PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1986
Revised Mar.1996

ASO PAK/S 202B/81

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Introduction of Containerization

3.SECTOR
Transportation/Port

4.REFERENCE NO.

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

6.COUNTERPART AGENCY
Ports and Shipping Wing,
Ministry of Communication

7.OBJECTIVES OF STUDY
Preparation of long-term project and short-term developmet plan of container terminal

8.DATE OF S/W 1980/7

9.CONSULTANT(S)
Overseas Coastal Area Development Institute

10.STUDY TEAM

No.of Members 10

Period Nov.1980-Mar.1982(16 months)

Total M/M	Japan	Field
67.40	49.60	17.80

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	142,298 (¥'000)
Contracted	134,266

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Karachi

2.PROJECT COST (US$1,000)

M/P	1)	313,432 Local	112,917 Foreign	200,515
	2)	301,984 Cost	107,472 Cost	194,512
F/S	1)	115,472	43,299	72,173
	2)	103,018	38,594	64,424
	3)	65,904	20,560	45,344

3.CONTENTS OF MAJOR PROJECT(S)
<M/P> Select and compare two ports, karachi port and Qasin port, as container terminal. Set up an inland CFS in Lahore.
(Main works)
Long-term project:
Container terminal: 6 berth(New construction)
Inland CFS: 50 ha
Urgent improvement plan:
Container terminal: 2 berth(Qasim)
Inland CFS: 30 ha(Lahore), Railway transport

<F/S>Urgent Improvement Plan

	Karachi	Qasim
Container berth	600m	600m
Container Terminal	282,400sq.m	282,400sq.m
Railway	11,700m	5,500m
Roads	4,700m	2,500m

Budget 1) for Karachi Port, 2) for Qasim Port and FIRR 3) for Inland CFS

Imp. Period: 1982.1-1986.12

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

EIRR1)	14.30	FIRR1)	11.20
EIRR2)	12.20	FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
<M/P>There is a tendency to increase containerization in the world. It is possible for karachi Port to make efficient the existing cargo handling facilities and deal with the container cargo which is expected to rapidly increase in the near future, and to improve economic activities in Pakistan by implementating this project.
<F/S>[Conditions]
Container cargo volume is predicted based on the feasibility study in 1978 and 1980 by import/export cargo items and sea route. It is assumed that tariff is raised by 25% according to a financial analysis.
[Development Impact]
It is possible for Karachi Port to make efficient the existing cargo handling facilities and deal with the container cargo which is expected to rapidly increase in the near future, and to raise economic activities in Pakistan by implementing this project.

5.TECHNICAL TRANSFER
Counterpart training (4 persons)
Instruction on method of port planning and feasibility study

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 basic infrastructure was constructed in 1986 as 1st stage with ADB loan in the Qasim Port.
-After the 1st stage project, there was an expansion project in the port, but the Master Plan proposed in the JICA study did not suit the actual conditions of the port. Therefore, a review of the Master Plan was required and the Government of Fakistan contacted the UK for assistance. However, no action has been taken to date to implement the restudy.

(FY1991 Overseas Survey)
Container Terminals at Karachi Port and Port Qasim will be developed by private sector.

(FY1993 Overseas Survey)
It is going to be implemented during the period from June, 1994 to June, 1996 by means of the financing to be arranged by the private sector in Australia with an amount of Rs. 160 million.
The location of the container terminal at Port Qasim has been changed by the private sector who wishes to save the investment. And the private sector offerred to establish two berths of container terminal, each bearth having 300 meters quay wall.

(FY1994 Domestic Survey)
No additional information.

(FY1994 Overseas Survey)
(1)Container terminal
: Both Karachi and Quasim ports were reluctant to build container terminals just after the F/S. No progress was found even when 12years passed after the F/S.
: JICA's M/P is not reconciled.
: According to the policy change of the government, a policy of privatization promotion was employed. The private sector is now examining a plan to change the existing berth at Karach and Qasim ports to the container terminals thereat.
: A private firm is negotiating with Karachi port authority about a transformation project of a container terminal based upon BOT method.
: An Australian private firm is planning to transform existing two berths (total cost: A$ 160mil., June 1994-June1996). A civil lawsuit concerning the company's bid is under deliberation (the Australian firm won at the high court). The container terminal plan at Qasim port was partially changed (some buildigns were relocated from the west bank, according to the JICA plan, to the south). The size of the terminal is not changed.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、③、⑥ Port and Shipping Wing, Ministry of Communication

和名 コンテナ輸送導入計画

Continued on {M/P+F/S}

状況（要約表添付文書）

ASO PAK/S 202B/81 (M/P+F/S)

Name of Study: Introduction of Containerization

Country: Pakistan

Type of Study: M/P+F/S

Sector: Transportation/Port

Present Status: Partially Completed

(Description)

-The basic infrastructure was constructed in 1986 as 1st stage with ADB loan in the Qasim Port.
-After the 1st stage project, there was an expansion project in the port, but the Master Plan proposed in the JICA study did not suit the actual conditions of the port. Therefore, a review of the Master Plan was required and the Government of Pakistan contacted the UK for assistance. However, no action has been taken to date to implement the restudy.

(FY1991 Overseas Survey)
Container Terminals at Karachi Port and Port Qasim will be developed by private sector.

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It is going to be implemented during the period from June, 1994 to June, 1996 by means of the financing to be arranged by the private sector in Australia with an amount of Rs. 160 million.
The location of the container terminal at Port Qasim has been changed by the private sector who wishes to save the investment. And the private sector offerred to establish two berths of container terminal, each bearth having 300 meters quay wall.

(FY1994 Domestic Survey)
No additional information.

(FY1994 Overseas Survey)
(1)Container terminal
: Both Karachi and Quasim ports were reluctant to build container terminals just after the F/S. No progress was found even when 12years passed after the F/S.
: JICA's M/P is not reconciled.
: According to the policy change of the government, a policy of privatization promotion was employed. The private sector is now examining a plan to change the existing berth at Karach and Qasim ports to the container terminals thereat.
: A private firm is negotiating with Karachi port authority about a transformation project of a container terminal based upon BOT method.
: An Australian private firm is planning to transform existing two berths (total cost: A$ 160mil., June 1994-June1996). A civil lawsuit concerning the company's bid is under deliberation (the Australian firm won at the high court). The container terminal plan at Qasim port was partially changed (some buildigns were relocated from the west bank, according to the JICA plan, to the south). The size of the terminal is not changed.
(2)Inland container freight station (ICFS)
: The ICFS is not built yet at Lahore.
: In December1994, Pakistan Railways presented a conceptual design to build ICFS changing the construction site. Sheikhupura at the northwestern district was selected for the location instead of Kahna Kacha at the south of Lahore. Implementation based upon private funds, such as BOT, is now under deliberation.

(FY1995 Domestic Survey)
No additional information.

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASO PAK/A 301/82

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

2.NAME OF STUDY
Agricultural Development Project with Widening of Pat Feeder Canal

3.SECTOR
Agriculture/Irrigation, Drainage & Reclamation

4.REFERENCE NO.

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY
Ministry of Economy, Baluchistan Provincial Bureau of Water Power Generation

7.OBJECTIVES OF STUDY
Feasibility study on the improvement planning of irrigation and drainage

8.DATE OF S/W: 1982/2

9.CONSULTANT(S)
Sanyu Consultants Inc.

10.STUDY TEAM

No.of Members 12
Period Feb.1982-Jan.1983 (12 months)

Total M/M	Japan	Field
47.80	28.70	19.10

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	127,562 (¥'000)
Contracted	119,996

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Kachhi Plain, Baluchistan Province (Head of Indus River) Area 250,000 sq.m

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	193,810		
2)	172,000		
3)			

3.CONTENTS OF MAJOR PROJECT(S)
- Desert Pat Feeder canal : 11.1km
  Pat Feeder canal : 187.2 km
  Extension of Distributaries : 375 km
- Improvement and Construction of related canal structure
- Construction of minor canal: 1,224km
- Aerial survey

Note: The project cost 1) above is for case 3 and 2) is for case 4.

Imp. Period: 1982.6-1982.12

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes

EIRR1)	16.00	FIRR1)	
EIRR2)	14.60	FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

[Conditions]
1) The incremetal crop production was calculated as the direct benefit of the project.
2) The 1982 price is the standard price.
3) The price of the tradable goods is calculated from their world price.
4) The prices of the non-tradable goods were converted into the border price equivalents by making use of the conversion factors estimated in this study.
5) Opportunity cost of capital 12.5%

[Development Impacts]
Planting will be done in 60% or 50% of the field in each planting period in the district of 250,000ha.
The EIRRs 1) and 2) above are for Case-3 and for Case-4.

5.TECHNICAL TRANSFER
In the process of survey and study, technology was transferred to the local counterparts.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS
- [x] Completed or in Progress
  - ○ Completed
  - ● Partially Completed
  - ○ Implementing
  - ○ Processing
- [ ] Promoting
- [ ] Delayed or Suspended
- [ ] Discontinued or Cancelled

(Description)
(FY1992 Overseas Survey)
The proposed project is under implementation with ADB and OECF co-financing and the Japanese grant aid.
Total investment cost: US$ 142.6 million
Local currency: US$ 70.83 million
Foreign currency: US$ 71.77 million

Jan. 1986 ADB L/A signed (Rs.3,067 million)
Sep. 1987 OECF L/A signed (1,550 million yen)

The ADB loan finances the construction of Pat Feeder Canal (extension) and other facilities. 26% of the construction of the main canal is now completed. (Sir MacDonald & Partners Ltd.)
The OECF loan was used for the preparation of maps and the purchase of construction equipment and vehicles. The tender was completed in Sept. 1992.

The Japanese grant aid was used to establish a pilot farm in the project area. In Feb. 1990, five Japanese experts have been sent in relation to the management of the pilot farm. In addition short-term expert (irrigation and water management) was sent in Oct. 1992.
Mar.1988 E/N signed (396 million yen)
Aug.1988 E/N signed (1,668 million yen)

(FY 1993 Overseas Survey)
Unlined water courses were proposed. But now 10-30% Lining of water courses is provided like OEWM project. This change will be implemented in the proposed Pat Feeder Command Area Development Project co-financed by IFAD. It is expected to start on July-1994.

(FY1995 Domestic Survey)
ADB is implementing the construction work.

(FY1995 Overseas Survey)
10% Lining of water courses is scheduled to be completed in June, 2002 with IFAD fund.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

和名 パットフィーダー水路拡張計画

{F/S,D/D}

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1996

ASO PAK/S 101/83

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

2.NAME OF STUDY
National Transport Plan

3.SECTOR
Transportation/(Transportation in)General

4.REFERENCE NO.

5.TYPE OF STUDY: M/P

6.COUNTERPART AGENCY
Planning and Development Division

7.OBJECTIVES OF STUDY
Formulation of a master plan for nation-wide transport development

8.DATE OF S/W: 1981/9

9.CONSULTANT(S)
Mitsui Knowledge Industry

10.STUDY TEAM
No.of Members 18
Period Dec.1981-May.1983(18 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE
Total 326,297 (¥'000)
Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Entire country

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)
The study covered 1) roads and road transportation, 2) railways, 3) ports, 4) shipping, 5) aviation and airports, and 6) other transportation modes. Major proposals are as follows:
- Improvement of database on transport and traffic
- Improvement and expansion of MTRC
- Comprehensive study on inland water ways
- Introduction of containerization and related adjustments of transport modes

4.CONDITIONS AND DEVELOPMENT IMPACTS
[Development impacts]
The comprehensive transportation development plan will contribute to the realization of the integrated and efficient transport system by reducing the diseconomy of sectionalism in development planning in terms of the mode of transportation. The most important point is to establish optimum mix of modes in development planning.

5.TECHNICAL TRANSFER
1. Participation of 3 counterparts in JICA training program
2. OJT

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS
- [x] In Progress or In Use
- [ ] Delayed
- [ ] Discontinued

(Description)
The master plan was incorporated into the transport sector of the 6th Five-Year Development Plan (1983-88). Feasibility studies were undertaken on major airports (Karachi, Lahore and Islamabad).

(FY1993 Overseas Survey)
1) Motor way project is denied according to the results of this survey.
2) Indas highway has been constructed by OECF loan.
3) Geometric Design has been utlized in North-West province.
4) In order to determine the method of traffic forecast, NTRC and NHA have discussed which is better, AASHTO or JICA cretiria.

(FY1994 Domestic Survey)
No additional information.

(FY1994 Overseas Survey)
Comprehensive recommendations based upon data (e.g., traffic volume, etc.) analysis were presented, and the M/P contributed a lot to determination of basic transportation policies.

(FY1995 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

和名 全国総合交通計画

[M/P,Basic Study,Other]

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASO PAK/S 302/83

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

2.NAME OF STUDY: Pakistan Railways Locomotives Manufacturing Factory Project

3.SECTOR: Transportation/Railway

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Ministry of Railways, the Government of Pakistan

7.OBJECTIVES OF STUDY
Transport demand forecast and calculation of the necessary number of locomotives, and F/S and basic design for constructing a locomotive manufacturing factory

8.DATE OF S/W: 1982/3

9.CONSULTANT(S)
Japan Railway Technical Service

10.STUDY TEAM
No.of Members 12
Period Mar.1982-May.1983(14 months)

Total M/M	Japan	Field
74.44	59.70	14.74

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	168,180 (¥'000)
Contracted	143,335

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Bara Bandah, Nowshera, Northwest Frontier Province

2.PROJECT COST (US$1,000) (US$1=13.8Rs)

	Total Cost	Local Cost	Foreign Cost
1)	66,000	40,000	26,000
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
Construction of a locomotive factory for domestic production of 25 diesel electric locomotives (50 locomotives in future) per year
(1) Construction of locomotive factory
(2) Domestic production plan
1st phase(to be completed in one year after the opening of the factory) --- Domestic production ratio, 20%
2nd phase(to be completed in 2 to 5 years after the opening) --- 30-35%
3rd phase(to be completed in about 10 years after the opening --- 50%

Imp. Period: 1984.6-1989.6

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes

EIRR1)	12.50	FIRR1)	10.00
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
(Conditions)
The market price of April,1982 was chosen as a reference price. The project life is set at 33 years.(30 years after completion of the factory.)

(Development Impacts)
Reinforcement of railway transport capacity will promote nationwide development and contribute towards activation of the economy in the Northwest Frontier region where infrastructure is lacking.

A reduction in the use of foreign currency reserves is also expected because the supply of locomotives is at present entirely dependent on imports.

5.TECHNICAL TRANSFER
Two counterparts received training in Japan from JICA under the Colombo Plan.

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 was decided to implement the project in accordance with the recommendations of the study team, and the work started with OECF loans.

Feb.1984	OECF loan agreement on the locomotive plant (9,760 million yen)
May 1984	Consulting service agreement signed
July 1984	Consulting service started
1985	D/D completed
1989	Evaluation of tenders completed
Feb.1990	Construction started
Feb.1991	Installation of equipment started
Aug.1993	OECF L/A on the rehabilitation of locomotives (6,001 million yen)
Aug.1993	OECF L/A on the manufacture of diesel locomotives (6,067 million yen)

(FY1993 Overseas Survey)
Construction was completed in December 1993.

38 Diesel Locomotives (30 completed and 8 knocked-down) were provided by using the Japan's Yen Loan (L/A in Dec.1980, The railway transportation capacity increasing project, 9 billion Yen).

(FY1994 Domestic Survey)
No information.

(FY1994 Overseas Survey)
After the completion of the factory, 5 diesel locomotives were built at the factory, with parts/devices purchased in February 1984 with an OECF loan. Moreover, L/A of another OECF loan (6.7 billion yen) was concluded in August 1994, and parts/devices for 18 diesel locomotives will be purchased. Eight locomotives in the second year and ten in the third year will be produced at the factory using those parts/devices.

(FY1995 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、④

和名 国鉄機関車供給計画

(F/S,D/D)

PROJECT SUMMARY (F/S)

Compiled Mar.1988
Revised Mar.1996

ASO PAK/S 303/84

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Conduction of Water from Khanpur to Islamabad/Rawalpindi

3.SECTOR
Public Utilities/Water Supply

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Capital Development Authority (CDA)

7.OBJECTIVES OF STUDY
Study on the establishment of stable water supply system in Capital Area

8.DATE OF S/W 1983/12

9.CONSULTANT(S)
Sanyu Consultants Inc.
Nihon Suido Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 9
Period Jul.1984-Mar.1985(9 months)

Total M/M	Japan	Field
61.98	21.49	40.49

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	170,231 (¥'000)
Contracted	166,887

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Islamabad City ,Rawalpindi City

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	113,235	66,435	46,800
2)	32,824	19,406	13,418
3)	24,529	15,835	8,694

3.CONTENTS OF MAJOR PROJECT(S)

	Equipment & Scale
Ran Water Conveyance Facility	Intake Tower: 6.74cu.m/sec Aquaduct : 13.1km
Water Filtration Plant	Max.Capacity 522,000cu.m/day
Distribution Main Line	700mm-1.5km(2 lines) 1,500mm-1.6km 1,500mm-6.5km(2 lines)
Distribution Pond	13,000cu.m,PC Type X 2 16,000cu.m,PC Type x 1

Note: The a/m costs are 1) for Phase I, 2) for Phase II and 3) for Phase III.

