PROJECT SUMMARY (M/P+F/S)

ASO CHN/S 202B/90

Compiled Mar.1992
Revised

I. OUTLINE OF STUDY

1.COUNTRY China

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

3.SECTOR
Public Utilities/Urban Sanitation

4.REFERENCE NO.

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

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

7.OBJECTIVES OF STUDY
Feasibility Study

8.DATE OF S/W Sep.1988

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

10.STUDY TEAM

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

Total M/M	Japan	Field
70.11	38.56	31.55

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	261,310 (¥'000)
Contracted	68,205

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Inner City in Xian City (Final Disposal Site)
Outer City in Xian City (Intermediate Treatment Site)

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

	Total Cost	Local Cost	Foreign Cost
1)	4,233	4,233	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
The First Phase Project of which the target year is 1995 should be as follows:
1) Construction of controlled type of final disposal facility.
Location : Chian-Sun District
Landfill method : Semi-Anaerobic Metabolism in Landfill
Major facilities : Reservoir type deposit
Water insulation
Underground Water Discharge
Rainwater Discharge
Access road
2) Construction of transfer station.

Contents of Major Project
Targeted Population : 475,343 (1995)
Planned waste collection volume : 477 tons/day
Capacity of Planned Facilities : Compector Container 160 tons/day
Flat Landfill 360 tons/day

Imp. Period: .1991-.1995

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

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

Conditions and Development Impacts:
Unit cost of treatment, in case of short-term priority plan is implemented, is as follows.
Operation and Maintenance 11.8 Yuan/ton
Total cost 35.7 Yuan/ton
The present waste collection charge is 10 Yuan/ton.
For implementation, the subsidy from city budget to the environment management agency is needed. If the charge to the beneficieries is increased twice and three times, the subsidy amount will be 83% and 66%.

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

Development Impacts:
1) The project would bring about more efficent waste collection and haulage system.
2) The project would make an improvement of environmental preservation.

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

III. PRESENT STATUS OF STUDIED PROJECT

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

(Description)

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 西安市生活廃棄物処理計画

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

PROJECT SUMMARY (F/S)

ASO CHN/S 313/90

Compiled Mar.1992
Revised

I. OUTLINE OF STUDY

1.COUNTRY China

2.NAME OF STUDY
Rapid Railway Construction Project in Tianjin

3.SECTOR
Transportation/Railway

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Tianjin Science and Technology Commission

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

8.DATE OF S/W Sep.1988

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

10.STUDY TEAM

No.of Members 14

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

Total M/M	Japan	Field
62.28	35.84	26.44

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

12.EXPENDITURE

Total	189,751 (¥'000)
Contracted	17,900

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

(US$1,000) US$1=4yuan		Total Cost	Local Cost	Foreign Cost
	1)	396,958	281,875	115,083
	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)
Construction by Tianjin City of a new passenger railway line of about 50 km between Tianjin and Tanqqu --- Major purpose is the development of regions along the route, especially, the improvement of commuter transport in Tianjin and Tanqqu, and balanced development of regions along the Hai He River.
- Section to be opened at the 1st Stage (end of 1995): between Shuang Lin and He Bey Lue, 38.70km, Structures: viaduct 31.50km, embankment: 7.20km, No. of stations: 9 rolling stock: 58 cars (commuter electric railways), maximum operation speed of trains 120km/h
- Section to be opened at the 2nd stage (early 2000): between He Bey Lue and Tianjin New Port, 10.85km, No. of stations: 2, rolling stock: 84 cars

Operational safety and traffic control systems: cabsignal block system, cab signal system, 1st-type electric relay or electronic relay system, automatic train control(ATC)system, centralized train control (CTC) system; Rolling stock base:
1)Base facilities: facilities for main part inspection or overhaul, temporary repair, trip inspection, regular inspection(monthly,etc.), car cleaning facilities, storage track, etc.
2) Inspection and repair facilities: management office, inspection building, workshop building, wheel grinding shop, maintenance base, other buildings. Electric facilities: power transformation facilities, contact wire facilities, power transmission and distribution wire facilities, signalling facilities planning, telecommunications facilities planning.

Imp. Period: .1991-.1999

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes/No

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

Conditions and Development Impacts:

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

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

(FY 1991 Overseas Survey)
To date neither a detailed study nor official request for financial cooperation has been made.

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

(FY 1992 Overseas Survey)
Waiting for the answer.

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

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 天津市津塘快速鉄道新線建設計画

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

PROJECT SUMMARY (F/S)

ASO CHN/A 305/90

Compiled Mar.1992
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY China

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

3.SECTOR
Agriculture/General

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Ministry of Water Resources

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

8.DATE OF S/W Nov.1988

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

10.STUDY TEAM

No.of Members 9
Period Dec.1989-Mar.1991(15 months)

Total M/M	Japan	Field
58.64	25.70	32.94

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Beijin city, Pinggu Prefecture

2.PROJECT COST (US$1,000)

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

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

Imp. Period: .1991-.1995

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

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

2.MAJOR REASONS FOR PRESENT STATUS
For the second one mentioned above, this is the plan of the Ministry of Foreign Economic Relation and Trade.

3.PRINCIPAL SOURCE OF INFORMATION
①②③

和名 北京市海子ダム農業水利開発計画

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

PROJECT SUMMARY (F/S)

ASO CHN/S 314/91

Compiled Mar.1993
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY China

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

3.SECTOR
Communications & Broadcasting/Telecommunication

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Posts and Telecommunications Administration of Jilin Province

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

8.DATE OF S/W Mar.1990

9.CONSULTANT(S)
NTT International Corporation

10.STUDY TEAM

No.of Members 8
Period Jul.1990-Sep.1991(13 months)

Total M/M	Japan	Field
57.96	23.28	34.68

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST (US$1,000)

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

3.CONTENTS OF MAJOR PROJECT(S)

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

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

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

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

Conditions and Development Impacts:

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)
On July 1991, the Commitee constructed by "The Association for the Promotion of International Trade, Japan" visited in China, vice-president of Ministry of Posts and Telecommunication of China and requested promotion of this project.
Chinese Government has not yet requested the implementation of this project to Japanese Government.

(FY1992 Overseas Survey)
A request has been made to the Ministry of Foreign Economic Relations and Trade for the uilization of Japanese Grant Aid and presently in progress toward ratification.

2.MAJOR REASONS FOR PRESENT STATUS
Chinese Government hold a lot of projects, therefore implementation of this project has been delayed.

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 吉林省徳恵県電話網自動化計画

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

PROJECT SUMMARY (F/S)

ASO CHN/A 306/91

Compiled Mar.1993
Revised

I. OUTLINE OF STUDY

1.COUNTRY China

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

3.SECTOR
Agriculture/General

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
China Guangxi Water and Power Department

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

8.DATE OF S/W Feb.1990

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

10.STUDY TEAM

No.of Members 11

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

Total M/M	Japan	Field
52.50	32.93	19.57

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Qinzxhou Region, Guangxi Zhuang Autonomous Region
Area: 34,363 ha, Population: 135(thousand) (1990)

2.PROJECT COST (US$1,000)

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

3.CONTENTS OF MAJOR PROJECT(S)

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

Imp. Period: Jan.1991-Dec.2012

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes

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

Conditions and Development Impacts:

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

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

The economic and financial evaluation is as follows:

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

5.TECHNICAL TRANSFER
Technical Transfer of Design Criteria on Reclamation Dike was done.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

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

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

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 広西壮族自治区欽州地区農業海河堤整備及び農業開発計画

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

PROJECT SUMMARY (F/S)

ASO IND/S 301/87

Compiled Mar.1990
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY India

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

3.SECTOR
Transportation/Railway

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Indian Railway Board

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

8.DATE OF S/W Oct.1986

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

10.STUDY TEAM

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

Total M/M	Japan	Field
93.41	55.66	37.75

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

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST (US$1,000) (US$1=12.87Rp)

	Total Cost	Local Cost	Foreign Cost
1)	1,677,000	1,440,000	237,000
2)			
3)			

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

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

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

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

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

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

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

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

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 デリー～カンプール間幹線鉄道改良計画

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

PROJECT SUMMARY (F/S)

ASO IND/S 302/87

Compiled Mar.1990
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY India

2.NAME OF STUDY
Modernization of Rolling Stock Workshop

3.SECTOR
Transportation/Railway

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Indian Railway Board

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

8.DATE OF S/W Oct.1986

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

10.STUDY TEAM

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

Total M/M	Japan	Field
67.26	43.56	23.70

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

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

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

3.CONTENTS OF MAJOR PROJECT(S)

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

Imp. Period: .1989-.1994 .1989-.1996

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)
The project was incorporated in the 8th Long-term Plan.

Mar.1990 OECF loan agreement signed (1,256 million yen) For the provision of equipment for Jamalpur and Perambur Workshops

Aug.1990 The Indian Railway requested JARTS to submit a proposal as the sole consultant of the consultant service agreement.

Oct.1990 JARTS submitted the proposal.

