

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1992
Revised Mar.1996

ASE THA/A 204B/90

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA				I. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input checked="" type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY		M/P for Tha Lat River Basin, Chachoengsao Providence. F/S for Bang Pakong River Basin which encompasses four Provinces of Chonburi.					
Agricultural Water Resources Development Project of Bang Pakong River Basin		2. PROJECT COST				(Description) - Thai government is taking necessary actions to avail financial support to proceed with the detailed design as well as the implementation of the highest priority project, the First Stage of Tha Lat River development project among the studied projects in the overall basin. - It is urgently required to secure a water source for the industrial and domestic use especially in the Metropolitan Bangkok and neighboring areas, in addition to the planned stabilized irrigation water supply. With this concern, the government is conducting necessary procedures for land acquisition as well as environmental study on the construction of Diversion Dam Project. - Thai government requested technical cooperation to Japanese government on the implementation of detailed design for the above-mentioned project. (FY 1991 Overseas Survey) The detail design will be conducted from 1992 to 1993. (FY 1993 Domestic Survey) F/S of Bang Pakong River Weir and Khulong Shat Dam was conducted. D/D of Bang Pakong River Weir was carried by JICA and was completed in 1993. Approximately 80% of land acquisition of the project site is completed. Bid is planning to initiate weir construction by government budget. D/D and EIA study of Khulong Shat Dam construction is conducted by government budget and preparatory work is now undertaken. (FY1994 Domestic Survey) D/D was completed by JICA in 1992-1993. The project was decided to be implemented by the Government budget. After the selection of consultant on Aug. 1994, bidding procedure for the construction and commencement of the work is to be completed in 1995. The budget is 132 million baht. (FY1995 Domestic Survey) At present, making a tender for the constructor of Ban Pakong River Weir and Khlong Shat Dam, Using allocated budget of the Government, F/S of four(4) Dam construction projects, Thandan, Huai Luang, Huai Simeang and Huai Chlai, have been completed and now EIA is progressing.	
3. SECTOR		M/P 1) 1,374,000 Local 719,000 Foreign 655,000 2) Cost Cost (US\$1,000) ES 1) 352,120 184,320 167,800 2) 3)					
Agriculture/(Agriculture in)General		3. CONTENTS OF MAJOR PROJECT(S)					
4. REFERENCE NO.		M/P (target year: 2000)				- Thai government is taking necessary actions to avail financial support to proceed with the detailed design as well as the implementation of the highest priority project, the First Stage of Tha Lat River development project among the studied projects in the overall basin. - It is urgently required to secure a water source for the industrial and domestic use especially in the Metropolitan Bangkok and neighboring areas, in addition to the planned stabilized irrigation water supply. With this concern, the government is conducting necessary procedures for land acquisition as well as environmental study on the construction of Diversion Dam Project. - Thai government requested technical cooperation to Japanese government on the implementation of detailed design for the above-mentioned project. (FY 1991 Overseas Survey) The detail design will be conducted from 1992 to 1993. (FY 1993 Domestic Survey) F/S of Bang Pakong River Weir and Khulong Shat Dam was conducted. D/D of Bang Pakong River Weir was carried by JICA and was completed in 1993. Approximately 80% of land acquisition of the project site is completed. Bid is planning to initiate weir construction by government budget. D/D and EIA study of Khulong Shat Dam construction is conducted by government budget and preparatory work is now undertaken. (FY1994 Domestic Survey) D/D was completed by JICA in 1992-1993. The project was decided to be implemented by the Government budget. After the selection of consultant on Aug. 1994, bidding procedure for the construction and commencement of the work is to be completed in 1995. The budget is 132 million baht. (FY1995 Domestic Survey) At present, making a tender for the constructor of Ban Pakong River Weir and Khlong Shat Dam, Using allocated budget of the Government, F/S of four(4) Dam construction projects, Thandan, Huai Luang, Huai Simeang and Huai Chlai, have been completed and now EIA is progressing.	
5. TYPE OF STUDY		1. 1st Stage: 3 sub-basins, 2 storage dams, 2 diversion weirs, agri.land dev. 46,400ha					
6. COUNTERPART AGENCY		2. 2nd Stage: 2 sub-basins, 2 storage dams, agri.land dev. 66,400ha					
Royal Irrigation Department, Ministry of Agriculture and Cooperatives		3. 3rd Stage: 8 sub-basins, 9 storage dams, agri.land dev. 294,400ha					
7. OBJECTIVES OF STUDY		The feasibility study was undertaken on the most downstream area (Tha Lat River Basin) next to the Bangkok Economic Sphere. Bang Pakong River is a tidal river, and it is impossible to utilize river water in the downstream areas during the dry season because of the rising sea water. 1) Stage I : 14,300ha Bang Pakong River-mouth Diversion Weir: length 170m, 5 gates (span 30m x height 10.6m) Pumping Station: 17 cu.m/s, dia.1,500mm, 4 pumps Main irrigation canals: left bank main 12km, right bank main 24km, other 0.7km Drainage canals: 14km 2) Stage II : 28,200ha Khlong S----- Storage Dam: 396 million cu.m Tha Lat diversion weir: length 33.5m, rehab. of rubber-type gates Tha Lat irrigation dev.: rehabilitation of main (44km) and secondary canals S----- irrigation dev.: construction of main (45km) and secondary canals					
8. DATE OF S/W		1989/3				Imp. Period: 1992. -1998.	
9. CONSULTANT(S)		Sanyu Consultants Inc.					
10. STUDY TEAM		4. FEASIBILITY AND ITS ASSUMPTIONS				Conditions and Development Impacts: [Planning Conditions] 1) Irrigation development assumes: introduction of double cropping on the existing paddy fields; expansion of agricultural land; shift from cassava to more profitable cash crops increase in yield. 2) Water requirements by households, industries and fisheries in 2000 are taken into account. 3) 13 storage dam sites are selected from 22 possible locations assuming cropping intensity of 150% over some 400,000 ha. 4) B/C ratios in M/P: highest area 1.83, lowest 0.23, whole 1.04. 5) EIRR: Stage I 14.0%, Stage II 9.7%, entire project 11.7%. [Development Impacts] 1) Irrigation development in parallel with water resource development can ensure efficient water utilization. 2) Increase in agricultural and inland fishery production. 3) Stable water supply for industries and households. 4) Creation of employment, better roads, better sanitary conditions, etc..	
No. of Members 13		Feasibility: Yes					
Period Sep.1989-Sep.1990(13 months)		EIRR1) 11.70 FIRR1) EIRR2) FIRR2) EIRR3) FIRR3)					
Total M/M		5. TECHNICAL TRANSFER				3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③	
Japan		Technical transfer was carried out through the field survey especially on the aspects of planning method and dam design technique					
86.24							
32.11							
54.13							
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY							
Survey of the quality of water							
12. EXPENDITURE							
Total		214,029 (¥000)					
Contracted		181,557					

和名 バンパコン川流域農業水利開発計画

[M/P+F/S]

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1992
Revised Mar.1996

ASE TIA/S 212B/90

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT																													
1. COUNTRY	Thailand	1. SITE OR AREA		Bangkok Metropolitan Administration Area		1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled																												
2. NAME OF STUDY	Bangkok Solid Waste Management (II)	2. PROJECT COST (US\$1,000)		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td style="width: 10%;">M/P 1)</td> <td style="width: 15%;">54,700 Local</td> <td style="width: 15%;">43,300 Foreign</td> <td style="width: 15%;">11,400</td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td>2)</td> <td>74,000 Cost</td> <td>40,200 Cost</td> <td>33,800</td> <td></td> </tr> <tr> <td></td> <td>F/S 1)</td> <td>18,000</td> <td>14,800</td> <td>3,200</td> <td></td> </tr> <tr> <td></td> <td>2)</td> <td>74,000</td> <td>40,200</td> <td>33,800</td> <td></td> </tr> <tr> <td></td> <td>3)</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					M/P 1)	54,700 Local	43,300 Foreign	11,400			2)	74,000 Cost	40,200 Cost	33,800			F/S 1)	18,000	14,800	3,200			2)	74,000	40,200	33,800			3)		
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	2)	74,000	40,200	33,800																															
	3)																																		
3. SECTOR	Public Utilities/Urban Sanitation	3. CONTENTS OF MAJOR PROJECT(S)				(Description) The director general of the Department of Public Cleaning (DPC) submitted a letter to the Governor of the Bangkok Metropolitan Administration, in October 1990, requesting the construction of the sanitary landfill and the incineration plant. The request has been studied by the administrators of the BMA. As of October 1991, the situation is as follows: 1. Construction of Sanitary Landfill at Ram Intra The project is suspended due to increase in the land purchase cost. 2. Construction of an Incineration Plant Whether or not to implement the project depends on the availability of subsidies of the Thai Government. The Bangkok Metropolitan Administration (BMA) has requested the subsidy from the Thai Government. 3. Improvement of Waste Collection Systems; No information available. (FY 1991 Overseas Survey) 1. Sanitary Landfill It seems unlikely to acquire sufficient area of land inside the city. DPC/BMA is considering remote places for populated urban areas from the site. DPC/BMA got a conclusion that railway would be advantageous for long-distance haulage and has proposed JICA to conduct a study on "Solid Waste Railway Transfer Transport Project." 2. Budgeting was made in FY 1990 for Detail Design of the project. (FY 1992 Overseas Survey) Waiting for the answer. (FY 1993 Overseas Survey) 1. Sanitary Landfill Land acquisition trouble in Ram Intra caused the project to discontinue. Then, BMA is preparing garbage transfer stations at Ram Intra, Nongkam and On-nuj and sanitary landfills at Nakhon Pathom and Chachoengsao. 2. Incineration Plant In FY 1994, BMA budgeted Bht.32 million to restudy the plant. After the study, the plant will be constructed by turnkey contract. (FY 1994 Domestic Survey) The expert on the incineration was dispatched to the Department of Public Cleaning of Bangkok by JICA in Jun.1994. (FY1995 Domestic Survey) The City of Bangkok made a tender for the engineering service in order to construct an incineration plant with a capacity of 1,200 ton/day. And the city intends to finance a half by its own budget.																													
4. REFERENCE NO.		<M/P> 1.1 Construction of Sanitary Landfill at Ram Intra a) Place: A burrow pit at Ram Intra. b) Capacity: 1830000ton c) Area: 15 ha., d) Construction Cost: \$18 million 1.2 Construction of Sanitary Landfill in the East Part of Bangkok a) Place: East part of Bangkok (Not specified), b) Capacity: 3,650,000 ton. c) Area: 123ha, d) Construction: \$36 million 2. Construction of an Incineration Plant a) Place: The existing On Nut dumping ground b) Capacity: 200t/d/unit * 3 units = 600t/d c) Gas cooling system: Water infection system d) Construction cost: \$74 million 3. Improvement on Waste Collection System <F/S> 1. Construction of Sanitary Landfill at Ram Intra a. Place: A burrow pit at Ram Intra b. Capacity: 1830000ton c. Area: 15 ha. d. Construction Cost: \$18 million 2. Construction of an Incineration Plant a. Place: The existing dumping ground at On Nut b. Capacity: 200t/d/unit * 3 units = 600t/d c. Gas cooling system: Water infection system d. Construction cost: \$74 million																																	
5. TYPE OF STUDY	M/P+F/S	Imp. Period: 1992. -2000.																																	
6. COUNTERPART AGENCY	Bangkok Metropolitan Administration (BMA) Department of Public Cleaning (DPC)	4. FEASIBILITY AND ITS ASSUMPTIONS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Feasibility:</td> <td style="width: 15%;">EIRR1)</td> <td style="width: 15%;">FIRR1)</td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> <tr> <td>Yes/No</td> <td>EIRR2)</td> <td>FIRR2)</td> <td></td> <td></td> </tr> <tr> <td></td> <td>EIRR3)</td> <td>FIRR3)</td> <td></td> <td></td> </tr> </table>				Feasibility:	EIRR1)	FIRR1)			Yes/No	EIRR2)	FIRR2)				EIRR3)	FIRR3)															
Feasibility:	EIRR1)	FIRR1)																																	
Yes/No	EIRR2)	FIRR2)																																	
	EIRR3)	FIRR3)																																	
7. OBJECTIVES OF STUDY	Preparation of a master plan and feasibility study on priority projects. To study feasibility of sanitary landfill and incineration plant.	Conditions and Development Impacts: <M/P, F/S> 1. Construction of Sanitary Landfill at Ram Intra With the introduction of sanitary landfill, sanitary and environmental conditions in and around a disposal site will remarkably improve. (The proposed sanitary landfill will be the first sanitary landfill of complete type in Thailand.) 2. Construction of an Incineration Plant The proposed incinerator will be the first modern incinerator of this scale. It will contribute to the BMA in acquiring experiment and know-how that will be needed in operating future incinerators of larger scale. It will contribute to the volume reduction of waste. 3. Improvement on Waste Collection Systems It will contribute to cost reduction and increase in collection efficiency.																																	
8. DATE OF S/W	1989/8	10. STUDY TEAM No. of Members 11 Period Dec.1989-Mar.1991(16 months) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Total M/M</td> <td style="width: 33%;">Japan</td> <td style="width: 33%;">Field</td> </tr> <tr> <td>64.98</td> <td>25.74</td> <td>39.24</td> </tr> </table>						Total M/M	Japan	Field	64.98	25.74	39.24																						
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64.98	25.74	39.24																																	
9. CONSULTANT(S)	EX Cor. Pacific Consultants International	11. ASSOCIATED AND/OR SUBCONTRACTED STUDY Water quality analysis, Chemical composition analysis of water, Geological survey, Topographic survey																																	
12. EXPENDITURE	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Total</td> <td style="width: 15%;">193,188 (¥'000)</td> </tr> <tr> <td>Contracted</td> <td>187,139</td> </tr> </table>	Total	193,188 (¥'000)	Contracted	187,139	5. TECHNICAL TRANSFER The following technique has been transferred: 1. Technique for preparing a master plan. 2. Technique for daily maintenance of collection vehicles. 3. Technique for time and motion study.																													
Total	193,188 (¥'000)																																		
Contracted	187,139																																		
		2. MAJOR REASONS FOR PRESENT STATUS 1. Construction of Sanitary Landfill Major reason is the increase in the land purchase cost. 2. Construction of Incineration Plant Major reason for delay is the shortage of fund. (FY 1991 Overseas Survey) The reasons are, in addition to hike in land price, dwindling land supply in the city area and the citizens' opposition against Solid Waste Management facilities in their urban living environment.																																	
		3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③																																	

和名 バンコク廃棄物処理計画

状況 (要約表添付文書)

ASE THA/S 212B/90	(M/P+F/S)
Name of Bangkok Solid Waste Management (II) Study	
Country	Thailand
Type of Study	M/P+F/S
Sector	Public Utilities/Urban Sanitation
Present Status: Implementing	
(Description)	
<p>The director general of the Department of Public Cleaning (DPC) submitted a letter to the Governor of the Bangkok Metropolitan Administration, in October 1990, requesting the construction of the sanitary landfill and the incineration plant. The request has been studied by the administrators of the BMA.</p> <p>As of October 1991, the situation is as follows:</p> <ol style="list-style-type: none">1. Construction of Sanitary Landfill at Ram Intra The project is suspended due to increase in the land purchase cost.2. Construction of an Incineration Plant Whether or not to implement the project depends on the availability of subsidies of the Thai Government. The Bangkok Metropolitan Administration (BMA) has requested the subsidy from the Thai Government.3. Improvement of Waste Collection Systems: No information available. <p>(FY 1991 Overseas Survey)</p> <ol style="list-style-type: none">1. Sanitary Landfill It seems unlikely to acquire sufficient area of land inside the city. DPC/BMA is considering remote places for populated urban areas from the site. DPC/BMA got a conclusion that railway would be advantageous for long-distance haulage and has proposed JICA to conduct a study on "Solid Waste Railway Transfer Transport Project."2. Budgeting was made in FY 1990 for Detail Design of the project. <p>(FY 1992 Overseas Survey) Waiting for the answer.</p> <p>(FY 1993 Overseas Survey)</p> <ol style="list-style-type: none">1. Sanitary Landfill Land acquisition trouble in Ram Intra caused the project to discontinue. Then, BMA is preparing garbage transfer stations at Ram Intra, Nongkam and On-nuj and sanitary landfills at Nokhon Pathom and Chachoengsao.2. Incineration Plant In FY 1994, BMA budgeted Bht.32 million to restudy the plant. After the study, the plant will be constructed by turnkey contract. <p>(FY 1994 Domestic Survey) The expert on the incineration was dispatched to the Department of Public cleaning of Bangkok by JICA in Jun.1994.</p> <p>(FY1995 Domestic Survey) The City of Bangkok made a tender for the engineering service in order to construct an incineration plant with a capacity of 1,200 ton/day. And the city intends to finance a half by its own budget and another half by the BOT method.</p> <p>(FY1995 Overseas Survey) An incinerator plant for hospital wastes were constructed in On Nut from Oct.1993 to Sep.1994, and started operation in July 1995. F/S for incinerator was done Oct.1993 to Sept.1995. The most prospective land is On Nut wher open dumping is going. The transfer station were constructed in Taling, under construction in Nong Kean, and one in On Nut started for preparation.</p>	

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1992
Revised Mar.1996

ASE THA/S 211B/90

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT			
1. COUNTRY	Thailand	1. SITE OR AREA				1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled		
2. NAME OF STUDY		Phuket Municipality, Thailand							
Sewerage and Drainage Improvement Project for Phuket Municipality		2. PROJECT COST (US\$1,000)		M/P 1) 42,463 Local Cost	25,478 Foreign Cost	(Description) In the proposed projects, sewerage and flood control projects, PWD requested and prepared the application through the Thai Government to Japanese Government regarding sewerage project for Japanese Grant Aid project, but it was not approved. The Thai Government will implement the project with its own finance. (FY 1991 Overseas Survey) Detail Design: From 1992 to 1993 Construction : From 1994 to 1996 (FY1993 Overseas Survey) Oct.92 - Feb.93 Preparation of bidding document Oct.93 - Dec.93 Bidding evaluation Mar.94 - Oct.96 D/D and implementation are scheduled. PWA will implement the project by turn-key contract. PWA's budget will cover total cost, 390 million baht. PWA's budget constraints caused reduction of designed sewerage flow from the JICA study. (FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) D/D was done from Aug.1994 to April 1995 by PWD budget of 11.3million Baht. The construction started in April 1995 by PWD budget of 377million Baht and will finish in Nov.1996			
				2) 14,896	6,703				
				3) 7,799	3,777				
3. SECTOR		3. CONTENTS OF MAJOR PROJECT(S)							
Public Utilities/Sewerage		<M/P> 1. Sewerage: 1) Designed Population: 78200 (Year 2006) 2) Designed Sewage Flow: 34500 cub.m/D (Daily Average) 3) Treatment Method: Oxidation Ditch Method, Drying Bed 4) Outline of Facilities: Length of Sewer: 41.1km Pump Station : 10 Treatment Plant: 1 2. Flood Control (Urgent Plan): 1) East Flooding: Length = 4.3km, Width = 13km, Excavation = 1500 thousand cub.m 2) River Improvement in the Town: Excavation: 33800 cub.m/ 1.3 km Embankment: 74400 cub.m/1.7 km ; Revetment: 0.8 km Bridge Construction: 6 Others: Road-side U-shaped, Drain Improvement. <F/S> 1) Sewerage: -Target Year : 2001 -Designed Population : 29600 -Designed Sewage Flow: 18300 cub.m/D (Daily Average) -Outline of Facilities: Length of Sewer: 14.3km Pumping Station: 4 Planned Treatment: 4 2) Flood Control: -East Flooding: Length = 3.4km, Width = 11m, Excavation = 442 thousand cub.m -River improvement in the Town: Excavation: 18400 cub.m Revetment : 10470 cub.m Bridge Reconstruction: 6 The implementation period for flood control component is four years.							
4. REFERENCE NO.		Imp. Period:							
5. TYPE OF STUDY		4. FEASIBILITY AND ITS ASSUMPTIONS							
M/P+F/S		Feasibility: EIRR1) 10.30 FIRR1) 3.20 Yes/No EIRR2) 12.50 FIRR2) 3.42 EIRR3) FIRR3)							
6. COUNTERPART AGENCY		10. STUDY TEAM							
Public Works Department Ministry of Interior		Conditions and Development Impacts: <M/P> At present, there is no public sewerage system in Phuket City. Human excreta are disposed through cesspools or septic tanks installed at almost all houses and buildings in the town area, with the effluent allowed to leach into the ground or discharge into the watercourse through street gutters or the nearest drain. The implementation of this project has following impacts and benefits in this study area. <F/S> 1. Sewerage System: -Reducing the content of water pollution for rivers and canals. -Improvement sea water pollution, where is the important place for the resort areas. -Increase the health benefit for island habitants. 2. Flood Control System: -Reduce the flood damage -Improvement Economic Activity in Study Area -Increase the land value.							
7. OBJECTIVES OF STUDY		Develop a comprehensive master plan for sewerage and flood control system for Phuket Municipality. Provided a feasibility study for proposed master plan of sewerage and flood control system							
8. DATE OF S/W		1989/2							
9. CONSULTANT(S)		Nippon Jogesuido Sekkei Co., Ltd. Nippon Kei Co., Ltd.							
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		5. TECHNICAL TRANSFER							
-Topographical Survey ; -Geological Survey -Water Quality Analysis		Conducted the training for three counterpart engineers in this project in Japan, and also held a seminar for the project planning and design in Bangkok, Thailand.							
12. EXPENDITURE		3. PRINCIPAL SOURCE OF INFORMATION							
Total 180,370 (¥000) Contracted 159,092		①, ②							