Imp. Period: 1985. -1992. 1992. -1995. 1996. -2000.

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

EIRR1)	6.20	FIRR1)	6.60
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

[Prior conditions]	EIRR	FIRR
1) Recovery Period	24 years	36 years
2) Discount Rate	0 %	0 %
Benefit(Rp.million)	19,858	27,260
Cost (')	6,410	17,040
Net Current Value(')	13,248	10,219
Benefit Cost Ratio	3.07%	1.60%

[Development Impacts]
Supply of city water (Average 420,000T/day. Max. 523,600T/day)to 2 cities of Islamabad and Rawalpindi.
(Target of completion: year 2000)
The whole projects is divided into 3 phases and scheduled to take 15 years between 1985 and 2000.

5.TECHNICAL TRANSFER
Acceptance of 3 trainees from the local counterpart

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)

Oct.1987 Request for Yen Credit from Pakistan Government
Mar.1989 OECF loan agreement (12,518 million yen)

(FY1991 Overseas Survey)
Mar.1990 - Feb.1991 D/D undertaken
1992 - 1994 The construction shall be implemented

(FY1992 Overseas Survey)
Although the OECF loan is already available, the source of the domestic fund (Rs. 1,870 mil.) has not yet been identified. Presently the Federal government is studying the funding possibilities. However in order for the project to start, funding from the State government would also be required.

(FY 1993 Overseas Survey)
- Fund from Federal and Punjab government were decided. So this project would be inplemented until 1995 or 1996.
- Not only OECF but also Bank of Tokyo has fund for this project.

(FY1995 Domestic Survey)
It is expected to commence the implementation in the near future as the domestic financing become available.

(FY1995 Overseas Survey)
Feb. 1995 Construction stated.
(Oct. 1997 scheduled to be completed)

2.MAJOR REASONS FOR PRESENT STATUS
The project was delayed due to the difficulties concerning the land acquisition and the fund-raising.

3.PRINCIPAL SOURCE OF INFORMATION
①、②、④

和名 カンブールダム・イスラマバード・ラワルピンディ導水計画

{F/S,D/D}

PROJECT SUMMARY (M/P)

Compiled Mar.1990
Revised Mar.1996

ASO PAK/A 101/85

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Integrated Rural Development Project

3.SECTOR
Agriculture/(Agriculture in)General

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Ministry of Local Government and Rural Development, Capital Development Authority (CDA)

7.OBJECTIVES OF STUDY
Draw up a M/P to enforce the basic conditions to increase agricultural products, opportunities of employment and revenues for farmhouses in order to promote the integrated development of rural area included in Islamabad capital territory.

8.DATE OF S/W 1984/11

9.CONSULTANT(S)
Chuo Kaihatsu International Corp.
Nippon Giken Inc.
Japan Engineering Consultants Co., Ltd.

10.STUDY TEAM
No.of Members 16
Period Feb.1985-Mar.1986(14 months)

Total M/M	Japan	Field
72.06		47.70

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	212,498 (¥'000)
Contracted	195,893

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Islamabad capital territory (rural area: 59,500ha)

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
US$1=215Yen in 1985	1)	210,925		
	2)			

3.CONTENTS OF MAJOR PROJECT(S)
(1) Model Integrated Rural Area Development (MIRAD) Project
The project is located in rural area of Islamabad capital district. The project components include water supply by way of groundwater, small scale irrigation, road construction (35km), construction of agricultural machinery stations (10 units) and agricutural development stations (6 units).

(2) Upper Kurang Irrigation Project (UKIP)
The project is located in rural area of Islamabad capital district. Water source will be from the surface water of the Kurang river which runs through the central part of the capital district, and from groundwater to be tapped in the southern part of the project area. The irrigation area will be approximately 6,300ha in total.

4.CONDITIONS AND DEVELOPMENT IMPACTS
[Development Impacts]
1) Increase of agricultural production (increase of food crops production by way of irrigation project and increase in lovestock production)
2) Increase of farmers' income (increase in farmers' income as a result of increased production as well as increased employment opportunities)
3) Increase of employment opportunities (increase in overall employment opportunities due to intensive utilization of land resources for agriculture as well as non-agriculture uses)
4) Upgranding of living standards (improvement of living standards of rural population due to increased agricultural production and increased employment opportunities)
5) Environmental improvement (environmental improvement as a result of soil conservation schemes including reforestation, grassland development, vegetation protection, etc.)

5.TECHNICAL TRANSFER
(1) Training in Japan (2 persons)
(2) OJT

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
(1) Basic design for MIRAD was done in 1988 (Nippon Giken). This was followed by detailed design, and construction in 1989.

(2) Feasibility study for UKID was done in 1988

(FY1991 Overseas Survey)
No additional information.

(FY1992 Overseas Survey)
1989 Grant Aid (1,858 mil. yen) : MIRAD-I
1990 Grant Aid (1,254 mil. yen) : MIRAD-II

- The content of the grant aid is as follows:
construction of two irrigation dams, three deep wells, 16 waterworks and drainage facilities, improvement of roads (16km), two rural development centers, provision of agricultural machines and automobiles

- A detachment of two experts has been requested: an expert was dispatched in November 1992 (irrigation technology).
The other (an expert in agricultural technology) has not yet been dispatched.

- The c/p has a further request for technical asssistance in maintenance and management of the facilities

(FY1994 Domestic Survey)(FY1995 Domestic Survey)
No additional information.

(FY1995 Overseas Survey)
The construction was completed in 1991. The study findings like maps and basic data have been found very useful.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

相名 農村総合開発計画

(M/P,Basic Study,Other)

PROJECT SUMMARY (M/P)

Compiled Mar.1990
Revised Mar.1996

ASO PAK/A 102/86

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Paddy/Rice Handling and Processing Improvement Project

3.SECTOR
Agriculture/Agricultural Processing

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Ministry of Food and Agriculture

7.OBJECTIVES OF STUDY
Improvement of postharvest practice of rice

8.DATE OF S/W 1985/3

9.CONSULTANT(S)
Overseas Merchandise Inspection Co., Ltd.
Nippon Koei Co., Ltd.
System Science Consultants

10.STUDY TEAM

No.of Members 13
Period Jul.1985-Aug.1986(14 months)

Total M/M	Japan	Field
50.15	16.18	33.97

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	160,150 (¥'000)
Contracted	142,126

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Punjab, Sind

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	569,346		
US$1=154Yenin Aug.1986,Rs1 2)			

3.CONTENTS OF MAJOR PROJECT(S)
1. Direct rental operation of harvesting machines to the farmers for the harvest of rice and wheat crops.
2. Rental operation of rubber-roll husker to the collaborating rice mills.
3. Production of edible oil from rice bran through processing facility and relevant technology from which highly sophisticated use of the rice bran is much improved. In addition, the facility can be used for other local oil seeds and will increase efficiency of oil extraction then ultimately will save oil importation and foreign currency be involved.
4. Establishment of facilities for improving and developing postharvest technology in order to meet the farmers' request as well as requirement, necessary test and adjustment shall be made for the relevant postharvest machinery. At the same time necessary training for the handling and operation of the said machinery for the farmers is also implemented for the reasonable use of the by-products of the agricultural produce concerned together with the required implementation of the facility and machinery to go with.

4.CONDITIONS AND DEVELOPMENT IMPACTS
[Development Impacts]
1)Minimizing qualitative and quantitative losses of rice which occurred at each stage of postharvest operation
2)Supplying higher quality rice at low cost to both domestic and foreign markets
3)Increasing the income of farmers by rationalizing their farming practice and increases the foreign currency through the export concerned.

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
1.Project '1' was developed and carried out in the form of production and dissemination by private enterprises.
2.Project '2' was developed and carried out in the form of production and dissemination by the manufactures of agricultural machinery.
3.Project '3' and '4' were not materialized because high priority was not given to those projects
'Wharf Facilities Improvement Project for Export Rice' by RECP was derived from this M/P and it is under consideration.

(FY 1991 Overseas Survey)
No additional information.

(FY 1992 Overseas Survey)
-the implementation of project 3) is under consideration by Ministry of Food and Agriculture as a part of the Edible Oil Production Plan.
-After a request for Grant Aid for postharvest technology training was turned down, the following two requests has been made:
1) project-type technical cooperarion for machanization of rice cropping and impovement of postharvest techniques (1992)

2) ditachment of short-term experts in the field of agricultural machinery and postharvest technology (December 1992)

(FY 1993 Overseas Survey)
No additional information.

(FY1995 Domestic Survey)
No additional information.

(FY1995 Overseas Survey)
The project "the research and introduction of Modern Rice Transplanting and Harvesting Technologies" is being implemented for a period of three years (1993/94 - 1995/96) with own fund of the Pakistani government. For the impementation of the Pre and Post Harvest Rice Research and Development, the request has been made to the Japanese government for funding.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

和名 米穀収穫後処理法改善計画

{M/P,Basic Study,Other}

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASO PAK/A 302/86

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

2.NAME OF STUDY
Baluchistan Irrigation Development Project through Groundwater Development

3.SECTOR
Agriculture/(Agriculture in)General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY
Ministry of Economic Affairs and Finance, Government of Pakistan.Government of Baluchistan

7.OBJECTIVES OF STUDY
F/S evaluation for agricultural development basing on groundwater research for fissure water

8.DATE OF S/W: 1986/3

9.CONSULTANT(S)
Pacific Consultants International
Nihon Norin Helicopter Co., Ltd.
Sanyu Consultants Inc.

10.STUDY TEAM

No.of Members 20
Period Jun.1986-Mar.1987(10 months)

Total M/M	Japan	Field
78.34	36.69	41.65

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Geological Survey

12.EXPENDITURE

Total	346,111 (¥'000)
Contracted	327,436

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Baluchistan, Quetta and Kalat areas
(40,000 ha, 11,500 people)

2.PROJECT COST
(US$1,000)
US$1=17.5Rs.in 1987

	Total Cost	Local Cost	Foreign Cost
1)	1,826	1,278	548
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
Wells (18") : 18
Arterial drainage : 1 km
Farm pond : 3
Arterial farm road : 1.6 km

Above-mentioned facility elements are for 10ha model farm plot. It is required to carry out the ground water investigation to clarify the development potentiality.

Imp. Period: 1988. -1990.

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

EIRR1)	12.90	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
[Pre-conditions]
- Farm size to be more than 5.0ha
- Well capacity to be more than 10.0 lit./sec
- 3 years cropping lotation with vegetable and fruit
- 27km approach road and 22km feeder line to be subsidized by the Government

[Impacts]
- Improving regional differences
- Improving managed agriculture
- Improving regional traffic
- Improving the level of public hygiene

5.TECHNICAL TRANSFER
1.Acceptance of trainees(3)
2.Providing machinery and instruction on its use
3.OJT

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS
- [■] Completed or in Progress
  - ○ Completed
  - ❸ Partially Completed
  - ○ Implementing
  - ○ Processing
- [ ] Promoting
- [ ] Delayed or Suspended
- [ ] Discontinued or Cancelled

(Description)
(FY 1991 Overseas Survey)
Sept.1986 - Dec.1987 D/D undertaken by Japanese cooperation

(FY 1992 Overseas Survey)
1) Grant provision of equipment
three well-digging machines (to Baluchistan Development Authority) in 1987
two well-digging machines (to WAPDA) in 1990
two well-digging machines (to PHED) in 1991
Water resources development for water supply are being carried out by using the granted equipment (Public Health Department or PHED, established within the state government is in charge)
2) The underwater irrigation plan has not been implemented due to a lack of fund

(FY1993 Overseas Survey)
Granted equipments are used effectively.
But underwater irrigation plan has no progress.

(FY1994 Domestic Survey)
No additional information.

(FY1995 Domestic Survey)
As the grant aid to supply equipment is requested on 1995, implementation of the basic design is going to be commenced on Sep., 1995.

(FY1995 Overseas Survey)
The underwater irrigation plan has been delayed due to a lack of fund.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

和名 バルチスタン州地下水かんがい開発計画

{F/S,D/D}

PROJECT SUMMARY (M/P)

Compiled Mar.1990
Revised Mar.1996

ASO PAK/S 102/87

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Water Resources Development Potential for the Metropolitan Area of Islamabad/ Rawalpindi

3.SECTOR
Social Infrastructu/Water Resource Development

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Capital Development Authority

7.OBJECTIVES OF STUDY
Investigation into the Possibility of water resource development in capital area

8.DATE OF S/W 1986/8

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

10.STUDY TEAM

No.of Members 11
Period Nov.1986-Feb.1988(16 months)

Total M/M	Japan	Field
80.30	25.60	54.70

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Investigation of aquifer by electric exploration method and related survey works

12.EXPENDITURE

Total	227,291 (¥'000)
Contracted	212,954

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Capital Area (the Province of Punjab)

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
(US$1=17.0Rs)	1)	970,588	533,823	436,765
	2)			

3.CONTENTS OF MAJOR PROJECT(S)

The Study proposed the improvement of the control system for 3 existing dams (Rawal, Simly & Khanpur) and the construction of 5 new dams (Haro, Dor & Soan Rivers) to realize the effective utilization of water sources.

1. Projects proposed for the target year of 2000
 1) Construction of water conveyance facilties from Khanpur (to be completed in 1991)
 2) Study and project preparation of Cherah Dam (Soan River) and the start of its construction; and study and project preparation of D------- Dam (S-- River)
 3) Implementation and completion of the improvements proposed in Islamabad and Rawalpindi
2. Projects proposed for the target year of 2010
 1) Completion of R----- Dam (to be completed in 2005)
 2) Construction of D-------- Dam (to be completed in 2009)
3. Projects proposed for the target year of 2030.
 1) Study, project preparation and construction of R----- Dam, N------ Weir and Dor water conveyance facilities (to be completed in 2015)
 2) Study, project preparation and construction of P---- Dam (to be completed in 2019)
 3) Study, project preparation and construction of D------ Dam (to be completed in 2025)

4.CONDITIONS AND DEVELOPMENT IMPACTS

[Conditions]
1) Population in the capital area of 3,267,000 in 2030, and per capita water demand of 475 litters
2) Required water totals 830 MCM per year, including irrigation requirements and the water supply to the airport and industries.

Rough estimates of selected water demands in 2030, investment costs and EIRRs are shown below.

	Demand	Investment	EIRR
General Urban Water Supply	428MCM	11,530 mil. Rps	3.7%
Irrigation	120	1,180	8.1
New Airport	2.5	14.2	16.1

5.TECHNICAL TRANSFER
(1) Explanation of various analysis methods
(2) Training of an engineer in charge of geology in Japan (Analysis of aquifer by means of computer)

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)

The project components as described below have been under implementation. The other recommended components will be executed based on the supply and demand balance status for urban water supply in Metropolitan area.

1) Conduction of water from Khanpur to Islamabad/Rawalpindi
 Mar. 1989 OECF loan agreement signed (12.52 billion yen)
2) Construction of Simly Dam
 Mar. 1986 OECF loan agreement signed (5,750 million yen)

(FY 1991 Overseas Survey)
Rs.13 million was allocated for the F/S of Cherah Dam, but the study was postponed until the completion of the Khanpur irregation project.
Rs.12.87 million was approved in Aug. 1989 for undertaking a study on groundwater resources, and the request was made for the JICA assistance. The request was not accepted because a similar study had already been conducted.

(FY 1993 Overseas Survey)
Tenders for some of the contract packages for Khanpur Water Supply Project have been carried out.
This project would be completed in 1995 or 1996.

(FY1995 Domestic Survey) (FY1995 Overseas Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①, ②, ④

和名 首都圏水資源開発基本計画

{M/P,Basic Study,Other}

PROJECT SUMMARY (M/P)

Compiled Mar.1990
Revised Mar.1996

ASO PAK/S 103/87

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
National Transport Plan(follow-up)

3.SECTOR
Transportation/(Transportation in)General

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Planning Commission,
Transport and Communications Section

7.OBJECTIVES OF STUDY
Integral transportation plan

8.DATE OF S/W 1986/11

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

10.STUDY TEAM

No.of Members 15
Period Jan.1987-Mar.1988(15 months)

Total M/M	Japan	Field
60.66	29.62	31.04

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	285,090 (¥'000)
Contracted	274,030

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Pakistan(whole country)

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
	1)	28,550	8,565	19,985
	2)	38,000	11,400	26,600

3.CONTENTS OF MAJOR PROJECT(S)

Railways : Improvement of signal system, Track doubling & electrification, Locomotive enforcement, Cargo terminals, Inland dry ports, etc.