Jan.1993 An agreement was reached on the contents of services and the amount of costs. Signing of the contract is yet to be made, pending the approval by the Indian side.

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

3.PRINCIPAL SOURCE OF INFORMATION
①②④

和名 鉄道車両工場近代化計画

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

PROJECT SUMMARY (M/P+F/S)

ASO IND/S 201A/89

Compiled Mar.1991
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY India

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

3.SECTOR
Transportation/Port

4.REFERENCE NO.

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

6.COUNTERPART AGENCY
The coordination committee Government of India. Ministry of Surface Transport, Ports Department

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

8.DATE OF S/W Dec.1987

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

10.STUDY TEAM

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

Total M/M	Japan	Field
142.26	72.09	70.17

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Soil investigation Sounding

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Calcutta and Haldia

2.PROJECT COST

US$1=Rs13.50=135yen

(US$1,000)	Total Cost	Local Cost	Foreign Cost
1)	243,874	137,430	106,444
2)			

3.CONTENTS OF MAJOR PROJECT(S)
Master Plan with the target year of 2005.

1.Functional Allocation
The container traffic allocation between Calcutta and Haldia
2.Effective land use of Calcutta Port Trust
3.Improvement of Transportation Facilities
1) Construction of Bridge
2) Constructon of handling place for railway cargo
4.Improvement of Navigation Aid System

4.CONDITIONS AND DEVELOPMENT IMPACTS
Demand Forecast (unit: 1,000t)

Liqnid Bulk Cargo	2,495
Dry Bulk Cargo	1,070
Container Cargo	2,235
Other General Cargo	2,910

5.TECHNICAL TRANSFER
Through discussion with counterpart, we conducted technical transfer such as the way of thinking of the study and the study method and so on.

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
(FY1991 Overseas Survey)
The project was scaled down and modified. This Master Plan is used as the guideline of the long-term development of the port.
The following projects for Calcutta Port was conducted:

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

2.MAJOR REASONS FOR PRESENT STATUS
A part of the project is integrated into the 8th Five-Year Plan.

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 カルカッタ・ハルディア港開発計画

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

PROJECT SUMMARY (M/P+F/S)

ASO IND/S 201B/89

Compiled Mar.1991
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY India

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

3.SECTOR
Transportation/Port

4.REFERENCE NO.

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

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

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

8.DATE OF S/W Dec.1987

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

10.STUDY TEAM

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

Total M/M	Japan	Field
142.26	72.09	70.17

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Soil investigation Sounding

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Calcutta and Haldia

2.PROJECT COST
(US$1,000)
US$1=Rs13.50=135yen

	Total Cost	Local Cost	Foreign Cost
1)	243,874	137,430	106,444
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
Short-Term Plan with the target year to 1995

(1) Calcutta
- Port road
- Railway
- Rehabilitation of port facilities
- CFS
- Dredging
- Cargo handling equipment
- Port Service vessels

(2) Haldia
- Container berth
- Multi-Purpose berth
- Yard
- Railway
- Cargo handling equipment
- Port Service vessels

Imp. Period: .1990-.1995

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

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

Conditions and Development Impacts:
Demand forecast
Calcutt Haldia Port (unit: 1,000t)

Liquid Bulk Cargo	1,210
Dry Bulk Cargo	610
Container Cargo	1,110
Other General Cargo	2,210

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

(FY1991 Overseas Survey)
The following Feasibility Studies were conducted using local funds.

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

2. Halida Port
   1) Replacement of dredger
      (Mar. 1990 - Aug. 1991)
   2) Procurement of Grab Dredger
      (Mar. 1990 - Aug. 1991)

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 カルカッタ・ハルディア港開発計画

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

PROJECT SUMMARY (F/S)

ASO IND/S 303/89

Compiled Mar.1991
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY India

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

3.SECTOR
Transportation/Railway

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Northern Railway

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

8.DATE OF S/W Apr.1988

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

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

Total M/M	Japan	Field
	30.18	35.55

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
None

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
200 kilometers around New Delhi

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
US$1=17.75Rs	1)	94,727,000	83,544,000	11,183,000
	2)			
	3)			

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

Imp. Period: .1991-.1995

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

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

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

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 ニューデリー駅近代化計画

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

PROJECT SUMMARY (F/S)

ASO IND/S 304/90

Compiled Mar.1992
Revised

I. OUTLINE OF STUDY

1.COUNTRY India

2.NAME OF STUDY
Improvement Plan of New Mangalore

3.SECTOR
Transportation/Port

4.REFERENCE NO.

5.TYPE OF STUDY F/S

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

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

8.DATE OF S/W Mar.1989

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

10.STUDY TEAM

No.of Members	12		
Period	Aug.1989-Aug.1990(13 months)		
Total M/M	Japan	Field	
56.52	26.22	30.30	

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

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
New Mangalore Port

2.PROJECT COST

(US$1,000) US$1=Rs16.75		Total Cost	Local Cost	Foreign Cost
	1)	76,521	49,460	27,061
	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)
1. Review of Master Plan
   1)Iron Ore Berth, Oil Berth,
   2)Oil Product Berth, Coal Berth,
   3)Breakwaters
   4)Dredging
2. Short-term plan with the target year of 1995
   1)Improvement of the existing Iron Ore Bereh to 100,000 DWT class.
   2)Reconstruction of the existing 0:7 Product Jetty to a Crude 0:7 Jetty of 100,000 DWT class
   3)Construction of an 0:7 Product Jetty of 85,000 DWT class
   4)Extension of the Southern and Northern Breakwaters up to 1,500m
   5)Deepning and widening of the channel
   6)Deepning and widening of the Basin

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

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

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

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

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

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

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

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

3.PRINCIPAL SOURCE OF INFORMATION
①②

和名 ニュー・マンガロール港改良計画

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

PROJECT SUMMARY (F/S)

ASO IND/A 301/91

Compiled Mar.1993
Revised

I. OUTLINE OF STUDY

1.COUNTRY India

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

3.SECTOR
Agriculture/General

4.REFERENCE NO.

5.TYPE OF STUDY F/S

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

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

8.DATE OF S/W Apr.1990

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

10.STUDY TEAM

No.of Members 10
Period Sep.1990-Jul.1991(11 months)

Total M/M	Japan	Field
65.94	26.78	38.96

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST (US$1,000)

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

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

Imp. Period: Jan.1993-Dec.1998

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

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

Conditions and Development Impacts:

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

Impacts:

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

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

2.MAJOR REASONS FOR PRESENT STATUS

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

3.PRINCIPAL SOURCE OF INFORMATION

和名 シャルダ灌漑・排水事業整備計画

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

PROJECT SUMMARY (Other)

ASE IDN/S 601/74

Compiled Mar.1990
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

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

3.SECTOR: Social Infrastructures/Water Resource Development

4.REFERENCE NO.:

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY: Directorate General of Water Resources Development

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

8.DATE OF S/W: .0

9.CONSULTANT(S):

10.STUDY TEAM

No.of Members

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

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total 3,905 (¥'000)

Contracted

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

(US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)

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

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

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

(Description)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 ソロ河流域開発計画アフターケア

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

PROJECT SUMMARY (M/P)

ASE IDN/S 101/75

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Java Regional Study, East Java

3.SECTOR
Development Plan/Integrated Regional Development Plan

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Ministry of Public Works and Power

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

8.DATE OF S/W Apr.1975

9.CONSULTANT(S)
International Development Center of Japan

10.STUDY TEAM

No.of Members 8

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

Total M/M	Japan	Field
24.60	13.40	11.20

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
East Java Province (47,922 sq. km)

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)

The study proposed six priority programs and two supportive programs as follows.
Priority Programs:
(1)Industrialization;
(2) Water resource development;
(3) Madura agricultural development;
(4) Southern coast development;
(5) Rural development; and
(6) Community facilities development

Supportive Programs:
(7) Training; and
(8) Strengthening of BAPPEDA

4.CONDITIONS AND DEVELOPMENT IMPACTS

The development strategy proposed by the study combines the top-down approach to industrialization and regional planning and the bottom-up approach to rural development and water resource development.

5.TECHNICAL TRANSFER

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

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

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

(Description)

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

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

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

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

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①④

和名 東部ジャワ州総合開発

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

PROJECT SUMMARY (F/S)

ASE IDN/S 301/75

Compiled Mar.1986
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Wonogiri Multipurpose Dam Project

3.SECTOR
Social Infrastructures/Water Resource Development

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Directorate General of Water Resouces Development

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

8.DATE OF S/W .0

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

10.STUDY TEAM

No.of Members	20	
Period	Nov.1974-Oct.1975(12 months)	
Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

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

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

Imp. Period: Oct.1976-Nov.1983

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

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

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

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 ウオノギリ多目的ダム建設計画

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

PROJECT SUMMARY (F/S)

ASE IDN/S 303/76

Compiled Mar.1976
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

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

3.SECTOR
Transportation/Road

4.REFERENCE NO.

