PROJECT SUMMARY (F/S)

ASO MYN 305/86

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Myanmar

2. NAME OF STUDY
Track, Telecommunication and Signalling Improvement Project

3. SECTOR
Transportation/ Railway

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Burma Railway Corporation

7. OBJECTIVES OF STUDY
Formulation of a long-term and short-term development plan for tracks, signalling and telecommunication equipment

8. DATE OF S/W Aug. 1985

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

10. STUDY TEAM

No. of Members	12
Period	Jan.1986 - Feb.1987 (14 months)
Total M/M	90.40
Japan	53.34
Field	37.06

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12. EXPENDITURE

Total	247,477 (¥'000)
Contracted	242,970

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Rangoon - Mandalay, Pegu-Martaban, Rangoon - Prome, Myohaung Junction - Minati

2. PROJECT COSTS (US$1=199Yen)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	163,000	57,000	106,000
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
The master plan study on 4 lines.
The feasibility study on Rangoon - Mandalay line, with following components:
- Track improvement (800 km)
- Signal improvement (4 stations, signal replacement, 20 crossings)
- Telecommunication improvement (transmission 620 km, exchange and relay equipment)
- Other related facilities

Implementation Period: 1986 - 2001

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
10.7%	2.8%

Feasibility: Yes

Conditions and Development Impacts:
Benefits:
1) Saving of the investment in rolling stock
2) Time saving of passengers
3) Saving of railway operating costs
4) Saving of road investment

Impacts:
1)
2) Reduction of railway accidents
3) Saving of fuel costs
4) Reduction of manpower requirements

5. TECHINCAL TRANSFER
Participation of counterparts in JICA training program

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)
After the completion of the study, the Government planned to apply for yen credit, but because of the succession of economic and political problems, the application did not materialize.

2. MAJOR REASONS FOR PRESENT STATUS
Political destabilization
Designation as a LLDC country

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 幹線鉄道整備計画

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

PROJECT SUMMARY (F/S)

ASO NPL 301 /83

Compiled March 1986
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Nepal

2. NAME OF STUDY
Rural Telecommunications Network Project

3. SECTOR
Communications & Broadcasting/ Telecommunication

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Nepal Telecommunicating Corporation(NTC)

7. OBJECTIVES OF STUDY
To determine the technical and economic feasibilities of the project to improve the Rural Telecouununications

8. DATE OF S/W Sep.1982

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

10. STUDY TEAM

No. of Members	13
Period	Nov.1982 - Oct.1983 (12 months)
Total M/M	24.2
Japan	11.5
Field	12.7

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	81,960 (¥'000)
Contracted	48,007

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Whole country

2. PROJECT COSTS (US$1=270Yen)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	34,963		34,963
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
Contents
construct the National Radio Telecommunications Network with 53 Radio Stations.

Implementation Period: Jan.1986 - Mar.1989

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR FIRR

Feasibility: Yes

Conditions and Development Impacts:
The National Radio Telecommunications Network is to be constructed under the 6th national development plan (1980-85), in order to increase productivity and employment opportunity and to improve the economic infrastructure.
The project may have impacts on not only communications but also on education, medical treatment, agriculture, and tourism.

5. TECHINCAL TRANSFER
OJT was conducted for the counterpart staff.

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

The project was implemente with Japanese grant aid.

Jun.1984 E/N of grant aid signed (154 million yen)
Mar.1985 D/D completed
Oct.1985 E/N of grant aid signed (4,376 million yen)

2. MAJOR REASONS FOR PRESENT STATUS
- large impacts
- high priority

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 地方電気通信網整備計画

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

PROJECT SUMMARY (M/P)

ASO NPL 101/84

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Nepal

2. NAME OF STUDY
Kosi River Water Resources Development

3. SECTOR
Social Infrastructures/ Water Resource Development

4. REFERENCE NO.

5. TYPE OF STUDY M/P

6. COUNTERPART AGENCY
Department of Electricity,
Ministry of Water Resources

7. OBJECTIVES OF STUDY
Hydropower;irrigation

8. DATE OF S/W Feb.1983

9. CONSULTANT(S)
Chuo kaihatsu Corporation;Toden Corp,;Kokusai Kogyo Co.,Ltd.

10. STUDY TEAM

No. of Members	22
Period	Jun.1983 - Mar.1985 (21 months)
Total M/M	57.5
Japan	37.5
Field	20.0

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	491,986 (¥'000)
Contracted	181,019

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
42,000 sq.km in eastern Nepal

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

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

3. MAJOR PROJECT(S) PROPOSED
(1) Arun catchment project (Arun 3)
(2) Sun Kosi diversion project

4. CONDITIONS AND DEVELOPMENT IMPACTS
Development impact includes
(1) supply of abundant,low cost power
(2) large scale irrigated agricultural development
(3) regional development through access road construction

5. TECHINCAL TRANSFER
(1) Training of 4 counterparts personnel on power development planning
(2) Supply and training in use of drilling equipment

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
This is the first integrated development study in the region.
In particular, the Arun 3 project has been the focus of attention due to large potentiality for supply of cheap power.
At the request of the Nepalese government, an F/S for the Arun 3 project(Arun 3 Hydropower Development Project) has been carried out by JICA.

Oct.1988-Apr.1991
D/D is implemented jointly by West Germany (Lahmeyer/Energy Engineering) and Japan (EPDC/CKC).
Construction is scheduled to begin in 1991 and be completed in 2000. The government of Nepal is requesting a JICA F/S on Sun Kosi Diversion Project.

2. MAJOR REASONS FOR PRESENT STATUS
(1) The Arun 3 hydropower project is the most economically viable project among projects surveyed in Napal.
(2) Implementation of Arun 3 will promote the development of other hydropower projects in the area.
(3) Sun Kosi: Diversion Project is important partly for its impact on food production and partly for environmental conservation.

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 コシ河流域水資源開発基本計画

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

ASO NPL 201A /87

PROJECT SUMMARY (M/P + F/S)

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Nepal

2. NAME OF STUDY
Development Plan of Television Network

3. SECTOR
Communications & Broadcasting/ Broadcasting

4. REFERENCE NO.

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

6. COUNTERPART AGENCY
Nepal Television Corporation

7. OBJECTIVES OF STUDY
Formulation of a development plan of TV broadcasting network

8. DATE OF S/W Feb.1987

9. CONSULTANT(S)
Integrated Technology Inc.

10. STUDY TEAM

No. of Members	8
Period	Jun.1987 - Mar.1988 (22 months)
Total M/M	33.68
Japan	17.53
Field	16.15

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Cross-cut topographic mapping

12. EXPENDITURE

Total	128,937 (¥'000)
Contracted	99,420

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Kathmandu and east and west Terai

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=130Yen)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	41,700	4,600	37,100
2)			

3. MAJOR PROJECT(S) PROPOSED
See next page

4. CONDITIONS AND DEVELOPMENT IMPACTS
The proposed TV network will play an important role in the national development, by improving the level of education and literacy and vocational training.

5. TECHINCAL TRANSFER
1) OJT
2) Participation of counterparts in JICA training program

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
Followed by F/S.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 テレビジョン放送網開発計画

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

ASO NPL 201B /87

PROJECT SUMMARY (M/P + F/S)

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Nepal

2. NAME OF STUDY
Development Plan of Television Network

3. SECTOR
Communications & Broadcasting/ Broadcasting

4. REFERENCE NO.

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

6. COUNTERPART AGENCY

7. OBJECTIVES OF STUDY

8. DATE OF S/W Feb.1987

9. CONSULTANT(S)

10. STUDY TEAM

No. of Members	8
Period	Jun.1987 - Mar.1988 (22 months)
Total M/M	33.68
Japan	24.51
Field	9.17

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	128,937 (¥'000)
Contracted	99,420

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Kathmandu and east and west Terai

2. PROJECT COSTS

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	417,000	4,600	37,100
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)

TV Studio (Kathmandu)	: 4 studios
Broadcasting stations	: 2 stations
Relay stations	: 16 stations
Outdoor relay vans	: 1 vehicle

Implementation Period: 1989 - 1995

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR FIRR

Feasibility: Yes

Conditions and Development Impacts:
FIRR will be 18.6% if grant aid is used for investment, and -4.9% if a loan is used.

Development impacts:
- Speedy dissemination of information and strengthening of effective communication means
- Improvement of school education
- Improvement of agricultural extension services
- Diffusion of family planning, health care and hygiene
- Integration of different ethnic and cultural communities

5. TECHINCAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

The Government of Nepal is requesting Japanese grant aid to implement the project.

2. MAJOR REASONS FOR PRESENT STATUS

The Nepalese side is very eager to implement the project, but the Japanese grant aid program for Nepal is already fully committed to the other projects for the next three years.

3. PRINCIPAL SOURCES OF INFORMATION

(1)

和名 テレビジョン放送網開発計画

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

ASO NPL 302/88

PROJECT SUMMARY (F/S)

Compiled March 1986
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Nepal

2. NAME OF STUDY
Sindhuli Road Construction Project

3. SECTOR
Transportation/ Road

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Dept. of Road, Ministry of Works and Transport

7. OBJECTIVES OF STUDY

8. DATE OF S/W Jul.1986

9. CONSULTANT(S)
Nippon Koei Co. and
Kokusai Kogyo Co.

10. STUDY TEAM

No. of Members	21
Period	Nov.1986 - Jun.1988 (20 months)
Total M/M	98.8
Japan	40.2
Field	58.6

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Traffic survey
Geological survey

12. EXPENDITURE

Total	406,657 (¥'000)
Contracted	414,063

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Between Bardibas and Dhulikhel in the Central Development Region

2. PROJECT COSTS (US$1=130Yen=21.0Rps.)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	207,000	29,000	178,000
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
- Construction of trunk road (155 km, two-lane, paved) connecting the East-West Highway in the Terai Plains and the Kathmandu region
- The project is divided into two sections
  Section I: From Bardibas of the East-West Highway Bazar to Shindhuli
  Section II: Shindhuli Bazar - Khurkot - Nepalthok - Dhulikeli of Kodari Road
- A operation & maintenance training center

Implementation Period: 1989 - 2000

4. FEASIBILITY AND ITS ASSUMPTIONS

	EIRR	FIRR
Feasibility: Yes	9.6%	
	B/C 1,261	

Conditions and Development Impacts:
- The project will contribute to the improvement of marketing agricultural products, especially increased producer price in Terai and decreased consumer price in Kathmandu concerning rice.
- The project will provide the link from Kathmandu to Calcutta, promoting trade, and reduce the travel time.
- The project will promote the development efforts along the way (e.g. construction of dams)
- The indirect effects of the project are estimated to be US$78 million.

