviation of east-west traffic congestion in the city center of Chongqing.
This project will also contribute to the development of sound social and economic activities in the entire Chongqing City by realizing efficent transport and coping with the large tranport demand arising in the city center, Down town, Da ping area, Yang jia ping area,Da du kou area, etc.

5.TECHNICAL TRANSFER

1)Site survey : ecomonic and financial analysis,train operation and rolling stock planning,facilities planning, electric system, etc.
2)C/P training(one person):demand forecast and economic analysis.(June,1993)

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)

(FY1994 Domestic Survey)
Chongqing city requested the Japanese Government to provide financial assistance in order to realize the project. At present, the Japanese Government is studying the request.

(Fy1994 Overseas Survey)
This project was decided to be nominated as a first half plan (1996-2000) of the 4th OECF loan for China (1996-1998) according to the information in Dec. 1994.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①、③

和名 重慶市快速軌道交通計画調査

{F/S,D/D}

PROJECT SUMMARY (F/S)

ASO CHN/A 309/93

Compiled Mar.1995
Revised

I. OUTLINE OF STUDY

1.COUNTRY China

2.NAME OF STUDY
Facilities Improvement Project in Second Irrigation Section in Qianguo Area in Jilin Province

3.SECTOR
Agriculture/General

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Committee of Science & Technology, Ministry of Water Resouses in Julin Pro.

7.OBJECTIVES OF STUDY
Feasibility-Study of the Improvement of Irrigation Facilities in Second Irrigation Section Located at the left Bank of Second Shokako in Julin Province

8.DATE OF S/W Oct.1991

9.CONSULTANT(S)
Taiyo Consultants Co., Ltd.
Nippon Giken Inc.

10.STUDY TEAM
No.of Members 11
Period Feb.1991-Mar.1993(25 months)

Total M/M	Japan	Field
77.08	45.00	32.08

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 323,586 (¥'000)
Contracted 302,601

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Second Irrigation Section in Qianguo Area in Jilin Province
Area : 37,200ha, Population : 51,575(1990)

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	69,538	39,853	29,685
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
1.Improvement of the New Second Pumping Station and Water Facilities
2.Constructio of Fish Farm
3.Land Consalidation
4.Improvement of Water Management Facilities
-Water Supply Station : vertical mixed flow type 2,000(Q=9.4m3/s) X 3
64ZLB-50 1,625(Q=8.4m3/s)(Made in China)
-Water Facility : 85.3km
-Drainage Station : 20ZLB-100 500(Q=0.5m3/s) X 2(Made in China)
-Drainage Facility : 89.6km
-Fish Farm : 250ha
-Land Consolidation : 8,005ha, Farm Road;126km, Bridge;24 places
-Water Management Facilities :

Imp. Period: Jan.1996~Dec.2001

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

EIRR1)	13.60	FIRR1)	
EIRR2)	15.80	FIRR2)	
EIRR3)	17.20	FIRR3)	

Conditions and Development Impacts:
Conditions ;
1)30 percent increase in expenditure
2)10 percent decrease in benefits of increased agricultural producrtion(due to fluctuations in prices or amount of harvest)
3)1 year extension of construction period for the New Second Pumping Station (due to uncertainty of the conditions of execution of the work)
4)Occurrences of both 1) and 2)

It is anticipated that in any cases Economic Internal Rate of Return is higher than opportunity cost of capital, and these four conditions would not influence the economic feasibility of the project.(discount rate : 12%)

5.TECHNICAL TRANSFER
Technical exchange of irrigation and drainage was carried out. Seminer on technical transfer was held at an explanatory meeting of Draft-Final Report.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS
☐ Completed or in Progress ■ Promoting
○ Completed
○ Partially Completed ☐ Delayed or Suspended
○ Implementing
○ Processing ☐ Discontinued or Cancelled

(Description)

This project is referred to the Eighth Five-Years Plan in Julin Province. Chinese government has been constructiong the Chimonto drainage station and the canals along it which are the main dranage facilities in the study area. The drainage station is expected to complete in 1994.

With regard to the First, Second, and Third Irrigation Sections, Chinese government was carried out the construction of tailed canals based on the Five-Years Plan.

In respect of the Second Irrigation Section, which is the object of F/S on this project, it has been on urgent task to construct pumping station diversed at 48t per second from the Second Shokako which is water resouses, main canals, and Water Management Facilities along the pumping station. Under these circumstances, the Ministry of Water Resouses In china has requested the grant aid of Japan.(1994,5)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、⑤ (the Japanese Embassy in China)

和名 吉林省前郭地区第二灌漑区施設整備計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

ASO IND/S 301/87

Compiled Mar.1990
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY India

2.NAME OF STUDY
Railway Improvement Plan of Transport Capacity and Train Speed on the Delhi-Kampur Section

3.SECTOR
Transportation/Railway

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Indian Railway Board

7.OBJECTIVES OF STUDY
F/S for facility planning for transport capacity strengthening and train speed increses on a conventional trunk line, and a basic study on constructing a new high-speed line

8.DATE OF S/W Oct.1986

9.CONSULTANT(S)
Japan Railway Technical Service
Tonichi Engineering Consultants, Inc.
Yachiyo Engineering Co., Ltd.
The Japan Electrical Consulting Co., Ltd.

10.STUDY TEAM
No.of Members 17
Period Feb.1987-Jan.1988(12 months)

Total M/M	Japan	Field
93.41	55.66	37.75

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
traffic data collection.

12.EXPENDITURE

Total	267,615 (¥'000)
Contracted	257,220

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Between Delhi and Kampur, northwestern India

2.PROJECT COST

(US$1,000) (US$1=12.87Rp)		Total Cost	Local Cost	Foreign Cost
	1)	1,677,000	1,440,000	237,000
	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)
I. Conventional line improvement by 1991: max. speed 160km/h, Ghaziabad-Kanpur
1. Track & structures:1) Imprv.of transition curves;2) Imprv.of 333 turnouts on main tracks; 3) Construction of passing tracks that do not border on platforms (Aligarh & Etawah stations); 4) Construction of one platform and two departure-arrival tracks,in Kanpur station; 5) Imprv. of 187 turnouts and track layout(Ghaziabad, Tundla & Juhi marshalling yards); 6) Remodeling of No. 304 bridge and Hathras overbridge
2. Rolling stock: Imprv. of high-speed running performance and brake perfomance of electric locomotives, passenger cars, and freight cars
3. Signals and telecommunications: Signal automation, electronic interlocking, auto- matic control of levelcrossing facilities, and introduction of ATS (automatic train stop) and CTC (centralized train control) systems
4. Electrification: Partial modification of the contact-wire structure
II. High-speed railway construction by 2000: max. speed 250km/h, Delhi-Agra-Kanpur
1. Terminals: New Delhi, New Agra, and New Kanpur
2. Track and structures: Embankment section 412km; viaduct section 17km; sections jointly used by the conventional railway 21km.
3. Rolling Stock: A super express train of 6 motored cars and 10 trailers
4. Signals and telecommunications: Automatic train control(ATC) system,

Imp. Period: .1989~.1990 .1990~.1995

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

EIRR1)	42.62	FIRR1)	25.79
EIRR2)	36.08	FIRR2)	18.00
EIRR3)		FIRR3)	

Conditions and Development Impacts:
Preconditions for calculating IRRs:
Transport demand was estimated for the years 1995, 2000, 2005, 2010, and 2015 for the two cases of conventional line improvement and new high-spead line construction.
Economic and financial evaluation was carried out for the cases of conventional line improvement, new high-speed line construction, and a combination of both.

Development impacts:
1) Increase in transport capacity
2) Reduction in travel time
3) Alleviation of public nuisances due to road transport and a reduction in accidents
4) Development of cities along the railway route
5) Development of related industries

5.TECHNICAL TRANSFER
1)OJT: Movies on Shinkansen and conventional line improvement.
2)Utilization of a local consultant as an assistant in traffic data collection.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS
- ■ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ● Implementing
  - ○ Processing
- ☐ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)
The study recommended that the conventional line improvement be carried out including the section between Kampur and Calcutta, and that the construction of a high-speed line, which is in the pre-F/S stage, be studied in phases. Based on the recommendations, the Ministry of Railway requested a JICA feasibility study on the improvement around the New Delhi Station ("Development Plan for the New Delhi Station," completed in 1990). The Indian Railway Board is studying the improvement of Kampur - Calcutta Section, utilizing the method employed by this study.
Conventional line improvement is partially under way.

(FY1991 Overseas Survey)
Indian Railway Board hopes to implement the project, but has no definite schedule.

(FY1994 Domestic Survey)
No additional information.

(FY1994 Overseas survey)
Even though a new express, whose highest speed is 250km/h, plan will be necessary for the Indian Ministry of Transportation in the future, it is not planned at present. Based upon the plan which enables existing express service to realize the highest speed of 160km/h, improvement of the whole section between Delhi and Calcutta is implementing. Since preparation of electric locomotives and arrangement of tracks or singals are almost completed with few exceptions, the new railway service will be started in June 1995. The frequency of service is scheduled as once a day in the beginning.

2.MAJOR REASONS FOR PRESENT STATUS
It is effective to implement the improvement of the object sections jointly with the work for the adjacent sections. Therefore the Indian Railway is studying this issue.

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

和名 デリー～カンプール間幹線鉄道改良計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

ASO IND/S 302/87

Compiled Mar.1990
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY India

2.NAME OF STUDY
Modernization of Rolling Stock Workshop

3.SECTOR
Transportation/Railway

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Indian Railway Board

7.OBJECTIVES OF STUDY
F/S for modernization of two conventional workshops for rolling stock as part of the modernization of the Indian Railways

8.DATE OF S/W Oct.1986

9.CONSULTANT(S)
Japan Railway Technical Service
Pacific Consultants International

10.STUDY TEAM

No.of Members 14
Period Feb.1987-Jan.1988(12 months)

Total M/M	Japan	Field
67.26	43.56	23.70

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	192,044 (¥'000)
Contracted	185,418

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Jamalpur Workshop (Eastern Railway), Perambur Workshop (Southern Railway)

2.PROJECT COST

(US$1,000)
(US$1=12.87Rp)

	Total Cost	Local Cost	Foreign Cost
1)	87,000	64,100	22,900
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1.Workshop modernization
1)Shortening of period of POH(periodical overhaul) of rolling stock,and strengthening of inspection/repair capacities; 2)Improvement of operation efficiency of rolling stock,and reduction of POH costs; 3)Introduction of new technology for rolling stock inspection and repair; 4)Development of skills of personnel by training and education; 5)Introduction of testing equipment for improving quality and reliability of rolling stock
2.Plan of strengthening inspection/repair capacities, and scale of investment.
1)Jamalpur Workshop:Project cost,481 million Rs.
Building construction---Engine test room,car maintenance room,training center
Building reconstruction---Steam-locomotive part shop,casting shop
Machine installation---Testing equipment for engine and generator; commutator grooving equipment; bogie washer; brake-shoe casting equipment; others
Machine replacement---Wheel lathe, etc.
Others---Maintenance of passage,floor surface,track,etc.
2)Perambur Workshop: Project cost,639 million Rs.
Building construction---Passenger-car body shop,freight-car painting shop,others
Building reconstruction---Freight-car inspection/repair shop,etc.

Imp. Period: .1989~.1994 .1989~.1996

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	21.00	FIRR1)	17.00
EIRR2)	18.00	FIRR2)	16.00
EIRR3)		FIRR3)	

Conditions and Development Impacts:

1)Improvement in level of service quality
2)Decrease in failure of rolling stock and resultant increase in availability of rolling stock.
3)High quality rolling stock will increase the effect of investments in railway ground installations and rolling stock.
4)Impetus for moderinization of other workshops.
5)Increase in employment oppotunities in project areas.
6)Overall decrease in rolling stock maintenance costs for the Indian Railway.
7)Improvement in maintenance technology at the workshops.
8)Ipetus for development of local idustries and their technological levels through introduction of new plants and machinery.
9)Improvement in worker's motination and work safety.

