PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1992

ASO PAK/S 601/75

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

2.NAME OF STUDY
Port Muhammad-Bin-Quasim Project(follow-up)

3.SECTOR
Transportation/Port

4.REFERENCE NO.

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY
Quasim Port Authority

7.OBJECTIVES OF STUDY

8.DATE OF S/W: .0

9.CONSULTANT(S)
Central Consultant, Inc.

10.STUDY TEAM

No.of Members 3

Period Feb.1976-Mar.1976(1 months)

Total M/M	Japan	Field
2.20		2.20

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	9,463 (¥'000)
Contracted	3,227

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Quasim Port

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	59,686	32,414	27,272
2)			

3.CONTENTS OF MAJOR PROJECT(S)

In response to the request of the Pakistani Government, the study team explained the results of the study on Quasim Port and offerred technical suggestions.

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER
Training in Japan on port development and basic design

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)

(FY 1991 Overseas Survey)
1974-1980
D/D undertaken by consultants of Japan, France, Canada and U.K., and the construction was financed by ADB, U.K., France, Japan etc. and the GOP.

1977-1994
Construction undertaken by France, Belgium, Holland, and GOP. Financed by GOP and loans/grants from foreign countries. The project scale was modified.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 バンデルカシム港建設計画アフターケア

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1986
Revised Mar.1993

ASO PAK/S 201A/79

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Shipping & Shipbuilding Development

3.SECTOR
Transportation/Marine Transportation & Ships

4.REFERENCE NO.

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

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

7.OBJECTIVES OF STUDY
Development of National Shipbuilding Sector

8.DATE OF S/W Mar.1978

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

10.STUDY TEAM

No.of Members 7
Period Aug.1978-Oct.1979(14 months)

Total M/M	Japan	Field
16.55	10.00	6.55

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	51,135 (¥'000)
Contracted	39,849

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Major parts and shipbuilding yards

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)

The study proposed the fleet replacement for the government-owned national shipping line and the improvement of the government-owned shipbuilding yard (KSEW).
1) Shipping
22 obsolete ships (226,800 DWT) will be scrapped during 1980 - 1983 and replaced by 16 new ships (240,000 DWT).

2) Shipbuilding
The capacity and operation of KSEW was studied to propose measures for improving productivity. Out of 16 new ships, 4 will be constructed by KSEW.

4.CONDITIONS AND DEVELOPMENT IMPACTS

Development impacts:
1. Production increase
2. Saving of foreign currency
3. Increase of employment opportunity
4. Introduction of modern technology
5. Contribution to industrialization

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
Followed by F/S on shipping improvement.

(FY1991 Oversea Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS
Due to the high urgency

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 海運・造船振興計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1986
Revised Mar.1993

ASO PAK/S 201B/79

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

2.NAME OF STUDY
Shipping & Shipbuilding Development

3.SECTOR
Transportation/Marine Transportation & Ships

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
Development of National Shipbuilding Sector

8.DATE OF S/W: Mar.1978

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

10.STUDY TEAM

No.of Members 6

Period Aug.1978-Oct.1979 (14 months)

Total M/M	Japan	Field
16.55	10.00	6.55

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

Total	51,135 (¥'000)
Contracted	39,849

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Karachi

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	226,201	14,000	212,201
2)	750		
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1) Shipping
Construction of 16 multi-purpose vessels (15,000 DWT)
(4 vessels to be built at KSEW)

2) Shipbuilding
Purchase of necessary equipment, overseas manpower training, technical assistance by experts

Imp. Period: .1979-.1983 .1979-.1980

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

Conditions and Development Impacts:

Conditions:
1) Operation of 16 new ships; 2) investment of US$226.2 million distributed over 5 years (1979-83); 3) the construction of 16 ships to be completed during the same period; 4) annual tariff revenue of US$14.17 million per ship; 5) 70% of the investment cost to be repaid at the interest rate of 8.5% per annum, and the remaining 30% at the rate of 10.5%, over 7 years; project life of 20 years; and the rate of inflation at 8% per annum.

Development impacts:
Shipping: 1) 16 new ships will earn US$300 million in foreign exchange; and 2) improvement of distribution and price stabilization; Shipbuilding: 1) increase of production at KSEW (from US$6.4 million in 1975/76 to 44.76 million in 1982/83); 2) saving of foreign exchange (12 million); 3) creation of employment (800 skilled workers during 8 years); and 4) enhancement of the level of KSEW technology.

5.TECHNICAL TRANSFER
OJT

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

Acquisition of multi-purpose vessels was implemented by the OECF loan.