5. TECHINCAL TRANSFER
OJT on traffic survey and analysis, road engineering technology, etc.

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)
The Government of Nepal assigns top priority to this project among various trunk road projects, and plans to request Japanese grant aid.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 シンズリ道路建設計画

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

PROJECT SUMMARY (M/P + F/S)

ASO NPL 202A /89

Compiled March 1991
Revised

I. OUTLINE OF STUDY

1. COUNTRY Nepal

2. NAME OF STUDY
Development Plan of Civil Aviation

3. SECTOR
Transportation/ Air Transportation & Airport

4. REFERENCE NO.

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

6. COUNTERPART AGENCY
Department of Civil Aviation, Ministry of Tourism

7. OBJECTIVES OF STUDY
Over-all development of air transport system in Nepal

8. DATE OF S/W Feb.1988

9. CONSULTANT(S)
Pacific Consultants International

10. STUDY TEAM

No. of Members	8
Period	Aug.1988 - Sep.1988 (14 months)
Total M/M	50.14
Japan	31.49
Field	18.65

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Topographic Survey and Soil Investigation

12. EXPENDITURE

Total	167,332	(¥'000)
Contracted	155,142	

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
The whole area of Nepal

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	605,000		
2)			

3. MAJOR PROJECT(S) PROPOSED

1. Kathmandu International Airport Development Project
2. New Pokhara Airport Development Project
3. Jomsom, Simikot, Lukla, Syangboche and Mugu airport development projects
4. En-route Navaids Network Project and Nationwide Aeronautical Telecom. Network Project

4. CONDITIONS AND DEVELOPMENT IMPACTS

1. Improvement of the function and capacity of the existing airport facilities
2. Improvement of safety and punctuality of aircraft operations
3. Contribution to the public welfare in remote districts
4. Promotion of the tourism sector

5. TECHINCAL TRANSFER
Counterpart training in Oct. and Nov. 1988 which consists of lectures on airport plannings, discussion on the study, and inspection of the airport in Japan

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
Followed by F/S.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 国内航空網整備計画

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

ASO NPL 202B /89

PROJECT SUMMARY (M/P + F/S)

Compiled March 1991
Revised

I. OUTLINE OF STUDY

1. COUNTRY Nepal

2. NAME OF STUDY
Development Plan of Civil Aviation

3. SECTOR
Transportation/ Air Transportation & Airport

4. REFERENCE NO.

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

6. COUNTERPART AGENCY
Department of Civil Aviation, Ministry of Tourism

7. OBJECTIVES OF STUDY
Examination of the feasibility on the priority plans.

8. DATE OF S/W Feb.1988

9. CONSULTANT(S)
Pacific Consultants International

10. STUDY TEAM

No. of Members	8
Period	Dec.1988 - Sep.1989 (14 months)
Total M/M	50.14
Japan	31.49
Field	18.65

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	167,332 (¥'000)
Contracted	155,142

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Kathmandu, Pokhara, Jomsom, Simikot, Lukla, and Syangboche airports

2. PROJECT COSTS

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	246,300	55,600	190,700
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
1.Kathmandu International Airport Project
a. New domestic terminal building
b. Expansion of passenger apron
c. Installation of air navigation system
2.New Pokhara Airport
3.Development of Jomsom, Simikot, Lukla, and Syangboche Airports

Implementation Period: 1989 - 1994

4. FEASIBILITY AND ITS ASSUMPTIONS

	EIRR	FIRR
Feasibility:	1) 19.7%	
	2) 2.1%	

Conditions and Development Impacts:
- Improvement of the functions and capacity of the existing airport facilities
- Improvement of safety and punctuality of aircraft operations
- Contribution to the public welfare in remote areas
- Promotion tourism

Note: EIRR for Jomsom and Simikot are 13.1% and 9.6%.

5. TECHINCAL TRANSFER
Counterpart training from Aug. to Oct.1989 which consists of lectures on airport plannings, discussion on the study, and inspection of the airport in Japan

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)
Under promotion

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 国内航空網整備計画

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

PROJECT SUMMARY (Other)

ASO PAK 601 /75

Compiled March 1990
Revised March 1992

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:

9. CONSULTANT(S): Central Consultant, Inc.

10. STUDY TEAM

No. of Members	3
Period	Feb.1976 - Mar.1976 (1 months)
Total M/M	2.2
Japan	0
Field	2.2

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. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

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

3. MAJOR PROJECT(S) PROPOSED

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. TECHINCAL TRANSFER

Training in Japan on port development and basic design

III. PRESENT STATUS OF USE OF STUDY RESULTS

1. PRSENT STATUS

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

(Description)

1973 - 75 M/P study was undertaken on Quasim Port
1975 D/D on the construction of berths for 25,000 - 75,000 DWT

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION

(1)

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)

ASO PAK 201A /79

Compiled March 1986
Revised March 1991

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

8. DATE OF S/W Mar.1978

9. CONSULTANT(S)
Shipbuilding Research Centre of Japan

10. STUDY TEAM

No. of Members	7
Period	Aug.1978 - Oct.1979 (14 months)
Total M/M	16.55
Japan	10
Field	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. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

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

3. MAJOR PROJECT(S) PROPOSED

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

The project will contribute ot the growth of shipping and the balance of payments improvement.

5. TECHINCAL TRANSFER

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

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

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

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)

ASO PAK 201B /79

Compiled March 1986
Revised March 1991

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

7. OBJECTIVES OF STUDY

8. DATE OF S/W Mar.1978

9. CONSULTANT(S)

10. STUDY TEAM

No. of Members	7
Period	Aug.1978 - Oct.1979 (14 months)
Total M/M	16.55
Japan	10
Field	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
Karachi

2. PROJECT COSTS

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	226,201	14,000	
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

Implementation Period: 1) 1979 - 1873
2) 1979 - 1980

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
	1)20.1%

Feasibility: Yes

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

5. TECHINCAL TRANSFER
OJT

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

1979 Mar. OECF loan agreement
(18,000 million yen)

1980 Dec. - 1983 Mar.
The project was implemented

One ship was built by KSEW and six ships were built in Japan.

2. MAJOR REASONS FOR PRESENT STATUS
Large economic impact

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 海運・造船振興計画

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

ASO PAK 301/79

PROJECT SUMMARY (F/S)

Compiled March 1986
Revised March 1991

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 Japan and Kiso-jiban Consultants Co.,Ltd.

10. STUDY TEAM

No. of Members	16
Period	Sep.1978 - Mar.1980 (19 months)
Total M/M	72.47
Japan	56.1
Field	16.37

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Soil condition survey
¥1,630

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 COSTS (US$1=RS10)

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

Implementation Period: Jan.1982 - Dec.1983

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
3.8%	

Feasibility: Yes

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

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)
As the project site is near the border of Iran, this project was delayed because of the Iran-Iraq War.

2. MAJOR REASONS FOR PRESENT STATUS
Due to the bad economic condition

3. PRINCIPAL SOURCES OF INFORMATION
(1)

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)

ASO PAK 202A /81

Compiled March 1986
Revised March 1991

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 Japan

10. STUDY TEAM

No. of Members	10
Period	Nov.1980 - Mar.1982 (16 months)
Total M/M	67.4
Japan	49.6
Field	17.8

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. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=210Yen=9.9Rp)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	218,490	81,893	
2)			

3. MAJOR PROJECT(S) PROPOSED
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. TECHINCAL TRANSFER
Counterpart training (4 persons)
Instruction on method of port planning and feasibility study

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
Feasibility study on the introduction of containerization by OCDI

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 コンテナ輸送導入計画

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

ASO PAK 202B /81

PROJECT SUMMARY (M/P + F/S)

Compiled March 1986
Revised March 1991

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

7. OBJECTIVES OF STUDY

8. DATE OF S/W Jul.1980

9. CONSULTANT(S)

10. STUDY TEAM

No. of Members 10
Period Nov.1980 - Mar.1982 (16 months)

Total M/M 67.4
Japan 49.6
Field 17.8

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 COSTS

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

Implementation Period: Jan.1982 - Dec.1986

4. FEASIBILITY AND ITS ASSUMPTIONS

	EIRR	FIRR
1)	14.3%	11.2%
2)	12.2%	

Feasibility: Yes

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. TECHINCAL TRANSFER

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

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

-Suspended after F/S
-It is expected that the project will be implemented when the cargo volume increase in the future

2. MAJOR REASONS FOR PRESENT STATUS

Worsening of economic conditions

3. PRINCIPAL SOURCES OF INFORMATION

(1)

和名 コンテナ輸送導入計画

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

PROJECT SUMMARY (M/P)

ASO PAK 101 /83

Compiled March 1986
Revised March 1991

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 Contracted 326,297 (¥'000)

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Entire country

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

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

3. MAJOR PROJECT(S) PROPOSED

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

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
The master plan was incorporated into the transport sector of the 6th Five-Year Development Plan (1983-87). Feasibility studies were undertaken on major airports (Karachi, Lahore and Islamabad).

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 全国総合交通計画

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

ASO PAK 302/83

PROJECT SUMMARY (F/S)

Compiled March 1990
Revised March 1991

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
Transoprt 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	74.44
Japan	59.70
Field	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 COSTS (US$1=13.8Rs)

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

3. CONTENTS OF MAJOR PROJECT(S)
Locomotive introduction plan--- 1,265 locomotives
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%

Implementation Period:

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR FIRR

Feasibility:

Conditions and Development Impacts:
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. TECHINCAL TRANSFER
Two counterparts received training in Japan from JICA under the Colombo Plan.

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

- [x] 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)
Oct.1985	OECF loan agreement on the purchase of locomotives (14,800 million yen)
1985	D/D completed
1989	Evaluation of tenders completed
Feb.1990	Construction started
Jun.1992	Construction to be completed

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 国鉄機関車供給計画

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

ASO PAK 303 /84

PROJECT SUMMARY (F/S)

Compiled March 1988
Revised March 1991

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	61.98
Japan	21.49
Field	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 COSTS

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

Implementation Period:
1) 1985 - 1992
2) 1992 - 1995
3) 1996 - 2000

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
6.2%	6.6%

Feasibility: Yes

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. TECHINCAL TRANSFER
Acceptance of 3 trainees from the local counterpart

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT 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)
Apr.-May 1991 Tenders scheduled

2. MAJOR REASONS FOR PRESENT STATUS

Present status in Pakistan:
Through the adjustment between the study on the availability of existing facilities and the development plan for the cities of Islamabad and Rawalpindi, a new request for the inpelmentation on the yen credit is being prepared.

3. PRINCIPAL SOURCES OF INFORMATION

(1)

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}

ASO PAK 102/87

PROJECT SUMMARY (M/P)

Compiled March 1990
Revised March 1991

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	80.3
Japan	25.6
Field	54.7

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 Punjabi)

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=17.0Rs)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	970,588		
2)			

3. MAJOR PROJECT(S) PROPOSED
(1) Improvement of the control system for 3 existing dams (Rawal, Simly and Khanpur)
(2) Construction of 5 new dams in Haro, Dor and Soan Rivers
(3) Establishmentof the integral control system for above 8 dams for the effective use of water sources

4. CONDITIONS AND DEVELOPMENT IMPACTS
On an assumption of the population of 3,267,000 in the capital area in the final target year 2030, and water demand of 475.1 per capita, water source of 566.4(1,000 sq.m)has to be required. In order to reserve 830(1,000 cu.m) including 212(1,000 cu.m) for the airport and industrial use, the execution of the above project is needed.
For the planning of new dams and the establishment of the control system, further F/S is required.

5. TECHINCAL 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 USE OF STUDY RESULTS

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

(Description)
1) OECF financed the conduction of water from Khanpur to Islamabad/Rawalpindi.
2) OECF loan agreement was signed in March 1989 on Simly Dam (5,750 million yen)

2. MAJOR REASONS FOR PRESENT STATUS
The establishment of an orderly development policy in the present developed capital area.

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 首都圏水資源開発基本計画

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

ASO PAK 602/87

PROJECT SUMMARY (Other)

Compiled March 1990
Revised March 1991

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 Other

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

10. STUDY TEAM

No. of Members	15
Period	Jan.1987 - Mar.1988 (15 months)
Total M/M	60.66
Japan	29.62
Field	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. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

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

3. MAJOR PROJECT(S) PROPOSED
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. TECHINCAL 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 USE OF STUDY RESULTS

1. PRSENT STATUS
- [x] 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 (E/S) is being implemented on Lahore urban transport system.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

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}

ASO PAK 304 /89

PROJECT SUMMARY (F/S)

Compiled March 1991
Revised

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)
All Japan Radio & Television Engineering Services Co.,Ltd.
Nippon Sogo Architects & Engineers

10. STUDY TEAM

No. of Members	14
Period	Jan.1989 - Sep.1989 (9 months)
Total M/M	49.76
Japan	23.04
Field	26.72

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	157,100 (¥'000)
Contracted	159,273

II. SUMMARY OF STUDY RESULTS

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

2. PROJECT COSTS US$1=19.57P.Re=130Yen

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	130,955	81,904	49,050
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
The establishment of the second TV channel for education in the Islamic Republic of Pakistan.
-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 15 TV ROs).
-Supply and installation of ETV transmitter and antenna for each of 12 rebroadcast stations.

Implementation Period: 1990 - 1995

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
15.26%	

Feasibility:

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 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, vocational training, etc.

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

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)
The Exchange of Note for grant aid was signed on December 10, 1989.
The project for the establishment of the second TV channel for education(PC-1 Form) was submitted to the Pakistan Government by PTV on February, 1990. And this PC-1 Form is under consideration.

2. MAJOR REASONS FOR PRESENT STATUS
PC-1 Form was submitted to the Pakistan Government by PTV on Februray,1990, and is under consideration at this time.