5.TECHNICAL TRANSFER
OJT : Lecture were given on methods to guide workshop personnel in promoting the modernization project.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ☐ Promoting
- ☐ Delayed or Suspended
- ■ Discontinued or Cancelled

(Description)

The project was incorporated in the 8th Long-term Plan.
Mar.1990 OECF loan agreement signed (1,256 million yen) For the provision of equipment for Jamalpur and Perambur Workshops
Aug.1990 The Indian Railway requested JARTS to submit a proposal as the sole consultant of the consultant service agreement.
Oct.1990 JARTS submitted the proposal.
Jan.1993 An agreement was reached on the contents of services and the amount of costs. Signing of the contract is yet to be made, pending the approval by the Indian side.

(FY1994 Domestic Survey)
The Ministry of Finance, of India Government has sent official letter to New Dehli office of OECF on Aug.1994 saying that the loan amount for the project has remained unutilized because of non-conclusion of consultancy agreement between the Indian project executing agency and the Japanese consulting firm for various reassons. Indian Government, therefore, decided to terminate the loan agreement, and asked for the agreement of OECF for the termination.
Following the above request, OECF HDQ is taking contact with concerned Ministries of Japanese Government to terminate the loan.

(FY1994 Overseas Survey)
L/A of OECF loan was concluded in March 1990, but abrogated in June 1994. The reason was that, though consulting concerning detailed design (JARTS), proposals of the Ministry of Railways and negotiation for contracts started in October 1990, no conclusion was made even spending a long time. It have been difficult for the ministry to make a conclusion because they had been seeking for possibility to privatize train production and railway management, keeping accordance with the Indian government's grand policy of privatization since 1991.

2.MAJOR REASONS FOR PRESENT STATUS
Improvement has already been made in some workshops. This project will be materialized on the basis of comprehensive studies covering improvement plans for all workshops.

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③、④

相名 鉄道車両工場近代化計画

(F/S,D/D)

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1991
Revised Mar.1995

ASO IND/S 201B/89

I. OUTLINE OF STUDY

1.COUNTRY India

2.NAME OF STUDY
Development of Calcutta and Haldia Dock Systems of Calcutta Port Trust

3.SECTOR
Transportation/Port

4.REFERENCE NO.

5.TYPE OF STUDY M/P+F/S

6.COUNTERPART AGENCY
The coordination committee Government of India (Ministry of Surface Transport, Port Department)

7.OBJECTIVES OF STUDY
To prepare a Master Plan up to the year 2005.
To prepare a Short-Term Development plan up to the year 1995.

8.DATE OF S/W Dec.1987

9.CONSULTANT(S)
Overseas Coastal Area Development Institute

10.STUDY TEAM
No.of Members 13
Period May.1988-Oct.1989(17 months)

Total M/M	Japan	Field
142.26	72.09	70.17

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Soil investigation Sounding

12.EXPENDITURE

Total	276,611 (¥'000)
Contracted	280,277

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Calcutta and Haldia

2.PROJECT COST

(US$1,000) US$1=Rs13.50=135yen		Local Cost	Foreign Cost	
M/P	1)			
	2)			
F/S	1)	243,874	137,430	106,444
	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)

<M/P>
Master Plan with the target year of 2005.
1.Functional Allocation
The container traffic allocation between Calcutta and Haldia
2.Effective land use of Calcutta Port Trust
3.Improvement of Transportation Facilities
1) Construction of Bridge
2) Constructon of handling place for railway cargo
4.Improvement of Navigation Aid System

<F/S>
Short-Term Plan with the target year to 1995

(1) Calcutta	(2) Haldia
- Port road	- Container berth
- Railway	- Multi-Purpose berth
- Rehabilitation of port facilities	- Yard
- CFS	- Railway
- Dredging	- Cargo handling equipment
- Cargo handling equipment	- Port Service vessels
- Port Service vessels	

Imp. Period: 1990-1995

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

EIRR1)	17.13	FIRR1)	12.14
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

<M/P>
Demand Forecast (unit: 1,000t)

Lignid Bulk Cargo	2,495
Dry Bulk Cargo	1,070
Container Cargo	2,235

<F/S>
Demand forecast

Calcutt Haldia Port	(unit: 1,000t)
Liquid Bulk Cargo	1,210
Dry Bulk Cargo	610
Container Cargo	1,110
Other General Cargo	2,210

5.TECHNICAL TRANSFER
Through discussion with counterpart, we conducted technical transfer by transmitting our idea of the study and the study method and so on.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
- ○ Completed
- ● Partially Completed
- ○ Implementing
- ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)
(FY1991 Overseas Survey)
<M/P>The project was scaled down and modified. This Master Plan is used as the guideline of the long-term development of the port.
The following projects for Calcutta Port was conducted:
1. Modernization of KPD water gate
Apr. - Aug. 1991 D/D
Nov. 1991 - 1993 The construction by local contractor using local finance
2. Modernization of NSD water gate
3. The replacement of Tug Cuameli
Apr. - Jun. 1990 D/D
Sept. 1990 - Jan. 1992 Implementation
4. Hardstanding of yards for storage of heavy/normal cargo
Dec. 1990 - 1993 Implementation
5. Rehabilitation of transit sheds
6. Replacement of mobile cranes
Jul. 1990 - 1992 Implementation
<F/S>The following Feasibility Studies were conducted using local funds.
1. Calcutta Port
1) Development of 4-lane bridge (Apr. 1990 - Aug. 1991)
2) Channel navigation/VIMS project (Jan. 1990 - Aug. 1991)
3) Replacement of Floating Crane (Feb. 1990 - Aug. 1991)
2. Halida Port
1) Replacement of dredger (Mar. 1990 - Aug. 1991)
2) Procurement of Grab Dredger (Mar. 1990 - Aug. 1991)
Due to the decrease of the cargo destined for former USSR countries, and the little need to invest in the new port (Haldia) by port users, implementation of the project is not expected at this moment.

(FY1993 Overseas Survey)
Improvement of Roads in and around Dock area, replacement of loading facilities and replacement of port service vessels have been partially completed. Remainder Works are now implementing.

(FY1994 Domestic Survey)
No additional information.

(FY1994 Overseas Survey)
(Please turn over)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、② Ministry of Surface Transport、③

和名 カルカッタ・ハルディア港開発計画

{M/P+F/S}

III. PRESENT STATUS OF STUDIED PROJECT

(Description)

(FY1991 Overseas Survey)

<M/P>The project was scaled down and modified. This Master Plan is used as the guideline of the long-term development of the port.

The following projects for Calcutta Port was conducted:

1. Modernization of KPD water gate
   Apr. - Aug. 1991 D/D
   Nov. 1991 - 1993 The construction by local contractor using local finance
2. Modernization of NSD water gate
3. The replacement of Tug Cuameli
   Apr. - Jun. 1990 D/D
   Sept. 1990 - Jan. 1992 Implementation
4. Hardstanding of yards for storage of heavy/normal cargo
   Dec. 1990 - 1993 Implementation
5. Rehabilitation of transit sheds
6. Replacement of mobile cranes
   Jul. 1990 - 1992 Implementation

<F/S>The following Feasibility Studies were conducted using local funds.

1. Calcutta Port
   1) Development of 4-lane bridge (Apr. 1990 - Aug. 1991)
   2) Channel navigation/VIMS project (Jan. 1990 - Aug. 1991)
   3) Replacement of Floating Crane (Feb. 1990 - Aug. 1991)
2. Halida Port
   1) Replacement of dredger (Mar. 1990 - Aug. 1991)
   2) Procurement of Grab Dredger (Mar. 1990 - Aug. 1991)

Due to the decrease of the cargo destined for former USSR countries, and the little need to invest in the new port (Haldia) by port users, implementation of the project is not expected at this moment.

(FY1993 Overseas Survey)

Improvement of Roads in and around Dock area, replacement of loading facilities and replacement of port service vessels have been partially completed. Remainder Works are now implementing.

(FY1994 Domestic Survey)

No additional information.

(FY1994 Overseas Survey)

After the completion of F/S, the Calcutta Port Trust(CRT) completed D/D and the construction partially.

(Calcutta port)

Port road: partially finished

Port railway: (partially finished)

Improvement of port facilities: (partially finished)

Container freight station (CFS), loading/discharging machines:(partially finished)

Development of the container park is partially finished by ADB loans. Container cargo operation is controlled by computers.

(Haldia port)

Container berth: general freight berth - finished
multi-purpose berth - under construction

Yard: partially finished

Port railway: under construction

Dredging: untouched (due to the lack of fund)

Loading/discharging machines: partially finished

Almost all the fund was domestically financed (by governmental budget, internal reserve, or loans). Foreign fund, that was allocated to the container park at Calcutta, was financed by the ADB loan.

JICA F/S re-categorized the improvement of pilot systems into short-term ation items (previously long-term objectives). It is for the purpose of cost reduction and improving CPT's financial status by raising working ratio of pilots and maintaining working circumstances.

PROJECT SUMMARY (F/S)

Compiled Mar.1991
Revised Mar.1995

ASO IND/S 303/89

I. OUTLINE OF STUDY

1.COUNTRY India

2.NAME OF STUDY
Development Plan for the New Delhi Railway Station

3.SECTOR
Transportation/Railway

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Northern Railway

7.OBJECTIVES OF STUDY
To formulate a Master Plan for the modernization of railway teminal in Delhi area; and to conduct a feasibility study for the modernization plan on New Delhi Railway Station

8.DATE OF S/W Apr.1988

9.CONSULTANT(S)
Japan Railway Technical Service
Tonichi Engineering Consultants, Inc.

10.STUDY TEAM

No.of Members 13
Period Nov.1988-Jan.1990(11.5 months)

Total M/M	Japan	Field
	30.18	35.55

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	216,046 (¥'000)
Contracted	186,641

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
200 kilometers around New Delhi

2.PROJECT COST
(US$1,000)
US$1=17.75Rs

	Total Cost	Local Cost	Foreign Cost
1)	94,727,000	83,544,000	11,183,000
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
- Target year: 2010, 1st half period (from present to 2000), latter half period (from 2000 to 2010)
- Track improvement plans; 1st half period --- track addition, electrification, and signal modernization for 6 lines(718.6km) and improvement of bottlenecks in Delhi (grade separation); Latter half period --- track addition, electrification, and signal modernization for 8 lines(730.6km) and improvement of bottlenecks in Delhi (grade separation)
- Improvement of New Delhi station
1. Station improvement 1)Track layout 2)Reconstruction of main structures
3)Related facilities (water supply and drainage, car cleaning, and electric facilities)
2. Passenger facilities (facilities that serve for smooth passenger flow; passenger service facilities; station offices; others) 1) Station office improvement (construction of station offices in the eastern entrance, reconstruction in the western entrance)
2) Auxiliary facilities -Mechanical facilities: escalators, baggage lifts, air-conditioning facilities; -electric facilities: substations, power lines and related facilities, lighting facilities) 3)Station plaza development
3. Passenger information and guidance systems.
4. Telecommunicaions facilities.

Imp. Period: .1991~.1995

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

EIRR1)	19.50	FIRR1)	12.13
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
Preconditions: 1.Economic prices 1)Domestic materials are evaluated by the economic prices obtained by deducting domestic consumption and sales taxes (20%, 7%)from market prices.
2)Imported materials are evaluated by the total of CIF prices and domestic transport and distribution costs. 3)Labor costs are evaluated by annual incomes of standard workers.
4)Exchange rate --- Daily median value average for August 1989.
2.Inflation: Inflation is not considered. 3.Project life: 31 years from 1990 to 2020.
4.Reinvestment and depreciation: It is assumed that, for the depreciable assets whose service life expires within the project life, reinvestment of the initial amount is conducted in the following year. 5. Residual value: the residual value of the depreciable assets as of the last year of the project is earmarked as benefit.
6. Economic growth rate: 5% up to the year 2010, 4% after 2010.
Development Impacts: Implementation of this project would greatly contribute to the vitalization of economy in the New Delhi Metropolitan Area through improvement of transport efficiency and elevation of service level.