Mar.1979 OECF loan agreement signed (18,000 million yen)
Dec.1980 - Mar. 1983 Mar. Construction of vessels
Dec.1980 - Mar. 1983 Operation commenced

OECF financing:
- Construction of seven 8,000 DWT vessels
- One ship was built by KSEW and six ships were built in Japan.

(FY 1991 Overseas Survey)
The implementation of the remaining components is delayed owing to the delay of financial arrangement.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②④

和名 海運・造船振興計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1993

ASO PAK/S 301/80

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Construction Project of a Mini-Port in Gwadar

3.SECTOR
Transportation/Port

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Port and Shipping Wing
Ministry of Communication

7.OBJECTIVES OF STUDY
Planning a mini-port capable of functioning as a fishing port

8.DATE OF S/W Sep.1978

9.CONSULTANT(S)
Overseas Coastal Area Development Institute of Ja
Kiso-Jiban Consultants Co., Ltd.

10.STUDY TEAM

No.of Members 16
Period Sep.1978-Mar.1980(19 months)

Total M/M	Japan	Field
72.47	56.10	16.37

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Soil condition survey
Àè1,630

12.EXPENDITURE

Total	182,029 (¥'000)
Contracted	184,340

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
West side of Makran Coast/ South of Baluchistan

2.PROJECT COST

		Total Cost	Local Cost	Foreign Cost
(US$1,000)	1)	22,500	3,610	
(US$1=RS10)	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)

Item	Quantity
Breakwater	1,030m
Quay -1.5m	200m
-3.0m	740m
Ice,freezing and refrigeration Plant	1 unit
Refrigeration vessal	1 unit
Revetment	500m

Imp. Period: Jan.1982-Dec.1983

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

Conditions and Development Impacts:

Basic condition:
(1) Fishing resources in Off-shore Baluchistan are estimated at 400,000tons per year
(2) Population of Gwadar in 2000 is estimated at 80,000
(3) Increase rate of Baluchistan's GDP 1978-83 is 4.64% and 6.23% until 2000.
(4) Population was estimated to increase during 1977-83: 1.35 times
84-90: 1.91 times, 91-2000: 3.16 times

Development Impacts:
(1) Increased fish catch
(2) Increased foreign exchange earning by fish exports
(3) Increased supply of basic goods through berthing of domestic vessels

5.TECHNICAL TRANSFER
Study team carried out on the job trainings to counterpart for theory of natural condition survey and port planning

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

(FY1991 Overseas Survey)
1985-1988 D/D by Belgium Government, etc.
1988 Loan from Belgium Government: BEC 485, 89
Buyers Credit from Consortium Bank: BEC 841, 77
1988-1992 Construction

(FY1992 Overseas Survey)
The above D/D has been continued during 1988 and 1992 (a loan from Belgian government). The construction started in October 1988, and is scheduled to be completed in October 1993.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 グァダール・ミニポート開発計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1986
Revised Mar.1992

ASO PAK/S 202A/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 development plan of container terminal

8.DATE OF S/W: Jul.1980

9.CONSULTANT(S)
Overseas Coastal Area Development Institute of Ja

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

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)		Total Cost	Local Cost	Foreign Cost
	1)	218,490	81,893	
(US$1=210Yen=9.9Rp)	2)			

3.CONTENTS OF MAJOR PROJECT(S)

Select and compare two ports,Karachi port and Qasim 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

4.CONDITIONS AND DEVELOPMENT IMPACTS

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.

5.TECHNICAL TRANSFER

Counterpart training (4 persons)
Instruction on method of port planning and feasibility study

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
Feasibility study on the introduction of containerization was subsequently undertaken.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 コンテナ輸送導入計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (M/P+F/S)

ASO PAK/S 202B/81

Compiled Mar.1986
Revised Mar.1992

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 Jul.1980

9.CONSULTANT(S)
Overseas Coastal Area Development Institute of Ja

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

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)

	Total Cost	Local Cost	Foreign Cost
1)	115,472	43,299	
2)	103,018	38,594	
3)			

3.CONTENTS OF MAJOR PROJECT(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

Imp. Period: Jan.1982-Dec.1986

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

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

Conditions and Development Impacts:

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
- ● Implementing
- ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)
-The basic infrastructure was constructed in 1986 as 1st stage by 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.

(FY 1991 Overseas Survey)
Container Terminals at Karachi Port and Port Qasim will be developed by private sector.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 コンテナ輸送導入計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

ASO PAK/A 301/82

Compiled Mar.1990
Revised Mar.1993

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 Feb.1982

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

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: Jun.1982-Dec.1982

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

- ■ Completed or in Progress
  - ○ 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 complted. (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. An addition short-term expert (irrigation and water management) was sent in Oct. 1992.
Mar.1988 E/N signed (396 million yen)

2.MAJOR REASONS FOR PRESENT STATUS
Because the OECF finance at the time did not include the part of the works in local currency, the Pakistani Government requested the ADB finance for the most part of the project.