3. PRINCIPAL SOURCES OF INFORMATION

和名 教育テレビチャンネル設立計画

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

ASE PHI 303 /76

PROJECT SUMMARY (F/S)

Compiled March 1986
Revised March 1991

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

10. STUDY TEAM

No. of Members	12
Period	Apr.1975 - Jun.1976 (14 months)
Total M/M	90.42
Japan	53.34
Field	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 COSTS

(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

Implementation Period: Jan.1980 - Jul.1987

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
20.4%	

Feasibility: No

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

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT 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 Loydo/Sumitomo, Swiss Transfer Credit, LRT 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.
5. Construction committee for LRT No. 2 has been established within DOTC.

2. MAJOR REASONS FOR PRESENT STATUS
The alternative transit system was implemented.

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 マニラ地下鉄（1号線）計画

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

ASE PHI 301 /76

PROJECT SUMMARY (F/S)

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

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

3. SECTOR
Transportation/ Marine Transportation & Ships

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Maritime Industry Authority

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

8. DATE OF S/W

9. CONSULTANT(S)

10. STUDY TEAM

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

Total M/M
Japan
Field

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

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

II. SUMMARY OF STUDY RESULTS

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

2. PROJECT COSTS

(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) Desiltation and reclamation (1 million cu.m)
2) Revetment (-15m:250m, -3m:100m, -2m:360m, -1m:80m)
3) Wharf (-9m, 700m)
4) Dock yard (350m x 65m x 13m, concrete pile base, steel-reinforced concrete)
5) Quay and dolphin (25m x 160m, of which dolfin 20m x 25m, holding equipment)
6) Repair plant (2 main bldgs., 1 ancillary bldg., a set of equipment)

Implementation Period: 1976 - 1980

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
25%	

Feasibility: Yes

Conditions and Development Impacts:
The capacity of the dock yard is determined on the basis of the projected cargo volume passing the western side of the Philippines toward Southeast Asia and Far East, and the Philippines fleet of 10,000GT.
Development impacts:
1) Foreign exchange earnings and saving
2) Creation of employment (1,600 workers at the repair plant)
3) Increased markets for domestic materials

5. TECHINCAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS
- [■] Completed or in Progress
  - (●) Completed
  - (○) Implementing
  - (○) Processing
- [ ] Promoting
- [ ] Delayed or Suspended
- [ ] Discontinued or Cancelled

(Description)

Sept.1977 OECF E/S loan agreement (265 million yen)
Mar. 1979 OECF loan agreement (10,855 million yen)

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION

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}

ASE PHI 302 /76

PROJECT SUMMARY (F/S)

Compiled March 1986
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

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

3. SECTOR
Transportation/ Marine Transportation & Ships

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Dept.of Public Highway

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

8. DATE OF S/W

9. CONSULTANT(S)

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 Contracted 8,550 (¥'000)

II. SUMMARY OF STUDY RESULTS

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

2. PROJECT COSTS (US$1=292.8yen)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	9,904	1,707	
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
Construction of 2 ferries (59m)
One ferry will be built in Japan and the other in the Philippines (BASECO Shipyard).

Implementation Period: 1978 - 1980

4. FEASIBILITY AND ITS ASSUMPTIONS

	EIRR	FIRR
1)	10%	
2)	8%	

Feasibility: Yes

Conditions and Development Impacts:
The IRR is 10% for the ferry to be built in Japan and operated in the San Bernardino Strait, and 8% for the ferry to be built in the Philippines and operated in the Surigao Strait.
The project will provide efficient inter-island and coastal transport link and contribute to the transfer of shipbuilding technology.

5. TECHINCAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

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

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

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION

和名 フェリー計画

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

ASE PHI 305 /77

PROJECT SUMMARY (F/S)

Compiled March 1986
Revised March 1991

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
Ministry of Public Highways Department of Public highways (DPH)

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. and Kokusai Kaihatsu Center

10. STUDY TEAM

No. of Members	12
Period	Mar.1977 - Mar.1978 (12 months)
Total M/M	65.31
Japan	36.6
Field	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 COSTS (US$1=8P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	37,000	27,000	
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
- C-3 Road (15,5km: South Superhighway - Rizal Av. and - Balintawak Interchange) 6 leans
- R-4 Road (C-4 - Juan Luna) with sections overlapping C-5: total length 7.2km. 4 leans for R-4 and 6 lanes for the rest
- In order to ensure social equity in transportation services, it is recommended that the bus lane be introduced to the project.

Implementation Period: 1978 - 1982

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR 49.9% FIRR

Feasibility: Yes

Conditions and Development Impacts:
Conditions :
1) Subjected to right of way acquisition.

Development Impacts :
1) Completion of the major throughfares in Metropolitan Manila area.
2) Relief of traffic congestion for crossing over the Pasig River Bridge.
3) Substitution effectiveness for circumferential road C-3.
4) Expected to develop as a sub-centre of a metropolis, such as Makati office centre, Kubao commercial center and Mandalyong Industrial Belts and Dagato - Dagatan Resettlements etc.

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

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)

1978 Nov. OECF E/S loan agreement (296 million yen)
1980 Jun. OECF E/S loan agreement (150 million yen)
1985 May OECF loan agreement (1,429 million yen)

- The northern section (7km) of C-3 Road (15km) is under construction.
- R-5 road is under construction together with C-5 Road.

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 SOURCES OF INFORMATION
(1)

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}

ASE PHI 304 /77

PROJECT SUMMARY (F/S)

Compiled March 1986
Revised March 1991

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	15.7
Japan	6.3
Field	9.4

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 COSTS (US$1=291Yen=7.39P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	6,534	440	6,094
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)

Flood Forecasting Center	1
Relay Station	4
Monitor Station	3
Telemeter Station	21
Subcenter	3
Transmission and Receiving Station	2

Implementation Period: Jan.1979 - Jul.1982

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR FIRR

Feasibility: Yes

Conditions and Development Impacts:
The prerequisite is simultaneous commencement of construction of the proposed flood forecasting and warning systems over the three rivers, Agno, Bicol and Cagayan. The merit of development is that by flood information services, it contributes toward effective execution of flood fighting activities, mitigation of loss of lives and personal and public assets and further, it also contributes to maintain stability of social economy and public welfare.

5. TECHINCAL 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 received for training.
3. Local Consultant: CTIE entered into joint-venture with Basic Technology and Management.

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS
- [x] Completed or in Progress
  - (●) Completed
  - ( ) Implementing
  - ( ) Processing
- [ ] Promoting
- [ ] Delayed or Suspended
- [ ] Discontinued or Cancelled

(Description)

Date of completion of detail design :	February 1979
Date of OECF loan agreement (¥17.74 billion) :	January 1978
Date of completion :	March 1982
Date of commencement of service :	March 1982
Name of consultant after commencement of detail design :	CYI Engineering Co., Ltd.

Approved project cost ;
Total project cost $ 8.83 million (US$1=¥ 240.-)
Local Currency Portion $ 1.45 million (US$1=P8.-)
Fund provided by Yen Loan $ 7.38 million

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 SOURCES OF INFORMATION
(1)

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 (Other)

ASE PHI 601 /77

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

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

3. SECTOR
Transportation/ Marine Transportation & Ships

4. REFERENCE NO.

5. TYPE OF STUDY Other

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

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

8. DATE OF S/W

9. CONSULTANT(S)
Shipbuilding Research Centre of Japan

10. STUDY TEAM

No. of Members 4
Period Jul.1977 - Jul.1977 (1 months)

Total M/M
Japan
Field

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE
Total 4,554 (¥'000)
Contracted

II. SUMMARY OF STUDY RESULTS

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

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

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

3. MAJOR PROJECT(S) PROPOSED
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. TECHINCAL TRANSFER

III. PRESENT STATUS OF USE OF STUDY RESULTS

1. PRSENT 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 SOURCES 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}

ASE PHI 101 /78

PROJECT SUMMARY (M/P)

Compiled March 1986
Revised March 1991

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
Bureau of Public Works and Highways (BPWH)

7. OBJECTIVES OF STUDY
Flood control

8. DATE OF S/W Mar.1977

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

10. STUDY TEAM

No. of Members	15
Period	Aug.1977 - Sep.1978 (14 months)
Total M/M	42.97
Japan	7.17
Field	35.8

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. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=7.4P)

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

3. MAJOR PROJECT(S) PROPOSED

The pasig and Potolero rivers in the western region of Luzon Island causes the flood damage because of the remarkable denudation of mountain region.
The project consists of the following sabo works preventing sediment deposit in the river.

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

4. CONDITIONS AND DEVELOPMENT IMPACTS

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

5. TECHINCAL TRANSFER
1) OJT :

III. PRESENT STATUS OF USE OF STUDY RESULTS

1. PRSENT STATUS
- [x] 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 domestic budget of the Government of the Philippines.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

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 PHI 306 /78

Compiled March 1986
Revised March 1991

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)
NTC

10. STUDY TEAM

No. of Members 13
Period Feb.1978 - Dec.1978 (10 months)

Total M/M
Japan 1.3
Field

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 COSTS

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)			
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)

1) Local exchanges(45), IPTSS(50)
2) Microwave network(20hops, 732knis)
3) VHF system(43), VHF system(30)
4) PCM system(4 sections), Multiplexing equipment (about 3100ch)
5) Trunk cable(about 457km)
6) Local cable (about 640km)
7) Telex exchange(2), Telex concentrator(7), Gentex station(32)

Implementation Period: Jul.1980 - 1982

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
6.31%	

Feasibility:

Conditions and Development Impacts:
Subscriber Toll Dialling Service (STD) is available from Ilocos and Cagayan areas.

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

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

1978 Nov.	OECF E/S loan agreement (157 million yen)
1981 Jun	OECF loan agreement (7,600 million yen)
1988 Jan.	(5,700 millon yen)
1992 Oct.	Construction works scheduled to be completed.

2. MAJOR REASONS FOR PRESENT STATUS

Effectiveness
- large impact
- high priority

3. PRINCIPAL SOURCES OF INFORMATION

(1)

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 (M/P)

ASE PHI 102/79

Compiled March 1990
Revised

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 and Mitsubishi Research Institute, Inc.

10. STUDY TEAM

No. of Members 14
Period Jun.1978 - Feb.1980 (8 months)

Total M/M
Japan
Field

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. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

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

3. MAJOR PROJECT(S) PROPOSED

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

1) Water resource development:
   - Wahig-Pamacsalan irrigation development
   - Tagbilaran pumping station
2) Agriculture:
   - Establishment of a center for soil technology development and agricultural promotion
   - Establishment of a Wahig-Pamacsalan pilot farm
   - Development of the livestock sector
3) Fisheries:
   - Establishment of a fish processing base at the port of Cogtong
4) Forestry:

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

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)

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.
June 1980 OECF E/S loan agreement (90 million yen)
Sept. 1983 OECF loan agreement (4,600 million yen)

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

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 ボホール州総合開発計画

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

ASE PHI 308/79

PROJECT SUMMARY (F/S)

Compiled March 1986
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

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

3. SECTOR
Transportation/ Road

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Ministry of Public Highways

7. OBJECTIVES OF STUDY
Road plan

8. DATE OF S/W Aug.1978

9. CONSULTANT(S)
Pacific Consultants International

10. STUDY TEAM

No. of Members 13
Period Jan.1979 - Mar.1980 (14 months)

Total M/M
Japan 9.9
Field 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 COSTS (US$1=215Yen)

(US$1,000)	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

Implementation Period: 1981 - 1987

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
22.6%	60%

Feasibility: Yes

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. TECHINCAL TRANSFER
1) Overseas training
2) Report writing with counterpart staff

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)

1) The reclamation component will take time to mature because the Cavite reclamation area is not creating enough demand.
2) During 1987, three German contractors offered the turn-key implemention, but the offer was turned down by the philippine authorities. The NEDA coordinated with DPWH and formulated the Implementation Program I to apply for yen credit, bur the application fell through.
3) the Philippine authorities is preparing a new application for yen credit by reducing the scale of the project.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

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}

ASE PHI 307 /79

PROJECT SUMMARY (F/S)

Compiled March 1986
Revised March 1991

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 - Dec.1980 (11 months)
Total M/M	30.32
Japan	20.26
Field	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 COSTS (US$1=7.415P)

(US$1,000)	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: 6 years

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR FIRR

Feasibility: Yes

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. TECHINCAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)
Cancelled after the completion of the study.