和名 プーケット市下水排水改善計画

[M/P+F/S]

PROJECT SUMMARY (F/S)

Compiled Mar. 1992
Revised Mar. 1996

ASE THA/A 314/90

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA				1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY Sukhothai Integrated Agricultural and Rural Infrastructure Development Project		Thung Sai Yart (5,600ha) and Nong Khon Kaen (1,300ha) in Sukhothai Provic					
3. SECTOR Agriculture/(Agriculture in)General		2. PROJECT COST		Total Cost	Local Cost	Foreign Cost	
4. REFERENCE NO.		(US\$1,000)	1)	17,597	4,964	12,633	
5. TYPE OF STUDY		US\$1=25 Bahts	2)				
6. COUNTERPART AGENCY Agricultural Land Reform Office (ALRO), Ministry of Agriculture and Agricultural Cooperatives		3)	3. CONTENTS OF MAJOR PROJECT(S)				
7. OBJECTIVES OF STUDY To make F/S on Integrated Agricultural Development in Thung Sai Yat and Nong Khon Kaen in Sukhothai		(1) Construction of Pond		Thung Sai Yart 14 places (2.4 MCM)	Nong Khon Kaen 8 places (0.32 MCM)	(Description) Presently, ALRO, the implementing agency, is seeking an external financing for the project implementation. However, because of the competing projects for external financing, it is unlikely for the project to be included in the application list for OECF loans in the near future. (FY1991 Overseas Survey) At present, priority or urgency of the project is not ranked high. (FY1993 Overseas Survey) Construction of 2 reservoirs and 7.3km of road improvement in Non Khon Ken and 40 km of farm road improvement and construction of 13 rural water supply facility were completed by government budget in 1993. Construction of water reservoir in Non Khon Khen is to be implemented from 1994. (FY1994 Domestic Survey) The executing agency had an idea to implement the project under the OECF loan. However, the application was turned down at the Government level and promoted for implementation with the Government budget. (FY1995 Domestic Survey) The implementation of this project by the governmental budget was investigated, however, there is no affirmative conclusion on this fiscal year due to the strict limitation of the budget and some other reasons.	
8. DATE OF SAV		1988/12	Imp. Period: 1991. -1996.				
9. CONSULTANT(S) Sanyu Consultants Inc.		4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No	EIRR1) 7.90 EIRR2) EIRR3)		FIRR1) FIRR2) FIRR3)
10. STUDY TEAM		Conditions and Development Impacts:					
No. of Members 10 Period Jul. 1989-Jul. 1990 (13 months)		1) The basic concept of the project follows the policy of the 6th 5-year plan.					
Total M/M Japan Field 47.70 19.04 28.66		2) The development concept based on diversified agriculture under rained condition could be applicable to other similar areas with demonstration effect.					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY Test Well Drilling & Geological Survey, Water Quality Test		3) ALRO could upgrade their engineering and managerial capabilities through project implementation.					
12. EXPENDITURE		4) The project would contribute to eradicating poverty and to solving regional income differential in backward villages through increasing income and upgrading living standard.					
Total		158,547 (¥000)		5. TECHNICAL TRANSFER			
Contracted		153,066		(1) On-the-Job Training (2) Seminar (Sukhothai & Bangkok) on Integrated Agricultural/Rural Development			
2. MAJOR REASONS FOR PRESENT STATUS						3. PRINCIPAL SOURCE OF INFORMATION	
1) The change in Japanese policy for her economic cooperation to Thailand. 2) Thai economic coordination agency is not willing to use an external loan for agricultural projects which do not have high economic feasibility.							
①, ②, ③							

PROJECT SUMMARY (D/D)

Compiled Mar.1992

Revised Mar.1996

ASE THA/S 405/90

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT		
1.COUNTRY	Thailand	1.SITE OR AREA		Area 31 sq.km in Central Bangkok		1.PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled	
2.NAME OF STUDY Area Traffic Control Project in Bangkok		2.PROJECT COST						Total Cost
		(US\$1,000)	1) 20,000	20,000	20,000			
		2)						
		3)						
3.SECTOR Transportation/Urban Transportation		3.CONTENTS OF MAJOR PROJECT(S)				(Description) (FY1993 Overseas Survey) Aug.92 - Jun.93 D/D was revised by BMA budget. It costed 40 million Baht. Jan.94 - Jul.95 Implementation is scheduled BMA budgeted 227 million Baht. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) ATC system was expanded from 143 intersections to 146 intersections and the construction will be completed until October, 1995. The second stage program was also expanded from 92 intersections to 226 and its D/D will be started from June 1996. The third stage is now under consideration and 200 intersections are included in the program. CCTV system was installed at 5spots but this system is under the control of not BMA but Police Department's Jurisdiction.		
4.REFERENCE NO.		1) ATC signalized intersections....143						
5.TYPE OF STUDY		2) Control center....The control center will be located on the 1st floor of the existing BMA, central computer and peripheral devices etc. will be provided.						
6.COUNTERPART AGENCY		3) Transmission system and communication lines will be installed.						
Bangkok Metropolitan Administration (BMA)		4) 141 local controllers and 460 vehicle detectors will be equipped.						
7.OBJECTIVES OF STUDY		5) 5 CCTV cameras will be provided at intersection.						
Detailed design study & Prepare the necessary documents for ATC system.		6) 67 intersections will be improved.						
8.DATE OF SAW		Imp. Period: 1990.5-1991.12						
1989/12		4.FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes	EIRR1) 74.00			FIRR1)
9.CONSULTANT(S)		Yachiyo Engineering Co., Ltd.		EIRR2)	FIRR2)			
Fukuyama Consultants International, Inc.				EIRR3)	FIRR3)			
10.STUDY TEAM		Conditions and Development Impacts: IRR of this project (stage 1) is as extremely high as 74 % and all the initial investment will be covered within 12.1 months after commencement under 12 % of discount rate. B/C ratio is as high as 7.5. Although nobody would deny that time has economic value, there are many arguments on how to measure it. In this study, time value is quantified based on the productivity of economically active population in the study area. Even in cases where this unit time value is admitted, there may be objections to apply this value to a small fraction of a few minutes at saved travel time. Therefore, taking only the VOC saving benefit which is tangible, IRR is re-calculated at 17.2 which shows the ATC project is still economically tangible.						
No.of Members 13								
Period Mar.1990-Nov.1991(8 months)								
Total M/M		Japan		Field				
52.36		25.66		26.70				
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		5. TECHNICAL TRANSFER				2.MAJOR REASONS FOR PRESENT STATUS		
- Intersection Configuration Survey		Counterpart training : 1 person (28 Sept., 1990 - 5 Oct., 1990)				The reason for the abovementioned delay of schedule may be the shortage of BMA's Traffic Engineering Division (TED) staff.		
- Underground Utility Lines and Materials								
12.EXPENDITURE						3.PRINCIPAL SOURCE OF INFORMATION		
Total		164,060 (¥000)				①, ②, ③		
Contracted		157,107						

PROJECT SUMMARY (M/P)

Compiled Mar.1993
Revised Mar.1996

ASE THA/S 109/91

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA		Whole of Thailand (Area: 511,000 sq.km, Population: 55 million)		1. PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY Toll Highway Development		2. PROJECT COST		Total Cost	Local Cost	Foreign Cost	(Description) DOH has submitted TOR for F/S on the inter-city toll motorway projects (644km of 4,300km) to the Government of Japan in Dec. 1990. In November 1992, S/W was signed and P/S on two routes (the total length: 260km) will be carried out. (FY1993 Overseas Survey) JICA is conducting F/S on following two routes. - Ban Fong - Chaa route - Lam pang - Chiangai RTG will conduct F/S on other routes by its own budget soon. (FY1994 Domestic Survey) The F/S has been implementing. (FY1995 Domestic Survey) F/S on the two routes had been completed on 1994. (FY1995 Overseas Survey) DOH has a policy to give priority to highway construction in Bangkok Metropolitan Area. Therefore, in rural area, BOT system will be applied for highway construction.
3. SECTOR Transportation/Road				(US\$1,000)			
4. REFERENCE NO.				1)	4,000,000	2,400,000	
5. TYPE OF STUDY				2)	6,000,000	3,600,000	
6. COUNTERPART AGENCY Department of Highways, Ministry of Transport and Communications		3. CONTENTS OF MAJOR PROJECT(S)		Construction of 4,300km inter-city toll motorway network. Phase 1 1991-1995 900km Phase 2 1996-2000 1,000km Phase 3 2001-2010 2,400km			
7. OBJECTIVES OF STUDY Study on the inter-city toll motorway network development		4. CONDITIONS AND DEVELOPMENT IMPACTS					
8. DATE OF S/W 1989/10		[Condition] The trip number in 2010 will be 3.4 times as much as that in 1990.					
9. CONSULTANT(S) Katahira & Engineers International Nippon Koei Co., Ltd.		[Development Impacts] Direct Benefit: - Savings in vehicle operation cost - Savings in time cost					
10. STUDY TEAM No. of Members 12 Period Feb.1990-Jun.1991(17 months)		[Indirect Effects] - Betterment of national development - Promotion of manufacturing, tourism, agriculture, fisheries and commercial activities. - Improvement in living conditions.					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY Traffic Surveys		5. TECHNICAL TRANSFER		2. MAJOR REASONS FOR PRESENT STATUS			
12. EXPENDITURE				About 600km inter-city toll motorways construction plan has been made in the 7th 5-year National Economic and Social Development Plan (1992-1996).			
Total 333,451 (¥000)		Opening of Seminar at BKK (Dec.1990) / Participation of the counterparts in the JICA training program / Collaboration with the counterparts / Employment of local consultant					3. PRINCIPAL SOURCE OF INFORMATION
Contracted 322,047				①, ②, ③			

和名 有料高速道路計画

[M/P, Basic Study, Other]

PROJECT SUMMARY (Other)

Compiled Mar. 1993
Revised Mar. 1996

ASE THA/S 605/91

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS	
1. COUNTRY	Thailand	1. SITE OR AREA	DOH roads within the area of the Outer Ring Road of Bangkok		I. PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	Traffic Operation Plan for Roads (follow-up)	2. PROJECT COST	Total Cost	Local Cost	Foreign Cost	(Description) In the Seventh Highway Development Plan (Oct. 1991-Sept. 1996), the budget of 10 billion baht is appropriated for traffic safety projects. These projects will be implemented together with projects proposed in the former TOFR Study. Projects for grade separations and the motorcycle lane program will be implemented under the construction project and the road maintenance project. (FY1993 Overseas Survey) DOH use the study results. RTG annual budget follows the results. (FY1994 Domestic Survey) (FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) Traffic data collection for Traffic Operation Plan of Roads have been implemented by means of computer-networking system. Most of the recommended improvement projects were implemented by DOH except the improvement of U-turn section.
3. SECTOR	Transportation/Road	(US\$1,000)	1) 8,000	2)		
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)				
5. TYPE OF STUDY	Other	The Dept. of Highways (DOH), Ministry of Transport and Communications, prepared the 7th Highway Development Plan (Oct. 1991-Sept. 1996), by partly incorporating the findings and proposals of the JICA TOFR Study (Traffic Operation Plan for Roads) conducted from Jan. 1989 to July 1990. The present follow-up study of the TOFR Study was conducted in response to the additional request of the DOH, and aimed to propose a traffic operation plan for reducing traffic accidents in the area inside the Outer Ring Road of Bangkok, to prepare preliminary designs for selected sections, and to continue the transfer of technology to the Thai counterparts. In consultation with DOH, the present study selected ten sites out of 59 sections under study and prepared preliminary designs (scale: 1/500) for improvement as follows: 1) Road improvement curvature improvement and installation of a motorcycle lane: S-44; 2) Improvement of intersections with signals: S-18 and S-22; 3) Creation of grade separation: S-19 and S-48; 4) Improved channelization at intersections and median openings: S-10, S-15, and S-24; and 5) Improved signalization and channelization at intersections: S-43, S-52, and S-48.				
6. COUNTERPART AGENCY	Department of Highways, Ministry of Transport and Communications	4. CONDITIONS AND DEVELOPMENT IMPACTS			2. MAJOR REASONS FOR PRESENT STATUS	
7. OBJECTIVES OF STUDY	1. To formulate the traffic operation plan. 2. To recommend a suitable road improvement plan. 3. To transfer technology	Criteria for Selection: Sections for the follow-up study were selected according to the following criteria. 1) Sections for which traffic controllers, road users and local residents strongly request earliest improvement. 2) Sections which are considered most dangerous on the basis of the analysis of accidents and other traffic-related data. 3) Sections which are judged as requiring urgent improvement at the time of field observations. In consultation with the DOH, 59 sections were selected for the follow-up study. 24 sections were found to require improvements of intersections, 6 sections to require regular road improvement, and 29 sections to require measures for pedestrian safety. Ten sites for preliminary designing were selected according to the following criteria. 1) Sections with obvious traffic congestions and risks where improvements will immediately realize desirable effects. 2) Sections requiring the types of improvements which are applicable to other sections. 3) Sections for which it is judged necessary to draw preliminary designs of the proposed specific improvements. Expected Impacts: Implementation of proposal improvement plans will substantially contribute to the improvement of the very serious road traffic problems on road under jurisdiction of DOH, in particular the heavy traffic condition and frequent occurrence of traffic accidents.				
8. DATE OF S/W	1990/9	5. TECHNICAL TRANSFER			3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③	
9. CONSULTANT(S)	Central Consultant, Inc. Oriental Consultants Co., Ltd.	By applying the results of the former TOFR Study concretely, much more technology was transferred to the Thai counterparts.				
10. STUDY TEAM	No. of Members 6 Period Apr. 1991-Nov. 1991 (7 months)					
		Total M/M	Japan	Field		
		21.96	1.96	20.00		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Topographic Survey Traffic Survey					
12. EXPENDITURE						
		Total	77,234 (¥000)			
		Contracted	76,828			

和名 道路交通運用計画 (アフターケア)

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1993

Revised Mar.1996

ASE THA/A 205B/91

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA				1. PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY		Anphoe Phra Yun, Changwat Khon Kaen, North-east Thailand					
Integrated Rural Development of Salt-affected Land in Northeast Thailand		2. PROJECT COST (US\$1,000)		M/P 1) 50,000 Local Cost	23,000 Foreign Cost	27,000	
		US\$1=25.0 Bahts		F/S 1) 12,600	4,800	7,800	
3. SECTOR		3. CONTENTS OF MAJOR PROJECT(S)				(Description) Japanese government excluded Thailand from acceptor of Japan's grant aid assistance, and it is confirmed at the annual meeting of grant aid and technical assistance in FY 1992. The request of this project for grant aid was listed by DTEC, however it was not listed in the formal request because of the low priority in the Thai government. (FY 1993 Overseas Survey) No additional information available. DLD recognize that it is difficult to secure financial arrangement for the implementation of the project. DLD is planning to reduce project scale from 4,500 to 800ha and to implement as a verification trial, however details is not yet known. (FY1994 Domestic Survey) The executing agency has a plan to implement a small scale trial project for rural and land development, and is also seeking a possibility to implement a pilot project using foreign loan. (FY1995 Domestic Survey) The project to carry out the small-scaled verification by means of foreign loan did not have any progress. At present, investigation of the possibility to carry it out by the Governmental budget is underway.	
Agriculture/(Agriculture in)General		<M/P>Major project components 1) Irrigation Facilities: Total gross area 3,715ha; 6 new weirs & rehab. of 11 existing weirs; 27 new ponds & rehab. of 3 existing ponds; 50 pumps 2) Drainage Facilities: Drainage improvement (5,000ha) 3) Rural Road: 31km improvement & rehab. of 3 bridges 4) Rural Water Supply: 4 Villages (3,800 persons) 5) Forestry: Afforestation 583ha, Agro-forestry 15,830ha 6. Social Services: Training and recreation, Market facilities <F/S>The pilot area is selected to represent major development components which characterize the entire study area. 1) Irrigation facilities: Two sites along Huai Yang (158ha and 166ha) and one site along the canal to Nong Khu Weir (57ha) 2) Drainage improvement: 820ha (salt-affected land 300ha, slightly salt-affected land 520ha) 3) Rural Road: Surface raising at 10 flooded places (total 1km); concrete drainage pipes (10 places); simple asphalt paving within 15 villages (total 7.5km) 4) Rural Water Supply: 4 Villages (3,800 persons) 5) Forestry & Social Services: Training and recreation, Market facilities *Project life of M/P and F/S is assumed 50 years.					
4. REFERENCE NO.		Imp. Period: 1992. -1997.					
5. TYPE OF STUDY		4. FEASIBILITY AND ITS ASSUMPTIONS					
M/P+F/S		Feasibility: EIRR1) 9.50 FIRR1) Yes/No EIRR2) FIRR2) EIRR3) FIRR3)					
6. COUNTERPART AGENCY		Conditions and Development Impacts: <M/P><Assumptions>: 1) Irrigation and salination control 2) Introduction of a agroforestry system 3) Agricultural diversification <Impact>Quantifiable benefits are estimated to be 87.3 mill. Bahts (agriculture 78.1, inland fisheries 4.7, village water supply 0.8, and rural road 3.7), with an EIRR of 8.1%. <F/S><Assumptions> 1) Grassland improvement in severely salt-affected land for animal grazing (210ha); 2) Paddy cultivation (2,150ha); 3) Agroforestry (1,840ha) <Impacts> 1) 2.2-time increase of rice production; 2) intensive horticulture (tomato & watermelon); 3) 1.7-time increase in number of cattle /water buffaloes; 4) 4.3-time increase of the area planted to mulberry. Quantifiable benefits are estimated to be 17.4 million bahts (agriculture 15.6, inland fisheries 0.5, village water supply 0.8, and rural road 0.5 million). Annual gross farming income is estimated to be 7,272 bahts without project, but 11,820 bahts (rain-fed paddy farmers) and 26,990 bahts (irrigated paddy farmers) with project.					
7. OBJECTIVES OF STUDY		5. TECHNICAL TRANSFER					
Formulation of a Master Plan and economic evaluation of the pilot project		On-the job training through field survey and seminar in Khon Kaen.					
8. DATE OF SAW		2. MAJOR REASONS FOR PRESENT STATUS					
1989/11		Since grant aid by Japanese Government is difficult, this project will be financed by Thai government. However, project-type technical assistance can be sought.					
9. CONSULTANT(S)		3. PRINCIPAL SOURCE OF INFORMATION					
Sanyu Consultants Inc.		①, ③					
10. STUDY TEAM							
No. of Members 12							
Period Mar.1990-Oct.1991 (7 months)							
Total M/M 65.00							
Japan 27.30							
Field 37.70							
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY							
Survey of river profile and section Topographic Survey (4,500ha) Shallow well drilling							
12. EXPENDITURE							
Total 253,905 (¥000)							
Contracted 237,071							

和名 東北タイ塩害地域農村総合開発計画

[M/P+F/S]