3.PRINCIPAL SOURCE OF INFORMATION
①②③

和名 パットフィーダー水路拡張計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1992

ASO PAK/S 101/83

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

2.NAME OF STUDY
National Transport Plan

3.SECTOR
Transportation/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: Sep.1981

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

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 by 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
- ■ 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).

(FY 1991 Oversea Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 全国総合交通計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (F/S)

ASO PAK/S 302/83

Compiled Mar.1990
Revised Mar.1993

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: Mar.1982

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:

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) Locomotive introduction plan --- 1,265 locomotives
(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: Jun.1984-Jun.1989

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
  - ● 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

(FY1992 Overseas Survey)
Construction is scheduled to be completed in December 1993.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①②④

和名 国鉄機関車供給計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

ASO PAK/S 303/84

Compiled Mar.1988
Revised Mar.1993

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 Dec.1983

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

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
- ○ Completed
- ○ Implementing
- ● Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

Oct.1987 Request for Yen Credit from Pakistan Government
Mar.1989 OECF loan agreement (12,518 million yen)
As of September 1991 Under procedures of pre-qualification of contractors

(FY1991 Overseas Survey)
Mar.1990 - Feb.1991 D/D undertaken

(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.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②④

和名 カンプールダム・イスラマバード・ラワルピンディ導水計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (M/P)

ASO PAK/A 101/85

Compiled Mar.1990
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Integrated Rural Development Project

3.SECTOR
Agriculture/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
Integrated rural development in Islamabad capital territory

8.DATE OF S/W Nov.1984

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

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
	1)	210,925		
US$1=215Yen in 1985	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

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 UKIP was done in 1988

(FY 1991 Overseas Survey)
No additional information.

(FY 1992 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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②③

和名 農村総合開発計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (M/P)

Compiled Mar.1990
Revised Mar.1993

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 Mar.1985

9.CONSULTANT(S)
Overseas Merchandise Inspection Co., Ltd.
Nihon 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

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		
2)			

US$1=154Yenin Aug.1986,Rs1

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)

2.MAJOR REASONS FOR PRESENT STATUS

"Facilities Improvement Project for Export Rice" was positively discussed during this survey.
However, it was not materialized because RECP is under Ministry of Commerce and the executing agency for this project is Ministry of Food & Agriculture.

3.PRINCIPAL SOURCE OF INFORMATION

①②③

和名 米穀収穫後処理法改善計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1993

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/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: Mar.1986

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

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
  - ● 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 carrid 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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②③

和名 バルチスタン州地下水かんがい開発計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (M/P)

Compiled Mar.1990
Revised Mar.1992

ASO PAK/S 103/87

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

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

3.SECTOR
Transportation/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 Nov.1986

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

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

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)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)
Improvement of Indus Highway
Study on domestic air transportation
Basic study on electrification of realized
Transit study for Lahore
F/S on construction of container berth in Karachi Port

4.CONDITIONS AND DEVELOPMENT IMPACTS
Realistic objectives were set and recommendations 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. Phase II construction is scheduled to begin before long.
The JICA study (M/P) was completed on Lahore urban transport system in Oct.1991.

(FY1991 Overseas Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 全国総合交通計画（アフターケア）

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (M/P)

ASO PAK/S 102/87

Compiled Mar.1990
Revised Mar.1992

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 Infrastructures/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 Aug.1986

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 research method and related survey

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
	1)	970,588	533,823	436,765
(US$1=17.0Rs)	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
 2) Construction of D-------- Dam (to be completed in 1997)
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 enineer 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 1992 Overseas Survey)
No additional information

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②④

和名 首都圏水資源開発基本計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1993

ASO PAK/A 303/88

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Upper Kurang River Irrigation Project

3.SECTOR
Agriculture/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 Feb.1988

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
Irriqation development with 6,600 ha irriqable area throuqh 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 heiqht and effective capacity is 53 m and 18.5 MCM, respectively)
- Canal: Total lenqth of main and branch canals is 130 km
- Oh-farm facilities: 6,600 ha
- Road Network: 18.6 km
- Aqriculture-supportinq facilities: Buildinqs, aqricultural machinery, etc.

Imp. Period: Jul.1987-Feb.1988

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 Kuranq River, toqether with effective utilization of irriqation water for rainfed paddy production in the rural areas of Islamabad capital territory, brinqs about better supply of veqetables, fruit, and daily products which requires quick delivery to the neighborinq biq markets in the capital territory, and improve/stabilize the regional farm households' economy.