2. MAJOR REASONS FOR PRESENT STATUS
Lack of funds.

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 病院整備計画

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

PROJECT SUMMARY (M/P)

ASE PHI 103/80

Compiled March 1986
Revised March 1991

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
Ministry of Public Works and Highways

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)
Nippon koei Co., Ltd.

10. STUDY TEAM

No. of Members	23
Period	Sep.1979 - Mar.1981 (9 months)
Total M/M	72.38
Japan	40.36
Field	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. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=7.5P)

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

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

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

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

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

5. TECHINCAL TRANSFER
1) OJT : The lecture for Sabo technology was held in the local office
2) Acceptance of trainee: JICA accepted two trainees for one month including the lecture (for Sabo, hydrology, river and survey,) by the study Team for 3days.
3) Preparation of the report :
The study team had deccussion with hte counterparts to prepared the reports.
(especially Progress Report and Financial Report)
4) Donation of equipment and instruction : the supervision and guidance of ground surveying (by local constructor)was carried out for four month.
(Lare surveying prfit and class leveling of river)

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
The Government of the Philippines had budgeted the project in the 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 yen credit.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 マヨン火山砂防基本計画

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

PROJECT SUMMARY (M/P)

ASE PHI 104 /81

Compiled March 1986
Revised March 1991

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
Ministry of Public Works and Highways

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 Consultatns Co. and Nippon Koei Co

10. STUDY TEAM

No. of Members	17
Period	Jun.1979 - Dec.1981 (30 months)
Total M/M	136.93
Japan	17.33
Field	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. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

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

3. MAJOR PROJECT(S) PROPOSED

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

III. PRESENT STATUS OF USE OF STUDY RESULTS

1. PRSENT 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.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 ダバオ都市交通計画

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

ASE PHI 201A /81

PROJECT SUMMARY (M/P + F/S)

Compiled March 1986
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Development Project of the Port of Irene

3. SECTOR
Transportation/ Port

4. REFERENCE NO.

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

6. COUNTERPART AGENCY
The Philippine Ports Authority(PPA)

7. OBJECTIVES OF STUDY
Preparation of Master Plan(Target year 2000) and Short-term Development Plan (Target year 1987)

8. DATE OF S/W Feb.1981

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

10. STUDY TEAM

No. of Members	9
Period	May 1981 - Mar.1982 (11 months)
Total M/M	46.98
Japan	35.10
Field	11.88

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Geological and oceanographic survey

12. EXPENDITURE

Total	135,996 (¥'000)
Contracted	101,988

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Port Irene at Casambalangan Bay

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=7.95P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	73,685		
2)			

3. MAJOR PROJECT(S) PROPOSED
Main projects (Target year 2000):
- 2 berths for foreign trade (-10m, 15,000dwt)(New construction)
- 3 berths for domestic trade (-7.5m, -5.5m) (New construction)
-1 Container berth for domestic trade (-7.5m)(New construction)
-Construction of sheds, warehouses, fishing ports

4. CONDITIONS AND DEVELOPMENT IMPACTS
Development of this port in short-term plan will increase the employment opportunity and the income through the development of the Cagayan Valley where agriculture and forestry are main industry.

In long-term plan development of this port will strengthen the basis of industry in this region and contribute to the development of sea transportation system in the Philippines.

5. TECHINCAL TRANSFER
1) On the job training to counterpart
2) Counterpart training
3) Preparation of report by cooperation with counterpart
4) Use the local consultant for oceanographic survey and boring
5) Donation of machinery and instruction of its use.

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
Followed by F/S.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 アイリーン港整備計画

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

ASE PHI 201B /81

PROJECT SUMMARY (M/P + F/S)

Compiled March 1986
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Development Project of the Port of Irene

3. SECTOR
Transportation/ Port

4. REFERENCE NO.

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

6. COUNTERPART AGENCY
The Philippine Ports Authority(PPA)

7. OBJECTIVES OF STUDY
Preparation of Master Plan(Target year 2000) and Short-term Development Plan (Target year 1987)

8. DATE OF S/W Feb.1981

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

10. STUDY TEAM

No. of Members	9
Period	May 1981 - Mar.1982 (11 months)
Total M/M	46.98
Japan	35.10
Field	11.88

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Geological and oceanographic survey

12. EXPENDITURE

Total	135,996 (¥'000)
Contracted	101,988

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Port Irene at Casambalagan bay

2. PROJECT COSTS (US$1=7.95P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	12,941	4,167	8,774
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
Short-term projects:
Wharf for foreign trade (-10m) 1berth (200m)
Mooring basin (-10m) 750 thousand cu.m
Transit shed (40mx90m)
Road (width 10m) 1.6km

Implementation Period: Oct.1983 - Dec.1986

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
25.2%	5.2%

Feasibility: Yes

Conditions and Development Impacts:
Conditions:
Cargo throughput projection (1987) for the short-term plan are based on the development prospects of Cagayan Province. The projection for the long-term plan (2000) is based on the development prospects of the northeastern region of Luzon Island.

Impacts:
The port will function as one of the development centers for the Cagayan Valley area and contribute to the increase of employment and income among the local population.

5. TECHINCAL TRANSFER
OJT and JICA training for counterparts

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)
D/D was completed in August 1986 with E/S loan from OECF (240 millon yen), but construction was subsequently suspended.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 アイリーン港整備計画

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

ASE PHI 309/81

PROJECT SUMMARY (F/S)

Compiled March 1986
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Dalton Pass Tunnel Project

3. SECTOR
Transportation/ Road

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Ministry of Public Highways

7. OBJECTIVES OF STUDY
Construction of Tunnel and Planning of Road Disaster Prevention

8. DATE OF S/W Feb.1981

9. CONSULTANT(S)
Katahira & Engineers

10. STUDY TEAM

No. of Members	11
Period	May 1981 - Mar.1982 (10 months)
Total M/M	68.76
Japan	13.93
Field	54.83

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Geotechincal Investigations
Traffic surveys including OD surveys

12. EXPENDITURE

Total	217,540 (¥'000)
Contracted	215,452

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Dalton Pass, Nueva Vizcaya

2. PROJECT COSTS

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)			
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
The Route No. 5 (Philippine-Japan Friendship Highway) is a main truck line connecting between the Luzon Central Plain including the Metro Manila Region and the Cagayan Valley Region in the north. During the typhoon season, the Dalton Pass Region is cut off due to landslides, roadcuts, collapsed bridges, etc. Considering this situation, the realization of the tunneling project was proposed in the Dalton Pass Region.

Implementation Period: 1983 - 1990

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
17.8%	

Feasibility: Yes

Conditions and Development Impacts:
As an assumption, the forecasted daily traffic in 2015 should be 7910 vehicles per day and a ventilation of jet-fan type, which will be at the first stage applied, shall be changed to the shaft type. The electric power for tunnel facilities shall be secured from the Gabat Substation which would be completed in 1982. The development benefits involve : to ensure the traffic in the Dalto pass Region, and reduction of travel time and the price increase due to cut off of roads at Dalton Pass which causes a detour through Route No. 3 connecting with Metro Manila Region.

5. TECHINCAL TRANSFER
OJT to counterparts on traffic survey and data analysis.

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

As a sole project, the required investment cost is too high. The priority is not given by the Government. At present, the road disaster prevention works along the existing routes, which require less costs, are being undertaken by applying the measures suggested in the study. The existing road was seriously affected by the earthquake in 1990, and the Philippine Government is currently evaluating whether the road should be rehabilitated or the alternative road should be constructed.

2. MAJOR REASONS FOR PRESENT STATUS
Judging the present economical development, the implementation of a big project seems to be unrealistic within the limited financial budget of the Ministry in charge.

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 ダルトン・パス・トンネル計画

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

PROJECT SUMMARY (F/S)

ASE PHI 312/81

Compiled March 1986
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Metro Manila Outer Major Roads Project (Southern Package)

3. SECTOR
Transportation/ Road

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Department of Public works and Highways

7. OBJECTIVES OF STUDY
Road Planning

8. DATE OF S/W Dec.1980

9. CONSULTANT(S)
Pacific Consultants International

10. STUDY TEAM

No. of Members	12
Period	Mar.1981 - Mar.1982 (13 months)
Total M/M	69.03
Japan	9.86
Field	59.17

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Topographic survey, soil survey, Analysis of samples

12. EXPENDITURE

Total	333,815 (¥'000)
Contracted	166,210

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Southern area of Manila Metropolitan zone including Las Pinas Paranaque and Muntinlupa

2. PROJECT COSTS (US$1=225Yen)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	92,200	63,000	
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
Improvement of roads, 17.8km
Construction od roads, 20.7km

Implementation Period: 1985 - 1994

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
40%	

Feasibility: Yes

Conditions and Development Impacts:
The project aimed to improve road network in the southern part of Metro Manila, and feasibility study was conducted for three (3) roads: Paranaque-Sucaf Road (existing): 7.5km, Zapote-Alabang Road (existing): 10.3km, Taguig-Las Pinass-Muntinlupa Road (new construction), Total length is 38.5km.
Future traffic demand is expected to increase; therefore, this road planning project should contribute to ease traffic congestion as well as to other development projects in the southern region.

5. TECHINCAL TRANSFER
OJT and JICA training program for counterparts

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

1. Detailed Design Work of Paranaque-Sucat Widening was completed (Feb.1988) -DPWH's own fund
2. Detailed Design for Zapoto-Alabang road widening was completed by World Bank finance.
3. Taguig-Las Pinass-Multinlupa road
   - F/S review was conducted in April - August 1986
   - As a result of F/S review, the route was altered to Taguig-Paranaque road (length:12.9km), which is called Southern Section of C-5.
   - The 14th OECF Loan (4,800 millon yen, approved in January 1988) included this southern section. D/D is currently under way.

2. MAJOR REASONS FOR PRESENT STATUS

Paranaque-Sucat Road: Since this was considered very urgent, DPWH started by its own fund

Other roads: For administrative and economical reasons, DPWH is expecting loan form OECF or IBRD

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 マニラ首都圏南部地区幹線道路網計画

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

ASE PHI 311 /81

PROJECT SUMMARY (F/S)

Compiled March 1990
Revised March 1991

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
Ministry of Public Works and Highways 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)
Nippon Koei Co., Ltd.
Nikken Consultants, Inc.

10. STUDY TEAM
No. of Members 20
Period Jul.1980 - Feb.1982 (7 months)
Total M/M
Japan
Field

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Topographic mapping

12. EXPENDITURE
Total Contracted 435,309 (¥'000)

II. SUMMARY OF STUDY RESULTS

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

2. PROJECT COSTS (US$1=8.2pesos)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	167,073		73,170
2)	76,829		30,487
3)			

3. CONTENTS OF MAJOR PROJECT(S)
1) Flood control
-River channel improvement (78.7 km)
-Revetment (88.1 km)
2) Irrigation development
-1 weir, irrigable area of 11,000 ha
-Main canals 37 km, secondary and tertiary canals 145 km

Implementation Period: 1) 10 years
2) 7 years

4. FEASIBILITY AND ITS ASSUMPTIONS

	EIRR	FIRR
1)	10.8%	
2)	15.4%	

Feasibility: Yes

Conditions and Development 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. TECHINCAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS
- [x] 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)
1990 D/D completed
Jan.1991 Tenders to be invited

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION

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 PHI 310/81

Compiled March 1990
Revised March 1991

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)

NTC

10. STUDY TEAM

No. of Members	13
Period	Mar.1981 - Mar.1982 (12 months)
Total M/M	10,27
Japan	5,17
Field	5,10

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	46,007 (¥'000)
Contracted	15,139

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA

Luzon, Mindoro, Lubang, Palawan, Panai, Tablas, Romblon

2. PROJECT COSTS (US$1=215Yen=28.3P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	82,670	8,470	74,200
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)

- Telephone Installation Plan 13,720
- SHF system 11spans 581.7km,
- UHF/VHF system 144spans,
- Telex exchanges 2,
- Telex concentrator 14,
- Telex and gentex equipment 122,
- Trunk cable length 191.7km,
- Local cable length 371km,
- Buildings
  (Radio station, Telphone Office etc.)
- Access roads 88.2km

Implementation Period:

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR FIRR

Feasibility: Yes

Conditions and Development Impacts:

(1) To rehabilitate the existing old telecommunicating facilities at the objected areas.
(2) To improve the telecommunications services at the objected areas.