Roads : Increase the capacities of trunk road network system including Indus Highway, Maintenance system improvement and work's implementation, and others

Ports : Improvement of container facilities in Karachi and Qasim, warehouses and approach roads, oil berths, etc.

Airports : Improvement of terminal facilities and runways, communication and navigation aid systems, etc.

R & D : Research and development studies in the establishment of transport date base, profitability & fare levels, urban transport planning, etc.

Budget 1) for Road and 2) for Railways

4.CONDITIONS AND DEVELOPMENT IMPACTS

Realistic objectives were set and reccommendations were made taking into account the existing situation of the transportation sector,possibility of securing adequate budget, and capabilities to implement plans.
This is the basic policy of the Seventh Five-year Development Plan(87/88 - 92/93).

5.TECHNICAL TRANSFER

(1) OJT Computer use
(2) Training in Japan: 2 persons (urban and regional transportation systems, role of government transportation offices)

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

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

(Description)

"Indus Highway Technical and Economic F/S and D/D" were conducted by a Pakistan consulting firm.
Financed by OECF loan, Phase I consruction is under way.
OECF signed L/A on Indus Highway Project Phase II B in Aug. 1993.
The amount of this loan was 18,214 million yen.
The JICA study (M/P) was completed on Lahore urban transport system in Oct.1991. Phase III will start in 1994.

(FY1993 Domestic Survey)
The 7th plan period was over mid-1993. Review of the initial plan and completion will be done by the national transport plan study of 1994.

(FY1994 Domestic Survey)
The National Transport Plan (the 8th 5-year plan) has been undertaken by JICA since Jan.1994 lasting in Mar.1995.

(FY1994 Overseas Survey)
This M/P was utilized for the transportation/traffic sector of the seventh five-year project (FY1988/89-1992/93) conducted by the Pakistani government. The current status of additionally suggested action items relating to the project is:
(1)Indus Highway
: This highway, totaly 1,200km length, runs from the north to the south through the west side of the Indus River basin and leads from Peshawar (near to Islamabad) to Kotri (near to Karachi). All the route is an amendment (in terms of the linear-shape adjustment and pavement) of an exisiting road except for a 240km newly created road that directly leads to Karachi.
: This highway construction plan is, according to the priority based upon pavement status and traffic volume at each region, divided into three phases (Phase I,II and III). Both Phase I and II will be finished in 1996.
1989 Mar. : OECF L/A concluded (Phase I, foreign currency 8.5bill. yen, domestic currency 3.64bill. yen)
1994 Jan. & 1993 Aug : OECF L/A concluded (Phase II, foreign currency 45.8bill.yen, domestic currency 8.08bill. yen)
OECF loan for Phase III will be decided with the progress result of I and II.
(2) Additional carriageway project (N-5: Karachi-Lahore-Islamabad)
Sections between i)Nowshera and Cablet, ii)Rawalpindi and Kharian will be expanded to 4-lane width. Finance for this project is negotiated with the World Bank.
(3)Construction of the Great Bridge between Sukkar and Rohri
A bridge over the Indus will be built at Sukkar. Total cost of the construction is not fixed yet, but a loan from ADB was admitted in 1994.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①、②、③

和名 全国総合交通計画（アフターケア）

Continued on {M/P,Basic Study,Other}

状況（要約表添付文書）

ASO PAK/S 103/87 (M/P)

Name of Study: National Transport Plan(follow-up)

Country: Pakistan

Type of Study: M/P

Sector: Transportation/(Transportation in)General

Present Status: In progress or In use

(Description)

"Indus Highway Technical and Economic F/S and D/D" were conducted by a Pakistan consulting firm. Financed by OECF loan, Phase I consruction is under way.
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The National Transport Plan (the 8th 5-year plan) has been undertaken by JICA since Jan.1994 lasting in Mar.1995.

(FY1994 Overseas Survey)
This M/P was utilized for the transportation/traffic sector of the seventh five-year project (FY1988/89-1992/93) conducted by the Pakistani government. The current status of additionally suggested action items relating to the project is:
(1)Indus Highway
: This highway, totaly 1,200km length, runs from the north to the south through the west side of the Indus River basin and leads from Peshawar (near to Islamabad) to Kotri (near to Karachi). All the route is an amendment (in terms of the linear-shape adjustment and pavement) of an exisiting road except for a 240km newly created road that directly leads to Karachi.
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8.5bill. yen, domestic currency 3.64bill. yen)
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& 1993 Aug 45.8bill.yen, domestic currency 8.08bill. yen)
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Sections between i)Nowshera and Cablet, ii)Rawalpindi and Kharian will be expanded to 4-lane width. Finance for this project is negotiated with the World Bank.
(3)Construction of the Great Bridge between Sukkar and Rohri
A bridge over the Indus will be built at Sukkar. Total cost of the construction is not fixed yet, but a loan from ADB was admitted in 1994.
(4)Creation of road traffic database
Enforcement of the National Transport Research Centre and creation of traffic database were recommended. However, the project does not proceed smoothly.

(FY1995 Domestic Survey)
It is planned to implement phase-III of the Indus Highway Project after 1996.

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASO PAK/A 303/88

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

2.NAME OF STUDY: Upper Kurang River Irrigation Project

3.SECTOR: Agriculture/(Agriculture in)General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Islamabad Capital Territory Administration (ICTA)

7.OBJECTIVES OF STUDY: Feasibility study on the irrigated agricultural development in the metropolitan area of Islamabad

8.DATE OF S/W: 1988/2

9.CONSULTANT(S): Sanyu Consultants Inc.
Nippon Giken Inc.

10.STUDY TEAM

No.of Members 10

Period Aug.1987-Mar.1988(8 months)

Total M/M	Japan	Field
50.44	19.00	31.44

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY: Rock test/Embankment material test/Physical test for field irrigation soil/Water quality test/Soil analysis

12.EXPENDITURE

Total	173,991 (¥'000)
Contracted	155,446

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Irrigation development with 6,600 ha irrigable area through water resources development of upper Kurang River

2.PROJECT COST (US$1,000) (US$1=17.3rupee in 1987)

	Total Cost	Local Cost	Foreign Cost
1)	76,902	38,318	38,584
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

- Water resources: K-2 dam (zone-type fill dam whose height and effective capacity is 53 m and 18.5 MCM, respectively)
- Canal: Total length of main and branch canals is 130 km
- Off-farm facilities: 6,600 ha
- Road Network: 18.6 km
- Agriculture-supporting facilities: Buildings, agricultural machinery, etc.

Imp. Period: 1987.7-1988.2

4.FEASIBILITY AND ITS ASSUMPTIONS: Feasibility: Yes

EIRR1)	13.00	FIRR1)	12.70
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
The water resources development of upper Kurang River, together with effective utilization of irrigation water for rainfed paddy production in the rural areas of Islamabad capital territory, brings about better supply of vegetables, fruit, and dairy products which requires quick delivery to the neighboring big markets in the capital territory, and improve/ stabilize the regional farm households' economy.

5.TECHNICAL TRANSFER: Technology transfer to government officials both in Pakistan and in Japan 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)
After the completion of F/S study, the Government of Pakistan has decided to suspend the project, because the benefitable area of the project engulfs part of city districts (which is called park areas by the Government of Pakistan).

However, Sanyu Consultants Inc. is recently requested by the Government of Pakistan to make a conception paper for the project in order to coordinater among the authorities concerned, and it is submitted in Feb., 1990 to the Government of Pakistan.

(FY 1991 Overseas Survey)
1,359 million Rupee is desired to be funded from OECF.

(FY 1992 Overseas Survey)
As the result of social and economic changes such as a population increase and urbanizaion in the Metropolitan Islamabad area, the opening of nearby road that led to a decrease and higher prices of agricultural land, the implementation of the project needs to be reconsidered. Place a higher priority on the water supply in the metropolitan area.

(FY 1993 Overseas Survey)
Feasibility of the proposed irrigation project is questionned because of high cost of water. Drinking water supply for metropolitan area is considered with high priority.

(FY1995 Domestic Survey)
As the limited volume of water will be supplied for the drinking water with higher priority, the irrigation project may be with high possibility to be vanished.

(FY1995 Overseas Survey) No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

The higher priority is put on the project in the integrated rural development master plan from 1985 to 1986. However, it may be changed water utilization from irrigation to urban water supply due to project economy and cost recovery.

The project is under reconsideration due to a change in priority rankings among the competing projects.

3.PRINCIPAL SOURCE OF INFORMATION

①、②、③

和名 クラング川上流かんがい開発計画

{F/S,D/D}

PROJECT SUMMARY (M/P+F/S)

ASO PAK/A 201B/89

Compiled Mar.1991
Revised Mar.1996

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Swat District Integrated Rural Development Project

3.SECTOR
Agriculture/(Agriculture in)General

4.REFERENCE NO.

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

6.COUNTERPART AGENCY
NWFP, Local Government and Rural Development Department

7.OBJECTIVES OF STUDY
Draw up integrated rural development plan and carry out the F/S for the area which is given the priority.

8.DATE OF S/W 1988/4

9.CONSULTANT(S)
Sanyu Consultants Inc.
Pacific Consultants International

10.STUDY TEAM
No.of Members 9
Period Oct.1988-Dec.1989(15 months)

Total M/M	Japan	Field
49.77	20.59	29.18

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	165,783 (¥'000)
Contracted	158,592

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Shangla Par District in NWFP

2.PROJECT COST (US$1,000)
US$1=21R

M/P	1)	745,380 Local Cost	339,575 Foreign Cost	405,805
	2)			
F/S	1)	99,710	45,270	54,140
	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)
Priority Development Project
1.Agri. Infrastructure Development - Irrigation
- Small Scale Irrigation Scheme 18 pla.
- Spring Water Tank Irrigation 30 pla.
- Kabalgram Irri. Scheme 320 ha.
- Sandai-Aloch Irri. & Hydel Power Scheme 352 ha.
- Choga Irri. & Hydel Scheme 170 ha.
- Chakesar Irri. & Hydel Scheme 110 ha.

2.Agri. Supporting Service Development
3.Road Improvement 103.5km ; Road Construction 176.0km
4.Rural Electrification 26,700H
5.New Water Supply System 22,300H
6.Rural Infrastructure Development
7.Village Community Development

Imp. Period: 1990.1-2005.12

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

EIRR1)	10.30	FIRR1)	
EIRR2)	8.50	FIRR2)	
EIRR3)	2.80	FIRR3)	

Conditions and Development Impacts:

[Conditions] The benefits consist of direct (e.g. agri. benefits) and indirect benefits. Agricultural benefits are estimated as the difference of net income from crop production between with-project and without-project conditions.

	Paddy	Maize	Veg.	Fruits
without project	728t	607t	74t	-
with project	910t	638t	634t	126t
Incremental Benefit	182t	31t	560t	126t
Incremental N.P.V	3.7 million Rupees			

[Development Impacts] It is envisaged that expansion of agricultural production, employment opportunity and increased income, grading up living standard, infrastructure development can be secured by the project executions. 'The EIRRs for Agri.Infra,Road and Rural Electrification are 10.3%~14.5%, 8.5%~10.5% and 2.8%~9.6% respectively.

5.TECHNICAL TRANSFER

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)

A pre-feasibility study was conducted on the first priority project selected among the masterplan area, for which Pakistan Government will request to the Japanese Government the Grant-aid of FY 1992.

The component of the project will be as follows:
- Agricultural Infrastructure Improvement
- Agricultural Development
- Road Networks Improvement
- Village Water Supply

Estimated Cost: US$15.19 million

(FY 1992 Overseas Survey)
The request for a grant aid has not been approved because the MIRAD project, which is a comprehensive rural development project of similar nature to this is on-going and needs to be closely monitored before the implementation of this project.

(FY 1993 Overseas Survey)
There is no progress.

(FY1995 Domestic Survey)
Above-mentioned requests for the grant aid are continuously followed.

(FY1995 Overseas Survey) No additional information.

2.MAJOR REASONS FOR PRESENT STATUS
The Shangla Par district is the poorest district in the state, and the development of the area is placed higher priority in the country's Eighth Five Year Plan. However, because a similar project has already been carried out the implementation of the project has been delayed.

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

和名 スワット地域農村総合開発計画

{M/P+F/S}

PROJECT SUMMARY (F/S)

Compiled Mar.1991
Revised Mar.1996

ASO PAK/S 304/89

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

2.NAME OF STUDY
Establishment of the Second TV Channel for Education

3.SECTOR
Communications & B/Broadcasting

4.REFERENCE NO.

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY
Pakistan Television Corporation Ltd.(PTV)

7.OBJECTIVES OF STUDY
To study the Plan on the national broadcasting network of the TV channel for education

8.DATE OF S/W: 1988/9

9.CONSULTANT(S)
Integrated Technology Inc.
Nippon Sogo Architects and Engineers

10.STUDY TEAM
No.of Members 14
Period Jan.1989-Sep.1989(9 months)

Total M/M	Japan	Field
49.76	23.04	26.72

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	157,101 (¥'000)
Contracted	159,273

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Islamabad City, and around the country

2.PROJECT COST
(US$1,000)
US$1=19.57P.Re=130Yen

	Total Cost	Local Cost	Foreign Cost
1)	130,955	81,904	49,050
2)	32,000	6,100	26,900
3)			

3.CONTENTS OF MAJOR PROJECT(S)
The establishment of the second TV channel for education in the Islamic Republic of Pakistan.
In the first 2 years project contents are:
-Construction of a TV programme production centre in Islamabad.
-Supply and installation of broadcasting equipment for the above mentioned ETV Centre.
-TV programme transmission facilities via satellite(consist of 2 up/down link earth stations and 14 TV ROs).
-Supply and installation of ETV transmitter and antenna for each of 12 rebroadcast stations. Upon completion, 56% population coverage is acheived.
In the later 3 years:
-Construction of ETV centers in Karachi and Lahore.
-Supply and intallation of ETV production equipment.
-ETV transmitter and antennas for the rest 30 rebroadcast stations. Upon completion 98% of population coverage will be achieved.

Imp. Period: 1990. -1995.

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

EIRR1)	15.26	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
The current literacy rate in Pakistan is about 30%. However, with rapid increase of population (estimated to double in 20 years), the rate is likely to decline without an effective mass education program. The (mass) education of the people is the urgent task of national politics. The establishment of the second TV channel for education is an important step to improve the level of literacy, and to launch mass education programs on family planning, child health. TV is the most suitable media for the purpose.

5.TECHNICAL TRANSFER
Technical transfer was done on channel allocation, post production, procedure for programme production, audio dubbing and programme transmission via satellite.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS
- [x] Completed or in Progress
  - ○ Completed
  - ● Partially Completed
  - ○ Implementing
  - ○ Processing
- [ ] Promoting
- [ ] Delayed or Suspended
- [ ] Discontinued or Cancelled

(Description)
Although F/S was conducted on the basis of a loan financial support, the Pakistani Government requested a grant aid from Japanese Government due to the financial difficulties. The Japanese Goverment accepted the rquest for the first 2 years'project contents.

Dec.10, 1989 Grant Aid E/N (1,640 mil. yen)
Jun.1990 Grant Aid E/N (1,730 mil. yen)
Mar.1991 Completion of the 1st year project
Feb.1992 Completion of the 2nd year project

The opening ceremony took place in November 1992 in the presence of the President of Pakistan, and it has been broadcasting seven hours per day at regular time.

(FY1993 Overseas Survey)
This project was realized to increase the rate of literacy and also envisage education in health, sanitation, agriculture, population industry, handicraft and so on.

(FY1994 Domestic Survey)
Jun.-Jul.1994 The Basic Design Study for the latter 3 years term was implemented, and successively the final report has been under preparation.

(FY1995 Domestic Survey)
Dec.,1994 Basic designing survey for 'Expansion Project of the TV channel for education' was completed.
Feb.,1995 E/N of grant aid for four(4) rebroadcasting stations (33) million Yen), as a part of the later 3(three) years' plan, has been signed.
May,.1995 E/N of grant aid for eleven(11) rebroadcasting stations (792 million Yen) has been signed.
Jul.,1995 The agreement with construction contractor also has been signed for four(4) stations.
Detailed designing is implementing for eleven(11) rebroadcasting stations, continuously.