5.TECHNICAL TRANSFER
Transfer to government officials in Pakistan and Japan was done.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ 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 distrcts (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.

As of Septeber 1991, federal government is being under consideration due to high water cost compared to similar projects in different sectors.

(FY 1991 Overseas Survey)
1,359 million yen 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 reconsideration. Place a higher priority on the of water supply in the metropolitan area.

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.

(FY 1992 Overseas Survey)
The project is under reconsideration due to a change in priority rankings among the competing projects.

3.PRINCIPAL SOURCE OF INFORMATION
①②③

和名 クラング川上流かんがい開発計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1991
Revised Mar.1993

ASO PAK/A 201A/89

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Swat District Integrated Rural Development Project

3.SECTOR
Agriculture/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
Master plan study of the rural development and feasiblity study of the selected high priority projects

8.DATE OF S/W Apr.1988

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

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Swat Area, NSFP Province

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
	1)	745,380	339,575	405,805
US$1 = 21R	2)			

3.CONTENTS OF MAJOR PROJECT(S)

	(1990-1995) Short-Term	(1995-2000) Middle-Term	(2000-2005) Long-Term
1.Agri. Infrastructure Development			
Irrigation area	2,200ha	280ha	320ha
2.Agri.Supporting Service Development			
3.Road improvement	387.5km	123km	23km
Road construction	77km	88km	157km
4.Rural Electrification	29,000H	68,700H	116,200H
5.Water Supply System	58,800H	70,600H	72,600H
6.Rural Infrastructure Development			
7.Village Community Development			

*The project cost 1) above is for the entire schemes. The project costs for the different terms are as follows.
Total Cost: Short 186,050 Middle 216,290, Long 343,040.

4.CONDITIONS AND DEVELOPMENT IMPACTS

1.Development strategy
- To increase family income and expansion of employment opportunity
- To emphasize rural area development by the infrastructure consolidation

2.Impact of development project.
It is envisaged that expansion of agricultural production, employment opportunity and increased income, grading up living standard, infrastructure developments can be secured by the project executions.

5.TECHNICAL TRANSFER
On-the-job training for the counterpart staff and training in Japan for the staff of Rural Development Department.

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
In NWFP this masterplan study is utilized as a guidebook for mountain belt area, and the priority development plan is highly evaluated by the local government and applied as one of the standard.
Shangla Par district was selected as the first priority project in the masterplan study area for integrated rural development, for which the local government submitted request letter to the Federal government to apply 1992 Grant-aid from the Japanese Government.

(FY 1991 Overseas Survey)
The project is integrated into the 7th & 8th Five Year Plans.

(FY 1992 Overseas Survey)
Out of the proposed project in the master plan, the following projects are in process of implementation:
1) Agricultural supporting sevice development
2) Construction of model farms
3) Road improvement and construction
4) Water Supply System
The total cost is projected to be Rs. 3.1 mil..

2.MAJOR REASONS FOR PRESENT STATUS
Japanese Government wants to observe the implementation of agricultural development projects being carried out in and around Islamabad before it makes a decision to proceed.

3.PRINCIPAL SOURCE OF INFORMATION
①②③

和名 スワット地域農村総合開発計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (M/P+F/S)

ASO PAK/A 201B/89

Compiled Mar.1991
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

2.NAME OF STUDY
Swat District Integrated Rural Development Project

3.SECTOR
Agriculture/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

8.DATE OF S/W Apr.1988

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

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

	Total Cost	Local Cost	Foreign Cost
1)	99,710	45,270	54,140
2)			
3)			

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

2.Agri. Supportinq 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: Jan.1990-Dec.2005

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

Conditions and Development Impacts:

Conditions: The benefits consist of direct (e.q. aqri. 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	Veq.	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 envisaqed that expansion of aqricultural production, employment opportunity and increased income, qradinq up livinq standard, infrastructure development can be secured by the project executions. *The EIRRs for Aqri.Infra,Road and Rural Electrification are 10.3%~14.5%, 8.5%~10.5% and 2.8%~9.6% respectively.

5.TECHNICAL TRANSFER
On the job traininq for the counterpart staff and traininq in Japan for the staff of Rural Development Department

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ☐ Completed or in Progress
  - ○ Completed
  - ○ Implementing
  - ○ Processing
- ■ Promoting
- ☐ Delayed or Suspended
- ☐ 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 1991.

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 1991 Overseas Survey)
1992-1993 L/A (2087.7 million yen)
1990-2005 Construction (15 years) by GOP

(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 for another implementation.

2.MAJOR REASONS FOR PRESENT STATUS

Increase of living standard and improvement of living environment of the village farmers of the mountain belt areas will be required.

(FY 1992 Overseas Survey)
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, a similar project alread being carried out has delayed the implementation of the project.

