

PROJECT SUMMARY (F/S)

Compiled Mar. 1990

Revised Mar. 1996

ASETHA/A 308/83

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT				
1. COUNTRY	Thailand	1. SITE OR AREA	Northern part of Thailand, Mae Chang River Basin			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	Mae Chang Irrigation Project	2. PROJECT COST (US\$1,000)	1) 44,000	Local Cost 22,000	Foreign Cost 22,000					
3. SECTOR	Agriculture/(Agriculture in)General	3. CONTENTS OF MAJOR PROJECT(S)	Beneficial Area : 8,095ha (Right bank area, 6,006ha, Left bank area 2,089ha) Major Facilities: Storage dam 1 site (total storage capacity 40MCM, Enbankment volume 680,000m ³ , Zone type earthfill) Diversion dam 1 site (total storage capacity 7 MCM, Dam volume 72,000m ³ Combination type) Main canal 51.3 km (concrete lined canal) Tribeetary canal 93.3 km (partly, no-lining canal) Others : Drainage canal 7.0 km, Onfarm facilities Small-scale hydro-power generation(164kw)			(Description) The project has been suspended because of the change in agricultural policy of the Thai Government. (FY 1991 Overseas Survey) No additional information. (FY 1993 Overseas Survey) Due to the changes in development policy of the government of Thailand, the priority of the project is ranked low and there is no possibility of the project to be implemented. Previously, Land consolidation was one of the most important target in the development policy of agriculture sector, however high priority has been given to small irrigation development since 5th 5 year National development Plan. (FY1994 Domestic Survey) The EGAT constructed a reservoir dam for fire power generation after 1985 at the upper stream basin of the proposed dam site of this study. Therefore, there are no water resources available for the project. No further planning has been made so far. (FY1995 Domestic Survey) No additional information.				
4. REFERENCE NO.		4. FEASIBILITY AND ITS ASSUMPTIONS	Feasibility: Yes/No	EIRR1) 13.60	FIRR1)					
5. TYPE OF STUDY	F/S	Conditions and Development Impacts: [Conditions] - Total project cost : 44.25 million \$ (as of 1983) - Reservoir are : 1,300ha - Resettlement : Household 125, Farmland 224ha - Annual cropping rate : 130% [Development Impacts] - Increasing the agricultural productivity and the surplus incomes (2,784 B/Y --> 7,501 B/Y) - Increasing the employment opportunities. - Improving the life conditions and living standard			EIRR2)		FIRR2)			
6. COUNTERPART AGENCY	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives				EIRR3)		FIRR3)			
7. OBJECTIVES OF STUDY	Feasibility study of the irrigation plan in Mae Chang area through the construction of a water storage dam	5. TECHNICAL TRANSFER To Thai counterparts assigned through the survey			2. MAJOR REASONS FOR PRESENT STATUS					
8. DATE OF S/W	1982/11				Imp. Period: 1984.4-1992.4		Problem of relocating 25 families in the area which will be submerged in water in the River Basin.			
9. CONSULTANT(S)	Sanyu Consultants Inc. Taiyo Consultants Co., Ltd.	11. ASSOCIATED AND/OR SUBCONTRACTED STUDY Soil Analysis (FY 1993 Domestic Survey)			3. PRINCIPAL SOURCE OF INFORMATION					
10. STUDY TEAM	No. of Members 13 Period Jan. 1983-Jan. 1984 (13 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;">69.11</td> <td style="text-align: center;">34.81</td> <td style="text-align: center;">34.30</td> </tr> </table>						Total M/M	Japan	Field	69.11
Total M/M	Japan	Field								
69.11	34.81	34.30								
12. EXPENDITURE	Total 186,107 (¥'000) Contracted 141,808									

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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	Second Stage Expressway System in the Greater Bangkok	Greater Bangkok																				
3. SECTOR	Transportation/Road	2. PROJECT COST		Total Cost	Local Cost	(Description) D/D of the Second Expressway was undertaken by a consortium of 5 consulting firms. In September 1988, ETA decided to implement the project with the private sector investment and the contract was granted to the Bangkok Expressway Consortium in December of the same year. ETA allowed one year for the acquisition of right of way. (FY1991 Overseas Survey) Construction will be completed in 1995. There was route adjustment for more suitable traffic catchment making the total length of the expressway 39km. Comparison between the development study plan and the ongoing project: <table style="width: 100%; border: none;"> <tr> <td></td> <td style="text-align: center;">Study plan</td> <td style="text-align: center;">Ongoing project</td> </tr> <tr> <td>Length:</td> <td style="text-align: center;">27.9 km</td> <td style="text-align: center;">39.05 km</td> </tr> <tr> <td>Cost</td> <td style="text-align: center;">26,200 million bahts</td> <td style="text-align: center;">29,500 million bahts</td> </tr> <tr> <td>Construction period:</td> <td style="text-align: center;">1986-1995</td> <td style="text-align: center;">1989-1995</td> </tr> <tr> <td>Finance:</td> <td style="text-align: center;">government budget and domestic and foreign loan</td> <td style="text-align: center;">private sector investment (transfer to the ETA)</td> </tr> </table> (FY1993 Overseas Survey) ETA will acquire project site by 1996. Land acquisition cost will be 26,800 million baht. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) Construction of sector A.C (20.4km) was completed in 1993. Construction of sector B (9.4km) and sector D (16.0km) will be completed by the end of 1996 and 1998, respectively.			Study plan	Ongoing project	Length:	27.9 km	39.05 km	Cost	26,200 million bahts	29,500 million bahts	Construction period:	1986-1995	1989-1995	Finance:	government budget and domestic and foreign loan	private sector investment (transfer to the ETA)
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Finance:	government budget and domestic and foreign loan	private sector investment (transfer to the ETA)																				
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)																				
5. TYPE OF STUDY	F/S	-Toll highway: 27.9 km -North-South Route running from Chaeng Wattana to an interchange at Bang Khlo: 19.2 km -West-East Route running from an interchange at Phaya Thai to Sri Nakaim Road: 8.7 km -Toll elevated expressway (Total length: 31.8km)																				
6. COUNTERPART AGENCY	Expressway and Rapid Transit Authority(ETA)	The project cost is 26,200 million bahts.																				
7. OBJECTIVES OF STUDY	Road planning	4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes	EIRR1) 17.00 FIRR1) 12.00 EIRR2) FIRR2) EIRR3) FIRR3)																	
8. DATE OF S/W	1982/3	Imp. Period: 1987. -1995.																				
9. CONSULTANT(S)	Pacific Consultants International	Conditions and Development Impacts:																				
10. STUDY TEAM	No. of Members 16 Period May. 1982-Nov. 1983 (18 months)	[Condition] Future traffic volume was forecasted for the targetted year 1990, 2000, 2010 on the basis of O-D survey made by home interviews. [Development Impact] Traffic congestion in the city is expected to be alleviated.																				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Topographic Survey, Geological Survey and Traffic survey	5. TECHNICAL TRANSFER																				
12. EXPENDITURE	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Total</td> <td style="text-align: right;">260,230 (¥'000)</td> </tr> <tr> <td>Contracted</td> <td style="text-align: right;">250,242</td> </tr> </table>	Total	260,230 (¥'000)	Contracted	250,242	(1) Overseas training for 2 counterpart staff (2) Employment of local consultants for topographic and geological survey		2. MAJOR REASONS FOR PRESENT STATUS (1) Effectiveness: Speeding up of vehicles (2) Priority: Traffic volume of the First Stage exceeded the anticipated figure; therefore, toll revenue will increase and priority of Second Stage is high. (3) Strong support to promote this project														
Total	260,230 (¥'000)																					
Contracted	250,242																					
				3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③																		

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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 East Coast Water Resources Development (Phase II)		Eastern seaboard (Rayong and Chonburi changwats)					
3. SECTOR Social Infrastructure/Water Resource Development		2. PROJECT COST		Total Cost	Local Cost	Foreign Cost	
		(US\$1,000)	1)	198,260	115,652	82,608	
		(US\$1=23Bahts)	2)	329,565	194,783	134,782	
			3)	69,130	51,739	17,391	
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)				(Description) 1) Canal between Nong Pla Lai Reservoir and Nong Kho Reservoir Feb. 1990 OECF L/A (E/S) 204 million yen Major Component: Engineering Service Jan. 1993 OECF L/A 6,362 million yen Major Component: Canal construction 2) Khlong Luang and Khlong Thap Ma: Suspended after the completion of the F/S. (FY1991 Overseas Survey) Project scale was reduced. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information.	
5. TYPE OF STUDY		1) Khlong Luang: (a) Multi-purpose dam (h. 42.5m); (b) canal connecting the dam and Chonburi; (c) irrigation and drainage (6,600ha)					
6. COUNTERPART AGENCY		2) Khlong Yai: (a) Multi-purpose dam (h. 50.8m); (b) canal connecting Nong Pla Lai Dam and Nong Kho Dam; (c) irrigation and drainage (7,700ha)					
7. OBJECTIVES OF STUDY		3) Khlong Thap Ma: (a) Multi-purpose dam (h. 28.9m); (b) irrigation and drainage					
8. DATE OF SAV		Imp. Period: 1984. -1996.					
9. CONSULTANT(S)		4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility:	EIRR1)	16.10	FIRR1)
Nippon Koei Co., Ltd. Nikken Consultants., Inc.				Yes	EIRR2)	15.00	FIRR2)
					EIRR3)	12.10	FIRR3)
10. STUDY TEAM		Conditions and Development Impacts: Benefits of the projects are estimated as follows.					
		(Unit: million Bahts)					
		Water Demand	Agri. Dev.	Flood Control	Total		
		1) 423.3	180.7	49.8	653.8		
		2) 793.6	198.2	57.2	1,049.0		
		3) -	81.7	19.5	101.0		
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		Topographic Survey, Core Boring, Materials Examination					
12. EXPENDITURE		5. TECHNICAL TRANSFER					
		Total		184,263 (¥'000)		3. PRINCIPAL SOURCE OF INFORMATION	
		Contracted		173,923		①, ②, ③	
		2. MAJOR REASONS FOR PRESENT STATUS (FY 1991 Overseas Survey) Khlong Yai is planned to follow Nong Pla Lai Dam, whereas Khlong Luang and Khlong Thap Ma have resettlement problems.					

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2.NAME OF STUDY	Nong Kho - Lam Chabang Water Pipeline Project	Chonburi																																																																									
3.SECTOR	Public Utilities/Water Supply	2.PROJECT COST				(Description)																																																																					
4.REFERENCE NO.		<table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">Total Cost</td> <td style="text-align: center;">Local Cost</td> <td style="text-align: center;">Foreign Cost</td> <td></td> </tr> <tr> <td>(US\$1,000)</td> <td style="text-align: center;">1) 16,300</td> <td style="text-align: center;">7,100</td> <td style="text-align: center;">9,200</td> <td></td> </tr> <tr> <td>(US\$1=230Yen=23B)</td> <td style="text-align: center;">2) 13,100</td> <td style="text-align: center;">5,300</td> <td style="text-align: center;">7,800</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">3)</td> <td></td> <td></td> <td></td> </tr> </table>							Total Cost	Local Cost	Foreign Cost		(US\$1,000)	1) 16,300	7,100	9,200		(US\$1=230Yen=23B)	2) 13,100	5,300	7,800			3)																																																			
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5.TYPE OF STUDY	F/S	3.CONTENTS OF MAJOR PROJECT(S)				1984 Sep. OECF E/S loan agreement (144 million yen) 1985-1986 Detail design 1985 Oct. OECF loan agreement (1,363 million yen) 1987 May Construction commenced 1988 Dec. Construction completed (FY1991 Overseas Survey) No additional information. *Contents of OECF Loan. 1. Construction of the raw water pipeline with distance of 15km. 2. Construction of diversion facility. 3. Construction of water supply control facility. 4. Construction of raw water well (FY1994 Domestic Survey) No information (FY1995 Overseas Survey) Thai Government constructed water pipelines from Lam Chabang to Pataya by itself to overcome water shortage in Pataya. This project has been transferred to East Water Resources Development & Management Co.Ltd.in 1993. The company is a public enterprise owned by PWA and later its stock will be sold to private sector. Thai Government plans to implement phase 2 of the project by their budget and it will finish in 1997 (the annual budget is around 200 million Baht).																																																																					
6.COUNTERPART AGENCY	Public Works Dept., Ministry of Interior	<table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">First Stage</td> <td style="text-align: center;">Second Stage</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Nong Kho-Turnout</td> <td style="text-align: center;">Nong Kho-Turnout</td> <td style="text-align: center;">Turnout-Receiving Well</td> <td style="text-align: center;">Turnout-Receiving Well</td> </tr> <tr> <td>1.Raw Water Pipeline</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Diameter of pipe</td> <td style="text-align: center;">1,000mm</td> <td style="text-align: center;">900mm</td> <td style="text-align: center;">1,000mm</td> <td style="text-align: center;">900mm</td> </tr> <tr> <td>Length of pipe</td> <td style="text-align: center;">10.95km</td> <td style="text-align: center;">3.49km</td> <td style="text-align: center;">10.95km</td> <td style="text-align: center;">3.49km</td> </tr> <tr> <td>Expected completion year</td> <td style="text-align: center;">1988</td> <td style="text-align: center;">1988</td> <td style="text-align: center;">1994</td> <td style="text-align: center;">1994</td> </tr> <tr> <td>2.Turnout</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Delivery pipe</td> <td style="text-align: center;">250mm</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Slice pipe</td> <td style="text-align: center;">2 units</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>3.Aqueduct(pipe-beam)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Net span</td> <td style="text-align: center;">-</td> <td style="text-align: center;">27.5m</td> <td style="text-align: center;">-</td> <td style="text-align: center;">27.5</td> </tr> <tr> <td>Diameter of pipe</td> <td style="text-align: center;">-</td> <td style="text-align: center;">900</td> <td style="text-align: center;">-</td> <td style="text-align: center;">900</td> </tr> <tr> <td>4.Receiving Well</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dimension(WxHxL) (m)</td> <td style="text-align: center;">-</td> <td style="text-align: center;">6.3x4.4x16.4</td> <td style="text-align: center;">-</td> <td style="text-align: center;">6.3x4.4x16.4</td> </tr> </table>							First Stage	Second Stage				Nong Kho-Turnout	Nong Kho-Turnout	Turnout-Receiving Well	Turnout-Receiving Well	1.Raw Water Pipeline					Diameter of pipe	1,000mm	900mm	1,000mm	900mm	Length of pipe	10.95km	3.49km	10.95km	3.49km	Expected completion year	1988	1988	1994	1994	2.Turnout					Delivery pipe	250mm	-	-	-	Slice pipe	2 units	-	-	-	3.Aqueduct(pipe-beam)					Net span	-	27.5m	-	27.5	Diameter of pipe	-	900	-	900	4.Receiving Well					Dimension(WxHxL) (m)	-	6.3x4.4x16.4
	First Stage	Second Stage																																																																									
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7.OBJECTIVES OF STUDY	To formulate a plan for the pipeline system from the Nong Kho dam to the Lam Chabang and to verify the feasibility of the project.	8.DATE OF SAV				2.MAJOR REASONS FOR PRESENT STATUS																																																																					
8.DATE OF SAV	1983/7	Imp. Period: 1987. -1988.																																																																									
9.CONSULTANT(S)	Nippon Koei Co., Ltd. Nikken Consultants., Inc.	4.FEASIBILITY AND ITS ASSUMPTIONS				1) Large impact: the industrial development at the Lam Chabang area is dependent on this project. 2) Close linkage with other projects: development in Lam Chabang and the source of water 3) High priority 4) Strength of the executing agency: strong support by NESDB																																																																					
10.STUDY TEAM	No.of Members 7 Period Aug.1983-Mar.1984(7 months)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Feasibility:</td> <td style="text-align: center;">EIRR1)</td> <td style="text-align: center;">11.60</td> <td style="text-align: center;">FIRR1)</td> <td style="text-align: center;">9.60</td> </tr> <tr> <td style="text-align: center;">Yes</td> <td style="text-align: center;">EIRR2)</td> <td></td> <td style="text-align: center;">FIRR2)</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">EIRR3)</td> <td></td> <td style="text-align: center;">FIRR3)</td> <td></td> </tr> </table>						Feasibility:	EIRR1)	11.60	FIRR1)	9.60	Yes	EIRR2)		FIRR2)			EIRR3)		FIRR3)																																																						
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	EIRR3)		FIRR3)																																																																								
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		Conditions and Development Impacts: [Conditions] The demand for water was projected for 1995 and 2001. The existing reservoir will not be able to satisfy the projected demand, and water must be conveyed by the pipeline from outside the area. The project life is set at 40 years. [Development Impacts] The industrial and urban development in the area, increase of job opportunities, upgrading of living standard, improvement of trade balance, mitigation of congestion in Bangkok.				3.PRINCIPAL SOURCE OF INFORMATION																																																																					
12.EXPENDITURE		5.TECHNICAL TRANSFER						①, ②, ③, ④																																																																			
Total	75,218 (¥'000)	1) On-the-job training during the study 2) Acceptance of counterparts for the training in Japan																																																																									
Contracted	78,467																																																																										

和名 ノンコー・ラムチャバン送水パイプライン建設計画

[F/S,D/D]

PROJECT SUMMARY (M/P)

Compiled Mar.1990
Revised Mar.1996

ASE THA/S 103/84

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDY RESULTS	
1.COUNTRY	Thailand	1.SITE OR AREA	Upper part of the Southern Region (pop.1.1 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	Sub-Regional Development of the Upper Southern Part	2.PROJECT COST	Total Cost Local Cost Foreign Cost (US\$1,000) 1) (US\$1=23Bahts) 2)	(Description) 1) After the completion of the study, ADB reviewed 10 high priority projects and endorsed their validity. 2) The Southern Seaboard Development Committee (chaired by the Prime Minister) was established in 1989. Under the purview of this Committee, a study on the development of Southern Thailand is being implemented, including the East-West Link, the Krabi Oil Refinery and Pipeline, and the Khanom Deep-sea Port, with World Bank finance. 3) With JICA technical assistance, the Tourism Authority of Thailand implemented a master plan study on tourism in Southern Thailand (1988). 4) With JICA technical assistance, the Dept. of Highways of the Ministry of Communications is implementing a master plan study on the road network (the East-West Link) in Southern Thailand. 5) The Electricity Generating Authority of Thailand is making preparations for a study on the Kaen Krung Dam proposed as part of the Tapi-Phum Duang River Management, but the problem of relocation is yet unsolved. 6) Unilever and other private enterprises have been active in the Central Lowland Development. (FY1993 Domestic Survey) 1) The idea of East-west Link is accommodated into the present Land Bridge Program. 2) Krabi-Khanom Road is under D/D. (FY1994 Domestic Survey) 1. The D/D has been completed for an East-West Link; Krabi-Khanom Highway in particular. Actual construction will start soon. 2. A proposed oil refinery will be set up at Khanom in stead of a pipeline proposed at the same time is expected to transport crude oil instead of petroleum products. 3. Surat Thani has been designated as one of the regional cities for which intensive investment have been made to reinforce urban infrastructures. (FY1995 Domestic Survey) No additional information.	
3.SECTOR	Development Plan/Integrated Regional Development Plan	3.CONTENTS OF MAJOR PROJECT(S)	The study proposed 10 high priority projects at the total cost of 24.272 million baht. 1) Surat Thani Industrial Estate 2) Phuket Airport Industrial Estate and Export Processing Zone 3) East-West Link 4) Surat Thani International Port (Khanom Deep-sea Port) 5) Krabi Oil Refinery and Pipeline 6) Phuket Urban Development 7) Surat Thani Urban Development 8) Central Lowland Development 9) Tapi-Phum Duang River Management 10) Phuket Water Supply Note: The cost shown above pertains to the ten high priority projects.		
4.REFERENCE NO.		4.CONDITIONS AND DEVELOPMENT IMPACTS	Development impacts: 1) Lessening of the concentration of economic activities in Greater Bangkok and more decentralized economic growth 2) Agricultural development (agricultural land development of unutilized or underutilized land and an increase of agricultural exports) 3) Industrial development (Sophistication of processing industries) 4) Tourism development (beach resorts, etc.) 5) Energy development (hydro-power, thermal power (coal), refining of Middle East petroleum) 6) Development of two urban cores (Surat Thani and Phuket)		
5.TYPE OF STUDY	M/P	10.STUDY TEAM			
6.COUNTERPART AGENCY	National Economic and Social Development Board (NESDB)	9.CONCONSULTANT(S)	International Development Center of Japan Pacific Consultants International	2.MAJOR REASONS FOR PRESENT STATUS	
7.OBJECTIVES OF STUDY	Formulation of a regional development plan through 2000	8.DATE OF SAW	1982/11	(FY 1991 Overseas Survey) The project was integrated in the Sixth National Plan (Chapter 5: 'Preparation for Development of Other New Economic Areas').	
12.EXPENDITURE	Total 431,827 (¥'000) Contracted 416,274	5.TECHNICAL TRANSFER	1) Participation of counterparts in the JICA training program (2 Staff) 2) OJT for the counterparts through joint work	3.PRINCIPAL SOURCE OF INFORMATION	
				①, ②, ③	

PROJECT SUMMARY (Other)

Compiled Mar. 1988
Revised Mar. 1996

ASE THA/S 601/84

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS							
1. COUNTRY	Thailand	1. SITE OR AREA	Entire country		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 Safety Plan for Roads	2. PROJECT COST	Total Cost	Local Cost	(Description) Utilizing the guidelines and other suggestions of the study, the Dept. of Highways have been installing necessary traffic-safety facilities. (FY1991 Overseas Survey) The results of study have been utilized for a loan proposal to the World Bank for the Sixth National Economic and Social Development Plan and it was approved. (FY1993 Overseas Survey) DOH has used the recommendations to implemented Traffic Safety Master Plan since 1987. DOH has used the giudelines of counter measures on traffic safety programme, too. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) Proposed project was implemented in the 7th 5year plan. There was a great progress of collection and analysis of traffic data by means of computer.							
3. SECTOR	Transportation/(Transportation in)General	(US\$1,000)	1)	2)								
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)										
5. TYPE OF STUDY	Other	In order to promote traffic safety in road transport, the study conducted the following tasks. (1) Collection and analysis of road traffic data (2) Identification of high-risk areas (3) Guidelines of physical facilities (4) Planning of physical facilities (5) Medium- and long-term plan for installing physical facilities										
6. COUNTERPART AGENCY	Dept. of Highways, Ministry of Communications	4. CONDITIONS AND DEVELOPMENT IMPACTS										
7. OBJECTIVES OF STUDY		The effect of technical transfer is much larger than the direct effect of the project.			2. MAJOR REASONS FOR PRESENT STATUS							
8. DATE OF SA/W	1983/2	10. STUDY TEAM										
9. CONSULTANT(S)	International Engineering Consultants Association Central Consultant, Inc. Chodai Co., Ltd. Oriental Consultants Co., Ltd.	No. of Members 11 Period May. 1983-Dec. 1984 (19 months)										
		<table style="width: 100%; border-collapse: collapse;"> <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;">54.50</td> <td style="text-align: center;">10.50</td> <td style="text-align: center;">44.00</td> </tr> </tbody> </table>			Total M/M	Japan	Field	54.50	10.50	44.00	3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③	
Total M/M	Japan	Field										
54.50	10.50	44.00										
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	5. TECHNICAL TRANSFER											
12. EXPENDITURE		1) Participation of the counterparts in the JICA training program 2) Gift of equipment (2 micro-computers)										
		Total	332,824 (¥'000)									
		Contracted	142,810									