5.TYPE OF STUDY F/S

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

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

8.DATE OF S/W Nov.1975

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

10.STUDY TEAM

No.of Members 21

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

Total M/M	Japan	Field
57.00	39.00	18.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Cilacap - Malang Corridor

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)
Improvement of road condition in four routes connecting Central and East Java provinces
(Project Routes)

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

Imp. Period: .1975~.1976

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

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

Conditions and Development Impacts:
1) Project life of 10 years, socilal discount rate at 15%
2) Evaluation based on alternative plans for standards of design and staqes of construction
Standards of design
Plan 1 (from longer-run point of view): a 2-lane carriageway with a minimum width of 6m for each of the four project routes
Plan 2 (responding to staqes of regional development): adoption of tentative standards (width ranged 4.5 - 6m) according to the traffic volume in the respective routes
Staqes of construction
Non-staqed construction: based on traffic volume in 1990
Staqed construction: 1st staqe based on traffic volume in 1985 and 2nd staqe on that in 1990
Plan 2 with non-staqed construction was evaluated as best.
(Development Impacts)
(1)Promoting economic development in the areas along the project roads (Cilacap-Malanq, Cilacap-Semaranq)
(2)Indirect diffusion effects on economic development in conjunction with other road construction/ betterment projects in the whole Central and East Java Provinces

5.TECHNICAL TRANSFER
Technical trasfer by reception of trainees

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

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

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

2.MAJOR REASONS FOR PRESENT STATUS

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

3.PRINCIPAL SOURCE OF INFORMATION

①④

和名 中東部ジャワ道路改良計画

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

PROJECT SUMMARY (F/S)

ASE IDN/S 302/76

Compiled Mar.1986
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

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

3.SECTOR
Social Infrastructures/River & Erosion Control

4.REFERENCE NO.

5.TYPE OF STUDY F/S

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

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

8.DATE OF S/W .0

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

10.STUDY TEAM

No.of Members 22

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

Total M/M	Japan	Field
91.22	42.20	49.02

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Surakarta Area
(downstream reach at Wonogiri Dam, Middle Java)

2.PROJECT COST

(US$1,000) (US$1=415Rp)		Total Cost	Local Cost	Foreign Cost
	1)	277,080	174,130	102,950
	2)	82,150	47,880	34,270
	3)	63,180	35,480	27,700

3.CONTENTS OF MAJOR PROJECT(S)

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

Note: One study consists of this study and Wonogiri Irrigation and Upper Solo River Improvement Project study (Agriculture/General). The above project costs are for: 1) total 2) irrigation 3) river improvemet. In addition to these, 4) dam and reservoir (total: 115,200, local: 88,250 and foreign: 26,970) and 5) hydroelectric power station (total: 16,530, local: 2,520 and foreign: 14,010) were calculated.

Imp. Period: Apr.1978-Oct.1983

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

Conditions and Development Impacts:

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

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

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

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

2.MAJOR REASONS FOR PRESENT STATUS
1.Large economic impact
2.High priority
3.Good financial position
4.Stable political background

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 ウオノギリ多目的ダム計画関連灌漑及び河川改修計画

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

PROJECT SUMMARY (F/S)

ASE IDN/A 301/76

Compiled Mar.1990
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

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

3.SECTOR
Agriculture/General

4.REFERENCE NO.

5.TYPE OF STUDY F/S

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

7.OBJECTIVES OF STUDY

8.DATE OF S/W .0

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

10.STUDY TEAM

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

Total M/M	Japan	Field
91.22	42.20	49.02

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

(US$1,000) US$1=415Rp.		Total Cost	Local Cost	Foreign Cost
	1)	277,080	174,130	102,950
	2)	82,150	47,880	34,270
	3)	63,180	35,480	27,700

3.CONTENTS OF MAJOR PROJECT(S)
1. Irrigation 1) Colo intake weir: Concrete weir,Height of weir: 10m, Length of weir: 108m 2) Irrigation canal: a. Irrigation area: 23,200ha b. Length of main canal: 93.8km c. Length of secondary canal: 81.2km d. Length of tertiary canal: 928km in total 3) crossings: 48 turnouts, 13 gates, 27 shiphons, 16 head races and 259 bridges 2. River improvement 1) Improvement area: Nguter railway bridge-Juruq road bridge, Surakarta city 2) Length of river improvement: 33km along Solo River and 30.5km along eight tributaries 3) Designed discharge after dam construction: 1,050 cu.m/s at Nguter railway bridge and 2,000 cu.m/s at Juruq road bridge 4) two retarding basins (capacity: 27 million cu.m and 18 million cu.m) 5) Length of bank protection: 7km 6) 395 spur dikes (13km) 7) 32 sluice-ways 8) Length of drains for water inside dikes
3. Wonogiri Dam 1) Catchment area: 1,350 sq.km 2) Rockfill type dam 3) Fill: 18 million cu.m 4) Intake capacity for irrigation at Colo weir: 400 illion cu.m 5) Intake capacity for river maintenance: 30 million cu.m
4. Water power station 1) Turbines: two units of 5,100kW Kaplan-type turbines 2) Generator: two units of 6,375 kVA generators 3) Maximum output: 10,200 kW 4) Yearly average output: 28,200 MWh
Note: One study consists of this study and Wonogiri Irrigation and Upper Solo River Improvement Project study (Social Infrastructure/River & Erosion control). The above project costs are for: 1) total 2) irrigation 3) river improvement. In addition to these, 4) dam and reservoir (total: 115,200, local: 88,250 and foreign: 26,970) and 5) hydroelectric power station (total: 16,530, local: 2,250 and foreign: 14,010) were calculated.

Imp. Period: May.1977-Oct.1983

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

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

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

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

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

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 ウオノギリダムかんがい及び河川改修計画

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

PROJECT SUMMARY (M/P)

ASE IDN/S 102/77

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Java Regional Study: Central Java

3.SECTOR
Development Plan/Integrated Regional Development Plan

4.REFERENCE NO.

5.TYPE OF STUDY M/P

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

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

8.DATE OF S/W Oct.1976

9.CONSULTANT(S)
International Development Center of Japan

10.STUDY TEAM

No.of Members 9

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

Total M/M	Japan	Field
34.80	24.20	10.60

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)

The study examined the comparative advantages of the four alternatives of distributing development finance within the province and the two alternatives of development financing. The study chose the development financing alternative which aims to maintain the per capita income of the province at 55% of the national average and an appropriate mix of the four distribution alternatives, and proposed a comprehensive development program for water resource development, agriculture, industry, tourism, transportation, public utilities, housing, education, family planning, transmigration, development administration and finance, etc. Major projects identified are tertiary irrigation canal development, control of volcanic debris, highland horticulture, agricultural marketing improvement, improvement of industrial statistics, public housing through KIP programs, etc.

4.CONDITIONS AND DEVELOPMENT IMPACTS

In order to narrow down regional income disparities and to raise the level of income in the province, the study suggested to increase the allocation of the central government development budget to the province and to concentrate the public investment in the strategic priority areas.

5.TECHNICAL TRANSFER

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

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

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

(Description)

Among the programs/projects suggested by the study, the following have been implemented.
1) F/S on Borobudur Prambanan Parks*
2) Development of the port of Semarang**

The suggestions of the study has been utilized for implementing the industrialization program, improvement of agricultural extension services, agricultural marketing improvement, potable water supply and so forth.

* OECF loan agreements signed in Apr. 1979 (E/S, 440 million yen) and in Aug. 1982 (2,805 million yen).

** OECF loan agreements signed in Mar. 1979 (E/S, 480 million yen) in Mar. 1981 (Stage I construction, 17.3 billion yen), in Mar. 1987 (E/S, 545 million yen), in Dec. 1987 (Stage II construction, 2,420 million yen).

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①④

和名 中部ジャワ州総合開発計画

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

PROJECT SUMMARY (F/S)

ASE IDN/S 304/77

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Development Plan of the Banjarmasin Port

3.SECTOR: Transportation/Port

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Directorate General of Sea Communication

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

8.DATE OF S/W: Mar.1976

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

10.STUDY TEAM

No.of Members 8

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

Total M/M	Japan	Field
63.40	22.80	40.60

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Kalimanatan, South Kalimantan Province

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

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

3.CONTENTS OF MAJOR PROJECT(S)

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

Imp. Period: Jan.1978-Dec.1983

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

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

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

5.TECHNICAL TRANSFER: Counterpart training

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

The project was implemented by ADB financing.

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

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

2.MAJOR REASONS FOR PRESENT STATUS: High priority

3.PRINCIPAL SOURCE OF INFORMATION: ①②

和名 バンジャルマシン港開発計画

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

PROJECT SUMMARY (Other)

ASE IDN/S 602/77

Compiled Mar.1990
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

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

3.SECTOR
Social Infrastructures/River & Erosion Control

4.REFERENCE NO.

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY
Directorate General of Water Resource Development

7.OBJECTIVES OF STUDY

8.DATE OF S/W: .0

9.CONSULTANT(S)

10.STUDY TEAM
No.of Members 3
Period Mar.1978-Mar.1978(0.3 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 2,273 (¥'000)
Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Wuringi dam of Brantas River

2.PROJECT COST
(US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)
The study examined the problem of seepage of the base qround of the Wuringi dam, and advised on the suitable construction methods.