5.TECHNICAL TRANSFER
1) During site investigations, techinical trasfer was made in such respects as
planning and construction methods.
2) One counterpart received JICA training.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS
- ■ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ● Implementing
  - ○ Processing
- ☐ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)
In the Works Programme of the Indian Railway for FY1991, Rs.500 million was earmarked for the work for 3 to 4 years. Station yard improvements and so on are partially under way by the Indian Railway and local contractors.
It is uncertain whether the request will be made for further Japanese cooperation in the course of the project implementation in the future.

(FY1994 Domestic Survey)
No additional information.

(FY1994 Overseas Survey)
1) Development of the New Delhi Station
As the phase I construction, extension of pedestrian bridges(2), construction of platforms (2) with transfer of lines for train wash and repair, constructions of lines for train wash (2), repair (5) and storage (2), maintenance of parking for buses and taxis at the east entrance of the station have been completed by the budget of the Indian Ministry of Railways (Rs. 60 million) since April 1993.
As the phase II construction, building of new platforms (2), etc. will be completed from June 1995.

2) Railway track improvement project in New Delhi
Construction completed until present are as follows: double tracking, advancement of signal systems, electrification, building of new stations (land purchase only). It can be found that the Ministry of Railways gives priority to each project according to JICA F/S and tries to realize one by one keeping budget constraint. Neither building of a new line (bypass) nor automation of signal systems is planned.

2.MAJOR REASONS FOR PRESENT STATUS
The Indian side can deal with many parts of the project in respect of technology and finance.

3.PRINCIPAL SOURCE OF INFORMATION
①、③

和名 ニューデリー駅近代化計画

(F/S,D/D)

PROJECT SUMMARY (F/S)

ASO IND/S 304/90

Compiled Mar.1992
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY: India

2.NAME OF STUDY: Improvement Plan of New Mangalore

3.SECTOR: Transportation/Port

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: The Coordination Committee
Government of India (Ministry of Surface Transport), Joint Secretary(Ports)

7.OBJECTIVES OF STUDY:
To prepare a Master Plan up to the year 2004/2005
To prepare a Short-term Plan up to the year 1994/1995

8.DATE OF S/W: Mar.1989

9.CONSULTANT(S):
Overseas Coastal Area Development Institute
Yachiyo Engineering Co., Ltd.

10.STUDY TEAM

No.of Members 12

Period Aug.1989-Aug.1990(13 months)

Total M/M	Japan	Field
56.52	26.22	30.30

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:
Wave observation, and current observation etc.

12.EXPENDITURE

Total	219,260 (¥'000)
Contracted	224,275

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: New Mangalore Port

2.PROJECT COST (US$1,000) US$1=Rs16.75

	Total Cost	Local Cost	Foreign Cost
1)	76,521	49,460	27,061
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1.Review of Master Plan
 1)Iron Ore Berth, Oil Berth,
 2)Oil Product Berth, Coal Berth,
 3)Breakwaters
 4)Dredging

2.Short-term plan with the target year of 1995
 1)Improvement of the existing Iron Ore Bersh to 100,000 DWT class.
 2)Reconstruction of the existing 0:7 Product Jetty to a Crude 0:7 Jetty of 100,000 DWT class
 3)Construction of an 0:7 Product Jetty of 85,000 DWT class
 4)Extension of the Southern and Northern Breakwaters up to 1,500m
 5)Deepning and widening of the channel
 6)Deepning and widening of the Basin

Imp. Period: .1991~.1993 .1992~.1994

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes

EIRR1)	22.90	FIRR1)	12.50
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

-Demand Forecast: 1994/1995 2004/2005 (Unit; '000tons)

Iron Ore (Export) :	7500	1000
Oil Products (Export) :	1570	3160
Crude Oil (Import) :	3000	6000

-It will be possible to accommodate 100000 DWT iron ore carriers and crude oil tankers and 85000 DWT oil products carriers by development of the port from 60000 DWT iron ore carriers at present.

5.TECHNICAL TRANSFER:
1)Counterpart training; 2) technical transfer by OJT

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
- ○ Completed
- ○ Partially Completed
- ● Implementing
- ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

Kudremukh, a user of the Iron Ore Berth, is worried whether the project is profitable, because the project cost is expensive. Therefore, the project has not been implemented.

(1991 Survey of JICA Overseas Office)
KIOCL has decided to construct the iron ore berth. The D/D on the oil related facilities was conducted and these facilities are expected to be constructed in the near future. The M/P by JICA is reviewed periodically.

(FY1994 Domestic Survey)
No additional information.

(FY1994 Overseas Survey)
1) Maintenance of facilities relating to oil refinement and steam power plant
1.Maintenance of following oil facilities is in progress by Indian Oil Company, a semi-national firm.
- alteration of existing berths for oil products to crude oil berths
- construction of new berths for oil products(*)
- extension/expansion of breakwaters(*)
- expansion and deepening of navigation traffic routes(*)
- expansion and deepening of anchorages
- improvement of facilities
- reinforcement of tugboats(*)

(*) ordered after tenders

2. Funding
L/A was concluded with SCICI, a semi-governmental financial corporation, at the price of US$ 73 mil. Completion of the construction is scheduled in December 1996.

Improvement of iron ore processing
Realization delays after the detailed design due to a financial problem. Kudremukh Iron Ore Co. Ltd. (KIOCL), which determined to build iron ore handling berths, suspended the construction owing to expansion cost for development.

2.MAJOR REASONS FOR PRESENT STATUS:
It is integrated into the National Development Plan.

3.PRINCIPAL SOURCE OF INFORMATION:
①、②、③

和名 ニュー・マンガロール港改良計画

(F/S,D/D)

PROJECT SUMMARY (F/S)

Compiled Mar.1993
Revised Mar.1995

ASO IND/A 301/91

I. OUTLINE OF STUDY

1.COUNTRY: India

2.NAME OF STUDY:
Irrigation and Drainage Development of Sharda Canal CAD Project

3.SECTOR:
Agriculture/General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY:
Ministry of Water Resources.
Department of Area Development of Uttar Pradesh State Government.

7.OBJECTIVES OF STUDY:
To formulate an optimum agricultural development plan for the selected areas in the command area of Sharda canal CAD Project.

8.DATE OF S/W: Apr.1990

9.CONSULTANT(S):
Nippon Koei Co., Ltd.
Hokkaido Engineering Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 10

Period Sep.1990-Jul.1991(11 months)

Total M/M	Japan	Field
65.94	26.78	38.96

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	228,100 (¥'000)
Contracted	229,851

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA:
Command area Hardoi Branch Canal within Sharda Canal CAD Project

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	129,386	107,336	22,046
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1. Irrigation Plan
   1.1 Improvement of Existing Irrigation System: 53,161ha
   1.2 Sai River Pump Lift Irrigation Scheme: 4,989ha
   1.3 Ground Water Development: 1,180nos
   1.4 Establishment of Wireless Communication System
2. Drainage Plan
3. On-farm Development Plan
4. Improvement Plan of Water logging and Salt Affected Areas: 17,950ha
5. Corp Production Plan
6. Plan to Acutualize Osrafandi

Imp. Period: Jan.1993-Dec.1998

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	15.50	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Conditions:
Expansion of irrigation area through stable water supply
Training, education, resarch & extencion to farmers
Drainage improvement
Education to women
Soil impravement
Application of organic matter and green manure

Impacts:

Production increase(ton)	w/o project	w project
rice	42,000	101,000
wheat	64,500	102,400
pulses	2,200	15,900
oil crops	12,000	62,600

Economic benefit is estimated at Rp.488.5 x 10^6. Farm budget analysis made to the poorest farmers having marginal land reveal that the project will increase their income by 50% to 120% and contribute much their nutritions status.

5.TECHNICAL TRANSFER:
Training of Indian counterpart personnel in the course of the study as for on-farm devemlopment and water managemanet.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ☐ Promoting
- ■ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)
To implement the Project, the request from the government of Uttar Pradesh State, where the project is located, to the Central Government is first required. Up to the present, no action has been taken by the State Government.

(FY1994 Domestic Survey)
Request from the State Government to the Central Government is not prepared yet.

2.MAJOR REASONS FOR PRESENT STATUS

- The Government of India requires a large proportion of grant aid in the financial assistance.
- The Government of India considers that unit cost per ha is rather high for extension of the proposed developement concept to surrounding areas.

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 シャルダ灌漑・排水事業整備計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

ASO IND/S 305/92

Compiled Mar.1994
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY: India

2.NAME OF STUDY:
Transport Infrastructure Development Project in Calcutta

3.SECTOR:
Transportation/Urban Transportaion

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY:
Transport Department Ministry of Transport

7.OBJECTIVES OF STUDY:
To conduct a feasibility study on the transport infrastructure for the alleviation of traffic congestion in the study area

8.DATE OF S/W: Dec.1990

9.CONSULTANT(S):
Yachiyo Engineering Co., Ltd.
Fukuyama Consultants International, Inc.

10.STUDY TEAM

No.of Members 9

Period Sep.1991-Feb.1992(13 months)

Total M/M	Japan	Field
37.28	17.91	19.37

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:
Traffic Survey, Topographin Surveu (4 km2), Soil Investigation (40m x 10 intersections) Underground Utilities, Survey (10 intersections)

12.EXPENDITURE

Total	147,609 (¥'000)
Contracted	116,619

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA:
Calcutta Metropolitan District

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	67,000	26,800	40,200
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
Flyover - 6 flyover
At Grade Improvements - 4 Intersections
Pedestrian Plaza - 1.5 kilometer

Imp. Period: .1993~.1997

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	18.40	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
Direct benefit : Reduction of transport costs

Indirect effects:
1) Decrease of traffic accidents
2) Improvement of air pollution
3) Decrease of the honking of vehicles
4) Increase of employment
5) Rebuilding of an old town area
6) Side-effects in better driver behaviour
7) Training better pedestrian behaviour at cross walks

5.TECHNICAL TRANSFER
Counterpart training in Japan: 2 persons (May 25 '92- June 11 '92)

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)
West Bengal Government will request Central Government to apply for OECF loan in this year. (The application already prepared)

(FY1993 Overseas Survey)
Application for the OECF assistance has been made by the Government of West Bengal through the Government of India. However, no further progress could be made.
This Project has been included in the Eight 5-year plan of the Government of West Bengal.
This Project aims at following points and to be expected very effective.
1)To increase extremely limited road capacity in the central area of Calcutta,
2)To arrange more efficient public transportation systems with bus service networks, and
3)To improve the accessibility of the central area of Calcutta and its linkages with surrounding areas of the metropolis including newly built second Hooghly bridge.

(FY1994 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、② Ministry of Transport、③

和名 カルカッタ都市交通施設整備計画

{F/S,D/D}

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1992

ASE IDN/S 601/74

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Solo River Basin Development(follow-up)

3.SECTOR: Social Infrastructures/Water Resource Development

4.REFERENCE NO.:

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY: Directorate General of Water Resources Development

7.OBJECTIVES OF STUDY: Guidance on topographic mapping and boring

8.DATE OF S/W: .0

9.CONSULTANT(S):

10.STUDY TEAM

No.of Members

Period Nov.1974-Mar.1975(4 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total: 3,905 (¥'000)

Contracted:

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Central part of Java, Solo River basin (16,000sq.km, population 10 million)

2.PROJECT COST

(US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)

After the completion of the Master Plan Study in July 1974, this follow-up study gave technical guidance on topographic mapping and underground water boring.