3.PRINCIPAL SOURCE OF INFORMATION

①②③

和名 スワット地域農村総合開発計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

ASO PAK/S 304/89

Compiled Mar.1991
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

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

3.SECTOR
Communications & Broadcasting/Broadcasting

4.REFERENCE NO.

5.TYPE OF STUDY F/S

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

7.OBJECTIVES OF STUDY
Feasibility Study

8.DATE OF S/W Sep.1988

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

10.STUDY TEAM

No.of Members	Total M/M	Japan	Field
14	49.76	23.04	26.72

Period Jan.1989-Sep.1989(9 months)

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

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

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

(Description)
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.

2.MAJOR REASONS FOR PRESENT STATUS
Although the F/S was conducted on the basis of a loan financial support, Pakistan Government requested grant aid from Japanese Government due to the financial difficulties. Japanese Goverment accepted the rquest for the first 2 years project contents.

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 教育テレビチャンネル設立計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

ASO PAK/A 304/90

Compiled Mar.1992
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

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

3.SECTOR: Agriculture/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: Feb.1989

9.CONSULTANT(S): Nihon 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:

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 Khadeji Dam:
  the max. amount of pondage 35.5MCM
- Construction of Mol Dam:
  the max. amount of pondage 43.83MCM
- Demonstration Pilot Farm
- Development of irrigation area (4,350ha)

Imp. Period: Apr.1991-Mar.1995

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 standard of life 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
- Food Mitigation Effects
- Improvement of Agro-technology
- Demonstration Effect of Pilot Farm

5.TECHNICAL TRANSFER

- Technology transfer to counterparts in the course of the Study
- Training of counterparts in JICA training course

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

Under promotion in the Government of Pakistan for OECF loan.

(1991 Survey of JICA overseas office)
No additional information.

(FY 1992 Overseas Survey)
1) A request was made for a OECD loan during the FY 1992 Annual Meeting between the Pakistan and Japanese governments.
2) A OECD loan for a detailed design L/A was expected in February or March 1992, the carrying out of D/D in August 1992.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①②③

和名 マリル川流域農業開発計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (M/P+F/S)

ASO PAK/S 203A/91

Compiled Mar.1993
Revised

I. OUTLINE OF STUDY

1.COUNTRY Pakistan

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

3.SECTOR
Transportation/Urban Transportation

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 Master Plan for 2000/2010
2) Feasibility Study on Priority Projects
3) Technical Transfer to Counterparts

8.DATE OF S/W Oct.1989

9.CONSULTANT(S)
ALMEC Corporation
Pacific Consultants International

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

Total M/M	Japan	Field
60.95	24.86	36.09

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Traffic Survey
Topographical Survey

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)	Total Cost	Local Cost	Foreign Cost
1)	910,000		
2)			

3.CONTENTS OF MAJOR PROJECT(S)
Components of the Master Plan (up to 2010):
1)Short-term plan (1992-1995) (Total construction cost of 25 billion Rps): Improvement and construction of roads and improvement of 9 intersections; Improved traffic management in the inner area; Improvement and expansion of the bus system (bigger bus fleet, etc.); Construction of a new bridge across the Ravi River.
2)Medium-term plan (1996-2000) (Total construction cost of 65 billion Rps): Improvement and construction of roads and improvement of 14 intersections; Construction of a new bridge across the Ravi River; Improvement and expansion of the bus system (priority bus lanes, etc.); Improvement of the existing Heavy Rail Transit (HRT) System (40.0km); Improved traffic management in the inner area; Development of mode interchange facilities.
3)Long-term plan (2001-2010) (Total construction cost of 110 billion Rps): Improvement and construction of roads and intersection improvement (92.4km); Construction of a new bridge across the Ravi River; Improvement and expansion of the bus system (priority bus lanes, etc.); Introduction of the Light Rail Transit (LRT) System; Development of mode interchange facilities.

4.CONDITIONS AND DEVELOPMENT IMPACTS
Assumptions
The future transport demand (in person trips/day) was projected on the bases of the results of the 1990 person trip survey (HIS) and the project socio-economic framework of population (total, by occupation and by sector), per capita GNP, household income, and the conceptual land use plan for the Lahore Metropolitan Area (LMA).

	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	

The master plan was formulated by taking note of the following points. 1) To identify a Transport System in accordance with the future urban transport demand in the LMA, and to formulate the system to suit the role of the state capital of Punjab, 2) To ensure the conservation of urban amenities, 3) To develop a radial/ring road network which will service the future road traffic demand, 4) To introduce a more effective mass transit system which will accomodate the future demand for public transportation, and 5) To take into full consideration of the unique transportation characteristics of the LMA, such as the sizable share of two-wheel vehicles (esp. bicycles) and the diversity of the available transportation means.