5. TECHINCAL TRANSFER

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

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

1987 Dec.	OECF E/S loan agreement (707 million yen)
1988 Nov.	Contract signed with a consulting firm.
1990 Feb.	OECF loan agreement (21,752 million yen)
1991 Jan.	Tenders evaluation

2. MAJOR REASONS FOR PRESENT STATUS

(1) Effectiveness
(2) High priority

3. PRINCIPAL SOURCES OF INFORMATION

(1)

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 PHI 202A /82

Compiled March 1986
Revised March 1991

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	79.95
Japan	34.72
Field	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
Laoag district (Ilocos Norte Province), Legaspi City and Daraga Municipality (Albay Province), Tagbilaran City (Bohol Province)

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=7.80P)

(US$1,000)		Total Cost	Local Cost	Foreign Cost
	1)	15,830	6,570	
	2)			

3. MAJOR PROJECT(S) PROPOSED
This project is to make master plan with the target year of 2010, in order to improve and expand the existing water supply facilities in four districts. Project implementation has been divided into three phases based on the master plan. First phase, target year of 1987, is to improve the existing facilities and to enlarge the distribution pipelines. Second phase, target year of 1993, is to expand the system including the development of new water sources.

4. CONDITIONS AND DEVELOPMENT IMPACTS
As development impacts, increase of service area and served population, safe, continuous and stable water supply, improvement of environment hygiene, decrease of fire injury, increase of land price and expansion of employment opportunity, are expected.

5. TECHINCAL TRANSFER
Carried out the training program on investigation, planning and management of water works for four counterparts. Two counterparts have studied and prepared studies with project team at project site.

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
Followed by F/S.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 地方都市上水道計画

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

PROJECT SUMMARY (M/P + F/S)

ASE PHI 202B /82

Compiled March 1986
Revised March 1991

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
F/S of the emergency project based on the master plan

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	79.95
Japan	34.72
Field	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
Laoag district (Ilocos Norte Province), Legaspi City and Daraga Town (Albay Province), Tagbilaran City (Bohol Province)

2. PROJECT COSTS (US$1=7.80P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	15,830	6,570	
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)

- Laoag area : water intake conduits, deep wells, transmission and distribution pipes, etc. (4,130 cu.m/day)
- Legaspi area : spring water, transmission and distribution pipes, etc. (6,480 cu.m/day)
- Daraga town : spring water, transmission and distribution pipes, etc. (4,320 cu.m/day)
- Tagbilaran city : deep wells, distribution reservoirs, distribution pipes, etc. (1,700 cu.m/day)
- Total water quantity: 16,630 cu.m/day (Planned development quantity)

Implementation Period: Jan.1984 - Dec.1986

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR FIRR

Feasibility: Yes

Conditions and Development Impacts:
Master plan on the water supply system for the target year of 2010 has been established, which was divided into three phases. Technical and financial feasibilities for first phase for the target year of 1987 has been examined. As development impacts, increase of services area and served population, safe, continuous and stable water supply, improvement of environmental hygiene, decrease of fire injury, increase of land price and expansion of employment opportunity will be foreseen.

5. TECHINCAL TRANSFER
Carried out the training program on investigation, planning and management of water works for four counterparts. Two counterparts have studied and prepared studies with project team.

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

After Malcos Regime fell, the contents of this project have been changed drastically.
Only the daoag area (Ilocos Prov.) was selected from the project and grouped with two other cities to apply for OECF finance.
1987 Dec. OECF loan agreement on water supply development in regional cities (891 million yen)
1990 May D/D was completed and construction works started.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 地方都市上水道計画

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

ASE PHI 501 /82

PROJECT SUMMARY (Basic Study)

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Topographic Mapping Project for Cagayan Valley

3. SECTOR
Social Infrastructures/ Survey & Mapping

4. REFERENCE NO.

5. TYPE OF STUDY Basic Study

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

7. OBJECTIVES OF STUDY

8. DATE OF S/W Mar.1978

9. CONSULTANT(S)
International Engineering Consultants Association

10. STUDY TEAM

No. of Members 19
Period Feb.1979 - Feb.1983 (48 months)

Total M/M
Japan
Field

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

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

3. MAJOR PROJECT(S) PROPOSED

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

4. CONDITIONS AND DEVELOPMENT IMPACTS

5. TECHINCAL TRANSFER

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION

和名 カガヤンバレー地区地図作成

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

PROJECT SUMMARY (Other)

ASE PHI 602/82

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Mayon Volcano Sabo and Flood Control Project (Re-Study)

3. SECTOR
Social Infrastructures/ River & Erosion Control

4. REFERENCE NO.

5. TYPE OF STUDY Other

6. COUNTERPART AGENCY
Ministry of Public Works and Highways

7. OBJECTIVES OF STUDY
Sabo plan for the area of southern slope of Mayon Volcano based on the disaster due to typhoon Daling in 1981

8. DATE OF S/W Feb.1982

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

10. STUDY TEAM

No. of Members	12
Period	Jun.1982 - Mar.1983 (10 months)
Total M/M	56.63
Japan	33.03
Field	23.06

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	144,352 (¥'000)
Contracted	138,421

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Surrounding area of Mayor Volcano in the southeast of Luzon

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=8P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	20,190	14,690	5,500
2)			

3. MAJOR PROJECT(S) PROPOSED
Training Levee. Slur Dike, Consolidation Dam and Sabo Dam
1st stage Sabo works
Quirangay River, Masarawag River, Nasisi River,
Anuling River (1), Anuling River (2),
Budiao River, Pawa-Burabad River
1st stage Disaster Prediction and Warning System

4. CONDITIONS AND DEVELOPMENT IMPACTS
The imphementation of this project will contribute to the protection of the people's livelihood in the region sufferred from the disaster due to debris flow, so that the social stability and the better livelihood will be insured.

5. TECHINCAL TRANSFER
(1) The lecture of sabo technology for the counterparts was held in the local office.
(2) The training of sabo, hydroloy, river engineering and surveying was carried out for the counterparts.

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
The following construction works in the southern slope included in the M/P of 1980 were carried out by local fund.
Quirangay River : Training Levee No.2
Anuling River : Training Levee No.2, NO.3 and No.4
Pawa-Burabod River : Training Levee No.5 and No.6

Afterward Mayor Volcano erupted and the huge debris flow (10 million cu.m) occurred in 1984. The finance for the construction including the eastern slope and the emergency works was requested to OECF (in 1989, the 16th loan). But the application was turned down.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 マヨン火山砂防計画（再調査）

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

PROJECT SUMMARY (F/S)

ASE PHI 314/83

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Metro Manila Outer Major Roads Project (Northern Package)

3. SECTOR
Transportation/ Road

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Ministry of Public Works and Highways

7. OBJECTIVES OF STUDY

8. DATE OF S/W Feb.1982

9. CONSULTANT(S)
Nippon Engineering Consultants.

10. STUDY TEAM

No. of Members 10
Period Jun.1982 - Jun.1983 (12 months)

Total M/M
Japan
Field

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total 161,996 (¥'000)
Contracted 156,087

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
C-5,C-6,Mindanao Av. and Visayas Road in Metro Manila

2. PROJECT COSTS (US$1=14.0pesos)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	77,697	44,214	33,482
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
Increase of lanes to alleviate traffic congestions
1984 - 1990 32 lanes
1993 - 1996 48 lanes

Implementation Period: 1984 - 1996

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR 46.3% FIRR

Feasibility: Yes

Conditions and Development Impacts:
The project will alleviate the serious traffic congestion and contribute to the more orderly urban development in Metro Manila.

5. TECHINCAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

1988 Jan. Included in OECF E/S package loan agreement (2,000 million yen)
1990 Nov. D/D on C-5 Road being implemented

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION

和名 マニラ首都圏北部地区幹線道路網計画

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

ASE PHI 313 /83

PROJECT SUMMARY (F/S)

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Development Project of the Port of San Fernando

3. SECTOR
Transportation/ Port

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Philippine Ports Authority

7. OBJECTIVES OF STUDY
Preparation of Master Plan (Target year 2000) and Short-term Development Plan (Target year 1990).

8. DATE OF S/W Oct.1982

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

10. STUDY TEAM

No. of Members	9
Period	Feb.1983 - Mar.1984 (14 months)
Total M/M	58.77
Japan	38.4
Field	20.37

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Natural Conditions Survey

12. EXPENDITURE

Total	128,037 (¥'000)
Contracted	129,003

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Northern Luzon (Region I)

2. PROJECT COSTS (US$1=14P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	18,400	7,345	
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)

Wharf(Pier -10 ~ -14m)	900m
Dredging	4,500sq.m
Transit Sheds	32,000sq.m
Open Storage Yard	12,000sq.m
Roads	12,000sq.m

Implementation Period: Jan.1987 - Dec.1989

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
22.9%	4.1%

Feasibility: Yes

Conditions and Development Impacts:
Estimated cargo volume in 1990 and 2000 are:

1990	1,900 thousand tonnes
2000	3,700 thousand tonnes

The development of this promotes the port activities and contributes to the regional development in and around Region I, as there is no large scale port in this region.

5. TECHINCAL TRANSFER
Counterpart training for method of feasibility study to two counterparts

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

- Suspension after completion of F/S.
- There is a possibility to revive this project if the state of finance is improved.

2. MAJOR REASONS FOR PRESENT STATUS

(1) Shortage of finance
(2) Alternation from the Marcos Government to the new Government

3. PRINCIPAL SOURCES OF INFORMATION

(1)

和名 サンフェルナンド港整備計画

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

PROJECT SUMMARY (M/P)

ASE PHI 105/84

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Infanta - Real Area Urban Development Project

3. SECTOR
Social Infrastructures/ Urban Planning & Land Development

4. REFERENCE NO.

5. TYPE OF STUDY M/P

6. COUNTERPART AGENCY
Human Settlement Development Corporation

7. OBJECTIVES OF STUDY
Master plan for the urban development in Infanta-Real area upon establishing the development strategy and target.

8. DATE OF S/W Apr.1983

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

10. STUDY TEAM

No. of Members	15
Period	Jul.1983 - Mar.1985 (21 months)
Total M/M	75.26
Japan	5.4
Field	69.86

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	221,634 (¥'000)
Contracted	212,283

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Infanta, Real, and Nakar, Quezon, Luzon Island

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=20P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	615,000		
2)			

3. MAJOR PROJECT(S) PROPOSED
(1) Improvement of transport conditions
(2) Development of regional natural resources (fishery)

4. CONDITIONS AND DEVELOPMENT IMPACTS
A master plan was undertaken for development, improvement and preservation of the study area in conjunction with the national and regional programs of the nation. In formulating the concept plan, proper urban functions were established and the kind and scale of development was reviewed taking into account the functional roles of the study area in development concept of the eastern Manila and eastern seaboard.

5. TECHINCAL TRANSFER
(1) Acceptance of trainees: One <1> counterpart (2 months)
(2) Use of Local consultant: Social, economic and financial analysis

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
In January 1988, the scope of work (F/S) on Infanta-Famy road and urban core development was signed by JICA. The rehabilitation of the Infanta-Famy road is financed by ADB, and currently under construction.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 インファンタ・リアル都市開発計画

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

PROJECT SUMMARY (F/S)

ASE PHI 317 /84

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Philippine Road Disaster Prevention Project

3. SECTOR
Transportation/ Road

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Ministry of Public Works and Highways

7. OBJECTIVES OF STUDY
Formulation of disaster prevention measures for 3 selected sections of national highways

8. DATE OF S/W Feb.1983

9. CONSULTANT(S)
Nippon Engineering Consultants Co., Ltd.
Katahira & Engineers International

10. STUDY TEAM

No. of Members	8
Period	May 1983 - Jun.1984 (13 months)
Total M/M	55.86
Japan	1.75
Field	54.11

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Geological and topographic surveys

12. EXPENDITURE

Total	183,661 (¥'000)
Contracted	160,257

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
1) San Jose - Aritao (Northern Luzon)
2) Mahaplag - Sogod (Leyte)
3) Rosario - Baguio (Northern Luzon)

2. PROJECT COSTS (US$1=234.3Yen)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	26,300	10,200	
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
Protection of Shoulder slope:

1) Dalton Pass section	77 km
2) Mahaplag - Sogod	37 km
3) Kenon Road	34 km
Total	148 km

Implementation Period: Jul.1987 - Jun.1990

4. FEASIBILITY AND ITS ASSUMPTIONS

	EIRR	FIRR
Feasibility: Yes	1) 18.7%	
	2) 14.4%	
	3) 16.6%	

Conditions and Development Impacts:
Conditions:
traffic projections for 1990, 2000 and 2010; traffic stoppage due to road disasters are 16 days/year for Dalton Pass, 60 days for Mahaplag, and 18 days for Kenon.
Development impacts:
better access to isolated areas; recovery of road reliability; stimulation of private investments; saving of rehabilitation costs.