(FY1995 Overseas Survey)
Two years have pased since the second TV channel for Education started its operation. Presently, based on the Basic Design Studies, the expansion of the transmission network has been undertaken.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②

和名 教育テレビチャンネル設立計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1992
Revised Mar.1996

ASO PAK/A 304/90

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

2.NAME OF STUDY:
Water Resource Development Project in Malis Basin

3.SECTOR:
Agriculture/(Agriculture in)General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY:
Government of Sindh

7.OBJECTIVES OF STUDY:
To Formulate Water Resource Development Project

8.DATE OF S/W: 1989/2

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

10.STUDY TEAM

No.of Members 11
Period Aug.1989-Oct.1990(15 months)

Total M/M	Japan	Field
47.17	16.74	30.43

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:
None

12.EXPENDITURE

Total	152,552 (¥'000)
Contracted	147,613

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA:
Malis River Basin situated about 20km north west of Karachi city, Total area is 30,000ha

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	31,900	5,680	26,220
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
- Construction of Mol Dam:
  - Type of dam = Rockfill (Zone type)
  - Maxium water level = 173.0m, Normal full water level 169.6m
  - Maximum height = 48.8m
  - Gross storage = 45.7MCM, - live storage = 35.0MCM
  - Dam volume = 1,730 x 10*3m3
- Demonstration Pilot Farm
- Development of irrigation area (4,350ha) and Domestic Water Supply 33MCM

Imp. Period: 1991.4-1995.3

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

EIRR1)	10.65	FIRR1)
EIRR2)		FIRR2)
EIRR3)		FIRR3)

Conditions and Development Impacts:
(Development Impacts)
A large improvement in the living standard of farmers including peasants is expected.
- Stable Supply of Water
- Increase of Employment Opportunity
- Increase of Crop Production and Stable Supply of the Products to the Karachi City - Increase of Farmer's Income
- Improvement of Water Quality
- Flood Mitigation Effects
- Improvement of Agro-technology
- Demonstration Effect of Pilot Farm

5.TECHNICAL TRANSFER
1)Technology transfer to counterparts in the course of the Study
2)Training of counterparts in JICA training course

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 Pakistani government is in preparation to submit the request for yen credit to the Japanese government.

(FY1991 Overseas Survey)
No additional information.

(FY1992 Overseas Survey)
1) A request was made for a OECF loan during the FY 1992 Annual Meeting between the Pakistan : and Japanese governments.
2) A OECF loan for a detailed design was expected.

(FY1993 Overseas Survey)
The construction plan of Mol Dam is under preparation as follows;

August 1993. OECF Loan L/A 206 million yen.
(Water Resource Development Project in Malis Basin)
This loan aimes a review, D/D and tender preparetion of the Dam and reservoir costruction.

(FY1994 Domestic Survey)
The OECF Loan for the Project design was agreed. The engineering services for design will be commenced in Dec.1994 or Jan.1995.

(FY1995 Domestic Survey)
Since Jan., 1995, D/D is implemented by the OECF Loan.

(FY1995 Overseas Survey)
The Pakistani government expects that the construction will be started in Oct. 1996.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

和名 マリル川流域農業開発計画

{F/S,D/D}

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1993
Revised Mar.1996

ASO PAK/S 203B/91

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Comprehensive Study on Transportation System in Lahore

3.SECTOR
Transportation/Urban Transportaion

4.REFERENCE NO.

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

6.COUNTERPART AGENCY
Lahore Development Authority

7.OBJECTIVES OF STUDY
1)Formulation of Urban Transport Plan for 2000/2010
2)Feasbility Study on Priority Projects

8.DATE OF S/W 1989/10

9.CONSULTANT(S)
AIMEC Corporation
Pacific Consultants International

10.STUDY TEAM
No.of Members 11
Period Jul.1990-Oct.1991(15 months)

Total M/M	Japan	Field
60.95	24.86	36.09

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Traffic Survey including HIS, Topographic Survey along the Project Route.

12.EXPENDITURE

Total	226,159 (¥'000)
Contracted	218,462

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Lahore Metropolitan Area (2,300 Sq.Km)

2.PROJECT COST (US$1,000)

		Local Cost	Foreign Cost	
M/P	1)	910,000		
	2)			
F/S	1)	13,932	11,332	2,600
	2)	288,164	209,707	78,457
	3)			

3.CONTENTS OF MAJOR PROJECT(S)
<M/P>Components of the Master Plan (up to 2010):
1)Short-term plan (1992-1995) (Total cost Rps 25 bil): Improvement and construction of roads; 9 intersections; traffic management; bus system ; new bridge across the Ravi River.
2)Medium-term plan (1996-2000) (Total cost Rps 65 bil): roads; 14 intersections; new bridge across the Ravi River; bus system ; Heavy Rail Transit (HRT) System (40.0km); traffic management; mode interchange facilities.
3)Long-term plan (2001-2010) (Total cost Rps 110 bil): roads; intersection improvement (92.4km); new bridge across the Ravi River; bus system ; Light Rail Transit (LRT) System; mode interchange facilities.
<F/S> 1) Intersection Improvement (construction of flyovers):
Total cost Rp.302.3 million
- Qartaba Chowk
- Ferozepur Road / Canal Bridge & Wahdat Road
- Kalma Chowk
2) LRT: Total cost Rp.5,965 million
- Construction of a light rail line from the present CBD to the Model Town in the south (12.5 km)
- Related facilities and equipment (elevated stations, signaling and communication, yards and workshops, rolling stocks, aquisition of the right of way, etc.)

' Costs are estimated in the end 1990 prices.

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes/No

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

Conditions and Development Impacts:
[Assumptions]
1)Future transport demand (in person trips/day) was projected on the basis of the results of the 1990 person trip survey (HIS):

	1990	2010	
Population (over 5 years of age)	4,578	8,875	(in 1000)
Person trips/day	9,779	19,863	
Trip generation rate	2.14	2.24	

2)LRT System is to be elevated and start operation in 2010
3)LRT route is selected with reference to future transport network, convenience in transfer, conservation of historical buildings and greenery, etc.
4)More than 75% of initial investment in LRT is soft loan or subsidy.
[Development Impacts]
1)Intersection Improvement: Alleviation of traffic congestion.
2)LRT: Strengthening of the public transportation capacity, alleviation of traffic congestions, redevelopment in the areas around terminals, etc.; To

5.TECHNICAL TRANSFER
(1)Analyze Methods of Basic Data of Urban traffic plan such as person trip survey and future O-D Tables.
(2)C/P training in Japan(2person).

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)
(FY1992 Overseas Survey)
1) Detailed designs are prepared for three flyovers.
2) A D/D for LRT is planned to be implemented in time for the scheduled opening.
The construction of flyovers is planned to be implemented through funding of the Pakistani Government and World Bank. The scale of LRT project is so large that the government seeks Japanese cooperation in addition to the planned World Bank loan for a part of the construction.
3) The construction of the bridge across Ravi River has started.
4) A D/D for grade seperations is in progress.
5) A D/D for link road is also in progress.

(FY1993 Overseas Survey)
1) In Ling Road project, F/S and D/D have already been completed for the first term by WB Fund.
2) Ravi bridge : one bridge completed, one on the way to build.

(FY1994 Domestic Survey)
The Punjab Government has a keen interest to implement the LRT project within a few years, and the draft PC-I(official request to the central government) might be submitted, based on the availability of OECF loan.

(FY1994 Overseas Survey)
1) The World Bank conducted a F/S for LRT, with a plan to shorten the LRT route, compared with JICA's F/S, in 1992. Moreover, Japanese consulting firms did financial analysis again in 1994. But there is no progress in loans from the World Bank and OECF.
2) As far as constructions of two-level crossings (3 places) are concerned ,i) underground crossings, instead of on-the-ground, were built based upon Rs.450million paid from Punjab State budget in 1994; ii)existing roads are expanded based upon the World Bank loan; iii) since on-the-ground two-level crossings will be constructed over the LRT, the construction cannot get started unless the LRT route is determined.
3) For a part of the ring road surrounding Lahore (16km), the World Bank conducted F/S and D/D. JICA is expected to take charge of F/S and D/D for 30 km of the ring road. Other 48km mentioned above, the rest of the road will be left as it is.

(FY1995 Domestic Survey)
LRT is promoted to commence the construction works in early stage. It is learnt that LDA was re-studied F/S and is carrying out the evaluation study on the environmental effects by themselves. And

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

和名 ラホール都市圏総合交通システム開発計画

Continued on (M/P+F/S)

状況（要約表添付文書）

ASO PAK/S 203B/91 (M/P+F/S)

Name of Study: Comprehensive Study on Transportation System in Lahore

Country: Pakistan

Type of Study: M/P+F/S

Sector: Transportation/Urban Transportaion

Present Status: Partially Completed

(Description)

(FY1992 Overseas Survey)
1) Detailed designs are prepared for three flyovers.
2) A D/D for LRT is planned to be implemented in time for the scheduled opening.
The construction of flyovers is planned to be implemented through funding of the Pakistani Government and World Bank. The scale of LRT project is so large that the government seeks Japanese cooperation in addition to the planned World Bank loan for a part of the construction.
3) The construction of the bridge across Ravi River has started.
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(FY1994 Domestic Survey)
The Punjab Government has a keen interest to implement the LRT project within a few years, and the draft PC-1(official request to the central government) might be submitted, based on the availability of OECF loan.

(FY1994 Overseas Survey)
1) The World Bank conducted a F/S for LRT, with a plan to shorten the LRT route, compared with JICA's F/S, in 1992. Moreover, Japanese consulting firms did financial analysis again in 1994. But there is no progress in loans from the World Bank and OECF.
2) As far as constructions of two-level crossings (3 places) are concerned ,i) underground crossings, instead of on-the-ground, were built based upon Rs.450million paid from Punjab State budget in 1994; ii)existing roads are expanded based upon the World Bank loan; iii) since on-the-ground two-level crossings will be constructed over the LRT, the construction cannot get started unless the LRT route is determined.
3) For a part of the ring road surrounding Lahore (16km), the World Bank conducted F/S and D/D. JICA is expected to take charge of F/S and D/D for 30 km of the ring road. Other 48km mentioned above, the rest of the road will be left as it is.

(FY1995 Domestic Survey)
LRT is promoted to commence the construction works in early stage. It is learnt that LDA was re-studied F/S and is carrying out the evaluation study on the environmental effects by themselves. And also LDA begins an active approach to Japan in order to earn the Yen Credit.

PROJECT SUMMARY (F/S)

Compiled Mar.1994
Revised Mar.1996

ASO PAK/A 305/92

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Development of Irrigation Based on Flood Flows of D.G. Khan Hill Torrents

3.SECTOR
Agriculture/Irrigation, Drainage & Reclamation

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Department of Irrigation Power, Province of Punjab

7.OBJECTIVES OF STUDY
Formulate an adequate flood control and irrigation plan in order to utilize the water of the main hill torrent at D.G. Khan district South-Western Punjab. And recommend a plan to maintain the basin in order to reduce flood disasters at the lower reach.

8.DATE OF S/W 1990/8

9.CONSULTANT(S)
Nippon Giken Inc.
Sanyu Consultants Inc.

10.STUDY TEAM

No.of Members 21
Period Mar.1991-Oct.1992(19 months)

Total M/M	Japan	Field
32.00	16.00	16.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Topugraphic Survey, Geologic Survey, Soil Test and
Water Right Survey

12.EXPENDITURE

Total	201,790 (¥'000)
Contracted	187,898

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Vidor in D.G. Khan, Punjab province

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	3,553	2,432	1,121
2)	7,403	5,654	1,749
3)	10,440	8,249	2,191

3.CONTENTS OF MAJOR PROJECT(S)
1. Dispersion Structure : 2 sites
2. Distribution Facilities : Improvement at 23 sites
3. Watershed Conservation Facilities :
   * construction of earthen bunds
   * application of grass contour hedges
   * construction of gully plugs
4. Road : new road ..... 1 route
   improvement .... 1 route

Imp. Period: 1997.1-1998.12 1997.1-2001.12 1997.1-2000.12

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes/No

EIRR1)	19.90	FIRR1)	14.20
EIRR2)	11.80	FIRR2)	8.20
EIRR3)	10.40	FIRR3)	7.20

Conditions and Development Impacts:
[Conditions and Development Impacts] (Imp. Periods are 1) 2 years, 2) 5 years, 3) 10 years.)

1. Considerable expansion of upland irrigated area and reduction of the flood damage through the increase of the dispersion of the hill torrent water.
2. The stabilization of the land conditions in watershed area and the encouragement of livestock raising by watershed conservation facilities.

5.TECHNICAL TRANSFER
The technology of the facility study for irrigation and watershed management was transferred to the counterparts of the Department of Irrigation and Power, Punjab.

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)
In the feasibility study, the review of Mithawan Hill torrent Pilot Project was carried out, and the basic design study for this project going to be implemented with the Japan's Grant Aid is in progress now.
But, for the Vidore Hill torrent area, the implementation of the project will be decided after completion of the Mithawan Hill torrent Pilot project.

(FY 1993 Overseas Survey)
Above Mithawan Hill torrent Pilot Project has already started since May 1994 (untill April 1996), granted by JICA.

(FY1994 Domestic Survey)
The constructions of watershed conservation and irrigation in the Mithawan Area have been implemented with the Japan's Grant Aid (signed in Oct, 1992 Rs346.90mil) since Aug.1994. The technical transfer for pasturing and cultivation to the inhabitants is planned from Jan.1995 for five year by FAO, with the facilities to be constructed under the Japan's Grant Aid.

(FY1995 Domestic Survey)
Department of Irrigation and Power, Province of Punjab is requesting the implementation of the project to the World Bank for development and maintenance of Vidor Hill Torrent Area.
On July, 1995, the World Bank requested to an expert, who was in charge of disaster protection of agricultural area when this F/S was carried out, to participate the reinvestigation survey of this project (especially in the field of maintenance of the basin).

(FY1995 Overseas Survey)
Concerning Vidore Hill Torrent Project, Preparetion of basic study report and its implementation are likely to be undertaken after the completion of Mithawan Hill Torrent Pilot Project.

2.MAJOR REASONS FOR PRESENT STATUS
Due to the Vidor hill torrent area is close to the Mithawan hill torrent area, the balanced project implementation in the Nation will be taken into consideration.

3.PRINCIPAL SOURCE OF INFORMATION
①、②

和名 D.G.カーン地区かんがい開発計画

[F/S,D/D]

PROJECT SUMMARY (M/P)

Compiled Sep.1995
Revised Mar.1996

ASO PAK/S 104/94

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
National Transport Plan in the Islamic Republic of Pakistan

3.SECTOR
Transportation/Urban Transportaion

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
National Transportation Research Center (NTRC), Ministry of Transportation and Communication

7.OBJECTIVES OF STUDY
To reexamine the Master Plan of whole transportation sector for 2005-2006, and to recommend an investment programme for the eighth five year plan.

8.DATE OF S/W 1993/4

9.CONSULTANT(S)
ALMEC Corporation
Pacific Consultants International

10.STUDY TEAM
No.of Members 12
Period Jan.1994-Feb.1995(14 months)

Total M/M	Japan	Field
75.15	36.65	39.50

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 286,073 (¥'000)
Contracted 285,158

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Whole of the country

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	15,100,000		
2)	6,425,000		

3.CONTENTS OF MAJOR PROJECT(S)
Proposal for the eighth five year plan:

	(million rupee)
Road (Arrangement of Automobile road; National highway and rural road)	73,226
Railway (Improve the orbits,signal system; increase the coach, electrification and improve the information system)	40,700
Port (Improvement of the ports of Karachi, Kashim, etc.)	14,572
Airport/Aviation (Airport renovation project, and other projects regarding to aviation)	38,560
Total	167,058

4.CONDITIONS AND DEVELOPMENT IMPACTS
[Conditions]
1)Annual economical growth should be 6% in average.
2)Transportation method should be convert to railway reasonablly.
3)Active utilization of the private sectors.

[Development Impacts]
1)Appropriate allotment for each means of transport.
2)Increase of the capacity of transportation to meet with increase of the demands.
3)EIRR will be 12 to 35% (in each mode and main project).

5.TECHNICAL TRANSFER
1)Transfer the soft of transportation planning system.
2)One counterpart trained in Japan.

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
It is estimated that the major part of the results of this survey work may be included in the eighth five year plan.

(FY1995 Overseas Survey)
The study results have been circulated to all concerned agencies who would use it for their specific development.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②

和名 全国総合交通計画調査（第８次５ヶ年計画）

{M/P,Basic Study,Other}

PROJECT SUMMARY (F/S)

Compiled Sep.1995
Revised Mar.1996

ASO PAK/A 306/94

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Chashma Right Bank 1st Lift Irrigation Project

3.SECTOR
Agriculture/Irrigation, Drainage & Reclamation

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Irrigation Department,
the Government of North West Frontier Province (N.W.F.P.)