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1993
Revised Mar.1996

ASE THA/S 213B/91

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT																															
1.COUNTRY	Thailand	1.SITE OR AREA			1.PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled																														
2.NAME OF STUDY Road Development in the Southern Region		Southern region in Thailand			(Description) Nineteen projects out of the F/S and Pre-F/S studies of this Road Development Study in the Southern Region are included in the road development plan by DOH in the Seventh Five Year Plan (1992-1996). The importance of the Phuket and Surat Thani roads are particularly recognized by the DOH. (FY1993 Overseas Survey) There is no subsequent study after the JICA study. However, the Department has been conducting road development in the region by RTG annual budget in accordance with the National Highway Plan. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas survey) DOH has been conducting road development in the region according to the JICA's study. Phuket Road, Surat Thani Road and Krabi-Khanom Link are under D/D. The other project will be implemented in the 8th 5year plan.																															
3.SECTOR Transportation/Road		2.PROJECT COST (US\$1,000)																																		
4.REFERENCE NO.		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">M/P 1)</td> <td style="width: 15%;"></td> <td style="width: 15%;">Local Cost</td> <td style="width: 15%;"></td> <td style="width: 15%;">Foreign Cost</td> <td style="width: 15%;"></td> </tr> <tr> <td>2)</td> <td></td> <td>2,516</td> <td></td> <td>2,516</td> <td></td> </tr> <tr> <td>F/S 1)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					M/P 1)		Local Cost		Foreign Cost		2)		2,516		2,516		F/S 1)						2)						3)					
M/P 1)		Local Cost		Foreign Cost																																
2)		2,516		2,516																																
F/S 1)																																				
2)																																				
3)																																				
5.TYPE OF STUDY M/P+F/S		3.CONTENTS OF MAJOR PROJECT(S)																																		
6.COUNTERPART AGENCY Department of Highways Ministry of Transport and Communications		<p><M/P>The road improvement M/P cumfill 2001 is as follows: 1. Widening to six lanes : 150km 2. Widening to four lanes : 1,210km 3. Widening to seven-meter lanes: 970km (in total: 2,330km) 4. Solid crossing of multi-lane roads 5. Pavement completion of provincial roads 6. Upgrading of substandard roads to six-meter pavement 7. Bypass construction in the urban areas and major towns The master plan projects with a target completion year 1996 is as follows: 1. Construction of new roads : 120km 2. Construction of additional lanes: 780km 3. Widening to seven-meter lanes : 1,460km 4. Widening to six-meter lanes : 130km 5. Reconstruction and upgrading : 132km (in total: 2,622km)</p> <p><F/S> The priority projects with the target year 1996 are as follows: [No. / Project / Length(km) / Cost(in mil.bath)] [NC-1 / Chumphone Road / 9.1 / 110.2] [AD-2-1 / Phuket Road / 38.4 / 612.6] [AD-1-2 / Surat Thani Road / 40.1 / 458.6] [NC-5 / Connection 4/406 / 24.1 / 285.3] [WD7-4-1 / Hua Sai Road / 96.3 / 215.6] To carry out a study on required transport capacity of the Krabi-Khanom link which consists of the Seashore Development Plan (SSDP: the isthmus transformation to new international economic zone through the construction of "Trans Thai Land Bridge"). The project and construction costs of three route alternatives are as follows: [Plan / Project Cost (in mil.bath) / Construction Cost (in mil.bath)] [A / 8,442.2 / 6,365.5] [B / 9,419.6 / 7,264.4] [C / 8,438.8 / 5,634.9]</p> Imp. Period: 1992. -1996.																																		
7.OBJECTIVES OF STUDY 1)To carry out F/S on the selected projects in the M/P; 2)to carry out F/S on the Krabi-Khanom link as a part of the Southern Seashore Development Plan(SSDP); and 3)To perform technology transfer to Thai counterpart personnel in the course of study.		4.FEASIBILITY AND ITS ASSUMPTIONS																																		
8.DATE OF S/W 1989/10		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Feasibility:</td> <td style="width: 15%;">EIRR1)</td> <td style="width: 15%;">14.80</td> <td style="width: 15%;">HRR1)</td> <td style="width: 15%;"></td> </tr> <tr> <td>Yes/No</td> <td>EIRR2)</td> <td>13.70</td> <td>HRR2)</td> <td></td> </tr> <tr> <td></td> <td>EIRR3)</td> <td>14.80</td> <td>HRR3)</td> <td></td> </tr> </table>			Feasibility:	EIRR1)	14.80	HRR1)		Yes/No	EIRR2)	13.70	HRR2)			EIRR3)	14.80	HRR3)																		
Feasibility:	EIRR1)	14.80	HRR1)																																	
Yes/No	EIRR2)	13.70	HRR2)																																	
	EIRR3)	14.80	HRR3)																																	
9.CONSULTANT(S) Pacific Consultants International Oriental Consultants Co., Ltd.		Conditions and Development Impacts: <M/P> Impact:1. Capacity increase of national roads linking major urban centers. 2. Capacity increase of roads near urban districts including bypass construction 3. Road construction linking provincial capitals especially those in the west coast and southern areas near national boarder. 4. Upgrading of substandard roads to six-meter pavements. 5. Attaching importance to disaster prevention and traffic safety. 6. Environment preservation in road construction especially in the mountainous districts. <F/S> The EIRRs of priority projects with the target year 1996 are as follows.[No. / Project / EIRR(%)] [NC-1 / Chumphone Road / 69.9] [AD-2-1 / Phuket Road / 69.2] [AD-1-2 / Surat Thani Road / 52.3] [NC-5 / Connection 4/406 / 52.3] [WD7-4-1 / Hua Sai Road / 34.3] The project economic costs and EIRRs of three alternatives of the Krabi-Khanom link are as follows: [Plan / Project Economic Cost(in mil.bath)/EIRR(%)] [A / 8,442.2 / 14.8] [B / 9,419.6 / 13.7] [C / 8,438.8 / 14.8]																																		
10.STUDY TEAM No.of Members 8 Period Feb.1990-Sep.1991(20 months)		5.TECHNICAL TRANSFER																																		
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Total M/M</td> <td style="width: 15%;">Japan</td> <td style="width: 15%;">Field</td> <td style="width: 15%;"></td> </tr> <tr> <td>67.98</td> <td>5.73</td> <td>62.25</td> <td></td> </tr> </table>		Total M/M	Japan	Field		67.98	5.73	62.25		Methods of Traffic Demand Forecast and Computer Utilization																										
Total M/M	Japan	Field																																		
67.98	5.73	62.25																																		
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY Social and Economic Survey Soil Test Traffic Survey		6.MAJOR REASONS FOR PRESENT STATUS																																		
12.EXPENDITURE		7.PRINCIPAL SOURCE OF INFORMATION																																		
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Total</td> <td style="width: 15%;">277,624 (¥'000)</td> </tr> <tr> <td>Contracted</td> <td>273,090</td> </tr> </table>		Total	277,624 (¥'000)	Contracted	273,090	①, ②, ③																														
Total	277,624 (¥'000)																																			
Contracted	273,090																																			

PROJECT SUMMARY (F/S)

Compiled Mar.1993
Revised Mar.1996

ASE THA/A 315/91

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT					
1. COUNTRY	Thailand	1. SITE OR AREA		4 Provinces (Phitsanulote, Sukhothai, Kamphaeng phet and Tak)		1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input checked="" type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled				
2. NAME OF STUDY	Integrated Rural Development Project at Lower North Thailand	2. PROJECT COST		Total Cost	Local Cost			Foreign Cost			
3. SECTOR	Agriculture/(Agriculture in)General			1) 115,300	57,900	57,400					
4. REFERENCE NO.				2)							
5. TYPE OF STUDY	F/S			3)							
6. COUNTERPART AGENCY	Office of Accelerated Rural Development, Ministry of Interior.	3. CONTENTS OF MAJOR PROJECT(S)				(Description) A Project-type Technical Cooperation is under consideration. There is no possibility of OECF loan. (FY1992 Overseas Survey) Waiting for the answer. (FY 1993 Overseas Survey) The most urgent site, Fai Non Kho, was selected among 4 project sites and dam construction is planned to be initiated by government budget from 1994. Implementation of other related construction such as irrigation canals is not known yet. In Feb. 1993 ARD made official request for JICA long term expert to DETC. (FY1994 Domestic Survey) Fai Non Kho project among four projects is planned to be implemented with the budget of 48 million Baht. At present, bidding procedure is under-way. ARD will become a supervisor. For the second project D/D works are on-going to be implemented using the Government budget. (FY1995 Domestic Survey) New technological experts were despatched by JICA on Apr., 1995, to promote the implementation of this project. It has been concluded to request a promotion survey for certain region including 4 targetted areas of the project in order to get the financial cooperation in the field of agricultural and marine industry. At present, it is under examination to adopt above conclusion or not by "the Agricultural Development Association".					
7. OBJECTIVES OF STUDY	- Master plan on integrated rural development project of 4 provinces - Feasibility study of 4 model projects	1. Irrigated agriculture development - Irrigation of 9,300ha - Improvement of rainfed agriculture - Development of sericulture, cattle raising and inland fisheries (108 projects) 2. Rural road development - Construction of rural roads (1,070km) - Pavement of existing roads (60km) 3. Rural water supply (574 deep wells) 4. Rural infrastructure development - Rural youth and agriculture technology training - Cottage industry groups working facilities (36)									
8. DATE OF S/W	1990/2	4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No	EIRR1) 7.80			FIRR1)			
9. CONSULTANT(S)	Sanyu Consultants Inc. Pacific Consultants International			EIRR2)	FIRR2)			EIRR3)			
10. STUDY TEAM	No. of Members 10 Period Jun.1990-Aug.1991(14 months) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Total M/M</td> <td style="width: 33%;">Japan</td> <td style="width: 33%;">Field</td> </tr> <tr> <td style="text-align: center;">66.90</td> <td style="text-align: center;">26.70</td> <td style="text-align: center;">40.20</td> </tr> </table>	Total M/M	Japan	Field	66.90			26.70	40.20	Conditions and Development Impacts: 1. Associated projects (education, public health, agro-industry) shall be implemented under the coordination by National Rural Development Coordinating Center. 2. For effective implementation of the project, the proposed 4 model projects shall be implemented in advance. 3. Increase in income through improvement of agricultural productivity and creation of job opportunity. 4. Improvement of quality of life.	
Total M/M	Japan	Field									
66.90	26.70	40.20									
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Topographic mapping Analysis of soil and water samples	5. TECHNICAL TRANSFER				2. MAJOR REASONS FOR PRESENT STATUS					
12. EXPENDITURE	Total 222,913 (¥'000) Contracted 218,890	Seminar in integrated rural development at Lower North Thailand in August, 1992 in Bangkok.				3. PRINCIPAL SOURCE OF INFORMATION					
						①, ③					

PROJECT SUMMARY (M/P+F/S)

Compiled Mar. 1994
Revised Mar. 1996

ASE THA/A 206B/92

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT			
1. COUNTRY	Thailand	1. SITE OR AREA		Ubon Ratchathani Province and Si Sa Ket Province (717sq. Km)		1. PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="radio"/> Completed <input type="radio"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="radio"/> Implementing <input type="radio"/> Processing <input type="checkbox"/> Discontinued or Cancelled		
2. NAME OF STUDY	Lam Dom Yai Basin Irrigation Project	2. PROJECT COST (US\$1,000)						M/P 1) 2) 3)	Local Cost
3. SECTOR	Agriculture/Irrigation, Drainage & Reclamation			1) 193,800	83,400	110,400	(Description) Through final report was submitted in December 1992, there has been no action taken by Thai Government to date for the implementation of the proposed project. As for the information by the officials concerned, the executing agency intends to implement the project for possible poverty alleviation in the North-East Region of Thailand as soon as possible, but the priority given by the Central Government is rather low. (FY1993 Overseas Survey) Related Thai laws require Environmental Impact Assessment on the project. RID requested for FY 1995 budget to conduct the EIA. If the budget is approved, RID will conduct F/S including EIA. (FY1994 Domestic Survey) Terms of Reference for EIA study are making to secure the budget of EIA, and will be completed by the end of 1994. (FY1995 Domestic Survey) The TOR of EIA has been completed. However, the implementation is postponed to next fiscal year due to lack of the budget.		
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)							
5. TYPE OF STUDY	M/P+F/S	<M/P> The irrigable areas form 29 new water resources were selected in the river basin, and the Lam Dom Yai Project was the one with highest priority. <F/S> 1. Water Resource Development - construction for D-28 Dam (Storage capacity=117.1MCM) 2. Irrigation and drainage system Development - construction for irrigation and drainage system (benefit area=4,000ha). 3. Irrigated Agriculture - establishment for land use plan, planted area and farming practices 4. Improvement for Agricultural support policy							
6. COUNTERPART AGENCY	Royal Irrigation Department, MDAC	7. OBJECTIVES OF STUDY							
- feasibility study for the selected area with high priority.									
8. DATE OF SAW	1990/12	8. FEASIBILITY AND ITS ASSUMPTIONS							
9. CONSULTANT(S)	Sanyu Consultants Inc. Naigai Engineering Co., Ltd.								
10. STUDY TEAM		Imp. Period: 1993. -1999. Feasibility: EIRR1) 9.00 FIRR1) Yes/No EIRR2) FIRR2) EIRR3) FIRR3)							
No. of Members 10 Period Oct. 1991-Sep. 1992 (12 months) <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Total M/M</td> <td style="text-align: center;">Japan</td> <td style="text-align: center;">Field</td> </tr> <tr> <td style="text-align: center;">30.90</td> <td style="text-align: center;">13.00</td> <td style="text-align: center;">17.90</td> </tr> </table>						Total M/M		Japan	Field
Total M/M	Japan	Field							
30.90	13.00	17.90							
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		Conditions and Development Impacts: <M/P> Selection of Priority Development Project - B/C ratio - scale of irrigable area - reservoir area condition - income level - soil suitability - civil work condition Project Benefits - water resources development - land resources development - irrigation development - Rainfed Agricultural development <F/S> Conditions - water resources development for rice crop in rainy season - improvement for farming practices in rainfed agricultural area - land use plan for forest preservation Project Benefits - crop benefits - fishery benefits							
12. EXPENDITURE						5. TECHNICAL TRANSFER			
<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Total</td> <td style="text-align: right;">223,873 (¥000)</td> </tr> <tr> <td style="text-align: center;">Contracted</td> <td style="text-align: right;">220,086</td> </tr> </table>		Total	223,873 (¥000)	Contracted	220,086	Technical transfer was carried through the study			
Total	223,873 (¥000)								
Contracted	220,086								
		2. MAJOR REASONS FOR PRESENT STATUS							
		1. higher project cost 2. compensation for submerged area 3. financial difficulties							
		3. PRINCIPAL SOURCE OF INFORMATION							
		①, ②							

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1994
Revised Mar.1996

ASE THA/S 214B/92

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT																									
1.COUNTRY	Thailand	1.SITE OR AREA				1.PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled																								
2.NAME OF STUDY		Bangkok Metropolitan Area (Bangkok, Pathum Thani, Samutprakarn, Nonthaburi) & the surrounding area (Nakhon Pathum, Samut Sakhon, Ayutthaya).																													
Regional Development Plan for Telecommunication Networks in the Bangkok Metropolitan Area		2.PROJECT COST (US\$1,000)		Local Cost	Foreign Cost	(Description) <M/P> Thai Government employed a BTO (Build, Transfer and Operation) scheme for the implementation of the seventh TOT ESDP expansion project (192-1996). Three million telephone lines are to expand in the whole country by the BTO scheme. In the Bangkok Metropolitan Area, Telecom Asia Co. was awarded concession by government to construct and maintain two million local telephone lines. The private company is now under the construction stage. The study report is referred by TOT to control the expansion project, and some targets proposed for upgrade service quality are utilized in their corporate plan. (FY1993 Overseas Survey) <M/P> CFO used this M/P for following projects. 1. Rehabilitation Project (1994-2000) 2. Analog Switching Replacement Project (1994-2000) 3. Public Phone Service Expansion Project (1994-95) 4. Network Reliability Improvement Project (1995-97) Additionally, CFO is to conduct following studies. Regional Development Plan for Telecommunication Network in Provincial Area (1993-94) Revision Study on a Regional Development Plan for Telecommunication Networks in the Bangkok Metropolitan Area (1994-95) <F/S> On the suggestion of this study report, the request for an approval of implementation of 26 projects, suggested in the report, was submitted to the Management Committee of TOT by Corporate Planning Office of TOT and it is now under consideration in the committee. (FY1993 Overseas Survey) Although CFO submitted four project proposals to TOT Managing Committee, the Committee has not approved them yet. Financial sources are under consideration. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information.																									
3.SECTOR		US\$1=25 Baht.		1) 7,926,560	3,181,800			4,744,760																							
Communications & B/Telecommunication				2) 1,156,640	487,680			668,960																							
4.REFERENCE NO.		3.CONTENTIS OF MAJOR PROJECT(S)																													
5.TYPE OF STUDY		<M/P> 1. To meet the telephone demand at the end of FY 1997 in the Bangkok Metropolitan Area and at the end of FY 2002 in the surrounding area. The outline of the telecommunication expansion plan is calculated. 2. The outline of the rehabilitation plan for upgrade of the telecommunication service quality is as follows; (1997-2007 total) Switching system: 356,000 lines capacity, Transmission system: 87,000 circuits, Local cables: 431,000 pairs <F/S> "Improvement of fault ratio" and "Improvement of call completion ratio" were selected for the study objectives to improve telecommunications service quality. The major projects proposed are as follows: 1) Rehabilitation of local cables - replacement of drop wires with cables and renewal of drop wires - replacement of local cables 2) Check and consulting for customer premises 3) Replacement of public telephone sets 4) Changing P.D. timing 5) Promotion of Mult-hunting system 6) Increasing number of circuits (switching, transmission) 7) Dial consulting activity 8) Expansion of subscriber lines																													
6.COUNTERPART AGENCY																															
Telephone Organization of Thailand (TOT), Corporate Planning Office																															
7.OBJECTIVES OF STUDY																															
To formulate a long term development plan for the period from FY 1993 to FY 2007 in the Bangkok metropolitan area in Thailand																															
8.DATE OF S/W																															
1990/10																															
9.CONSULTANT(S)																															
NTT International Corporation																															
10.STUDY TEAM		Imp. Period: 1993. -1997.		4.FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No EIRRI) 11.28 EIRR2) EIRR3)																									
No.of Members 9		Conditions and Development Impacts: <M/P, F/S>Conditions: 1) Telephone demand is forecasted by socio-economic model on the basis of householded monthly income distribution, number of employees, etc. and logistic model. <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 25%; text-align: center;">1992</td> <td style="width: 25%; text-align: center;">2007</td> </tr> <tr> <td>Population (1,000)</td> <td style="text-align: center;">10,084</td> <td style="text-align: center;">12,963</td> </tr> <tr> <td>Telephone demand (1,000)</td> <td style="text-align: center;">2,285</td> <td style="text-align: center;">6,513</td> </tr> </table> Development Impacts: 1) Reduction of fault ratio(Number of faults/100 subscribers per month) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 25%; text-align: center;">1991</td> <td style="width: 25%; text-align: center;">1997</td> </tr> <tr> <td>Bangkok Metropolitan Area</td> <td style="text-align: center;">4.4</td> <td style="text-align: center;">2.5</td> </tr> <tr> <td>Surrounding Area</td> <td style="text-align: center;">4.9</td> <td style="text-align: center;">3.0</td> </tr> </table> 2) Improvement of call completion ratio <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 25%; text-align: center;">1992</td> <td style="width: 25%; text-align: center;">1997</td> </tr> <tr> <td>Study Area (%)</td> <td style="text-align: center;">23.5</td> <td style="text-align: center;">55</td> </tr> </table> 3) Contribution to economic development by providing the reliable telecommunications services					1992	2007	Population (1,000)	10,084	12,963	Telephone demand (1,000)	2,285	6,513		1991	1997	Bangkok Metropolitan Area	4.4	2.5	Surrounding Area	4.9	3.0		1992	1997	Study Area (%)	23.5	55	2.MAJOR REASONS FOR PRESENT STATUS	
	1992					2007																									
Population (1,000)	10,084					12,963																									
Telephone demand (1,000)	2,285	6,513																													
	1991	1997																													
Bangkok Metropolitan Area	4.4	2.5																													
Surrounding Area	4.9	3.0																													
	1992	1997																													
Study Area (%)	23.5	55																													
Period Jul.1991-Oct.1992(16 months)						Corporate Planning Office of TOT has recognized that it is indispensable for the improvement of telecommunications service quality in Thailand to implement 26 projects suggested in the report.																									
Total M/M	Japan	5. TECHNICAL TRANSFER				3.PRINCIPAL SOURCE OF INFORMATION																									
59.29	26.18							Technical transfer in Japan was conducted to TOT counterparts, one member JICA sponsored and 8 members TOT sponsored, about the process of formulating the Improvement plan on the service quality by "On the Job"																							
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY						①, ③																									
None																															
12.EXPENDITURE																															
Total		198,311 (¥'000)																													
Contracted		186,419																													

和名 バンコク首都圏電気通信網開発計画

[M/P+F/S]

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1994
Revised Mar.1996

ASE THA/S 215B/92

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA				1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input checked="" type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY The Tourism Development of the Hoa-Hin/Cha-Am Beach Area		Hua-Hin / Cha-Am beach area and its surroundings, including Petcuaburi and Prachuap Khiri Khan.					
3. SECTOR Tourism/(Tourism in)General		2. PROJECT COST (US\$1,000)		Local Cost	Foreign Cost	(Description) <M/P> 1. & 7. are under processing for implementation. 2. - 6. are requested to the relating implementation agencies. 2. 3. and 4. will be taken care by DOH. 5. & 6. will be carried out by PWA. Further study by Japanese Government is necessary for 8. However, implementation agencies are not clarified. <F/S> 1. Respect of budget amounting 700 million Bahts has been submitted to the cabinet. 2. DOH is now under study for D/D. 3. FWA called local consultants for D/D. D/D will be started soon. (FY1993 Overseas Survey) TAT requested OECF loan for the Center (Phase II). However, it was not selected. TAT will implement the center under cooperation between the government and private sector. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information.	
4. REFERENCE NO.		M/P 1) Local Cost Foreign Cost		2) 843,000 650,000			
5. TYPE OF STUDY		F/S 1) 2) 3)		2) 43,123			
6. COUNTERPART AGENCY The Tourism Authority of Thailand		3. CONTENTS OF MAJOR PROJECT(S)					
7. OBJECTIVES OF STUDY		<M/P>1. Cultural and recreational center in Cha-am 2. Road development program in Feet Kasem 0.67 km 2.50 km 3. Improvement of phetchaburi coastal road 4. Improvement of circulation roads in Peetchabari 5. Municipal sewerage system development in Cha-am 6. Water supply development in Cha-am and Hua hin. 7. Tourism promotion program 8. Environmental management program <F/S>1. Cultural and Recreational Center in Cha-am To build a cultura and recreational center on a 327 Rai Government other site in Takard pilee in Northern Cha-am 2. Improvement of Circulation Road in Pe - 20.5km of the Road unber Rid oo - 14.0km under Oa 3. Water Supply development in Cha-am and to complete the water distribution system with includes rooting and replacement of distribution pipes, construction of distributor facilities, etc.					
8. DATE OF S/W		1990/4					
9. CONSULTANT(S) Pacific Consultants International Yachiyo Engineering Co., Ltd.		Imp. Period:					
10. STUDY TEAM		4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No			
No. of Members 13 Period Jan.1992-Jan.1993(12 months)		EIRR1) FIRR1) 4.90		EIRR2) FIRR2) 0.30			
Total M/M Japan Field		EIRR3) FIRR3)					
47.20 22.50 24.70		Conditions and Development Impacts: <M/P> [Development Impacts] 1.To diversify tourist attractions and make it more attractive for the development of the regional economy. 2.Expansion and improvement of the existing infrastructural network. 3.To fill up model to upper middle class accomodation and more adequate tourists promotion. <F/S> [Conditions] FIRR 1) is of Public 2) is of Private [Development Impact] 1.To diversify tourist attractions and make it more attractive for the development of the regional economy. 2.TExpansion and improvement of the existing infrastructural network					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY - Tourists Interview Studies - Analysis of Water Quality - Study of its Community and Economics		5. TECHNICAL TRANSFER					
12. EXPENDITURE		Through the execution of the study and the planning, technical trouble was considered to the counterpart personnel.					
Total 164,714 (¥'000)		3. PRINCIPAL SOURCE OF INFORMATION					
Contracted 156,966		①, ②					
		2. MAJOR REASONS FOR PRESENT STATUS					
		1) Ministry of Finance agreed on the implencetation of the project by using OECF lone. Approval by OECF will be required.					