和名 道路交通安全計画

[M/P, Basic Study, Other]

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1988

Revised Mar.1996

ASE THA/S 205B/84

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 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 Development Project of Laem Chabang Coastal Area		Laem Chabang (120km southeast of Bangkok)																																	
3.SECTOR Development Plan/Integrated Regional Development Plan		2.PROJECT COST				(Description) The project is under implementation with the OECF loans.																													
4.REFERENCE NO.		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;">M/P 1)</td> <td style="width: 10%;">1,051,000</td> <td style="width: 10%;">Local Cost</td> <td style="width: 10%;">Foreign Cost</td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td>2)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>F/S 1)</td> <td>397,000</td> <td>214,000</td> <td>183,000</td> <td></td> </tr> <tr> <td></td> <td>2)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>3)</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>							M/P 1)	1,051,000	Local Cost	Foreign Cost			2)						F/S 1)	397,000	214,000	183,000			2)						3)		
	M/P 1)	1,051,000	Local Cost	Foreign Cost																															
	2)																																		
	F/S 1)	397,000	214,000	183,000																															
	2)																																		
	3)																																		
5.TYPE OF STUDY M/P+F/S		3.CONTENTS OF MAJOR PROJECT(S)				Oct.1985 OECF loan agreement on the industrial estate I (2,922 million yen) Sep.1987 OECF loan agreement on the industrial estate II (3,003 million yen) Sep.1984 OECF loan agreement on the commercial port I (4,172 million yen) Nov.1986 OECF loan agreement on the commercial port II (12,283 million yen) Feb.1990 OECF loan agreement on the commercial port III (6,436 million yen) Sep.1988 OECF loan agreement on the railway (1,013 million yen) (FY1991 Overseas Survey) Construction Period: From year 1988 to year 1991 (FY1993 Overseas Survey) - First Stage of New Town (16ha residential zone, 2284 units) has been completed. Present population is 11,420. Second stage (8ha) is under preparation. - Public Utilities to accommodate new housing development have been completed. (FY1994 Domestic Survey) No information																													
6.COUNTERPART AGENCY Industrial Estate Authority of Thailand		<M/P> 1) Industrial Development 2) Port Development: 16 berths, domestic wharf 1,100m, wharf area 258ha length of breakwater 3,070m 3) Urban Development: New town population 120,000, Area 930ha 4) Transportation Planning 5) Utility Development Water supply, sewerage system, drainage system, solid waste disposal, power supply system(2 substations) telecommunication system (number of telephones 13,764, number of telex terminals 64) land preparation plan (land fill 3 million cu.m) * The project cost 1) above is for a short-term plan and 2) is for a long-term plan. <F/S>Major components of the short-term development plan: 1) Industrial Development: Industrial estate 219ha 2) Port Development: 6 berths, domestic wharf 280m, land area 116ha length of breakwater 2,400m 3) Urban Development: New town population 24,000, area 130ha 4) Transportation Development 5) Utility Development: Water supply, sewerage system, drainage system solid waste disposal, power generation(88.5MW) telephone lines(3,000), telex terminal(32) land preparation plan(land fill 2.6 million cu.m) Note: EIRR and FIRR1) below are for the industrial estate, and 2)FIRR for the housing estate.																																	
7.OBJECTIVES OF STUDY Formulation of a master plan (target year 2000) for the development of Laem Chabang Area and feasibility analysis of the short-term plan (target year 1987)		Imp. Period: 1985. -1989.				2.MAJOR REASONS FOR PRESENT STATUS																													
8.DATE OF SAW 1983/9		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">4.FEASIBILITY AND ITS ASSUMPTIONS</td> <td style="width: 15%;">Feasibility:</td> <td style="width: 10%;">EIRR1)</td> <td style="width: 10%;">19.20</td> <td style="width: 10%;">FIRR1)</td> <td style="width: 10%;">8.40</td> </tr> <tr> <td></td> <td>Yes</td> <td>EIRR2)</td> <td></td> <td>FIRR2)</td> <td>4.80</td> </tr> <tr> <td></td> <td></td> <td>EIRR3)</td> <td></td> <td>FIRR3)</td> <td></td> </tr> </table>						4.FEASIBILITY AND ITS ASSUMPTIONS	Feasibility:	EIRR1)	19.20	FIRR1)	8.40		Yes	EIRR2)		FIRR2)	4.80			EIRR3)		FIRR3)											
4.FEASIBILITY AND ITS ASSUMPTIONS	Feasibility:	EIRR1)	19.20	FIRR1)	8.40																														
	Yes	EIRR2)		FIRR2)	4.80																														
		EIRR3)		FIRR3)																															
9.CONSULTANT(S) Nippon Koei Co., Ltd.		Conditions and Development Impacts: <M/P>[Impacts]1) Creation of employment opportunities 2) Increase in foreign exchange earnings 3) Control of excessive growth in the Bangkok Metropolitan Area and Development of the regional economy <F/S>[Conditions] EIRR: adjusted the price with the Standard Conversion Factor of 0.92; Benefits consist of value added in the industrial estate FIRR: Calculated for the investments and for entities in charge of development (FIRR for the developing entity is calculated to be 8.0% for the industrial estate and 11% for the housing estate) [Impacts]1)Creation of employment 2)Increased foreign exchange earnings 3)Regional economic growth 4)Improvement of transportation system 5)Development of coastal shipping and port related industry. 6)Utilization of local resources; 7)Accumulation of production technologies, managerial technology and know-how.				3.PRINCIPAL SOURCE OF INFORMATION ①, ②, ③, ④																													
10.STUDY TEAM No.of Members Period Jan.1984-Mar.1985(15 months)																																			
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		5.TECHNICAL TRANSFER				2.MAJOR REASONS FOR PRESENT STATUS																													
12.EXPENDITURE		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;">Total</td> <td style="width: 10%;">255,314</td> <td style="width: 10%;">(¥000)</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td>Contracted</td> <td>181,733</td> <td></td> <td></td> <td></td> </tr> </table>							Total	255,314	(¥000)				Contracted	181,733																			
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11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;">Japan</td> <td style="width: 10%;">Field</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td>65.31</td> <td>36.60</td> <td>28.71</td> <td></td> <td></td> </tr> </table>					Japan	Field					65.31	36.60	28.71			1) Large impact: employment creation, increased foreign exchange, transfer of technology 2) High priority: one of the major projects to be implemented during the 5th development plan 3) close linkage with other projects 4) Strength of the executing Agency																	
	Japan	Field																																	
	65.31	36.60	28.71																																
12.EXPENDITURE		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;">Total</td> <td style="width: 10%;">255,314</td> <td style="width: 10%;">(¥000)</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td>Contracted</td> <td>181,733</td> <td></td> <td></td> <td></td> </tr> </table>					Total	255,314	(¥000)				Contracted	181,733																					
	Total	255,314	(¥000)																																
	Contracted	181,733																																	

和名 ラムチャバン臨海部開発計画

(M/P+F/S)

PROJECT SUMMARY (F/S)

Compiled Mar. 1990

Revised Mar. 1996

ASE/THA/A 309/84

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT			
1. COUNTRY	Thailand	1. SITE OR AREA		NakhonRatchasima and BuriRam Provinces, northeastern part of Thailand		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	Lower Northeast Medium Scale Irrigation Package Project	2. PROJECT COST		Total Cost	Local Cost			Foreign Cost	
3. SECTOR	Agriculture/(Agriculture in)General			1) 58,874	28,131	30,743			
4. REFERENCE NO.				2) Price in 1983					
5. TYPE OF STUDY	F/S			3)					
6. COUNTERPART AGENCY	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	3. CONTENTS OF MAJOR PROJECT(S)				(Description) The mid-size dam in Lam Plai Mat was constructed by the Thai Government fund during 1987 - 1991. Small-scale dams in adjustment areas and surrounding dams have been under construction since 1990, with Thai Government funds. (FY1991 Overseas Survey) No additional information. (FY 1993 Overseas Survey) After D/D was conducted by government budget in 1985, Dam construction in Ram Prai Mat project site has been completed by government budget in 1991. Total project cost was 325 million Bahts. Irrigation canal construction was split into 2 phases. As a 1st stage of 20,000 rai of irrigation area, 14km of irrigation canal out of 52km was completed in 1993. As a 2nd stage of 40,000 rai irrigation area, construction of 150km of irrigation canal is to be initiated in 1994 and to be completed within 6 years. (FY1994 Domestic Survey) Canal construction of phase-2 is underway. Both detailed design and construction were commenced in 1992 and scheduled to be completed in 1996. Project cost including D/D is 290 million Baht. (FY1995 Domestic Survey) Canal construction of Phase-2 is underway. Budget allocated for each Phase are as shown below ; Phase-1 (1992-93) 90 (million bahts) Phase-2 (1994) 60 (1995) 60 (1996) 39.77 Designing works, etc. 40.23 Total 290			
7. OBJECTIVES OF STUDY	Integrated agricultural development through the construction of a medium-size dam for irrigation and drinking water	Lam Plai Mat	Nong Lam Fuk	Huai Phlu					
8. DATE OF SAV	1982/12	Irrigation area	9,100	300	700				
9. CONSULTANT(S)	Sanyu Consultants Inc. Naigai Engineering Co., Ltd.	Dam height	44.6m	12.0m	20m				
10. STUDY TEAM	No. of Members 14 Period Feb. 1983-Jul. 1984 (18 months)	pondage	90 MCM	4 MCM	6 MCM				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	None	Diversion weir	1 site	-	-				
12. EXPENDITURE	Total 240,296 (¥'000) Contracted 223,112	Canal irrigation drainage	215km	13km	29km		1km		
		4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes	EIRR1) 8.70 EIRR2) 11.20 EIRR3)		FIRR1) FIRR2) FIRR3)		
		Conditions and Development Impacts: Irrigation agriculture development plan: The proposed cropping pattern is 100% of wet season paddy and 10% of dry season upland crop. The terminal irrigation facilities are planned at each 20-30 ha of irrigable area. Water use development plan in a village: Field crop adjustment facilities for night will be established to breed fish as well as to secure farmers' potable water and for other use through surrounding shallow well.							
		5. TECHNICAL TRANSFER		Study method and development planning method. JICA c/p training.					
		2. MAJOR REASONS FOR PRESENT STATUS							
		Recently external finance is mainly used for the implementation of big projects, and the Thai Government itself finances small and medium size projects.							
		3. PRINCIPAL SOURCE OF INFORMATION							
		①, ②, ③							

和名 東北タイ南部中規模かんがいパッケージプロジェクト

[F/S,D/D]

PROJECT SUMMARY (F/S)

Compiled Mar.1988

Revised Mar.1996

ASE THA/S 314/84

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 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 Track Elevation Project of Existing Railway Lines in the Bangkok Metropolitan Area		Entire Bangkok Metropolitan Area					
3.SECTOR Transportation/Railway		2.PROJECT COST		Total Cost	Local Cost	Foreign Cost	
4.REFERENCE NO.		(US\$1,000)	1)	158,000	100,000	48,000	
5.TYPE OF STUDY		(US\$1=23B)	2)				
6.COUNTERPART AGENCY State Railway of Thailand		3)	3.CONTENTS OF MAJOR PROJECT(S)				
7.OBJECTIVES OF STUDY Increasing the efficiency and ensuring the safety of train operation and elimination of traffic congestion at level crossings		Civil work		US\$ 125 million			
8.DATE OF S/W		Land procurement		US\$ 2000 million			
9.CONSULTANT(S) Japan Railway Technical Service		Electric facilities		US\$ 30.9 million			
10.STUDY TEAM		Rolling stock		US\$ 68.6 million			
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY Geological and traffic volume surveys were entrusted to a local consultant		Track elevation will be mainly carried out in the following sections. -Bangkok Station - Bang Sue Station) -Yoma Pot, Chit-La-Da Junction - Makkasan Station) 13 km -Makkasan Station - Mae Nam Station)					
12.EXPENDITURE		4.FEASIBILITY AND ITS ASSUMPTIONS					
Total		Feasibility: Yes/No		EIRR1) 16.00	HRR1)	(Description) The State Railway of Thailand and the Ministry of Communications decided to implement the track elevation by the BOT system. SRT invited the private sector application in December 1988, but received no response. By offering better access to the SRT-owned land, the invitation was announced again in October 1989. In November 1990, SRT signed the contract of 80 billion bahts (about 400 billion yen) with HOPEWELL of Hong Kong. In December 1991, the HOPEWELL Company decides to carry on this project, therefore, it can be expected that the construction of track elevation together with community train and freeway for the first phase along the Yommaraj-Donmaung section for a distance of 18.8km shall be finished in year 1995. (FY1991 Overseas Survey) The project scale was enlarged to 60.1 km consisting of north-south and east-west lines with a budget of 60 billion bahts. The construction will be from 1993 to 1996. (FY1993 Overseas Survey) The construction by HOPEWELL is from 1991 to 1999. It will totally cost 80 billion baht. (FY1994 Domestic Survey) The construction works of HOPEWELL Project on the 'L' shaped route from Yommarat toward north and east have been started. Cast-in-place pile works are in progress. The construction is delayed about two and a half years now. As for the sections toward west and Maeklong which cross the Chao Phraya River construction works are not commenced yet. (FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) Hopewell project is completely different in scale and concept from the project proposed by this development study, therefore the study should be actually considered cancelled. The construction started in 1992 by Hopewell, with a construction period of 8 years, an estimated cost of 80 billion bahts. No land acquisition shall be necessary to implement the project. However the construction work seems to be much delayed.	
Contracted				EIRR2)	HRR2)		
				EIRR3)	HRR3)		
				Conditions and Development Impacts: [Preconditions] 1)With/without analysis conducted 2)Project life estimated to be 30 years 3)1 baht = 10 yen 4)As for the transfer of traffic, only that from buses was considered. [Development impacts] 1)Alleviation of traffic congestion at level crossings owing to track elevation. 2)Alleviation of road traffic congestion owing to passengers transferring from buses to the railway due to the latter's punctuality and faster speeds. 3)Elimination of geographical separation and promotion of urban facilities development owing to track elevation. * Above EIRR is 16 - 20%.			
				5. TECHNICAL TRANSFER			
				6. MAJOR REASONS FOR PRESENT STATUS			
				3. PRINCIPAL SOURCE OF INFORMATION			
				①, ②, ③			

PROJECT SUMMARY (F/S)

Compiled Mar. 1988

Revised Mar. 1996

ASE THA/S 313/84

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 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	Comprehensive Development of Coastal Shipping	the entire coastal areas					
3. SECTOR	Transportation/Marine Transportation & Ships	2. PROJECT COST		Total Cost	Local Cost	(Description) Suspended after the completion of the study. A short-term expert (2 months) was sent in 1985 and 1986 to give advice on the legislation on domestic shipping and its promotion. The project requires the government finance, and the implementation was suspended because some legislative improvement is necessary for reviewing the operation of domestic shipping companies. (FY 1991 Overseas Survey) Office of the Mercantile Marine Promotion Commission (OMPC) has requested the Industrial Finance Corporation (IFCT) of Thailand to negotiate with the OECF. The Ministry of Transport and Communications has requested for the JICA project review. (FY1993 Overseas Survey) Following factors caused the project to discontinue. - Economic recession (1985-88) - IFCT's attitude to the project - Comparative advantage of road-transport. (FY1994 Domestic Survey) No information. (FY1995 Overseas Survey) Liner service has not been established in Coastal shipping. New Line of Liner service is expected to be established from Bangkok to Chun-Pon through Laem Chabang.	
4. REFERENCE NO.		(US\$1,000)	1) 528	516	Foreign Cost		
5. TYPE OF STUDY	F/S	(US\$1=251.1yen)	2)				
6. COUNTERPART AGENCY	Office of the Mercantile Marine Promotion Commission, Ministry of Communications	3)	3. CONTENTS OF MAJOR PROJECT(S)				
7. OBJECTIVES OF STUDY	Formulation of a comprehensive development plan for the coastal shipping and regional ports	1) Present status of physical distribution and selection of major commodities for domestic shipping 2) Present status of the domestic shipping industry 3) Cargo throughputs and present facilities of regional ports 4) Present freight movements by transportation mode and the possibility of transfer from other modes to domestic shipping 5) Formulation of a development plan for the domestic shipping industry and regional ports 6) Economic and financial analysis of the operations of domestic shipping and regional ports					
8. DATE OF SAW	1983/2	Imp. Period: 1983.7-1984.10					
9. CONSULTANT(S)	The Maritime International Cooperatin Center of J Overseas Coastal Area Development Institute	4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: No	EIRR1) 19.70 EIRR2) EIRR3)		
10. STUDY TEAM	No. of Members 11 Period Jul. 1983-Oct. 1984 (16 months)	Conditions and Development Impacts: 1) For the shuttle service between Bangkok and Songkhla, a fleet of 7 general cargo boats (700 tons) will be suitable. 2) Institutional measures for domestic shipping: Legislation of the domestic shipping act; clear separation between international and domestic shipping; establishment of the ship registry; introduction of the permit system on ship construction; submission of the operation reports 3) Measures for promoting domestic shipping: Preferential treatment by the Investment Promotion Act; Fiscal incentives; simplification of freight documents and improvement of customs procedures; establishment of the institutional finance to give soft long-term loans * Above EIRR is 19.7 - 20.6%					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		5. TECHNICAL TRANSFER			2. MAJOR REASONS FOR PRESENT STATUS		
		1) OJT on the operation of domestic shipping and ports 2) Participation of the counterparts in the JICA training program			1) Change of priority 2) Problem of demand: difficulty of providing transportation service with profit. (FY 1991 Overseas Survey) There is no law which empowers the Government to guarantee private loan. The IFCT has the view that the project is not viable.		
12. EXPENDITURE					3. PRINCIPAL SOURCE OF INFORMATION		
Total 219,015 (¥000)					①, ②		
Contracted 88,824							

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1988

Revised Mar.1996

ASE THA/S 206B/85

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		Eastern Suburban Bangkok (study area of 260 sq.km) <M/P> East suburban area of Bangkok (Study area of 100 sq.km) <F/S>					
Master Plan on Flood Protection/ Drainage Project in Eastern Suburban- Bangkok		2. PROJECT COST		M/P 1) 233,333 Local Cost	140,740 Foreign Cost	92,593	
		(US\$1,000)		2) Cost	Cost		
		(US\$1= 27 Bahts)		F/S 1) 98,333	51,630	46,703	
				2)			
				3)			
3. SECTOR		3. CONTENTS OF MAJOR PROJECT(S)				(Description) After the completion of the F/S, 59 pumps were provided by the Japanese grant aid. The construction of the Flood Control Operation Center was completed in Mar. 1991 by the Japanese grant. (FY1993 Overseas Survey) The flood protection and drainage facilities were implemented in eastern suburban of Bangkok from 1988 to present such as pumping stations, watergates, canal improvement etc. (FY1995 Domestic Survey) No additional information.	
Social Infrastructu/River & Erosion Control		<M/P> The project aims to protect the area of 260 sq.km from floods coming from outer areas by construction of polder dykes and drain internal storm water by providing adequate drainage facilities. The proposed measures are as follows. (Structural measures) - Polder dyke (62km), gate (55 places), pump station (10 places), channel improvement (133km), drain pipe (110km) (Non-structural measures) - Land use regulation, provision of storm retarding basin, establishment of flood forecasting and warning system					
4. REFERENCE NO.							
5. TYPE OF STUDY		M/P+F/S					
6. COUNTERPART AGENCY		Dept. of Drainage and Sewerage, Bangkok Metropolitan Administration					
7. OBJECTIVES OF STUDY		To evaluate the feasibility of building the drainage facilities					
8. DATE OF S/W		1982/11					
9. CONSULTANT(S)		Pacific Consultants International Tokyo Engineering Consultants Co., Ltd.					
		Imp. Period: 1987.4-1992.3					
		4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes	EIRR1) 20.20 EIRR2) EIRR3)		
10. STUDY TEAM		Conditions and Development Impacts:					
No. of Members 12		<M/P> Flood damage mitigation. The area of 260 sq.km will be completely protected from outer floods and inner storm rainfall will be fully controlled for 5-year probability rainfall. As a result, flood damage reduction on the buildings, properties, traffic, electricity and telecommunication, and land use enhancement are much expected.					
Period May.1983-Feb.1986(32 months)		<F/S> Drainage facilities are to be improved based on the result of floods which occurred in 1983. It used to take 2 or 3 months to recover. But now it takes only 3 days to 1 week. The development impact is great.					
Total M/M		Japan		Field			
115.00		60.50		54.50			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		Topographic and Geological Survey					
12. EXPENDITURE		5. TECHNICAL TRANSFER					
Total		Technical advice on flood control operation, drainage facilities management/operation.					
Contracted		Overseas training for counterpart staff.					
487,871 (¥000)							
331,729							
		2. MAJOR REASONS FOR PRESENT STATUS					
		3. PRINCIPAL SOURCE OF INFORMATION					
		①, ②					