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

- ■ In Progress or In Use
- ☐ Delayed
- ☐ Discontinued

(Description)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 ソロ河流域開発計画アフターケア

{M/P,Basic Study,Other}

PROJECT SUMMARY (M/P)

ASE IDN/S 101/75

Compiled Mar.1986
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Java Regional Study, East Java

3.SECTOR
Development Plan/Integrated Regional Development Plan

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Ministry of Public Works and Power

7.OBJECTIVES OF STUDY
Regional development planning for increased equity of income distribution

8.DATE OF S/W Apr.1975

9.CONSULTANT(S)
International Development Center of Japan

10.STUDY TEAM

No.of Members 8

Period Mar.1975-Jan.1976(10 months)

Total M/M	Japan	Field
24.60	13.40	11.20

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	67,354 (¥'000)
Contracted	39,653

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA

East Java Province (47,922 sq.km)

2.PROJECT COST

	Total Cost	Local Cost	Foreign Cost
(US$1,000)	1)		
(US$1=415Rp.)	2)		

3.CONTENTS OF MAJOR PROJECT(S)

Based on the selected development strategy, the study proposed 7 priority programs and 2 supporting measures as follows.

Priority Programs:
(1) Industrialization Program (institutional requirements)
(2) Water Resources Development Program (flood control and irrigation development in Solo and Brantas river basins)
(3) Madura Agricultural Development Program (cattle fattening, freshwater aquaculture, suitable upland crops)
(4) Southern Coast Development Program (port development, mining)
(5) Rural Development Program (strengthening of agricultrural coops & INPRES programs)
(6) Community Facility System Development Program (study of available service facilities and development planning)

Supporting Measures:
(7) Professional Education Program
(8) Strengthening of BAPPEDA

4.CONDITIONS AND DEVELOPMENT IMPACTS

After the spatial evaluation of development potentials, the study proposed the followng dual strategy for the Province.

1. "Pulling-from-the-top" Strategy
Major elements are skill-oriented labor-intensive industrialization and more intensified planning activities on the provincial level. The Surabaya-Gresik axis is the primary center of industrial development, and industrialization will spread along the fairly developed trunk highways to Mojokerto, Kediri and Madium to the west, down to Malang in the south, and to Pasuruan, Probolinggo, Jember and Banyuwangi to the east.

2. "Pushing-from-the-bottom" Strategy
Major elements include rural development and water resources development in Solo and Brantas river basins. In the spatial framework development efforts will be directed to the underdevelopment areas such as the southern and northern coastal zones, Madura Island and the area bordering Central Java Province.

5.TECHNICAL TRANSFER

-Participation of counterparts in the JICA training program -OJT on regional development planning

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

- ■ In Progress or In Use
- ☐ Delayed
- ☐ Discontinued

(Description)

Of the six priority programs, the southern coast development program and the rural development program were selected for another M/P study, "Southern Coast Development Plan, East Java," which was undertaken during FY1978 - 1979.

Some of the projects which were central to the priority programs have been financed by the OECF loans as follows.

1) Wonogiri Multi-purpose Dam and Irrigation Development
- OECF loan agreements signed in Jan. 1976 (430 million yen) and Aug. 1977 (9.8 billion yen) for the dam.
- OECF loan agreements signed in Mar. 1977 (513 million yen) and in Feb. 1979 (9.8 billion yen) for the irrigation development.

2) River channel improvement of upstream Solo River and Madiun River
- OECF loan agreement signed in Feb. 1985 (6.4 billion yen)

3) Flood control of midstream Brantas River
- OECF loan agreements signed in Oct. 1977 (504 million yen), in Mar. 1979 (5,718 million yen) and in Feb. 1985 (6 billion yen).

(FY1993 Overseas Survey)
The JICA Study was completed about 18 years ago. The Indonesian counterparts at the time of study are no longer working at the Provincial BAPPEDA and no information is available on how the Study's proposals were utilized subsequently.

The growth pattern of provincial economy since the latter half of the 1970s roughly concurs with the "pulling-from-the-top" strategy in that the Surabaya/Gresik axis has been landing the agglomeration of industrial and other economic activities in the province. The rapid growth of Surabaya has been spreading along the trunk roads to the surrounding cities.

According to the 15-year Provincial Spatial Design Structure Plan (RSTRP) of 1990, the first priority for rural development is assigned to the southern coastal area and the second priority to Madura Island. In other workds, the situation of underdevelopment still remains unchanged since the time of the JICA Study 18 years ago. The 1st priority for urban development is now shifting toward the secondary cities away from the Surabaya metropolitan area.

(FY1994 Domestic Survey)
No information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①、③、④

和名 東部ジャワ州総合開発

{M/P,Basic Study,Other}

PROJECT SUMMARY (F/S)

ASE IDN/S 301/75

Compiled Mar.1986
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Wonogiri Multipurpose Dam Project

3.SECTOR
Social Infrastructures/Water Resource Development

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Directorate General of Water Resouces Development

7.OBJECTIVES OF STUDY
A F/S of irrigation sector, power sector and flood control among the Solo River Basin Master Plan, taking into account the importance of increasing food production, lessening flood damage and supplying hydro-electric power.

8.DATE OF S/W .0

9.CONSULTANT(S)
Nippon Koei Co., Ltd.
CTI Engineering Co., Ltd.
Japan Engineering Consultants Co., Ltd.

10.STUDY TEAM
No.of Members 20
Period Nov.1974-Oct.1975(12 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	136,361 (¥'000)
Contracted	131,851

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Upstream area of Solo River Basin (Kab. Wonogiri), in Central Java Province

2.PROJECT COST

(US$1,000) (US$1=415Rp)	Total Cost	Local Cost	Foreign Cost
1)	211,330	120,010	91,320
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
1. Dam and reservior
Dam: Catchment area: 1,350 sq. km, Rockfill type, Crest elevation: 141.60m SHVP, max. height of dam: 37.5 m, Crest length: 1,440m, Embankment volume: 1.8 cu. m
Reservior: Gross storage capacity: 730 million cu. m, Sediment storage capacity:120 million cu. m, Effective storage capacity: 440 million cu. m, Flood control capacity: 220 million cu. m
2. Irrigation
Irrigation area: 23,600 ha; Colo diversion weir: Concrete weir, Height of weir: 10 m, Length of weir: 108m; Irrigation canal: Length of main canal: 89.5 km, Length of secondary canal:144.9 km: Crossing: 17 siphons, 16 aqueducts, 95 culverts, 183 bridges, 49 turnouts, 6 checkgates and 3 regulating reserviors
3. Power station
Turbine: 2 units of 5,100kW vertical shaft Kaplan type, Generator: 2 units of 6,375 kVA alternate current generators
4. Flood control (River improvement)
Improved section: Nguter - Surakarta, Length of the section: 32.2 km along the main river and 17.5 km along the tributaries, Design discharge (after dam regulation): 1,600 cu. m/sec at beginning section (Nguter) and 2,000 cu. m/sec at end section (Surakarta)

Imp. Period: Oct.1976-Nov.1983

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

EIRR1)	13.90	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
The combined effects of (1) flood control, (2) irrigation, (3) power generation and (4) dam and river channel improvement are evaluated.
Development impacts:
(1) Flood control effect by the dam (4,000 cu.m per second reduced to 400 cu.m per sec)
(2) Irrigation for 23,600 ha with cropping intensity of 2.5.
(3) Reduction of flooding
(4) Power generation of 28,200 MWh

5.TECHNICAL TRANSFER
(1) On-the-job training
(2) Counterpart training program (JICA)
(3) Provision of equipment

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS
- ■ Completed or in Progress
  - ● Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

Jan.1976 OECF loan agreement (E/S, 430 million yen)
For the dam and the power plant
Mar.1977 OECF loan agreement (E/S, 513 million yen)
For irrigation development
Jun.1977 E/S completed (the dam and the power plant)
Aug.1977 OECF loan agreement (9,807 million yen) for the dam
Feb.1979 OECF loan agreement (9,800 million yen)
For irrigation development
Dec.1978 OECF loan agreement (3,400 million yen)
For the power plant
Feb.1981 Construction of the dam completed

(FY1994 Domestic Survey)
No information.

2.MAJOR REASONS FOR PRESENT STATUS
(1) large impact: the first project on Solo River was expected to solve the problem of flood in Surakarta.
(2) high priority: contribution to food self-sufficiency.
(3) strong administrative support: compatible to the strategy of the 5-year development plan.

3.PRINCIPAL SOURCE OF INFORMATION
①、④

和名 ウオノギリ多目的ダム建設計画

(F/S,D/D)

PROJECT SUMMARY (F/S)

ASE IDN/S 303/76

Compiled Mar.1976
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Central and East Java Road Betterment Project

3.SECTOR: Transportation/Road

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Bina Marga (Directorate General of Highways, Ministry of Public Works)

7.OBJECTIVES OF STUDY: Widening, overlay and realignment of roads

8.DATE OF S/W: Nov.1975

9.CONSULTANT(S): Mitsui Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 21

Period Nov.1975-Aug.1976(10 months)

Total M/M	Japan	Field
57.00	39.00	18.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	161,259 (¥'000)
Contracted	105,197

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Cilacap - Malang Corridor

2.PROJECT COST

		Total Cost	Local Cost	Foreign Cost
(US$1,000)	1)	53,000	33,000	20,000
(US$1=415Rp)	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)

Improvement of road condition in four routes connecting Central and East Java provinces

(Project Routes)

ROUTE 1:	Buntu - Pringsurat	145.2 km
ROUTE 2:	Salaman - Purworejo	27.2 km
ROUTE 3:	Surakarta - Wonogiri	32.2 km
ROUTE 4:	Ponorogo - Biltar	117.5 km
TOTAL		322.1 km

Imp. Period: .1975~.1976

4.FEASIBILITY AND ITS ASSUMPTIONS: Feasibility: Yes

EIRR1)	37.98	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

1) Project life of 10 years, socilal discount rate at 15%
2) Evaluation based on alternative plans for standards of design and stages of construction

Standards of design

Plan 1 (from longer-run point of view): a 2-lane carriageway with a minimum width of 6m for each of the four project routes

Plan 2 (responding to stages of regional development): adoption of tentative standards (width ranged 4.5 - 6m) according to the traffic volume in the respective routes

Stages of construction

Non-staged construction: based on traffic volume in 1990

Staged construction: 1st stage based on traffic volume in 1985 and 2nd stage on that in 1990

Plan 2 with non-staged construction was evaluated as best.

[Development Impacts]

(1)Promoting economic development in the areas along the project roads (Cilacap-Malang, Cilacap-Semarang)

(2)Indirect diffusion effects on economic development in conjunction with other road construction/ betterment projects in the whole Central and East Java

5.TECHNICAL TRANSFER

Technical trasfer by reception of trainees

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ● Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

Apr.1977 OECF L/A signed (E/S 226 million yen)
Sep.1979 D/D completed
Jun.1980 OECF L/A signed (3,600 million yen)
Nov.1987 Construction completed

Realized project:
Road improvement of 170km
Buntu-Wonosobo Section (Central Java)
Wonosobo-Secang Section (Central Java)
Ponogoro-Blitan (East Java)

(FY1994 Domestic Survey)
No information.

2.MAJOR REASONS FOR PRESENT STATUS

(1) Benefit: Economic development was greatly promoted along the routes of Cilacap-Malang and Cilacap-Semarang.
(2) The completion of this roads has had a great repercussions in the close relation to the other project roads of the same district; Semarang-Magelang, Magelang-Purworejo, etc.
(3) Top priority : These roads are playing a very important role in the development of Central and East Java in as much as they connect the Southern and Northern Coasts of Java.