5. TECHINCAL TRANSFER
OJT and JICA training program for counterparts

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)

1) Dalton Pass
OECF loan (Special Rehabilitation Fund) approved
2) Mahaplag - Sogod
D/D was completed by the fund diverted from the OECF loan (North-West Leyte Road Project).
3) Kenon Road
OECF loan (14th) approved in Jan.1988 (2,250 million yen)

1) and 3) were affected by the earthquake of June 1990, and D/D are being implemented again.

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

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 道路防災計画

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

PROJECT SUMMARY (F/S)

ASE PHI 315/84

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Development Project on the Meteorological Telecommunication System

3. SECTOR
Transportation/ Meteorology & Seismology

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Philippine Atmospheric Geophysical and Astronomical Services Adm. Ministry of Defence (at F/S time)

7. OBJECTIVES OF STUDY
Establishment of Meteorological Telecommunication System

8. DATE OF S/W Nov.1982

9. CONSULTANT(S)
Japan Weather Association

10. STUDY TEAM

No. of Members	13
Period	Aug.1983 - Sep.1984 (14 months)
Total M/M	80
Japan	33
Field	47

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	261,238 (¥'000)
Contracted	209,692

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Covering the whole country

2. PROJECT COSTS (US$1=238Yen)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	18,626	2,206	16,421
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
Contents
- Telecom. facilities
  (1) Main Trunk Line: About 950km between Luzon Island and Mindanao Island
  (2) Branch Lines: Lines connecting each station
- Building and antenna of each relay station

Implementation Period: Aug.1988 - Feb.1995

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR 51.9% FIRR

Feasibility: Yes

Conditions and Development Impacts:
Conditions
- Benefit is calculated on condition that rate of natural disaster decrease is 5%.
- Completion of the Project is in 1995.
- Eight (8) years is required for acquisition of technological knowledge by the staff concerned.
- Replacement of equipment to be made every 10 years.

Development Impacts
- Mitigation of meteorological disasters
- Improvement of safe operation of aircraft and ships
- Improvement of agricultural production development of related sectors(tourism, commerce, industry, etc.)

5. TECHINCAL TRANSFER
Technical guidance relating to telecommunication, data exchange system and observation system has been given to two (2) F/S counterpart officials.

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)

1988 Jan. OECF E/S loan agreement (308 million yen)
1989 Sep. D/D completed
1990 Jun. Contract on construction
1991 Apr. - May Construction expected to begin.
Total cost: $45.8 million (US$1=130yen), foreign exchange cost: $38.3 million.

2. MAJOR REASONS FOR PRESENT STATUS
(1) Greatness of project impact
- Mitigation of agricultural disasters
- Economic impact resulting from mitigation of transportation disasters

(2) High priority of the Project

3. PRINCIPAL SOURCES OF INFORMATION
(1) (4)

和名 気象通信網整備計画

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

PROJECT SUMMARY (F/S)

ASE PHI 316/84

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
San Roque Multi-Purpose Dam Project (Re-Study)

3. SECTOR
Social Infrastructures/ Water Resource Development

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
National Power Corporation (NPC)

7. OBJECTIVES OF STUDY
- Review of hydrological study
- Evaluation on quality of irrigation water

8. DATE OF S/W Oct.1983

9. CONSULTANT(S)
Nippon Koei Co., Ltd.
(Nikkou Tankai)

10. STUDY TEAM

No. of Members	6
Period	Nov.1983 - Mar.1985 (17 months)
Total M/M	38.35
Japan	12.69
Field	25.66

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	117,374 (¥'000)
Contracted	102,244

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Upstream reach of Agno River, middle Luzon island

2. PROJECT COSTS (US$1=9.00P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	1,200,000		
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)

structure	Scale	
Main Dam (filldam)	Gross storage	990 million cu.m
	Effective storage	670 million cu.m
Installed Capacity	390MW	

Implementation Period:

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR FIRR

Feasibility: Yes

Conditions and Development Impacts:
1. JICA preliminary study team pointed out to carry out additional investigations for the review of hydrological analysis and the evaluation of water quality.
2. Although there was a slight difference between the estimated low flow and those of F/S (by Italian Consultant), the scale of reservoir was proposed as the same of the F/S.
3. On the basis of the forecasted water quality in the reservoir, the increasing ratio of copper concentration in the soil of paddy field and the damage of crop were studied. The data shows that the damage will be tangible after 150 years.

5. TECHINCAL TRANSFER
1. Training in Japan (JICA trainee): 2 persons (first year) and 1 person (second year)
2. Supply of equipment and the instruction on operation

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)

Suspended after F/S.

Note: A hydroelectric power project is required in view of the large load demand in Luzon Island. The existing nuclear power station is abandoned to operate. Although the Project is not listed by NPC, the Project is likely to be adopted if NPC decides to implement new projects.

2. MAJOR REASONS FOR PRESENT STATUS

(1) Domestic condition: change of political power, deficit of domestic fund.

(2) Others: Construction cost was estimated at over US$ 1.2 billion so that it was difficult to secure finance.

3. PRINCIPAL SOURCES OF INFORMATION

(1)

和名 サンロケ多目的ダム開発計画

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

PROJECT SUMMARY (M/P)

ASE PHI 107/85

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Metro Manila Transportation Planning

3. SECTOR
Transportation/ Urban Transportation

4. REFERENCE NO.

5. TYPE OF STUDY M/P

6. COUNTERPART AGENCY
Ministry of Transportation and Communications

7. OBJECTIVES OF STUDY
- Transportation rerouting plan
- Transportation development policy

8. DATE OF S/W 1) Jul.1982 2) Mar.1984

9. CONSULTANT(S)
ALMEC Corporation

10. STUDY TEAM

No. of Members	15
Period	Oct.1982 - Mar.1984 (16 months)
	Jun.1984 - Sep.1985 (15 months)
Total M/M	158.68
Japan	13.56
Field	145.12

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
transport surveys and systems analysis

12. EXPENDITURE

Total	490,159 (¥'000)
Contracted	468,192

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Metro Manila

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	40,212		
2)			

3. MAJOR PROJECT(S) PROPOSED
- Preparation of public transportation rerouting plans and associated facilities improvement plans
- Preparation of mode interchange area development plans for the selected 5 areas
- Formulation of medium-term transportation improvement policy

4. CONDITIONS AND DEVELOPMENT IMPACTS

Conditions
- Strengthening of bus and jeepney route management capabilities
- Provision of financial support or incentives by the Government for transport terminal development

Development Impacts
- Rationalization of public transportation operation through proper functional-split among LRT, bus and zeepney.
- Encouragement of urban centre and increase in transportation service level through the development and reorganization of mode interchange areas.

5. TECHINCAL TRANSFER
(1) OJT: conduct of a series of seminars on the use of PCs for transportation planning
(2) Training of two counterparts in Japan
(3) Practical use of local consultants for cost estimate and systems analysis

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)

The study has been undertaken in close coordination with counterparts. Therefore, a part of the study results on rerouting of public transportation and facilities improvements have been implemented.
Public transportation route management system based on PC and database has been officially introduced to the Ministry's administrative system.

However, recommendations on the mode interchange areas have not been properly followed up by the Government.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 マニラ首都圏都市交通計画（フューズI &II）

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

PROJECT SUMMARY (M/P)

ASE PHI 106 /85

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Panay River Basin-Wide Flood Control

3. SECTOR
Social Infrastructures/ River & Erosion Control

4. REFERENCE NO.

5. TYPE OF STUDY M/P

6. COUNTERPART AGENCY
Ministry of Public Works and Highways
(Department of Public Works and Highways)

7. OBJECTIVES OF STUDY
Flood control

8. DATE OF S/W Dec.1982

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

10. STUDY TEAM

No. of Members	18
Period	Feb.1983 - Nov.1985 (33 months)
Total M/M	89.92
Japan	21.65
Field	68.29

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	414,927 (¥'000)
Contracted	241,418

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Panay Basin, Copig Province, Panay Island

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=234Yen)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	323,000	195,000	128,000
2)			

3. MAJOR PROJECT(S) PROPOSED
(1) Flood control
(2) Irrigation
(3) Power generation
(4) Municipal and industrial water supply to Roxas City

4. CONDITIONS AND DEVELOPMENT IMPACTS
Flood control plan con, protect 340 sq.km in the basin which is equivalent of 1/4 of area of potentially usuable land, and 15% of basin catchment area.
Not only by flood control but also by irrigation and municipal and Industrial water supply, integrated landuse in the basin will be promoted in the future.

5. TECHINCAL TRANSFER
(1) OJT: A seminor was held after the draft final report was submitted.
(2) Trainee: Two trainees visited Japan.
(3) Working with counterparts was conducted.

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
Until now, this project has been postponed because this is rural project.
But there is a possibility that some feasibility study will be implemented for some projects recommended in the master plan.

2. MAJOR REASONS FOR PRESENT STATUS
Although this project has smaller economic investment effect than the present guideline of the Philippines(EIRR 15%), it is important to implement this project for rural economy as well as flood control.

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 パナイ河流域洪水防御基本計画

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

PROJECT SUMMARY (M/P + F/S)

ASE PHI 203A /85

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Development Project on the Port of Batangas

3. SECTOR
Transportation/ Port

4. REFERENCE NO.

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

6. COUNTERPART AGENCY
Philippine Ports Authority

7. OBJECTIVES OF STUDY
Preparation for Master Plan (Target year 2000) and short-term development plan (Target year 1990)

8. DATE OF S/W Jun.1984

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

10. STUDY TEAM

No. of Members	10
Period	Sep.1984 - Dec.1985 (16 months)
Total M/M	76.49
Japan	44.50
Field	31.99

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Sounding survey, Shoreline survey, Geographical survey, Soil explorations

12. EXPENDITURE

Total	181,400 (¥'000)
Contracted	178,642

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
South-west of Luzon

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=19P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	76,316		
2)			

3. MAJOR PROJECT(S) PROPOSED
(Master Plan)
Construction of 13 berths for cargo handling (3,063 thousand tonnes) and passengers.

Wharf	1,570 m
Dredging	1,414 thousand cu.m
Land reclamation	731 thousand cu.m
Road	142 thousand sq.m

4. CONDITIONS AND DEVELOPMENT IMPACTS
Batangas city is located approximately 100km south of Metro Manila.
Economy of Batangas area including Batangas city is expected to grow accompany with the progress of Metro Manila.

5. TECHINCAL TRANSFER
Counterpart training (3 persons)
-Feasibility study method
-Field survey of ports similar to Batangas port

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
Followed by F/S.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 バタンガス港整備計画

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

ASE PHI 203B /85

PROJECT SUMMARY (M/P + F/S)

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Development Project on the Port of Batangas

3. SECTOR
Transportation/ Port

4. REFERENCE NO.

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

6. COUNTERPART AGENCY
Philippine Port Authority

7. OBJECTIVES OF STUDY
Preparation of Master Plan (target year 2000) and short-term development plan (target year 1990)

8. DATE OF S/W Jun.1984

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

10. STUDY TEAM

No. of Members	10
Period	Sep.1984 - Dec.1985 (16 months)
Total M/M	76.49
Japan	44.50
Field	31.99

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Sounding survey, Shoreline survey, Geographical survey, Soil explorations

12. EXPENDITURE

Total	181,400 (¥'000)
Contracted	178,642

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
South-west Luzon

2. PROJECT COSTS (US$1=19P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	13,631	5,684	7,947
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)

Wharf	(-10m)	185 m
"	(-5m)	105 m
"	(-5m,Pier)	105 m
"	(-4.5m)	155 m
Dredging		430,000 cu.m

Implementation Period: Jun.1986 - Dec.1989

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
35%	0.5%

Feasibility: Yes

Conditions and Development Impacts:
Projection of cargo volume
1990: 596 thousand tonnes
2000: 3,050 " "
Development Impact
Contribution to the development of South Tagalog area and also to the development of social and economic activities in Metro Manila

5. TECHINCAL TRANSFER
Counterpart training(3 persons)
-Feasibility study method
-Field survey of ports similar to Batangas port

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

1986 Jan. OECF E/S loan agreement (190 million yen)
1990 D/D completed and application made for yen credit (pledge is expected in early 1991).