PROJECT SUMMARY (F/S)

Compiled Mar.1994

Revised Mar.1996

ASE THA/A 316/92

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1.COUNTRY	Thailand	1.SITE OR AREA		Nong Yai area: 2,260 ha, 10,800 population The Taphao basin: 35,700 ha, 66,000 population		1.PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2.NAME OF STUDY		2.PROJECT COST		Total Cost	Local Cost		
Integrated Agriculture and Water Resources Development Project of the Menam Chumphon Basin		(US\$1,000)		79,064	48,696	30,368	
3.SECTOR		3.CONTENTS OF MAJOR PROJECT(S)					
Agriculture/(Agriculture in)General		the selected priority projects are composed of:					
4.REFERENCE NO.		(1) Nong Yai Agriculture Development					
5.TYPE OF STUDY		- Rehabilitation of Nong Yai swamp (Storage: 4.5 MCM)					
6.COUNTERPART AGENCY		- Irrigation (1,200 ha)					
Royal Irrigation Department, Ministry of Agriculture and Cooperatives		- Livestock development (Beef cattle, pig)					
7.OBJECTIVES OF STUDY		- Swamp fisheries (543 surface water area)					
(1) To formulate an integrated agriculture and water resources development plan of the Menam Chumphon basin, and		(2) Drainage Improvement of The Taphao River System					
(2) To conduct a feasibility study on selected priority projects		- Improvement of The Taphao river (34.3 Km, 350-880cu.m/s)					
8.DATE OF SAV		1991/3		Imp. Period:		1992. -1996.	
9.CONSULTANT(S)		Sanyu Consultants Inc.		4.FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No	
				EIRR1)		17.10	
				EIRR2)		FIRR1)	
				EIRR3)		FIRR2)	
						FIRR3)	
10.STUDY TEAM		Conditions and Development Impacts:					
No.of Members 8		[Conditions]					
Period Oct.1991-Mar.1992(6 months)		- Drainage improvement should be implemented prior to the implementation of Nong Yai agriculture development project					
May.1992-Dec.1992		- The project should provide for extension services, institutional credit, marketing, etc..					
Total M/M		Japan		[Development Impact]			
52.80		21.10		- Reduction of flood damages and upgrading of land use in the river basin through mitigation of floods.			
Field		31.70		- Increase in crop yield and crop intensity through introduction of irrigation.			
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		- Provision of water supply for daily use for farmers.					
None		5.TECHNICAL TRANSFER					
12.EXPENDITURE		Technical transfer was carried through the surveys and regular conferences.					
Total		197,362 (Y'000)		3.PRINCIPAL SOURCE OF INFORMATION			
Contracted		192,795		①, ②			

(F/S,D/D)

PROJECT SUMMARY (F/S)

Compiled Mar.1994
Revised Mar.1996

ASE THA/S 324/92

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT																			
1.COUNTRY	Thailand	1.SITE OR AREA		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">Total Cost</td> <td style="width: 10%; text-align: center;">Local Cost</td> <td style="width: 10%; text-align: center;">Foreign Cost</td> </tr> <tr> <td style="text-align: center;">1)</td> <td style="text-align: center;">16,340</td> <td style="text-align: center;">16,340</td> <td></td> </tr> <tr> <td style="text-align: center;">2)</td> <td style="text-align: center;">7,696</td> <td style="text-align: center;">7,696</td> <td></td> </tr> <tr> <td style="text-align: center;">3)</td> <td></td> <td></td> <td></td> </tr> </table>			Total Cost	Local Cost	Foreign Cost	1)	16,340	16,340		2)	7,696	7,696		3)				1.PRESENT STATUS <input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input checked="" type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled			
	Total Cost	Local Cost	Foreign Cost																						
1)	16,340	16,340																							
2)	7,696	7,696																							
3)																									
2.NAME OF STUDY Greater Bangkok Truck Terminal		32 Km north of the CBD of Bangkok																							
3.SECTOR Transportation/Land Transportation		2.PROJECT COST (US\$1,000)		(Description) DLT established "Truck Terminal construction Project Committee" in its department, chaired by Deputy General Manager Mr. Preecha. Planning Division plays a role of secretarial body. (Established in Oct. 1992) Purpose is to determine a final policy of truck terminal construction and to prepare construction program and schedule. (FY1993 Overseas Survey) LTD is preparing EIA study on the project. The duration of EIA study will be 4 months. LTD has already drafted TOR for D/D and budgeted it. The D/D, which will cost 15 million baht, will be conducted soon after the EIA study. LTD is also in the process of land acquisition for 3 truck terminal sites. The site, 120 ha, for one terminal will be obtained within 1994. At present, land acquisition is the most important issue. (FY1994 Domestic Survey) The Thai Government has decided to construct truck terminal. It is planned to start the construction next year and scheduled to complete within three year. It is to be implemented by private fund. (FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) The Thai Government ratified to construct truck terminal by its own budget. After the ratification, this project moved into implementation according to the JICA's study. September 1995, D/D was completed but land acquisition was not finished yet.																					
4.REFERENCE NO.		3.CONTENTS OF MAJOR PROJECT(S)																							
5.TYPE OF STUDY F/S		- To construct a public terminal with 500 berth - Construction stage is divided into 2 stages: 1. First Stage : 350 berth (144 Rai) 1. Second Stage : 150 berth (63 Rai) - Terminal facilities includes platform, apron, parking administration building, service station, green belt and road.																							
6.COUNTERPART AGENCY Mini. of Transport and Communications, Department of Land Transport																									
7.OBJECTIVES OF STUDY To construct a public truck terminal in order to alleviate traffic congestion and to modernize physical distribution system in Bangkok		8.DATE OF S/W 1991/4				Imp. Period: 1992. -1995. 1998. -2000.																			
9.CONSULTANT(S) Pacific Consultants International		4.FEASIBILITY AND ITS ASSUMPTIONS				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">Feasibility:</td> <td style="width: 10%; text-align: center;">EIRR1)</td> <td style="width: 10%; text-align: center;">15.60</td> <td style="width: 10%; text-align: center;">FIRR1)</td> <td style="width: 10%; text-align: center;">14.67</td> </tr> <tr> <td></td> <td style="text-align: center;">Yes/No</td> <td style="text-align: center;">EIRR2)</td> <td style="text-align: center;">16.67</td> <td style="text-align: center;">FIRR2)</td> <td style="text-align: center;">18.11</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">EIRR3)</td> <td></td> <td style="text-align: center;">FIRR3)</td> <td></td> </tr> </table>			Feasibility:	EIRR1)	15.60	FIRR1)	14.67		Yes/No	EIRR2)	16.67	FIRR2)	18.11			EIRR3)		FIRR3)	
	Feasibility:	EIRR1)	15.60			FIRR1)	14.67																		
	Yes/No	EIRR2)	16.67			FIRR2)	18.11																		
		EIRR3)				FIRR3)																			
10.STUDY TEAM		Conditions and Development Impacts: 1. Demand for truck terminal is estimated based on 24 hours CBD traffic control for large truck. 2. The project can generate (1) traffic congestion relieving effects and (2) modernization effect of physical distribution. Both are large to prove the project's feasibility in terms of economic analysis. 3. The financial feasibility is proved with the government support on land, infrastructure, terminal facilities and capital.				2.MAJOR REASONS FOR PRESENT STATUS																			
No.of Members 7 Period Dec.1991-Sep.1992(10 months) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">Total M/M</td> <td style="width: 33%; text-align: center;">Japan</td> <td style="width: 33%; text-align: center;">Field</td> </tr> <tr> <td style="text-align: center;">30.70</td> <td style="text-align: center;">12.50</td> <td style="text-align: center;">18.20</td> </tr> </table>				Total M/M	Japan			Field	30.70	12.50	18.20														
Total M/M	Japan	Field																							
30.70	12.50	18.20																							
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY Road-side Heavy-Truck Driver Interview Survey Interview Survey for Freight-related Company		5.TECHNICAL TRANSFER		3.PRINCIPAL SOURCE OF INFORMATION ①, ③																					
12.EXPENDITURE		1. Staff from Planning Div., DLT (1 person, March 1993, 23 days). 2. Deputy Director and Chief of Planning Div., DLT (2 persons, August 1992, 11 days)																							
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">Total</td> <td style="width: 15%; text-align: center;">108,861 (¥000)</td> </tr> <tr> <td></td> <td style="text-align: center;">Contracted</td> <td style="text-align: center;">112,339</td> </tr> </table>			Total	108,861 (¥000)		Contracted	112,339																		
	Total	108,861 (¥000)																							
	Contracted	112,339																							

PROJECT SUMMARY (M/P)

Compiled Mar.1995

Revised Mar.1996

ASE THA/S 108/93

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS		
1.COUNTRY	Thailand	1.SITE OR AREA	Seven provinces in the Lower Northeast and two provinces in the Upper East Regions (Land Area: 89,000km ² , population:9,900 thousand)			1.PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2.NAME OF STUDY	Regional Development Plan for the Lower Northeast and the Upper East Regions in the Kingdom of Thailand	2.PROJECT COST	Total Cost	Local Cost	Foreign Cost	(Description) 1.Final Report was submitted to JICA in Sep.1993. Then, it was transmitted to Government of Thailand in the same year after the examination and approval of JICA. 2.Final Report was approved by NESDB as an official plan of the Study Area of the proposed priority projects, regional artery establishment (one of the highly priority projects) was submitted to the Diet before the submission of Final Report. 3.Through Thai Government Mission to Vietnam in 1993, Secretary of NESDB conveyed a plan of NESDB that linkage between Eastern Coastal Area and Vietnam be made and then be developed mutually. 4.Based on the results of ADB's survey on the sites of Second Mekong bridge in 1992, the location of Second Mekong bridge was finally decided to be between Mukdahan and Sabanaket. In addition, the route going to Danan via Laos was approved as one of priority transportation projects. (FY1995 Domestic Survey) Route No.331 : Planned to expand the width to four lanes by 8th 5 year plan. Railway improvement : D/D is underway. Route No.24 improvement : D/D is underway. Second Mekong Bridge : Suspended to select the location, waiting for the opinion from Laos. Phanom Dong Rek Water Resources Development : F/S for Phase-I is completed. Pak Man Hydropower Station and Lam Thakong Pumped Storage Power Generation : Under construction. Extension of Natural gas Pipelines : Almost completed.	
3.SECTOR	Development Plan/Integrated Regional Development Plan		(US\$1,000)	1)	2)		
4.REFERENCE NO.		3.CONTENTES OF MAJOR PROJECT(S)					
5.TYPE OF STUDY	M/P	Regional/inter-regional projects 1.Regional artery establishment 2.Railway improvement 3.Route No.24 improvement 4.Second Mekong bridge 5.Local air services network development 6.Small pumping reservoirs development 7.Phanom Dong Rek water resources development 8.Lam Thakong pumped storage power generation 9.Pak Man hydropower					
6.COUNTERPART AGENCY	National Economic and Social Development Board (NESDB)	Area Development Program 1.Greater Nakhon Ratchasima Industrial Center Development, 2.Ubon Ratchathani Agro-industrial Forefront Development, 3.Buri Ram-Surin Integrated Central Area Development					
7.OBJECTIVES OF STUDY	In order to accelerate economic growth, the following is to be expected; 1.To settle on an integrated regional development plan, 2.To propose institutional scheme to implement plans.	Other projects 1.Nakhon Nayok/fachin Buri multipurpose development, 2.Yasothon water network development, 3.Yasothon aquaculture center, 4.Groundwater exploration, 5.Haai Bang Sai multipurpose development, 6.Mukdahan IUD/border trade center, 7.Avanypavthet IUD/border trade center					
8.DATE OF S/W	/	4.CONDITIONS AND DEVELOPMENT IMPACTS					
9.CONSULTANT(S)	Hippon Koei Co., Ltd.	Development Strategies 1.Improvement of physical structure of the study area by transportation and water resources infrastructure, 2.Improvement of urban function to support economic activities in order to make use of interchange between Indochina countries and Eastern Coastal Area, 3.Implementation of rationalization of land use and improvement of land ownership. Development Impacts 1.Economy:industrialization to make use of domestic resources and market, and diversification of agriculture products 2.Administration:development management by strengthening local governments 3.Environment:development within the limitation of water resources and soil condition 4.Social:small number of incoming population 5.Special development:formation of network of medium size cities 6.Growth rates:annual growth rate of 9% at average					
10.STUDY TEAM	No.of Members 16 Period						
	Total M/M Japan Field 93.30 3.16 90.14						
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	Socio-economic survey, Tourism survey, Land use map preparation, Financial institution survey, Border trade survey, Distribution survey						
12.EXPENDITURE	Total 284,717 (¥'000) Contracted	5.TECHNICAL TRANSFER	Seminar held in June,1993				
		2.MAJOR REASONS FOR PRESENT STATUS		1.This project was undertaken timely in the proper area with the background of economic liberation of Indochina Countries. 2.In terms of implementation of plans, action-oriented plans were requested by Thailand Government. JICA Study Team then responded to it.			
		3.PRINCIPAL SOURCE OF INFORMATION					
				①			

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1995
Revised Mar.1996

ASETHA/S 209/93

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA				1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY		Lower Cha Phraya River Basin					
Sewerage Development Project for Lower Cha Phraya River Basin		2. PROJECT COST		Local Cost	Foreign Cost	(Description) Concerning the implimentation of Two Municipalities(Rong Sit, Bang Bua Thog) Project are being cordinated. It's going to be carried out by thier finance. Concerning oter six municipalities Projects have also high priorities, so FWD, and Local Government are preparing futher study. (FY1995 Domestic Survey) No. additional information. (FY1995 Overseas Survey) For Chai Nat, FWD conducted F/S and D/D in 1994, the construction started in 1995 and will finish in 1997. For sing Buri, FWD conducted F/S in 1994 and will conduct D/D in 1991. For Lop Buri, F/S and D/D has been postponed to 1997 because of the demarcation problem between FWD and Ministry of Science, Technology and Environment. For Ang Thong, FWD did F/S and D/D, finished construction in March of 1995, and it is now under operation. For Pa Mok, Sena, and Rangsit, FWD is waiting for the land to be prepared by the local governments. For Bang Bua Thong, FWD conducted F/S in 1994 and it is now waiting for the land.	
		(US\$1,000)		1,373	419		
3. SECTOR		M/P 1) 2) 3)		E/S 1) 2) 3)		(Description) Concerning the implimentation of Two Municipalities(Rong Sit, Bang Bua Thog) Project are being cordinated. It's going to be carried out by thier finance. Concerning oter six municipalities Projects have also high priorities, so FWD, and Local Government are preparing futher study. (FY1995 Domestic Survey) No. additional information. (FY1995 Overseas Survey) For Chai Nat, FWD conducted F/S and D/D in 1994, the construction started in 1995 and will finish in 1997. For sing Buri, FWD conducted F/S in 1994 and will conduct D/D in 1991. For Lop Buri, F/S and D/D has been postponed to 1997 because of the demarcation problem between FWD and Ministry of Science, Technology and Environment. For Ang Thong, FWD did F/S and D/D, finished construction in March of 1995, and it is now under operation. For Pa Mok, Sena, and Rangsit, FWD is waiting for the land to be prepared by the local governments. For Bang Bua Thong, FWD conducted F/S in 1994 and it is now waiting for the land.	
Public Utilities/Sewerage		3. CONTENTS OF MAJOR PROJECT(S)					
4. REFERENCE NO.		Water Pollution Control Plan Sewerage M/P for the Eight Municipalities Preliminary Engineer Design of Sewerage System for two Municipalities				(Description) Concerning the implimentation of Two Municipalities(Rong Sit, Bang Bua Thog) Project are being cordinated. It's going to be carried out by thier finance. Concerning oter six municipalities Projects have also high priorities, so FWD, and Local Government are preparing futher study. (FY1995 Domestic Survey) No. additional information. (FY1995 Overseas Survey) For Chai Nat, FWD conducted F/S and D/D in 1994, the construction started in 1995 and will finish in 1997. For sing Buri, FWD conducted F/S in 1994 and will conduct D/D in 1991. For Lop Buri, F/S and D/D has been postponed to 1997 because of the demarcation problem between FWD and Ministry of Science, Technology and Environment. For Ang Thong, FWD did F/S and D/D, finished construction in March of 1995, and it is now under operation. For Pa Mok, Sena, and Rangsit, FWD is waiting for the land to be prepared by the local governments. For Bang Bua Thong, FWD conducted F/S in 1994 and it is now waiting for the land.	
5. TYPE OF STUDY		M/P+F/S					
6. COUNTERPART AGENCY		FWD				(Description) Concerning the implimentation of Two Municipalities(Rong Sit, Bang Bua Thog) Project are being cordinated. It's going to be carried out by thier finance. Concerning oter six municipalities Projects have also high priorities, so FWD, and Local Government are preparing futher study. (FY1995 Domestic Survey) No. additional information. (FY1995 Overseas Survey) For Chai Nat, FWD conducted F/S and D/D in 1994, the construction started in 1995 and will finish in 1997. For sing Buri, FWD conducted F/S in 1994 and will conduct D/D in 1991. For Lop Buri, F/S and D/D has been postponed to 1997 because of the demarcation problem between FWD and Ministry of Science, Technology and Environment. For Ang Thong, FWD did F/S and D/D, finished construction in March of 1995, and it is now under operation. For Pa Mok, Sena, and Rangsit, FWD is waiting for the land to be prepared by the local governments. For Bang Bua Thong, FWD conducted F/S in 1994 and it is now waiting for the land.	
7. OBJECTIVES OF STUDY		to adopt the Water Quality of Chao Phraya River to National Standard					
8. DATE OF S/W		/				(Description) Concerning the implimentation of Two Municipalities(Rong Sit, Bang Bua Thog) Project are being cordinated. It's going to be carried out by thier finance. Concerning oter six municipalities Projects have also high priorities, so FWD, and Local Government are preparing futher study. (FY1995 Domestic Survey) No. additional information. (FY1995 Overseas Survey) For Chai Nat, FWD conducted F/S and D/D in 1994, the construction started in 1995 and will finish in 1997. For sing Buri, FWD conducted F/S in 1994 and will conduct D/D in 1991. For Lop Buri, F/S and D/D has been postponed to 1997 because of the demarcation problem between FWD and Ministry of Science, Technology and Environment. For Ang Thong, FWD did F/S and D/D, finished construction in March of 1995, and it is now under operation. For Pa Mok, Sena, and Rangsit, FWD is waiting for the land to be prepared by the local governments. For Bang Bua Thong, FWD conducted F/S in 1994 and it is now waiting for the land.	
9. CONSULTANT(S)		Nippon Jogesuido Sekkei Co., Ltd. Pacific Consultants International					
		Imp. Period: 1994. -1997.				(Description) Concerning the implimentation of Two Municipalities(Rong Sit, Bang Bua Thog) Project are being cordinated. It's going to be carried out by thier finance. Concerning oter six municipalities Projects have also high priorities, so FWD, and Local Government are preparing futher study. (FY1995 Domestic Survey) No. additional information. (FY1995 Overseas Survey) For Chai Nat, FWD conducted F/S and D/D in 1994, the construction started in 1995 and will finish in 1997. For sing Buri, FWD conducted F/S in 1994 and will conduct D/D in 1991. For Lop Buri, F/S and D/D has been postponed to 1997 because of the demarcation problem between FWD and Ministry of Science, Technology and Environment. For Ang Thong, FWD did F/S and D/D, finished construction in March of 1995, and it is now under operation. For Pa Mok, Sena, and Rangsit, FWD is waiting for the land to be prepared by the local governments. For Bang Bua Thong, FWD conducted F/S in 1994 and it is now waiting for the land.	
		4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No	EIRR1) 31.00 FIRR1) 5.50 EIRR2) 48.10 FIRR2) 6.70 EIRR3) FIRR3)		
10. STUDY TEAM		Conditions and Development Impacts: Improvements of Environmental Condition Prevention from Water Pollution in Chao Phraya River Redection of Urban Population Density Reduction of the Cost of Water supply				(Description) Concerning the implimentation of Two Municipalities(Rong Sit, Bang Bua Thog) Project are being cordinated. It's going to be carried out by thier finance. Concerning oter six municipalities Projects have also high priorities, so FWD, and Local Government are preparing futher study. (FY1995 Domestic Survey) No. additional information. (FY1995 Overseas Survey) For Chai Nat, FWD conducted F/S and D/D in 1994, the construction started in 1995 and will finish in 1997. For sing Buri, FWD conducted F/S in 1994 and will conduct D/D in 1991. For Lop Buri, F/S and D/D has been postponed to 1997 because of the demarcation problem between FWD and Ministry of Science, Technology and Environment. For Ang Thong, FWD did F/S and D/D, finished construction in March of 1995, and it is now under operation. For Pa Mok, Sena, and Rangsit, FWD is waiting for the land to be prepared by the local governments. For Bang Bua Thong, FWD conducted F/S in 1994 and it is now waiting for the land.	
No. of Members 11 Period Mar.1992-Jan.1994(23 months)							
Total M/M		Japan		Field		(Description) Concerning the implimentation of Two Municipalities(Rong Sit, Bang Bua Thog) Project are being cordinated. It's going to be carried out by thier finance. Concerning oter six municipalities Projects have also high priorities, so FWD, and Local Government are preparing futher study. (FY1995 Domestic Survey) No. additional information. (FY1995 Overseas Survey) For Chai Nat, FWD conducted F/S and D/D in 1994, the construction started in 1995 and will finish in 1997. For sing Buri, FWD conducted F/S in 1994 and will conduct D/D in 1991. For Lop Buri, F/S and D/D has been postponed to 1997 because of the demarcation problem between FWD and Ministry of Science, Technology and Environment. For Ang Thong, FWD did F/S and D/D, finished construction in March of 1995, and it is now under operation. For Pa Mok, Sena, and Rangsit, FWD is waiting for the land to be prepared by the local governments. For Bang Bua Thong, FWD conducted F/S in 1994 and it is now waiting for the land.	
88.27		34.00		54.27			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		Soil Survey, Water Quality Survey, Topographical Map.				(Description) Concerning the implimentation of Two Municipalities(Rong Sit, Bang Bua Thog) Project are being cordinated. It's going to be carried out by thier finance. Concerning oter six municipalities Projects have also high priorities, so FWD, and Local Government are preparing futher study. (FY1995 Domestic Survey) No. additional information. (FY1995 Overseas Survey) For Chai Nat, FWD conducted F/S and D/D in 1994, the construction started in 1995 and will finish in 1997. For sing Buri, FWD conducted F/S in 1994 and will conduct D/D in 1991. For Lop Buri, F/S and D/D has been postponed to 1997 because of the demarcation problem between FWD and Ministry of Science, Technology and Environment. For Ang Thong, FWD did F/S and D/D, finished construction in March of 1995, and it is now under operation. For Pa Mok, Sena, and Rangsit, FWD is waiting for the land to be prepared by the local governments. For Bang Bua Thong, FWD conducted F/S in 1994 and it is now waiting for the land.	
12. EXPENDITURE		5. TECHNICAL TRANSFER					
Total		How to establish the sewerage development master plan.				(Description) Concerning the implimentation of Two Municipalities(Rong Sit, Bang Bua Thog) Project are being cordinated. It's going to be carried out by thier finance. Concerning oter six municipalities Projects have also high priorities, so FWD, and Local Government are preparing futher study. (FY1995 Domestic Survey) No. additional information. (FY1995 Overseas Survey) For Chai Nat, FWD conducted F/S and D/D in 1994, the construction started in 1995 and will finish in 1997. For sing Buri, FWD conducted F/S in 1994 and will conduct D/D in 1991. For Lop Buri, F/S and D/D has been postponed to 1997 because of the demarcation problem between FWD and Ministry of Science, Technology and Environment. For Ang Thong, FWD did F/S and D/D, finished construction in March of 1995, and it is now under operation. For Pa Mok, Sena, and Rangsit, FWD is waiting for the land to be prepared by the local governments. For Bang Bua Thong, FWD conducted F/S in 1994 and it is now waiting for the land.	
Contracted							
						2. MAJOR REASONS FOR PRESENT STATUS The object of this survey work, which is to protect and control the water pollution at Chao Phraya River Basin is considered to be given very high priority by FWD and the Metropolitan Zone of Bangkok.	
						3. PRINCIPAL SOURCE OF INFORMATION ①, ③	