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE/THA/A 311/85

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT		
1.COUNTRY	Thailand	1.SITE OR AREA		Sakae Krang River Basin(6,300 sq.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	Sakae Krang River Basin Irrigation Project	2.PROJECT COST						
		(US\$1,000)	1)	Total Cost	Local Cost	Foreign Cost	(Description) An environmental impact assessment study was undertaken by RID for earlier implementation of the project. (FY1991 Overseas Survey) No additional information. (FY1993 Overseas Survey) Upper Mewong dam, 230MCM capacity, proposed by JICA study is classified as large scale according to RID's regulation and Environmental Impact Assessment study is requested to be conducted before the project is implemented. EIA study was completed by Chengmai University in Dec. 1993. Rid is now preparing request for 20th OECF loan. (FY1994 Domestic Survey) The environmental impact assessment was completed by RID in Dec. 1993. In response to the request from RID, OECF decided to execute a SAPROP survey to order to update the F/S conducted by JICA in 1984-86. (FY1995 Domestic Survey) No additional information.	
		US\$1=27B	2)	107,226	35,144	72,082		
			3)					
3.SECTOR	Agriculture/(Agriculture in)General	3.CONTENTS OF MAJOR PROJECT(S)						
		Mae Wong irrigation scheme was selected as a result of M/P and Pre-F/S.						
		1.Irrigation area : 46,700ha						
		2.Water source : Mae Wong river						
		3.Upper Mae Wong dam : Rock-fill type Height 57m, Crest Length 794m						
		4.Irrigation Facilities: Intake weir 2 sites Main canal 76.7 km Secondary canal 285.2 km Drainage canal 204.2 km						
		* Implementation period below is 7 years.						
4.REFERENCE NO.		4.FEASIBILITY AND ITS ASSUMPTIONS						
5.TYPE OF STUDY	F/S	Feasibility: Yes	EIRR1) 13.00 EIRR2) EIRR3)	FIRR1) FIRR2) FIRR3)	2.MAJOR REASONS FOR PRESENT STATUS			
6.COUNTERPART AGENCY	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	Conditions and Development Impacts: 1.Increase of crop production 2.Improvement of living standard and welfare 3.Improvement of cropping productivity in the dry season						
7.OBJECTIVES OF STUDY	Irrigation of Sakae Krang River Basin Pre-F/S and M/P	10.STUDY TEAM				3.PRINCIPAL SOURCE OF INFORMATION		
		No.of Members 16 Period Sep.1984-Mar.1986(19 months)						
8.DATE OF SAW	1984/7	Imp. Period:				①, ②, ③		
9.CONSULTANT(S)	Nippon Koei Co., Ltd. Kyowa Engineering Consultants Co., Ltd. Nippon Giken Inc.							
		11.ASSOCIATED AND/OR SUBCONTRACTED STUDY						
		None						
		5.TECHNICAL TRANSFER						
		Technology transfer to counterpart in the course of the study.						
		12.EXPENDITURE						
		Total	257,848 (Y'000)					
		Contracted	246,885					

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASETHA/A 310/85

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT		
1. COUNTRY	Thailand	1. SITE OR AREA		Whole country		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 Comprehensive Storage Facilities Development Project (Phase II)		2. PROJECT COST		Total Cost	Local Cost	Foreign Cost	(Description) In 1986, Thai government drastically revised the rice marketing policy and abolished the conventional government procurement at support prices. As a result, the operational scale of Public Warehouse Organization (PWO) was radically reduced. On the other hand, the government has been implementing the development of the port at Laem Chabang and planned to construct integrated facilities for collecting, processing and exporting agricultural products in the area behind the port. The government at one time considered the possibility of including the loading facilities for export rice in the area, but the idea did not materialize. The rice exports have long been made from the river ports in Bangkok city, and the construction of modern facilities are underway by private companies. The exports of Thai rice reached 5.7 million tons in 1989. Further rationalization of rice marketing and modernization of marketing facilities are strongly desired by both the government and private organization. (FY1993 Overseas Survey) Thereason of discontinuation is because many government agencies joined rice export programme. It lowered PWO's rank as a rice exporter. (FY1994 Domestic Survey) No information.	
		(US\$1,000)	1)	42,129	21,167	20,962		
		US\$1=202.83Yen in Dec.1984		2)				
				3)				
3. SECTOR Agriculture/(Agriculture in)General		3. CONTENTS OF MAJOR PROJECT(S)						
4. REFERENCE NO.		1. Warehouse construction: State level - 10 sites Local level - 5 sites. Seaport Warehouse - 1 site at Laem Chabang						
5. TYPE OF STUDY F/S		2. Improvement on processing and loading facilities for shipping exportable rice: River port - 2 sites (Nonthaburi, Rajburana) Deep sea port - 1 site (Laem Chabang)						
6. COUNTERPART AGENCY Public Warehouse Organization (PWO)		3. Grain reprocessing facility: 6 sites						
7. OBJECTIVES OF STUDY		4. Storage technology improvement and training center construction: 1 site (Nonthaburi)						
		* Project costs above are in Dec.1984 prices.						
8. DATE OF SAW 1983/12		4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes	EIRR1) 12.00 EIRR2) 13.10 EIRR3)	FIRR1) FIRR2) FIRR3)		
9. CONSULTANT(S) Overseas Merchandise Inspection Co., Ltd. Sanyu Consultants Inc.		Conditions and Development Impacts: [Conditions] 1. Recruiting and training of personnel; 2. Proper management and control; 3. R&D by Cooperation with other organization. [Development Impacts] 1. Expansion of public activities by PWO; 2. Support government rice price policies and materialize long-term stabilization of producers' paddy price and consumers' milled rice price; 3. Improvement and rationalization of rice marketing by expanding and improving facilities/warehouses at rice markets; 4. Continued Sales to existing markets and developing new markets by improving export rice quality and expanding shipping facilities and capacities for loading onto a large sized ocean-going vessels; 5. Reducing losses during storage; 6. Support the activities of public organizations such as agricultural cooperatives, BAAC, etc. by offering them the use of Warehouse; 7. Providing services for marketing other agricultural products by offering the use of seasonal empty space and the auxiliary facilities of the warehouse. * Above EIRRs are 1) for River port and 2) for Sea port.						
10. STUDY TEAM No. of Members 11 Period Feb.1984-Jun.1985(17 months)				5. TECHNICAL TRANSFER				
		Total M/M	Japan	Field				
		40.66	19.74	20.92				
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY								
12. EXPENDITURE		3. PRINCIPAL SOURCE OF INFORMATION						
		①, ②						
		Total	122,940 (¥'000)					
		Contracted	114,782					

PROJECT SUMMARY (F/S)

Compiled Mar.1988
Revised Mar.1996

ASE THA/S 315/85

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	Establishment of a Large Repair Shipyard	Laem Chabang							
3.SECTOR	Transportation/Marine Transportation & Ships	2.PROJECT COST		Total Cost	Local Cost	(Description) Suspended after the completion of the study because of the low feasibility. The Government has been encouraging the private sector investment. JICA is conducting a M/P study on the shipbuilding industry, and reviewing the proposal of the study. Private shipping company and shipyard have jointly operated and going to invest shipyard facilities on the basis of leasing contract of site between Port Authority of Thailand and the company. (FY1993 Overseas Survey) Prospective low return on investment caused the above company to discontinue the project. At present, big ships go to Singapore for repairment. (FY1995 Overseas Survey) The joint-venture has started the operation of a floating dock since 1994. The construction cost: 1,500 Million Bahts. Capacity: repair of eighty(80) vessels a year.			
4.REFERENCE NO.		(US\$1,000)	1)	40,000	15,000			25,000	
5.TYPE OF STUDY	F/S	(US\$1=169.40Yen)	2)						
6.COUNTERPART AGENCY	Board of Investment	3)							
7.OBJECTIVES OF STUDY	Feasibility analysis of a repair shipyard	3.CONTENTS OF MAJOR PROJECT(S)							
8.DATE OF SAW	1982/10	Any other facilities necessary for shiprepairing. Time schedule: start of preparation for construction, Jan. 1986 start of construction work, Sept. 1987 start of operation, Jan. 1990 Completion of construction work, March 1990							
9.CONULTANI(S)	Overseas Ships Building Cooperation Center	4.FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes	EIRR1) 11.40 EIRR2) EIRR3)			FIRR1) 5.80 FIRR2) FIRR3)	
10.STUDY TEAM	No.of Members 9 Period Jul.1984-May.1985(11 months)	Conditions and Development Impacts: The growth rate of the cargo carried by the Thai shipping companies(which has a share of 10% of the total transportation volume) was estimated on the bases of growth of GDP and international trade. The scale of the shipyard was then determined by evaluating the types of ships used and the nature of repair work needed. Development effects will be substantial, because the existing capacity of the domestic repair yards is considerably short of the demand. The major shipyards in Thailand are located along the Chaopraya River in Bangkok city surrounded by housing and it is impossible for them to expand their facilities to bigger sizes. At present their max. capacity to accommodate for repairing services is 5,000 tons. The max. capacity will become 20,000 tons if this shipyard is established. (FY 1993 Domestic Survey)						2.MAJOR REASONS FOR PRESENT STATUS	
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		5.technical transfer						3.PRINCIPAL SOURCE OF INFORMATION	
12.EXPENDITURE	Total 146,390 (¥000) Contracted 158,523	1) Participation of one counterpart in the JICA training program 2) Employment of local consultants						①, ②	

PROJECT SUMMARY (F/S)

Compiled Mar.1986
Revised Mar.1996

ASE THA/S 316/85

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 Sanitary District Water Works Project in the North - Eastern Region		10 towns and villages in the North-Eastern region of Thailand																																																	
3. SECTOR Public Utilities/Water Supply		2. PROJECT COST		Total Cost	Local Cost	Foreign Cost																																													
4. REFERENCE NO.				1) 6,463	3,080	3,383																																													
5. TYPE OF STUDY F/S				2)																																															
6. COUNTERPART AGENCY Department of Public Works, (DPW) Ministry of Interior		3. CONTENTS OF MAJOR PROJECT(S)				(Description) The project implementation for respective sanitary district may be commenced with their own budget sources. (FY1993 Overseas Survey) The water works in each town were put in the ordinary budget of the provincial water supply development division. The projects proposed in the study are in lower priority of each town. (FY1994 Domestic Survey) At the time of F/S study, the Public works Department of the Ministry of Interior was the counter-part Agency. The project was transferred to the Office of Urban Development of the Department of Local Administration, Ministry of Interior at the implementation stage. The project is being discussed among the Office of Urban Development and those Sanitary District offices concerned with the project. (FY1995 Domestic Survey) Due to the change of the Governmental organizations including DOLA, since Aug., 1995, this project is under the control of following 3 divisions of PWD such as Bureau of Local Affairs, Structure and System Development Division and Local Finance Division. Now the investigation works are carrying out how to implement the project with each local governments concerned. (FY1995 Overseas Survey) Asian Development Bank conducted a study of water supply for 100 sanitary districts in the whole nation, which includes a review of JICA study. 58 projects out of 100 are PWD projects, and 42 belongs to Public Water Authority(P.W.A.). Based on the study of ADB, Thai Government prepared 5 year planning for water supply. D/D was done for a part of the plan and construction in 10 areas started in 1995 by Thai Government budget. 10 projects which were covered by JICA study belong to PWA, and PWD is not implementing projects for the area.																																													
7. OBJECTIVES OF STUDY Stable supply of clear water to the area.		Summary of the proposed project is tabulated as follows. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sub-project Name</th> <th>Served Population</th> <th>Max.Capacity (cu.m/day)</th> <th>Major Facility</th> </tr> </thead> <tbody> <tr><td>Kham Sake Sang</td><td>6,000</td><td>900</td><td>RSFP 1.0 unit, D.pipe 10.5km</td></tr> <tr><td>Nong Bua Lai</td><td>4,500</td><td>675</td><td>RSFP 1.0 unit, D.pipe 6.91km</td></tr> <tr><td>Huai Thalaeng</td><td>13,300</td><td>1,995</td><td>RSFP 1.0 unit, D.pipe 12.3km</td></tr> <tr><td>Nong Xi</td><td>16,900</td><td>2,535</td><td>RSFP 1.0 unit, D.pipe 25.6km</td></tr> <tr><td>Huai Rat</td><td>4,900</td><td>735</td><td>RSFP 1.0 unit, D.pipe 9.0km</td></tr> <tr><td>Khun Han</td><td>5,000</td><td>750</td><td>RSFP 1.0 unit, D.pipe 6.7km</td></tr> <tr><td>Kusuman</td><td>6,200</td><td>930</td><td>ASFP 1.0 unit, D.pipe 9.2km</td></tr> <tr><td>Phon Charoen</td><td>10,600</td><td>1,580</td><td>RSFP 1.0 unit, D.pipe 12.1km</td></tr> <tr><td>Nong Song Hong</td><td>8,600</td><td>1,290</td><td>RSFP 1.0 unit, D.pipe 13.2km</td></tr> <tr><td>Huai Kha Yung</td><td>4,900</td><td>735</td><td>RSFP 1.0 unit, D.pipe 13.5km</td></tr> </tbody> </table> Note: RSFP =Rapid Sand Filtration Plant, ASFP=Aeration Sand Filtration Plant						Sub-project Name	Served Population	Max.Capacity (cu.m/day)	Major Facility	Kham Sake Sang	6,000	900	RSFP 1.0 unit, D.pipe 10.5km	Nong Bua Lai	4,500	675	RSFP 1.0 unit, D.pipe 6.91km	Huai Thalaeng	13,300	1,995	RSFP 1.0 unit, D.pipe 12.3km	Nong Xi	16,900	2,535	RSFP 1.0 unit, D.pipe 25.6km	Huai Rat	4,900	735	RSFP 1.0 unit, D.pipe 9.0km	Khun Han	5,000	750	RSFP 1.0 unit, D.pipe 6.7km	Kusuman	6,200	930	ASFP 1.0 unit, D.pipe 9.2km	Phon Charoen	10,600	1,580	RSFP 1.0 unit, D.pipe 12.1km	Nong Song Hong	8,600	1,290	RSFP 1.0 unit, D.pipe 13.2km	Huai Kha Yung	4,900	735	RSFP 1.0 unit, D.pipe 13.5km
Sub-project Name	Served Population	Max.Capacity (cu.m/day)	Major Facility																																																
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8. DATE OF S/W 1984/7		Imp. Period: 1986.10-1989.5																																																	
9. CONSULTANT(S) Sanyu Consultants Inc.		4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes	EIRR1) 6.00 EIRR2) EIRR3)	FIRR1) FIRR2) FIRR3)																																													
10. STUDY TEAM		Conditions and Development Impacts: As preconditions, samples of F/S were conducted in 10 districts. [Development Impacts] Since the construction and development of the water works is to be conducted in the town where the provincial office is, the execution and benefit from this kind of project exerts much influence not only on the town but on surrounding districts. * Above FIRR is 6 - 8%.																																																	
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY None		5. TECHNICAL TRANSFER																																																	
12. EXPENDITURE		Acceptance of 2 trainees from the local counterpart																																																	
Total 134,763 (¥'000)																																																			
Contracted 126,639																																																			
		3. PRINCIPAL SOURCE OF INFORMATION																																																	
		①, ②, ③																																																	
		2. MAJOR REASONS FOR PRESENT STATUS																																																	
		The project is executed by the respective sanitary district organization.																																																	

PROJECT SUMMARY (F/S)

Compiled Mar.1988
Revised Mar.1996

ASE THA/S 317/85

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	Road Development in the North - Eastern Region (Phase 2)	Northeast Region					
3. SECTOR	Transportation/Road	2. PROJECT COST		Total Cost	Local Cost	Foreign Cost	
4. REFERENCE NO.		(US\$1,000)	1)	42,155			
5. TYPE OF STUDY	F/S	(US\$1=20B)	2)				
6. COUNTERPART AGENCY	Dept. of Highways, Ministry of Communications		3)				
7. OBJECTIVES OF STUDY	Feasibility analysis of new construction, improvement and rehabilitation of roads	3. CONTENTS OF MAJOR PROJECT(S)				(Description)	
8. DATE OF S/W	1984/3	(1) New construction and improvement Total 502.1km: 1)A. Khong - J.R.2180 46.8km; 2)A. Chonnabot - B. Dong Han 24.0km; 3)A. Nam Phong - B. Nong Tum 28.0km; 4)B. Lao(J.R.210) - B. Tha Yom 40.7km; 5)B. Huai Koeng - A. Kumphawapi 14.2km; 6) A. Nong Han - A. Kumphawapi 34.3km; 7)A. Sawang Daen Din - A. Song Dao 19.1km; 8)A. Selaphum - B. Kham Phon Sung 46.3km; 9)B. Na Suang - B. Na. Yia 13.6km; 10)A. Maha Chana Chai - A. Kho Wang 24.5km; 11)B. Som Poi Noi - B. Muang Mak 28.4km; 12)A. Chom Phra - B. Nong Khawao 31.1km; 13)A. Parakhon Chai - A. Krasang 47.1km; 14)B. Nong Pha Ong - A. Nong Ki 52.6km; 15)A. Si Khui(J.R.2) - A. Chok Chai 51.4km. (2) Rehabilitation 8 routes (90km) 16)A. Sikhui - A. Dan Khun Thot 19km; 17)A. Prathai - A. Khok Chik 10km 18)A. Kalasin - B. Lum Chai 10km; 19)A. Pak Thong Chai - J.R.2 13km 20)B. Nam Kong - A. Si That 8km; 21)A. Chokchai - A. Khonburi 10km 22)B. Wat - A. Kong 10km; 23)Nakhon Ratchasima - A. Chokchai 10km The total project cost is 1,839.22 million bahts. * The project cost 1)above is the economic construction costs of Improvement and New Construction Routes.					
9. CONSULTANT(S)	Katahira & Engineers International Nippon Koei Co., Ltd.	4. FEASIBILITY AND ITS ASSUMPTIONS					
10. STUDY TEAM	No. of Members 12 Period Jun.1984-Jul.1985(11 months) Total M/M Japan Field 57.56 5.00 52.56	Imp. Period: 1985.1-1987.12 Feasibility: Yes EIRR1) 22.20 FIRR1) EIRR2) 19.70 FIRR2) EIRR3) 19.20 FIRR3) Conditions and Development Impacts: [Direct effects] 1) Decrease of transportation costs to road users 2) Increase of value added of agricultural produce 3) Saving of road maintenance costs [Social impacts] 1) Improved access to administrative services 2) Improvement of educational standards 3) Improvement of medical services 4) Narrowing of income disparities * Five sections with higher EIRRs are 2)22.2%, 15)19.7%, 13)17.1%, 8)15.7%					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Traffic Survey, Topographic and Geological Survey, Measurement of Bend	5. TECHNICAL TRANSFER				Nov.1988 OECF loan agreement (4,085 million yen), of which 1,008 million was for the construction and improvement of 7 routes (235.1km) of the Northeastern Region. Apr.1990 Construction started The rest of new construction and improvement and rehabilitation are to be financed by the World Bank and own fund (part of the work is already under way). May 1993 OECF loan agreement (Highway Sector Project (2)), 2,184 million yen) Major Component: 1 Provincial Road 2 Local Roads (FY1991 Overseas Survey) IERD Loan: L/A in 1990. Around 2 billion yen Construction: 1988-1994 (FY1992 Overseas Survey) For this project, OECF loan (472.51 million bahts), World Bank loan (406.48 million bahts) and DOH budget (425.04 million bahts) were appropriated. The classification of implementing routes and exact distances in terms of the financial sources are as follows. (By OECF) : New Construction and Improvement, 3)28.0km, 4)40.7km, 5)14.2km, 6)34.3km, 8)46.3km, 10)24.5km, 13)47.1km. (By World Bank) : New Construction and Improvement, 2)24.0km, 11)28.0km, 15)52.0km, Repair, 16)48.0km, 18)28.0km. (By DOH) : New Construction and Improvement, 1)30.9km, 7)19.2km, 9)11.7km, 12)31.5km, 14)53.0km, Repair, 17)35.3km, 20)8.1km, 21)27.8km, 22)18.7km, 23)26.7km, and No Implementation of Repair of 19). (Nos. above correspond with nos. on 3. CONTENTS of MAJOR PROJECT(S) above.) The total completed distances are 485.4km for new construction and improvement and 192.6km for repair. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information.	
12. EXPENDITURE	Total 194,238 (¥'000) Contracted 183,479					2. MAJOR REASONS FOR PRESENT STATUS	
						3. PRINCIPAL SOURCE OF INFORMATION	
						①, ②, ③, ④	

PROJECT SUMMARY (Other)

Compiled Mar.1990

Revised Mar.1996

ASE THA/S 602/86

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			1.PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued						
2.NAME OF STUDY	Road Improvement, Rehabilitation and Traffic Safety in Bangkok	2.PROJECT COST	(US\$1,000)	Total Cost	Local Cost	Foreign Cost	(Description) Many traffic safety projects were carried out along with the guideline and designs by Thai government budget and they are now in sound operation. Construction project of Rama IV flyover is now under construction by Japanese grant aid. (FY1993 Overseas Survey) Besides Rama IV flyover, BMA constructed 10 flyovers based on the M/P. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) Proposed engineering guideline has not ratified as a BMA's standard guideline yet. So the guideline is not used effectively. BMA plans to ratify the guideline as a standard guideline in the near future. Almost of the other proposed road improvement project which will require a certain scale of financial resources did not move into implementation because of budgetary problems.						
3.SECTOR	Transportation/(Transportation in)General	3.CONTENTES OF MAJOR PROJECT(S)	1)										
4.REFERENCE NO.		The study compiled basic information on traffic safety planning and recommended some road improvements. -Flyover-Intersection improvement -Pavement improvement -Busstop improvement -Pedestrian path -Median -Traffic sign -Pedestrian crossing bridge among others. -Guard fence -Safety island -Traffic signal -Road marking	2)										
5.TYPE OF STUDY	Other												
6.COUNTERPART AGENCY	Bangkok Metropolitan Administration												
7.OBJECTIVES OF STUDY	Policy recommendations on traffic safety measures												
8.DATE OF S/W	1985/3												
9.CONSULTANT(S)	International Engineering Consultants Association Central Consultant, Inc. Chodai Co., Ltd.	4.CONDITIONS AND DEVELOPMENT IMPACTS	The study results will contribute to the planning process on traffic safety measures, road improvement and pavement repairs. Small scale improvement engineering for traffic safety was efficiently transferred through proposing an engineering guideline and actual design on each actual spot, and carrying out of model project simultaneously.										
10.STUDY TEAM	No.of Members 29 Period Jun.1985-Mar.1987(22 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></td> <td style="text-align: center;">7.01</td> <td style="text-align: center;">143.93</td> </tr> </table>	Total M/M	Japan	Field		7.01		143.93					2.MAJOR REASONS FOR PRESENT STATUS
Total M/M	Japan	Field											
	7.01	143.93											
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	Traffic Survey, Survey Works for Inventory and Paved Roads												
12.EXPENDITURE	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Total</td> <td style="text-align: right;">412,771 (¥000)</td> </tr> <tr> <td style="text-align: center;">Contracted</td> <td style="text-align: right;">4,182</td> </tr> </table>	Total	412,771 (¥000)	Contracted	4,182	5.technical transfer	1) OJT on the evaluation method of pavement; 2) Participation of the counterparts in the JICA training program (road administration and road improvement); 3) Employment of local consultants (traffic survey.				3.PRINCIPAL SOURCE OF INFORMATION	①, ②, ③	
Total	412,771 (¥000)												
Contracted	4,182												