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 バタンガス港整備計画

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

PROJECT SUMMARY (F/S)

ASE PHI 318 /85

Compiled March 1988
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY

Philippine Road Disaster Prevention Project, Stage II

3. SECTOR

Transportation/ Road

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY

Ministry of Public Works and Highways

7. OBJECTIVES OF STUDY

Formulation of disaster prevention measures for 3 selected sections of national highways

8. DATE OF S/W Aug.1984

9. CONSULTANT(S)

Nippon Engineering Consultants Co., Ltd.
Katahira & Engineers International

10. STUDY TEAM

No. of Members	7
Period	Sep.1984 - Jul.1985 (9 months)
Total M/M	31.46
Japan	2.46
Field	29.00

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

Geological and topographic surveys

12. EXPENDITURE

Total	97,428 (¥'000)
Contracted	93,173

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA

1) Lucena - Calawag (N.Luzon)
2) Allen - Calbayog (Samar)
3) Bauang - Baguio (N.Luzon)

2. PROJECT COSTS (US$1=236.4Yen)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	3,725	1,438	
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)

Protection of shoulder slope:

Lucena - Calawag	95.7 km
Allen - Calbayog	72.9 km
Nagilian Road	47.2 km
Total	215.8 km

Implementation Period: Jan.1990 - Aug.1991

4. FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR	FIRR
1) 16.0%	
2) 14.4%	
3) 15.4%	

Conditions and Development Impacts:

Conditions:
Traffic projections for 1990, 2000 and 2010; road closure by disasters are 8 days/year for Lucena - Calawag, 9 days for Allen - Calbayog and 4 days for Nagilian Road.

Development impacts:
Better access to isolated areas; recovery of road reliability; stimulation of private investments; saving of rehabilitation costs

5. TECHINCAL TRANSFER

OJT and JICA training program for counterparts

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

1) Lucena - Calawag
OECF loan (Special Rehabilitation Fund) approved
2) Allen - Calbayog and Nagilian Road
OECF loan (16th) approved.

Because of the earthquake in the summer of 1990, D/D is being implemented again.

2. MAJOR REASONS FOR PRESENT STATUS

- large impact
- high priority

3. PRINCIPAL SOURCES OF INFORMATION

(1)

和名 道路防災計画ステージII

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

ASE PHI 204A /86

PROJECT SUMMARY (M/P + F/S)

Compiled March 1990
Revised Marxh 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Municipal Water Supply Project

3. SECTOR
Public Utilities/ Water Supply

4. REFERENCE NO.

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

6. COUNTERPART AGENCY
Local Water Utilities Administration (LWUA)

7. OBJECTIVES OF STUDY
Formulation of a master plan for water supply in seven local cities and towns

8. DATE OF S/W Oct.1985

9. CONSULTANT(S)
Nippon Jogesuido Sekkei Co.

10. STUDY TEAM

No. of Members	10
Period	Feb.1986 - Mar.1987 (14 months)
Total M/M	40.97
Japan	19.93
Field	22.04

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Water quality analysis

12. EXPENDITURE

Total	163,499 (¥'000)
Contracted	149,175

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Two cities (Angeles and Dagpan) and two groups of towns (Cabyao, Santa Rosa and Biniyan; Bayombong and Sorano)

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=20.50P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	43,678	18,573	
2)			

3. MAJOR PROJECT(S) PROPOSED
Construction of groundwater pumping stations, transmission pipelines, distribution ponds and distribution pipelines.

4. CONDITIONS AND DEVELOPMENT IMPACTS
1) Improvement of living environment
2) Economic impacts as follows
- Decrease of water-borne diseases
- Reduction of medical expenses
- Increase of working hours
- Increase of land prices
- Reduction of fire damages

5. TECHINCAL TRANSFER

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
Followed by F/S.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 地方都市上水道整備計画

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

ASE PHI 204B /86

PROJECT SUMMARY (M/P + F/S)

Compiled March 1990
Revised Marxh 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Municipal Water Supply Project

3. SECTOR
Public Utilities/ Water Supply

4. REFERENCE NO.

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

6. COUNTERPART AGENCY
Local Water Utilities Administration (LWUA)

7. OBJECTIVES OF STUDY

8. DATE OF S/W Oct.1985

9. CONSULTANT(S)
Nippon Jogesuido Sekkei Co.

10. STUDY TEAM

No. of Members	10
Period	Feb.1986 - Mar.1987 (14 months)
Total M/M	40.97
Japan	19.93
Field	22.04

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	163,499 (¥'000)
Contracted	149,175

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Two cities (Angeles and Dagpan) and two groups of towns (Cabyao, Santa Rosa and Biniyan; Bayombong and Sorano)

2. PROJECT COSTS (US$1=20.50P)

		Total Cost	Local Cost	Foreign Cost
(US$1,000)	1)	11,971	5,078	
	2)	11,483	5,343	
	3)	16,380	6,662	

3. CONTENTS OF MAJOR PROJECT(S)
The project consists of tube wells, transmission and distribution pipelines, and distribution ponds. The costs for each city/town group are as follows.

1) Angeles	11,971	(US$1,000)
2) Dagpan	11,483	
3) Cabyao - Santa Rose - Biniyan	16,380	
4) Bayombon - Sorano	3,844	

Implementation Period: 1988 - 1995

4. FEASIBILITY AND ITS ASSUMPTIONS

	EIRR	FIRR
Feasibility:	13.7%	17.6%
	13.1%	6.0%
	13.4%	12.3%

Conditions and Development Impacts:
EIRR:
End of construction 1995; project life of 20 years; own fund 5%, government subsidy 5%, government loan 10 - 12%, and annual reserve of 5 - 10%; basic charge equivalent to 5% of the income of low-income families; rate increase less than 60% of the old rate.
FIRR:
Increase of land price, improvement of health and economic value of water are taken into account. The shadow pricing factor is 1.3 for foreign exchange, 0.5 for the premium of unskilled labor, and 1.0 for other components.

Note: EIRR and FIRR for Bayombon - Sorano are 13.5% and 4.3%.

5. TECHINCAL TRANSFER
- On-the-job training on development planning and tube well construction
- JICA training program for counterparts

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)

D/D has been completed for Dagpan, and Bayombon - Sorano.

Jan.1988 OECF loan agreement (1,272 million yen)
1990 Under construction

With regard to Angeles, D/D will be conducted with the 17th OECF finance (E/S loan).

2. MAJOR REASONS FOR PRESENT STATUS
- Development of water supply systems has high priority among BHN-related projects.
- Effectiveness of LWUA

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 地方都市上水道整備計画

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

ASE PHI 108 /87

PROJECT SUMMARY (M/P)

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Cagayan River Basin Water Resources Development

3. SECTOR
Social Infrastructures/ Water Resource Development

4. REFERENCE NO.

5. TYPE OF STUDY M/P

6. COUNTERPART AGENCY
Department of Public Works and Highway

7. OBJECTIVES OF STUDY
Master Plan of Water Resources

8. DATE OF S/W Aug.1985

9. CONSULTANT(S)
Nippon Koei
Nikken Consultants

10. STUDY TEAM

No. of Members	15
Period	Oct.1985 - Aug.1987 (23 months)
Total M/M	140.97
Japan	72.29
Field	68.68

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	446,671 (¥'000)
Contracted	344,969

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Cagayan River Basin in Luzon Island, 27,300 sq.km

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS (US$1=20.5p)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	1,609		
2)			

3. MAJOR PROJECT(S) PROPOSED

(1) Sipfu Multi Dam Project, Dam Height 58 m
(2) Matuno Multi Dam Project, Dam Height 147 m
(3) Malig Dam Project, Dam Height 84 m
(4) Tuguegarao River Training Project 22.1 km
(5) Magapit Dredging Project
(6) Pinacanauan Irrigation Rehabilitation Project 1,220 ha

4. CONDITIONS AND DEVELOPMENT IMPACTS

(1) This project generally has tremendous effects on irrigation, flood control and hydropower development and additionally, it has an advantage on social security problem because an opportunity of labour will be expected to increase in local area.

5. TECHINCAL TRANSFER

(1) 4 special OJT
(2) 2 OJT in Japan
(3) To finalize report with counterpart

III. PRESENT STATUS OF USE OF STUDY RESULTS

1. PRSENT STATUS

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

(Description)

Implementation of the Feasibility Study by the DPWH was expected immediately after M/P was finalized on August in 1987.
However, F/S was delayed due to the revolution on February 1987.
The government of the Philippines is requesting a feasibility study by JICA.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION

(1)

和名 カガヤン河流域水資源開発基本計画

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

ASE PHI 319/87

PROJECT SUMMARY (F/S)

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Road Improvement Project on the Pan-Philippine Highway (Philippines-Japan Friendship Highway)

3. SECTOR
Transportation/ Road

4. REFERENCE NO.

5. TYPE OF STUDY F/S

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

7. OBJECTIVES OF STUDY
Road Rehabilitation

8. DATE OF S/W Nov.1985

9. CONSULTANT(S)
Dai-Nippon Consultants
Katahira & Engineers

10. STUDY TEAM

No. of Members	7
Period	Jun.1986 - Sep.1987 (16 months)
Total M/M	48.13
Japan	2.10
Field	46.03

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Topographic Survey and Geotechnical Investigation

12. EXPENDITURE

Total	168,225 (¥'000)
Contracted	161,111

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Sta.Rita - Aritao, Calamba - Calauag, Luzon

2. PROJECT COSTS (US$1=160Yen)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	55,000	23,000	
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
Rehabilitation of Road Function: 13 cities
Rehabilitation of Pavement: 206 km

Implementation Period: Apr.1989 - Dec.1992

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
57.2%	

Feasibility: Yes

Conditions and Development Impacts:
Conditions:
(1) Future traffic demand is estimated for the years of 2000 and 2010.
(2) For improvement of traffic function, widening of road width, construction of By-pass, etc were suggested.
(3) Rehabilitation of pavement for each section was also suggested.

Development Impacts with improvement of road function in the cities are expected.

5. TECHINCAL TRANSFER
(1) Technical Transfer through Seminar
(2) OJT on highway planning and pavement

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)
1988 May OECF loan agreement (14,003 million yen)
1991 Jan. D/D being implemented

2. MAJOR REASONS FOR PRESENT STATUS
-High priority has been given to this project as the road is one of important trunk roads in Philippines.
-The project was evaluated to be the most suitable one as Social Rehabilitation Fund by OECF

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 日比友好道路・道路改善計画

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

ASE PHI 320 /87

PROJECT SUMMARY (F/S)

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Manila South Port Rehabilitation Project

3. SECTOR
Transportation/ Port

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Philippines Ports Authority

7. OBJECTIVES OF STUDY
Review of Master Plan (year 2000) and establishing Short Term Development Plan for South Harbour.

8. DATE OF S/W Dec.1985

9. CONSULTANT(S)
Overseas Coastal Area Development Institute of Japan
Nikken Sekkei

10. STUDY TEAM

No. of Members	11
Period	Mar.1986 - Jun.1987 (16 months)
Total M/M	65.06
Japan	30.22
Field	34.84

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Traffic Survey, Soil Survey, Topographic Survey, Structure Inspection

12. EXPENDITURE

Total	228,100 (¥'000)
Contracted	214,956

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Manila

2. PROJECT COSTS (US$1=20.5P)

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	35,366	10,315	25,051
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
-Rehabilitation of Existing Facilities.
-Expansion of Apron and Open Storage Area
-Implementation of Floating Unloaders(two Nos)

Implementation Period: 1989 - 1992

4. FEASIBILITY AND ITS ASSUMPTIONS

EIRR	FIRR
18.46%	7.69%

Feasibility: Yes

Conditions and Development Impacts:
Target Year of Demand Estimate: Year 1995 and Year 2005

Development Impact: Improvement in managing and operation by rehabilitation of facilities.