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 ブランタス河（ウリンギダム） アフターケア

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

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1992

ASE IDN/S 603/77

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

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

3.SECTOR
Social Infrastructures/River & Erosion Control

4.REFERENCE NO.

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY
Directorate General of Water Resources Development

7.OBJECTIVES OF STUDY

8.DATE OF S/W: .0

9.CONSULTANT(S)

10.STUDY TEAM
No.of Members 3
Period Aug.1977-Sep.1977(0.4 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 2,495 (¥'000)
Contracted

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST
(US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)			
2)			

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

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 ブランタス河中流部河川改修計画アフターケア

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

PROJECT SUMMARY (M/P)

ASE IDN/S 103/78

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
North and West Sumatra Tourism

3.SECTOR
Tourism/General

4.REFERENCE NO.

5.TYPE OF STUDY M/P

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

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

8.DATE OF S/W Dec.1976

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

10.STUDY TEAM

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

Total M/M	Japan	Field
111.40	89.50	21.90

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

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

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

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

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

III. PRESENT STATUS OF STUDY RESULTS

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

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 スマトラ西部及び北部トバ湖周辺基盤整備計画

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

PROJECT SUMMARY (M/P+F/S)

ASE IDN/S 201A/78

Compiled Mar.1990
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY
Ular River Improvement Project

3.SECTOR
Social Infrastructures/River & Erosion Control

4.REFERENCE NO.:

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

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

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

8.DATE OF S/W: Mar.1976

9.CONSULTANT(S)
Nikken Consultants., Inc.

10.STUDY TEAM

No.of Members	35	
Period	Jul.1976-Jul.1978(24 months)	
Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Preparation of Topographic Map

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)
1st year: survey and mapping (scale: 1/25,000)
2nd year: Master plan study proposing combined development of flood control and irrigation

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
Followed by F/S.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

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

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

PROJECT SUMMARY (M/P+F/S)

ASE IDN/S 201B/78

Compiled Mar.1990
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Ular River Improvement Project

3.SECTOR
Social Infrastructures/River & Erosion Control

4.REFERENCE NO.

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

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

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

8.DATE OF S/W .0

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

10.STUDY TEAM

No.of Members	35	
Period	Jul.1976-Jul.1978(24 months)	
Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

(US$1,000) (US$1=625Rp.)		Total Cost	Local Cost	Foreign Cost
	1)	20,736	12,947	
	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)
1.River channel improvement (45km)
2.Downstream irrigation and drainage (18,500ha)

Imp. Period: .1979-.1985

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

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

Conditions and Development Impacts:

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

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

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

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

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

PROJECT SUMMARY (F/S)

ASE IDN/S 305/78

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Jakarta Ring Road Project

3.SECTOR: Transportation/Road

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

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

7.OBJECTIVES OF STUDY: Highway Plan

8.DATE OF S/W: Dec.1976

9.CONSULTANT(S): Pacific Consultants International

10.STUDY TEAM

No.of Members 15

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

Total M/M	Japan	Field
	54.00	

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Boundary of Jakarta

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

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

3.CONTENTS OF MAJOR PROJECT(S)

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

Imp. Period: .1981-.1985

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

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

5.TECHNICAL TRANSFER

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

Funding request has been repeatedly submitted to OECF since 1980, but the E/S loan has not been approved, mainly because the Intra Urban Tollway System Project was given a higher priority.

E/S loan for 939 million yen was pledged in 1985. The D/D was implemented in 24 months (Mar.1988-Feb.1990).

The following segments were added.
- Cengkareng Access - Jakarta-Tangerang Tollway 8.2 km
- Jakarta Coastal Road - JI.Jakarta-Bekasi 6.5 km

2.MAJOR REASONS FOR PRESENT STATUS

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

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 ジャカルタリングロード計画

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

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1992

ASE IDN/S 306/78

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY
Expansion Project of the Bitung Port

3.SECTOR
Transportation/Port

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY
Directorate General of Sea Communication

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

8.DATE OF S/W: Feb.1977

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

10.STUDY TEAM

No.of Members 7

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

Total M/M	Japan	Field
47.00	46.00	1.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

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

	Total Cost	Local Cost	Foreign Cost
1)	21,422	10,433	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)
The development plan aiming the year 1985

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

Imp. Period: .1978-Dec.1984

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 ビトン港拡張計画

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

PROJECT SUMMARY (F/S)

ASE IDN/S 307/78

Compiled Mar.1986
Revised Mar.1991

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

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

3.SECTOR
Transportation/Port

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Directorate General of Sea Communication

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

8.DATE OF S/W .0

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

10.STUDY TEAM

No.of Members 8

Period Sep.1977-Aug.1978(10 months)

Total M/M	Japan	Field
30.00	29.00	1.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Central Java

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)

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

Imp. Period: Feb.1981-Oct.1985

4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes

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

Conditions and Development Impacts:

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

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

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

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

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

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

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

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 スマラン港開発計画（フェーズI）

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

PROJECT SUMMARY (F/S)

ASE IDN/S 308/78

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Hospital Facilities Improvement Project

3.SECTOR: Social Infrastructures/Architecture & Housing

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Ministry of Health

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

8.DATE OF S/W: .0

9.CONSULTANT(S):

10.STUDY TEAM

No.of Members 8

Period Apr.1978-Oct.1978(7 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total 21,874 (¥'000)

Contracted

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST (US$1,000)

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

3.CONTENTS OF MAJOR PROJECT(S)

The study undertook the following tasks.

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

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes/No

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

Conditions and Development Impacts:

The proposed project will contribute to the improvement of medical services and hospital facilities.

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

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

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①④

和名 病院整備計画

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

PROJECT SUMMARY (Basic Study)

ASE IDN/A 501/78

Compiled Mar.1990
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

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

3.SECTOR
Forestry/Forestry & Forest Conservation

4.REFERENCE NO.

5.TYPE OF STUDY: Basic Study

6.COUNTERPART AGENCY
PERUM PERHUTANI

7.OBJECTIVES OF STUDY

8.DATE OF S/W: Dec.1976

9.CONSULTANT(S)
Japan Forest Technical Association

Kokusai Kougyo Co., Ltd.

10.STUDY TEAM

No.of Members 14

Period Nov.1976-Mar.1978(16 months)

Total M/M	Japan	Field
28.00	20.00	8.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Aerial photography

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

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

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

4.CONDITIONS AND DEVELOPMENT IMPACTS
1.Products in the pine plantations will be able to supply raw materials for a papermill,
which will be constructed in the future
2.Pine plantations will be increased so that pine resin products will be increased and
local employment will be enlarged.

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

III. PRESENT STATUS OF STUDY RESULTS

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

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 中部ジャワ州プカロンガン林業資源調査

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

PROJECT SUMMARY (Other)

ASE IDN/S 604/78

Compiled Mar.1990
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

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

3.SECTOR
Social Infrastructures/River & Erosion Control

4.REFERENCE NO.

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY
Directorate General of Water Resources Development

7.OBJECTIVES OF STUDY
Identification of an optimum construction plan

8.DATE OF S/W: .0

9.CONSULTANT(S)

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

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)

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

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 ソロ河ウオノギリ多目的ダム関連河川改修計画アフターケア

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

PROJECT SUMMARY (M/P)

ASE IDN/S 104/79

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Shipbuilding Industry Development

3.SECTOR
Transportation/Marine Transportation & Ships

4.REFERENCE NO.

5.TYPE OF STUDY M/P

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

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

8.DATE OF S/W .0

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

10.STUDY TEAM

No.of Members 14

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

Total M/M	Japan	Field
21.33	16.00	5.33

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
18 major shipbuilding yards in Indonesia

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)

The study suggested to modernize four shipbuilding yards in order to meet the future demands for ship building and repair.
The proposed targets are as follows.
1) Ship building:
   1983 90% of the annual demand (approx. 50,000GT)
   1990 100% of the annual demand (approx. 94,000GT)
2) Repair work:
   1983 70% of the annual demand (approx. 1.4 million GT)
   1990 100% of the annual demand (approx. 2.8 million GT)

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

4.CONDITIONS AND DEVELOPMENT IMPACTS

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

5.TECHNICAL TRANSFER

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

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

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

(Description)

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 造船振興計画

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

PROJECT SUMMARY (M/P)

ASE IDN/S 107/79

Compiled Mar.1986
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

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

3.SECTOR
Social Infrastructures/Water Resource Development

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Directorate of Planning and Programming

7.OBJECTIVES OF STUDY
Irrigation Development
Topographic survey

8.DATE OF S/W Oct.1976

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

Nikken Consultants., Inc.

10.STUDY TEAM

No.of Members 36
Period Dec.1976-Jun.1978(39 months)
Aug.1978-Mar.1980

Total M/M	Japan	Field
258.91	81.60	177.31

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Aerial Photography

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

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

2.PROJECT COST

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

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

The total cost above only pertains to the irrigation development.