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE/THA/A 312/86

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		Bang Nara River Basin of Nava Tik Province in Southern Thailand																																					
3.SECTOR		2.PROJECT COST		Total Cost	Local Cost	Foreign Cost																																	
Agriculture/(Agriculture in)General		(US\$1,000)		1) 25,240,000	10,320,000	14,920,000																																	
		(US\$1=20Bahts in 1985)		2)																																			
				3)																																			
4.REFERENCE NO.		3.CONTENTS OF MAJOR PROJECT(S)				(Description) The proposed project was implemented by Japanese grand aid. Feb. 1988 E/N signed for D/D (94 million yen) Feb. - Jun. 1988 Detailed design undertaken Oct. 1988 Construction started Sep. 1988 E/N signed (888 million yen) Jul. 1989 E/N signed (2,604 million yen) Jun. 1990 E/N signed (375 million yen) Nov. 1990 Construction completed (FY1991 Overseas Survey) The total Japanese grant aid amounted to 3,867 million yen. There were minor changes in the location of fixed pumping stations owing to the land acquisition problems. (FY1994 Domestic Survey) Tidal gate was completed in 1990 under JICA grant-aid. Installation of 10 pump stations under the Government budget is delayed due to the problems of right of way, etc. Design of 9 pump stations has been completed. The installation of 3 pump stations out of 9 is under-way. (FY1995 Domestic Survey) 10 pump stations which were planned to install by the Government budget are increased to 11, however, the installation works are delayed considerably due to the problem of land acquisition. At present, following 2 stations are under construction ; Ku Chan Station, 26.6 million Baht, until 1996 and Moru Bo Station 55.7 million Baht, until 1996. Remainder 9 stations are not decided to commence as yet. At this moment, approximately 18,100 rai of farmland with an elevation of less than 2.0 meter above sea-level is irrigated by means of 164 portable pump stations owned by the farmers.																																	
5.TYPE OF STUDY		- To construct tidal gates both in Nara Tik side and Tagbai side of Bang Nara River - Pumping irrigation by utilizing planned reservoir with 9 pumping stations - Rehabilitation of drainage rivers flowing into Bang Nara River - To install 6 check gates to control acid water																																					
6.COUNTERPART AGENCY		Outline of the Project Tidal Gate: Upper Gate Width 120m, Feeder Canal 750m, closme dam 220m Down stream Gate Width 24m, Feeder Canal 450m, closme dam 75m Facility to control Achid Water : 6 check gates Irrigation : 9,100ha Drainage improvement 11,490ha Project cost																																					
7.OBJECTIVES OF STUDY		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">F/C</th> <th style="text-align: center;">L/C</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Tidal Gate</td> <td style="text-align: center;">278</td> <td style="text-align: center;">118</td> <td style="text-align: center;">396</td> </tr> <tr> <td>Acid Improvement Facilities</td> <td style="text-align: center;">32</td> <td style="text-align: center;">26</td> <td style="text-align: center;">58</td> </tr> <tr> <td>Irr. and Drainage Facilities</td> <td style="text-align: center;">146</td> <td style="text-align: center;">125</td> <td style="text-align: center;">271</td> </tr> <tr> <td>Consulting Service Fee</td> <td style="text-align: center;">56</td> <td style="text-align: center;">84</td> <td style="text-align: center;">140</td> </tr> <tr> <td>Phisical Contingency</td> <td style="text-align: center;">56</td> <td style="text-align: center;">52</td> <td style="text-align: center;">108</td> </tr> <tr> <td>Price Erealation</td> <td style="text-align: center;">179</td> <td style="text-align: center;">111</td> <td style="text-align: center;">288</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">746</td> <td style="text-align: center;">516</td> <td style="text-align: center;">1,262</td> </tr> </tbody> </table>							F/C	L/C	Total	Tidal Gate	278	118	396	Acid Improvement Facilities	32	26	58	Irr. and Drainage Facilities	146	125	271	Consulting Service Fee	56	84	140	Phisical Contingency	56	52	108	Price Erealation	179	111	288	Total	746	516	1,262
	F/C	L/C	Total																																				
Tidal Gate	278	118	396																																				
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Total	746	516	1,262																																				
8.DATE OF SAW		Imp. Period:																																					
9.CONSULTANT(S)		4.FEASIBILITY AND ITS ASSUMPTIONS		EIRR1) 10.20	FIRR1)																																		
Sanyu Consultants Inc. Japan Engineering Consultants Co., Ltd.		Feasibility: Yes		EIRR2)	FIRR2)																																		
				EIRR3)	FIRR3)																																		
10.STUDY TEAM		Conditions and Development Impacts: The beneficial area: - by pumping irrigation for existing paddy fields, 9,100 ha - by rehabilitation of river, 5,280 ha for paddy fields and 6,210ha for rubber fields The main purpose of the project is to utilize Bang Nara water resources for irrigation and to control the flood in rainy season. And by using the proposed impounding water, the 9,100ha of paddy field will be irrigated by nine Pumping stations. By the improvement of drainage canal/rivers the 5,280ha of paddy field and 6,210ha of rubber plantation will be benefitted as drainage improvement. The irrigation development consists of 4,870ha of paddy fields located along the proposed reservoir by portable pumps, and the remaining area to be irrigated by nine (9) RID pumping station. The irrigation aims to plant wet season paddy during wet season and to plant upland uops in the area of 20% of the paddy field during the dry season. From economic poid of view, the development plan of swamp, forest and mild loan is excluded in this plan. EIRR is 10.2%																																					
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		5.TECHNICAL TRANSFER																																					
None		1)Technical transfer of methods of survey, planning for development in various fields. 2)training the counterparts in JICA.																																					
12.EXPENDITURE		3.PRINCIPAL SOURCE OF INFORMATION																																					
Total 293,737 (¥'000)		①, ②																																					
Contracted 271,828																																							

和名 バンナラ川かんがい排水計画

(F/S,D/D)

PROJECT SUMMARY (F/S)

Compiled Mar.1990

Revised Mar.1996

ASE THA/S 318/86

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 Dredging Plant Development Project		Coastal routes of Thailand, 43 routes						
3.SECTOR Transportation/Port		2.PROJECT COST		Total Cost	Local Cost	Foreign Cost		
4.REFERENCE NO.		(US\$1,000)	1) 9,666	2,730	6,936	(Description) Suspended after the completion of F/S due to the lack of fund. F/S must be reviewed, because the exchange rate has largely changed since the last F/S. (FY1993 Domestic Survey) As of Dec.1993: In FY 1993, Yen Loan was requested from the Government of Thailand, and presently, the matter is under negotiation between OECF and GDT. Harbour Department requested financial assistance for donors including OECF. However, no assistance is available. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) This year, the Harbor Department called for bids on long-term-import of a dredger. Forty(40) Companies remained after the pre-qualification. However, only more or less ten firms will survive in the short-list.		
5.TYPE OF STUDY		(US\$1= 27 Bahts)	2)					
6.COUNTERPART AGENCY Harbour Department, Ministry of Transport and Communication		3.CONTENTS OF MAJOR PROJECT(S)						
7.OBJECTIVES OF STUDY Frame of long-range dredging plan target in 2000 and development plan including improvement and maintenance of facilities.		43 channels were studied and quantity of necessary maintenance dredging was estimated and was compared with the capacity of present dredging plant. Dredging plant development project such as construction of 2 training hopper dredging, preparation of mechanical center was proposed.						
8.DATE OF S/W		Imp. Period: 1988.4-1991.3						
9.CONSULTANT(S) Overseas Coastal Area Development Institute		4.FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes	EIRR1) 12.20 EIRR2) EIRR3)			FIRR1) FIRR2) FIRR3)
10.STUDY TEAM		Conditions and Development Impacts: Comparison of the proposed project under two conditions: with case and without case. Cost and benefit is shown with cost of 1985 (1 baht = 9.01 yen)						
No.of Members 8 Period May.1985-Jun.1986(14 months)		As the effect of development, improvement of the dredging capability, possibility of the effective maintenance and repair of the dredging boat, and possibility of the development for the community are given.						
Total M/M		Japan		Field				
49.47		18.17		31.30				
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY None		5.technical transfer						
12.EXPENDITURE		The business training was carried out at some Japanese important port, Port and Harbour Research Institute, and some shipyard, etc.						
Total		133,282 (¥'000)						
Contracted		119,922						
		2.MAJOR REASONS FOR PRESENT STATUS						
		Delay due to the ceiling on the government budget						
		3.PRINCIPAL SOURCE OF INFORMATION						
		①, ②, ③						

和名 港湾浚渫船隊整備計画

(F/S,D/D)

PROJECT SUMMARY (M/P)

Compiled Mar.1990

Revised Mar.1996

ASE/THA/A 102/87

I. OUTLINE OF STUDY			II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS												
1.COUNTRY	Thailand		1.SITE OR AREA	An Area of 20,000sq.km extended over Kanchanaburi Province and other 4 provinces in the western part of the Central Plain Region		1.PRESENT STATUS	<input type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input checked="" type="checkbox"/> Discontinued											
2.NAME OF STUDY	Aerial Photography and Forest Management Plan in the Encroached National Reserve Forest		2.PROJECT COST	<table border="0" style="width: 100%;"> <tr> <th style="text-align: left;">(US\$1,000)</th> <th>Total Cost</th> <th>Local Cost</th> <th>Foreign Cost</th> </tr> <tr> <td>1)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2)</td> <td></td> <td></td> <td></td> </tr> </table>			(US\$1,000)	Total Cost	Local Cost	Foreign Cost	1)				2)			
(US\$1,000)	Total Cost	Local Cost	Foreign Cost															
1)																		
2)																		
3.SECTOR	Forestry/Forestry & Forest Conservation		3.CONTENTS OF MAJOR PROJECT(S)	Using the results of land classification conducted on Model Area (some 20,000 ha) within the Study Area (some 2 million ha), national forest management plan was formulated. The planning components are: 1. Forest Land Use Plan: The Model Area was divided into three forest land use classification: Forestry area (6,065 ha), agroforestry area (911 ha) and conservation area (14,671 ha), with the integrated evaluation of the land classification results and other related surveys. 2. Forestry Area Plan: For the forestry area, forest management works with the assumption of sustainable forestry production were proposed on: - artificial forest, assuming the rotation ages of 50 years for slowly growing species such as teak, and 5 years for fast growing species; - natural forest, assuming selective cutting cycle of 40 years with the selective cutting rate of 20%; - bamboo forest. For conducting those works, necessary facilities are planned: - nursery, with the total production of 70,000 seedlings, shared with the following agroforestry plan; - forest roads, with the total length of 25 km; - countermeasures for fire accidents. 3. Agroforestry Area Plan: For the agroforestry area, in order to harmonize local life of 54 households in the Model Area and forest conservation, the following plans														
4.REFERENCE NO.			4.CONDITIONS AND DEVELOPMENT IMPACTS	[Assumption] - Currency rate ; 1 bath = 5.5 yen (1987) It is necessary to improve the road networks and develop researches of tree growth. When dealing with the proposed plan of a forest village in the model area, the authorities concerned need to iron out the handling of the settlement with the persons concerned. [Impact] The above mentioned plans will improve forests for timber supply, National Park and forests for soil and water conservation so that deforestation will be reduced. And the Forest Village plan will enhance the settlements of farmers who live in the encroached National Reserve Forest. - Mitigation of decrease of degradation of forest area with sustainable development of forest resources - Favourable use of land resources in terms of forest conservation and soil and water conservation - Harmonization of forest conservation and activities of local society - Promotion of permanent relocation of locally scattered settlements by improving infrastructure such as the road network		2.MAJOR REASONS FOR PRESENT STATUS		A comprehensive project including the forestry, the agriculture and the irrigation is prior to the proposed project.										
5.TYPE OF STUDY	M/P																	
6.COUNTERPART AGENCY	Royal Forestry Department, Ministry of Agriculture and Cooperatives																	
7.OBJECTIVES OF STUDY	This forest management plan is formulated in order to restore the function which the forest had originally had in the area of the degraded national reserve forest.																	
8.DATE OF S/W	1985/7																	
9.CONSULTANT(S)	Japan Forest Technical Association																	
10.STUDY TEAM	No. of Members 19 Period Oct.1985-Mar.1988(31 months) <table border="0" style="width: 100%; text-align: center;"> <tr> <td style="border: none;">Total M/M</td> <td style="border: none;">Japan</td> <td style="border: none;">Field</td> </tr> <tr> <td style="border: none;">160.00</td> <td style="border: none;">90.00</td> <td style="border: none;">70.00</td> </tr> </table>		Total M/M	Japan	Field	160.00	90.00	70.00										
Total M/M	Japan	Field																
160.00	90.00	70.00																
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY																		
12.EXPENDITURE	<table border="0" style="width: 100%;"> <tr> <td style="border: none;">Total</td> <td style="border: none;">450,604 (¥'000)</td> </tr> <tr> <td style="border: none;">Contracted</td> <td style="border: none;">434,600</td> </tr> </table>		Total	450,604 (¥'000)	Contracted	434,600	5. TECHNICAL TRANSFER	1.To accept the trainees out of counterparts; 2.To conduct jointly field works such as a forest inventory survey, a soil survey and a survey on the Forest Villages and Tropical Farming ; 3.To practice works on preparation		3.PRINCIPAL SOURCE OF INFORMATION		①, ②						
Total	450,604 (¥'000)																	
Contracted	434,600																	

和名 国有林管理計画

(M/P,Basic Study,Other)

PROJECT SUMMARY (Other)

Compiled Mar.1990

Revised Mar.1996

ASE THA/S 603/87

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDY RESULTS						
1. COUNTRY	Thailand	1. SITE OR AREA	Port of Bangkok, Port of Laem Chabang, Port of Map Ta Phut, Port of Sattahip, Port of Phuket, Port of Song Khla		1. PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued				
2. NAME OF STUDY	Effective Port Management and Operation System	2. PROJECT COST			Total Cost Local Cost Foreign Cost		(Description) The National Port Administration Commission was established in the Ministry of Transport and Communication by accepting recommendations of the study and came into operation since December 1988. - Port of Laem Chang The administrative body has been established in the PAT. The Container Terminal and the agricultural/Bulk Berth are leased to the private companies and operated by them. - Port of Map Ta Phut Started operation in 1992. IEAT became an administrative body, and each berth is leased to the private company. - Port of Song Khla and Port of Phuket The private sector is in charge of port management and its operation. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) There (3) container terminals and an agricultural product terminal have been leased out to private companies. A multi-purpose terminal is under bidding for the lease.			
3. SECTOR	Transportation/Port	(US\$1,000)	1) 2)							
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)								
5. TYPE OF STUDY	Other	Recommendation of port management - Determination of fundamental concept for the port planning and development policy. - Making of the port management policy. - Preparation for the operation and management as an international port. - Reviewing the legal system concerning port development, management and operation. - Recommendation of improvement of the cargo handling.								
6. COUNTERPART AGENCY	Ministry of Transport and Communication	4. CONDITIONS AND DEVELOPMENT IMPACTS								
7. OBJECTIVES OF STUDY	-Formulation of a framework for port operation	[Development Impacts] 1) Effective port service is indispensable for Thai economic activity, and at the same time port development is emphasized its importance as main infrastructure for promotion of industrial location and as a core of regional economical development. 2) Reduction of transportation cost through the effective port operation 3) Mitigation of the congestion at Bangkok port as well as promotion of the development of the Eastern Seaboard region are brought about through the enhancement of the effectiveness of container cargo handling and inland transportation at Port of Laem Chabang.								
8. DATE OF SAW	1986/2	5. TECHNICAL TRANSFER								
9. CONSULTANT(S)	Overseas Coastal Area Development Institute	The study of port management was carried out for the counterpart.		2. MAJOR REASONS FOR PRESENT STATUS						
10. STUDY TEAM	No. of Members 12 Period Aug.1986-Mar.1988 (8 months)									
	<table style="margin: auto;"> <tr> <td>Total M/M</td> <td>Japan</td> <td>Field</td> </tr> <tr> <td>99.90</td> <td>48.44</td> <td>51.36</td> </tr> </table>	Total M/M	Japan	Field	99.90	48.44		51.36		
Total M/M	Japan	Field								
99.90	48.44	51.36								
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	Investigation of the Legal System			3. PRINCIPAL SOURCE OF INFORMATION						
12. EXPENDITURE				①, ②, ③						
	<table style="margin: auto;"> <tr> <td>Total</td> <td>265,006 (¥000)</td> </tr> <tr> <td>Contracted</td> <td>265,693</td> </tr> </table>	Total	265,006 (¥000)	Contracted	265,693					
Total	265,006 (¥000)									
Contracted	265,693									

和名 効果的港湾システム調査

[M/P, Basic Study, Other]

PROJECT SUMMARY (F/S)

Compiled Mar. 1990
Revised Mar. 1996

ASE THA/S 320/87

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 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 Railway Yards Improvement		Bangkok, Mae Nani, Bang Sue, and Hat Yai Stations											
3. SECTOR Transportation/Railway		2. PROJECT COST		Total Cost	Local Cost	Foreign Cost							
4. REFERENCE NO.		(US\$1,000)	1)	13,357	7,557	5,800							
5. TYPE OF STUDY F/S		(US\$1=26.455B)	2)										
6. COUNTERPART AGENCY State Railway of Thailand		3)	3. CONTENTS OF MAJOR PROJECT(S)										
7. OBJECTIVES OF STUDY Preparation of a basic improvement plan for 10 years with a target year of 2006 F/S for several high-priority yards with a target year of 1996		Improvement of yard facilities (passenger facilities, freight facilities, track facilities, electric facilities, signalling and telecommunications facilities): Bangkok: 1. Additional construction of two arrival tracks for strengthening capacity of arrival tracks; 2. Modification of two departure tracks into arrival/ departure tracks for strengthening capacity of arrival/ departure tracks; 3. Additional construction of one arrival track for strengthening capacity of departure tracks. 4. Extension of effective length of the passenger car yard for strengthening capacity for passenger car; 5. Extension of effective length of tracks for DRC (diesel railcar) storage; 6. Modification of locations of signal erection and improvement of interlocking devices for ensuring train safety. Mae Nam: 1. New construction of two sorting tracks for freight cars in a place about 4 km away from the origin of the Bangkok Port Line; 2. New construction of a shortcut line between Mae Nam Station and the Bangkok Port Line; 3. Additional construction of one sorting track and extension of effective length of tracks for strengthening capacity for empty car storage. Bang Sue: 1. New construction of two arrival/ departure tracks in the freight station for dealing with direct transport between freight stations; 2. Improvement of signalling facilities entailed by track improvement (erection of signals, etc.)				(Description) Detailed design completed in December 1987. Part of the high-priority work for Bangkok and Bang Sue stations was implemented. At present, the project is progressing in two categories. (1) 1st category -- Work to improve the operational efficiency of main yards and to meet future traffic increase. * Bangkok yard -- Construction of a new departure track and 2 arrival tracks, conversion of 2 arrival tracks to arrival/ departure tracks, and extension of the effective length (37 million baht, to be completed at the end of 1990). * Ban Phachi yard -- 25 million baht, to be completed in the middle of 1990. * Other improvements -- To start as scheduled. (2) 2nd category -- Smaller-scale work such as platform improvement. * 5 to 10 yards to be improved every year. (FY1991 Overseas Survey) The project is integrated in the SRT Investment Program and the construction will be completed in 1993. (FY1993 Overseas Survey) SRT improved above yards during the period of the Sixth National Development Plan, 1987-91. Total investment cost is 120 million baht. Construction of Bangkok and Ban Phachi Yards (at the junction of the Northern and Northeastern Lines, with priority next to four major yards) has almost been completed. Schedules for Mae Nam, Bang Sue, and Hat Yai Yards are being delayed, excluding some urgent cases, due to the changes in transport trend and other factors. As for Mae Nam, it has become necessary to reexamine the original plan in such respects as: the transfer of outgoing and incoming freight due to the opening of Laem Chabang Port; and new installation of oil pipeline (Mae Nam-Ayutthaya). It is also necessary to review the plan for Ban Sue regarding the relations with the Hope Well Plan, etc. As for Hat Yai, yard improvement will be promoted in accordance with the traffic trend in the future because the transport demand is somewhat sluggish at present. (FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) No additional information.							
8. DATE OF S/W 1985/8		Imp. Period: 1987.1-1991.12				4. FEASIBILITY AND ITS ASSUMPTIONS Feasibility: Yes EIRR1) 18.29 FIRR1) 19.72 EIRR2) FIRR2) EIRR3) FIRR3)							
9. CONSULTANT(S) Japan Railway Technical Service Pacific Consultants International The Japan Electrical Consulting Co., Ltd.		Conditions and Development Impacts: [Preconditions for IRR calculation] 1. Traffic volume is forecasted for the years 1991, 1996, and 2006. 2. Of the yards taken up in the study, four high-priority yards are to be improved by 1991. [Development impacts] 1. Improvement of yards with bottlenecks will increase passenger traffic. 2. Improvement of yard functions will lead to efficient transport and a reduction in transport cost.				2. MAJOR REASONS FOR PRESENT STATUS							
10. STUDY TEAM No. of Members 13 Period Dec. 1985-Jun. 1987 (19 months)						3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③							
<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> </tr> <tr> <td style="text-align: center;">98.86</td> <td style="text-align: center;">61.11</td> <td style="text-align: center;">37.75</td> </tr> </table>		Total M/M	Japan	Field	98.86	61.11	37.75	5. TECHNICAL TRANSFER					
Total M/M	Japan	Field											
98.86	61.11	37.75											
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY Topographic Survey: Subcontracted to a Domestic Contractor.		1) 1) 1) A seminar was held on measures for yard planning. 2) Counterparts participated in JICA training program. 3) Instruction, as well as the preparation of a guidebook, on measures for yard work improvement.											
12. EXPENDITURE													
Total		266,088 (¥'000)											
Contracted		258,834											

和名 鉄道ヤード改良計画

[F/S,D/D]

PROJECT SUMMARY (F/S)