和名 チャオプラヤ川下流域下水道整備計画調査

{M/P+F/S}

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1995
Revised Mar.1996

ASE THA/S 208/93

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1.COUNTRY	Thailand	1.SITE OR AREA				1.PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2.NAME OF STUDY Phuket International Airport Development Plan		Phuket International Airport Area and the Surrounding areas.					
3.SECTOR Transportation/Air Transportaion & Airport		2.PROJECT COST (US\$1,000)		Local Cost	Foreign Cost	(Description) Following works have been implemented by AAT along the Short-Term Development Plan established in the Study. 1. Runway Overlay(construction in 1993/94) Forstrengthening of the pavement, average overlay thickness is set at 12.7cm in the Study. Actual thickness implemented by AAT, however, is 8cm in average for surfacing only. Therefore, additional overlay is required. 2. Expansion of Passenger Terminal Building Concept design started in 1993 and construction work is scheduled to be completed in 1995. Expansion area : 5,400 sq.m 3. Construction waste Water Treatment plant(construction in 1993) 4.Expansion of carpark(Design and construction in 1993/94) Expanded capacity : 200/sts. In addition, expansion of the Cargo terminal building has been implemented in 1993 and 1994 which is planned to be implemented after 2000 in the Long-Term Development Plan of the Study. (FY1995 Domestic Survey) No additional information. (FY1995 Overseas Interview Survey) 1. (Runway Overlay) Actual thickness implemented by AAT is from 8 to 24 cm for 3,500 meter runway overlay. cost: 100 million baht. 2. (Expansion of Passenger Terminal Building) Construction will be started in July, 1996 and completed in August 1997, expansion area is 5,500m3. cost: 294 million baht. 3. (Expansion of car park) Construction will be started in Sept, 1996 and completed in May, 1997. cost: 25 million baht.	
4.REFERENCE NO.		2) (Million Bt)		497	176		
5.TYPE OF STUDY		M/P+F/S		321			
6.COUNTERPART AGENCY		Airports Authority of Thailand (AAT)				4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes/No EIRR1) 25.96 FIRR1) 12.03 EIRR2) FIRR2) EIRR3) FIRR3)	
7.OBJECTIVES OF STUDY		To formulate a Master Plan for long-term development of Phuket International Airport for the target year 2010 and to study the feasibility of a short-term development plan for the exisiting airport to be formulated within the formework of the Master Plan.					
8.DATE OF S/W		1992/1				2.MAJOR REASONS FOR PRESENT STATUS AAT is executing the improvement works of the airport in accordance with increase of passenger/cargo demand.	
9.CONSULTANT(S)		Pacific Consultants International Pasco International Inc.					
10.STUDY TEAM		Imp. Period: No.of Members 9 Period Aug.1992--Sep.1993(14 months)				3.PRINCIPAL SOURCE OF INFORMATION ①, ③	
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		Conditions and Development Impacts: (1)The Short-Term Development plan is feasible from the technical, environmental, economic and financial aspects. (2)The FIRR of this project is estimated at 12.01% which indicates the minimum rate to justify the project from the financial point of view. The EIRR and NPV are estimated at 25.95% and 295.67 million Baht respectively, for the national economic of Thailand. Furthermore, the EIRRs will remain within level to reveal the economic feasibility of the project under the assumption of combination of 20% increase in costs and 20% decrease in benefits. (3)The environmental impact assessment for the short-term development indicates that there willnot be so much influence expected as a whole. (4)Consequently, the exisiting airport will be expanded for the target year 2000 in order to cope with increasing demand along the implementation schedule established in this study.					
12.EXPENDITURE		Total 188,924 (¥000) Contracted 177,065				5.technical transfer workshop, counterpart training, OJT	

和名 プーケット国際空港整備計画調査

[M/P+F/S]

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1995
Revised Mar.1996

ASE THA/S 207/93

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT							
1.COUNTRY	Thailand	1.SITE OR AREA		Bangkok Urban Metropolitan Area		1.PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="radio"/> Completed <input type="radio"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="radio"/> Implementing <input type="radio"/> Processing <input type="checkbox"/> Discontinued or Cancelled						
2.NAME OF STUDY Application Scheme of Land Readjustment (L/R) National Urban Development Thrust		2.PROJECT COST (US\$1,000) (1000Bt)		M/P 1) 2) 3)	Local Cost 673,480 171,050 64,470			(Description) 1. Under preparation of the National Cabinet Council approval on Land Readjustment law. 2. Under preparation of implementation to designation plot(including relocation/removal). 3. Under support this project with a dispatch of JICA's specialists. (FY1995 Domestic Survey) No additional information.					
3.SECTOR Social Infrastructure/Urban Planning & Land Development		3.CONTENTS OF MAJOR PROJECT(S) In Thailand especially in/around Bangkok, urbanization triggered by the rapid economic and industrial development has been expanded faster than expected, resulting in the serious urban problems, typically worst traffic congestion. To solve the urban problems, development of the following area is required urgently. Travelling Area : Bangkok Huai Khwang 85ha District Builder : Development of Town and Country Planning or Bangkok Municipality Project cost : 909 million Bt Period of work : 5 years(On condition that the preparation necessary for the project be completed within one year) Reduction Ratio : 29.5-30.7% Exchange Rate : 1Bt=5yen											
4.REFERENCE NO.		5.TYPE OF STUDY		6.COUNTERPART AGENCY		2.MAJOR REASONS FOR PRESENT STATUS							
		M/P+F/S		Department of Town and Country Planning Ministry of Interior									
7.OBJECTIVES OF STUDY To formulate a L/R plan for the first implementation project and propose L/R System in Thailand		8.DATE OF SAW		9.CONCONSULTANT(S)		3.PRINCIPAL SOURCE OF INFORMATION ①							
		1991/1		Yachiyo Engineering Co., Ltd.									
10.STUDY TEAM		11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		5.TECHNICAL TRANSFER									
No.of Members 13 Period Jan.1991-Jun.1993(30 months) <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Total M/M</td> <td style="width: 33%;">Japan</td> <td style="width: 33%;">Field</td> </tr> <tr> <td style="text-align: center;">80.17</td> <td style="text-align: center;">14.54</td> <td style="text-align: center;">65.63</td> </tr> </table>		Total M/M	Japan	Field	80.17			14.54	65.63	Site survey and Measurement		1.L/R Legal system 2.L/R Implementation Plan 3.Replotting System and Design/Plan	
Total M/M	Japan	Field											
80.17	14.54	65.63											
12.EXPENDITURE		11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		5.TECHNICAL TRANSFER									
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Total</td> <td style="width: 33%;">308,863 (¥000)</td> <td style="width: 33%;"></td> </tr> <tr> <td>Contracted</td> <td>284,830</td> <td></td> </tr> </table>		Total	308,863 (¥000)		Contracted	284,830		Site survey and Measurement		1.L/R Legal system 2.L/R Implementation Plan 3.Replotting System and Design/Plan			
Total	308,863 (¥000)												
Contracted	284,830												

和名 区画整理事業適用調査

PROJECT SUMMARY (F/S)

Compiled Mar.1995

Revised Mar.1996

ASE THA/A 310/93

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1.COUNTRY	Thailand	1.SITE OR AREA				1.PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2.NAME OF STUDY Agricultural Development for Peat, Acid Sulfate Soil Areas in Narathiwat Province		Peat/acid sulfate soil areas in the Narathiwat province					
3.SECTOR Agriculture/(Agriculture in)General		2.PROJECT COST (US\$1,000)		Total Cost	Local Cost	Foreign Cost	
4.REFERENCE NO.		1)	2)	3)	341,000	170,000	171,000
5.TYPE OF STUDY		F/S		3.CONTENTS OF MAJOR PROJECT(S)			
6.COUNTERPART AGENCY The Department of Land Development (DLD) Ministry of Agriculture and Cooperatives		Land Improvement 997ha Drainage Canal(New) 9,900m Drainage Canal(Reform) 11,910m Embankment 17,800m Fish Nursery Pond 21ponds					
7.OBJECTIVES OF STUDY Establishment of Agricultural Development Method in peat/acid sulfate soil area.		(Description) Aiming at the implementation of the project at the earliest, DLD is trying to secure the necessary budget. In view of the size of the project, DLD considers that the required budget is within the range of DLD authority. Funding is brought not only from domestic but from foreign sources. (FY1995 Domestic Survey) Despite it does not have any idea to implement, DLD, the Governmental organization in charge of this project, is planning to hold a seminar. Additionally, DLD is considering to commence a technical cooperation project regarding to the treatment of particular soil together with another implementing project of farmland maintenance at Southern Thailand within this fiscal year.					
8.DATE OF S/W							
9.CONSULTANT(S) Sanyu Consultants Inc. Taiyo Consultants Co., Ltd.		4.FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No	EIRR1) 5.30 EIRR2) EIRR3)	FIRR1) FIRR2) FIRR3)	
10.STUDY TEAM		Conditions and Development Impacts: -preservation of Natural Environment -allocation of farm plot for landless farmers -Demonstration of farming in peat/acid sulfate soil areas					
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY Experimental plot for leaching test Topo-map Environmental Impact Survey		5.technical transfer		Proper techniques have been transferred through conducting the leaching test.			
12.EXPENDITURE		Total		252,048 (¥000)		2.MAJOR REASONS FOR PRESENT STATUS	
		Contracted		245,079			
						3.PRINCIPAL SOURCE OF INFORMATION	
						①, ⑥	

PROJECT SUMMARY (D/D)

Compiled Mar.1995
Revised Mar.1996

ASE THA/A 402/93

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1.COUNTRY	Thailand	1.SITE OR AREA				1.PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input checked="" type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2.NAME OF STUDY Bang Pakong Diversion Dam Project		Tha Lat River Basin in Chachoengsao Province					
3.SECTOR Agriculture/(Agriculture in)General		2.PROJECT COST (US\$1,000)		Total Cost 100,360	Local Cost 32,752	Foreign Cost 67,608	
4.REFERENCE NO.		5.TYPE OF STUDY D/D		3.CONTENT(S) OF MAJOR PROJECT(S) One diversion dam and related structures, and one pumping station			
6.COUNTERPART AGENCY Royal Irrigation Department (RID)		7.OBJECTIVES OF STUDY Making a Detailed Design Study on Bang Pakong Diversion Dam Project		(Description) The Thai government intended to implement the construction works of the above project from October 1994. (FY1995 Domestic Survey) In order to commence the implementation of the project, negotiation with the consultants have been concluded and waiting for the Cabinet approval to sign the agreement. The tender documents to select the contractors are almost ready and the tender invitation is planned to announce on around Sep. or Oct., 1995 after the examination and the approval of the authorities concerned. The construction costs and the consultant fee will be borne by their own budget.			
8.DATE OF SAW 1992/4		9.CONCONSULTANT(S) Sanyu Consultants Inc.					
10.STUDY TEAM No.of Members 22 Period Sep.1992-Nov.1993(15 months)		11.ASSOCIATED AND/OR SUBCONTRACTED STUDY Core Boring, Topographic Survey		Conditions and Development Impacts: -As a result of the project implementation, an irrigation water for paddy fields and orchard of 42,500 ha can be supplied, and saline water intrusion in dry season will be excluded. -Owing to water resources development-diversion dam construction : domestic water, industrial water and others will be able to be supplied and result in mitigate water shortage in urban areas.			
12.EXPENDITURE		5.TECHNICAL TRANSFER		3.PRINCIPAL SOURCE OF INFORMATION			
Total 418,894 (Y'000)		Through the study, technology, such as planning method, dam designing technic, etc. was transferred to the counterparts.		①			
Contracted 408,229				2.MAJOR REASONS FOR PRESENT STATUS This project is one of the very urgent and important projects for the Thai government.			

PROJECT SUMMARY (M/P)

Compiled Oct.1995
Revised Mar.1996

ASE THA/S 110/94

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDY RESULTS	
1.COUNTRY	Thailand	1.SITE OR AREA	Bangkok metropolitan area and its vicinity (approx. 5,600sq.km)		1.PRESENT STATUS
2.NAME OF STUDY	Management of Groundwater and Land Subsidence in the Bangkok Metropolitan Area and its Vicinity	2.PROJECT COST	Total Cost Local Cost Foreign Cost		<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
3.SECTOR	Social Infrastructure/Water Resource Development	(US\$1,000)	1) 2)		
4.REFERENCE NO.		3.CONTENTES OF MAJOR PROJECT(S)	(Description) At Pathum Thani Province, a part of investigating area, construction plan of an observation well is in progress by DMR with its own budget.		
5.TYPE OF STUDY	M/P	1)Establishment of new facilities for observation. 2)Hydrological/geological investigation for all area of the Chao Phraya River basin. 3)Investigation for the reasonable utilization of river water.			
6.COUNTERPART AGENCY	Department of Mineral Resources (DMR), Ministry of Industry and Public Works Department (PWD), Ministry of Interior	4.CONDITIONS AND DEVELOPMENT IMPACTS			
7.OBJECTIVES OF STUDY	Draw up the plan to control the land subsidence and the underground water.	The economical growth of Thailand shows nearly 10% for each year. In order to keep such a growth, the development and utilization of underground water has to be carried on all over the Chao Phraya River basin in future. This project is to expand the control area for the land subsidence and the underground water usage and obtain the basic data for these subjects. It will be expected to give a big impacts for the continuous economical growth and the maintenance of environmental conditions.			
8.DATE OF SAV	1992/2	10.STUDY TEAM	2.MAJOR REASONS FOR PRESENT STATUS		
9.CONSULTANT(S)	Kokusai Kougyo Co., Ltd.	No.of Members 11 Period Jul.1992-Mar.1995 (32 months)			
		Total M/M Japan Field 89.41 14.90 74.51	As area of land subsidence is now expanding to Pathum Thani and Samut Sakhon Provinces.		
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	Core boring, Establishment of the observation wells, Analysis of Water quality	5.TECHNICAL TRANSFER			
12.EXPENDITURE		Monitoring of the observation wells, database and simulation.	3.PRINCIPAL SOURCE OF INFORMATION		
Total	635,251 (¥'000)				
Contracted			①		

和名 バンコク首都圏地盤沈下・地下水管理計画調査

PROJECT SUMMARY (Other)

Compiled Sep.1995

Revised Mar.1996

ASE THA/S 606/94

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDY RESULTS							
1.COUNTRY	Thailand	1.SITE OR AREA	Expressways in Bangkok metropolitan area		1.PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued						
2.NAME OF STUDY	Inspection and Maintenance System for the Express Way	2.PROJECT COST (US\$1,000)	Total Cost	Local Cost		Foreign Cost					
3.SECTOR	Transportation/Road	3.CONTENT(S) OF MAJOR PROJECT(S)	1) To prepare the ledger database of expressways. 2) To prepare database and manual for inspection of the ground surface portion. 3) To prepare database and manual for inspection of the Rama IX Bridge. 4) To prepare database and manual for repairment of the ground surface portion. 5) To prepare database and manual for repairment of the Rama IX Bridge.		(Description) (FY1995 Domestic Survey) At present, input of the inventory data good for the section with a distance of 27.1km have been completed. Data of inspection are also being inputted occasionally. (FY1995 Overseas Survey) Express way and Rapid Transit Authority(ETA) is proceeding with most of the JICA plan, including kilo-post-operation, safety measures and maintenance computerization.						
4.REFERENCE NO.		4.CONDITIONS AND DEVELOPMENT IMPACTS	[Conditions] 1) Input the inventory data of the expressways. 2) Input each of database for inspection and repairment. [Development Impacts] 1) It will become possible to save 80% of information control works from the task of maintenance and administration of the expressways. 2) The time to treat the data will be saved. 3) Promote the creativity.								
5.TYPE OF STUDY	Other	10.STUDY TEAM	No.of Members 11 Period Jun.1993-Sep.1994(15 months) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Total M/M</td> <td style="text-align: center;">Japan</td> <td style="text-align: center;">Field</td> </tr> <tr> <td style="text-align: center;">67.00</td> <td style="text-align: center;">9.00</td> <td style="text-align: center;">58.00</td> </tr> </table>			Total M/M	Japan	Field	67.00	9.00	58.00
Total M/M	Japan	Field									
67.00	9.00	58.00									
6.COUNTERPART AGENCY	Expressway and Railway Transportation Agency (ETA) Ministry of Interior	11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	Collection of inventory data								
7.OBJECTIVES OF STUDY	Establishment of inspection, management and repair system utilizing databases for expressways under the control of ETA	12.EXPENDITURE	5. TECHNICAL TRANSFER 1) Transfer the technology to operate the system for ETA staffs. 2) Transfer the technology of inspection and repairment for damages.								
8.DATE OF S/W	1992/11			3.PRINCIPAL SOURCE OF INFORMATION							
9.CONSULTANT(S)	Oriental Consultants Co., Ltd. Pacific Consultants International			① ③							
				2.MAJOR REASONS FOR PRESENT STATUS							
				As it is necessary to collate with the existing data when input the inventory data.							