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

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)

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

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

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

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

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 南スラウェシ州中部水資源総合開発計画

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

PROJECT SUMMARY (F/S)

ASE IDN/S 309/79

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

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

3.SECTOR: Transportation/Port

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Directorate General of Sea Communication

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

8.DATE OF S/W: Dec.1978

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

10.STUDY TEAM

No.of Members 6

Period Jan.1979-Nov.1979(10 months)

Total M/M	Japan	Field
44.51	34.84	9.67

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

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

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Kalimantan, East Kalimantan Province

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

	Total Cost	Local Cost	Foreign Cost
1)	20,888	8,686	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

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

Imp. Period: Oct.1981-Dec.1984

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

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

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

5.TECHNICAL TRANSFER: Counterpart training

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

The project was implemented by ADB financing.

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

Total project cost: US$22.9 million

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 バリクパパン港港湾整備計画

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

PROJECT SUMMARY (F/S)

ASE IDN/S 310/79

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Borobudur Prambanan: National Archeological Parks

3.SECTOR: Tourism/General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Tourism Directorate Transport Ministry

7.OBJECTIVES OF STUDY: Tourism Development

8.DATE OF S/W: Jul.1978

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

10.STUDY TEAM

No.of Members 24

Period Jul.1978-Jul.1979(13 months)

Total M/M	Japan	Field
61.03	48.00	13.03

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	160,852 (¥'000)
Contracted	143,858

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Central Java, Borobudur Prambanan

2.PROJECT COST (US$1,000) (US$1=627Rp.)

	Total Cost	Local Cost	Foreign Cost
1)	17,266		
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

Review of existing reports and formulation of 1979-1989 detailed plan for the national archeological park centered around ruins of Borobudur Prambanan in Central Java.

Imp. Period: .1979-.1989

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: No

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

Conditions and Development Impacts:
Repair and restoration of ruins in both sites are expected to promote domestic and foreign tourism, thereby increasing tourism revenues and inducing regional development

5.TECHNICAL TRANSFER

OJT : Counterparts were trained on land use, tourism and infrastructure development

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

The project was completed by the OECF loan.

Apr.1980	OECF L/A signed (E/S, 440 million yen)
May 1982	OECF L/A signed (2,805 million yen)
Summer 1988	Construction completed

2.MAJOR REASONS FOR PRESENT STATUS

(1) Large favorable effects
(2) Favorable political conditions
(3) High priority Great cultural and educational impacts

3.PRINCIPAL SOURCE OF INFORMATION

①④

和名 ボロブドール・プランバナン国立史跡公園整備計画

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

PROJECT SUMMARY (F/S)

ASE IDN/A 302/79

Compiled Mar.1990
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Riam Kanan Irrigation Project

3.SECTOR: Agriculture/General

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

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

7.OBJECTIVES OF STUDY

8.DATE OF S/W: Mar.1978

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

10.STUDY TEAM

No.of Members 18

Period Jul.1978-Mar.1979(9 months)

Total M/M	Japan	Field
73.43	19.53	53.90

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	248,480 (¥'000)
Contracted	151,908

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Riam Kanan Area of South Kalimantan Province (Investigated Area 60,000ha)

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

	Total Cost	Local Cost	Foreign Cost
1)	190,670	106,880	83,790
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

1. Total Irrigation Area : 32,610 ha
   (AI Zone 1,870 ha, BI Zone: 7,400 ha, CI Zone: 3,740 ha, DI Zone: 11,520 ha, EI: 8,080 ha)
2. Diversion weir : 1 place, height 9m, length 228m, max. intake discharge 34 cu.m/sec
3. Main canal : 48.4 km
4. Main drain : 53 km
5. Main road : 122 km
6. New paddy field: 5,150 ha

Imp. Period: Jan.1980-Oct.1988

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	13.50	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Preconditions: (1)construciton period: 8 years,
realization of target benefit: 15 years
(2)The direct benefit was evaluated as the difference of net income from the crop production between with-project and without-project conditions

	with-project		without-project	
	Total benefit	Net benefits	Total benefit	Net benefits
1984	4,284	1,600	1,323	892
1994	45,756	27,429	11,078	7,897

Development Impacts:
(1) Saving of foreign currency by a reduction of rice import
(2) Increase of employment opportunity
(3) Improvement of quality of agricultural products and increase of marketability
(4) Improvement of living environment
(5) Contribution to activation of the economy

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

Mar.1980	OECF L/A signed (E/S 450 million yen)
1982	Pilot farm developed by Japanese grant
Jun.1984	OECF L/A signed (8,636 million yen)
May 1987	Construction started
Dec.1992	Construction completed

OECF Loan:
- Main canals (primary 20km, secondary 50km)
- Drainage canals (40km)
- Tertiary canals (5,965ha)

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①④

和名 リアムカナンかんがい計画

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

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1992

ASE IDN/S 605/79

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY
Jakarta-Merak Highway Project: Jakarta/ Tangerang Freeway Financial Study(follw-up)

3.SECTOR
Transportation/Road

4.REFERENCE NO.

5.TYPE OF STUDY: Other

6.COUNTERPART AGENCY
Directorate General of Highways, Ministry of Public Works

7.OBJECTIVES OF STUDY
Policy recommendations on the operation of toll road

8.DATE OF S/W: .0

9.CONSULTANT(S)
Pacific Consultants International

10.STUDY TEAM
No.of Members 4
Period Mar.1979-Jun.1979(2.5 months)

Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE
Total 13,679 (¥'000)
Contracted

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Road between Jakarta and Tangerang

2.PROJECT COST
(US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)
The Government of Indonesia promulqated the toll road Act in February 1978, and planned to apply the law to the operation of the Jakarta-Tanqeran section (27km) of the Jakarta - Merak Highway (120km). The follow-up study reevaluated the project by financial analysis and suggested specific policy guidelines.

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)

The road construction was completed by the OECF loan which was approved in Nov. 1977 (12,514 million yen) and is now managed as a toll road.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 ジャカルターメラク間道路アフターケア

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

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1992

ASE IDN/S 106/80

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY
Southern Coast Development Plan, East Java

3.SECTOR
Development Plan/Integrated Regional Development Plan

4.REFERENCE NO.

5.TYPE OF STUDY: M/P

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

7.OBJECTIVES OF STUDY
Identification of development strategy and projects, and evaluation of economic and social impacts

8.DATE OF S/W: .0

9.CONSULTANT(S)
International Development Center of Japan

10.STUDY TEAM

No.of Members 15

Period Nov.1978-Feb.1980(16 months)

Total M/M	Japan	Field
47.00	22.40	24.60

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	113,538 (¥'000)
Contracted	102,302

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Southern coastal area of East Java (8,310 sq.km, 17% of the land area of East Java)

2.PROJECT COST

(US$1,000)	Total Cost	Local Cost	Foreign Cost
	1)		
US$1=Rp630	2)		

3.CONTENTS OF MAJOR PROJECT(S)

The study proposed 12 project packages (mostly by area) for the development of the southern coastal area of East Java. 6 project packages are suggested for early implementation by utilizing either domestic fund or foreign technical assistance. The packages include the construction of dams for irrigation and sabo check dams, rural water supply, rural roads, breeding and raising of draft animals, modernization of fishing boats and gear, etc. The study recommended feasibility studies for the following projects.

- Construction of the Prigi commercial port; rehabilitation of the Prigi fishing port, Pacitan
- Slahung provincial road improvement; Prigi communal telephone project; Prigi electrification project;
- Construction of two dams at Grindulu and Tinator; and West Pacitan critical area rehabilitation (upstream Grindulu River)

4.CONDITIONS AND DEVELOPMENT IMPACTS

12 project packages were suggested to raise the income level in the targeted area.

5.TECHNICAL TRANSFER

1) OJT through joint undertaking of the study
2) Participation of the counterparts in the JICA training program

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)

The project packages proposed by the study is a integrated collection of small projects, and have not received foreign financing. However, they have been utilized to formulate development programs for the provincial and kabupaten levels.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 東部ジャワ州南部沿岸地域開発計画

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

PROJECT SUMMARY (M/P)

ASE IDN/S 105/80

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Removal of Sunken Vessels

3.SECTOR
Transportation/Marine Transportation & Ships

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
Directorate General of Sea Communications, Ministry of Communications

7.OBJECTIVES OF STUDY
Transfer of techniques for the removal of sunken ships

8.DATE OF S/W Mar.1979

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

10.STUDY TEAM

No.of Members 24

Period Oct.1979-Feb.1980(4 months)

Total M/M	Japan	Field
	6.93	13.30

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	74,983 (¥'000)
Contracted	67,056

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Majo ports in Indonesia, and the port of Surabaya for the case study

2.PROJECT COST

(US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)			
2)			

3.CONTENTS OF MAJOR PROJECT(S)
In order to assist in the removal of sunken ships in the major harbours during the World War II, the study made a case study of the port of Surabaya and formulated a master plan concerning the appropriate techniques, necessary salvage equipment and boats, and training requirements.