ASE THA/S 319/87

Compiled Mar.1990

Revised Mar.1996

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 New Krungthep Bridge Construction and Thonburi Road Extension		New Krung Thep Bridge: downstream side of existing Krung Thep Bridge over Chao Phraya River Thon Buri Road:between Middle and Outer Ring Roads, Thon Buri Area.																						
3.SECTOR Transportation/Road		2.PROJECT COST			(Description) The D/D was completed with FWD's finance for yen credit application. (1) Krung Thep Bridge: Detailed design made by Norcon (Norway) and Thai consultants. (2) Thon Buri Road: Detailed design of the first section (3.5km) completed under a local tender. Jan.1993 OECF L/A 7,546 million yen. (Krungthep Bridge Construction Project) Major Components: New bridge construction, Rehabilitation of old bridge. Period : Jan.94 - Dec.96 Total Cost : 15,091 million yen (FY1991 Overseas Survey) Construction period: 1994 - 1996. (FY1992 Overseas Survey) The project is included in the 6th and 7th National Economic and Social Development Plan and its priority is high. Thai cabinet approved the construction of New Krungthep Bridge in August 1987. Application for yen credit will be done through the Ministry of Finance. The project will be completed in 1995. (FY1994 Domestic Survey) New Krung Thep Bridge Construction Project is tendering stage in 1994 and the construction will be commenced in Apr.1995. The first phase of Thonburi Road Extension Project (3.5km) is considered to be suspended because of the difficulty of land acquisition in the dense town area. (FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) 1. New Krung Thep Bridge construction will be commenced at the end of 1995 and completed in 1998. cost: 1,950 million bahts. 2. The first phase construction of Thonburi; Road Extension will be commenced in early 1996 and completed in 1998. cost: 4,370 million bahts.																			
4.REFERENCE NO.		3.CONTENTS OF MAJOR PROJECT(S)					2.MAJOR REASONS FOR PRESENT STATUS (1) Aging of the existing Krung Thep Bridge (2) Strong support by Public Works Dept.																	
5.TYPE OF STUDY F/S		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2"></td> <td style="text-align: center;">Total Cost</td> <td style="text-align: center;">Local Cost</td> <td style="text-align: center;">Foreign Cost</td> </tr> <tr> <td style="text-align: center;">(US\$1,000)</td> <td style="text-align: center;">1)</td> <td style="text-align: center;">1,885</td> <td style="text-align: center;">1,217</td> <td style="text-align: center;">668</td> </tr> <tr> <td style="text-align: center;">(US\$1=153Yen)</td> <td style="text-align: center;">2)</td> <td style="text-align: center;">2,469</td> <td style="text-align: center;">1,844</td> <td style="text-align: center;">625</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: center;">3)</td> <td colspan="2"></td> </tr> </table>							Total Cost	Local Cost	Foreign Cost	(US\$1,000)	1)	1,885	1,217	668	(US\$1=153Yen)	2)	2,469	1,844	625			3)
		Total Cost	Local Cost	Foreign Cost																				
(US\$1,000)	1)	1,885	1,217	668																				
(US\$1=153Yen)	2)	2,469	1,844	625																				
		3)																						
6.COUNTERPART AGENCY Public Works Department		(1)New Krungthep Bridge Main Bridge: 4-span continuous PC Box of 476m length(125m+226m+125m). Navigational clearance in center of 34m in height and 60 in width. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">Thoribori Side</td> <td style="text-align: center;">Bangkok Side</td> </tr> <tr> <td>Approach Bridge</td> <td style="text-align: center;">770m</td> <td style="text-align: center;">599m</td> </tr> <tr> <td>Interchange</td> <td style="text-align: center;">131m</td> <td style="text-align: center;">120m</td> </tr> <tr> <td>Rampway</td> <td style="text-align: center;">400m</td> <td style="text-align: center;">480m</td> </tr> </table> The project cost is 1,885 million bahts. (2)Thoribori Road Extension 1st Stage Construction Target year of opening:1991, construction of a L-shaped bypass of 3.3km 2nd Stage Construction Target year of opening:1995,construction of a connector with ORR 6.5km The project cost is 2,469 million bahts.				Thoribori Side	Bangkok Side	Approach Bridge	770m	599m	Interchange	131m	120m	Rampway	400m	480m	3.PRINCIPAL SOURCE OF INFORMATION ①, ②, ③							
	Thoribori Side	Bangkok Side																						
Approach Bridge	770m	599m																						
Interchange	131m	120m																						
Rampway	400m	480m																						
7.OBJECTIVES OF STUDY Construction of PC bridge		Imp. Period: 1988.10-1995.10 4.FEASIBILITY AND ITS ASSUMPTIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Feasibility:</td> <td style="text-align: center;">EIRR1)</td> <td style="text-align: center;">20.00</td> <td style="text-align: center;">FIRR1)</td> </tr> <tr> <td style="text-align: center;">Yes</td> <td style="text-align: center;">EIRR2)</td> <td style="text-align: center;">41.00</td> <td style="text-align: center;">FIRR2)</td> </tr> <tr> <td></td> <td style="text-align: center;">EIRR3)</td> <td></td> <td style="text-align: center;">FIRR3)</td> </tr> </table> Conditions and Development Impacts: [Conditions] 1) Construction Period: 36months(opening of FY1991) 2) Construction costs were estimated based on interviews with Japanese-affiliated construction companies: 1885 mil. Bahts(35% foreign fund) for New Krungthep bridge, and 2469 mil. Bahts(26% foreign fund) for Thoribori Road Extension. [Development Impacts] 1) Solving the problem of traffic jams in the Krungthep Bridge - Thoribori Road area. Improvement of traffic conditions on the circular roads running through Bangkok without adverse effects on river traffics. 2) Facilitating the Krungthep Bridge - Thoribori Road area's turning into a major residential area for Greater Bangkok. 3) Facilitating the diffusion of the development of Greater Bangkok area to West Chaobaya area with the Thoribori Road as the center.			Feasibility:	EIRR1)	20.00	FIRR1)	Yes	EIRR2)	41.00	FIRR2)		EIRR3)		FIRR3)								
Feasibility:	EIRR1)	20.00	FIRR1)																					
Yes	EIRR2)	41.00	FIRR2)																					
	EIRR3)		FIRR3)																					
8.DATE OF SAV 1985/11		10.STUDY TEAM No.of Members 10 Period Feb.1986-Jun.1987(17 months) <table border="1" 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;">39.73</td> <td style="text-align: center;">1.73</td> <td style="text-align: center;">38.00</td> </tr> </table>			Total M/M	Japan	Field	39.73	1.73	38.00	11.ASSOCIATED AND/OR SUBCONTRACTED STUDY None													
Total M/M	Japan				Field																			
39.73	1.73	38.00																						
9.CONSULTANT(S) Nippon Koei Co., Ltd. Central Consultant, Inc.																								
12.EXPENDITURE		5.TECHNICAL TRANSFER																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Total</td> <td style="text-align: center;">142,329 (¥000)</td> </tr> <tr> <td style="text-align: center;">Contracted</td> <td style="text-align: center;">129,651</td> </tr> </table>		Total	142,329 (¥000)	Contracted			129,651	(1) Two counterpart were invited to Japan for training (2) Use of local consultants																
Total	142,329 (¥000)																							
Contracted	129,651																							

和名 新クルンテップ橋及びトンブリ道路延伸計画

(F/S,D/D)

PROJECT SUMMARY (M/P)

Compiled Mar.1986
Revised Mar.1996

ASE THA/S 104/88

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS	
1.COUNTRY	Thailand	1.SITE OR AREA	Chao Phraya River Basin(162,000 sq.km)		1.PRESENT STATUS	<input type="checkbox"/> In Progress or In Use <input checked="" type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2.NAME OF STUDY	Flood Forecasting System in the Chao Phraya River Basin	2.PROJECT COST	Total Cost	Local Cost	Foreign Cost	(Description) Royal Irrigation Department highly appreciated the study and prepared to pledge for the grant aid for the urgent projects among the proposed plans, but has not requested to the Government of Japan. The RID has an intention of requesting similar projects of irrigation water management system. (FY 1991 Overseas Survey) No policy has come out regarding this project. (FY1993 Overseas Survey) Because the JICA study didn't provide specific flood forecasting method, RID is using existing method to provide accurate result. (FY1994 Domestic Survey) Although the Project had been expected to proceed to the next stage, it has not been realized yet. (FY1995 Domestic Survey) No additional information.
3.SECTOR	Social Infrastructu/River & Erosion Control	(US\$1,000)	1) 55,948			
4.REFERENCE NO.		(US\$1=130Yen)	2)			
5.TYPE OF STUDY	M/P	3.CONTENTIS OF MAJOR PROJECT(S)				
6.COUNTERPART AGENCY	Royal Irrigation Department, Ministry of Agriculture and Cooperatives	Step 1: Flood forecasting system started with the existing facilities as the bases and by adding auxillary equipment as required. This system is composed of (1) 34 of rainfall gauging stations, (2) 31 of water level gauging stations, (3) 54 of HF radio stations, (4) 7 of VHF radio stations, and (5) one set of data management system.				
7.OBJECTIVES OF STUDY	Formulation of a flood forecasting system over Chao Phraya river basin	Step 2: Flood forecasting system with latest equipment and facilities operated under full flood forecasting organizations. This system is composed of (1) 65 of rainfall gauging stations, (2) 19 of water level gauging stations, (3) 19 of rainfall/water level gauging stations, (4) 2 of radar rainfall gauging stations, (5) 110 of VHF radio stations, (6) 15 of VHF repeater stations, (7) 2 of VHF radio stations, (8) 5 of sub-stations, (9) 6 of terminal stations of TOT, (10) one of flood forecasting center, and (11) one set of data management system.				
8.DATE OF S/W	1986/7	4.CONDITIONS AND DEVELOPMENT IMPACTS				
9.CONSULTANT(S)	CTI Engineering Co., Ltd. Nippon Koei Co., Ltd.	The flood forecasting system opens up to the possibilities of highly reliable flood forecasting services through collection of flood information from extensive areas of the Chao Phraya River basin. The communication networks of the flood forecasting systems render great services in communication other than flood forecasting. It is expected to mitigate the flood damage at the main urban areas along the river course such as Nakhon Sawan, Chai-Nat, Ayutaya, Bangkok, etc. through the efficient flood fighting works and evacuation of the inhabitants. Besides, the hydrological data collected and managed by this system can be used as the basic data to formulate the comprehensive flood control plan in the Chao-Phraya River Basin.				
10.STUDY TEAM	No.of Members 11 Period Feb.1987-Jun.1988(16 months)					
	Total M/M	Japan	Field	2.MAJOR REASONS FOR PRESENT STATUS		
	73.32	38.47	34.85	Grant and projects by the Government of Japan has been narrowed down according to the increase of GNP of Thailand. The Gov't of thailand might put higher priority to realize the water resources management system which has been studied in parallel with this Project.		
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	Topographic Survey	5.7. TECHNICAL TRANSFER			3.PRINCIPAL SOURCE OF INFORMATION	
12.EXPENDITURE	Total 209,304 (¥000) Contracted 183,794	Execution of an intensive lecture course to counterparts on hydrologic computation procedures.			①, ②	

PROJECT SUMMARY (Basic Study)

Compiled Mar.1990

Revised Mar.1996

ASE THA/S 502/88

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS								
1.COUNTRY	Thailand	1.SITE OR AREA	Bangkok Metropolitan Region			1.PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued						
2.NAME OF STUDY	Topographic Mapping of Bangkok Metropolitan Area	2.PROJECT COST	(US\$1,000)	Total Cost	Local Cost	Foreign Cost	(Description) The start of the topographic survey and aerial photography scheduled for the first year was delayed due to some procedural matters, but the work progressed as planned during the second year. The printing of the maps, the final phase of the work, was done by the Royal Thai Survey Dept. in the third year. These are the organizations which are currently using the maps: - Bangkok Metropolitan Administration (BMA) - Department of Town and Country Planning, Ministry of Interior - Metropolitan Water Works Authority, M.I. - Department of Public Works, M.I. - Express and Rapid Transit Authority of Thailand, M.I. - Royal Irrigation Department, Ministry of Agriculture and Cooperatives - National housing Authority, M.I. - Others (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information.						
3.SECTOR	Social Infrastructure/Survey & Mapping												
4.REFERENCE NO.		3.CONTENTIS OF MAJOR PROJECT(S)	Aerial photography Bangkok Metropolitan Region 4,000 sq.km Topographic mapping (Scale:1/10,000) Bangkok Metropolitan Area 2,000 sq.km Topographic mapping (Scale:1/4,000) Builtup Area of Bangkok 300 sq.km										
5.TYPE OF STUDY	Basic Study	4.CONDITIONS AND DEVELOPMENT IMPACTS The maps will provide the base for planning transportation, flood control, housing, sewerage and other aspects of urban planning for the Bangkok Metropolitan Area. They are mainly used as basic data for the main principal road planning, anti-slum policy plan, housing development planning, land readjustment planning, urban traffic control plan, flood preventive measures, sewerage planning, waste disposal planning.											
6.COUNTERPART AGENCY	Bangkok Metropolitan Administration(BMA)												
7.OBJECTIVES OF STUDY	To make topographic map with a scale of 1:10,000 covering 200 sq.km and with a scale of 1:4,000 covering 300 sq.km of the Bangkok Metropolitan Area.												
8.DATE OF S/W	1986/3												
9.CONSULTANT(S)	International Engineering Consultants Association	10.STUDY TEAM No.of Members 65 Period Sep.1986-Mar.1989(28 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;">213.30</td> <td style="text-align: center;">52.20</td> <td style="text-align: center;">161.10</td> </tr> </table>						Total M/M	Japan	Field	213.30	52.20	161.10
Total M/M	Japan							Field					
213.30	52.20							161.10					
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	None												
12.EXPENDITURE		5.TECHNICAL TRANSFER 1)OJT on aerial triangulation, drafting, editing and other mapping processes. 2)OJT on new technologies of digital mapping and computer-aided mapping.			2.MAJOR REASONS FOR PRESENT STATUS These maps are highly valued and widely used. After the completion of the map, notable changes have been made. However, revision and reprinting are quite difficult to conduct due to BMA's budgetary problems.								
	Total 1,002,033 (¥000) Contracted 983,807				3.PRINCIPAL SOURCE OF INFORMATION ①								

和名 バンコク首都圏地形図作成事業

(M/P, Basic Study, Other)

PROJECT SUMMARY (Other)

Compiled Mar.1990
Revised Mar.1996

ASE THA/S 604/88

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS		
1. COUNTRY	Thailand	1. SITE OR AREA	Major cities			1. PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2. NAME OF STUDY City Planning Manual		2. PROJECT COST		Total Cost	Local Cost	Foreign Cost	(Description) - The planning techniques included in the manual has been utilized by various divisions of the DTCP. - Preparations are under way to establish the proposed center. - The Government of Thailand requested JICA for a study on land consolidation and zoning. (FY1993 Overseas Survey) Training Center, 15-storey building, is under construction by RTG budget. It costed 80 million baht. Besides the Center above, following two projects are formulated. - Land Re-adjustment Project - Land and Building Use Control Additionally, JICA dispatched an expert to DTCP for the project relating to the M/P. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information.
		(US\$,1,000)		1) 8,550		8,550	
				2)			
3. SECTOR Social Infrastructure/Urban Planning & Land Development		3. CONTENTS OF MAJOR PROJECT(S)					
4. REFERENCE NO.		The study suggested measures to strengthen the organization of the DTCP (structural reform, technical training, data management system, etc.) and measures to improve the capability of the DTCP in planning, implementing and research, and proposed the establishment of a center for promoting urban planning and improvement.					
5. TYPE OF STUDY Other		The proposed center will be attached to the DTCP and work with the NESOR, the Regional Administration, Dept. of the Ministry of Interior, Chulalongkorn Univ., Asian Institute of Technology and others. Major activities of the center are: (1) technical training and (2) database management and R&D. Major facilities are seminar houses and dormitories.					
6. COUNTERPART AGENCY Dept. of Town and Country Planning(DTCP), Ministry of Interior							
7. OBJECTIVES OF STUDY Technical transfer on urban planning							
8. DATE OF SAV 1987/8							
9. CONSULTANT(S) Yachiyo Engineering Co., Ltd.		4. CONDITIONS AND DEVELOPMENT IMPACTS					
		- The project will strengthen the functions of the DTCP. - Improvement of urban planning techniques will contribute to the national socio-economic development. DTCP shall improve their technical training system, data control system and technical development system by utilizing the manual which was produced by JICA study team for upgrading of their city planning and contributing on national socio-economic development.					
10. STUDY TEAM							
No. of Members 11 Period Nov.1987-Feb.1989(13 months)							
Total M/M		Japan		Field			
63.37		4.33		59.04			
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY							
12. EXPENDITURE		5. TECHNICAL TRANSFER					
Total		OJT and a seminar					
229,891 (¥'000)							
Contracted							
210,450							
		2. MAJOR REASONS FOR PRESENT STATUS					
		3. PRINCIPAL SOURCE OF INFORMATION					
		①, ②					

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1990
Revised Mar.1996

ASE/THA/A 202B/88

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 Agricultural Land and Conservation for Integrated Rural Development in the East		Four provinces in the eastern Thailand facing or close to the sea (Chachoengsao, Chonburi, Rayong, and Chanthaburi)																																													
3. SECTOR Agriculture/(Agriculture in)General		2. PROJECT COST				(Description) <M/P> The following plans have been made to strengthen the capabilities of DLD in implementing the project. (1) To establish a "Technology Introducing Center" at the DLD main office. (2) To set up a "Soil and Water Conservation Center" at every regional office of DLD. <F/S> The Thai Government intends to implement the 16 pilot projects for agricultural land conservation, which were worked out through F/S, according to the priority orders given to each project. The Thai Government requested the grant aid of the Japanese Government for procuring the machineries for civil engineering and construction as well as those for farming operation which are required to implement the projects. The Japanese Government, in response to the request, has done B/D surveys. The equipments arrived in March 1992. (FY1991 Overseas Survey) Detail design will be conducted from 1992 to 1994, construction from 1992 to 1995 and approximately 136.1 million bahts will be financed by the RTG budget. (FY1993 Overseas Survey) June 1993 - June 1993 The Land and Water Conservation Center Project in the East of Thailand (Project type technical cooperation) Besides the project above DLD uses the M/P to formulate "Land and Water Conservation Center Project." DDS estimates total investment cost of 16 Pilot Areas for 99 million baht. (FY1994 Domestic Survey) This Project has been implementing following the schedule. (FY1995 Domestic Survey) This project is implementing as on the schedule.																																									
4. REFERENCE NO.		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;">M/P 1)</td> <td style="width: 10%;">2,776,293</td> <td style="width: 10%;">Local</td> <td style="width: 10%;">1,696,090</td> <td style="width: 10%;">Foreign</td> <td style="width: 10%;">1,080,203</td> </tr> <tr> <td></td> <td>2)</td> <td></td> <td>Cost</td> <td>Cost</td> <td></td> <td></td> </tr> <tr> <td colspan="2">3)</td> <td colspan="5"></td> </tr> <tr> <td colspan="2">by 1988 price</td> <td>F/S 1)</td> <td>6,649</td> <td>4,063</td> <td></td> <td>2,587</td> </tr> <tr> <td colspan="2"></td> <td>2)</td> <td colspan="4"></td> </tr> <tr> <td colspan="2"></td> <td>3)</td> <td colspan="4"></td> </tr> </table>							M/P 1)	2,776,293	Local	1,696,090	Foreign	1,080,203		2)		Cost	Cost			3)							by 1988 price		F/S 1)	6,649	4,063		2,587			2)							3)		
	M/P 1)	2,776,293	Local	1,696,090	Foreign	1,080,203																																									
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5. TYPE OF STUDY		3. CONTENTS OF MAJOR PROJECT(S)				(FY1994 Domestic Survey) This Project has been implementing following the schedule. (FY1995 Domestic Survey) This project is implementing as on the schedule.																																									
6. COUNTERPART AGENCY Ministry of Agriculture and Cooperatives Department of Land Development (DLD)		<M/P><F/S> All over Thailand, soil erosion problems caused by random development is serious, 34% of national land is eroded. 478(716,000ha) of the areas in 4 provinces of the East of Thailand are eroded. The project for "Agricultural Land and Conservation for Integrated Rural Development" has been formulated. In 16 pilot areas selected from 4 provinces of the East of Thailand, "The Feasibility Study for Agricultural Land and Conservation for Integrated Rural Development" was carried out. <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Province</th> <th style="width: 15%;">Study Area (sq.km)</th> <th style="width: 15%;">Project Area (sq.km)</th> <th style="width: 15%;">Planning Area (sq.km)</th> <th style="width: 15%;">Pilot Area (sites)</th> </tr> </thead> <tbody> <tr> <td>Chachoengsao</td> <td>5,351</td> <td>5,351</td> <td>2,200</td> <td>4</td> </tr> <tr> <td>Chonburi</td> <td>4,363</td> <td>4,363</td> <td>3,041</td> <td>5</td> </tr> <tr> <td>Rayong</td> <td>3,552</td> <td>3,552</td> <td>2,634</td> <td>5</td> </tr> <tr> <td>Chanthaburi</td> <td>6,338</td> <td>1,981</td> <td>965</td> <td>2</td> </tr> <tr> <td>Total</td> <td>19,604</td> <td>15,247</td> <td>8,840</td> <td>16</td> </tr> </tbody> </table> Contents of Projects Soil conservation measures 1. Agricultural measures: cropping methods, cultivation methods 2. Mechanical measures: terracing systems, terrace channels 3. Irrigation facility: farm ponds and reservoirs 4. Supporting measures: infrastructures, agro-industry, farmers'education, institutional cooperation						Province	Study Area (sq.km)	Project Area (sq.km)	Planning Area (sq.km)	Pilot Area (sites)	Chachoengsao	5,351	5,351	2,200	4	Chonburi	4,363	4,363	3,041	5	Rayong	3,552	3,552	2,634	5	Chanthaburi	6,338	1,981	965	2	Total	19,604	15,247	8,840	16										
Province	Study Area (sq.km)	Project Area (sq.km)	Planning Area (sq.km)	Pilot Area (sites)																																											
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Total	19,604	15,247	8,840	16																																											
7. OBJECTIVES OF STUDY Building up the ability of project execution		Imp. Period: 1991. -1995.				(FY1994 Domestic Survey) This Project has been implementing following the schedule. (FY1995 Domestic Survey) This project is implementing as on the schedule.																																									
8. DATE OF SAV		1987/2																																													
9. CONSULTANT(S) Taiyo Consultants Co., Ltd. Sanyu Consultants Inc.		4. FEASIBILITY AND ITS ASSUMPTIONS				2. MAJOR REASONS FOR PRESENT STATUS Conservation of agricultural lands, which plays a key role in preservation of the environment, is deemed as one of the measures of top priority. Therefore, it should be implemented urgently, and the Thai Government requested the assistance through the grant aid scheme.																																									
10. STUDY TEAM		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Feasibility:</td> <td style="width: 15%;">EIRR1)</td> <td style="width: 15%;">10.40</td> <td style="width: 15%;">FIRR1)</td> <td style="width: 15%;"></td> </tr> <tr> <td>Yes</td> <td>EIRR2)</td> <td></td> <td>FIRR2)</td> <td></td> </tr> <tr> <td></td> <td>EIRR3)</td> <td></td> <td>FIRR3)</td> <td></td> </tr> </table>						Feasibility:	EIRR1)	10.40	FIRR1)		Yes	EIRR2)		FIRR2)			EIRR3)		FIRR3)																										
Feasibility:	EIRR1)	10.40	FIRR1)																																												
Yes	EIRR2)		FIRR2)																																												
	EIRR3)		FIRR3)																																												
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY Topographic survey Analysis of soil samples		Conditions and Development Impacts: [Conditions] 1)The project will be carried out as national project. 2)Classification of eroded areas Classification Soil loss(ton/ha/year) 1.Top-urgent (more than 50) 2.Urgent (50-30) 3.Necessary (30-20) 4.Normal (20-5) 5.Not Necessary (under than 5) 3)Pilot areas are chosen from the "Urgent" category [Development Impacts] 1)creation of employment opportunities, 2)improvement of socio-economic and rural living conditions of farmers, 3)military protection, 4)save and earn foreign currency, 5)improvement of farmers' cooperation, 6)ecological conservation, 7)prevent a change of micrometeorology, 8)water resource conservation and disaster prevention. In case of 4 model areas EIRR is 8.5- 11.6%. If no procurement of construction machines, EIRR is 13.1%.				3. PRINCIPAL SOURCE OF INFORMATION ①, ②																																									
12. EXPENDITURE		5. TECHNICAL TRANSFER																																													
Total		- Acceptance of three trainees for in-service training in Japan				3. PRINCIPAL SOURCE OF INFORMATION ①, ②																																									
Contracted		- OJT - Organizing seminars at the DLD main office																																													