3.PRINCIPAL SOURCE OF INFORMATION

①、④

和名 中東部ジャワ道路改良計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1995

ASE IDN/S 302/76

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Wonogiri Irrigation and Upper Solo River Improvement Project

3.SECTOR: Social Infrastructures/River & Erosion Control

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Directorate General of Water Resources Development, Solo River Basin Development Project

7.OBJECTIVES OF STUDY: Irrigation, Flood control and Hydroelectric Power

8.DATE OF S/W: .0

9.CONSULTANT(S):
Nippon Koei Co., Ltd.
CTI Engineering Co., Ltd.
Japan Engineering Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 22

Period Jan.1976-Sep.1976(7 months)

Total M/M	Japan	Field
91.22	42.20	49.02

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	164,779 (¥'000)
Contracted	158,217

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA

Surakarta Area
(downstream reach at Wonogiri Dam, Middle Java)

2.PROJECT COST (US$1,000) (US$1=415Rp)

	Total Cost	Local Cost	Foreign Cost
1)	277,080	174,130	102,950
2)	82,150	47,880	34,270
3)	63,180	35,480	27,700

3.CONTENTS OF MAJOR PROJECT(S)

1. Irrigation 1) Colo intake weir: Concrete weir, Height of weir: 10 m, Length of weir: 108 m 2) Irrigation canal: a. Irrigation area: 23,200 ha,b. Length of main canal: 93.8 km, c. Length of secondary canal: 81.2 km, d. Length' of tertiary canal: 928 km in total 3) Crossings: 48 turnouts, 13 gates, 27 siphons, 16 head races and 259 bridges
2. River improvement 1) Improvement area: Nguter railway bridge-Jurug road bridge, Surakarta City 2) Length of river improvements: 33km along Solo River and 30.5 km along eight tributaries 3) Designed discharge after dam construction: 1,050 cu.m/s at Nguter railway bridge and 2,000 cu.m/s at Jurug road bridge 4) two retarding basins (capacity: 27 million cu.m and 18 illion cu.m) 5) Length of bank protection: 7 km 6) 395 spur dikes (13 km) 7) 32 sluice-ways 8) Length of drains for water inside dikes
3. Wonogiri Dam 1) Catchment area: 1,350 sq.km 2) Rockfill type dam 3) Fill:18 million cu.m 4) Intake capacity for irrigation at Colo weir: 400 million cu.m 5) Intake capacity for river maintenance: 30 million cu.m
4. Water power station 1) Turbines: two units of 5,100 kW Kaplan-type turbines 2) Generator: two units of 6,375 kVA generators 3) Maximum output: 10,200 kW 4) Yearly average output: 28,200 MWh
Note: One study consists of this study and Wonogiri Irrigation and Upper Solo River Improvement Project study (Agriculture/General). The above project costs are for: 1) total 2) irrigation 3) river improvemet. In addition to these, 4) dam and reservoir (total: 115,200, local: 88,250 and

Imp. Period: Apr.1978-Oct.1983

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	12.10	FIRR1)	
EIRR2)	12.50	FIRR2)	
EIRR3)	11.70	FIRR3)	

Conditions and Development Impacts:

1. Primary benefits
1) a. Irrigation benefits,
b. Flood damage at Sragen district (negative benefit),
c. Farm production increase by the supply of water in the project area to the outside area, and
d. Saved maintenance fee by the pump disposal,
2) Flood control benefits: decrease of flood damage
3) Hydroelectric power benefits

2. Secondary benefits
1) Economic benefits by fishery, recreations, tourism and water.
2) Foreign currency saving by the decrease of import paddy from paddy production increase.

Note: The above EIRRs are for: 1) total project, 2) irrigation, and 3) river improvement. In addition to these 4) EIRR for hydroeletric power was calculated as 8.9.

5.TECHNICAL TRANSFER

(1) OJT, (2) Training in Japan
(3) Cooperative reporting
(4) Supply of equipment and instruction of operation

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ○ Completed
  - ● Partially Completed
  - ○ Implementing
  - ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

Mar.1978 OECF loan agreement for irrigation (E/S, 513 million yen)
Feb.1979 OECF loan agreement for irrigation (9,800 million yen)
Jan.1981 Construction completed
Sep.1981 OECF loan agreement (E/S, 805 million yen)
Upper Solo River and Madiun River Improvement
Jan.1985 Detailed design completed
Dec.1985 OECF L/A signed (4,746 million yen)
Mar.1988 Construction started
Oct.1993 Construction to be completed

Note: The OECF loan above was for Packages 1 and 2 of the Phase I construction. Because of the large Rupiah devaluation, the implementation left a large loan balance, which was then used to construct Packages 3,4 and 5.

(FY1993 Overseas Survey)
1.In 1992 a working unit has been established by provicincial government which was intended for undertaking operation & maintenance of right main canal of Wonogiri Irrigation area.
2.Left main canal of Worogiri Irrigation is now under construction, and nearly completed. Upon completion of left main canal, the operation & maintenance will be handed over to provincial government.

(FY1994 Domestic Survey)
River improvement work has completed on Oct,1994.

2.MAJOR REASONS FOR PRESENT STATUS

1.Large economic impact
2.High priority
3.Good financial position
4.Stable political background

3.PRINCIPAL SOURCE OF INFORMATION

①、③、④

和名 ウオノギリ多目的ダム計画関連概況及び河川改修計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1995

ASE IDN/A 301/76

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Wonogiri Irrigation and Upper Solo River Improvement Project

3.SECTOR
Agriculture/General

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Ministry of Public Works, Directorate General of Water Resources Development

7.OBJECTIVES OF STUDY

8.DATE OF S/W .0

9.CONSULTANT(S)
Nippon Koei Co., Ltd.
CTI Engineering Co., Ltd.
Japan Engineering Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 15
Period Jan.1976-Sep.1976(9 months)

Total M/M	Japan	Field
91.22	42.20	49.02

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	164,779 (¥'000)
Contracted	158,217

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Area with 5km wide and 60km long along the Solo river (population is 25 million centering on Surakarta city of Java island)

2.PROJECT COST (US$1,000) US$1=415Rp.

	Total Cost	Local Cost	Foreign Cost
1)	277,080	174,130	102,950
2)	82,150	47,880	34,270
3)	63,180	35,480	27,700

3.CONTENTS OF MAJOR PROJECT(S)
1. Irrigation 1) Colo intake weir: Concrete weir,Height of weir: 10m, Length of weir: 108m 2) Irrigation canal: a. Irrigation area: 23,200ha b. Length of main canal: 93.8km c. Length of secondary canal: 81.2km d. Length of tertiary canal: 928km in total 3) crossings: 48 turnouts, 13 gates, 27 shiphons, 16 head races and 259 bridges
2. River improvement 1) Improvement area: Nguter railway bridge-Jurug road bridge, Surakarta city 2) Length of river improvement: 33km along Solo River and 30.5km along eight tributaries 3) Designed discharge after dam construction: 1,050 cu.m/s at Nguter railway bridge and 2,000 cu.m/s at Jurug road bridge 4) two retarding basins (capacity: 27 million cu.m and 18 million cu.m) 5) Length of bank protection: 7km 6) 395 spur dikes (13km) 7) 32 sluice-ways 8) Length of drains for water inside dikes
3. Wonogiri Dam 1) Catchment area: 1,350 sq.km 2) Rockfill type dam 3) Fill: 18 million cu.m 4) Intake capacity for irrigation at Colo weir: 400 illion cu.m 5) Intake capacity for river maintenance: 30 million cu.m
4. Water power station 1) Turbines: two units of 5,100kW Kaplan-type turbines 2) Generator: two units of 6,375 kVA generators 3) Maximum output: 10,200 kW 4) Yearly average output: 28,200 MWh
Note: One study consists of this study and Wonogiri Irrigation and Upper Solo River Improvement Project study (Social Infrastructure/River & Erosion control). The above project costs are for: 1) total 2) irrigation 3) river improvement. In addition to these, 4) dam and reservoir (total:

Imp. Period: May.1977-Oct.1983

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

EIRR1)	12.10	FIRR1)	
EIRR2)	12.50	FIRR2)	
EIRR3)	11.70	FIRR3)	

Conditions and Development Impacts:
1. Primary benefits
1) a. Irrigation benefits,
b. Flood damage at Sragen district (negative benefit),
c. Farm production increase by the supply of water in the project area to the outside area, and
d. Saved maintenance fee by the pump disposal,
2) Flood control benefits: decrease of flood damage
3) Hydroelectiric power benefits
2. Secondary benefits
1) Economic benefits by fishery,recreaions, tourism and water.
2) Foreign currency saving by the decrease of import paddy from paddy production increase.

Note: The above EIRRs are for: 1) total project, 2) irrigation, and 3) river improvement. In addition to these 4) EIRR for hydroelectric power was calculated as 8.9

5.TECHNICAL TRANSFER
(1)OJT
(2)Training in Japan
(3)Report writing

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ○ Completed
  - ● Partially Completed
  - ○ Implementing
  - ○ Processing
- ☐ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)

Mar.1977 OECF L/A signed (E/S, 513 million yen)
1977 - 1979 D/D undertaken (Nippon Koei Co.)
Feb.1979 OECF L/A signed (9.8 billion yen)
1980 - 1986 Construction undertaken

OECF Loan:
- Irrigation development (23,200 ha)
- Intake weir at Colo (height 8.68m, length 111.75m)
- Irrigation canals (main 95km, branch 80km)

(FY1994 Domestic Survey)
Operation of the dam and irrigation facilities has been commenced immedirtely after teh completion and are well managed at present. A modification of a cropping pattern due to change of the government policy enabled saving of irrigation water. Therefore,GOI is extending the irrigation area by itself.

(FY1994 Overseas Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、③、④

和名 ウオノギリダムかんがい及び河川改修計画

(F/S,D/D)

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1995

ASE IDN/S 102/77

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Java Regional Study: Central Java

3.SECTOR
Development Plan/Integrated Regional Development Plan

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Directorate of Urban Planning and Housing, Ministry of Public Works

7.OBJECTIVES OF STUDY
Evaluation of regional development potentials and formulation of development strategies

8.DATE OF S/W Oct.1976

9.CONSULTANT(S)
International Development Center of Japan

10.STUDY TEAM

No.of Members 9

Period Dec.1976-Nov.1977(11 months)

Total M/M	Japan	Field
34.80	24.20	10.60

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	72,667 (¥'000)
Contracted	68,987

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Central Java Province (34,206 sq.km)

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)

The study selected as high priority development areas two large blocks which are further subdivided into six small blocks as shown below, and indicated core development sectors for each small block.

I-A Semarang(provincial capital)
Industry : port dev., industrial estates, water supply, road, etc.
Urban Dev.: urban planning, housing site dev., Kampung dev.

I-B Dieng Plateau, Wonosobo
Agro-tourism: roads, agri. land dev, hotels/resourts, power supply, etc.

I-C Magelang, Temanggung, Kopeng, Bandungan
Tourism/Resourt: hotels/resorts, Restoration of historic assets, etc.
Agriculture/Agro-processing: extension services, marketing, etc.

I-D Demak, Kudus, Jepara
Agriculture/Agro-processing: reservoirs, drainage, marketing, etc.
Industry: extension services, better access to Semarang, etc.