7.OBJECTIVES OF STUDY
Formulation of an irrigation agricultural development plan for the area in D.I.Khan district, NWFP, located in the right bank of the Indus River with an area of approx.110,000ha by prping up the water from the Indus River

8.DATE OF S/W 1992/11

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

10.STUDY TEAM
No.of Members 13
Period Mar.1993-Mar.1995(24 months)

Total M/M	Japan	Field
93.63	32.70	60.93

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Soil Test, survey of Farmhouse, Investigation of Water and Groundwater Quality, Topographic and Geological Survey

12.EXPENDITURE

	(¥000)
Total	
Contracted	263,604

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
D.I. Khan district, North-Western Frontier Province (N.W.F.P.)

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	308,081	121,896	186,185
2)	290,028	114,661	175,367
3)			

3.CONTENTS OF MAJOR PROJECT(S)
Waterintake works : newly estblished
Canal : newly established
Crossing drain works : 11 Waterway bridges, 11 Culverts, 1 Mud removal-cum-
outlet work 1 and 29 Bridges
Pump station : 20cu.m/s - 72cu.m/s, actural lift head 18.3m
Pump : Vertical vortex type, Main pump 10cu.m/s X 6 unit,
Sub pump 6cu.m/s X 2
Water line : 3 lines of steel pipe with a diameter of 3,200mm
Trunk canal : total extension 113.25km
Other ficilities : Branch of trunk canal, Regulation reservoir, Drain facility, Communication facilities, Living water supply facilities and Rural roads

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes/No

EIRR1)	15.30	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
[Conditions]
Targets of crop has been settled based on the Feasibility Study Report of CRBC Stage III(1990) and the various test results conducted by the D.I. Khan agriculture Research Center in 1991-1992. In order to reach the target level, beneficial farmers should be supported by means of technical transfer of improved cultivation methods and so forth.
[Development Impacts]
Following privileges are expected:-
1)Increase of the agricultural products at this area, 2)Saving transportation costs, 3)Water causing flood is diverted to irrigation water for upper stream area, 4)Development of living water resources, 5)Saving migration expenses during summer season, and so forth.
Additionally 1)Creation of chances of employment, 2)Improvement of local transportation, 3)Mitigation of gap of revenues among inhabitants and 4)Promotion of land price are also expected as the socio-economic effects.

5.TECHNICAL TRANSFER
1)Method of Feasibility Study was transferred to the Counterparts of N.W.F.P. during the survey works at the site.
2)3 Counterparts in total were invited to Japan for technical 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)
At present, the Irrigation Department of the Government of N.W.F.P. is preparing an actutal plan for the implementation of the project (FC-1) based on the report on this project. And the authority concerned expects to get Yen Credit from OECF in order to implement this project and it seems to be requested to the Government of Japan in near future.

(FY1995 Overseas Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS
Because the project is expected to benefit underdeveloped region, it is given top priority.

3.PRINCIPAL SOURCE OF INFORMATION
①, ②

和名 チャシュマ右岸揚水灌漑計画

(F/S,D/D)

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/A 301/76

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Cagayan Integrated Agricultural Development Project

3.SECTOR
Agriculture/(Agriculture in)General

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
CIADP related agencies NIA, NEA, PW

7.OBJECTIVES OF STUDY
The Project Area is rainfed paddy field area with the Cagayan river which is the biggest one in the Philippines however as useless for irrigation. Accordingly, F/S for the pump irrigation and the establishment for the integrated agricultural development plan shall be undertaken.

8.DATE OF S/W /

9.CONSULTANT(S)
Sanyu Consultants Inc.

10.STUDY TEAM

No.of Members	10	
Period	May.1975-Jun.1976(13 months)	
Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	91,893 (¥'000)
Contracted	82,482

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Cagayan River Basin of Cagayan Province

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	31,309	15,831	15,478
2)	11,923	12,530	11,923
3)	2,158	2,418	2,158

3.CONTENTS OF MAJOR PROJECT(S)

Scheme		1)Aparri-Lallo	2)Pared	3)Iguig
Irrigation areas(total:14,300ha)		12,000ha	1,500ha	800ha
Pumping facilities		1,200mm x 7sets	600mm x 4sets	450mm x 4 sets
Canals(irrigation)	Main	30km	8km	4.5km
	Lateral	240km	30km	16km
	Farm ditch	480km	105km	32km
Canals(drainage)	Main	50km		
	Lateral	360km	45km	16km
Farm Road		108km	27.5km	12km

The project cost 1)above is for the entire schemes. The project costs for the individual schemes are as follows.

	Total	Local	Foreign (US$1,000)
Aparri-Lallo	11,923	12,530	11,923
Pared	2,158	2,418	2,159
Iguig	1,397	883	1,397

Imp. Period: 1977. ~1982.

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

EIRR1)	15.00	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

[Conditions]
Economic benefits are estimated as the difference of net income in rice production between with-project and without-project conditions.

Increased rice production (tons)

	without project	with project
Iguig, Pared, Lallo	5,574	23,721
Aparri	12,190	52,106

[Development Impacts]
1) Irrigation Impacts:
Complete double cropping has been possible in paddy of 15,000ha in these 3 districts above.
2) Increased farmers' income
3) Village electrification plan was promoted in Aparri district.

5.TECHNICAL TRANSFER
Overseas training was done during the period of project implementation

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 proposed project was implemented by the OECF finance.

Apr.1977 OECF L/A sigfned (6.16 billion yen)
1978 Construction started
Dec.1988 Construction completed

OECF Loan:
- 3 pump stations
- Irrigation canals (930km)
- Drainage canals (414km)
- Rosds (759km)
- Power transmission (70km)

(FY1991 Overseas Survey)
No additional information.

(FY1994 Domestic Survey)
Due to the siltation in front of the intake gate for pumping station, irrigation water shortage is experienced in dry season. NIA is planning to conduct dredging but could not yet performed enough due to its budgetary constraint.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、④

和名 カガヤン農業総合開発

{F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1996

ASE PHL/S 302/76

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Pan-Philippine Highway Ferry Service Plan

3.SECTOR: Transportation/Marine Transportation & Ships

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Dept.of Public Highway

7.OBJECTIVES OF STUDY: Feasibility analysis of the construction car ferries

8.DATE OF S/W: /

9.CONSULTANT(S): Overseas Ships Building Cooperation Center

10.STUDY TEAM

No.of Members 4

Period Jan.1976-Jun.1976(5 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total 8,550 (¥'000)

Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Bataan Shipyard (Manila Bay and Marivelez)

2.PROJECT COST (US$1,000) (US$1=292.8yen)

	Total Cost	Local Cost	Foreign Cost
1)	9,904	1,707	8,197
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1. Ferry
1) Scale: 59m Diesel engine, 2 ferry
2) Capacity: Passenger 400, Truck (8t) 14
3) Term for constructon: 26 months
4) Technical employee: 20 engineers 3 months,40 managers 6 months

2. Ferry terminal
1) Mooring
Crest elevation: MHHW +2.5m
Depth: -4.5m
2) Building
Size: 1,200sq.m
Structure: 2 floor Ferro-concrete
3) Car park, shore protection, breakwater constructed.

Imp. Period: 1978. -1980.

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes

EIRR1)	10.00	FIRR1)	8.00
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Conditons:
1. Forecasted demand; assumed 2 round-trips per day (target year: 1985)
2. Staff: 20(officer 8, clue 12)
3. Continental regime: A center is set on oneside, managers is set.
4. Capacity of transport/day (passenger)

1978	1980	1985	1990
310	390	710	1,270

Development impacts:
1. Reduction of transportation cost: 11 pesos/man
2. Reduction of transportation time: 0.8 pesos/man
3. Loss of taking on board is saved: 20 pesos/T
4. Saving the maintenance of other shore: 76,000 pesos year/1,000 passengers
5. Other impacts
1) Several functions of service will be established around terminal.
2) Increase of sightseers

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)

On 1977, the after care survey had been carried out, and after that the project implemented by Yen Credit.

Jan.1978 OECF loan agreement (3,000 million yen)
For the construction of two ferry boats and four ferry terminals
Jan.1983 1st ferry boat delivered
Oct.1983 Terminals completed
Jun.1984 2nd ferry boat delivered

(FY 1991 Overseas Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①、②、④

(F/S,D/D)

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/S 301/76

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Construction Plan of Subic Ship Repair Yard

3.SECTOR: Transportation/Marine Transportation & Ships

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Maritime Industry Authority

7.OBJECTIVES OF STUDY: Feasibility analysis of a ship repair yard

8.DATE OF S/W: /

9.CONSULTANT(S):

10.STUDY TEAM
No.of Members 6
Period Jan.1976-Apr.1976(3 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE
Total 13,226 (¥'000)
Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Subic Bay in southwestern Luzon (100km from Manila)

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	66,530	29,370	37,160
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1. Facility plan
1) Total site: 158,000sq.m
2) Dredging and reclamation: 1 million cu.m
3) Dock yard: 350m x 65m x 13m, sufficient for 300,000D.W.
4) Dock side crane: 30t x 2
5) Repair plant: main bldg. 150m x 35m x 12-17m, ancillary bldg. 150m x 15m x 7m
6) Quay and dolphin: 25m x 160m, of which dolphin 20m x 25m, obliquely intersection
steel pile standard
7) Oxygen and acetylene generator: obtained from outside.
8) Service and industrial water: well used, Water tank 500t for service water,
2,000t for industrial water.
9) Control pollution: Equipment for treating waste water from living and from
sashing engine parts is to be installed.
10) Construction cost: $71.86 million
2. Management plan
Organization of New company
Capital 20 million US$(60% from Philippine government 40% from partner) It is

Imp. Period: 1976. -1980.

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	25.00	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Conditions:
1. Initial investment: recovered in 17.5 years after beginning of operation.
2. Residual book value: 10%
3. Long-term loan: Interest 4.25% on the average. 7 year deferment 18 year
payment
4. Sales: 65% is received before the end of a year, 35% in the following year.
5. Production cost: 10% is paid in the present year and 90% in the following year.

Development impacts:

1. Sales

	1979	1980	1981	1982	1983	1984	1985
(mil$)	2.42	9.46	13.2	17.2	19.1	21.4	24.2

2. Foreign exchange earnings and savings
3. Increase of employment opportunity: 1,600
4. Increased market for domestic materials: The dependence on imported raw
materials will be lowered gradually in the course of this project.

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)

Sep.1977 OECF loan agreement (E/S, 265 million yen)
Mar.1979 OECF loan agreement (10,855 million yen)
For the construction of Subic Repair Yard
Oct.1979 Construction started
Dec.1981 Construction completed

OECF financing:
1) Construction of a dry dock (350m x 65m x 12.5m)
2) Berths (two 300,000DWT berths, one 150,000DWT berth, and one 20,000DWT berth
3) Cranes (one 80t crane, one 30t crane and one 15t crane)
4) Buildings

2.MAJOR REASONS FOR PRESENT STATUS:

3.PRINCIPAL SOURCE OF INFORMATION
①, ④

{F/S,D/D}

和名 スービック修理用造船所建設計画

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/S 303/76

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Manila Rapid Transit Railway Line No.1

3.SECTOR: Transportation/Railway

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Planning & Project Development office, Public Works Dept., Transport & Communication

7.OBJECTIVES OF STUDY: Urban Public Transportation

8.DATE OF S/W: 1974/7

9.CONSULTANT(S): Pacific Consultants International
Japan Overseas Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 12

Period Apr.1975-Jun.1976(14 months)

Total M/M	Japan	Field
90.42	53.34	37.08

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY: None

12.EXPENDITURE

Total	178,914 (¥'000)
Contracted	242,970

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Manila

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	547,000	282,000	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

Content : Route selection
: Station building
: Power supply facilities
: Communications facilities
: Signalling
: Operation and Maintenance
Length : 20km

Imp. Period: 1980.1-1987.7

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: No

EIRR1)	20.40	FIRR1)
EIRR2)		FIRR2)
EIRR3)		FIRR3)

Conditions and Development Impacts:

Conditions: - Traffic demand forecast was made on the basis of person trip survey (1971) and mass transit service survey (1975).
- survey area was Greater Manila Area including 4 cities and 15 towns.

Development impact: It is to meet future traffic demand which cannot be met by roads surface mocks.

5.TECHNICAL TRANSFER

-Technique for future traffic demand forecasting
-Overseas training in Japan
-Environmental assessment method

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 subway project was cancelled as follows.

1. According to the decision made by the President's Office in 1979, this project was started with a Belgian grant. The original plan was the surface railway transit.
2. Afterwards, the plan was changed to the elevated railway transit(LRT) and consequently required additional loans, including Lloyd/Sumitomo, Swiss Transfer Credit, and LTD Bond.
3. This LRT No.1 route replaced Subway No.1 route. Total length was about 14 km.
4. This LRT project was completed in December 1985. Number of passengers : 250,000/day.

(FY1994 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

The alternative transit system was implemented.

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 マニラ地下鉄（1号線）計画

{F/S,D/D}

PROJECT SUMMARY (Basic Study)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/A 501/77

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY
Fish Finding (skipjack) Survey

3.SECTOR
Fisheries/Fisheries

4.REFERENCE NO.

5.TYPE OF STUDY: Basic Study

6.COUNTERPART AGENCY
Bureau of Marine Resources

7.OBJECTIVES OF STUDY
To conduct maritime surveys in order to clarify the distribution of skipjack resources, abundance of bait fishes for skipjack pole-and-line fishing and, aptitude of bait fishes in the southeastern area of the Philippine Islands.

8.DATE OF S/W /

9.CONSULTANT(S)
Japan Marine Fishery Resource Research Center

10.STUDY TEAM

No.of Members	Total M/M	Japan	Field
3			

Period Nov.1976-Mar.1977(5 months)

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	99,851 (¥'000)
Contracted	94,682

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
The Gulf of Leyte and the Gulf of Davao

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)
During the period of the study, it was a poor catch period in the Gulf of Leyte, and it was between a poor catch period and the beginning of fish visiting period in the Gulf of Davao, therefore the haul was poor.
It is necessary to conduct survey in different time to observe the difference of the hauls by the time and to judge the overall situation through a year.

4.CONDITIONS AND DEVELOPMENT IMPACTS
1. Survey period was too short to estimate the feasibility of skipjack pole-and-line fishery in this area.
2. Feasibility of supplying bait fish was estimated, and feasibility of technic to keep bait fish was also estimated.

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
(FY1993 Overseas Survey)
No information is available.

(FY1994 Domestic Survey)
No information.

(FY1995 Domestic Survey)
After this basic study, there is no new survey work has been carried out.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①, ②

和名 水産資源開発調査

{M/P,Basic Study,Other}

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/S 601/77

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Pan-Philippine Highway Ferry Service (follow-up)

3.SECTOR: Transportation/Marine Transportation & Ships

4.REFERENCE NO.:

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY: Dept.of Public Highway, Maritime Industry Authority

7.OBJECTIVES OF STUDY: Technical guidance on the construction of ferries

8.DATE OF S/W: /

9.CONSULTANT(S): Overseas Ships Building Cooperation Center

10.STUDY TEAM

No.of Members 4

Period Jul.1977-Jul.1977(1 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total 4,554 (¥'000)

Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Shipyard (27ha) in Marivelez

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	10,870	2,010	8,860
2)			

3.CONTENTS OF MAJOR PROJECT(S)

Technical advice on the ferry construction which has been proposed by the F/S (FY 1976).

4.CONDITIONS AND DEVELOPMENT IMPACTS

- Efficient in-island and coastal transportation
- Transfer of shipbuilding technology

5.TECHNICAL TRANSFER

1)Designing engineers and field technicians were trained in Japan.
2)Supervisors, engineers, field staffs, etc. were dispatched from Japan.

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

- [x] In Progress or In Use
- [ ] Delayed
- [ ] Discontinued

(Description)

Jan.1978 OECF loan agreement (3,000 million yen)

(FY1994 Domestic Survey)
No additional information.

(FY1995 Domestic Survey)
Utilize the report of this survey work, a 1900 GTZ ferry was built in Japan and another one was built in Philippines, respectively during 1980 to 1984.
These ferries are on use at present. No further information is available at present moment.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

[M/P,Basic Study,Other]

和名 フェリー計画アフターケア

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/A 302/77

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Grain Terminal Construction Projects in Manila and Cebu

3.SECTOR: Agriculture/Irrigation, Drainage & Reclamation

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: National Grains Authority

7.OBJECTIVES OF STUDY:

8.DATE OF S/W: /

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

10.STUDY TEAM
No.of Members 12
Period Oct.1976-Apr.1977(7 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	72,011 (¥'000)
Contracted	61,397

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Manila and Cebu

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	13,800	7,800	6,000
2)	6,600	3,700	2,900
3)			

3.CONTENTS OF MAJOR PROJECT(S)

Manila: Construction of 26,000 tons grain terminal silo.
Installation of 300 tons/hour pneumatic unloaders.