和名 東部タイ農地保全総合開発計画

(M/P+F/S)

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1990
Revised Mar.1996

ASE THA/S 208B/88

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 Potential Tourism Development for the Southern Region		Phuket, Phangnga, and Krabi (Greater Phuket)			
3.SECTOR Tourism/(Tourism in)General		2.PROJECT COST (US\$1,000)		(Description) (1) TAT has been making preparations to obtain the Cabinet endorsement on the proposed projects. (2) TAT has been coordinating with Royal Forest Dept. and Fine Arts Dept. on the implementation of the projects below proposed for public sector investment. - Andaman Historical and Cultural Research Center (Krabi) - Tourism Manpower Training School (Phuket) - National Park Training Center (Phuket). (3) With regard to the improvement of other tourism facilities and the development of new resort complexes, TAT will prepare programs after the endorsement by the Cabinet. (FY1993 Overseas Survey) After submission of the M/P, TAT held a seminar among related agencies. A committee to consider potential projects is elected. It consists of related Provincial Authority, TAT, and PAD. May 1993 OECF L/A 4,268 million yen (Regional Development Project) The loan aims infrastructure development for tourism promotion in four regional core cities in the northern, southern and northeastern region. It also includes the D/D and construction of Andaman Historical and Cultural Research Center. The center is to be completed in Sep.1996. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information.	
4.REFERENCE NO.		M/P 1) 1,753,000 Local Cost 526,000 Foreign Cost 1,227,000 2) F/S 1) 2) 3)			
5.TYPE OF STUDY M/P+F/S		3.CONTENTS OF MAJOR PROJECT(S)		2.MAJOR REASONS FOR PRESENT STATUS	
6.COUNTERPART AGENCY Tourism Authority of Thailand		<M/P> - Development of tourism resources Conservation of historical sites in Phuket; village tourism; Andaman Historical and Cultural Research Center; National park development; training center - Improvement of tourism infrastructure: Airport; water supply; roads; cruising route improvement urban development; tourism manpower training school - New resort complex: Thai Muang, Khok Kloi beach resort, Phuket Marine center <F/S> 1) New resort complex: - Thai Muang international beach resort base (5,000 hotel rooms) - Khok Kloi public beach development (1,000 hotel rooms) 2) Phuket marine center (100ha) - Yacht harbor (200 berths for yachts and a basin for boats) - Marine hotel (200 rooms) - Marine center (restaurants, supermarkets)			
7.OBJECTIVES OF STUDY Formulation of a master plan through 2001 and feasibility analysis of priority projects		Imp. Period: 1989. -2001.			
8.DATE OF S/W 1987/7		4.FEASIBILITY AND ITS ASSUMPTIONS			
9.CONSULTANT(S) JCP Co., Ltd. Pacific Consultants International		Feasibility: Yes		3.PRINCIPAL SOURCE OF INFORMATION ①, ②, ④	
10.STUDY TEAM No. of Members 16 Period Nov.1987-Mar.1989 (12 months)		Conditions and Development Impacts: <M/P,F/S> EIRR of the entire package was estimated to be 34.6%. Development impacts: 1) With 1987 as base year, per capita GNP will increase 26.8% by 1991, 55.4% by 1996 and 86.6% by 2001. 2) Employment will increase 2 times by 1991, 2.7 by 1996 and 3.7 by 2001. 3) Net foreign exchange earnings will increase 2.7 times by 1991, 3.7 times by 1996 and 5.5 times by 2001. In addition to the investments mentioned above, it is necessary to strengthen administrative organizations, such as clear demarcation of responsibility between the central and regional governments (especially on environmental administration, and infrastructural development), good coordination between local administrative bodies, expansion of the functions of TAT (planning, coordination and project implementation capability in addition to tourism promotion) and formation of a wider area coordinating committee of Phuket, Phangnga and Krabi Provinces.			
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY Market survey LANDSAT survey		5. TECHNICAL TRANSFER			
12.EXPENDITURE Total 211,779 (¥000) Contracted 198,915		OUT on the selection of sites for international tourism development, analysis of tourism development potentials, market development and promotion campaigns and programming through intergration with other organizations			

和名 南部地域開発計画

[M/P+F/S]

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1990

Revised Mar.1996

ASE THA/S 207B/88

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 Road Development in the Central Region		Central Region (26 changwats, including Bangkok; 104,000 sq.km, pop. 17 million)																																	
3. SECTOR Transportation/Road		2. PROJECT COST				(Description) 15 routes out of 21 are under construction by OECF finance (L/A 1988 Nov. 4,117 million yen). ML-5 (Chonburi - Pataya) has been under construction since Aug. 1990. Another OECF L/A (5,670 million yen) was signed in Sep. 1991. Dec.1990 OECF loan agreement on Phase I (15,497 million yen) Construction scheduled to commence in FY1992. Sep.1991 OECF loan agreement on Phase II (13,631 million yen) Of the remaining routes, D/D for ML-9 (Bangkok-Chonburi new highway) is under way with the World Bank finance. (FY1991 Overseas Survey) The construction will be completed in 1995. (FY1992 Overseas Survey) The construction of ML-9 was commenced in 1992 and is now under way (FY1993 Overseas Survey) No additional information (FY1994 Domestic Survey) The construction work of the Bangkok-chonburi new highway was commenced in May 1994 and will be completed in 1997. (FY1995 Domestic Survey) The construction project of Bangkok - Chonburi new highway has been commenced on May, 1994 and is expected to complete on 1997. (FY1995 Overseas Survey) Most of the construction works of ML-project and IM-project were completed. Some part of RH-project moved into implementation and that construction work was also completed in 1994.																													
4. REFERENCE NO.		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;">M/P 1)</td> <td style="width: 10%;">79,202</td> <td style="width: 10%;">Local</td> <td style="width: 10%;">Foreign</td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td>2)</td> <td>49,151</td> <td>Cost</td> <td>Cost</td> <td></td> </tr> <tr> <td colspan="2">US\$1=25B</td> <td>F/S 1)</td> <td>398,960</td> <td>202,640</td> <td>196,320</td> </tr> <tr> <td colspan="2"></td> <td>2)</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2"></td> <td>3)</td> <td></td> <td></td> <td></td> </tr> </table>							M/P 1)	79,202	Local	Foreign			2)	49,151	Cost	Cost		US\$1=25B		F/S 1)	398,960	202,640	196,320			2)						3)	
	M/P 1)	79,202	Local	Foreign																															
	2)	49,151	Cost	Cost																															
US\$1=25B		F/S 1)	398,960	202,640	196,320																														
		2)																																	
		3)																																	
5. TYPE OF STUDY M/P+F/S		3. CONTENTS OF MAJOR PROJECT(S)																																	
6. COUNTERPART AGENCY Dept. of Highways		<p><M/P> 1) Trunk highway network (ML projects), 8 Links, total length:288.8km. Project No.ML-1 - ML-8 - The increase of lanes and new highway construction are necessary in many places. - It will be necessary in the future to develop a road network with inter-city expressways.</p> <p>2) Supplemental road network (IM projects), 23 Links, total length:718.2km. Project No.IM-1 - IM-23 - It will be necessary in the future to improve 85 routes (2,017km)</p> <p>3) Rehabilitation (RH projects), 8 Links, total length:206.8km. Project No.RH-1 - RH-8</p> <p>4) Improvement of intersections 48 places The project cost 1)is the ML project and. 2)is the IM project.</p> <p><F/S>1) Trunk highway network (ML projects) 7 projects, total length 320.3km ML-1:13.6km, ML-2:23.7km, ML-3:44.6km, ML-4:61.9km, ML-5:50.3km, ML-7:40.9km, ML-9:81.7km</p> <p>2) Supplemental road network (IM projects) 11 projects, total length 297.2km IM-1:18.7km, IM-2:35.9km, IM-11:40.7km, IM-12:51km, IM-13:17.8km, IM-14:25.6km, IM-15:24.7km, IM-16:20.8km, IM-17:19.2km, IM-22:15.9km, IM-23:26.9km</p> <p>3) Rehabilitation (RH projects) 3 projects, total length 96.7km RH-2:39.7km, RH-3:17.9km, RH-5:39.3km</p> <p>4) Improvement of intersections</p>																																	
7. OBJECTIVES OF STUDY Road development		Imp. Period: 1991. -1993.																																	
8. DATE OF S/W 1987/2		4. FEASIBILITY AND ITS ASSUMPTIONS																																	
9. CONSULTANT(S) Katahira & Engineers International Nippon Koei Co., Ltd.		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%;">Feasibility:</td> <td style="width: 10%;">EIRR1)</td> <td style="width: 10%;">19.70</td> <td style="width: 10%;">FIRR1)</td> <td style="width: 10%;"></td> </tr> <tr> <td></td> <td>Yes</td> <td>EIRR2)</td> <td>15.10</td> <td>FIRR2)</td> <td></td> </tr> <tr> <td></td> <td></td> <td>EIRR3)</td> <td>74.20</td> <td>FIRR3)</td> <td></td> </tr> </table>					Feasibility:	EIRR1)	19.70	FIRR1)			Yes	EIRR2)	15.10	FIRR2)				EIRR3)	74.20	FIRR3)													
	Feasibility:	EIRR1)	19.70	FIRR1)																															
	Yes	EIRR2)	15.10	FIRR2)																															
		EIRR3)	74.20	FIRR3)																															
10. STUDY TEAM No. of Members 10 Period Aug.1987-Mar.1989 (20 months)		Conditions and Development Impacts:																																	
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Total M/M</td> <td style="width: 30%;">Japan</td> <td style="width: 30%;">Field</td> </tr> <tr> <td>85.70</td> <td>15.70</td> <td>70.10</td> </tr> </table>		Total M/M	Japan	Field	85.70	15.70	70.10	<p>[Development Impacts]<M/P,F/S>- Regional development - Efficient functioning of existing highways - Meet increased traffic volume - Strengthen required linkage between producing places, and markets. - Ease traffic congestion - Prevent highway accidents - Invite private firms to participate in highway construction, etc.</p> <p>[Conditions]<F/S> Trunk road projects are selected to alleviate traffic congestion and to support the national project (Eastern Seaboard Development). Provincial road projects are selected to stimulate regional development and to provide socio-economic needs of the population. Feasibility analysis was undertaken on 21 projects which the Dept of Highways assigned high priority. Economic benefits are taken as the difference in vehicle operating cost and travel time for with and without projects. * The EIRRS for new construction, improvement of roads and rehabilitation of roads are 19.7% - 39.6%, 15.1% - 32.5% and 74.2% - 150.1% respectively.</p>																											
Total M/M	Japan	Field																																	
85.70	15.70	70.10																																	
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY Traffic survey by vehicle type, O/D survey, road inventory survey, boring and road surface survey		5. TECHNICAL TRANSFER																																	
12. EXPENDITURE		3. PRINCIPAL SOURCE OF INFORMATION																																	
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Total</td> <td style="width: 10%;">338,279 (¥'000)</td> </tr> <tr> <td>Contracted</td> <td>328,737</td> </tr> </table>		Total	338,279 (¥'000)	Contracted	328,737	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Technique of data collection, analysis and methodology approaches.<M/P></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>Instruction on how to formulate the M/P, F/S, and survey.<F/S></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>				Technique of data collection, analysis and methodology approaches.<M/P>						Instruction on how to formulate the M/P, F/S, and survey.<F/S>																			
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Instruction on how to formulate the M/P, F/S, and survey.<F/S>																																			
		①, ②, ③, ④																																	

和名 中央部道路網整備計画

(M/P+F/S)

PROJECT SUMMARY (F/S)

Compiled Mar.1990
Revised Mar.1996

ASE THA/S 321/88

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 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 Project of the Regional Truck Terminals		Bangkok, Chiang Mai, Khon Kaen, Nakhon Sawan, Nakhon Ratchasima, Hat Yai/Songkhla																							
		2.PROJECT COST (US\$1,000)		Total Cost	Local Cost	Foreign Cost	(Description) Regional truck terminal needs a Bangkok truck terminal as a pre-requisite condition. And the Thai government has just commenced the formal preparation of 10 years-suspended Bangkok truck terminal project in October 1992 when new Bangkok truck terminal project completed. The Thai government also intends to apply various implementation methods adopted in this project for the regional truck terminal project. Thus the Thai government has suspended the regional truck terminal until Bangkok truck terminal project can be succeeded. Establishment of Bangkok truck terminal project is sure to be implemented. For the government of Thailand gives the highest priority to this traffic congestion relieving project, and thus has established a Truck Terminal Construction Committee (Secretary: DLT). All of which can contribute to solve the causes the project had deadlocked. The government also made public that it is ready to provide the government's land, and to finance the capital of operation company. A JICA Export has been attached to DLT since Nov. 1988, and now successor is making efforts to implement both Bangkok and regional terminal projects. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) Regional truck terminals need a Bangkok truck terminal as a prerequisite condition, so this project has been suspended for many years. As the Bangkok truck terminal project moved into implementation recently, the regional truck terminal project also moved into realization. This project will be realized in the 8th 5 year plan.																		
				1) 8,780	4,704	4,076																			
				2)																					
				3)																					
3.SECTOR Transportation/Land Transportation		3.CONTENTS OF MAJOR PROJECT(S) Construction of three truck terminals: Stage1(1991-1992) Stage2(1991-1992) area																							
4.REFERENCE NO.		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">1. Chiang Mai</td> <td style="width: 10%;">27berth</td> <td style="width: 10%;">18berth</td> <td style="width: 10%;">24,555sq.m</td> <td style="width: 30%;"></td> </tr> <tr> <td>2. Khon kaen</td> <td>30</td> <td>20</td> <td>27,246sq.m</td> <td></td> </tr> <tr> <td>3. Hat Yai/Songkhla</td> <td>50</td> <td>45</td> <td>49,104sq.m</td> <td></td> </tr> </table>						1. Chiang Mai	27berth	18berth	24,555sq.m		2. Khon kaen	30	20	27,246sq.m		3. Hat Yai/Songkhla	50	45	49,104sq.m				
1. Chiang Mai	27berth	18berth	24,555sq.m																						
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5.TYPE OF STUDY		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Freight Volume Handled</td> <td style="width: 10%;">1996</td> <td style="width: 10%;">2006</td> <td style="width: 10%;">(unit:1000ton/year)</td> <td style="width: 30%;"></td> </tr> <tr> <td>1. Chiang Mai</td> <td>436</td> <td>667</td> <td></td> <td></td> </tr> <tr> <td>2. Khon Kaen</td> <td>661</td> <td>1,107</td> <td></td> <td></td> </tr> <tr> <td>3. Hat Yai/Songkhla</td> <td>840</td> <td>1,598</td> <td></td> <td></td> </tr> </table>				Freight Volume Handled	1996	2006	(unit:1000ton/year)		1. Chiang Mai	436	667			2. Khon Kaen	661	1,107			3. Hat Yai/Songkhla	840	1,598		
Freight Volume Handled	1996	2006	(unit:1000ton/year)																						
1. Chiang Mai	436	667																							
2. Khon Kaen	661	1,107																							
3. Hat Yai/Songkhla	840	1,598																							
6.COUNTERPART AGENCY Dept. of Land Transport (DLT), Ministry of Communications		Newly established joint venture company(limited com.) composed of the Government and private company operates terminal. One company is assigned each terminal.																							
7.OBJECTIVES OF STUDY Projection of cargo and determination of the scale of regional terminals																									
8.DATE OF SAV		1986/10				Imp. Period: 1991. -2000.																			
9.CONSULTANT(S) Pacific Consultants International		4.FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No	EIRR1) 40.36	FIRR1)																			
					EIRR2) 16.89	FIRR2)																			
					EIRR3) 39.63	FIRR3)																			
10.STUDY TEAM		Conditions and Development Impacts: Physical distribution was projected for 1987, 1996, and 2006. Cargo traffic projections were based on the O/D survey and interviews of enterprises, and economic growth projections by NESDB. Composition of cargo was determined according to the regular O/D survey conducted by DLT. EIRR was calculated on the assumption that the terminal in Bangkok be constructed and in operation. Regional truck terminals will contribute to (1) efficient land use in regional cities, (2) smoother road traffic in and around regional cities, (3) efficiency improvement of transport, (4) economy of scale by joint use of facilities and equipment, (5) stimulation of regional economies, and (6) environmental conservation. * the EIRRS are based on the assumption of Bangkok Terminal construction.																							
No.of Members 10 Period Jan.1987-Jul.1988(19 months)						2.MAJOR REASONS FOR PRESENT STATUS																			
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Total M/M</td> <td style="width: 30%;">Japan</td> <td style="width: 30%;">Field</td> </tr> <tr> <td>48.30</td> <td>17.50</td> <td>30.80</td> </tr> </table>		Total M/M	Japan	Field	48.30	17.50	30.80																		
Total M/M	Japan	Field																							
48.30	17.50	30.80																							
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY - Commodity Flow Survey - Traffic Count Survey - Freight Survey		5. TECHNICAL TRANSFER				3.PRINCIPAL SOURCE OF INFORMATION																			
12.EXPENDITURE		OJT on the traffic survey and the interview survey. Participation of 2 counterparts in the JICA training program				①, ②																			
Total 159,475 (¥000)																									
Contracted 141,404																									

PROJECT SUMMARY (M/P)

Compiled Mar.1991
Revised Mar.1996

ASE THA/A 103/89

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS		
1.COUNTRY	Thailand	1.SITE OR AREA	Whole Chao Phraya Basin		1.PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued	
2.NAME OF STUDY	Water Management System and Monitoring Program in Chao Phraya River Basin	2.PROJECT COST	Total Cost	Local Cost	Foreign Cost	(Description) Irrigation Engineering Center (IEC) of a project-type technical cooperation project has plan to examine the water management system, and some of telemetering system was introduced at the site proposed in the water management model project. (FY1993 Overseas Survey) Due to a huge budget, the project has not been implemented. RID has been implementing water management system and monitoring program in Chao Phraya Basin by RID own plan. (FY1994 Domestic Survey) Out of seven major projects proposed by the study, monitoring system improvement is being undertaken by the Project Type Cooperation by Irrigation Engineering Center (IEC). (FY1995 Domestic Survey) The tele-metering watching plan by the IEC has been extended two(2) more years to be continued until 1997.	
3.SECTOR	Agriculture/(Agriculture in)General	(US\$1,000)	1) 26,554		26,554		
4.REFERENCE NO.		US\$1=148Yen	2)				
5.TYPE OF STUDY	M/P	3.CONTENTIS OF MAJOR PROJECT(S)					
6.COUNTERPART AGENCY	Royal Irrigation Department	1. Water Management Model Project (6 sites, 786 million bahts for 5 years) 2. Communication System Improvement (radio equipment, 485 mil.bahts for 3 years) 3. Monitoring System Improvement (hydrology equip.& facil. 1,182 mil.bahts for 3 years) 4. Data Control System Improvement (199 mil.bahts for 3 years) 5. Irrigation and Drainage System Improvement (18 billion bahts for 20 years) 6. Study on Comprehensive River Basin Development (not costed) Reviews of existing plans and reformulation of water resource development plans: (1) Bang Pakong River Basin Plan, (2) Upper Pasak River Basin Plan, (3) Groundwater Development Plan (Phichit and Sukhothai), (4) Kwai Noi River Basin Plan, (5) Yom River Basin Plan, (6) Kok-In-Yom-Nan Diversion Plan, (7) Salween River Basin Plan, (8) Sakaekrang River Basin Plan, (9) Wang Thong River Basin Plan, (10) MaeKlong-Chao Phraya Diversion Plan, (11) Lower Ping River Basin Plan (Tak-Kamphaeng Phet Area Development), (12) other related development plans 7. Study on a Crop Diversification Promotion Center (not costed) Crop-Water relations and marketing & price information					
7.OBJECTIVES OF STUDY	To formulate a master plan for efficient and proper management of water resources through evaluation of potential water resources and water availability for agricultural development	4.CONDITIONS AND DEVELOPMENT IMPACTS					
8.DATE OF S/W	1986/5	[Conditions] The proposed projects from (1) to (5) above are each subdivided into four levels, and it is easy to re-calculate the cost relative to a given target selected. The implementation of the Water Management Model Project will help build up experiences and expertise, with which to proceed from one level to next. The project implementation is adjustable in connection with budget limitations and capabilities of available instructors.					
9.CONSULTANT(S)	Sanyu Consultants Inc. Taiyo Consultants Co., Ltd.						
10.STUDY TEAM	No.of Members 14 Period Jan.1987-Mar.1989(27 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;">157.82</td> <td style="text-align: center;">49.59</td> <td style="text-align: center;">108.23</td> </tr> </table>						Total M/M
Total M/M	Japan	Field					
157.82	49.59	108.23					
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	None	2.MAJOR REASONS FOR PRESENT STATUS					
12.EXPENDITURE	Total 570,471 (¥'000) Contracted 474,636	The water management Model Project will be conducted on technical cooperation scheme. The guideline for the rest of the project will be decided after the result of Model Project.					
		5. TECHNICAL TRANSFER		3. PRINCIPAL SOURCE OF INFORMATION			
		1) Examination of technical criteria and staff training 2) Accept the trainees		①, ②			

和名 チャオピア川流域水管理システムおよび監視計画

[M/P, Basic Study, Other]

PROJECT SUMMARY (M/P)