PROJECT SUMMARY (M/P+F/S)

Compiled Sep. 1995
Revised Mar. 1996

ASE THA/S 216/94

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT		
1. COUNTRY	Thailand	1. SITE OR AREA				1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input checked="" type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled	
2. NAME OF STUDY	Modernization of Bangkok Port in the Kingdom of Thailand	Bangkok Port						
3. SECTOR	Transportation/Port	2. PROJECT COST (US\$1,000)	M/P 1) 139,000 2)	Local Cost	Foreign Cost	(Description) (FY1995 Domestic Survey) No information. (FY1995 Overseas Survey) Port Authority of Thailand (PAT) decided to implement a short-term improvement plan. (budget: 800 million baht) (1) Terminal operation will become easier by dividing the container-cargo-handling-place from conventional-cargo-handling-place. (2) Closed Terminal operation will be applied.		
4. REFERENCE NO.		E/S 1) 47,590 2) 3)	19,290	28,300				
5. TYPE OF STUDY	M/P+F/S	3. CONTENTS OF MAJOR PROJECT(S)						
6. COUNTERPART AGENCY	PAT	<M/P> 1) Introduction of the closed terminal system, 2) Expansion of the marshalling yard and 3) New establishment of Import CFS and Export CFS.						
7. OBJECTIVES OF STUDY	Master Plan of Bangkok Port upto 2005 Feasibility Study of Bangkok Port upto 1997	<F/S> 1) Introduction of the closed terminal system, 2) Introduction of the closing time, 3) Expansion of the marshalling yard at the eastern wharf, 4) Rationalization of the container yard at the western wharf, and 5) New establishment of Import CFS at Area II.						
8. DATE OF SAW	1992/10	Imp. Period: 1997. -2005.						
9. CONSULTANT(S)	Overseas Coastal Area Development Institute Pacific Consultants International	4. FEASIBILITY AND ITS ASSUMPTIONS						
		Feasibility: Yes/No	EIRR1) 12.40 EIRR2) EIRR3)	FIRR1) 9.30 FIRR2) 8.40 FIRR3) 8.50				
10. STUDY TEAM	No. of Members 13 Period Mar. 1993-Jul. 1994 (16 months)	Conditions and Development Impacts: [Final conditions] FIRR 1) Base case 2) Revenue -10% 3) Expenses +10% 4) Term of the project 30 years						
Total M/M 89.00 Japan 38.00 Field 51.00								2. MAJOR REASONS FOR PRESENT STATUS
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Survey the sailing frequency in the port. Survey of the quality of soil.	5. TECHNICAL TRANSFER				3. PRINCIPAL SOURCE OF INFORMATION		
12. EXPENDITURE	Total 284,190 (¥'000) Contracted					①, ③		

和名 バンコク港近代化計画調査

[M/P+F/S]

PROJECT SUMMARY (F/S)

Compiled Oct. 1995
Revised Mar. 1996

ASE THA/S 325/94

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Thailand	1. SITE OR AREA				1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input checked="" type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY Inter-City Toll Motorway Project		1) From Lampang to Doi Saket (98.72km) 2) From Bangbong to Chae-Hom (113.74km)					
3. SECTOR Transportation/Road		2. PROJECT COST (US\$1,000)		Total Cost	Local Cost	Foreign Cost	
4. REFERENCE NO.				1)	1,102,000	433,000	
5. TYPE OF STUDY		F/S		2)	1,110,000	590,000	
6. COUNTERPART AGENCY Bureau of Road, Ministry of Transportation & Communication				3)		669,000	
7. OBJECTIVES OF STUDY Construction of Expressways		3. CONTENTS OF MAJOR PROJECT(S)				(Description) The Government of Thailand asked JICA's technical cooperation to draw on a detailed design of the expressway from Lampang to Doi-Saket as the government is considering to implement this project by means of the Yen Credit of OECF. (FY1995 Overseas Survey) The implementation is scheduled to be carried out in five years. At present, a part of Outer Ring Road(60km) and the road between Inner Ring Road and Chonburi(82km) are under construction and scheduled to be completed in 1998. The partial construction cost is financed by OECF loan.	
		1) Construction of an expressway from Lampang to Doi Saket with a distance of 98.72km passing through the prefectures of Lampang, Lamphun and Chiang Mai including followings: Interchange : 5 Tunnel : 2 (3.80km, 0.75km) Bridge : 30 (Total length 720m) Overhead bridge: 35 (Total length 13,365m)					
8. DATE OF S/W		1992/11		Imp. Period:		1995. -2001.	1995. -2000.
9. CONSULTANT(S) Katahira & Engineers International Nippon Koei Co., Ltd. Kokusai Kougyo Co., Ltd.		4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No	EIRR1)	14.08	EIRR2)
					EIRR3)	23.02	EIRR3)
10. STUDY TEAM				Conditions and Development Impacts: (Conditions) Taking into consideration that two(2) economical privileges, (1) Save the driving cost (VOC) and (2) Save the driving time, followings are assumed in order to estimate FIRR of this project: annual cost-up ratio 5%, annual price up of charge 3% which will be amended in every 5 years, the charge is 1.0 Baht/km on 1995 and the pool system will be taken for both expressways. [Development Impacts] -Promotion of various industries -Improvement of the life of people -Promotion of the value of ground utilization -Improvement of the plan of production and transportation -Creation of new economical demands			
No. of Members 16 Period Aug. 1993-Mar. 1995 (17 months)							
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY Geological survey, Topographical survey, Environmental survey, and Aerial survey				2. MAJOR REASONS FOR PRESENT STATUS			
12. EXPENDITURE				1) The Government of Thailand intends to construct the expressways in early stage. 2) The reason to ask JICA the detailed design is that Thailand does not have any experience to design and establish any tunnel before and it becomes a technical bottleneck.			
Total 427,313 (¥'000) Contracted							
		5. TECHNICAL TRANSFER		3. PRINCIPAL SOURCE OF INFORMATION			
		1) JICA for counterparts 2) Holding seminars		①, ③			

PROJECT SUMMARY (M/P)

Compiled Sep.1995
Revised Mar.1996

ASE VNM/S 101/94

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS	
1.COUNTRY	Viet Nam	1.SITE OR AREA	The northern part of Viet Nam		1.PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2.NAME OF STUDY	Transport Development in the Northern Part in the Socialist Republic of Viet Nam	2.PROJECT COST	Total Cost	Local Cost	Foreign Cost	(Description) Road : Implementation of the works are being actively progressed by means of the financing from the government of Japan, the World Bank and the Asian Development Bank. Railway : Feasibility Study for the improvement of the passenger transportation system of Hanoi - Haiphong line is now being carried on by the assistance of U.K. Another projects are progressing by the aid of JICA and OECF. Port : The works are going to be materialized by the Yen Credit from OECF. Inland Waterway : No additional information.
3.SECTOR	Transportation/(Transportation in)General	(US\$1,000)	1)		2)	
4.REFERENCE NO.		3.CONTENT(S) OF MAJOR PROJECT(S)				
5.TYPE OF STUDY	M/P	1)Road : 10 items including improvement of the national highways of route 1, 2, 18, 70 and 379, bridges across national highways and local roads.				
6.COUNTERPART AGENCY	Transport Economic Science Institute (TESI) Ministry of Transport	2)Railway : 9 items including improvement of the passenger transportation system of Hanoi - Haiphong line, rolling stocks factory at San Pam and the transportation for the border area.				
7.OBJECTIVES OF STUDY	Draw up a Master Plan of the transportation system except airport in the northern part of the country until the target year of 2010.	3)Port : Renovation and development of Haiphong and Cailan.				
8.DATE OF SAW	1993/3	4)Inland Waterway : Improvement of Ninh Vinh, Hanoi and Bettri river ports, dredge and improvement of main waterways.				
9.CONSULTANT(S)	Pacific Consultants International	4.CONDITIONS AND DEVELOPMENT IMPACTS				
10.STUDY TEAM	No.of Members 17 Period Jun.1993-May.1994(12 months)	1) The improvement the infrastructure in the field of transportation will contribute all of the economical activities in the northern part of the country.				
	Total M/M	Japan	Field	2.MAJOR REASONS FOR PRESENT STATUS		
	70.23	35.00	35.23	As this is the first general development project for the northern part of the country, it is considered to make improvement of transportation at first of all.		
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	Traffic survey	5.technical transfer			3.PRINCIPAL SOURCE OF INFORMATION	
12.EXPENDITURE	Total 276,616 (¥'000)	1)Accept trainees in Japan. 2)On-the-job-training for counterparts.			①	
	Contracted					

PROJECT SUMMARY (M/P+F/S)

Compiled Sep. 1995
Revised Mar. 1996

ASE VNM/S 201/94

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT															
1. COUNTRY	Viet Nam	1. SITE OR AREA	Urban district of Hanoi City (approx. 135sq.km)			1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input checked="" type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled														
2. NAME OF STUDY	Urban Drainage and Wastewater Disposal System in Hanoi City	2. PROJECT COST (US\$1,000)	M/P 1) 1,162,000 2) Cost	Local Cost	Foreign Cost																
3. SECTOR	Social Infrastructure/River & Erosion Control		F/S 1) 179,700 2) 197,100 3)	61,800 86,700	117,900 110,400	(Description) 1st Stage of the drainage plan of Toric River basin has been adopted as for an OECF project of this fiscal year. At present, it is applied for the approval of the Government of Vietnam, and processing to arrange project implementation system by the People's Committee of Hanoi City.															
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)																			
5. TYPE OF STUDY	M/P+F/S	<M/P> Following two(2) projects were proposed in order to protect flood disaster and improve the environment of urban life: 1) Drainage Plan; Drainage Plan of Toric River Basin (77.5sq.km) Drainage Plan of Nuwe River Basin (57.9sq.km) 2) Renovation of Drainage system: Plan for 5 sewage collecting and treatment facilities. Plan for 2 separate sewage treatment facilities.																			
6. COUNTERPART AGENCY	People's Committee of City of Hanoi Hanoi Sewage/Drainage Corporation	<F/S> The project of drainage for Toric River Basin, which is selected to five top priority, is divided by two(2) stages as shown below: <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"></td> <td style="width: 30%; text-align: center;">1st Stage</td> <td style="width: 30%; text-align: center;">2nd Stage</td> </tr> <tr> <td>Capacity of Pump Station</td> <td style="text-align: center;">45cu.m/s</td> <td style="text-align: center;">45cu.m/s</td> </tr> <tr> <td>Regulation Pond</td> <td style="text-align: center;">3,870 thousand cu.m</td> <td style="text-align: center;">1,320 thousand cu.m</td> </tr> <tr> <td>River Renovation</td> <td style="text-align: center;">33km</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Drainage</td> <td style="text-align: center;">45km</td> <td style="text-align: center;">230km</td> </tr> </table>						1st Stage	2nd Stage	Capacity of Pump Station	45cu.m/s	45cu.m/s	Regulation Pond	3,870 thousand cu.m	1,320 thousand cu.m	River Renovation	33km	-	Drainage	45km	230km
	1st Stage	2nd Stage																			
Capacity of Pump Station	45cu.m/s	45cu.m/s																			
Regulation Pond	3,870 thousand cu.m	1,320 thousand cu.m																			
River Renovation	33km	-																			
Drainage	45km	230km																			
7. OBJECTIVES OF STUDY	1) Formulation of Master Plan on drainage and wastewater disposal 2) Feasibility Studies on urgent projects of improvement of inferior drainage and prioritized projects	Imp. Period: 1995. -2000. 2000. -2004.																			
8. DATE OF SAV	1993/6	4. FEASIBILITY AND ITS ASSUMPTIONS																			
9. CONSULTANT(S)	Nippon Koei Co., Ltd. CTI Engineering Co., Ltd.	Feasibility: Yes/No	EIRR1) 11.70 EIRR2) 11.40 EIRR3)	FIRR1) FIRR2) FIRR3)																	
10. STUDY TEAM	No. of Members 11 Period Oct. 1993-Feb. 1995 (16 months)	Conditions and Development Impacts: (Development Impacts) By the protection of flood water invasion, followings will be expected as the benefits: 1) to remove the big reason of interruption of economical activities, 2) to stabilize the life of inhabitants and improve sanitary environment.																			
	<table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Total M/M</td> <td style="width: 30%;">Japan</td> <td style="width: 30%;">Field</td> </tr> <tr> <td style="text-align: center;">83.68</td> <td style="text-align: center;">29.85</td> <td style="text-align: center;">53.83</td> </tr> </table>	Total M/M	Japan	Field	83.68	29.85	53.83	2. MAJOR REASONS FOR PRESENT STATUS													
Total M/M	Japan	Field																			
83.68	29.85	53.83																			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Water quality test, Geological survey, Soil test and Topographic survey	As this is the only one project in Vietnam for this fiscal year, it seems to take a long time to get the final approval from the Government.																			
12. EXPENDITURE	Total 271,344 (Y'000) Contracted	3. PRINCIPAL SOURCE OF INFORMATION																			
		5. TECHNICAL TRANSFER																			
		On the job training for counterparts. Hold the seminar.																			

和名 ハノイ市排水下水整備計画調査

[M/P+F/S]

PROJECT SUMMARY (F/S)

Compiled Sep.1995

Revised Mar.1996

ASE VNM/S 301/94

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT		
1.COUNTRY	Viet Nam	1.SITE OR AREA				1.PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled	
2.NAME OF STUDY	Cai Lan Port Construction Project	Cai lan port						
3.SECTOR	Transportation/Port	2.PROJECT COST (US\$1,000)		Total Cost	Local Cost	Foreign Cost		
4.REFERENCE NO.		1)	2)	146,453	23,863	122,590		
5.TYPE OF STUDY	F/S	3)						
6.COUNTERPART AGENCY	Transport Engineering Design Incorporated (TEDI)	3.CONTENTS OF MAJOR PROJECT(S)				(Description) Ministry of Transportation of the Government of Viet Nam is now providing a proposal to make this project as for the Yen Credit project of fiscal year of 1996.		
7.OBJECTIVES OF STUDY	Feasibility Study for Cai lan port (at the year of 2000)	(1)Sea Route : depth -11m, width of the bottom 130m (2)Wharf : 7 wharfs, extension 1,461m, depth of water -9 to -13m (3)Shed, yard (4)Loading equipment						
8.DATE OF SAV	1993/6	Imp. Period:						
9.CONSULTANT(S)	Overseas Coastal Area Development Institute Nippon Koei Co., Ltd.	4.FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No	EIRR1) 21.80 EIRR2) 19.90 EIRR3) 19.70			FIRR1) 5.10 FIRR2) 4.30 FIRR3) 3.70
10.STUDY TEAM	No.of Members 12 Period Dec.1993-Dec.1994(13 months)	Conditions and Development Impacts: (EIRR) 1)Base Case 2)Expenses +10% 3)Privilege -10% (FIRR) 1)Base Case 2)Costs +10% 3)Revenue -10% (Economic analysis) 1996-2031 (36years) (Financial analysis) Depreciation term : Wharf 40years Shed 25years Access road 20years Loading equipment 15years						
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		5. TECHNICAL TRANSFER				2.MAJOR REASONS FOR PRESENT STATUS		
Topographic survey, Depth survey, Survey works for soil, environment, current and tide, Physical exploration								
12.EXPENDITURE						3.PRINCIPAL SOURCE OF INFORMATION		
Total 231,471 (¥'000)								
Contracted						①		

和名 カイラン港拡張計画調査

(F/S,D/D)

PROJECT SUMMARY (F/S)

Compiled Sep.1995
Revised Mar.1996

ASE VNM/A 301/94

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT										
1.COUNTRY	Viet Nam	1.SITE OR AREA				I.PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input checked="" type="checkbox"/> Promoting <input type="radio"/> Completed <input type="radio"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="radio"/> Implementing <input type="radio"/> Processing <input type="checkbox"/> Discontinued or Cancelled									
2.NAME OF STUDY		South Bac Duong area in Northern Viet Nam														
Improvement Project of Drainage System in South Bac Duong Agricultural Area		2.PROJECT COST (US\$1,000)		Total Cost	Local Cost	Foreign Cost										
		1)	45,900	13,700	32,200											
		2)	64,600	19,800	44,800											
		3)														
3.SECTOR		3.CONTENTS OF MAJOR PROJECT(S)				(Description) The Ministry of Water Transportation is putting up this project to the State Planning Committee to make it as a grant aid project of fiscal year of 1996.										
Agriculture/Irrigation, Drainage & Reclamation		1)Improvement of drainage: Repair of the pump stations and canals for drainage														
4.REFERENCE NO.		2)Improvement of irrigation system: Security of water quantity and repair of waterways														
5.TYPE OF STUDY		3)Settlement of lasting agriculture: Introduction of intensive and many-sided agricultural system														
6.COUNTERPART AGENCY		4)Improvement of social-environmental circumstances: Mitigation of poverty and disease														
Ministry of Water Transportation		The activities contain the followings:-														
7.OBJECTIVES OF STUDY		<table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"></td> <td style="width: 35%; text-align: center;">Option I</td> <td style="width: 35%; text-align: center;">Option II</td> </tr> <tr> <td>Area for</td> <td style="text-align: center;">6,420 ha</td> <td style="text-align: center;">8,540 ha</td> </tr> <tr> <td>Pumping facility</td> <td style="text-align: center;">16.0cu.m/s</td> <td style="text-align: center;">26.0cu.m/s</td> </tr> </table>							Option I	Option II	Area for	6,420 ha	8,540 ha	Pumping facility	16.0cu.m/s	26.0cu.m/s
	Option I	Option II														
Area for	6,420 ha	8,540 ha														
Pumping facility	16.0cu.m/s	26.0cu.m/s														
Formulation of the drainage plan for South Bac Duong area neighbouring to the City of Hanoi with an area of approx.40,000ha		Imp. Period:														
8.DATE OF S/W		1993/12														
9.CONSULTANT(S)		4.FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No	EIRR1) FIRR1) EIRR2) FIRR2) EIRR3) FIRR3)											
Sanyu Consultants Inc. Taiyo Consultants Co., Ltd.		Conditions and Development Impacts: This project is for the agricultural development of Tanchi and Hang Kwang districts with an area of 8,540ha mainly by means of improvement of the drainage system. It is expected to reduce the area filled with water 1,000ha in case of Option I and 1,340ha in case of Option II, respectively, and to promote the agricultural productivity by adoption of the intensive agriculture. Decrease of crop by the disaster of heavy rainfall dose not only spoil teh motivation of production but bring the difficulty to secure even minimum income to survive. To solve the problem of the water covering widespread area is very urgent to improve present hard statistics.				2.MAJOR REASONS FOR PRESENT STATUS										
10.STUDY TEAM																
No.of Members 12																
Period Mar.1994-Mar.1995 (13 months)																
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY																
Convestigation by questionnaire to farmhouses, Sourvey of structural facilities, Geological survey for the locations of future pump station																
12.EXPENDITURE		5.TECHNICAL TRANSFER				3.PRINCIPAL SOURCE OF INFORMATION										
Total 223,749 (¥000)		Seminars were held to transfer the technique in connection with irrigation-drainage plan, analysis of drainage, evaluation of the results of task and administration of agricultural villages.				①										
Contracted																

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

MEA DZA/A 301/85

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT								
1. COUNTRY	Algeria	1. SITE OR AREA	Southwest 20km from Annaba City, Annaba Province			1. PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="radio"/> Completed <input type="radio"/> Partially Completed <input checked="" type="checkbox"/> Delayed or Suspended <input type="radio"/> Implementing <input type="radio"/> Processing <input type="checkbox"/> Discontinued or Cancelled							
2. NAME OF STUDY	Projet d'Aménagement agricole de la région périphérique du Lac Fetzara	2. PROJECT COST (US\$1,000)	1) Total Cost 350,000	2) Local Cost 220,000	3) Foreign Cost 130,000									
3. SECTOR	Agriculture / (Agriculture in) General	3. CONTENTS OF MAJOR PROJECT(S)	* Agricultural Infrastructure Improvement Plan Dam (1): 53m(H) x 480m(L) x 10m(Top width) x 7MCM(Effective storage) Pump station(2): 250mm x 46m(H) x 7.9m ³ /s(Q) x 110kw x 3 units 250mm x 85m(H) x 7.9m ³ /s(Q) x 190kw x 3 units Main Irrigation Pipeline : dia 200 - 300mm x 43km (density 39.2m/ha) Main Drainage Canal : 154km (density 3.9m/ha) Field Facilities : Irrigation ditches -- 70 m/ha Drainage ditches -- 40-50 m/ha Farm roads -- 65 m/ha * Agricultural Development Plan Farmland development -- 10,600ha Livestock facilities, Green houses, Management facilities * Village Infrastructure Development Plan. Housing, Domestic water supply, Sewerage facilities, Electricity, Hospitals, Schools, Post office, etc.			(Description) There is no hope of funding the proposed project because of the deterioration of the Algerian economy. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) Caused by the serious security problems, it is very hard to implement the project.								
4. REFERENCE NO.		4. FEASIBILITY AND ITS ASSUMPTIONS						Feasibility: Yes/No	EIRR1) 7.30	FIRR1)				
5. TYPE OF STUDY	F/S	Conditions and Development Impacts:						2. MAJOR REASONS FOR PRESENT STATUS						
6. COUNTERPART AGENCY	Ministry of Agriculture	[Conditions] (1) Inflation rate : 5.65% (2) Rate of exchange : 1US\$=4.88 DA (3) Residual value : Nil, as it is negligibly small in present value. (4) Analysis period : Up to 2034 (50 years from Project start) (5) Period until full benefit is gained : 10 years from Project start [Development Impacts] (1) Increase of agricultural production and improvement of living standard of rural population through agricultural infrastructure improvement plan and agricultural development plan. (2) Improvement of living environment of rural population through village infrastructure development plan.												
7. OBJECTIVES OF STUDY	Drafting of Agricultural Development Plan, Agricultural Infrastructure Improvement Plan and Village Infrastructure Development Plan, aiming at Agricultural Production Increase and Improvement of Living Environment for the Rural Population.	8. DATE OF S/W	1983/3	Imp. Period: 1985. -1992.		3. PRINCIPAL SOURCE OF INFORMATION ①, ②								
9. CONSULTANT(S)	Sanyu Consultants Inc. Kyowa Engineering Consultants Co., Ltd.	10. STUDY TEAM												
		No. of Members 13 Period Dec.1983-Mar.1985(16 months)												
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	None	<table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Total M/M</td> <td style="width: 15%;">Japan</td> <td style="width: 15%;">Field</td> </tr> <tr> <td>71.58</td> <td>29.15</td> <td>41.83</td> </tr> </table>		Total M/M	Japan	Field	71.58	29.15	41.83					
Total M/M	Japan	Field												
71.58	29.15	41.83												
12. EXPENDITURE		<table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Total</td> <td style="width: 15%;">315,059 (¥'000)</td> </tr> <tr> <td>Contracted</td> <td>280,430</td> </tr> </table>		Total	315,059 (¥'000)	Contracted	280,430	5. TECHNICAL TRANSFER						
Total	315,059 (¥'000)													
Contracted	280,430													
		To counterparts assigned during the period of the survey												