5.TECHNICAL TRANSFER
1) Joint work with counterparts in Pakistan
2) Counterparts training in Japan, 1991

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
F/S was carried out after this study.

-The Lahore Develoment Authority is interested in the construction of a new bridge across the Ravi River, and has sounded out the Japanese cooperation for a feasibility study or a basic design of the project.
-A feasibility study on the Lahore loop road is currrently on-going using a World Bank loan.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 ラホール都市圏総合交通システム開発計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (M/P+F/S)

ASO PAK/S 203B/91

Compiled Mar.1993
Revised

I. OUTLINE OF STUDY

1.COUNTRY: Pakistan

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

3.SECTOR
Transportation/Urban Transportation

4.REFERENCE NO.

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

6.COUNTERPART AGENCY
Lahore Development Authority

7.OBJECTIVES OF STUDY

8.DATE OF S/W: Oct.1989

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

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	13,932	11,332	2,600
2)	288,164	209,707	78,457
3)			

3.CONTENTS OF MAJOR PROJECT(S)

The TEPA and the othr related agencies have been studying and evaluating a number of urgent measures to alleviate the mounting problem of traffic congestions, such as construction of a new bridge or bridges across the Ravi River, connections of missing links and the grade separation at intersections of major corridors. The present study selected two projects for feasibility analysis: namely, 1) improvement of 3 intersections, and 2) a Light Rail Transit System (LRT), which will significantly change the future transportation policy for the LMA.

1) Intersection Improvement (construction of flyovers): Total cost of Rp.302.3 million
   - Qartaba Chowk
   - Ferozepur Road / Canal Bridge & Wahdat Road
   - Kalma Chowk

2) LRT: Total cost of 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) Selection of three intersections
   Indentification of seriously congested intersections on the basis of the hourly traffic volumes by direction; Selection of three sites, by taking note of the on-going improvment works, the importance of each intersection for the future transport planning; and the interrelationship with the future public transportation system.

2) LRT
   The System is to start operation in the year 2010; The priority route of 12.5 km was selected in reference to the future transportation network formulated by the preceding Master Plan; The System is to be grade-separated from the existing transportation modes in order to avoid traffic congestions and provide on-time and comfortable services; The System will be positioned to ensure convenient transfers to or from other transportation means; Route selection and facility design will ensure the conservation of historical fuildings, greenery and other amenable urban landscape; The development of terminals will take into consideration of their redevelopment impacts in the vicinities.

Impacts:

1) Intersection Improvement: Alleviation of traffic congestions.

2) LRT: Strengthening of the public transportation capacity, alleviation of traffic congestions, redevelopment in the areas around terminals, etc.; To maintain financial feasibility, it will be necessary to use low-interest public funds and/or

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
- ○ Completed
- ○ Implementing
- ● Processing
- □ Promoting
- □ Delayed or Suspended
- □ 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 Pakistan 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.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①②

和名 ラホール都市圏総合交通システム開発計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

ASE PHL/S 303/76

Compiled Mar.1990
Revised Mar.1992

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: Jul.1974

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

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: Jan.1980-Jul.1987

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
- ○ 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.

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,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

ASE PHL/S 301/76

Compiled Mar.1990
Revised Mar.1992

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: .0

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 built in Manila. The head office should smoothly obtain ship repairing orders and purchase materials while making close contact with the plant in Subic.

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:

	1979	1980	1981	1982	1983	1984	1985
1. Sales (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. Others:The construction of a dock in Subic will either decrease or prevent various useless expenditures attributable to the congestion around Manila.

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ● 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

①④

和名 スービック修理用造船所建設計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1992

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: .0

9.CONSULTANT(S):

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

	1978	1980	1985	1990
(passenger)	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
  - ○ Implementing
  - ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ Discontinued or Cancelled

(Description)

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

①②④

和名 フェリー計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

ASE PHL/A 301/76

Compiled Mar.1990
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY
Cagayan Integrated Agricultural Development Project

3.SECTOR
Agriculture/General

4.REFERENCE NO.

5.TYPE OF STUDY: F/S

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

7.OBJECTIVES OF STUDY

8.DATE OF S/W: .0

9.CONSULTANT(S)
Sanyu Consultants Inc.