Cebu: Construction of 10,000 tons grain terminal silo.
Installation of 150 tons/hour pneumatic unloaders and construction of 2,000 tons/month corn grits mill.

The Cost 1) above pertains to Manila, and the Cost 2) to Cebu (end 1979 prices).

Imp. Period:

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

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

Conditions and Development Impacts:
1. Cost reduction of imported grain transportation, unloading and storage.
2. Extermination of damage from insects and rodents and prevention of deterioration of grain.

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)
(FY1991 Overseas Survey)
The Government of the Philippines has no plan to secure financing for the project.

(FY1994 Domestic Survey)
No information.

2.MAJOR REASONS FOR PRESENT STATUS
(FY 1991 Overseas Survey)
The government is no longer interested in pursuing the project due to the policy of deregulation and privatization.

3.PRINCIPAL SOURCE OF INFORMATION
①、②

(F/S,D/D)

和名 穀物ターミナルサイロ建設プロジェクト（マニラ・セブ地区）

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1996

ASE PHL/S 304/77

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Flood-Forecasting Systems in the Agno, Bicol and Cagayan River Basins

3.SECTOR
Social Infrastructu/River & Erosion Control

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Weather Bureau P.A.G.A.S.A.

7.OBJECTIVES OF STUDY
Establishment of flood forecasting and warning systems over the three river basins of the Luzon Island

8.DATE OF S/W 1975/11

9.CONSULTANT(S)
CTI Engineering Co., Ltd.

10.STUDY TEAM

No.of Members 15
Period Nov.1976-Aug.1977(9 months)

Total M/M	Japan	Field
15.70	6.30	9.40

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Survey Radio wave propagation Test

12.EXPENDITURE

Total	102,520 (¥'000)
Contracted	39,133

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Agno, Bicol and Cagayan Rivers / Luzon Island

2.PROJECT COST (US$1,000) (US$1=291Yen=7.39P)

	Total Cost	Local Cost	Foreign Cost
1)	6,535	440	6,094
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1. Facilities and network

	Agno river	Bicol river
Cagayan river		
1) Flood forecasting center (Total 1) (to issue the flood warning to sub-centers)		
2) Relay stations (Total 4)	1	2
3) Monitor stations (Total 3)	1	1
(to transmit hydrological data to FFC)		
4) Telemeter stations (total 21)	8	9
5) Sub-center (Total 3)		
6) Transmission and receiving stations (Total 2)		

2. Provision of personnel
1) Flood forecasting center: Superviser (4) Hydrologist (5) Telecommunication engineer (6)
2) Monitor station: Hydrologist (8) Telecommunication engineer (11)

Imp. Period: 1979.1-1982.7

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

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

Conditions and Development Impacts:

Conditions:
Target areas of Flood forecasting system
1. Agno river basin: Entire Pangasinan Plain, Central part of Tarlac Province.
2. Bicol river basin: Central part of the basin, from lake Bato to lake Baao and the flood plain surrounding Naga city.
3. Cagayan river basin: Flood plain along the middle reaches from Ilagan to Tumauini, Flood plain along the lower reaches from Tuguegarao to Apari.

Development impacts:
1. Save life: Flood information services contributes to effective execution of flood fighting activities, mitigation of loss of lives and personal and public assets, furthermore, it contributes to maintain stability of social economy and public welfare.
2. Promotion of development project

5.TECHNICAL TRANSFER
1. OJT: During two years of construction period, total of 34 trainees were received for training.
2. Acceptance of trainees: Trainees consisting of 8 specializing hydrology and 11 telecommunication.

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.1978 OECF L/A signed (1,774 million yen)
Feb.1979 D/D completed
Mar.1982 Construction completed and operation started

Realized project:

Flood forecasting center	1 location
Relay stations	4 locations
Monitor stations	3 locations
Telemeter stations	21 locations
Subcenters	3 locations
Transmission & receiving stations	2 locations

Total project cost: US$8.83 million (OECF US$7.38 million)
(US$1=240yen)

2.MAJOR REASONS FOR PRESENT STATUS
1. Magnitude of effects
2. Factor of continuation
3. High degree of priority
4. Strength of supporting organizations

3.PRINCIPAL SOURCE OF INFORMATION
①、④

和名 アグノ川、ビコ川、カガヤン川における洪水予警報システムの総合計画設立のための調査

{F/S,D/D}

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1996

ASE PHL/S 101/78

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Pasig-Potrero River Flood Control and Sabo Project

3.SECTOR: Social Infrastructu/Water Resource Development

4.REFERENCE NO.:

5.TYPE OF STUDY: M/P

6.COUNTERPART AGENCY: Dept. of Public Works and Highways (DPWH)

7.OBJECTIVES OF STUDY: Flood control

8.DATE OF S/W: 1977/3

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

10.STUDY TEAM

No.of Members 15
Period Aug.1977-Sep.1978(14 months)

Total M/M	Japan	Field
42.97	7.17	35.80

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	158,282 (¥'000)
Contracted	89,719

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA

Pampanga Province (70km westward from Manila)

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
	1)	31,820		
(US$1=7.4P)	2)			

3.CONTENTS OF MAJOR PROJECT(S)

The pasig and Potolero rivers in the western region of Luzon Island causes the flood damage because of the remarkable denudation of mountain region.

The project consists of the following sabo works preventing sediment deposit in the river.

Structure	Scale
- Sabo dam	10 nos.(height 14~15m, crest length 31-68m)
- Pondage for sediment deposit	about 56 ha
- Levee	17,220m(new), 2,530m(tentative)
- Ground sill	13 nos.
- Groyne	349 nos.
- sluice	3 nos

* Above project cost is in 1979 price.

4.CONDITIONS AND DEVELOPMENT IMPACTS

The Project has the following far-reaching effects:
1)To mitigate the damage due to flood and sedimentation.
2)To increase the agricultural production.
3)To stabilize public welfare.
4)To create the chance of employment.
5)To transfer the knowledge on sabo works and river improvement works.

5.TECHNICAL TRANSFER

1) OJT

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

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

(Description)

1) One sabo dam was constructed by DPWH. River improvement works in the downstream reach is subsequently under way.

2)The construction works are managed by the budget of the Government of the Philippines.

(FY 1991 Overseas Survey)
No additional information.

(FY1993 Overseas Survey)
1. Pasig-Potrero River Flood Control and Sabo Project
The topography of the project area seriously affected by the eruption of Mt. Pinatubo in 1991. As a result, JICA study can not apply for further development.
The implementation of the master plan study around the Mt. Pinatsubo including Pasing-Potrero River area is conducting under the US technical assistance. This study will complete in March 1994.

(FY1994 Domestic Survey)
A master plan study of the flood control and sabo projects around Mt.Pinatubo was prepared with an technical assistance of US Army Corps of Engineers. The final report of its study was submitted to the Government of Philippines in March 1994 with a following title :
Mount Pinatubo Recovery Action Plan, Long Term Report, Eight River Basins, March 1994, US Army Corps of Engineers.

The project management office of Mount Pinatubo Rehabilitation (PMO-MPR) prepared their own urgent rehabilitation plan based on the said master plan and started its implementation by availing the local funds of the Government of Philippines.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①、②、③

{M/P,Basic Study,Other}

和名 小水系河川総合開発計画

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/A 601/78

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Review on the Feasibility Study of Fishing Port Package-1

3.SECTOR
Fisheries/Fisheries

4.REFERENCE NO.

5.TYPE OF STUDY Other

6.COUNTERPART AGENCY
Department of Public Works, Transportation, and Communication (1977)
Dept. of Construction (1978)

7.OBJECTIVES OF STUDY
Review of the feasibility studies of five ports undertaken by the Goverment of the Philippines and supplementary economic analysis

8.DATE OF S/W 1978/3

9.CONSULTANT(S)
Overseas Coastal Area Development Institute

System Science Consultants

10.STUDY TEAM

	Total M/M	Japan	Field
No.of Members	3		
Period			

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 33,866 (¥'000)
Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
whole country

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
US$1=220Yen	1)	120,366	59,756	60,610
	2)			

3.CONTENTS OF MAJOR PROJECT(S)

The Study reviewed the following components of the feasibility studies of five fishing ports shown below, with supplementary economic evaluation.
1.Construction of basic port facilities
(mooring gear, sea banks, berths, embankments, anchorages, etc.)
2.Improvement of functional facilities
(fish markets, ice plants and cold storage facilities, water supply stations, oil stations, etc.)

- Zamboanga Port
- Iloilo Port
- Camaligan Port
- Lucena Port
- Sual Port

4.CONDITIONS AND DEVELOPMENT IMPACTS

Conditions:
1.Project life is twenty years after the start of fishing ports operation.
2.1978 price
3.Discount rate : 15%

Direct impacts:
(1) increase of hauls
(2) improvement of fish freshness
Indirect impacts:
(1) improvement of self-sufficiency of marine products
(2) modernization of fishing
(3) increase of incentive for investment
(4) stabilization of fish price
(5) creation of employment opportunities

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)

(FY1991 Overseas Survey)
The five fishing ports reviewed by this study have all been constructed with OECF financing and are now fully operational.
Detailed engineering was prepared by the Pacific Consultants International in consortium with BASIC Technology Management Corporation. Construction was undertaken by varous firms over a period of ten years.

Nov.1978 OECF L/A signed (8,340 million yen)
Package I : Modernization of structural and functional facilities at five ports (Iloilo, Lucena, Zamboanga, Sual and Camaligan)
May 1982 OECF L/A signed (3,630 million yen)
Package II: Cold storage at Zamboanga, Lucena and Camaligan)
D/D for five other fishing ports
Jun.1985 Iloilo Port completed
Jun.1988 Zamboanga Port completed
May 1990 Sual Port completed
Jan.1991 Camaligan and Lucena Ports completed

(FY1994 Domestic Survey)(FY1995 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

The Government of the Philippines assigned high priority to the fishing ports in the application for the 6th Yen Credit Package.

3.PRINCIPAL SOURCE OF INFORMATION

①、②、④

和名 漁港整備計画レビュウ調査

{M/P,Basic Study,Other}

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/A 303/78

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Bohol Integrated Agricultural Development Project

3.SECTOR: Agriculture/(Agriculture in)General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: NIA (National Irrigation Administration) and two others

7.OBJECTIVES OF STUDY: F/S on the Integrated Agricultural Development Project in which the irrigation plan is a main component.

8.DATE OF S/W: 1977/3

9.CONSULTANT(S): Sanyu Consultants Inc.

10.STUDY TEAM

No.of Members 13

Period Aug.1977--Nov.1977(3 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY: Topogeaphic and geological survey

12.EXPENDITURE

Total	122,815 (¥'000)
Contracted	111,856

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Wahig-Pamacsaran River Basin of Bohol Island

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	43,600	18,400	25,200
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1)Pamascaran dam: height 67.5m, Malinao diversion dam: height 24.5m
2)Irrigation area
Pamascaran Lower area 4,800ha, Upper area 120ha
Wahig Upper area: Single cropping 256ha, Double cropping 400ha
Total: Single cropping 5,176ha, Double cropping 5,320ha
3)Irrigation facilities
Diversion weir 2 places (Upper area)
Irrigation canal 131km (Upper area 18km, Lower area 113km)
Drainage canal 98km (Upper area 8.4km, Lower area 89.4km)
Farm road 118km
4)Power station: Installed capacity 1,700KW
Annual power generation 5,175MWH
5)Consolidation of terminal facilities

Imp. Period: 1977.8-1978.3

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	17.00	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Conditions:
Economic benefits are expected of agricultural development and power generation. Agricultural benefits are estimated as the annual net increase in production benefits.

Development Impacts:
1.Increase of agricultural production by introduction of irrigation system
2.Contribution to self-sufficiency of the staple food
3.Increase of employment
4.Correction of imbalanced income distribution
5.Alleviation of energy restriction
6.Improvement of traffic network
7.Dissemination of agricultural technology

5.TECHNICAL TRANSFER: Survey method and development planning method were transferred to c/ps.

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)

Jun.1980 OECF loan agreement signed (F/S 90 million yen)
Sep.1983 OECF loan agreement signed (4,600 million yen)
The loan is for the construction of an earth dam (height 20.8m, cap. 5.99 million cu.m), irrigation and drainage canals, farm roads and on-farm facilities.

(FY1991 Overseas Survey)
The Bohol Project (I) was initially scheduled to be implemented during 1983 - 1989 by the OECF loan. The completion date was later revised from April 30, 1989 to Dec. 1995.

(FY1993 Overseas Survey)
At present, only the irrigation component of the original plan was adopted as a Project under Japanese OECF's fund (Yen Credit) with the Project name of "Bohor Irrigation Project I", and the irrigation facilities are under construction since 1985.
There is a technical problem concerning with the strength of the foundation ground. It comes out when implement the construction works of the Malinao diversion dam with a height of 20.8 m.
In order to solve this problem, some measures, such as to increase grouting pressure, are investigating. As the construction of the Pamascaran Dam with a dam height of 67.5 m, which was included in the original plan, has been excluded due to the financial restriction. There are also no plan to establish a hydro-generating facility.
According to NIA, original schedule to complete the construction works of the Project facilities were expected by the end of 1995. However, because of above-mentioned technical problem and the unfavourable weather of last a few years, there are still some possibility to delay the implementation works of this project.

(FY1994 Domestic Survey)
In 1993, flood caused by Typhoon damaged the dam under construction. This damage will be delayed the completion of the project which is expected on December, 1995.

(FY1995 Domestic Survey)
Early in Aug., 1995, the Malinao Dam has been closed and now is in full of water. Another construction works of the agreement are scheduled to complete on Dec., 1995.

2.MAJOR REASONS FOR PRESENT STATUS

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

和名 ボホール農業総合開発計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1996

ASE PHL/S 306/78

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Telecommunications Network Project in the Northern Part of Luzon

3.SECTOR
Communications & B/Telecommunication

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Bureau of Telecommunications

7.OBJECTIVES OF STUDY
Feasibility study of the telecommunications Network Project in the Northern part of Luzon.

8.DATE OF S/W 1977/12

9.CONSULTANT(S)
Nippon Telecommunication Consulting Co., Ltd.

10.STUDY TEAM

No.of Members	Total M/M	Japan	Field
13		1.30	

Period Feb.1978-Dec.1978 (10 months)

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	61,035 (¥'000)
Contracted	2,356

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Ilocos, Cagayan Valley

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	83,047	30,176	52,871
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1. Project
1) Local exchanges (45), IPTSS (50)
2) Toll switching centers (8)
3) Microwave network (20 hops, 732kms)
4) UHF system (43), VHF system (30)
5) PCM system (4 sections), Multiplexing equipment (about 3100ch)
6) Truck cable (about 457km)
7) Local cable (about 640km)
8) Telex exchange (2), Telex concentrator (7), General station (32)

2. Charging system
1) Charge per call: 0.30 pesos
2) Unit time: Inter-provincial call-30 sec
Inter-provincial call-5 case

Imp. Period: 1981. -1996.

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	6.31	FIRR1)
EIRR2)		FIRR2)
EIRR3)		FIRR3)

Conditions and Development Impacts:

Conditions:
1. Estimated telephone demand: 140,000 (Target year: 2002)
2. Range of installation: 1982-1987, 1,300-1,400 per year
3. A loss probability: 0.01

Development impacts:
1. Increase of telephone:9,000
2. Subscriber Toll Dialing Service available from Ilocos and Cagayan areas.
3. Toll call available to Manila
4. Establishment for protection against calamities
5. Development in sightseeing business
6. Technology transfer
7. Cultural and social integrity
8. Maintenance of public order

5.TECHNICAL TRANSFER
On the Job Training was concluded for the counterpart staff.

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 complted by the OECF financing.

Nov.1978 OECF E/S loan agreement (157 million yen)
Jun.1981 OECF loan agreement (Stage 1, 7,600 million yen)
Aug.1981 Construction completed
Jan.1988 OECF loan agreement (Stage 2, 5,700 millon yen)
Jul.1988 Construction started
Oct.1992 Construction completed
Aug.1993 OECF loan agreement (Stage 3, 3,803 million yen)

OECF financing:
Stage 1: Inter-city telecommunication links and telephone exchanges for major cities in Northern Luxon (11 city stations and 6 outside stations and one telex exchange
Stage 2: (10 city exchanges)
Stage 3: Inter-city telecommunication links and telephone exchanges for major cities in Northern Luxon. Expansion of servise area and looping main channels.