5. TECHINCAL TRANSFER
(1) We held a seminar in Manila for Technical Transfer
(2) We gave a lecture on methodology of F/S
(3) Jointly works on survey

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)
-Government of the Philippines applied the ADB loans based on the report.
-D/D was executed by Pacific Consultants International.
- As of Dec. 1990, The project is under construction.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 マニラ南港改修計画

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

ASE PHI 321 /88

PROJECT SUMMARY (F/S)

Compiled March 1990
Revised March 1991

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Rural Road Network Development Project

3. SECTOR
Transportation/ Road

4. REFERENCE NO.

5. TYPE OF STUDY F/S

6. COUNTERPART AGENCY
Ministry of Public Works and Highways

7. OBJECTIVES OF STUDY
Development of regional roads (secondary trunk road and lower road classes)

8. DATE OF S/W Jul.1987

9. CONSULTANT(S)
Katahira & Engineers International
Nippon Engineering Consultants Co., Ltd.

10. STUDY TEAM

No. of Members	10
Period	Nov.1987 - Feb.1989 (16 months)
Total M/M	55.9
Japan	13.4
Field	42.5

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Road inventory
Traffic survey

12. EXPENDITURE

Total	191,294 (¥'000)
Contracted	178,598

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
73 provinces (F/S on four selected provinces: Cavite, Masbate, Bohol and Agusan del Norte)

2. PROJECT COSTS

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	45,000	17,000	28,000
2)			
3)			

3. CONTENTS OF MAJOR PROJECT(S)
1) Evaluation and classification of the present status of roads in 73 provinces and selection of 4 provinces for a pilot F/S.
2) Selection of roads in 4 provinces for feasibility analysis (2,000km).
3) Feasibility analysis and identification of the development planning method
4) Organization and investment plans for implementation

Implementation Period: 1991 - 1995 (Phase I)

4. FEASIBILITY AND ITS ASSUMPTIONS EIRR FIRR

Feasibility:

Conditions and Development Impacts:
The study applied feasibility analysis to 4 selected provinces and thereby proposed the method to plan the development of regional roads. In order to proceed with the nation-wide regional road development, it is necessary to establish an appropriate administrative structure and secure finance.
The regional road development (roads with EIRR of over 15 %) will extend the network of all-weather roads in the country and stimulate socio-economic growth and employment creation.

5. TECHINCAL TRANSFER
OJT for the counterparts

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)
Based on the recommendations of the study, the Government of the Philippines has been taking steps to secure financing. The application to OECF in FY 1990 was not successful, but the Government intends to reapply in FY 1991.
The Government of the Philippines has a wish to request a similar feasibility study on other provinces.

2. MAJOR REASONS FOR PRESENT STATUS

3. PRINCIPAL SOURCES OF INFORMATION
(1)

和名 地方道路網整備計画

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

ASE PHI 503 /88

PROJECT SUMMARY (Basic Study)

Compiled March 1991
Revised

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Establishment of Graphic Information Base Project of National Capital Region

3. SECTOR
Social Infrastructures/ Survey & Mapping

4. REFERENCE NO.

5. TYPE OF STUDY Basic Study

6. COUNTERPART AGENCY
National Mapping and Resource Information Authority (Manila)

7. OBJECTIVES OF STUDY
Preparation of base maps for urban development planning

8. DATE OF S/W Mar.1985

9. CONSULTANT(S)
International Engineering Consultants Association

10. STUDY TEAM

No. of Members	62
Period	Jun.1985 - Mar.1989 (46 months)
Total M/M	200.67
Japan	81.48
Field	119.19

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

12. EXPENDITURE

Total	761,568 (¥'000)
Contracted	751,731

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Approx. 1,500 sq.km of Metro Manila Region

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS

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

3. MAJOR PROJECT(S) PROPOSED

Preparation of :

1.Contoured(Topographic) Mapping	(scale 1:10,000)	1500sq.km
2.Planimetric Mapping	(scale 1:10,000)	1500sq.km
3.Land Use Mapping	(scale 1:10,000)	823sq.km
4.Land Condition Mapping	(scale 1:10,000)	476sq.km

4. CONDITIONS AND DEVELOPMENT IMPACTS
By the preparation of the urban base maps, the formulation of urban re-development plans, land use plans, flood control measures, etc. are greatly facilitated to contribute to the regional economic development.

5. TECHINCAL TRANSFER
Technical transfer has been made to the counterparts through the field work in the Philippines and office work in Japan.

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
The final result of the four kinds of maps are now sold to the public in the Philippines.
The maps are widely used for the formulation of various development plans and studies in Metro Manila.

2. MAJOR REASONS FOR PRESENT STATUS
The urban base maps of scale 1:10,000 are prepared for the first time in the Philippines.

3. PRINCIPAL SOURCES OF INFORMATION

和名 マニラ都市基本図作成

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

ASE PHI 206A /89

PROJECT SUMMARY (M/P + F/S)

Compiled March 1991
Revised

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY
Flood Control and Drainage Project in Metro Manila

3. SECTOR
Social Infrastructures/ River & Erosion Control

4. REFERENCE NO.

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

6. COUNTERPART AGENCY
Department of Public Works and Hithway

7. OBJECTIVES OF STUDY
To prepare the master plan of flood control and drainage improvement in Metro Manila and to conduct the feasibility study on the selected priority projects

8. DATE OF S/W Jul.1987

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

10. STUDY TEAM

No. of Members	14
Period	Dec.1987 - Mar.1990 (27 months)
Total M/M	123.94
Japan	71.84
Field	52.10

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY
Longitudinel and Cross Sectional Survey of Rivers and Main Channels
Installation of Rain Gauge and Water Level Guage Stations

12. EXPENDITURE

Total	369,849 (¥'000)
Contracted	344,031

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA
Metro Manila and its Neighboring Area, about 981sq.km in total

2. COSTS OF PROPOSED PLAN OR MAJOR PROJECTS
US$1=21.3P=132Yen

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	634,883		
2)			

3. MAJOR PROJECT(S) PROPOSED
Master plan consists of the flood control for the four main rivers and the drainage improvement for the eight inland areas in Metro Manila and its neighboring area.
Flood control in the Pasig-Marikina River, passing through the core of Metro Manila, consists of the construction of Marikina Dam and Marikina Control Gate Structure(MCGS) as well as the river channel improvement.
Over three Rivers such as Bili-Baho-Mahaba, Malabon-Tullahan and South Paranaque-Las-Pinas consists of river channel improvement.
As for the drainage system by pumping station and drainage channel was fundamentally applied.
In Malabon-Nabotas and East and West of Mangahan areas, the coastal dike and lake dike is provided along the shoreline.

4. CONDITIONS AND DEVELOPMENT IMPACTS
Master Plan was prepared setting the target completion year in 2020 considering the financial restriction for realization.
The safety degree of the plan was set as follows based on the economic evaluation and social significance of the area.

Flood Control:		Drainage Improvement:	
Pasig-Marikina River:	100 year	Marabon-Navotas :	5 year
Other Rivers :	30 year	East of Mangahan:	5 year
		West of Mangahan:	5 year
		Other areas :	3 year

In the above, drainage improvement in Manila and its neighboring area is not included since the construction of three pumping stations and drainage channel improvement is on-going under the 14th OECF loan together with the retrieval of flood-prone area under the JICA grant aid, and the safety degree in this area reaches almost 10 year after the completion of the above foreign aid projects.

5. TECHINCAL TRANSFER
Transfer of knowledge
1.On-the-job-training for counterparts by each expert.
2.Guidance and training on hydrological observation, operation and maintenance methods of equipments and data filing system.

III. PRESENT STATUS OF USE OF STUDY RESULTS

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

(Description)
Three priority projects such as the drainage improvement in East and West of Mangahan, the drainage improvement in Malabon-Tullahan and the river improvement in Pasig River were selected in the Master Plan study.
Among the above, drainage improvement in East and West of Mangahan is scheduled to be Implemented under the 16th OECF loan. The up-dated status is in the pre-qualification of the consultants for the detailed design work.

2. MAJOR REASONS FOR PRESENT STATUS
Serious damage was occured in 1986 and 1988 in the East and West of Mangahan by the intrustion of the lake water together with the inundation of inland water because of the high lake stage and poor drainage system.

3. PRINCIPAL SOURCES OF INFORMATION

和名 マニラ洪水対策計画

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

ASE PHI 206B /89

PROJECT SUMMARY (M/P + F/S)

Compiled March 1991
Revised

I. OUTLINE OF STUDY

1. COUNTRY Philippines

2. NAME OF STUDY

Flood Control and Drainage Project in Metro Manila

3. SECTOR

Social Infrastructures/ River & Erosion Control

4. REFERENCE NO.

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

6. COUNTERPART AGENCY

Department of Public Works and Hithway

7. OBJECTIVES OF STUDY

To prepare the master plan of flood control and drainage improvement in Metro Manila and to conduct the feasibility study on the selected priority projects

8. DATE OF S/W Jul.1987

9. CONSULTANT(S)

Nippon Koei Co.,Ltd.
CTI Engineering Co.,Ltd.

10. STUDY TEAM

No. of Members 14
Period Dec.1987 - Mar.1990 (27 months)

Total M/M 123.94
Japan 71.84
Field 52.10

11. ASSOCIATED AND/OR SUBCONTRACTED STUDY

Longitudinel and Cross Sectional Survey of Rivers and Main Channels
Installation of Rain Gauge and Water Level Guage Stations

12. EXPENDITURE

Total 369,849 (¥'000)
Contracted 344,031

II. SUMMARY OF STUDY RESULTS

1. SITE OR AREA

1.East and West of Mangahan 2.Marabon-Navotas
3.Pasig-Marikina River

2. PROJECT COSTS US$1=21.3P=132Yen

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	132,000	35,400	96,600
2)	52,400	16,600	35,800
3)	65,800	22,300	43,500

3. CONTENTS OF MAJOR PROJECT(S)

1.Drainage Improvement in East and West of Mangahan.
-Lake Dike ; 10,700m in total length
-Pumping station ; 9 places
-New construction of drainage channel
; 19,750m in total length
2.Drainage Improvement in Malabon-Navotas
-Coastal Dike ; 6,800m in total length
-Pumping station ; 6 places
-New construction of drainage channel(Open channel)
; 2,700m in total length
3.Pasig-Marikina River Improvement
-River Improvement ; 23,920m in total length
-Marikina Control Gate Structure(MCGS)
; 1 place

Implementation Period: 1991 - 2000

4. FEASIBILITY AND ITS ASSUMPTIONS

	EIRR	FIRR
Feasibility: Yes	16.8%	
	15.9%	
	16.1%	

Conditions and Development Impacts:
Feasibility Study on the three priority projects selected in the Master Plan Study was conducted setting the target completion year in 2000, the safety degree was set as follows.
-Drainage Improvement ; 5 year
-River Improvement ; 30 year

5. TECHINCAL TRANSFER

1.Guidance and training on hydrological observation, operation and maintenance methods of equipment and Data filing system.

III. PRESENT STATUS OF STUDIED PROJECT

1. PRSENT STATUS

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

(Description)

Three priority projects such as the drainage improvement in East and West of Mangahan, the drainage improvement in Malabon-Tullahan and the river improvement in Pasig River were selected in the Master Plan study.
Among the above, drainage improvement in East and West of Mangahan is scheduled to be implemented under the 16th OECF loan. The up-dated status is in the pre-qualification of the consultants for the detailed design work.

2. MAJOR REASONS FOR PRESENT STATUS

Serious damage was occured in 1986 and 1988 in the East and West of Mangahan by the intrustion of the lake water together with the inundation of inland water because of the high lake stage and poor drainage system.

3. PRINCIPAL SOURCES OF INFORMATION

和名 マニラ洪水対策計画

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