10.STUDY TEAM

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

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)			
3)			

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(irriqation)	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	2,158
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
Iquiq, 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
○ 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)
- Roads (759km)
- Power transmission (70km)

(FY1991 Overseas Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②④

和名 カガヤン農業総合開発

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

ASE PHL/S 304/77

Compiled Mar.1986
Revised Mar.1992

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 Infrastructures/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 Nov.1975

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	1
3) Monitor stations (Total 3) (to transmit hydrological data to FFC)	1	1	1
4) Telemeter stations (total 21)	8	9	4
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: Jan.1979-Jul.1982

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
3. Increase of labor incentive

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 were

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

- ■ Completed or in Progress
  - ● 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
①④

和名 Agno川、Bicol川、Cagayan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,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1993

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: .0

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
  - ○ 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.

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
①②

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）

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (Basic Study)

Compiled Mar.1990
Revised Mar.1992

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

8.DATE OF S/W: .0

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

10.STUDY TEAM

	No.of Members	Period
Total M/M		
Japan		
Field		

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

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
No information is available.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 水産資源開発調査

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1992

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: .0

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

10.STUDY TEAM

	No.of Members	Period	Total M/M	Japan	Field
	4	Jul.1977-Jul.1977(1 months)			

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

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)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

和名 フェリー計画アフターケア

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1993

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 Infrastructures/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 Mar.1977

9.CONSULTANT(S)
Nihon 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 pasiq and Potolero rivers in the western reqion of Luzon Island causes the flood damaqe because of the remarkable denudation of mountain reqion.

The project consists of the followinq sabo works preventinq sediment deposit in the river.

Structure	Scale
- Sabo dam	10 nos.(heiqht 14~15m, crest lenqth 31~68m)
- Pondaqe 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 followinq far-reachinq effects:
1) To mitiqate the damaqe due to flood and sedimentation
2) To increase the aqricultural production.
3) To stabilize public welfare
4) To create the chance of employment
5) To transfer the knowledqe 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.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 小水系河川総合開発計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (F/S)

ASE PHL/S 305/78

Compiled Mar.1986
Revised Mar.1993

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 Mar.1977

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 (1982-1987)
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 volume 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
  - ● Implementing
  - ○ Processing
- ☐ Promoting
- ☐ Delayed or Suspended
- ☐ Discontinued or Cancelled

(Description)
Nov.1978 OECF loan(Ph-P26) L/A signed(E/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) compledted (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

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
①③④

和名 マニラ首都圏道路計画（C-3・R-4道路建設計画）

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1993

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 & Broadcasting/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 Dec.1977

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

10.STUDY TEAM

No.of Members	13		
Period	Feb.1978-Dec.1978(10 months)		
	Total M/M	Japan	Field
		1.30	

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	61,035 (¥'000)
Contracted	2,356

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Ilocos, Cagayan

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: Jul.1980-.1982

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
  - ○ 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.

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: Inter-city telecommunication links and telephone exchanges for major cities in Northern Luxon (10 city exchanges)

2.MAJOR REASONS FOR PRESENT STATUS

Effectiveness
- large impact
- high priority

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 ルソン島北部電気通信網建設計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1993

ASE PHL/A 303/78

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Bohol Integrated Agricultural Development Project

3.SECTOR
Agriculture/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 Mar.1977

9.CONSULTANT(S)
Sanyu Consultants Inc.

10.STUDY TEAM

	Total M/M	Japan	Field
No.of Members 13			
Period Aug.1977-Nov.1977 (3 months)			

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

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: Aug.1977-Mar.1978

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

Jun.1980 OECF loan agreement signed (E/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.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②④

和名 ボホール農業総合開発計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1993

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 Mar.1978

9.CONSULTANT(S)
Overseas Coastal Area Development Institute of Ja

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
	1)	120,366	59,756	60,610
US$1=220Yen	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

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
①②④

和名 漁港整備計画レビュウ調査

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (M/P)

ASE PHL/S 102/79

Compiled Mar.1991
Revised Mar.1993

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 Aug.1978

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

10.STUDY TEAM

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

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

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 Wahiq-Pamacsalan River basin (the F/S conducted by JICA). Major proposals are as follows.

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

3) Fisheries: Establishment of a fish processing base at the port of Coqtong
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.

(FY 1991 Overseas Survey)
BAPC was integrated to the research program of the regional outreach station for the lowland irrigated rice developmental zone.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②④

和名 ボホール州総合開発計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (F/S)

ASE PHL/S 307/79

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Philippines

2.NAME OF STUDY: Hospital Development Project

3.SECTOR: Social Infrastructures/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: Dec.1978

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

(Description)
Cancelled after the completion of the feasibility study.

(FY 1991 Overseas Survey)
No additional information.

2.MAJOR REASONS FOR PRESENT STATUS

Lack of funds.

3.PRINCIPAL SOURCE OF INFORMATION

①②

和名 病院整備計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (M/P)

ASE PHL/S 103/80

Compiled Mar.1986
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Philippines

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

3.SECTOR
Social Infrastructures/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 Jun.1978

9.CONSULTANT(S)
Nihon 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

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 qabying 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 reqion. This project will contribute to the insurance of better livelihood of people in the reqion.
Beside the sabo project, river improvement, irriqation and disaster prediction and warning system shall be done as the one of the total measures for disaster.