II-A Cilacap
Industry: power and water supply, industrial sites, access, etc.
Marketing: better access to loans

II-B Purwokerto, Banyumas, Baturaden
Agriculture/Resourt/Education & Culture

4.CONDITIONS AND DEVELOPMENT IMPACTS

1.Spatial Distribution of Development Potentials
Development Center: Semarang
Development Belt: roughly along the national highway from Brebes, Tegal, Pekalongan through Semarang, Salatiga to Surakarta and the east, with two spurs through Mageland and Klaten toward Yogyakarta.
Isolated Growth Centers: Cilacap/Banyumas and Kudus
Minus Areas: central highlands, eastern and southeastern ends of the Province Intermediate Areas : remaining areas

2.Selected Development Strategy
The Study evaluated three alternative strategies of (i) Differential Growth Strategy, (ii) Minus Areas Strategy and (iii) Cilacap Axis Development Strategy, and selected the following mix.
(1)Differential Growth Strategy and Minus Areas Strategy are mixed in a proportion of two to one.
(2)The family planning and transmigration programs are strengthened to reduce the population pressure of the province.
(3)Teh Cilacap Axis Strategy as a whole is not included but Cilacap and its direct vicinity is given emphasis for development.

5.TECHNICAL TRANSFER

1)OJT on regional development planning
2)Participation of the counterparts in the JICA training program
3)Joint report

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

- ■ In Progress or In Use
- ☐ Delayed
- ☐ Discontinued

(Description)

(FY1993 Overseas Survey)
1. Utilization of the Development Frame
(1) The development frame proposed by the JICA Study, notably the spatial frame of development potentials and the selected priority areas for development, was used as the basis for the 3rd 5-year Development Plan (1979/80 - 83/84)
(2) The development frame was modified on the basis of the performance evaluation study conducted in 1982 and used as the basis for development planning for the 4th 5-year Development Plan (1984/84 - 88/89)
(3) The spatial frame of development potentials as proposed by the JICA Study was used, with some modifications, as the conceptual basis for formulating the 15-year Provincial Spatial Design Structure Plan(RSTRP) in 1991. The province is subdivided into three areas by the level of productivity: namely, (i) high productivity areas (roughly coincide with Semarang and the Development Belt), (ii) lower productivity areas (Cilacap/Banyumas) and (iii) lowest assessment, three alternative development strategies are proposed for the selected priority areas.
2. Development Performance
(1) Industry and Industry-supporting Development
- Industrial park and/or estates established in Semarang
- Kretek tabacco industry and printing industry development in Kudus
- Agro-processing development in Magelang and Dieng Plateu (e.g. mushoroom production and canning)
- Development of Semarang Port financed by the OECF Loans (Phase-1 construction completed, Phase-2 construction under implementation)
- Urban planning and development in Semarang: implemented by the 2nd IUIDP from 1994
- Petrochemical complex and an industrial estate developed in Cilacap
(2) Tourism Development
- National Archeological Parks at Borobudur/Prambanan completed with the OECF Loans (L/A Apr. 1980 for E/S, and L/A Mar.1981 for restoration/construction)
- Agro-tourism being developed in Dieng Plateau
- Tourism development in the Semarang-Yogyakarta Complex:the Central Java and Yogyakarta Bridging Study completed by UNDP/UNESCO in 1993.
(3) Agricultrural development
- Irrigation development in Demak-Kudus Area: Jeratunseluna Project has been under implementation since the 4th 5-year Development Plan.
-High -Altitudo Agriculture under development in Dieng Plateau

(FY1994 Domestic Survey)
No information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①、③、④

和名 中部ジャワ州総合開発計画

{M/P,Basic Study,Other}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1995

ASE IDN/S 304/77

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Development Plan of the Banjarmasin Port

3.SECTOR
Transportation/Port

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Directorate General of Sea Communication

7.OBJECTIVES OF STUDY
M/P aiming the year 2000
F/S on the development plan aiming the year 1983

8.DATE OF S/W Mar.1976

9.CONSULTANT(S)
Overseas Coastal Area Development Institute

10.STUDY TEAM

No.of Members 8

Period Oct.1976-Aug.1977(10 months)

Total M/M	Japan	Field
63.40	22.80	40.60

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	157,386 (¥'000)
Contracted	105,398

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Kalimanatan, South Kalimantan Province

2.PROJECT COST
(US$1,000)
(US$1=415Rp)

	Total Cost	Local Cost	Foreign Cost
1)	253,960	135,000	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
1.Estimated annual throughput of Banjarmasin Port is 3.74 million tons and corresponding 130ha terminal area will be prepared.
2.To handle the above cargo, 5.6km-long whay is planned. The followings are new facilities.

- Wharf	L : 740m	D : -10m
- Wharf	L : 1,170m	D : -6m
- Wharf	L : 1,770m	D : -4m
- Wharf	L : 1,000m	D : -2m
- Warehouse	72,000sq.m	

Imp. Period: Jan.1978-Dec.1983

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

EIRR1)	24.10	FIRR1)	5.00
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
There are following conditions
- Future Cargo volume is based on the demand forecast for the year 1983 and 2000
- Cargo volume was forecasted 7,540 thousand tons in 2000

The following impacts are expected.
Since the area covered by Banjarmasin port includes not only South Kalimantan Province but also east central Kalimantan Province because of inland waterways like rivers and canals, it was expected that Banjarmasin port would be able to play important role as the gateway port for these two Provinces by this project.

5.TECHNICAL TRANSFER
Counterpart training

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ● Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

The project was implemented by ADB financing.

Oct.1984 F/S reviewed
Jun.1985 Detailed design comleted
Nov.1991 Construction completed

Project Outline:
Wharf: 320m long and 9m deep
Wharf: 500m long and 5m deep
Total project cost US$55 million

(FY1994 Domestic Survey)
Requested ADB Loan (90mil US$, Surabaya and Eastern Local Ports and Harbors Development).

2.MAJOR REASONS FOR PRESENT STATUS
High priority

3.PRINCIPAL SOURCE OF INFORMATION
①, ②

和名 バンジャルマシン港開発計画

{F/S,D/D}

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1992

ASE IDN/S 602/77

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Brantas River Basin Development Plan(follow-up)

3.SECTOR: Social Infrastructures/River & Erosion Control

4.REFERENCE NO.:

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY: Directorate General of Water Resource Development

7.OBJECTIVES OF STUDY:

8.DATE OF S/W: .0

9.CONSULTANT(S):

10.STUDY TEAM

No.of Members 3

Period Mar.1978-Mar.1978(0.3 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total 2,273 (¥'000)

Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Wuringi dam of Brantas River

2.PROJECT COST

(US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)

The study examined the problem of seepage of the base ground of the Wuringi dam, and advised on the suitable construction methods.

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

- ■ In Progress or In Use
- ☐ Delayed
- ☐ Discontinued

(Description)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 ブランタス河（ウリンギダム） アフターケア

{M/P,Basic Study,Other}

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1992

ASE IDN/S 603/77

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Brantas Middle Reaches River Improvement Project(follow-up)

3.SECTOR: Social Infrastructures/River & Erosion Control

4.REFERENCE NO.:

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY: Directorate General of Water Resources Development

7.OBJECTIVES OF STUDY:

8.DATE OF S/W: .0

9.CONSULTANT(S):

10.STUDY TEAM

No.of Members 3

Period Aug.1977-Sep.1977(0.4 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total 2,495 (¥'000)

Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Midstream basin of Brantas River in East Java Province (about 110 km in length)

2.PROJECT COST

(US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)

In order to facilitate the engineering service which was scheduled to be implemented with OECF financing, this follow-up study visited the middle reaches of Brantas River and clarified the basic approach in consultation with the Indonesian Government.

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

■ In Progress or In Use
☐ Delayed
☐ Discontinued

(Description)

1977.10.18 OECF L/A (E/S): 504 million yen (Brantas Middle River Flood Control)
1979. 3.15 OECF L/A: 5,118 million yen (Brantas Middle River Flood Control)
1985. 2.15 OECF L/A: 6,000 million yen (Brantas Middle River Improvement(2))

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①④

和名 ブランタス河中流部河川改修計画アフターケア

{M/P,Basic Study,Other}

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1995

ASE IDN/S 103/78

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
North and West Sumatra Tourism

3.SECTOR
Tourism/(Tourism in)General

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Department of Tourism,
Post and Telecommunication,Directorate General of Tourism

7.OBJECTIVES OF STUDY
Establishment of a basis for strategic tourism development in the North and West Sumatra provinces

8.DATE OF S/W Dec.1976

9.CONSULTANT(S)
Nippon Koei Co., Ltd.
Pacific Consultants International

10.STUDY TEAM
No.of Members 19
Period May.1977-Apr.1978(12 months)

Total M/M	Japan	Field
111.40	89.50	21.90

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 189,155 (¥'000)
Contracted 175,082

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
The Whole of North and West Sumatra Provinces

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	240,060		
2)			

3.CONTENTS OF MAJOR PROJECT(S)
The fifteen-year master plan for tourism development (1980-1995)covered Karo Plateau area,the Lake Toba area and the Minang Highlands area. The main projects consist of
(1) Conservation of nature,
(2) Conservation of scenery,
(3) Conservation of cultural heritage,
(4) development of infrastructure and network,
(5) development of tourism facilities,
(6) development of tourist towns(Brastagi,Parepat and Bukittingi),etc.

4.CONDITIONS AND DEVELOPMENT IMPACTS
The principles of tourism development in the study area were formulated in line with national tourism policy in order to have a maximum overall effect of linking the two provinces and to meet regional requirements, and so on.
The major specific measures for tourism development consisting of 33 items were proposed on the basis of the policy assumptions which include several measures for tourism promotion,improvement of transportation network for tourists,natural and cultural conservation, etc.

5.TECHNICAL TRANSFER
(1)On-the-job training for local counterparts during the field work period
(2)Training in Japan for 4 high official

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS
■ In Progress or In Use
☐ Delayed
☐ Discontinued

(Description)
As more than 10 years passed since the formulation of the master plan, the review of the study was conducted in "The Study on the Integrated Regional Development Plan for the Northern Part of Sumatra"(JICA).
Based on the results of the above study, the Directorate General of Tourism intends to promote tourism development in this region.kk

(FY1994 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 スマトラ西部及び北部トバ湖周辺基盤整備計画

{M/P,Basic Study,Other}

PROJECT SUMMARY (M/P+F/S)

ASE IDN/S 201B/78

Compiled Mar.1990
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Ular River Improvement Project

3.SECTOR: Social Infrastructures/River & Erosion Control

4.REFERENCE NO.:

5.TYPE OF STUDY: M/P+F/S

6.COUNTERPART AGENCY: Directorate General of Water Resources Development, Ministry of Public Works.Indonesia

7.OBJECTIVES OF STUDY: Formulating the plans for river channel improvement & flood control, and irrigation & drainage improvement works in the downstream area.

8.DATE OF S/W: .0

9.CONSULTANT(S): Nikken Consultants., Inc.
Nippon Koei Co., Ltd.

10.STUDY TEAM

No.of Members 35

Period Jul.1976-Jul.1978(24 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	339,695 (¥'000)
Contracted	192,650

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Ular River basin in North Sumatra Province

2.PROJECT COST (US$1,000) (US$1=625Rp.)

	Local Cost	Foreign Cost
M/P 1)		
2)		
F/S 1)	20,736	12,947
2)		
3)		

3.CONTENTS OF MAJOR PROJECT(S)

The Overell Plan was composed of the river-channel improvement for the Ular River based on the desigh discharge of 800m3/s over a stretch of 35km from river mouth and the agricultural development plan over an area of 18,500ha situated in the lower Ular river basin. IN succession, Feasibility Study was made on the plan and the following works were proposed.

(1)Flood Control
a.Channel inprovement work for the Ular River over a stretch of about 35km from river mouth up to Serbajadi Bridge.
b.Channel Improvement work for Pulau Gambar Canal over a stretch of about 3.5km from the confluence with the Ular river up to the Sennah Divergence.
The channel improvement works include channel excavation, dike embankment,
construction of drainage sluices, etc.