(FY1993 Overseas Survey)
1996 Scheduled to be completed.

(FY1995 Domestic Survey)
Sep.,1995 Manufacturing of the equipment of Phase-III is almost completed.

2.MAJOR REASONS FOR PRESENT STATUS
Effectiveness
- large impact
- high priority

3.PRINCIPAL SOURCE OF INFORMATION
①、②、④

和名 ルソン島北部電気通信網建設計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1996

ASE PHL/S 305/78

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: C-3 and R-4 and Related Roads Project

3.SECTOR: Transportation/Road

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Dept. of Public Works and Highways (DPWH)

7.OBJECTIVES OF STUDY: Technical and Economical F/S of C-3 and R-4 and its related road in Metro Manila, Philippines

8.DATE OF S/W: 1977/3

9.CONSULTANT(S): Japan Overseas Consultants Co., Ltd.
International Development Center of Japan

10.STUDY TEAM

No.of Members 12
Period Mar.1977-Mar.1978 (12 months)

Total M/M	Japan	Field
65.31	36.60	28.71

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	172,920 (¥'000)
Contracted	159,884

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Metropolitan Manila
(Ayal Ave to R-9, 15km and Edsa to C-5, 8km, totaling 23km in length)

2.PROJECT COST (US$1,000) (US$1=8P)

	Total Cost	Local Cost	Foreign Cost
1)	116,250	76,375	39,875
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1. Road
1) C-3 Road: 15.5km (South Superhighway - Rizal Av, Balintawak Interchange) 6 lanes
2) R-4 Road: 7.2km (C-4 - Juan Luna with sections overlapping C-5) 4 lanes for
R-4 and 6 lanes for the rest
2. Construction plan
Phase-1. southern Section of C-3 Road (1978-1985)
Stage-1. Construction of a four-lane road (1979-1983)
Stage-2. Construction of two additional lanes (1983-1985)
Phase-2. Northern Section of C-3 road (1962-1987)
Stage-1. Construction of a four-lane road on C-3 road (1983-1984)
Stage-2. Construction of two additional lanes on C-3 road and of grade
separation at Quezon-C-3 intersection (1986-1987)
Stage-3. Construction of Balintawak branch (1986-1987)
Phase-3. R-4 and its Related roads (1983-1988)
Phase-4. Construction of Grade Separation at four intersections (1987-1989)

Imp. Period: 1978. -1982.

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes

EIRR1)	49.90	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Conditions:

	Traffic projection (1980)	Average annual traffic growth (1980-2000)
C-3 Road	629,000 vehicle-km/day	4.4%
R-4 Road	201,800 vehicle-km/day	3.6%

Development Impacts:
1. Unit time value saved: Calculated on the basis of the annual income of families and the annual working hours by non-car owners and car owners.
The esimated time value of passengers was reduced by 50 percent in the calculation of time cost because these passengers could not normally fully utilize the time they have.

(peso)	Non-car owner	Car owner
1) To/from work	0.73	2.62
2) Business	1.47	5.25

2. Vehicle-operating cost saved
1) Passenger car 0.29(peso) 2) Truck 2.55
3) Bus 2.73 4) Jeepney 1.78
3. Traffic volune decreased: 12,000 vehicles/day

5.TECHNICAL TRANSFER: Used local consultants efficiently in air photography, soil and material survey and geotechnical survey.

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)
Nov.1978 OECF loan(Ph-P26) L/A signed(S/S on C-3 & R-10 296 million yen)
Dec.1989 - Jun.1991 Detailed design completed (NK, PCI, UICI)
May.1986 OECF loan (Ph-P74) L/A signed (Metro Manila C-3 1,439 million yen)
Project: C-3 Northern Section (7km, 6lanes)and the Makati to Mandalyon Section (3km,4lanes)
Jan.1988 OECF loan (Ph-P78) L/A signed (C-5 & R-4 4,837 million yen)
Project: southern C-5, and eastern R-4 connecting C-4(EDSA) and C-5
Apr.1989 - Jan.1991 Detailed Design (southern C-5, and eastern R-4) completed (Katahira & Engineers)
May 1989 OECF L/A(PH-P95)signed(Metro Manila Outer Major Roads 4.776 million yen)
Project: Mandanao Av. Extension(8km,6lanes), R-10 widening(6km), C-3Southern Section(9km, 6lanes)and related roads(23km)
(FY1992 Overseas Survey)
1.C-3: Construction commenced in June 1988. Northern C-3 Package A-1(N. Domingo St. - Sto. Domingo St.) was completed. Of Package A-2(Sto. Dommingo St. - Rizal Av. Extension), the section from Sto. Domingo to A. Bonificio has been completed, but the construction of the remaining section through Rizal Av. Extension has been suspended pending the aquisition of the necessary right of way. With regard to the Southern Section of C-3, the construction has not been started due to the difficulty of acquiring the right of way. GOP is considering the possibility of withdrawing the section from OECF finance. Total investment 522 million pesos(foreign currency 288 million, local currency 294 million).
2. R-4: The construction from the end of R-4 through C-5 has been commenced, but the construction of the eastern R-4 has been suspended pending the relocation squatters.
(FY1993 Overseas Survey)
May 1994: C-3, Segment S-11 scheduled to be completed.
Jun.1994: R-4 scheduled to be completed.
(FY1994 Domestic Survey)
• The northern section of the C-3 (N.Domingo-Rizal Av. Extension) was completed on Dec.1994.
• The R-4 (EDSA-2.4km) is under construction as a part of contract packages of the C-5 Road Project. The road was partialy completed and remaining part is scheduled to complete on March 1995.

(FY1995 Domestic Survey)
The construction works are completed as on schedule.

2.MAJOR REASONS FOR PRESENT STATUS
1) Efficient relief of traffic congestion in the Metropolitan area was recognized.
2) This study was given high priority.

3.PRINCIPAL SOURCE OF INFORMATION
①、③、④

PROJECT SUMMARY (M/P)

Compiled Mar.1991
Revised Mar.1996

ASE PHL/S 102/79

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Bohol Integrated Area Development Project

3.SECTOR
Development Plan/Integrated Regional Development Plan

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
National Council on Integrated Area Development (NACIAD)

7.OBJECTIVES OF STUDY
Formulation of a area development plan centering on the Wahig-Pamacsalan River basin

8.DATE OF S/W 1978/8

9.CONSULTANT(S)
Pacific Consultants International
Mitsubishi Research Institute

10.STUDY TEAM

No.of Members	14	
Period	Jun.1979-Feb.1980(8 months)	
Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Topographic Survey and Geological Survey

12.EXPENDITURE

Total	96,994 (¥'000)
Contracted	85,175

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Bohol Province (4,120 sq.km, pop.0.76 million)

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	549,300		
2)			

3.CONTENTS OF MAJOR PROJECT(S)

The study formulated the area development plan with central focus on the irrigation development project in the Wahig-Pamacsalan River basin (the F/S conducted by JICA). Major proposals are as follows.

1) Water resource development:
- Wahig-Pamacsalan irrigation development
- Tagbilaran pumping station 2) Agriculture:
- Establishment of a center for soil technology development and agricultural promotion
- Establishment of a Wahig-Pamacsalan pilot farm
- Development of the livestock sector

3) Fisheries: Establishment of a fish processing base at the port of Cogtong
4) Forestry: Reforestation/rehabilitation of the basin
5) Mining and industry: Skill development of small industries

4.CONDITIONS AND DEVELOPMENT IMPACTS

Bohol Province is one of the underdeveloped provinces included in the Central Visayas (or Region VII). The integrated area development will contribute to the narrowing of regional income disparities through strengthening the inter-sector linkages in development.
Major development impacts are (1) increase of income, (2) creation of employment, (3) creation of demands, etc.

5.TECHNICAL TRANSFER
OJT for the counterparts and participation of the counterparts in the JICA training program

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
1) Based on the recommendations of the study, the irrigation and drainage development project, including the construction of rural roads and tertiary irrigation facilities are under implementation by the National Irrigation Administration (NIA) with OECF finance.
Jun.1980 OECF E/S loan agreement (90 million yen)
Sep.1983 OECF loan agreement (4,600 million yen)
Apr.1985 Construction started
Jun.1993 Construction to be completed

Realized project:
- Earth dam (hight 20.8m)
- Irrigation & drainage canals, rural roads & on-farm development

2) The Bohol Agricultural Promotion Center (BAPC) was established by the Japanese grant (E/N in July 1983, 970 million yen).

3) Technical cooperation (Bohol Agricultural Promotion Center Project) was implemented by JICA during 1983-1990.

(FY1991 Overseas Survey)
BAPC was integrated to the research program of the regional outreach station for the lowland irrigated rice developmental zone.

(FY1993 Overseas Survey)
- Technical problem on its foundation and natural disaster postponed the completion of the Bohol Irrigation Project to 1996.
- JICA is conducting post evaluation on the Bohol Agricultural Promotion Center.
- Because new administration of the Philippines selected the Bohol Integrated Area Development Project as one of the 19 Flagship (high priority) Projects of the President starting in 1994, M/P needs updating.

(FY1994 Domestic Survey)(FY1995 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、④

和名 ボホール州総合開発計画

{M/P,Basic Study,Other}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1996

ASE PHL/S 307/79

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Hospital Development Project

3.SECTOR: Social Infrastructu/Architecture & Housing

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Ministry of Health

7.OBJECTIVES OF STUDY

8.DATE OF S/W: 1978/12

9.CONSULTANT(S): Nihon Sekkei, Inc.

10.STUDY TEAM

No.of Members 15

Period Mar.1979-Feb.1980(11 months)

Total M/M	Japan	Field
30.32	20.26	10.06

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	82,114 (¥'000)
Contracted	76,174

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Ilocos and Cagayan Valley Provinces

2.PROJECT COST (US$1,000) (US$1=7.415P)

	Total Cost	Local Cost	Foreign Cost
1)	128,388	128,388	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1)Medical centers: 4 locations, 900 beds
2)Regional hospitals: 2 locations, 500 beds
3)Provincial hospitals: 13 locations, 1,500 beds

* Implementation period is 6 years.

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes

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

Conditions and Development Impacts:

Conditions:
1)Containment of communicative diseases.
2)Old buildings to be renovated as wards and new diagnostic and treatment facilities to be added.
3)Improvement of water supply and drainage systems.
4)Power generation to maintain the minimum basic functions in case of power failures. Development impacts:
- Increased supply of healthy labor force
- Creation of medical employment
- Promotion of local medical industries

5.TECHNICAL TRANSFER

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)
Cancelled after the completion of the feasibility study.

(FY1991 Overseas Survey)
No additional information.

(FY1994 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS
Lack of funds.

3.PRINCIPAL SOURCE OF INFORMATION
①、②

(F/S,D/D)

和名 病院整備計画

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1996

ASE PHL/S 103/80

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY
Mayon Volcano Sabo and Flood Control Project

3.SECTOR
Social Infrastructu/River & Erosion Control

4.REFERENCE NO.

5.TYPE OF STUDY: M/P

6.COUNTERPART AGENCY
Dept. of Public Works and Highways (DPWH)

7.OBJECTIVES OF STUDY
Sabo and Flood Control plan for the Quinali (A) River The Quinali (B)River and the Yawa River

8.DATE OF S/W: 1978/6

9.CONSULTANT(S)
Nippon Koei Co., Ltd.
Sabo Technical Center

10.STUDY TEAM

No.of Members 23
Period Sep.1979-Mar.1981(9 months)

Total M/M	Japan	Field
72.38	40.36	32.02

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Note

12.EXPENDITURE

Total	241,998 (¥'000)
Contracted	231,034

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Surrounding area of Mayon volcano in the southeast of Luzon

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
	1)	200,900	128,500	72,400
(US$1=7.5P)	2)			

3.CONTENTS OF MAJOR PROJECT(S)
Construction of sabo facilities for sabo and flood control in the surrounding area of Mayon volcano and establishment of disaster prediction and warning system

Sabo Facilities : Sabo Dam 2nos. Consolidation dam 4nos.
Jetty 15nos. Spur Dike 43nos.
Groyne 4nos. Consolidation 34nos

Disaster Prediction and warning system:
Telemetering Rainfall/ waterlevel gabying stations, Automatic warning system, warning cars, connection with the existing forecasting and warning system of Bicol river basin.

* Above project costs are in 1980 prices.

4.CONDITIONS AND DEVELOPMENT IMPACTS
This Sabo project will performed as the social works to insure the social stability of the region. This project will contribute to the insurance of better livelihood of people in the region.
Beside the sabo project, river improvement, irrigation and disaster prediction and warning system shall be done as the one of the total measures for disaster.

5.TECHNICAL TRANSFER
1)OJT 2)JICA Training (2 trainees, 1 month) 3)Cooperaion to prepare reports 4)Equipment donation and instruction

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
The Government of the Philippines had budgeted the project in the five-year development plan. But this budget was used for other projects. The project area was seriously affected by the typhoon in 1981, and the JICA follow-up study was undertaken to review the master plan. Based on the findings of this study, the Philippine Government implemented some of the proposed jetties with its own funds.

(FY1991 Overseas Survey)
No additional information.

(FY1993 Overseas Survey)
2, Mayon Volcano Sabo and Flood Control Project
No description for this project.

(FY1994 Domestic Survey)(FY1995 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①、②、③

{M/P,Basic Study,Other}

和名 マヨン火山砂防基本計画

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/A 304/80

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Ilocos Norte Irrigation Project

3.SECTOR: Agriculture/(Agriculture in)General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: National Irrigation Administration (NIA)

7.OBJECTIVES OF STUDY: Agricultural development based on the improvement of irrigation facilities and hydropower generation

8.DATE OF S/W: 1975/11

9.CONSULTANT(S): Sanyu Consultants Inc.

10.STUDY TEAM

No.of Members 16

Period Aug.1978-Dec.1980(17 months)

Total M/M	Japan	Field
96.92	37.18	59.74

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY: None

12.EXPENDITURE

Total	328,554 (¥'000)
Contracted	290,172

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Ilocos Norte Province in northwest end of Luzon Island

2.PROJECT COST (US$1,000) US$1=7.4peso

	Total Cost	Local Cost	Foreign Cost
1)	331,000	120,600	210,500
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

	Phase 1	Phase 2
(1)Irrigation area	10,200 ha	12,400ha
(2)Diversion Weir	5 places	2 places
(3)Irrigation canal(total)	200 km	430km
link		96.0km
main		96.6km
branch		240.2km
(4)Drainage canal(total)	150 km	120km
main		75.3km
branch		47.8km
(5)Farm road(total)		431.6km

(6)Power station
Bonga: installed capacity 36,000KW, annual power generation 159.7GWh
Nueva Era: installed capacity 6,800KW, annual power generation 39.54GWh

Imp. Period: 1980. -1984. 1982. -1987.

4.FEASIBILITY AND ITS ASSUMPTIONS: Feasibility: Yes

EIRR1)	13.20	FIRR1)	
EIRR2)	14.00	FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

[Conditions]
Economic benefits are expected of agricultural development and electric power generation. Agricultural benefits are estimated as the difference of net income from crop production between with-project and without-project conditions.

Benefits net income from crop production. (million pesos)

	1984	1987	1992
with project	120	147	374
without project	117	122	129

[Development Impacts]
Increased crop production, improved farmers' income and living standard, increased employment opportunities.

The EIRR 1) above is for phase I, and 2) is for Phase II.

5.TECHNICAL TRANSFER: Survey method and development planning method in each sector were transferred to counterparts assigned during the period of the survey

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- [x] Completed or in Progress
  - ○ Completed
  - ● Partially Completed
  - ○ Implementing
  - ○ Processing
- [ ] Promoting
- [ ] Delayed or Suspended
- [ ] Discontinued or Cancelled

(Description)

The Phase I of the proposed project is under implementation with OECF financing.

Jun.1980	OECF L/A signed (E/S 70 million yen)
Jun.1981	OECF L/A signed (5,000 millio yen) The loan finances the construction of 5 diversion weirs, irrigation and drainage canals, farm roads, and other related facilities.
Apr.1982	Construction started
Dec.1993	Construction to be completed

A pilot project of on-farm irrigation facilities was implemented by the Japanese grant during 1981-1982.

(FY1991 Overseas Survey)
The financial arrangement for the project (Phase II) was not successful.
The project is likely to be revived, but the timing is not known.