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1994
Revised Mar.1996

MEA DZA/S 201B/92

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1.COUNTRY	Algeria	1.SITE OR AREA				1.PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="radio"/> Completed <input type="radio"/> Partially Completed <input checked="" type="checkbox"/> Delayed or Suspended <input type="radio"/> Implementing <input type="radio"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2.NAME OF STUDY Development of the Ports of Algiers, Oran and Annaba		The ports of Algiers, Oran and Annaba					
3.SECTOR Transportation/(Transportation in)General		2.PROJECT COST (US\$1,000)		Local Cost	Foreign Cost	(Description) Based on the results on this study shown in the Final Report handed over to Algeria side in March 1993, the government of Algeria is preparing to ask Yen loan to the government of Japan. On the other hand, the government of Japan sent a fact-finding mission to Algeria, in September, 1993. Taking account of missions report, for the moment, the government of Japan is looking round the situation of Algeria, especially in security matters, before entering the procedure of the finance. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) Caused by the serious security problems, it is very hard to implement the project.	
4.REFERENCE NO.		M/P 1) 251,064		75,475	175,589		
5.TYPE OF STUDY		F/S 1) 2) 3)		51,982	15,160		
6.COUNTERPART AGENCY Ministry of Transport, Algeria		3.CONTENTS OF MAJOR PROJECT(S) * Cost 1) is of Algiers Port, 2) is of Oran Port.					
7.OBJECTIVES OF STUDY 1. To formulate Master Plans for the ports of Algiers, Oran and Annaba for the period up to the year 2000. 2. To conduct feasibility, studies of the Short-Term Improvement Plans for the ports up to 1997.		1.Algiers Port (1)Master Plan i) Terminal-2: Container terminal with 42ha and a berth of 600m long and 13m deep ii) Cereal Terminal: Silos of 220,000 tons capacity, 4 unloaders of 400tons per hour each iii) Terminal 1: Installation of two container cranes (2)Short-Term Plan i) Terminal 2: Container terminal with a berth of 300m long and 13m deep ii) Cereal Terminal: Silos of 100,000 tons capacity 2 unloaders of 400 tons per hour each iii) Terminal 1: Installation of 2 container cranes 2.Oran Port: Development of cereal and container terminals					
8.DATE OF SAV		1990/9					
9.CONSULTANT(S) Overseas Coastal Area Development Institute Nippon Koei Co., Ltd.		Imp. Period: 1992. -1997.					
10.STUDY TEAM No.of Members 12 Period Aug.1990-Mar.1992(20 months)		4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes/No		EIRR1) 12.51 EIRR2) EIRR3)	FIRR1) 20.70 FIRR2) FIRR3)		
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY Soil material survey and sounding were subcontracted in Algeria		Conditions and Development Impacts: Development impacts of the projects. 1.Construction of container terminals Economic benefits are expected to be generated by the construction of the container terminals through the savings of costly land transport via JenJen Port. 2.Modernization of cereal terminal Economic benefits are expected to be generated by the installation of silos of sufficient capacity and in unloaders of sufficient productivity through the reduction of costly staying costs of cereal carriers.					
12.EXPENDITURE		5.TECHNICAL TRANSFER					
Total 343,477 (Y'000)		Technical transfer was conducted through face-to-face working with counterparts in Algeria and training in Japan.				3.PRINCIPAL SOURCE OF INFORMATION ①, ②	
Contracted 356,856							

和名 主要港湾整備計画

(M/P+F/S)

PROJECT SUMMARY (F/S)

Compiled Mar. 1990
Revised Mar. 1996

MEA EGY/S 301/75

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT																					
1. COUNTRY	Egypt	1. SITE OR AREA				1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled																				
2. NAME OF STUDY	Suez Canal Extension Project	Suez Canal																									
3. SECTOR	Transportation/Port	2. PROJECT COST		Total Cost	Local Cost	Foreign Cost																					
4. REFERENCE NO.		(US\$1,000)	1) 820,512	307,179	513,333	(Description) 1975 Jul. OECF loan agreement (Suez Canal expansion I, 18 billion yen) 1977 Dec. OECF loan agreement (Suez Canal expansion II, 23 billion yen) 1979 Jul. OECF loan agreement (strengthening dredging capacity, 12 billion yen) 1978 - 1981 Technical cooperation to the Economic Unit of the Suez Canal Authority 1982 - JUN. OECF Loan agreement (Bitter Lakes) (FY1991 Overseas Survey) 1975 D/O was conducted by the local finance 1975-80 Construction work was done by local finance of 42 million L.E. other than the above OECF loan. (FY1994 Overseas Survey) Following OECF loans in 1975, 1977 and 1979, one more OECF loan for expansion of waiting berths was made (5.4 billion yen). Total amount of four-time OECF loans for the Suez canal extension project came up to 78.1 billion yen. As to the consequence of the project, see "Present Status columns of projects "Second Stage Development Project of the Suez Canal (S304/80), "Technical Cooperation Program to the Suez Canal Authority (S102/81), and "Safety Improvement of the Suez Canal".																					
5. TYPE OF STUDY	F/S	3. CONTENTS OF MAJOR PROJECT(S)																									
6. COUNTERPART AGENCY	Suez Canal Authority	The 1st phase project shown below will take 3.5 years to complete, and it is imperative to proceed to the 2nd phase immediately, because the route going around Cape Town will cost less for supertankers than the Canal transit. 1st Phase Canal Extension: 1. Dredging: the entire canal length to four times the wet sectional area of the largest vessel transiting the Canal Dredging 470 million cu.m, Excavation ashore 67 million cu.m 2. Revetment: Relocation to the east side 3. West Breakwater: submerged mound structure, length 7,354m Breakwater from the light house to 4,500m, submerged from 4,500m to 7.354m 4. Earthworks: Removal of concrete military structures and the banking from the east side 5. Others: dredging of anchorage at Port Said and elsewhere, navigation aids, oil pollution control devices, etc.																									
7. OBJECTIVES OF STUDY	Promotion of Japanese cooperation to the 1st stage development of the Suez Canal	4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes	EIRR1) 11.50 EIRR2) EIRR3)			FIRR1) FIRR2) FIRR3)																			
8. DATE OF SAW	/	Imp. Period: 1975. -1978.																									
9. CONSULTANT(S)		Conditions and Development Impacts: Conditions: 1. Project life of 30 years 2. Planned canal extension: <table style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th></th> <th style="text-align: center;">Water Depth(m)</th> <th style="text-align: center;">Sectional Area(sq.m)</th> <th style="text-align: center;">Max. Draft (ft)</th> <th style="text-align: center;">Max. Tonnage of Largest Vessel (DWT)</th> </tr> </thead> <tbody> <tr> <td>Canal reopening</td> <td style="text-align: center;">15.5</td> <td style="text-align: center;">1,850</td> <td style="text-align: center;">40</td> <td style="text-align: center;">50,000</td> </tr> <tr> <td>1st phase ext.</td> <td style="text-align: center;">19.5</td> <td style="text-align: center;">3,200</td> <td style="text-align: center;">53</td> <td style="text-align: center;">150,000</td> </tr> <tr> <td>2nd phase ext.</td> <td style="text-align: center;">23.5</td> <td style="text-align: center;">4,200</td> <td style="text-align: center;">67</td> <td style="text-align: center;">250,000</td> </tr> </tbody> </table> 3. Benefits: Increase of the canal revenue after reopening (1.64 billion E pounds) Development impacts: 1. Increase of foreign exchange reserves and stimulation of trade 2. Reduction of crude oil transportation costs by the passage of supertankers 3. Economic development in the area along the Canal In addition, the Canal extension will greatly contribute to the international shipping industry.							Water Depth(m)	Sectional Area(sq.m)	Max. Draft (ft)	Max. Tonnage of Largest Vessel (DWT)	Canal reopening	15.5	1,850	40	50,000	1st phase ext.	19.5	3,200	53	150,000	2nd phase ext.	23.5	4,200	67	250,000
	Water Depth(m)	Sectional Area(sq.m)	Max. Draft (ft)	Max. Tonnage of Largest Vessel (DWT)																							
Canal reopening	15.5	1,850	40	50,000																							
1st phase ext.	19.5	3,200	53	150,000																							
2nd phase ext.	23.5	4,200	67	250,000																							
10. STUDY TEAM	No. of Members 10 Period Nov. 1974-Jul. 1975 (8 months) Total M/M Japan Field	5. TECHNICAL TRANSFER																									
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		12. EXPENDITURE																									
		Total		16,526 (¥'000)																							
		Contracted																									
		2. MAJOR REASONS FOR PRESENT STATUS																									
		Development of Suez Canal was the top priority of the Egyptian Government.																									
		3. PRINCIPAL SOURCE OF INFORMATION																									
		①, ②, ③																									

PROJECT SUMMARY (F/S)

Compiled Mar. 1986
Revised Mar. 1996

MEA EGY/S 302/76

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT			
1. COUNTRY	Egypt	1. SITE OR AREA				1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled		
2. NAME OF STUDY		The City of Cairo							
Urban Water Supply Project in the Great Cairo		2. PROJECT COST		Total Cost	Local Cost	Foreign Cost			
		(US\$1,000)		33,250	7,518	25,732			
		US\$1=300yen		1)	2)	3)			
3. SECTOR		3. CONTENTS OF MAJOR PROJECT(S)				(Description) OECF Loan Agreement: Jun. 1976(5,820 million yen) Dec. 1978(3,375 million yen) Detailed design: Completed in Dec. 1979 Completion of Project: Aug. 1984 The implemented project was modified as follows: d1400 - 1200mm: 9.4km d1200 - 1000mm: 6.1km d1200mm: 9.6km d1000mm: 21.8km d800 - 75mm: 43.0km d500 - 75mm: 53.0km d500mm: 7.3km Cost: US\$36,780,000 (US\$1=250yen) (FY1991 Overseas Survey) No additional information. (FY1994 Domestic Survey) No information. (FY1994 Overseas Survey) Projects of (1) pumping facilities for raw water supply, (2) Heliopolis water conveyance facilities (3) Nasr City water conveyance facilities were conducted based upon OECF loans. Helwan water conveyance facilities project, however, is left untouched due to finance shortage. Covering the status change "East Bank Water Supply Master Plan", targeting the year of 2010 for completion, was designed in 1990 with USAID support. Of the projects presented, improvement of the Assyria water purification plant started with Japan's grant. Other than this, moreover, the Grant Aid for the Northern Helwan Water Treatment Plant was requested to JICA. (FY1995 Domestic Survey) The agency in charge of this project intends to implement the expansion works when the construction of Assyria Water Purification Plant is completed (1996), and also it considers to reinvestigate the M/P itself.			
Public Utilities/Water Supply		1) Pumping facilities for raw water supply Nasr City: 4 pumps (d.500mm) Heliopolis: 4 booster pumps (d.500mm) 2) Heliopolis water conveyance facilities Raw water pipeline: d.1,350mm, 9,600m Drinking water pipeline: d.1,200mm, 9,800m One regulation tank: 15,000 cu.m 3) Nasr City water conveyance facilities Raw water pipeline: d.1,200mm, 5,100m One regulation tank: 22,000 cu.m 4) Helwan water conveyance facilities Raw water pipeline: d.500mm, 4,800m One regulation tank: 4,000 cu.m							
4. REFERENCE NO.		4. FEASIBILITY AND ITS ASSUMPTIONS							
5. TYPE OF STUDY								Feasibility: Yes	EIRR1) 10.78
6. COUNTERPART AGENCY		Conditions and Development Impacts: Conditions: With the annual interest rate of 3.5%, deferment period of 3 years and repayment period of 28 years, the project is feasible. Development Impacts: The project will increase the supply of treated water by 200,000 sq.m/day (10% of the present supply) and raw water by 140,000 sq.m/day(10%). The change of clean water now used for irrigation to raw water makes the actual increase of treated water by 235,000 sq.m/day and will cover the existing shortage.						EIRR2)	FIRR2)
The General Organization for the Greater Cairo Water Supply								EIRR3)	FIRR3)
7. OBJECTIVES OF STUDY		Imp. Period: 1976.9-1978.6						2. MAJOR REASONS FOR PRESENT STATUS	
To alleviate the increasing shortage of water in Cairo								1) Contribution to the alleviation of water shortage caused by population increase and urbanization 2) High Priority 3) The General Organization is the most powerful and active governmental agency in Cairo City.	
8. DATE OF SAV		1974/12		10. STUDY TEAM No. of Members 12 Period Sep. 1975-Mar. 1976 (5 months)				3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③, ④	
9. CONSULTANT(S)		Sanyu Consultants Inc. Nihon Suido Consultants Co., Ltd.							
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		Analysis of water in the Nile River				12. EXPENDITURE Total 93,212 (¥'000) Contracted 72,670			
12. EXPENDITURE		5. TECHNICAL TRANSFER 1) OJT: Inspection of water work facilities and factories in Japan was held for 11 engineers. 2) Instruction to a local consultant of research and investigation method was executed.							

PROJECT SUMMARY (M/P)

Compiled Mar.1985
Revised Mar.1996

MEA EGY/S 101/79

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS		
1. COUNTRY	Egypt	1. SITE OR AREA	Aswan City (pop. 0.2 million) and the High Dam Lake Area			1. PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY	High Dam Lake Area Integrated Region Development Plan	2. PROJECT COST				(US\$1,000)	Total Cost
3. SECTOR	Development Plan/Integrated Regional Development Plan	3. CONTENTS OF MAJOR PROJECT(S)	1)	2,327	2,327	(Description) After the completion of the study, the fishery management center was established by the Japanese grant aid, and the technical cooperation (dispatch of Japanese fishery experts and acceptance of trainees) has been implemented. (FY1991 Overseas Survey) 1) The Master Plan has been translated into Arabic and integrated into regional development program of the five-year Development Plan. It has been used as the main guide for the development of the Region. 2) The Fishery Management Center has been established by the Japanese aid. 3) An Agricultural Development Research Center has been requested for the Japanese Grant Aid, but no action has been effected. 4) An Agricultural Experiment Station has been constructed by local finance. 5) A foreshore agricultural project is under implementation by finance from the World Food Program WFP (about 11,000 feddan). 6) The construction of the roads between Aswan - Abu Simbel, Kalabasha - Gurf Hussein, and Aswan - El Alaqi has been completed by local finance. 7) Abu Simbel Port and the Ice Making Plant have been completed by local finance. 8) About 100 companies are working on the quarry development around the lake. (FY 1993 Overseas Survey) The Japanese cooperation for the development of fisheries resources of the High Dam Lake area gave very useful technologies, however, the study period was too short. Technology transferred by means of on the job training, training in Japan, special seminars, instructions for equipment, etc. In order to achieve the project target in the field of the fishery, it is planned to collect the basic data such as stock assessment of fishery resources, fish culture and environmental matters. And also it is going to arrange in order to maintain the fish resources, organization, regulations of close fishing season and the fishing tools, improvement of transportation methods and other policies good for the fishermen to attract them to the High Dam Lake. (FY1994 Domestic Survey) No additional information. (FY1994 Overseas Survey) Submitted projects, of which some are conducted by the state government, are successively realized in areas of Aswan, Abu Simbel, etc. The Fishery Management Center was founded by the Japanese grant. The center is effectively utilized for seafood storage.	
4. REFERENCE NO.		The study covers the area consisting of Aswan City and the High Dam Lake area extending 120 km from east to west and 300 km from south to north. Major projects are as follows:					
5. TYPE OF STUDY	M/P	1) Establishment of an agricultural experiment station (selection of suitable crops, development of appropriate farming systems, improvement of irrigation management and disease and pest control)					
6. COUNTERPART AGENCY	Ministry of Development and New Cities High Dam Lake Development Authority	2) Establishment of a Fishery Management Center (Resource surveys, experimental aquaculture, resource management).					
7. OBJECTIVES OF STUDY	Formulation of a regional development plan and selection of priority projects	4. CONDITIONS AND DEVELOPMENT IMPACTS					
8. DATE OF SAW	1978/6	Conditions: It is necessary to ascertain the constraints of development such as availability of water and soil conditions in order to utilize the development potentials. Development impacts: The development of the High Dam Lake area will contribute to the balanced regional growth and the alleviation of the population pressures in the Nile delta area.					
9. CONSULTANT(S)	International Development Center of Japan Nippon Koei Co., Ltd. Nomura Research Institute	5. TECHNICAL TRANSFER					
10. STUDY TEAM	No. of Members 14 Period Jan.1979-Feb.1980 (14 months)	- JTF on regional development planning - Acceptance of trainees (JICA counterpart training program)					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	None	3. PRINCIPAL SOURCE OF INFORMATION					
12. EXPENDITURE		①, ③, ⑥					
	Total	183,572 (¥'000)					
	Contracted	158,365					

和名 南部地域総合開発計画

状況 (要約表添付文書)

MEA EGY/S 101/79	(M/P)
Name of High Dam Lake Area Integrated Region Development Plan Study	
Country	Egypt
Type of Study	M/P
Sector	Development Plan/Integrated Regional Development Plan
Present Status: In progress or In use	
(Description)	
<p>After the completion of the study, the fishery management center was established by the Japanese grant aid, and the technical cooperation (dispatch of Japanese fishery experts and acceptance of trainees) has been implemented.</p>	
(FY1991 Overseas Survey)	
<p>1) The Master Plan has been translated into Arabic and integrated into regional development program of the five-year Development Plan. It has been used as the main guide for the development of the Region.</p> <p>2) The Fishery Management Center has been established by the Japanese aid.</p> <p>3) An Agricultural Development Research Center has been requested for the Japanese Grant Aid, but no action has been effected.</p> <p>4) An Agricultural Experiment Station has been constructed by local finance.</p> <p>5) A foreshore agricultural project is under implementation by finance from the World Food Program WFP (about 11,000 feddan)</p> <p>6) The construction of the roads between Aswan - Abu Simbel, Kalabasha - Gurf Hussein, and Aswan - El Alaqi has been completed by local finance.</p> <p>7) Abu Simbel Port and the Ice Making Plant have been completed by local finance.</p> <p>8) About 100 companies are working on the quarry development around the lake.</p>	
(FY 1993 Overseas Survey)	
<p>The Japanese cooperation for the development of fisheries resources of the High Dam Lake area gave very useful technologies, however, the study period was too short. Technology transferred by means of on the job training, training in Japan, special seminars, instructions for equipment, etc.</p> <p>In order to achieve the project target in the field of the fishery, it is planned to collect the basic data such as stock assessment of fishery resources, fish culture and environmental matters. And also it is going to arrange in order to maintain the fish resources, organization, regulations of close fishing season and the fishing tools, improvement of transportation methods and other policies good for the fishermen to attract them to the High Dam Lake.</p>	
(FY1994 Domestic Survey)	
No additional information.	
(FY1994 Overseas Survey)	
<p>Submitted projects, of which some are conducted by the state government, are successively realized in areas of Aswan, Abu Simbel, etc.. The Fishery Management Center was founded by the Japanese grant. The center is effectively utilized for seafood storage, loading/dischanging and cultivation (mainly of tilapia), with evolution of the local fishery business. The Agricultural Development Center was established by local finance. Grant for three ice plants related to the fishery industry, and technical support/instruments donation related to the agricultural industry were requested to JICA.</p>	
(FY1995 Domestic Survey)	
No additional information.	