(2)Irrigation and Drainage Improvement
a.Main irrigation canals: construction of new canals (2.6km), two intakes and 10stilling basins, improvement of canals (20.4km) and one intake.
b.Secondary irrigation canals: construction of new canals(158.5km) and improvement of canals(51.5km).
c.Drainage canals: improvement of main drainage canals(125km) an secondary drainage canals(136km).

Imp. Period: .1979-.1985

4.FEASIBILITY AND ITS ASSUMPTIONS: Feasibility: Yes

EIRR1)	20.00	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

(1)Conditions of Evaluation
a.Construction: full-contracting system
b.Price: as of 1977
c.Construction period: seven years from beginning of January 1979 to the end of the 1984/85 fiscal year
d.Economic life of the project: 50 years after completion of the works

(2)Development Impacts
The project will prevent the productive lands for palm oil, rubber, coconut and rice from flooding of the Ular river, and will enable a year-round irrigation farming over an area of 18,500 ha.
An intensive rise farming by double cropping is to be introduced and annual production of paddy in the project area is expected to be about 166,500 tons at the full development stage.

5.TECHNICAL TRANSFER

(1)Seminar on river improvement and sabo by JICA experts at the job site
(2)On the job training through the study work
(3)Training by joining the study team in formulating the draft final report in Japan

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ● Implementing
  - ○ Processing
- ☐ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)

Based on the proposals of the study, the detailed design was undertaken with an OECF loan in 1979, and the construction has been carried out with the following OECF financing.

Mar.1979 OECF loan agreement (E/S, 420 million yen)
May.1981 OECF loan agreement (8,140 million yen)
1981 E/S completed.
Feb.1990 OECF loan agreement (21,518 million yen)
Part of the loan used for th Ular River Improvement Project
Jun.1995 Construction to be completed

(FY1994 Domestic Survey)
Feb.1980-Apr.1981 Detailed design(by OECF Loan)
1)Reviewing previous studies and plans
2)Additional data collection, topographical survey and soil-mechanics investigation
3)Detailed design for
a)River channel improvement from Serbajadi bridge to the estuary(34km)
b)Improvement and extension of irrigation facilities for 18,500ha area in the Ular river basin.
4)Preparation of operation and maintenance manual
Jun.1982-Nov.1990 Construction and supervision of construction(by OECF Loan)
1)Construction of river channel improvement works(34km)
2)Construction of improvement works for irrigation/drainage facilities(18,500ha)
3)Supervision of the above construction works
Dec.1989-Jun.1995 Additional detailed design and construction(by OECF Loan)
1)To sustain the function of the existing irrigation/drainage facilities and flood control facilities by executing up-grading works
2)Additional detailed design and supervision of construction works
3)Preparation of detailed O&M manual

2.MAJOR REASONS FOR PRESENT STATUS:

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 ウラル河治水及び灌漑・排水改良計画（M／Pはウラル河総合河川改修計画）

{M/P+F/S}

PROJECT SUMMARY (F/S)

ASE IDN/S 305/78

Compiled Mar.1986
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Jakarta Ring Road Project

3.SECTOR: Transportation/Road

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Directorate of Planning,Directorate General of Highway, Ministry of Public Works

7.OBJECTIVES OF STUDY: Highway Plan

8.DATE OF S/W: Dec.1976

9.CONSULTANT(S): Pacific Consultants International

10.STUDY TEAM

No.of Members 15

Period Mar.1977-Mar.1978(13 months)

Total M/M	Japan	Field
	54.00	

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	151,992 (¥'000)
Contracted	90,809

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Boundary of Jakarta

2.PROJECT COST (US$1,000) (US$1=270Yen)

	Total Cost	Local Cost	Foreign Cost
1)	369,000	150,000	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

Designed length of the road: 48 km
Standard: 4-lane heighway standard (expandable to 6-lane standard)
Width of the lane: 3.75 m
Designed speed-capacity:120 km/h
Number of interchanges: 3 junctions to highways
5 interchanges to regular roads
Average distance between interchanges: 6 km

Imp. Period: .1981~.1985

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	17.50	FIRR1)
EIRR2)		FIRR2)
EIRR3)		FIRR3)

Conditions and Development Impacts:

Traffic volume was forecasted for 1985,1990,2000.
Only 3/4 of the full length of the ring road was the object of the F/S.
Land use plan was prepared for adjacent areas on both sides of the road.
Beneficial effects include dispersion of traffic concentrating from 3 directions.

5.TECHNICAL TRANSFER

(1) Training of counterparts in Japan
(2) Use of local consultants for soil type analysis

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ○ Completed
  - ● Partially Completed
  - ○ Implementing
  - ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

Funding request has been repeatedly submitted to OECF since 1980, but the E/S loan has not been approved, mainly because the Intra Urban Tollway System Project was given a higher priority.
E/S loan for 939 million yen was pledged in 1985. The D/D was implemented in 24 months (Mar.1988-Feb.1990).
The following segments were added.
A.Cengkareng Access - Jakarta-Tangerang Tollway 8.2 km
B.Jakarta Coastal Road - JI.Jakarta-Bekasi 6.5 km

(FY1993 Overseas Survey)
1)D/D of Above completed (1986 - 1988)
and financed by OECF undertaken by Directorate of Urban Road Development (Binkot)
2)D/D of B above completed (1984 - 1985)
and financed by IBRD undertaken by Binkot.
3)The construction of some section completed (1985 - 1987)

(FY1994 Domestic Survey)
After dividing the project into six segments using the activities of private sector, construction of the two segments has started.

2.MAJOR REASONS FOR PRESENT STATUS

(1)Important element in Metropolitan Jakarta Tollway network ,expected to induce development and downtown dispersion
(2)Included in the general M/P as a portion of Metropolitan Jakarta Tollway network
(3)Increased urgency to construct side roads before the tollways thereby E/S became necessary
(4)Counterpatt agency is highly experienced
(5)Private sector back up in Japan

3.PRINCIPAL SOURCE OF INFORMATION

①、②

和名 ジャカルタリングロード計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1995

ASE IDN/S 306/78

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Expansion Project of the Bitung Port

3.SECTOR: Transportation/Port

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Directorate General of Sea Communication

7.OBJECTIVES OF STUDY: M/P aiming the year 2000 F/S on the development plan aiming the year 1985

8.DATE OF S/W: Feb.1977

9.CONSULTANT(S): Overseas Coastal Area Development Institute
Pacific Consultants International

10.STUDY TEAM

No.of Members 7

Period Jul.1977-Mar.1978(9 months)

Total M/M	Japan	Field
47.00	46.00	1.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	98,988 (¥'000)
Contracted	70,549

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: North Sulawesi Province,North part of Sulawesi island

2.PROJECT COST

		Total Cost	Local Cost	Foreign Cost
(US$1,000)	1)	21,422	10,433	
(US$1=415Rp)	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)

Bitung Port is situated north of Sulawesi island, key point of local sea traffic. To handle 2.4 million tons in 1985, the following facilities are planned.

- Wharf L : 690m D : -5.5m
- Wharf L : 130m D : -3.0m
- Warehouse 15,650sq.m
- Road 44,100sq.m

Imp. Period: .1978~Dec.1984

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	19.70	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

There are following conditions
-Future Cargo Volume is based on the demand forecast for the year 1985 and 2000.
This forecast depends on the GRDP of the area covered by Bitung port.
-Main Cargos are Foodstuffs, Agricultural Products, Construction Materials, Production Materials, Vehicles and Petroleum.
Since the area covered by Bitung port does not have enough population or economic power for making independent economic area, it is very important for the economic development of the area to improve domestic and foreign trade by this Bitung port Expansion Project.

5.TECHNICAL TRANSFER

Counterpart training
Training for the methods of the port planning was carried out at the site.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- ☐ Promoting
- ■ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)

The project was suspended. The review of the F/S was done by the World Bank in March 1988.

(FY1993 Domestic Survey)
A new feasibility study by JICA with a target year of 2000 commenced in September 1993 and will be concluded in March 1994.

(FY1993 Overseas Survey)
New F/S survey has been implemented by JICA.
Final report is scheduled to be completed on March 1994.

(FY1993 Overseas Survey)
No additional information.

(FY1994 Domestic Survey)
No additionl information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①、②

和名 ビトン港拡張計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1995

ASE IDN/S 307/78

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Development Plan of the Port of Semarang

3.SECTOR
Transportation/Port

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Directorate General of Sea Communication

7.OBJECTIVES OF STUDY
Expansion and improvement measures in the access channel: M/P aiming at year 2000
F/S on the development plan aiming at year 1985
Urgent improvement program aimed at year 1980

8.DATE OF S/W .0

9.CONSULTANT(S)
Overseas Coastal Area Development Institute
Japan Port Consultants Co., Ltd.
Pacific Consultants International

10.STUDY TEAM
No.of Members 8
Period Sep.1977-Aug.1978(10 months)

Total M/M	Japan	Field
30.00	29.00	1.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 101,886 (¥'000)
Contracted 78,204

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Central Java

2.PROJECT COST

(US$1,000) (US$1=415Rp)		Total Cost	Local Cost	Foreign Cost
	1)	73,420	30,440	
	2)	120,160	37,940	
	3)			

3.CONTENTS OF MAJOR PROJECT(S)

Plan	High Projection	Low Projection
1.Wharf		
Deep sea general cargo wharf		
Cargo volume	870,000 t	780,000 t
Length of wharf	555 m	370 m
Number of wharfs	6	5
Regional harbor		
Cargo volume	860,000 t	740,000 t
Length of wharf	1,550 m	1,330 m
2.Length of breakwater	4,550 m	4,550 m

Imp. Period: Feb.1981~Oct.1985

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

EIRR1)	10.50	FIRR1)	2.90
EIRR2)	12.60	FIRR2)	3.40
EIRR3)		FIRR3)	

Conditions and Development Impacts:
There are following conditions
-Future Cargo volume is based on the Future GRDP of Central Java.The annual growth rate of the GDP estimated as follows,

	1976 - 1978	1979 -
case 1	7.5%	7%
case 2	55% of national growth rate	same as the national growth rate

There was a congestion problem in the land transportation which carried the most of the foreign trade cargo from Central Java, and the congestion obstructed the economic development of the area.It was expected that the wharves for ocean going ships planned by this project will solve the congestion problem and improve the economic development of the area.

Note: The above EIRRs and FIRRs are for 1) Low projection and 2) High projection

5.TECHNICAL TRANSFER
Counterpart training Training for the methods of the port planning and the industrial development planning was carried out at the site.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS
- ■ Completed or in Progress
  - ● Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

Mar.1979 OECF L/A signed (E/S, 480 million yen)
Mar.1981 OECF L/A signed (17.3 billion yen)
Jun.1986 Phase I construction completed

(FY1994 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS
Significance of the impact by the Project:
Improve the foreign trade,economic development and economic stability of the area.

3.PRINCIPAL SOURCE OF INFORMATION
①、④

和名 スマラン港開発計画（フェーズI）

{F/S,D/D}

PROJECT SUMMARY (F/S)

ASE IDN/S 308/78

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY:
Hospital Facilities Improvement Project

3.SECTOR:
Social Infrastructures/Archtecture & Housing

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY:
Ministry of Health

7.OBJECTIVES OF STUDY:
Development of 20 hospitals in three provinces

8.DATE OF S/W: .0

9.CONSULTANT(S):

10.STUDY TEAM
No.of Members 8
Period Apr.1978-Oct.1978(7 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE
Total 21,874 (¥'000)
Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA:
Three provinces of North Sulawesi, South Sulawesi, and North Sumatra

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)			
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

The study undertook the following tasks.
1) Analysis of the present situation of medical services and proposals for improvement
2) Examination of the present medical equipment and supplies and proposals for improvement
3) Evaluation of hospital-related facilities and proposals for improvement
4) Analysis of the needs and possibilities of infrastructural development necessary to support the improvement of hospital services

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes/No

EIRR1)	FIRR1)
EIRR2)	FIRR2)
EIRR3)	FIRR3)

Conditions and Development Impacts:
The proposed project will contribute to the improvement of medical services and hospital facilities.