4.CONDITIONS AND DEVELOPMENT IMPACTS
The removal of sunken ships in major harbours will ensure the safety of port operations and raise the port capacity, and thereby contribute to the economic development of the country.
The study recommended the following measures:
1) Formulation of medium- and long-term implementation plan
2) Preparation of manuals for salvage operations under difficult conditions
3) Provision of necessary salvage equipment
4) Preparation of necessary bylaws and regulations
5) Purchase of salvage boats and support boats

5.TECHNICAL TRANSFER
OJT and instructions on the recommended techniques

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

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

(Description)

The Government of Indonesia has been removing sunken ships in small scale. During ten years of the first and the second five-year national development plans, approximately 24,000 tons of sunken ships were reported to have been removed. The Government planned to remove approximately 36,000 tons during the third development plan (1979 - 1983), and the recommendations of the study was initially included in the blue book. Subsequently, the project was postponed due to financial constraints.

2.MAJOR REASONS FOR PRESENT STATUS
1) The domestic salvage companies cannot use the special techniques proposed by the study.
2) Because of the fiscal deficits, it was not possible to purchase necessary salvage equipment and boats.
3) The priority of the removal of sunken ships was lowered during the 3rd development plan period.

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 沈船除去計画

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

PROJECT SUMMARY (M/P)

ASE IDN/S 109/80

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY
Medan Area Transportation

3.SECTOR
Transportation/Urban Transportation

4.REFERENCE NO.:

5.TYPE OF STUDY: M/P

6.COUNTERPART AGENCY:

7.OBJECTIVES OF STUDY
Traffic plan

8.DATE OF S/W: Nov.1978

9.CONSULTANT(S)
Pacific Consultants International
Japan Transportaion Consultants, Inc.

10.STUDY TEAM

No.of Members 16
Period Sep.1979-Oct.1980(0 months)

Total M/M	Japan	Field
76.50	53.00	23.50

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	185,134 (¥'000)
Contracted	171,501

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Medan suburban area

2.PROJECT COST

(US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	8,484		
2)			

3.CONTENTS OF MAJOR PROJECT(S)

The major projects of the short term development plan for 5 years are :
- Rehabilitation and Construction of Roads:
  Total length, 12, 630m, Improvement of crossing, 2 sites.
- Establishment of City Bus Route (loop line) :
  Improvement of bus terminal, 2 sites.
- Traffic Control Facilities :
  One way traffic, 26 sites.
  Signal system, 15 sites
- Facilities improvement with reopening of passenger transport between Brawan - Medan.
- Establishment of Eastside Entrance and Rehabilitation of pedestrian bridge of Medan Station.

4.CONDITIONS AND DEVELOPMENT IMPACTS

Development Impacts : Improvement of urban and regional infrastructure by improvement of traffic network (roads and railways, etc.).

5.TECHNICAL TRANSFER

(1) On-the-job training
(2) Employed local consultants for traffic survey and hearing, etc

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

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

(Description)

The recommendation of this report was accepted into trunk road improvement plan.
Some part of the project is under construction by own funds and by the ADB loan on urban development (this loan does not cover trunk roads).

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 メダン地域都市交通計画

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

PROJECT SUMMARY (M/P)

ASE IDN/S 108/80

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Land Erosion and Volcanic Debris Control in the Area of Mt.Merapi

3.SECTOR
Social Infrastructures/River & Erosion Control

4.REFERENCE NO.

5.TYPE OF STUDY M/P

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

7.OBJECTIVES OF STUDY
Sabo planning in the volcanic area

8.DATE OF S/W Jun.1976

9.CONSULTANT(S)
Sabo Technical Center

10.STUDY TEAM

No.of Members 25

Period Jul.1976-Aug.1979(37 months)

Total M/M	Japan	Field
161.13	92.88	68.30

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	405,534 (¥'000)
Contracted	307,198

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Southern slope of Mt. Merapi (total area 1,300 sq.km, project area 850 sq.km) in Central Java

2.PROJECT COST

(US$1,000) (US$1=220Yen=630Rp)

	Total Cost	Local Cost	Foreign Cost
1)	66,430		
2)			

3.CONTENTS OF MAJOR PROJECT(S)

1) Relocation plan (50,400 persons)
2) Afforestation plan (6,010 ha)
3) Sabo facilities (58 sabo dams; 79 bed consolidation; 116,070m embankment and revetment; 16,490m training levee; 12,810m water control; and 4 bridges
4) Warning and evacuation (1 telemeter monitoring center; 4 telemeter monitoring stations; 10 to 15 information centers)
5) Related facilities (26.7km main irrigation canals; 26.7km main roads; 12 road bridges; 11 micro hydro-power plants)
6) River improvement (control of meandering, channel improvement)

4.CONDITIONS AND DEVELOPMENT IMPACTS
The proposed project will control land erosion by rivers and volcanic debris on the southern slope of Mt.Merapi located to the north of Yogyakarta. It will provide stability to the life and productive activities of local inhabitants, and improve basic infrastructure for livelihood by sabo dams which will provide irrigation and hydroelectric power.

5.TECHNICAL TRANSFER
1) OJT;
2) Participation of the counterparts in the JICA training program;

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)

The Volcanic Sabo Technology Center was established by JICA as proposed by the study and four Japanese experts have been assigned to the center.
After the volcanic erruption in June 1984, JICA sent the Japanese expert team to review the project and propose urgent measures, for which an OECF loan was subsequently approved.

Dec.1985	OECF loan agreement signed (4,672 million yen)
1986	E/S completed
Oct.1989	Construction started
Jun.1992	Construction completed

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 メラピ火山砂防基本計画

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

PROJECT SUMMARY (M/P)

ASE IDN/A 101/80

Compiled Mar.1990
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Watershed Management Plan in Upper Musi Watershed South Sumatra

3.SECTOR
Forestry/Forestry & Forest Conservation

4.REFERENCE NO.

5.TYPE OF STUDY M/P

6.COUNTERPART AGENCY
The Directorate General of Forestry of The Republic of Indonesia

7.OBJECTIVES OF STUDY

8.DATE OF S/W Sep.1977

9.CONSULTANT(S)
Japan Forest Technical Association

Kokusai Kougyo Co., Ltd.

10.STUDY TEAM

No.of Members 22

Period Nov.1977-Mar.1980(30 months)

Total M/M	Japan	Field
109.00	64.00	45.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY
Aerial Photography Mapping

12.EXPENDITURE

Total	347,517 (¥'000)
Contracted	341,716

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
An Area of 4,000 sq.km in Upper Musi Watershed, South Sumatra Province

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)
The main components of the plan were proposed as follows:
1. Conduct land use zonings in order fo secure the forest area
2. Select production forests and exploit the forest resources in forest area
3. Improve preventive functions of forest area against floods and erosions
4. Confirm forest reserves and improve them
5. Afforest the critical areas immediately in order to prevent erosions
6. Improve the agricultural infrastructure

4.CONDITIONS AND DEVELOPMENT IMPACTS
The subject area is located in the western part of the South Sumatra province, in which the Sumatra Highway is stretched. Therefore this area has developed so that deforestation and erosion have taken place in Upper Musi Watershed. This Watershed management plan will enhance the protection of the subject area as well as Lower Musi Watershed.

5.TECHNICAL TRANSFER
1.To accept trainees out of counterparts 2.To conduct field works with counterparts 3.To conduct aerial-photo interpretation and transferring of its results onto maps with counterparts under the guidance of the member of study team

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
Based on the proposed plan, the authorities concerned has implemented a re-afforestation Project by self financing.
"South Sumatra Afforestation project" was implemented from 1979 to 1987 as technical cooperation project by JICA, and a feasibility study on "Industrial Plantation Forest Development" was implemented by JICA from 1988 to 1989.

2.MAJOR REASONS FOR PRESENT STATUS
The counterpart agency requested a technical expert to help to implement the watershed management plan.