Compiled Mar.1991

Revised Mar.1996

ASE THA/S 105/89

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS								
1.COUNTRY	Thailand	1.SITE OR AREA	Whole area of the Kingdom Thailand		1.PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued							
2.NAME OF STUDY	Telecommunications Development	2.PROJECT COST	Total Cost Local Cost Foreign Cost (US\$1,000) 1) 6,406,758 3,525,379 2,881,379 US\$1=145Yen 2)			(Description) 1. Further Study (Bangkok Telecommunications Development Study) A further study titled "A Study on Regional Development Plan for Telecommunications Network in the Bangkok Metropolitan Area in the Kingdom of Thailand" was requested by the Government of Thailand in April 1990 on the recommendation of this Study report. The study was conducted from July 1991 to October 1992. The study area is the Bangkok Metropolitan area and its surroundings. The study proposed a 15-year(1993 to 2007) long-term development plan. The study conducted a feasibility study on the top telecommunications service quality from the viewpoints of call completion ratio and fault ratio. 2. BOT Project for the 7th 5-year Development Plan(1992-96) JICA Master Plan study recommended the improvement of TOT management including privatization for the future massive telephone network expansion and its smooth operation. Thai Government decided to introduce BOT method (Build, Operation, and Transfer) to implement TOT's 7th 5-year development plan. Two private companies: Telecom Asia Co. and Thai Telephone and Telecommunications Co., were awarded concession by TOT to construct and maintain 2 million local telephone lines network in the BMA and 1 million in the provincial areas respectively. The two companies are now under the construction stage. It is said that Thai Government applied BOT method for the step toward future privatization of TOT. The study report was used as a database and some outputs were utilized in TOR for BOT project. (FY1991 Overseas Survey) No additional information. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information.							
3.SECTOR	Communications & B/Telecommunication	3.CONTENTIS OF MAJOR PROJECT(S)	1.To install 4,345 thousand new main telephone lines within 15 years from FY 1993, and have total 6,168 thousand lines at the end of FY 2007. To improve telephone density from 3.2 at the end of FY 1992 to 10.7. To meet the telephone demand at the end of 1997. 2.To make existing network fully digitized to provide enhanced telecommunications services such as ISDN all over the country at the end of FY 2007. 3.The outline of the 15-year telecommunications network expansion plan is as follows: 1)switching systems:4,491 thousand switching line capacity, 2)transmission systems:205 systems are to be installed for the long-distance;189 fiber optical systems(FOTS) for Bangkok Metropolitan area and 511 FOTS and radio transmission systems for the Provincial area as for the spur rout transmission system. 3)outside plant(OSP): local cables of 8,088 thousand pairs are to be expanded and 4.1 billion Baht is required as for the rehabilitation of OSP.										
4.REFERENCE NO.		4.CONDITIONS AND DEVELOPMENT IMPACTS	Conditions: 1.Fund raising of required investment costs. 2.Improvement of management of TOT such as construction, operation and maintenance, procurement, marketing and customer relations, human resources, organization, budgeting and finance, tariff design, and management information. Development Impacts: 1.Fulfillment of national telephone demand and provision of versatile services. 2.Realization of an informationized society and more dynamic and innovative business operation.										
5.TYPE OF STUDY	M/P	10.STUDY TEAM	No.of Members 11 Period Sep.1988-Dec.1989(15 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;">75.61</td> <td style="text-align: center;">34.72</td> <td style="text-align: center;">40.89</td> </tr> </table>					Total M/M	Japan	Field	75.61	34.72	40.89
Total M/M	Japan	Field											
75.61	34.72	40.89											
6.COUNTERPART AGENCY	Telephone Organization of Thailand (Corporate Planning Office)	11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	None										
7.OBJECTIVES OF STUDY	To formulate a long term development plan for the period from FY 1993 to FY 2007 in Thailand	12.EXPENDITURE	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Total</td> <td style="width: 33%;">220,718 (¥000)</td> <td></td> </tr> <tr> <td>Contracted</td> <td>212,870</td> <td></td> </tr> </table>					Total	220,718 (¥000)		Contracted	212,870	
Total	220,718 (¥000)												
Contracted	212,870												
8.DATE OF SAV	1988/6	5. TECHNICAL TRANSFER	1)C/P training for 2 sponsored by JICA and 4 by TOT about the process of formulation of M/P in Japan. 2)Field survey of NTT facilities.										
9.CONSULTANT(S)	NTT International Corporation	3.PRINCIPAL SOURCE OF INFORMATION	①, ②										
		2.MAJOR REASONS FOR PRESENT STATUS	Recent rapid economic growth has accelerated the shortage of infrastructures. Especially in the telecom sector, there exists waiting applicants for telephone who have to 5 or 6 years. Thai Government has set the policy guideline in the 5th and 6th Development Plan for improving efficiency of state enterprises. As for the domestic telephone service, which is now provided dominantly by TOT, the Government has decided to promote the private sector.										

和名 国内電話網拡充長期計画

[M/P, Basic Study, Other]

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1991

Revised Mar.1996

ASE THA/A 203B/89

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS				III. PRESENT STATUS OF STUDIED PROJECT																																			
1. COUNTRY		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="checkbox"/> Discontinued or Cancelled <input type="radio"/> Processing																																			
Thailand		Sebai-Sebok-Tang Lung Rivers' Basins in Ubon Ratchathani and Yasothan of Northeastern Thailand<M/P> Priority areas in the basins of Sebai, Sebok and Tang Lung Rivers<F/S>																																							
2. NAME OF STUDY		2. PROJECT COST																																							
Sebai-Sebok Basin Development Project		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"></td> <td style="width: 20%; text-align: center;">M/P 1)</td> <td style="width: 20%; text-align: center;">157,154</td> <td style="width: 20%; text-align: center;">Local</td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td></td> <td style="text-align: center;">2)</td> <td style="text-align: center;">Cost</td> <td style="text-align: center;">Foreign</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center;">Cost</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">F/S 1)</td> <td style="text-align: center;">65,308</td> <td style="text-align: center;">34,231</td> <td style="text-align: center;">31,077</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">2)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">3)</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>					M/P 1)	157,154	Local				2)	Cost	Foreign						Cost				F/S 1)	65,308	34,231	31,077			2)						3)				
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3. SECTOR		3. CONTENTS OF MAJOR PROJECT(S)				(Description) In case of implementation, either provision of yen-credit for the entire program or application for grant aid for individual project can be considered. However as of now, no particular intention was shown by RID. (FY 1991 Overseas Survey) No additional information. (FY 1993 Overseas Survey) The project was planned to be implemented during 7th 5 years National Development Plan (1991 - 1996), however implementation is now suspended. Since there are many pending requests in RID and the project proposed by JICA study is considered as relatively new project so that the project is planned to be implemented after 1997. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information.																																			
Agriculture/(Agriculture in)General		<M/P>Major agricultural infrastructural development Projects: 1. Short-term Plan (1990 - 1996)																																							
4. REFERENCE NO.		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">No. of projects</th> <th style="text-align: center;">Irrig. Area (ha)</th> <th style="text-align: center;">Cost (million yen)</th> </tr> </thead> <tbody> <tr> <td>Medium-size water storage</td> <td style="text-align: center;">14</td> <td style="text-align: center;">18,750</td> <td style="text-align: center;">8,360</td> </tr> <tr> <td>Pumping stations (Pak Mung)</td> <td style="text-align: center;">7</td> <td style="text-align: center;">5,400</td> <td style="text-align: center;">1,880</td> </tr> <tr> <td>Medium-size rehabilitation</td> <td style="text-align: center;">5</td> <td style="text-align: center;">5,090</td> <td style="text-align: center;">390</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">26</td> <td style="text-align: center;">29,240</td> <td style="text-align: center;">10,630</td> </tr> </tbody> </table>							No. of projects	Irrig. Area (ha)	Cost (million yen)	Medium-size water storage	14	18,750	8,360	Pumping stations (Pak Mung)	7	5,400	1,880	Medium-size rehabilitation	5	5,090	390	Total	26	29,240	10,630														
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6. COUNTERPART AGENCY		<F/S>The Study examined the feasibility of five priority projects selected from 14 medium-size water storage projects proposed in the Short-term Development Plan.																																							
RID (Royal Irrigation Dept.), Ministry of Agriculture and Cooperatives		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Project</th> <th style="text-align: center;">River Basin</th> <th style="text-align: center;">Irrig. Area (ha)</th> <th style="text-align: center;">Cost (million yen)</th> </tr> </thead> <tbody> <tr> <td>Laem S---</td> <td style="text-align: center;">Sebai</td> <td style="text-align: center;">1,100</td> <td style="text-align: center;">1,130</td> </tr> <tr> <td>H---K-----K--</td> <td style="text-align: center;">Sebok</td> <td style="text-align: center;">2,600</td> <td style="text-align: center;">2,410</td> </tr> <tr> <td>H---K---Pak Wang</td> <td style="text-align: center;">Sebok</td> <td style="text-align: center;">960</td> <td style="text-align: center;">1,220</td> </tr> <tr> <td>H---N--K-----</td> <td style="text-align: center;">Sebok</td> <td style="text-align: center;">2,100</td> <td style="text-align: center;">2,120</td> </tr> <tr> <td>H---S----</td> <td style="text-align: center;">Tang Lung</td> <td style="text-align: center;">920</td> <td style="text-align: center;">1,610</td> </tr> <tr> <td>Total</td> <td></td> <td style="text-align: center;">7,670</td> <td style="text-align: center;">8,490</td> </tr> </tbody> </table>				Project	River Basin	Irrig. Area (ha)	Cost (million yen)	Laem S---	Sebai	1,100	1,130	H---K-----K--	Sebok	2,600	2,410	H---K---Pak Wang	Sebok	960	1,220	H---N--K-----	Sebok	2,100	2,120	H---S----	Tang Lung	920	1,610	Total		7,670	8,490								
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7. OBJECTIVES OF STUDY		Imp. Period: 1990. -1996. 1996. -2006.																																							
Preparation of a basin-wise agricultural development plan and feasibility study of the priority projects		4. FEASIBILITY AND ITS ASSUMPTIONS																																							
8. DATE OF SAW		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 30%; text-align: center;">Feasibility:</td> <td style="width: 20%; text-align: center;">EIRR1) 8.60</td> <td style="width: 20%; text-align: center;">FIRR1)</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;">FIRR2)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">EIRR3)</td> <td style="text-align: center;">FIRR3)</td> </tr> </table>					Feasibility:	EIRR1) 8.60	FIRR1)		Yes/No	EIRR2)	FIRR2)			EIRR3)	FIRR3)																								
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9. CONSULTANT(S)		Conditions and Development Impacts:																																							
Sanyu Consultants Inc. Naigai Engineering Co., Ltd.		<p><M/P>(Conditions)(1) It is necessary to secure support services such as extension services on improved farming methods, supply of agricultural inputs and appropriate water management. (2) On-farm land development, construction of main canals. (3) 20% of the irrigable area will be planted with upland crops during the dry season. Development impacts: 1)The irrigated area will be increased to 42,390ha, current 6% to 18%. 2) The average yield of wetland paddy will increase from the present 1.7-1.9 tons per hectare to 3.1-4.0 tons per hectare. <F/S>(Impacts)(1) Increase of production; wetland paddy 18,942(t), upland crops 7,361(t), inland water fisheries 585(t) 2) Increase of the typical farmer's income(3.2 ha) Non-agri. income (Before) 8,871 bahts (after) 8,871 bahts Farmer's income 19,942 57,956 3) The Project supplies water not only for irrigation but for village households and village reservoirs, and the improves the living environment.</p>																																							
10. STUDY TEAM		5. TECHNICAL TRANSFER																																							
No. of Members 9		<p>Technical transfer has been done properly through the process of various studies and surveys, the course of plan formulation and discussion and preparation and submission of the report.</p>																																							
Period Sep.1988-Nov.1989(14 months)		6. MAJOR REASONS FOR PRESENT STATUS																																							
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11. ASSOCIATED AND/OR SUBCONTRACTED STUDY		3. PRINCIPAL SOURCE OF INFORMATION																																							
None		①, ②, ③																																							
12. EXPENDITURE																																									
Total 202,871 (¥'000)																																									
Contracted 196,966																																									

和名 セバイ・セボック流域開発計画

(M/P+F/S)

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1991
Revised Mar.1996

ASE/THA/S 209B/89

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 Medium to Long Term Improvement / Management Plan of Road and Road Transport in Bangkok		Medium and long - term road plan Area within the, Outer Ring Road<M/P> ATC Project: Area within the Middle Ring Road and adjacent areas(235 intersections) CUD Project: Area within the Middle Ring Road.<F/S>					
3. SECTOR		2. PROJECT COST (US\$1,000)				(Description) <M/P> Concerning the expressway, arterial roads and bus way projects proposal in the M/P and in accordance with the request of BMA issued in May 1990, IECA dispatched a preliminary study team to undertake the necessary studies in order to formulate the bus way project. Based on the report of the IECA Study BMA intends to prepare an official request to have this project implemented under JICA aid. <F/S> 1) Based on the ATC F/S study, the detailed design and tender documents were prepared from March to November of 1990 for the project under the JICA study titled "The Detailed Design Study on Area Traffic Control Project in Bangkok". 2) The Government of Thailand has decided to construct the exclusive road for automobiles utilizing San Saep Canal by BOT, and is now negotiating with interested private investors. 3) The Government is requesting a JICA feasibility study on the exclusive bus road proposed by the study. (FY1993 Overseas Survey) June 1991-March 1994 Dispatch of JICA Expert to BMA BMA used the M/P to formulate the BMA 4th Development Plan. Many projects in the M/P are being implemented. (FY1994 Domestic Survey) The study results about CUD are widely used by the Government. (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 intersections and its D/D will be commenced from June 1996. Exclusive bus road was not realized but bus-lanes have been introduced. Preliminary study about CUD is carried out by a Japanese consultant.	
Transportation/Urban Transportaion		M/P 1) 5,007,320 Local 2,164,880 Foreign 2,842,440 2) Cost Cost F/S 1) 43,840 15,767 28,073 2) 3)		3. CONTENTS OF MAJOR PROJECT(S)			
4. REFERENCE NO.		4. FEASIBILITY AND ITS ASSUMPTIONS				2. MAJOR REASONS FOR PRESENT STATUS	
5. TYPE OF STUDY		Feasibility: EIRRI) FIRRI) Yes/No EIRR2) FIRR2) EIRR3) FIRR3)		1) Main Roads (1) Expressways (12 projects including following 3 projects) Expressway linking Thonburi-Bang Su-Ramkhamdeng Expressway linking Phet Kasem and SSE Expressway linking Nonchaburi and Bang Kapi (2) At-grade Main Roads (44 projects) 2) Bus-ways (13 projects)			
6. COUNTERPART AGENCY		Imp. Period: 1990. -1993.				3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③	
Bangkok Metropolitan Administration (BMA)Medium and long - term road plan Area within the, Outer Ring Road		4. FEASIBILITY AND ITS ASSUMPTIONS		Conditions and Development Impacts: <M/P> In order to meet the future transportation demand of both private and public modes at certain service levels, the study revealed that a package of road projects, comprising expressways (a total of 184km), segregated bus-ways (121km), at-grade main roads (599km) and distributors (56km specifically identified only in and around the city centre) has to be implemented by year 2006, in addition to the development of the extended LRT system (91km) and elevated Northern Line of SRT (45km). All these projects are economically viable. <F/S>(ATC) Making observations on current conditions and analyzing traffic survey results, the problems related to the ATC system in particular were evaluated and organized in a relevant manner. In order to evaluate the effectiveness of the ATC system in controlling traffic the total vehicle operating cost (VOC) and travel time cost (TTC) were estimated. In addition, an implementation program for the recommended plan was evaluated on the basis of the economic analysis. (Note) B/C Ratio 1.16			
7. OBJECTIVES OF STUDY		5. TECHNICAL TRANSFER					
Medium an Long-term road plan. (M/P) Area traffic control (ATC) system (F/S) Common utility duct (CUD) system		Accepted of trainees: 3 persons Seminar was held in Bangkok with the attendance of about 300 people.		10. STUDY TEAM			
8. DATE OF SAV				No. of Members 18 Period Nov.1988-Mar.1990 (17 months)			
9. CONSULTANT(S)				Total M/M Japan Field 127.24 55.37 71.87			
Yachiyo Engineering Co., Ltd. ALMEC Corporation				11. ASSOCIATED AND/OR SUBCONTRACTED STUDY			
12. EXPENDITURE				Common utility duct data collection survey Traffic survey			
Total 448,795 (¥'000)							
Contracted 424,258							

和名 バンコク首都圏中・長期道路交通計画

(M/P+F/S)

PROJECT SUMMARY (M/P+F/S)

Compiled Mar.1991
Revised Mar.1996

ASE THA/S 210B/89

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 Provincial Water Supply Projects		Patum Thani & Prachatipat, Phuket, Su Ngai Golok																																	
3.SECTOR Public Utilities/Water Supply		2.PROJECT COST (US\$1,000)				(Description) Patum Thani & Prachatipat, Phuket FWA intends to propose these package projects to Japanese government for OECF yen credit. Su Nagi Golok This project will be carried out by FWA's own equity. (FY 1991 Overseas Survey) Promoting by a private company in the form of privatization. Detail Design: From year 1992 to year 1993 Constructin : From year 1994 to year 1995 (FY1993 Overseas Survey) Using ADB grant, FWA revised F/S of Pathum Thani, Prachatipat and Phuket from Dec. 1993 to May 1994. This F/S focused on privatization of the Project. FWA will conduct the D/D and the construction of Fathum & Prachatipat by its own budget. FWA completed the D/D of Su Ngai Golok & Thung Soung and will implement if in FY 1995. (FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) The name of the project "Patum Thani & Prachatipat" has been changed to Patum Thani & Rangsatt Project and its privatization is decided. The contractor is selected, however PWD refuses it because of unclear procedure of the contract (Sep.1995). Phuket has been chosen for privatization in 1995. For Su Nagi Golok, D/D was done from 1994 to 1995 by FWA budget, and the government's subsidy of 134 million Baht has been approved. Now it is in the stage of tender. For Thung Soung D/D is planned in 1996 by the government budget for 75% and FWA for 25% and the construction will be conducted by the government subsidy of 98million Baht which is basically approved for 75% of construction cost and by FWA budget for 25%.																													
4.REFERENCE NO.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">M/P 1)</td> <td style="width: 15%;">906,402</td> <td style="width: 15%;">Local Cost</td> <td style="width: 15%;">1,385,231</td> <td style="width: 15%;">Foreign Cost</td> <td style="width: 10%;"></td> </tr> <tr> <td>2)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>F/S 1)</td> <td>233,228</td> <td></td> <td>117,079</td> <td></td> <td>116,149</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)	906,402	Local Cost	1,385,231	Foreign Cost		2)						F/S 1)	233,228		117,079		116,149	2)						3)			
M/P 1)	906,402	Local Cost	1,385,231	Foreign Cost																															
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F/S 1)	233,228		117,079		116,149																														
2)																																			
3)																																			
5.TYPE OF STUDY M/P+F/S		3.CONTENTS OF MAJOR PROJECT(S)																																	
6.COUNTERPART AGENCY Provincial Waterworks Authority		<p><M/P></p> <p>(1) Patum Thani & Prachatipat: Raw Water Intake, Water Treatment Plant, Distribution Reservoirs, Distribution and Transmission Pipeline (283,000 m3/day)</p> <p>(2) Phuket: New Water Treatment Plant, Dam, Distribution Reservoirs, Transmission Pipeline</p> <p>(3) Su Ngai Golok: Raw Water Intake, Water Treatment Plant, (9,400m3/day) Transmission Pipeline (13,000m)</p> <p>(4) Phang Nga: Raw Water Intake, Transmission Pipeline (21,300m)</p> <p>(5) Takua Pa: Raw Water Intake, Water Treatment Plant (4,300m3/day), Transmission Pipeline</p> <p>(6) Thung Song: Water Treatment Plant, Raw Water Intake, Transmission Pipeline</p> <p><F/S>(1)Patum water & Prachatipat; Phase I: Raw water intake, water treatment plant(141,500cu.m/day), 8 distribution reservoirs(47,250cu.m), distribution and transmission pipelines Phase II: Raw water intake, water treatment plant, distribution reservoir and pipeline (2)Phuket; Phase I: Khlong Bang Yai area, coastal resort area Phase II: 3 other systems (3)Su Ngai Golok; Raw water intake ,treatment plant(9,400 cu.m/day), ditribution reservoirs and transmission pipeline</p>																																	
7.OBJECTIVES OF STUDY		Imp. Period: 1990. -1996.																																	
-Preparation of development plans for 7 Provincial Cities Water Supply Projects in Thailand -To conduct F/S in Phuket, Prachatipat, Patum Thani and Su Ngai Golok		4.FEASIBILITY AND ITS ASSUMPTIONS																																	
8.DATE OF SAV 1988/3		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Feasibility:</td> <td style="width: 15%;">EIRR1)</td> <td style="width: 15%;">9.50</td> <td style="width: 15%;">EIRR1)</td> <td style="width: 10%;">17.00</td> </tr> <tr> <td>Yes</td> <td>EIRR2)</td> <td>7.44</td> <td>EIRR2)</td> <td>12.67</td> </tr> <tr> <td></td> <td>EIRR3)</td> <td>11.63</td> <td>EIRR3)</td> <td>0.31</td> </tr> </table>				Feasibility:	EIRR1)	9.50	EIRR1)	17.00	Yes	EIRR2)	7.44	EIRR2)	12.67		EIRR3)	11.63	EIRR3)	0.31															
Feasibility:	EIRR1)	9.50	EIRR1)	17.00																															
Yes	EIRR2)	7.44	EIRR2)	12.67																															
	EIRR3)	11.63	EIRR3)	0.31																															
9.CONSULTANT(S) Nippon Jogesuido Sekkei Co., Ltd.		Conditions and Development Impacts:																																	
10.STUDY TEAM		<p>Major urbanization is observed in Patum Thani & Prachatipat, and Phuket island is the most famous resort in Thailand. Su Ngai Golok is a trading area along boundary. So, investment of this project brings many social and economic benefits, such as, increase in served population, land value increase, health benefit and tourism income increase.</p>																																	
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY Topographic Survey Soil Investigation		2.MAJOR REASONS FOR PRESENT STATUS																																	
12.EXPENDITURE		<p>There are very higher economic and social efficiency in investment of these project. As compared to financing capability of government of Thailand, these projects need more capital costs.</p>																																	
Total 355,723 (¥'000)		3.PRINCIPAL SOURCE OF INFORMATION																																	
Contracted 164,359		①, ②, ③																																	

和名 地方都市水道整備計画

[M/P+F/S]

PROJECT SUMMARY (F/S)