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ● Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

The project was completed by the provision of the OECF fund for medical equipment procurement.

Aug.1979 OECF loan agreement on medical equipment procurement (3,783 million yen)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 病院整備計画

{F/S,D/D}

PROJECT SUMMARY (Basic Study)

Compiled Mar.1990
Revised Mar.1995

ASE IDN/A 501/78

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Forest Inventory for Management and Logging in Central Java

3.SECTOR
Forestry/Forestry & Forest Conservation

4.REFERENCE NO.

5.TYPE OF STUDY Basic Study

6.COUNTERPART AGENCY
PERUM PERHUTANI

7.OBJECTIVES OF STUDY
(To establish the inventory method of merkusi pine forest)

8.DATE OF S/W Dec.1976

9.CONSULTANT(S)
Japan Forest Technical Association

Kokusai Kougyo Co., Ltd.

10.STUDY TEAM

No.of Members 14
Period Nov.1976-Mar.1978(16 months)

Total M/M	Japan	Field
28.00	20.00	8.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Aerial photography

12.EXPENDITURE

Total	96,770 (¥'000)
Contracted	69,451

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
An area of 350sq.km within the jurisdiction of Pekalongan Forest Office, Central Java Province

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)
This project is a forest inventory works in the pine plantations within the jurisdiction of Pekalongan Forest Office, where is the training site for the technical cooperation for mountain logging practice project in Java.

Aerial photography was implemented over the subject area of merkusi pine plantation under the jurisdiction of Pekalongan District Forestry Office, where located at Central Java Province of Indonesia. Using the aerial photos, aerial photo-interpretation on forest types and sample plot survey were conducted. After all the photo stand volume table was prepared.

4.CONDITIONS AND DEVELOPMENT IMPACTS
The forest resources inventory work on the merkusi pine plantation of the District Forestry Office became necessary since the paper manufacturing factory planned asuumes the site as one of the material supply sources.

The forest resources inventory enables the precise estimation of material supply capacity of the subject area at present and in the future. Especially information on the distribution of forest resources using forest types interpretation, and evaluation of land productivity, will definitely contribute to formulation of the further development plan of the markusi pine plantation.

Not only developing log supply, it also leads to develop the production of by-products such as pine resin, which would economically contribute to the management of the District Forestry Office after all. Besides those such activities would have positive impact on development of employment opportunity for local inhabitants.

5.TECHNICAL TRANSFER
1.To accept trainees out of counterparts 2.To conduct sample plot survey for forest inventory with counterparts. 3.To conduct aerial photointerpretation and transferring its results onto maps with

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS
- ■ In Progress or In Use
- ☐ Delayed
- ☐ Discontinued

(Description)
The technical cooperation for mountain logging practice project in Java was started in 1983 and complete in 1985.

(FY1994 Domestic Survey)
No information.

(FY1994 Overseas Survey)
Perum Perhutani conducted "Mountain Logging Practice" from 1982 to 1986. Since then, due to the change of the government policy, the area to provide raw material for pulp has moved from Central Java to Aceh and North Sumatra.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、③

和名 中部ジャワ州プカロンガン林業資源調査

{M/P,Basic Study,Other}

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1992

ASE IDN/S 604/78

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY
Wonogiri Irrigation and River Improvement Project(follow-up)

3.SECTOR
Social Infrastructures/River & Erosion Control

4.REFERENCE NO.

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY
Directorate General of Water Resources Development

7.OBJECTIVES OF STUDY
Identification of an optimum construction plan

8.DATE OF S/W: .0

9.CONSULTANT(S)

10.STUDY TEAM
No.of Members
Period Nov.1978-Dec.1978(1 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 6,794 (¥'000)
Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)
In order to handle the relocation and other related problems vis-a-vis the river channel improvement component of the Wonogiri multi-purpose dam project, this study reviewed the feasibility study and evaluated the phasing of the construction plan and recommended the optimum schedule of implementation.

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS
■ In Progress or In Use
☐ Delayed
☐ Discontinued

(Description)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 ソロ河ウオノギリ多目的ダム関連河川改修計画アフターケア

{M/P,Basic Study,Other}

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1995

ASE IDN/S 104/79

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY
Shipbuilding Industry Development

3.SECTOR
Transportation/Marine Transportation & Ships

4.REFERENCE NO.

5.TYPE OF STUDY: M/P

6.COUNTERPART AGENCY
Directorate General of Sea Communications, Ministry of Communications, and Directorate General of Basic Metal and

7.OBJECTIVES OF STUDY
Examination of and advice on the needs of rehabilitation and new construction

8.DATE OF S/W: .0

9.CONSULTANT(S)
The Shipbuilding Research Centre of Japan

10.STUDY TEAM

No.of Members 14

Period Sep.1977-Nov.1977(8 months)
May.1978-Dec.1978

Total M/M	Japan	Field
21.33	16.00	5.33

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	68,785 (¥'000)
Contracted	42,575

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
18 major shipbuilding yards in Indonesia

2.PROJECT COST

		Total Cost	Local Cost	Foreign Cost
(US$1,000)	1)	474,000		
(US$1=415Rp)	2)			

3.CONTENTS OF MAJOR PROJECT(S)

The study suggested to modernize four shipbuilding yards in order to meet the future demands for ship building and repair.
The proposed targets are as follows.

1) Ship building:
   1983 90% of the annual demand (approx. 50,000GT)
   1990 100% of the annual demand (approx. 94,000GT)
2) Repair work:
   1983 70% of the annual demand (approx. 1.4 million GT)
   1990 100% of the annual demand (approx. 2.8 million GT)

In addition, the study proposed the establishment of a supplies center which would import materials for ship building and repair, and a training center for manpower development.

4.CONDITIONS AND DEVELOPMENT IMPACTS

The proposed project will induce increased production, savings of foreign exchange, creation of employment opportunities and regional development.

5.TECHNICAL TRANSFER

On-the-job training on the data analysis and the preparation of the report.

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

- ■ In Progress or In Use
- ☐ Delayed
- ☐ Discontinued

(Description)

Among the 18 major shipbuilding yards examined by the study, a feasibility study was conducted on the Makassar Shipyard (FY1980).

(FY1994 Domestic Survey)
No information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 造船振興計画

{M/P,Basic Study,Other}

PROJECT SUMMARY (M/P)

ASE IDN/S 107/79

Compiled Mar.1986
Revised Mar.1995

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Central South Sulawesi Water Resources Development Project

3.SECTOR
Social Infrastructures/Water Resource Development

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Directorate of Planning and Programming

7.OBJECTIVES OF STUDY
Irrigation Development
Topographic survey

8.DATE OF S/W Oct.1976

9.CONSULTANT(S)
Nippon Koei Co., Ltd.
Mitsui Consultants Co., Ltd.
System Science Consultants

Nikken Consultants., Inc.

10.STUDY TEAM

No.of Members	36	
Period	Dec.1976-Jun.1978(39 months)	
	Aug.1978-Mar.1980	
Total M/M	Japan	Field
258.91	81.60	177.31

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Aerial Photography

12.EXPENDITURE

Total	673,876 (¥'000)
Contracted	643,458

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
The area centered by Lake Tempe,south Sulawesi

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	340,400		
2)			

3.CONTENTS OF MAJOR PROJECT(S)
The project area is centered by Lake Tempe where the Walanae, the Bila, the Boya, and the Cenranae rivers flow in and out of the lake.
The catchment is 8,000sq.km in area,and main projects hereinafter has been proposed for maximum use of these water resources.
- Irrigation: Area 81,000ha(9 irrigation plots)
- Flood control: Extension by river improvement 117km
- Fresh water fishery: prohibition of fishing for a whole year of lake Tempe, construction of hatcheries and fisheries.
- Multi-purpose dam: Walimpong dam (Rockfill dam, height-82m, crest length-900m)
- Hydro-electric power: Walimpong hydro-electric power station (output:8,000kw, 70GW/year)
- Sabo: Sabo dam 12 plots, compacting plots-about 140.

The total cost above only pertains to the irrigation development.

4.CONDITIONS AND DEVELOPMENT IMPACTS
The project area has abundant water resources. However, the productivity of agricultural sector is considerably low because farmers, without facilities for irrigation, rely on rain-fall agriculture.
On the other hand,damage from flooding in the rainy season is quite high every year.
Furthermore, although Lake Tempe is suitable for fresh water fishing, the fish catch decreases annually due to reckless fishing .
The completion of this project may solve the above problems, and local communities will be able to raise their standard of living.
It is also expected that the nation will be able to promote self-sufficiency in food.

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS
- ■ In Progress or In Use
- ☐ Delayed
- ☐ Discontinued

(Description)

This master plan suggested 7 developing plans, of which 3 projects were implemented as follows.

Langkemme irrigation project
- Mar. 1981 F/S completed (JICA)
- Mar. 1985 E/S completed (OECF loan 320 million yen)
- Nov. 1987 Construction started (OECF loan 6.95 billion yen)
- Jun. 1994 Construction to be completed

Bila irrigation project
- Jun. 1982 F/S completed (JICA)
- Dec. 1988 E/S completed (OECF loan 550 million yen)
- Feb. 1992 1st stage construction started (OECF loan 6.46 billion yen)
- Jan. 1993 2nd stage construction started (OECF loan 3,788 million yen)
- Jul. 1995 1st stage construction to be completed
- Mar. 1997 2nd stage construction to be completed

Sanrego irrigation project
- Mar. 1983 F/S complted (JICA)

(FY1994 Domestic Survey)
JICA started F/S study(Gilirang irrigation project) in Feb.1994.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、④

和名 南スラウェシ州中部水資源総合開発計画

{M/P,Basic Study,Other}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1995

ASE IDN/S 309/79

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Expansion Project of the Port of Balikpapan

3.SECTOR
Transportation/Port

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Directorate General of Sea Communication

7.OBJECTIVES OF STUDY
Study on the development of deep sea port as the main development center in the east kalimantan

8.DATE OF S/W Dec.1978

9.CONSULTANT(S)
Overseas Coastal Area Development Institute

10.STUDY TEAM
No.of Members 6
Period Jan.1979-Nov.1979(10 months)

Total M/M	Japan	Field
44.51	34.84	9.67

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 99,579 (¥'000)
Contracted 86,160

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Kalimantan,East Kalimantan Province

2.PROJECT COST

(US$1,000) (US$1=625Rp)		Total Cost	Local Cost	Foreign Cost
	1)	20,888	8,686	
	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)
As the short-term development plan, following facilities are planned.

- Wharf for foreign trade 330m
- Wharf for small vessels 75m
- Jetty 50m
- Reclamation 905,000sq.m
- Warehouse 6,000sq.m

Imp. Period: Oct.1981~Dec.1984

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

EIRR1)	13.40	FIRR1)	10.00
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
Cargo volume in the port was forecasted 10,500 thousand tons in 1985 and 16,900 thousand tons in 2000.

Hinterland of the port will be estern Kalimantam and central Celebes as a foreign trade port, Balikpapan city, and Aurrounding villages as a domestic port.

5.TECHNICAL TRANSFER
Counterpart training

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ● Completed
  - ○ Partially Completed
  - ○ Implementing
  - ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

The project was implemented by ADB financing.

Sep.1984 JICA F/S reviewed
Jun.1985 D/D completed

Total project cost: US$22.9 million

(FY1993 Overseas Survey)
Construction complete (1991-1993)
Investment cost is Rp. S,246,606,000

(FY1994 Domestic Survey)
Requested ADB Loan (90mil. US$, Surabaya and Eastern Local Ports and harbors Development).

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②

和名 バリクパパン港港湾整備計画

{F/S,D/D}