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 南スマトラ州ムシ河上流流域管理計画

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

PROJECT SUMMARY (F/S)

ASE IDN/S 311/80

Compiled Mar.1986
Revised Mar.1993

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Small and Medium Sized Town Water Supply Projects in Sulawesi

3.SECTOR
Public Utilities/Water Supply

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
Dept.of Housing,Building,Planning & Urban Development,Ministry of Public Works, Indonesia

7.OBJECTIVES OF STUDY
Improvement of living and sanitary condition with implementation of water supply system

8.DATE OF S/W Mar.1980

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

10.STUDY TEAM

	Total M/M	Japan	Field
No.of Members 6			
Period Mar.1980-Sep.1980(7 months)			

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	74,192 (¥'000)
Contracted	59,043

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
South,Central and South-East of Sulawesi Province/ Sulawesi Island

2.PROJECT COST

(US$1,000) (US$1=629Rp)		Total Cost	Local Cost	Foreign Cost
	1)	5,134	2,268	2,866
	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)
Water supply facilities and transmission/distribution pipelines for the following cities(the numbers for transmission/distribution are diameter x length):
1. Donggala City
   capacity of system: 20 l/sec, transmission: 150mm x 200m, distribution: 200mm x 1,400m, 150mm x 2,400m, 100mm x 550m, 75mm x 1,250m
2. Yentena City
   capacity of system: 20 l/sec, transmission: 150mm x 2,150m, distribution: 150mm x 3,400m, 100mm x 3,200m, 75mm x 4,750m, 50mm x 600m
3. Luwuk City
   capacity of system: 40 l/sec, transmission: 300mm x 100m, distribution: 300mm x 300m, 200mm x 3,200m, 150mm x 1,800m, 100mm x 1,200m, 75mm x 750m
4. Baubau City
   capacity of system: 60 l/sec, transmission: 250mm x 3,000m, 150mm x 4,400m, distribution: 300mm x 1,600m, 250mm x 1,300m, 200mm x 1,350m, 150mm x 4,150m, 75mm x 6,350m
5. Enrekang City
   capacity of system: 20 l/sec, transmission: 100mm x 500m, 100mm x 400m, 200mm x 5,000m, distribution: 100mm x 2,500m, 200mm x 700m, 150mm x 2,250m, 100mm x 1,250m, 75mm x 1,100m

Note: Respective costs for the cities (in US$1,000) are Donggala: 968, Tentena: 785, Luwuk: 701, Baubau: 1,684 and Enrekang: 996.

Imp. Period: Nov.1982-Jul.1987

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility:	EIRR1)	FIRR1)
Yes	EIRR2)	FIRR2)
	EIRR3)	FIRR3)

Conditions and Development Impacts:
The Feasibility Study with the target year of 1985 was based on the review of a F/S conducted by local consultants data collection /review,population projection,future water demand (water consumption surveys were conducted as necessary base),water supply facility planning,
operation/maintenance study,institution /financial study.
Development impacts are; decrease in the work load for water conveyance at home,development of local industry,and improvement of sanitary condition in proposed cities which have been in very poor sanitary conditions.

5.TECHNICAL TRANSFER
Carried out a training program in Japan for 3 counterpart staff in water supply plannning,feasibility study,master plan and other related technical field.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

The project was implemented by the OECF loan.

June 1981 OECF loan apreement (559 million yen) for the town water supply projects in Donggala, Enrekang, Luwuk and Baubau.

2.MAJOR REASONS FOR PRESENT STATUS
(1) Effectiveness : effective in development of local industries and improvement of sanitation condition
(2) Priority : developed along with Indonesian Government plan

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 地方小都市上水道整備計画

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

PROJECT SUMMARY (F/S)

ASE IDN/S 312/80

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Reinforcement and Expansion Plan of P.T.IKI Makassar Shipyard at Ujung Pandang

3.SECTOR: Transportation/Marine Transportation & Ships

4.REFERENCE NO.:

5.TYPE OF STUDY: F/S

6.COUNTERPART AGENCY: Directorate General of Basic Metal and Machinery Industry

7.OBJECTIVES OF STUDY: Examination of conditions for improving the Makassar Shipyard and geological survey

8.DATE OF S/W: Mar.1980

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

10.STUDY TEAM

No.of Members 9

Period Jun.1980-Mar.1981(9 months)

Total M/M	Japan	Field
29.80	19.23	10.67

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	98,271 (¥'000)
Contracted	90,294

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Makassar Shipyard in Ujung Pandang, Sulawesi

2.PROJECT COST (US$1,000) (US$1=203 yen)

	Total Cost	Local Cost	Foreign Cost
1)	62,399	15,093	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

- New shipbuilding facilities
  135m x 20m (for 5,000DWT ships)
- Ship repairing facilities (a graving dock)
  140m x 18m x d. 7m (for 7,000DWT ships)

Imp. Period:

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	17.58	FIRR1)	13.39
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Assumptions:
(1) Project life of 20 years; (2) annual inflation of 10%; (3) initial investment of 12.70 billion yen; (4) loaned capital (8% annual interest) 70% and own capital 30%; (5) total benefits 34.76 billion yen and total costs 28.37 billion yen Development impacts:
(1) Increase of national income (10.2 billion yen per year); (2) growth of related industries (increase of gross sales 1 billion yen per year); (3) savings of foreign exchange (costs of ship purchases and repair works done overseas 3.5 billion yen per year); (4) increase of employment (700 jobs in shipbuilding and 2800 jobs in related industries and services); (5) indirect development effects in the surrounding areas Notes:1984 constant price; and annual figures pertain to the period from the 11th to 20th years

5.TECHNICAL TRANSFER: OJT during the joint preparation of the report

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

March 1985 OECF E/S loan agreement (535 millio yen)
May 1989 D/D completed

The project was changed to construct and repair ships up to 3,000DWT. However, because of the policy change in the Ministry of Industry, the application for OECF finance was withdrawn.

2.MAJOR REASONS FOR PRESENT STATUS: Change of policy

3.PRINCIPAL SOURCE OF INFORMATION: ①

和名 マカッサル造船所整備計画

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

PROJECT SUMMARY (F/S)

ASE IDN/S 313/80

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

2.NAME OF STUDY
Madiun River Urgent Improvement Project

3.SECTOR
Social Infrastructures/River & Erosion Control

4.REFERENCE NO.

5.TYPE OF STUDY F/S

6.COUNTERPART AGENCY
MPW Directorate General Water Resources

7.OBJECTIVES OF STUDY
To formulate an optimum project plan for the urgent flood control of the Madiun city and its surrounding area and to identify the effects of the improvement to the downstream areas.

8.DATE OF S/W Feb.1980

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

10.STUDY TEAM
No.of Members 8
Period Mar.1980-Dec.1980 (9 months)

Total M/M	Japan	Field
38.50	14.50	24.00

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	91,450 (¥'000)
Contracted	86,668

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Madiun City (Middle Java)

2.PROJECT COST

(US$1,000) (US$1=240Yen)		Total Cost	Local Cost	Foreign Cost
	1)	29,890	16,555	13,335
	2)			
	3)			

3.CONTENTS OF MAJOR PROJECT(S)
The principle work quantities required to the plan with the hriqhest EIRR are presented bellow:

Embankment of dykes	1,308,000	cu.m
Excavation of shortcut	525,000	cu.m
Wet masonry	44,000	sq.m
Construction of bridqe	3	sets
Modification of bridqe	2	sets
Construction of qate structure	4	sets
Treatment of spoil bank	210,000	sq.m
Land to be purchased	88	ha
Land to be hired	93	ha
House to be removed	454	pcs.

Imp. Period: Jun.1982-May.1985

4.FEASIBILITY AND ITS ASSUMPTIONS
Feasibility: Yes

EIRR1)	11.50	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:
The project was studied under the following conditions;
(1) Flood control in the upstream reach (Penoroqo City) is executed mainly at Bendo and Badoqan Dams.
(2) Flood control in the downstream reach is executed subsequently to the Project.
Flood discharqe of 1,200cu.m/s (17 years return period) is controlled in the Madiun City and its suburbs.
Annual benefit was estimated at 2.8 million US$

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

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

Sep.1981	OECF L/A signed (E/S on rehabilitation, 805 million yen)
Jan.1985	D/D completed
Feb.1985	OECF L/A signed (6.4 billion yen) for 1st stage construction (emergency flood control) Local cost: Rp.26.2 billion
Feb.1988	Construction started
Nov.1993	Construction to be completed

Note:
After the completion of D/D, additional revetment became necessary owing to the erosion. Because of the Rupiah devaluation, the loan balance was used to implement the additional revetment downstream.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 マディウン河緊急治水計画

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

PROJECT SUMMARY (Basic Study)

ASE IDN/S 501/80

Compiled Mar.1990
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY
Local Roads Support Works in Seven Provinces

3.SECTOR
Transportation/Road

4.REFERENCE NO.

5.TYPE OF STUDY: Basic Study

6.COUNTERPART AGENCY
Directorate General of Highways, Ministry of Public Works

7.OBJECTIVES OF STUDY
Development of information base on local roads

8.DATE OF S/W: .0

9.CONSULTANT(S)
International Engineering Consultants Association

10.STUDY TEAM
No.of Members
Period Feb.1980-Jul.1980(5 months)

	Total M/M	Japan	Field

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	66,138 (¥'000)
Contracted	

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
17 kabupatens in 7 provinces of Riau, Lampung, South Sumatra, North Sulawesi, South Sulawesi, Southeast Sulawesi and East Nusatenggara

2.PROJECT COST

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

3.CONTENTS OF MAJOR PROJECT(S)

In order to prepare basic data necessary for the appraisal by the OECF, the study analyzed the information (local roads, bridges and inventories) collected by the survey of the Government of Indonesia and undertook a supplementary survey.

4.CONDITIONS AND DEVELOPMENT IMPACTS

5.TECHNICAL TRANSFER

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
The study led to the OECF loan for the local roads improvement.

July 1980 OECF loan agreement on the purchase of road construction equipment (4,900 million yen)
Mar. 1984 The amount of the OECF loan reduced to 2,332 million yen

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①④

和名 地方道整備計画

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

PROJECT SUMMARY (M/P+F/S)

ASE IDN/S 203A/81

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY Indonesia

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

3.SECTOR
Transportation/Port

4.REFERENCE NO.