PROJECT SUMMARY (F/S)

Compiled Mar. 1986

Revised Mar. 1996

MEA EGY/S 303/79

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT		
1. COUNTRY	Egypt	1. SITE OR AREA		Line between Cairo and Alexandria and regions along the route		1. PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="radio"/> Completed <input type="radio"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="radio"/> Implementing <input type="radio"/> Processing <input checked="" type="checkbox"/> Discontinued or Cancelled	
2. NAME OF STUDY	Cairo - Alexandria Line Electrification for Egyptian Railways	2. PROJECT COST (US\$1,000)						Total Cost
				1) 457,000	98,200	358,800		
				2)				
				3)				
3. SECTOR	Transportation/Railway	3. CONTENTS OF MAJOR PROJECT(S)				(Description) After completion of the F/S, the project was suspended owing to the lack of funds. However, some improvement works on signals, tracks, etc., based on this project were implemented with the financial cooperation of both France and West Germany. (FY1991 Overseas Survey) The Egyptian Railways is convinced that electrification should be implemented. However, the project is suspended owing to the reasons mentioned below. An alternative project of introducing turbo train units between Cairo and Alexandria has been implemented since 1983 by French finance. (FY1994 Domestic Survey) No information. (FY1994 Overseas Survey) Owing to huge amount of initial cost, electrification between Cairo-Alexandria would not be realized for ten years from now on. It would take longer time for electrification of other lines.		
4. REFERENCE NO.		This line (208km) is regarded very important, connecting among Cairo (nation's capital; 8.5 million people living), Alexandria (Nation's largest trade port and well-known resort; 250 million) Benha (50,000), Tanta (150,000) and other regional main cities. This line is considered the main transportation system among cities. It is also considered main commuters transportation within the each city area. So this line is very crowded when rush-hour. Nowadays the number of 'express service' is 25 within 130 on this line per a day. It takes 2 hours and 35 minutes between Cairo and Alexandria by non-stop express service. But gov of Egypt has an intention to shorten it to about 90 minutes. To achieve this purpose, it is planned that the highest speed be 160km/hour and special express of EMU (Electric Multiple Unit) be operated more than once per hour. Expected investments are following: Rolling stock (48 EUs, etc.) 118.5LE Electric wires (208km) 78.8LE Power transformer facilities (3 substations, etc.) 31.3LE Machines (for inspection and repair at rolling stock bases) 18.2LE Civil facilities (rolling stock bases, etc) 16.0LE Signal and telecommunications facilities						
5. TYPE OF STUDY	F/S							
6. COUNTERPART AGENCY	Egyptian National Railways							
7. OBJECTIVES OF STUDY	F/S for electrification of the line between Cairo and Alexandria and a review of rolling stock specifications							
8. DATE OF SAV	1978/7	Imp. Period: 1979.6-1983.12		4. FEASIBILITY AND ITS ASSUMPTIONS			Feasibility: Yes EIRR1) FIRR1) EIRR2) FIRR2) EIRR3) FIRR3)	
9. CONSULTANT(S)	Japan Railway Technical Service	Conditions and Development Impacts: 1. Preconditions Increase in fare and efficient fund procurement 2. Expected development impacts 1) Effective utilization of resources (use of power from Aswan High Dam, economization of oil) 2) Balanced development of local cities and alleviation of population concentration in and around Cairo by reducing time-distance.						
10. STUDY TEAM	No. of Members 31 Period Sep. 1978-Dec. 1979 (15 months)							
	Total M/M Japan Field 61.63 49.43 12.20							
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY								
12. EXPENDITURE	Total 79,528 (¥'000) Contracted 69,133	5. TECHNICAL TRANSFER		Preparation of the report with the cooperation of Egyptian National Railways			2. MAJOR REASONS FOR PRESENT STATUS	
							-An arrangement of the large initial cost is the main obstacle. -Lack of surplus electric power.	
						3. PRINCIPAL SOURCE OF INFORMATION		
						①, ②, ③		

和名 エジプト国鉄カイロ-アレキサンドリア線電化

(F/S,D/D)

PROJECT SUMMARY (F/S)

Compiled Mar. 1986

Revised Mar. 1996

MEA EGY/S 304/80

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT								
1. COUNTRY	Egypt	1. SITE OR AREA	Suez Canal			1. PRESENT STATUS	<input type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="radio"/> Completed <input type="radio"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="radio"/> Implementing <input type="radio"/> Processing <input checked="" type="checkbox"/> Discontinued or Cancelled							
2. NAME OF STUDY	Second Stage Development Project of the Suez Canal	2. PROJECT COST	Total Cost	Local Cost	Foreign Cost									
		(US\$1,000)	1) 1,180,000	637,000	543,000									
3. SECTOR	Transportation/Port	3. CONTENTS OF MAJOR PROJECT(S)	As the number of vessels which pass through Suez Canal, double tracking of the canal is proposed by the study. Furthermore, widening of western channel for max 500,000 DWT empty tanker is proposed.											
4. REFERENCE NO.		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Contents</th> <th style="text-align: left;">Size</th> </tr> </thead> <tbody> <tr> <td>Deepening and widening of canal</td> <td></td> </tr> <tr> <td>Dredging</td> <td style="text-align: center;">555,800,000 cu.m</td> </tr> <tr> <td>Dry excavation</td> <td style="text-align: center;">226,000,000 cu.m</td> </tr> </tbody> </table>	Contents	Size	Deepening and widening of canal		Dredging	555,800,000 cu.m	Dry excavation	226,000,000 cu.m	(Description) Contrary to the double tracking of the canal proposed by the study, SCA decided to carry out the widening and deepening of the present canal. NEDECO implemented the F/S on this proposal. (FY1991 Overseas Survey) No additional information. (FY1994 Overseas Survey) Since 1980, the number of passing vessels through the Suez Canal has decreased due to depression of the marine transportation business. Hence, the Second Stage Project targeting the passing capability for the vessel of 250 thousand DWT should have been postponed. Considering proceeding construction of gas pipelines which substitute marine transportation, it should be admitted that the project has become less profitable. Container transporters would be prospective clients for the canal after development. However, the project should be reconciled from the viewpoint based upon various possibilities of change. (FY1995 Domestic Survey) No additional information.			
Contents	Size													
Deepening and widening of canal														
Dredging	555,800,000 cu.m													
Dry excavation	226,000,000 cu.m													
5. TYPE OF STUDY	F/S													
6. COUNTERPART AGENCY	The Suez Canal Authority													
7. OBJECTIVES OF STUDY	Drawing up the second stage development project of Suez Canal which should be carried out immediately after completion of the first stage development.													
8. DATE OF SAW	1979/3	Imp. Period:	1981.3-1994.4											
9. CONSULTANT(S)	Overseas Coastal Area Development Institute	4. FEASIBILITY AND ITS ASSUMPTIONS	Feasibility: Yes	EIRR1) 23.80 EIRR2) EIRR3)	FIRR1) 17.30 FIRR2) FIRR3)									
10. STUDY TEAM	No. of Members 11 Period Nov. 1979-Oct. 1980 (9 months)	Conditions and Development Impacts:				2. MAJOR REASONS FOR PRESENT STATUS								
	<table style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Total M/M</th> <th style="text-align: left;">Japan</th> <th style="text-align: left;">Field</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">31.37</td> <td style="text-align: center;">27.40</td> <td style="text-align: center;">3.97</td> </tr> </tbody> </table>	Total M/M	Japan	Field	31.37			27.40	3.97	Conditions: The passing vessels are projected as 85/day for 1985, 103/day for 1990 and 140/day for 2000. Freight projection is done for ten commodity groups such as crude oil, petroleum products, LNG, iron ores and so on. Cargo movement is projected for four types such as tankers, bulk carriers, general cargo carriers and so on. Development Impacts: -Reduction of losses due to waiting. -Increase canal revenues by attracting back those vessels which are now taking the route around Cape Town.				
Total M/M	Japan	Field												
31.37	27.40	3.97												
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	None	5. TECHNICAL TRANSFER				3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③								
12. EXPENDITURE														
	Total 115,081 (¥'000) Contracted 68,094													

和名 スエズ運河第2期拡張計画

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1996

MEA EGY/S 102/81

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDY RESULTS							
1.COUNTRY	Egypt	1.SITE OR AREA	North-eastern Suez Canal		1.PRESENT STATUS <input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued						
2.NAME OF STUDY	Technical Cooperation Program to the Suez Canal Authority	2.PROJECT COST (US\$1,000)				Total Cost Local Cost Foreign Cost					
3.SECTOR	Transportation/Marine Transportation & Ships	Study of organization and 2)		(Description) The Economic Study Unit has been taking active steps for the development plans, suggested by the report. A feasibility study was conducted for the second stage development project of Suez Canal. In addition, some JICA experts were continuously working with the Economic Study Unit. Economic Unit has also been conducting studies, under the guidance of JICA experts, on the proposed projects which have not been implemented yet. (FY1991 Overseas Survey) No additional information. (FY1994 Domestic Survey) No additional information. (FY1994 Overseas Survey) Economic Research Unit (and System Analysis Group, a division of the unit), a C/P organization; (1) researches on Optimum Toll calculation system, (2) participates in all P/S conducted by the Ministry of Suez Canal, and (3) studies about the safe passage. JICA cooperation gave successful outputs on the Economic Research Unit in all these activities. Technical support for the Optimum Toll research is requested. (FY1995 Domestic Survey) No additional information.							
4.REFERENCE NO.		3.CONTENTENTS OF MAJOR PROJECT(S)									
5.TYPE OF STUDY	M/P	Study of organization and service for Economic Unit of Planning and Institute Div., SCA functioning, and system analysis of prediction for canal passage. The study service is the core of this project. First year: Site survey, acceptance of study in Japan (6persons x 13weeks) Second year: Study in Egypt (the total number 290persons/days) Study in Japan (7persons x 2month) Study on system analysis (Actual number of canal passage, prediction for canal passage number of Tanker or non-tanker/etc.) Third year: Study in Egypt (the total number 690 persons/days) Study in Japan (7persons x 8weeks) Offer in drawing up of service manual									
6.COUNTERPART AGENCY	Economic Study Unit, Planning, Research and Engineering Projects Dept. SCA										
7.OBJECTIVES OF STUDY	Study, proposal and practice of some investigation for technical cooperation with EU established in SCA										
8.DATE OF SAV	1978/3	4.CONDITIONS AND DEVELOPMENT IMPACTS				2.MAJOR REASONS FOR PRESENT STATUS					
9.CONSULTANT(S)	Overseas Coastal Area Development Institute The Japan Association for Preventing Marine Accid	With respect to development effects, canal revenue is expected to be increased by the double-tracked planning. The report proposed that a feasibility study on the second stage development project of Suez Canal should be conducted as soon as possible.									
10.STUDY TEAM	No.of Members 3 Period Jul.1978-Mar.1981(33 months)										
<table style="width: 100%; border: none;"> <tr> <td style="width: 15%; text-align: center;">Total M/M</td> <td style="width: 20%; text-align: center;">Japan</td> <td style="width: 15%; text-align: center;">Field</td> </tr> <tr> <td style="text-align: center;">72.54</td> <td style="text-align: center;">48.80</td> <td style="text-align: center;">23.74</td> </tr> </table>		Total M/M	Japan	Field	72.54	48.80	23.74	5.TECHNICAL TRANSFER		3.PRINCIPAL SOURCE OF INFORMATION ①, ②, ③	
Total M/M	Japan	Field									
72.54	48.80	23.74									
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	None	1)Technology transfer was carried out by dispatching some JICA experts many times to the Economic Study Unit. 2)Acceptance of trainees; 6 staffs were invited and training was carried out in Japan.									
12.EXPENDITURE	Total 287,027 (¥000) Contracted 160,529										

和名 スエズ運河庁に対する技術協力計画

[M/P,Basic Study,Other]

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

MEA EGY/A 301/81

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Egypt	1. SITE OR AREA				1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	South Hussinia Valley Agricultural Development Project	Northeast part of Nile Delta, area 31,400ha					
3. SECTOR	Agriculture/(Agriculture in)General	2. PROJECT COST		Total Cost	Local Cost	Foreign Cost	
4. REFERENCE NO.		(US\$1,000)	1) 120,000	60,000	60,000	(Description) (FY1992 Overseas Survey) 1986.06 financed by the National Investment Bank and the Ministry of Finance. Total Cost 87.2 million E.pounds Local currency 72.2 million E.pounds Foreign currency 15 million E.pounds 1987-1988 detailed designed by GARPAD 1987.07 began construction 1992.06 ended construction Most of the infrastructure projects have been implemented. Concerning the on-farm works, only about 10,000 feddan has been developed. Some areas are planted with crops, and others are developed as fish farms which utilize drainage water. (FY1994 Overseas Survey) All are steadily in progress; (e.g., consolidation, implementation of pump stations for drainage and irrigation, canal construction, etc.) Dispatch of project engineers or specialists (agronomist, plantation instructor, farm manager, self-management farm consultant, etc.) are requested. Agricultural high school for immigrants has been arranged for the residents of the portside (at present, two departments with 367 students). Construction of sugar factory and milk factory is to start after finishing immigration. (FY1995 Domestic Survey) No additional information.	
5. TYPE OF STUDY	F/S	3. CONTENTS OF MAJOR PROJECT(S)					
6. COUNTERPART AGENCY	Ministry of Irrigation, Ministry of Land Rehabilitation	The Project is given higher priority in the 5 year plan (1982/83 - 1986/87), which forms a part of regional development of the Nile Delta by using water source of El Salam Canal, together with the development of north Hussinia area. (1) Land consolidation 23410ha, targeted cropping intensity 200% (2) Pump station for drainage 1 place and 4 places for irrigation (3) Canal 323km, drainage canal 296km (4) Pipe drain 9531km (23410ha) in the second stage (5) Settlement 9400 farm households (6) Construction of suger factory and milk factory.					
7. OBJECTIVES OF STUDY	To make F/S in the desert area and shallow lake area including cultivated land of 2500ha in Sharkia district by the water source of El Salam Canal. The project aims at expansion of farm land, increase of agricultural production, creation of employment opportunity, introduce of new industries and construction of new villages.	8. DATE OF S/W		Imp. Period: 1983. -1988.		2. MAJOR REASONS FOR PRESENT STATUS high priority project	
9. CONSULTANT(S)	Sanyu Consultants Inc.	9. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes	EIRR1) 13.00 EIRR2) EIRR3)		
10. STUDY TEAM	No. of Members 12 Period Jul.1980-Mar.1981(9 months)	Conditions and Development Impacts: [Conditions] EIRR 13.04 - Exchange rate 1 Egyptian Pound = 11 288 Japanese Yen - Price estimation is based on 1983 prices - Demarcation of the executing agency - on-farm facilities and public facilities by GARPAD, irrigation facilities by NOI - Open ditch drainage will be converted to pipe drainage in the second stage [Development Impacts] About 97% of the national land of Egypt is desert land, which is ranging along Nile river. Meanwhile, averaged annual increase ratio of population is high at 2.8%, therefore the government is promoting expansion of farm land with high priority. The project is expected to give impacts as shown below: (1) Land reclamation of 31400ha (2) Settlement of 9400 farm households (3) Alleviation of population to the city area (4) Increase of employment opportunity (5) Increase of agricultural production Rice 49,000 t Wheat 30,000 t Cotton 21,000 t Beef 8,000 t Corn 19,000 t				3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③	
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	None	12. EXPENDITURE		5. TECHNICAL TRANSFER			
		Total	149,413 (¥'000)		OJT		
		Contracted	116,140				

PROJECT SUMMARY (F/S)

Compiled Mar. 1986
Revised Mar. 1996

MEA EGY/S 305/81

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT	
1. COUNTRY	Egypt	1. SITE OR AREA	Alexandria			1. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY	Alexandria PCM Microwave Network Construction Project	2. PROJECT COST	Total Cost	Local Cost	Foreign Cost	(Description) (FY1991 Overseas Survey) The Project has been completed in 1984 with a loan from USAID amounting to US\$ 12 million and local fund of 800,000 E.pounds. Detailed design was completed in 1983 with USAID assistance. (FY1994 Domestic Survey) No information. (FY1994 Overseas Survey) The Project was completed by USAID financial support.	
3. SECTOR	Communications & B/Telecommunication		1) 29,072	2,545	26,527		
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)	2) US\$1=220yen				
5. TYPE OF STUDY	F/S		3)				
6. COUNTERPART AGENCY	Arab Republic of Egypt National Telecommunication Organization (ARENTO)	Contents	Alexandria area Connecting 10 exchanges by PCM digital microwave network				
7. OBJECTIVES OF STUDY	To clarify the feasibility for the project to construct a PCM digital microwave system in Alexandria area.	Scale					
8. DATE OF S/W	1981/3	4. FEASIBILITY AND ITS ASSUMPTIONS	Feasibility: Yes	EIRR1) 10.05 EIRR2) EIRR3)	FIRR1) 14.40 FIRR2) FIRR3)		
9. CONSULTANT(S)	Nippon Telecommunication Consulting Co., Ltd.	Conditions and Development Impacts: Condition: To examine the technical aspects of introducing a PCM microwave system network in Alexandria Development Impacts: Telephone network was deteriorated, and telephone service was inferior due to imperfect plant record, and poor maintenance. Therefore, the study may have many positive effects on city development in the region.					
10. STUDY TEAM	No. of Members 7 Period Mar. 1981-Jul. 1981 (4 months)	5. TECHNICAL TRANSFER					
	Total M/M Japan Field 17.00 11.70 5.30						
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	none	On the job training was conducted for the counterpart staff of ARENTO.				2. MAJOR REASONS FOR PRESENT STATUS	(FY1991 Overseas Survey) High priority and urgency
12. EXPENDITURE	Total 53,785 (¥000) Contracted 43,796					3. PRINCIPAL SOURCE OF INFORMATION	

和名 アレキサンドリアPCMマイクロウェーブ回線網建設

[F/S,D/D]

PROJECT SUMMARY (F/S)

Compiled Mar. 1990
Revised Mar. 1996

MEA EGY/A 302/82

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT		
1. COUNTRY	Egypt	1. SITE OR AREA	Tenth of Ramadan district, Ismailia State			I. PRESENT STATUS	<input checked="" type="checkbox"/> Completed or in Progress <input type="checkbox"/> Promoting <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Partially Completed <input type="checkbox"/> Delayed or Suspended <input type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled	
2. NAME OF STUDY	Tenth of Ramadan Agricultural Development Project	2. PROJECT COST	Total Cost	Local Cost	Foreign Cost			
3. SECTOR	Agriculture/(Agriculture in) General		(US\$1,000)			(Description) The OECF Loan (for E/S) Agreement was signed in Aug. 1984. The E/M was signed in April 1985 for an OECF loan (7.26 billion yen) for the project implementation. The detailed design study was undertaken from July 1984 to Aug. 1985. After the completion of the study, a construction firm was selected in Sept. 1986 after international bidding (LDC untied). Immediately after the selection, however, Egypt was classified as one of the countries for debt rescheduling, and the Egyptian Government withdrew from the approved loan. (FY1991 Overseas Survey) The General Authority for Reclamation and Agricultural Development restudied and changed some components of the project as follows. - Booster pump stations 28 units - Main pipeline 31km and branch line 210km - 970 households to be settled The management of the project has been completely transferred to the 10th of Ramadan Cooperative Society. The request for a loan of 26.5 million E. pounds has been made to the Main Bank for Development and Agriculture Credit. The Society has spent about 10 million E. pounds for the construction of roads and branch irrigation canals. *Contents of OECF Loan (1) Project : the engineering service of irrigation facility to cultivate the Tenth of Ramadan Area of 9,000ha. (2) Objective of Loan : Provision of the foreign currency for the expense of the above engineering service. (FY1994 Domestic Survey) No additional information (FY1994 Overseas Survey) The main pipeline has been completed. As to a main pump station and booster pump stations, though the Ministry of Water Resource Public Work announced those facilities would be implemented in the future, no outline was planned at present. The change of in-charge ministry from local government to central one seems to give influence to execution of the project. (FY1995 Domestic Survey) No additional information.		
4. REFERENCE NO.			1)	84,582	21,716			62,866
5. TYPE OF STUDY	F/S		2)					
6. COUNTERPART AGENCY	Ismailia state government	3. CONTENTS OF MAJOR PROJECT(S)	3)					
7. OBJECTIVES OF STUDY		Agricultural development in the desert: Irrigation area 9,000ha Head work 1 unit Main pump station 1 unit Booster pump station 10 units Main pipe line 20.7km Branch pipe line 247.9km Settlement 940 houses						
8. DATE OF SAV	1981/4	Imp. Period:	1982.1-1982.10					
9. CONSULTANT(S)	Taiyo Consultants Co., Ltd. Pacific Consultants International	4. FEASIBILITY AND ITS ASSUMPTIONS	Feasibility: Yes	EIRR1) EIRR2) EIRR3)	14.60			FIRR1) FIRR2) FIRR3)
10. STUDY TEAM	No. of Members 12 Period Jan. 1982-Oct. 1982 (10 months)	Conditions and Development Impacts: Prior conditions: The Irrigation Ministry of the Egyptian Government is to be responsible for preservation of irrigation water as well as construction and maintenance of the irrigation facilities for watering the project area. Benefits from the project: Through development of the desert, irrigation water will be reserved throughout a year enough to secure 200 percent of cropping in the project area, which will be managed under the mechanized farming system of middle scale. By this, the project is expected to contribute to obtaining foreign currencies, area development and increasing employment opportunities.						
	Total M/M							
	41.41	Japan						
		18.92	Field					
		22.49						
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Topographic Survey, Analysis of Water Quality and Soil Samples.	5. TECHNICAL TRANSFER	-Acceptance of two trainees for in-service training in Japan. -OJT -A seminar organized for the staffs of the state government and agriculture cooperatives.					
12. EXPENDITURE	Total 120,316 (¥000) Contracted 107,120							
						2. MAJOR REASONS FOR PRESENT STATUS		
						3. PRINCIPAL SOURCE OF INFORMATION		
						①, ②, ③, ④		

和名 テンスオブツマダン地区農業開発計画

[F/S,D/D]