Compiled Mar. 1991
Revised Mar. 1996

ASE/THA/A 313/89

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		Chantaburi River Basin (East Coast)																					
Agricultural Water Development Project on Chantaburi River Basin		2. PROJECT COST (US\$1,000)		Total Cost Local Cost Foreign Cost 1) 122,000 42,000 80,000 2) 3)																			
3. SECTOR		3. CONTENTS OF MAJOR PROJECT(S)				(Description) In 1989 RID requested to MOAC that yen loan should be applied for the implementation of this project, but the request for loan has not yet been made. A D/D study is under way with GOT finance. The project will be implemented with GOT finance. (as of March 1993) (FY1991 Overseas Survey) The project is tentatively incorporated in the Seventh National Plan (1992-1996). (FY1992 Overseas Survey) Waiting for the answer. (FY 1993 Domestic Survey) D/D of Khulong Sai Sai and Khulong Ta Uri has been initiated since 1992 and Environmental Impact Study is to be initiated in 1994. Preparatory work for dam construction in Khulong Sai Sai is now undertaken and the dam construction is to be initiated in 1994 by government budget of 172 million Bahts. (FY 1993 Overseas Survey) (FY 1993 Domestic Survey) D/D of Khulong Sai Sai and Khulong Ta Uri has been initiated since 1992 and Environmental Impact Study is to be initiated in 1994. Preparatory work for dam construction in Khulong Sai Sai is now undertaken and the dam construction is to be initiated in 1994 by government budget of 172 million Bahts. (FY1994 Domestic Survey) D/D and construction of Khulong Sai Sai were started in 1994 and planned to be completed in 1996. The construction budget including D/D is 172 million Baht. Khulong Ta Liu is not started yet. (FY1995 Domestic Survey) The construction of Khulong Sai Sai Dam is now underway and is planned to complete until 1996. The amount of its construction cost has been amended from 172 to 193 million Bahts.																	
Agriculture/(Agriculture in)General		The Project aims to stabilize and expand the fruit production by controlling the unfavorable effects of occasional droughts and water shortages during the dry season. 1. Storage Dams: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Type</th> <th style="width: 20%;">Cap. (cu.m)</th> <th style="width: 20%;">Dam Height (m)</th> <th style="width: 30%;"></th> </tr> </thead> <tbody> <tr> <td>Embankment (cu.m)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Khlong Ta Liu Dam: rock-fill</td> <td>35.85 million</td> <td>87.5</td> <td>4,700,000</td> </tr> <tr> <td>Khlong San Sai Dam: earth</td> <td>10.55</td> <td>16.2</td> <td>571,000</td> </tr> </tbody> </table> 2. Diversion Weir: water intake 3.5 cu.m/sec. 3. Water Conveyance Pipeline: Length 111.6km, dias. 350mm - 1,600mm 4. Main Pumping Stations: 3 places (dia. 150mm, 200mm, and 250mm)						Type	Cap. (cu.m)	Dam Height (m)		Embankment (cu.m)				Khlong Ta Liu Dam: rock-fill	35.85 million	87.5	4,700,000	Khlong San Sai Dam: earth	10.55	16.2	571,000
Type	Cap. (cu.m)	Dam Height (m)																					
Embankment (cu.m)																							
Khlong Ta Liu Dam: rock-fill	35.85 million	87.5	4,700,000																				
Khlong San Sai Dam: earth	10.55	16.2	571,000																				
4. REFERENCE NO.		4. FEASIBILITY AND ITS ASSUMPTIONS																					
5. TYPE OF STUDY		Imp. Period: Feasibility: EIRRI) 14.60 FIRR1) Yes EIRR2) FIRR2) EIRR3) FIRR3)																					
6. COUNTERPART AGENCY		Conditions and Development Impacts: The Project Area has annual rainfalls of 2,500mm and is known for its tropical fruits. The marketing system is fairly developed, but because of the less than adequate state of agricultural infrastructure often causes water shortage during the dry season. The proposed project will solve this water stress, and increase the production and improve the quality of fruits for export. Condition: - Cost-sharing by the beneficiaries is 20% of the total project cost. Development impacts: - Additional area of 3,500 ha planted to fruits, and an increase of production by 97,000 tons - 20% of the present rubber-planted area, and from 30% to 40% of the upland normally used for cassava growing will be converted to orchards. - An increase of the typical farmer's cash income will range from 47% to 110%.																					
Royal Irrigation Department, Ministry of Agriculture and Cooperatives (MOAC)																							
7. OBJECTIVES OF STUDY		Feasibility study on water resources development plan within the subject river basin and irrigation plan for fruits plantation																					
8. DATE OF SAW																							
1987/3		10. STUDY TEAM No. of Members 10 Period Mar. 1988-Jul. 1989 (16 months) <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Total M/M</th> <th style="width: 30%;">Japan</th> <th style="width: 30%;">Field</th> </tr> </thead> <tbody> <tr> <td></td> <td>29.33</td> <td>37.81</td> </tr> </tbody> </table>				Total M/M	Japan	Field		29.33	37.81												
Total M/M	Japan					Field																	
	29.33	37.81																					
9. CONSULTANT(S)		11. ASSOCIATED AND/OR SUBCONTRACTED STUDY None																					
Sanyu Consultants Inc. Pacific Consultants International Integrated Technology Inc.																							
12. EXPENDITURE		5. TECHNICAL TRANSFER																					
Total 203,038 (¥000)		On the job training																					
Contracted 193,112		2. MAJOR REASONS FOR PRESENT STATUS																					
		Due to high priority of the project among the irrigated agricultural development sector in Thailand, particularly with the request of project area.																					
		3. PRINCIPAL SOURCE OF INFORMATION																					
		①, ②, ③																					

PROJECT SUMMARY (F/S)

Compiled Mar.1991

Revised Mar.1996

ASE THA/S 323/89

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		Bangkok and Laem Chabang					
Measures to Promote the Container Handling System through Laem Chabang Port		2.PROJECT COST		Total Cost	Local Cost	Foreign Cost	
		(US\$1,000)		47,461	21,420	11,020	
		US\$=Baht .25.6=133 yen		1)	2)	3)	
3.SECTOR		3.CONTENTS OF MAJOR PROJECT(S)				(Description) Oct. 1991: The 1st phase of construction work was completed. Two of container berths were lent to private sector, began to be operated. The management body of ICD was determined as SRT was permitted to construct ICD in Lard Krabang. The beginning of the work will delay due to the increase of land acquisition cost. (FY 1991 Overseas Survey) SRT will employ engineering consultant firms to review the number of ICDS. (FY1993 Overseas Survey) 1993-94 D/D by RTG budget Site area increased to 100 ha. Feb.94 - Apr.95 Construction Work (scheduled) Cost: Land Acquisition 939 (million baht) D/D 37 Construction 874 Operation Cost 7 Total 1,857 (FY1994 Domestic Survey) (FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) They completed the construction of Inland Container Deposit including six(6) CFS. The four(4) CFS out of the six will be operated from January, 1996 by a private company. And a truck terminal will be constructed beside of them.	
Transportation/Port		Construction of an inland container depot(ICD) (Long-term) a 48ha ICD including 6 CFSs for handling 2.1 million tons of container cargo in 2001. (6 berths) (Short-term) a 32ha ICD including 4 CFSs for handling 1.3 million tons of container cargo in 1996. Stage 1: container berth 2, break-bulk berth 1, agri-bulk loading facilities (total 4 berths) 1)Facilities in each ICD: container freight station, container yard, container handling machines, gates, office, maintenance repair shop, parking space. 2)Administration Zone: main office 1,200sq.m, overtime cargo warehouse 2,100sq. m 3)Spur Line: The Lat Krabang ICD will be connected to the Eastern Line. (radius at least 300m, length 500m)					
4.REFERENCE NO.							
5.TYPE OF STUDY		F/S					
6.COUNTERPART AGENCY		CESB, NESDB, NOTC, PAT, SRT, BSAA					
7.OBJECTIVES OF STUDY		To recommend the effective container handling system between Laem Chabang Port and Bangkok Port and the effective port management and operation system focusing on the development of ICD.					
8.DATE OF SAV		1987/12		Imp. Period: 1989. -1991.8 1994. -1996.			
9.CONSULTANT(S)		Overseas Coastal Area Development Institute Pacific Consultants International		4.FEASIBILITY AND ITS ASSUMPTIONS			
10.STUDY TEAM		Feasibility: Yes		EIRR1) 17.60	FIRR1) 6.50		
				EIRR2)	FIRR2)		
				EIRR3)	FIRR3)		
No.of Members 12 Period Mar.1988-Jul.1989(16 months)		Conditions and Development Impacts:					
		[Conditions] a)Economic Growth Rate: 6.5%(1990), 5%(1991-) b)Container Cargo Volume in Thailand: 1996 15,560,000tons(1,487,000TEUS) / 2001 19,832,000tons(1,818,000TEUS) c)Laem Chabang Port Development: container cargo 1996: 6.8 million tons(638,000TEUS) 2001: 10.6 million tons(953,000TEUS) container berth 1996: 4, 2001:6					
Total M/M Japan Field		[Development Impact] Reduction of freight cost by effectuating container transport system, promotion of economic growth, increase in employment opportunities, reduction of traffic congestion between the ICD and Laem Chabang Port, saving in customs clearance cost.					
71.80 31.90 39.90							
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		5.technical transfer					
O/D Survey at both of the end points		1.Promotion of technical transfer by joint study 2.Promotion of technical transfer by employing a local consultant for O/D survey 3.Counterpart training					
12.EXPENDITURE		3.PRINCIPAL SOURCE OF INFORMATION					
Total 190,597 (¥'000)		①, ②, ③, ④					
Contracted 188,539							

PROJECT SUMMARY (F/S)

Compiled Mar.1991
Revised Mar.1996

ASE/TIA/S 322/89

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 checked="" type="checkbox"/> Implementing <input type="checkbox"/> Processing <input type="checkbox"/> Discontinued or Cancelled
2. NAME OF STUDY Purification of Klong Water in Bangkok		Bangkok City Study Area 380 sq.km Population 3.7 million					
3. SECTOR Public Utilities/Sewerage		2. PROJECT COST		Total Cost	Local Cost	Foreign Cost	
4. REFERENCE NO.		(US\$1,000)	1)	8,920	6,120	2,800	
5. TYPE OF STUDY F/S		US\$1=145Yen		2)			
6. COUNTERPART AGENCY Department Drainage and Sewerage, Bangkok Metropolitan Administration				3)			
7. OBJECTIVES OF STUDY Urgent Klong Water Purification in Bangkok		3. CONTENTS OF MAJOR PROJECT(S) An urgent water quality improvement for the Klong with the introduction of dilution water from the Chao Phraya River by remodeling the existing gates and pumps that are utilized for drainage only at present. Aerated lagoon treatment of Klong water in two ponds to realize a net pollution load reduction and to abate water quality deterioration of the Chao Phraya River by the dilution water introduction.				(Description) Two JICA experts are dispatched to the Department of Drainage and Sewerage of Bangkok Metropolitan Administration, the executive agency of the Project. And the experts are also engaged in promoting the implementation of the project. (FY1991 Overseas Survey) Detail design Period : 1991 - present (including the simulation study of water quality) Consultant's country: Thailand Source of finance : Thai Government Construction Period : 1993- Country of main contractors: Thailand (FY1993 Overseas Survey) Coming schedule is as follows: 1993-94 D/D by BMA's budget 1994-97 Construction Work Total cost will be 318 million Baht. (FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information. (FY1995 Overseas Survey) The contents of the above-mentioned project is rehabilitation of pump station, dredging of major Klongs, protection of river banks, installment of aerators, etc. The area covered 380 sq.km. Besides this, BMA started construction of Masakan pond and Lama IX pond lagoon in 1991 by its budget and other institutes, and it is still under implementation. JICA also contributed some aerators.	
8. DATE OF SAW 1987/9		Imp. Period: 1990. -2000.					
9. CONSULTANT(S) Pacific Consultants International Tokyo Engineering Consultants Co., Ltd.		4. FEASIBILITY AND ITS ASSUMPTIONS		Feasibility: Yes/No	EIRR1) EIRR2) EIRR3)	FIRR1) FIRR2) FIRR3)	
10. STUDY TEAM No. of Members 10 Period Dec.1987-Feb.1990 (27 months)		Conditions and Development Impacts: The project component of dilution water introduction and aerated lagoon treatment are only urgent water pollution control measures. As such, large scale structural measures are not proposed. The dilution water introduction will improve the Klong water quality resulting in a very significant improvement of color and order. The aerated lagoons will contribute to a net pollution load reduction which will more than offset the anticipated increase in pollution load discharge to the Chao Phraya River due to the introduction of dilution water to the Klongs.				2. MAJOR REASONS FOR PRESENT STATUS	
<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;">56.47</td> <td style="text-align: center;">20.01</td> <td style="text-align: center;">36.46</td> </tr> </table>							
Total M/M	Japan	Field					
56.47	20.01	36.46					
11. ASSOCIATED AND/OR SUBCONTRACTED STUDY Topographic Survey Construction of Aerated Lagoon Treatment System		5. TECHNICAL TRANSFER Consecutive observation of klong water quality and water flow. Simulation analysis of klong water quality by computer.				3. PRINCIPAL SOURCE OF INFORMATION ①, ②, ③	
12. EXPENDITURE							
Total		236,286 (¥000)					
Contracted		206,294					

和名 バンコク市クローン水質改善計画

PROJECT SUMMARY (M/P)

Compiled Mar.1992
Revised Mar.1996

ASE THA/S 106/90

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDY RESULTS													
1. COUNTRY	Thailand	1. SITE OR AREA			1. PRESENT STATUS												
2. NAME OF STUDY	Traffic Operation Plan for Roads	1. SITE OR AREA	All trunk roads managed by DOH		<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued												
3. SECTOR	Transportation/Road	2. PROJECT COST	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">(US\$1,000)</td> <td style="text-align: center;">1)</td> <td style="text-align: center;">Total Cost</td> <td style="text-align: center;">Local Cost</td> <td style="text-align: center;">Foreign Cost</td> </tr> <tr> <td></td> <td style="text-align: center;">2)</td> <td style="text-align: center;">8,000</td> <td style="text-align: center;">8,000</td> <td></td> </tr> </table>			(US\$1,000)	1)	Total Cost	Local Cost	Foreign Cost		2)	8,000	8,000			
(US\$1,000)	1)	Total Cost	Local Cost	Foreign Cost													
	2)	8,000	8,000														
4. REFERENCE NO.		3. CONTENTS OF MAJOR PROJECT(S)	<p>a) Introduction of Traffic Census System b) Introduction of Traffic Information System c) Introduction of Road Inventory System d) Technical Guideline and Engineering Specification of Traffic Safety and Traffic Control Devices e) Traffic Operation Plan</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">1) Improvement of Highway</td> <td style="width: 30%;">5 points</td> </tr> <tr> <td>2) Installation of Traffic Lights</td> <td>110 points</td> </tr> <tr> <td>3) Installation of Guard Fence</td> <td>96 points</td> </tr> <tr> <td>4) Construction of Bicycle Lanes</td> <td>1 point</td> </tr> <tr> <td>5) Construction of Overpasses</td> <td>8 points</td> </tr> <tr> <td>6) Pavement of Road Shoulders in the Urban Area</td> <td>1 set</td> </tr> </table> <p>The above project cost is 8,105.6 (local cost: 7,855.6 and foreign cost: 250.0) in million bahts.</p>		1) Improvement of Highway	5 points	2) Installation of Traffic Lights	110 points	3) Installation of Guard Fence	96 points	4) Construction of Bicycle Lanes	1 point	5) Construction of Overpasses	8 points	6) Pavement of Road Shoulders in the Urban Area	1 set	<p>(Description)</p> <p>Preparatory works for the projects are planned to be done in next fiscal year. (Oct.1990 - Sep.1991) Following this study, the aftercare study traffic operation plan for roads was executed, from March 1991 to November 1991, in order to formulate an effective road traffic operation. In the aftercare study, 24 intersections improvement, 6 road section improvement and traffic safety countermeasures for 29 road sections were recommended.</p> <p>(FY 1992 Overseas Survey) The 7th five year road improvement plan (Oct.1991-Sep.1996) was designed based on this study, and about 2,400 million bahts has been appropriated in the budget for traffic safety project.</p> <p>(FY1993 Overseas Survey) Whenever the budget is available, the plan is followed year by year. DOH established the Road Research and Development Center with few DOH staff.</p> <p>(FY1994 Domestic Survey)(FY1995 Domestic Survey) No additional information.</p> <p>(FY1995 Overseas Survey) Proposed projects a) Introduction of Traffic Census System, b) Introduction of Traffic Information System, c) Introduction of Road Inventory System, d) Technical Guideline and Engineering Specification of Traffic Safety and traffic Control Devices, were implemented by means of computer-networking system, but there was no progress about improvement of the organization which was included in the JICA's proposal.</p>
1) Improvement of Highway	5 points																
2) Installation of Traffic Lights	110 points																
3) Installation of Guard Fence	96 points																
4) Construction of Bicycle Lanes	1 point																
5) Construction of Overpasses	8 points																
6) Pavement of Road Shoulders in the Urban Area	1 set																
5. TYPE OF STUDY	M/P	4. CONDITIONS AND DEVELOPMENT IMPACTS	<p>Traffic Operation Plan [Conditions]</p> <p>1) Planning Area : Traffic Problem Section on all DOH road 2) Plans : Counter Measures with not Proposed in Phase I Study</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">- Motorcycle Lane</td> <td style="width: 20%;">20 sec</td> </tr> <tr> <td>- Passing Lane</td> <td>15 sec</td> </tr> <tr> <td>- Road Information System</td> <td>12 sec</td> </tr> <tr> <td>- Grade Separation</td> <td>17 sec</td> </tr> </table> <p>3) Project life : 20 years</p> <p>[Development Impacts] 1) Project Cost : 150 million Bahts 2) B/C : 1.43</p>		- Motorcycle Lane	20 sec	- Passing Lane	15 sec	- Road Information System	12 sec	- Grade Separation	17 sec					
- Motorcycle Lane	20 sec																
- Passing Lane	15 sec																
- Road Information System	12 sec																
- Grade Separation	17 sec																
6. COUNTERPART AGENCY	Department of Highways Ministry of Transport and Communications	10. STUDY TEAM	<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> <td colspan="2"></td> </tr> <tr> <td style="text-align: center;">58.06</td> <td style="text-align: center;">21.51</td> <td style="text-align: center;">36.55</td> <td colspan="2"></td> </tr> </table>		Total M/M	Japan	Field			58.06	21.51	36.55					
Total M/M	Japan	Field															
58.06	21.51	36.55															
7. OBJECTIVES OF STUDY	To establish effective traffic operation plan and to perform technology transfer	11. ASSOCIATED AND/OR SUBCONTRACTED STUDY	<p>1. Traffic Survey 2. Topographic Survey</p>														
8. DATE OF SAW	1988/9	12. EXPENDITURE	<table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Total</td> <td style="width: 15%;">199,824 (¥'000)</td> <td colspan="3"></td> </tr> <tr> <td>Contracted</td> <td>176,982</td> <td colspan="3"></td> </tr> </table>		Total	199,824 (¥'000)				Contracted	176,982						
Total	199,824 (¥'000)																
Contracted	176,982																
9. CONSULTANT(S)	Central Consultant, Inc. Oriental Consultants Co., Ltd.	5. TECHNICAL TRANSFER	<p>Technical transfer has been performed on following items. - Basic conception and technical method for the introduction of each system</p>														
		2. MAJOR REASONS FOR PRESENT STATUS															
		3. PRINCIPAL SOURCE OF INFORMATION		①, ②, ③													

PROJECT SUMMARY (M/P)

Compiled Mar.1992
Revised Mar.1996

ASE THA/S 107/90

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS		
1.COUNTRY	Thailand	1.SITE OR AREA	Ayutthaya, Saraburi, Lopburi, Anghong, Singburi, and Chainat Area=16450 s.km, Population = 3740000(1987)			1.PRESENT STATUS	<input checked="" type="checkbox"/> In Progress or In Use <input type="checkbox"/> Delayed <input type="checkbox"/> Discontinued
2.NAME OF STUDY	Upper Central Region Study	2.PROJECT COST	Total Cost Local Cost Foreign Cost			(Description) The Seventh National Economic and Social Development Plan for the 1992 to 1996 will incorporate the proposed development projects and programs. Preparation of the National Plan is now under progress. (FY1991 Overseas Survey) Suphan Buri - Tha Rus - Saraburi Highway is under construction. The following F/S are planned: - Pasak Dam Development Project Period: From July 1992 to July 1993 Executing Agency: Royal Irrigation Department Source of Finance: Thai Government - Environmental Monitoring and Management Project Period: From Sept. 1992 to the end of 1992 Looking for foreign assistance - Great Saraburi Industrial Core Planning Study Seeking for foreign assistance. Wishes technical supports from the Government of Japan. (FY1992 Overseas Survey) Waiting for the answer. (FY1993 Overseas Survey) - Most of transport projects have been completed. - Pasak Dam Project is under preparation. (FY1994 Domestic Survey) - Pasak Dam project is being prepared - Sara Buri Industrial Estate has been completed by local capital alone and now used by a number of factories. - Suphan Buri-Talua-Sara Buri Highways have been completed by local capital alone. - Klong 19-Kaeng Khoi Railway is underconstruction with a support of Yen Credit. (FY1995 Domestic Survey) No additional information.	
3.SECTOR	Development Plan/Integrated Regional Development Plan		1) 2)				
4.REFERENCE NO.		3.CONTENTES OF MAJOR PROJECT(S)					
5.TYPE OF STUDY	M/P	Integrated Pasak River Basin Development Package (6 projects) Greater Saraburi Industrial Core Development Package (15 projects) Agro-Industrial Linkage Development Package (6 projects) Human Resources Development Package (3 projects)					
6.COUNTERPART AGENCY	National/Economic and Social Development Board (NESDB)	* Project costs above were not calculated.					
7.OBJECTIVES OF STUDY	Preparation of regional development plan toward the year of 2010	4.CONDITIONS AND DEVELOPMENT IMPACTS					
8.DATE OF SAW	1988/7						
9.CONSULTANT(S)	International Development Center of Japan Pacific Consultants International	1. Regional macro-economic framework Population increase = 1%/year ; agricultural production : 3%/year; industrial production = 7%/year; service sector will grow according to agriculture and industrial sector. Regional production per capita will increase at 5%/year by 2010. 2. Impacts Gross regional production will become four times of 1987. Agriculture sector employment will shift to industry sector and it will reduce out-migration of regional population. Maintain the role of national food production center and the sound environment by the balanced development of agriculture and industry.					
10.STUDY TEAM	No.of Members 19 Period Dec.1988-Jul.1990(19 months)	5.TECHNICAL TRANSFER					
	Total M/M Japan Field 113.89 4.07 109.82						
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	Socio-economic study Distribution Study Landsat Image Analysis	2.MAJOR REASONS FOR PRESENT STATUS					
12.EXPENDITURE	Total 345,499 (¥000) Contracted 330,355						
		3.PRINCIPAL SOURCE OF INFORMATION					
					①, ②, ③		