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

6.COUNTERPART AGENCY
Directorate Genaral of Sea Communication

7.OBJECTIVES OF STUDY
M/P aiming the year 2000
F/S on the development of the port and harbour aiming the year 1985

8.DATE OF S/W Mar.1980

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

10.STUDY TEAM

No.of Members 7

Period May.1980-May.1981(12 months)

Total M/M	Japan	Field
54.58	31.50	23.08

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	121,228 (¥'000)
Contracted	122,811

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Irian, Irianjaya Province

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
	1)	11,059	4,586	
(US$1=625Rp)	2)			

3.CONTENTS OF MAJOR PROJECT(S)

The development and expansion of Sorong Port located at the western end of West Irian.
Major projects in the long-term development plan through the year 2000 are;
West port area - Construction of new one berth
- Expansion of the existing concrete pier
- Remodelling of wooden jetty
East port area - Construction of new 6 parallel wharves

Major projects in the medium-term development plan are;
- Construction of one large wharf adjoining the existing concrete pier
- Building of one warehouse
- Purchasing of one tugboat and two forklifts

4.CONDITIONS AND DEVELOPMENT IMPACTS

In Maluku and Irianjaya province in Indonesia, transportation of commodities for daily life is greatly dependent on the sea transportation.
At present, there is only Ambon port in these two provinces as the center for the domestic port, and the area covered by this port is too wide.
Therefore, one more port will be added as the center for the domestic port by realizing this project, which will meet future increase in cargo volume of domestic and foreign trade, and smooth distribution of commodities.

5.TECHNICAL TRANSFER

(1) Counterpart training
Training for the methods of F/S carried out for 3 trainees.
(2) Report Writing

III. PRESENT STATUS OF STUDY RESULTS

1.PRESENT STATUS

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

(Description)
A feasibility study was subsequently undertaken.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 ソロン港整備計画

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

PROJECT SUMMARY (M/P+F/S)

ASE IDN/S 203B/81

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Development Project of the Port of Sorong

3.SECTOR: Transportation/Port

4.REFERENCE NO.:

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

6.COUNTERPART AGENCY: Directorate Genaral of Sea Communication

7.OBJECTIVES OF STUDY: M/P aiming the year 2000 F/S on the development of the port and harbour aiming the year 1985

8.DATE OF S/W: Mar.1980

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

10.STUDY TEAM

No.of Members 7

Period May.1980-May.1981(12 months)

Total M/M	Japan	Field
54.58	31.50	23.08

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	121,228 (¥'000)
Contracted	122,811

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Irian, Irianjaya Privince

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

	Total Cost	Local Cost	Foreign Cost
1)	11,059	4,586	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

Item(Middle-term Development Plan)	Size
Wharf	L: 180m D: -10m
Warehouse	40m, 100m
Open storage yard	2900 sq.m

Imp. Period: Feb.1982-Dec.1984

4.FEASIBILITY AND ITS ASSUMPTIONS — Feasibility: Yes

EIRR1)	18.60	FIRR1)	3.20
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

There are following conditions;
- Increase in GRDP

	Irianjaya Province	Maluku Province
1978 - 1985	5.1%	11.2%
1978 - 2000	5.0%	6.7%

- population growth rate of Sorong area is 2.5% between 1978 and 2000
- The 41% total investment cost is offered under the national development fund of Indonesia The following impacts are considered as development impacts. In Maluku and Irianjaya province in Indonesia, transportation of commodities for daily life is greatly dependent on the sea transportation. At present, there is only Ambon port in these two provinces as the center for the domestic port, and the area covered by this port is too wide.Therefore, one more port is added as a center for the domestic port by realizing this project which will the future increase in cargo volume of domestic and foreign trade, and smooth distribution of commodities.

5.TECHNICAL TRANSFER

(1) Counterpart training : Training for the methods of F/S was carried out for 3 trainees,(2) Report Writing : Draft, final report,etc were made together with OCDI members in Japan.

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

After the completion of F/S, the project was suspended. The F/S was reviewed in 1985 with Dutch assistance.

2.MAJOR REASONS FOR PRESENT STATUS

(1) Local reasons : Economical conditions in Indoenesia grows worse.

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 ソロン港整備計画

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

PROJECT SUMMARY (M/P+F/S)

ASE IDN/S 202A/81

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY
Low Cost Housing Project in Cengkareng

3.SECTOR
Social Infrastructures/Architecture & Housing

4.REFERENCE NO.

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

6.COUNTERPART AGENCY
National Urban Development Corporation

7.OBJECTIVES OF STUDY
Development of residential land development and medium-rise housing in the Cengkareng area

8.DATE OF S/W: Feb.1979

9.CONSULTANT(S)
Nihon Sekkei, Inc.

10.STUDY TEAM

No.of Members	Period		
14	Oct.1979-Feb.1981(17 months)		
Total M/M	Japan	Field	
78.83	56.29	22.54	

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY

12.EXPENDITURE

Total	187,718 (¥'000)
Contracted	178,461

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA
Cengkareng area of Jakarta

2.PROJECT COST

(US$1,000)		Total Cost	Local Cost	Foreign Cost
	1)	67,063	67,063	
(US$1=613Rp.)	2)			

3.CONTENTS OF MAJOR PROJECT(S)
The study proposed the construction of medium-rise apartments and two-story flats for lower-income families and maisonnet-type detached houses and terrace houses for higher-income families.
The project will build 7,500 housing units for 45,000 persons in the area of 110 ha. The study suggested the integrated development of 370 ha for the long term.

4.CONDITIONS AND DEVELOPMENT IMPACTS
Expected development impacts are savings of household consumption among the residents, increased income-earning opportunities, and better access to public facilities (hospitals, schools, mosques, etc.). The project will create employment during and after the construction and contribute to the productivity improvement of the construction materials industry and the stable supply of labor.

5.TECHNICAL TRANSFER
1) OJT on survey methods 2) Participation of 5 counterparts in the JICA training program.

III. PRESENT STATUS OF STUDY RESULTS

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

(Description)
Followed by the feasibility study.

2.MAJOR REASONS FOR PRESENT STATUS

3.PRINCIPAL SOURCE OF INFORMATION
①

和名 ローコスト住宅開発計画

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

PROJECT SUMMARY (M/P+F/S)

ASE IDN/S 202B/81

Compiled Mar.1986
Revised Mar.1992

I. OUTLINE OF STUDY

1.COUNTRY: Indonesia

2.NAME OF STUDY: Low Cost Housing Project in Cengkareng

3.SECTOR: Social Infrastructures/Architecture & Housing

4.REFERENCE NO.:

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

6.COUNTERPART AGENCY:

7.OBJECTIVES OF STUDY:

8.DATE OF S/W: Feb.1979

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

10.STUDY TEAM

No.of Members 14

Period Oct.1979-Feb.1981(17 months)

Total M/M	Japan	Field
78.83	56.29	22.54

11.ASSOCIATED AND/OR SUBCONTRACTED STUDY:

12.EXPENDITURE

Total	187,718 (¥'000)
Contracted	178,461

II. SUMMARY OF STUDY RESULTS

1.SITE OR AREA: Cengkareng area of Jakarta

2.PROJECT COST (US$1,000)

	Total Cost	Local Cost	Foreign Cost
1)	67,063	67,063	
2)			
3)			

3.CONTENTS OF MAJOR PROJECT(S)

- medium-rise apartments (five-story)	880 units
- two-story apartment flats	4,400 units
- terrace houses (one-story)	1,500 units
- detached houses	770 units
- related infrastructure development	

Imp. Period: Feb.1982-Mar.1984

4.FEASIBILITY AND ITS ASSUMPTIONS

Feasibility: Yes

EIRR1)	11.46	FIRR1)	
EIRR2)		FIRR2)	
EIRR3)		FIRR3)	

Conditions and Development Impacts:

Assumptions:
- Development of a housing complex which is more or less self-sufficient in "living, recreating, and working".
- Loan repayments over a period for housing units and lump-sum payments for housing lots (empty lots and commercial lots)

Development impacts:
- savings of household consumption among the residents
- increased income-earning opportunities
- better access to public facilities (hospitals, schools, mosques
- employment creation during and after the construction
- contribution to the productivity improvement of the construction materials industry

5.TECHNICAL TRANSFER

1) OJT on survey methods 2) Participation of 5 counterparts in the JICA training program

III. PRESENT STATUS OF STUDIED PROJECT

1.PRESENT STATUS

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

(Description)

Suspended after the completion of F/S, owing to the difficulty of securing soft loans.

Note:
It is necessary to consider economic background of the financial situation of the Indonesian government and other factors.

2.MAJOR REASONS FOR PRESENT STATUS

The difficulty of securing low-interest loans.
The governments of the developed countries and international lending organizations usually do not assign high priority to housing development.

3.PRINCIPAL SOURCE OF INFORMATION

①

和名 ローコスト住宅開発計画

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