5.TECHNICAL TRANSFER

1) OJT : The lecture for Sabo technology was held in the local office
2) Acceptance of trainee: JICA acccepted two trainees for one month including the lecture (for Sabo, hydrology, river and survey,) by the study Team for 5days.

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.

(FY 1991 Overseas Survey)
No additional information

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 マヨン火山砂防基本計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (F/S)

ASE PHL/S 308/80

Compiled Mar.1986
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Manila-Bataan Coastal Road and its Telated 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 Aug.1978

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

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)	
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
- ○ 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.

(FY 1992 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.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②③

和名 マニラ・バターン道路およびC-5、C-6道路建設計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

ASE PHL/A 304/80

Compiled Mar.1990
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Ilocos Norte Irrigation Project:Phase II

3.SECTOR
Agriculture/General

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
National Irrigation Administration

7.OBJECTIVES OF STUDY

8.DATE OF S/W Nov.1975

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

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 39.5GWh

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

- ■ Completed or in Progress
- ○ 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.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②④

和名 イロコスノルテかんがい計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1993

ASE PHL/S 104/81

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Davao City Urban Transport cum Land Use

3.SECTOR
Transportation/Urban Transportation

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 Mar.1979

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 ダバオ都市交通計画

{M/P,M/P+(F/S),Basic Study,Other}

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1993

ASE PHL/S 310/81

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Pampanga Delta Development Project

3.SECTOR
Social Infrastructures/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 May.1980

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

10.STUDY TEAM

No.of Members	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
- ● 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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②④

和名 パンパンガデルタ開発計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (F/S)

ASE PHL/S 309/81

Compiled Mar.1990
Revised Mar.1993

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 & Broadcasting/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 Apr.1980

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

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 qentex 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
- ○ Completed
- ● Implementing
- ○ Processing
- □ Promoting
- □ Delayed or Suspended
- □ 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

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

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 中部ルソン電気通信網整備計画

{F/S,(M/P)+F/S,D/D}

PROJECT SUMMARY (M/P+F/S)

ASE PHL/S 202A/82

Compiled Mar.1986
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Philippines

2.NAME OF STUDY
Local Water Supply Projects

3.SECTOR
Public Utilities/Water Supply

4.REFERENCE NO.

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

6.COUNTERPART AGENCY
Local Water Utilities Administration

7.OBJECTIVES OF STUDY
Planning on the water supply expansion plan up to the year 2010 and selection of emergency project

8.DATE OF S/W Mar.1981

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

10.STUDY TEAM

No.of Members 9
Period Jun.1981-Jun.1982(12 months)

Total M/M	Japan	Field
79.95	34.72	45.23

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	182,931 (¥'000)
Contracted	180,464

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Laoaq district (Ilocos Norte Province), Leqaspi City and Daraqa Municipality (Albay Province), Tagbilaran City (Bohol Province)

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
	1)	56,480	21,860	34,620
(US$1=7.80P)	2)			

3.CONTENTS OF MAJOR PROJECT(S)

Phase (Target year)	Served Population	Water Demand(cu.m/day)	Facilities
Basis (1982)	76,500	14,800	
Phase-1(1987)	116,760	28,933	Improvement of existing facilities Expansion of distribution pipelines
Phase-2(1993)	206,690	45,608	Expansion of water facilities including new water resources
Phase-3(2010)	358,811	71,231	More expansion of Phase-2

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

	Total Cost	Local Cost	Foreign Cost
Laoaq	24,280	9,200	15,080
Leqaspi	11,940	4,740	7,200
Daraqa	89,00	3,500	5,400
Taqbilaran	11,360	4,420	6,940

4.CONDITIONS AND DEVELOPMENT IMPACTS

Assumptions:
Based on the served population, which was assumed to rise qradually, future water demand was projected.

Development impacts:
(1) Full utilization of the existinq water sources.
(2) Alleviation of the chronic water shortaqe
(3) Expansion of the water supply system

5.TECHNICAL TRANSFER
Carried out the trainino proqram on investiqation, planninq and manaqement of water works for four counterparts. Two counterparts have studied and prepared studies with project team at project site.

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

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

(Description)
Followed by F/S.

2.MAJOR REASONS FOR PRESENT STATUS
Provision of water supply is an essential infrastructure for improving environmental and sanitary condition in the respective four cities, as they have been developing as the center of the regions.

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 地方都市上水道計画

{M/P,M/P+(F/S),Basic Study,Other}