(FY1993 Overseas Survey)
Phase I, which covers the irrigating area of 10,200 ha, of the original plan was adopted as a Project under Japanese OECF loan with a Project name of "Ilocos Norte Irrigation Project (1)" and implemented since 1982. After the construction was completed in 1987, the intake weir was destroyed by a typhoon. The repairment works were commenced from 1990 and completed on December, 1993 by means of an additional financing of OECF.
Phase II, which covers the irrigation area of 12,400 ha, is now waiting for the approval of RDCI (regional Development Council I). After getting the approval, it will be investigated by ICC (Investment Control Committee). This Project has been planned as for a project for the period of 2001 to 2008 in COPRLAN (1993-2002) by NIA, and included in its programme to request the financing of OECF.
Since it has been more than ten(10) years passed after the original survey works, the Philippines Governmental Authority concerned carried out the survey works of the environmental assessment on this project, and completed the inspection from the environmental viewpoint by EMB (Environment Management Bureau).

(FY1994 Domestic Survey)
RDC-I has endosed this project in 1994.

(FY1995 Domestic Survey)
NIA wishes to implement the Phase-II by the 21st Yen Credit, and is providing to request.

2.MAJOR REASONS FOR PRESENT STATUS:

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

和名 イロコスノルテかんがい計画

(F/S,D/D)

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1996

ASE PHL/S 308/80

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Manila-Bataan Coastal Road and its Related Roads

3.SECTOR: Transportation/Road

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Dept. of Public Works and Highways (DPWH)

7.OBJECTIVES OF STUDY: Road plan

8.DATE OF S/W: 1978/8

9.CONSULTANT(S): Pacific Consultants International
Japan Overseas Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 13

Period Jan.1979-Mar.1980(14 months)

Total M/M	Japan	Field
	9.90	48.27

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY: Topographic and Geographic Survey

12.EXPENDITURE

Total	168,421 (¥'000)
Contracted	164,825

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Metro Manila area, in the Central west zone of Luzon Island

2.PROJECT COST (US$1,000) (US$1=215Yen)

	Total Cost	Local Cost	Foreign Cost
1)	297,000	99,000	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

Description	Scale
Construction of new Harbour Road	7.0km
Construction of new C-5 Road	8.6km
Reclamation and social infrastructure facilities	900ha
Flyovers and repavement	5 sites & 15.6km

Imp. Period: 1981. -1987.

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes

EIRR1)	22.60	FIRR1)	60.00
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
The project consists of 2 components: Road and Reclamation.
The value of EIRR/FIRR was calculated from both projects.
Condition:
1) Existing price mechanism does not change when general price increases as price of petroleum products go up.
2) Existing mode of public transportation service does not change.
Development impact:
1) Formulation of well-organized city function in suburban area as well as expansion of urban area.
2) Expansion of new industrial/commercial district as a result of superiority of commercial location.
3) Promotion of regional development through industrial district.

5.TECHNICAL TRANSFER: 1) Overseas training 2) Report writing with counterpart staff

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.1988 OECF L/A signed (E/S package loan 2 billion yen)

With part of the E/S loan (108 million yen), the detailed design study was undertaken on the western and southern sections of C-5 (Katahira & Engineers International, and TCGI Engineers). In 1990, the Government decided to implement the project by BOT, after scaling down the project.

(FY1992 Overseas Survey)
Jun.1992 After the eruption of Mt. Pinatubo in Nov.1991, the road was somewhat moved toward inland, and the D/D was completed on C-5.

The construction of C-5 has been delayed owing to the problem of land acquisition. The D/D of C-6 is yet to be undertaken, and the similar problem of land acquisition is expected.

(FY1993 Overseas Survey)
BOT scheme on C-5 road and Manila-Bataan road is envisioned.
The Medium Term Public Investment Program (MTPIP) includes the Project as a priority project to support the Subic Bay Development Program under the SBMA (Subic Bay Metropolitan Authority).

(FY1994 Domestic Survey)(FY1995 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS:

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

{F/S,D/D}

和名 マニラ・バターン道路およびC-5、C-6道路建設計画

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1996

ASE PHL/S 104/81

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Davao City Urban Transport and Land Use

3.SECTOR: Transportation/Urban Transportaion

4.REFERENCE NO.:

5.TYPE OF STUDY: M/P

6.COUNTERPART AGENCY: Dept. of Public Works and Highways (DPWH)

7.OBJECTIVES OF STUDY: Formulation of a land use plan and a transportation master plan through 2000

8.DATE OF S/W: 1979/3

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

10.STUDY TEAM

No.of Members 17
Period Jun.1979-Dec.1981(30 months)

Total M/M	Japan	Field
136.93	17.33	119.60

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY: Topographic maps (scale: 1/10,000 and 1/5,000)

12.EXPENDITURE

Total	326,652 (¥'000)
Contracted	323,320

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Davao in Mindanao

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	246,312	110,067	136,245
2)			

3.CONTENTS OF MAJOR PROJECT(S)

1)Regional development
7 industrial estates; 6 commercial centers; 2 educational urban centers; 1 administrative center; 2 port expansion
2)Road
25 new trunk road sections; 40 improvement sections
3)Public transportation
introduction of bus transport
4)Traffic control
improvement of interchanges; signals; exclusive bus lanes

4.CONDITIONS AND DEVELOPMENT IMPACTS

The proposed plan will contribute to the alleviation of the existing transportation problems and to the planning on land use, public transportation, road network development and traffic control to meet the future demand.

5.TECHNICAL TRANSFER

1)OJT on transport planning
2)Participation of counterparts in JICA training program
3)Employment of local consultants

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

- [■] In Progress or In Use
- [ ] Delayed
- [ ] Discontinued

(Description)

Part of the recommendation on public transportation (e.g. improvement of jeepney transportation) was implemented, but the utilization of the entire plan has not been realized.

(FY 1991 Overseas Survey)
Some of the projects recommended by this study were implemented by the IBRD - assisted Regional Cities Development Project (RCDP).

(FY 1993 Overseas Survey)
3. Pampanga Delta Development Project

OECF has concurred the contract of the four contract packages in July 15, 1993.
Offices for implementation Agency, consultant, contractor are set up on the site area.
The reasons behind of schedule are, 1) Relocation of squatters affected by the project, 2) persuasion of some opposition groups, and 3) obtain environmental compliance Certificate that pointed out by the OECF. Unless solve the problems OECF does not furnishes funds for first payment.
The PMO together with the consultant and contractor is undertaking the reconstruction survey to establish necessary control points and boundary lines.

(FY1993 Overseas Survey)
RCDP included following three major components.
- Installation of traffic signals
- Construction of waiting sheds
- Construction of Cabaguio Road

(FY1994 Domestic Survey)(FY1995 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①、②

(M/P,Basic Study,Other)

和名 ダバオ都市交通計画

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/S 309/81

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY
Rural Telecommunications Project in Regions III (Central Luzon) and IV (Southern Tagalog)

3.SECTOR
Communications & B/Telecommunication

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY
Bureau of Telecommunications

7.OBJECTIVES OF STUDY
To determine the feasibility of the Rural Telecommunications Project in Regions III and IV.

8.DATE OF S/W: 1980/4

9.CONSULTANT(S)
Nippon Telecommunication Consulting Co., Ltd.

10.STUDY TEAM
No.of Members 13
Period Mar.1981-Mar.1982(12 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	46,006 (¥'000)
Contracted	15,139

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Luzon, Mindoro, Lubang, Palawan, Panai, Tablas, Romblon

2.PROJECT COST (US$1,000) (US$1=215Yen=28.3P)

	Total Cost	Local Cost	Foreign Cost
1)	82,670	8,470	74,200
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

	Phase 1(1991)	Phase 2(1994)	Total
Telephone Installation Plan	8,210	5,510	13,720
SHF system	9 sapns/466.3km	2/115.4km	11/581.7km
UHF/VHF system	34 spans	110 spans	144 spans
Telex exchanges	2	-	2
Telex concentrator	9	5	14
Telex and gentex equipment	38	84	122
Trunk cable length	78.2	113.5	191.7
Local cable length	238km	133km	371km
Buildings (Radio station, Telphone Office etc.)	54	123	177
Access roads	32.5km	55.7km	88.2km

Imp. Period: 1982. -1986.

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes

EIRR1)	72.53	FIRR1)	7.26
EIRR2)	11.75	FIRR2)	6.89
EIRR3)		FIRR3)	

Conditions and Development Impacts:
1) Rehabilitation of the existing old telecommunicating facilities at the objected areas.
2) Improvement of the telecommunications services at the objected areas.
3) Development in administrative efficiency and enhancement of timely administration.
4) Progress of regional industries and regional development.
5) Contribution to tourism and the tourist industry.
6) Development in living environment in rural areas.
7) Development of reliability of telecommunication and spread of demand for telecommunication.

Note: The EIRRs and FIRRs 1) and 2) above are for the Phase 1 and the entire project.

5.TECHNICAL TRANSFER
(1)Trainee acceptance; 2 counterparts invited to Japan
(2)On-the-Job-Training for counterparts

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)

Dec.1987	OECF E/S loan agreement (707 million yen)
Nov.1988	Contract signed with a consulting firm.
Feb.1990	OECF loan agreement (21,752 million yen) The loan finances the telecommunication network connecting 71 cities in Regions III, IV and V with Manila and intra- and inter-city telephone exchanges.
May.1991	Contract signed with a contractor
Jun.1991	Construction started
Jul.1993	Construction is scheduled to be completed

(FY1993 Overseas Survey)
Jul.1994 Construction is scheduled to be completed.

(FY1994 Domestic Survey)(FY1995 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS
(1) Effectiveness
(2) High priority

3.PRINCIPAL SOURCE OF INFORMATION
①、②、④

和名 中部ルソン電気通信網整備計画

{F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/S 310/81

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Pampanga Delta Development Project

3.SECTOR: Social Infrastructu/River & Erosion Control

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Dept. of Public Works and Highways (DPWH) and National Irrigation Administration

7.OBJECTIVES OF STUDY: Review of the master plan and feasibility analysis of priority projects

8.DATE OF S/W: 1980/5

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

10.STUDY TEAM

No.of Members 20

Period Jul.1980-Feb.1982(7 months)

Total M/M	Japan	Field
107.48	45.94	61.54

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY: Topographic mapping

12.EXPENDITURE

Total	435,309 (¥'000)
Contracted	267,522

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Panpanga River Basin (0.32 million ha) in Luzon

2.PROJECT COST (US$1,000) (US$1=8.2pesos)

	Total Cost	Local Cost	Foreign Cost
1)	182,666	102,666	80,000
2)	84,000	49,333	33,333
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1)Flood control
river channel improvement 40km; revetment 97km; excavation of low-water channel in a volume of 33 million cu.m; embankment of existing levee to be heightened 35.6km; embankment of base mound 48.8km; revetment 4km; outlet culvert 19 places; outlet culverts incl.fishpond intakes of 26nos; bridges 2 places

2)Irrigation development
- 1 weir, irrigable area of 14,000 ha
- Main canals 37 km, secondary and tertiary canals 145 km

* Implementation 1) is 10 years.
Implementation 2) is 7 years.

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS: Feasibility: Yes

EIRR1)	10.80	FIRR1)	
EIRR2)	15.40	FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

(Conditions)
Flood control benefits are the expected reduction of flood damages for farm crops, fisheries, private properties, public facilities and so on, and the expected production increase for the land having not been utilized during the wet season.
Irrigation benefits are the increment of farm income of crops between with and without project conditions.

(Impacts)
1)The land area of 19,000 ha and 13,400 buildings will be protected from floods by the flood control project, and annual rice production will increase by 15,000 tons and annual fishery production by 2,400 tons.
2)Rice production will be increased by 47,000 tons by irrigation development. Farmers' income will increase from four to six times.

5.TECHNICAL TRANSFER

(1)Technical meetings and transfer of knowledge through monthly meetings.
(2)Trainee: Four trainees visited Japan.
(3)Working with counterparts was conducted for field surveys, design works, cost estimates 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)

May 1986	OECF E/S loan agreement (705 million yen)
Oct.1987-May 1990	Detailed Design
Jun.1989	OECF Appraisal of Flood Control Component
Feb.1990	OECF loan agreement (8.63 billion yen) for flood control
Mar.1991	OECF Appraisal of Irrigation Component
Jul.1991	OECF loan agreement (9.43 billion yen) for irrigation
Jan.1992	Construction (flood control) started
Dec.1992	Construction (irrigation) started
Mar.1997	Construction (flood control) to be completed
Oct.1998	Construction (irrigation) to be completed

(FY1993 Overseas Survey)
OECF agreed the contract of implementation program which is devided into four divisions of construction in Jul.1993. The implementation body, consultant and sub-contractor established the local office. The reasons of construction delay are ; 1)delay of transfer the habitants in the construction area, 2)difficulty of persuasion of opponents, 3)needs to get the Environmental Compliance Certificate. DPWH has been striving to solve such problems.

(FY1994 Domestic Survey)
The Environmental Compliance Certificate was approved and issued in May 1994. However, OECF has not commenced disbursement of the Loan for the construction fund yet, because it is impossible to start the construction actually until the completion of right-of-way acquisition and house compensation.
Therefore, the Contractors suspend the Civil works. DPWH has been striving to solve problems of right-of-way acquisition and house compensation in the area for the 1st year construction out of 4-year construction by the end of 1994. Therefore, the construction works will be resumed at the beginning of 1995.

(FY1995 Domestic Survey)
Before commencement of the construction of the irrigation project, re-examination of the design, pre-qualification and preparation of the tender documents are carried out during Feb., 1992 to Feb., 1993, P/Q was done on Dec., 1992. However, due to the effects of the eruption of Pinatubo volcano, the implementation works suspended on Feb., 1993. On Feb., 1994, NIA requested reopening the implementation. Then OECF despatched SAPI Team (Nippon Koei Co., Ltd.) for examination of the possibility to reopen the project, on Jul., 1995. Their conclusion is expected to come out from the Team upto Dec., 1995.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①、②、③、④

{F/S,D/D}

和名 パンパンガデルタ開発計画

PROJECT SUMMARY (Basic Study)

Compiled Mar.1990
Revised Mar.1996

ASE PHL/S 501/82

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Topographic Mapping Project for Cagayan Valley

3.SECTOR: Social Infrastructu/Survey & Mapping

4.REFERENCE NO.:

5.TYPE OF STUDY: Basic Study

6.COUNTERPART AGENCY: Ministry of Defense, Dept.of Coastal Survey

7.OBJECTIVES OF STUDY: 1:25,000 National Base Mapping covering approx 11,000 km2 of Cagayan Valley Area in Northern Luzon Island.

8.DATE OF S/W: 1978/3

9.CONSULTANT(S): International Engineering Consultants Association

10.STUDY TEAM

No.of Members 19

Period Feb.1979-Feb.1983(48 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	931,676 (¥'000)
Contracted	803,651

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Northern part of Luzon Island (from Ilagan of Isabela Prov. to Aparri of Cagayan Prov.;11,000sq.km)

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)

1st year: aerophotos (1/30,000, 15,000 sq.km)
2nd year: datum points surveyed
3rd year: aero-triangulation and orthoscopic photos
4th year: aero-triangulation, topographic original maps, ortho-photo maps
5th year: topographic maps (1/25,000, 72 plates)

4.CONDITIONS AND DEVELOPMENT IMPACTS

[Conditions]
1. As there was no existing appropriate aevial photograph for 1:25,000 stereo-plotting an aerial photography in the scale at 1:30,000 was carried out. The scale of 1:30,000 for the photography was considered in order to meet proper scale for generation of the orthophoto-map is the scale at 1:10,000 that was conducted in paralled with 1:25,000 mapping.
2. The symbols and specifications for the 1:25,000 national base map was determined on the basis of existig Philippine 1:25,000 symbols and specifications through detail discussion between Japan and Philippine side to present current local state.
3. As to Photo-controls for stereo plotting, Philippine BCGS made control point survey by employing NNSS observation in the area where nigher trangulation survey nortraversing were expected with difficulty in executing those surveying due to limited to pography.

[Development Impacts]
1. It should be possible to provide basic data to formation of general development scheme in the study Area. As the areas to be given benefit were transportaton, flood control, intergrated agriculture port rehabilitations, etc.
2. Technical transfer to Philippine counterpart's personnel in preparation of 1:25,000 base map which was never experienced in Philippine history through the inplementation of the study.

5.TECHNICAL TRANSFER:

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

- [x] In Progress or In Use
- [ ] Delayed
- [ ] Discontinued

(Description)

(FY1991 Overseas Survey)
Geodetic control data from the study were used by government and private surveyors. Topographic maps were used for the development planning of the mapped areas, particularly in river basins and coastal zones.

(FY1993 Overseas Survey)
Topographic Mapping Project for Cagayan Valley:
Output is Highly evaluated and appreciated. After completion, NAMRIA has expansion of surey areas by local fund.

(FY1994 Domestic Survey)(FY1995 Domestic Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS:

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

和名 カガヤン・バレー地区地図作成

{M/P,Basic Study,Other}