

# STUDY SUMMARY SHEET

## (M/P)

ASE SGP/S 101/78

<b>1. COUNTRY</b>	Singapore		
<b>2. NAME OF STUDY</b>	Dredging Project of the Strait of Singapore		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Port and Harbour Bureau, Ministry of Transport	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI)		
<b>7. STUDY PERIOD</b>	Aug.1978 ~ Mar.1979 7month(s) ~		
<b>8. SITE OR AREA</b>	Strait of Singapore		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Plan for deepening the shallow areas(4 sites) in Singapore Strait.</p> <p>Based upon the bathymetric surveys, seismic surveys, Boring, and Inspection by divers, the followings are proposed.</p> <p>(1) Dredging Method: Grab Dredger</p> <p>(2) Dredging Volume: 484,000cu.m (area 165,000sq.m)</p> <p>(3) Monthly Production: 38,000cu.m (by 7cu.m Grab) 89,900cu.m (by 13cu.m Grab)</p>			

浅瀬浚渫計画

ASESGP/S 101/78(M/P)	
PRESENT STATUS	In Progress or In Use
	Delayed
	Discontinued
<b>Description :</b>  1992 Dredging works were completed.	

# STUDY SUMMARY SHEET

## (F/S)

ASE SGP/S 301/86

<b>1. COUNTRY</b>	Singapore		
<b>2. NAME OF STUDY</b>	Plant Renovation Project of the Sentosa-1 Earth Station		
<b>3. SECTOR</b>	Communications & Broadcasting / Telecommunication		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Telecommunication Authority of Singapore	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Telecom. Eng. and Consulting Service (JTEC)		
<b>7. STUDY PERIOD</b>	Mar.1986 ~ Jul.1986 4month(s) ~		
<b>8. SITE OR AREA</b>	Sentosa Island of Singapore		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The Plant Renovation Project:</p> <p>1) 5 years life extension</p> <p style="padding-left: 20px;">Antenna mechanical part &amp; structure - partial repair</p> <p style="padding-left: 20px;">Antenna servo drive system - to replace some devices</p> <p>2) 10 years life extension</p> <p style="padding-left: 20px;">Antenna mechanical part &amp; structure - total repair</p> <p style="padding-left: 20px;">Antenna servo drive system - to replace all</p> <p style="padding-left: 20px;">High Power microwave trasmitter - extension for TDMA system</p>			

セントサ衛星地球局補修計画

ASE      SGP/S 301/86		(F/S)
PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b>  Reasons of Stoppage: The project was discontinued. 1) The antenna was the old type (york tower type) which is less flexible for expansion. 2) INTELSAT standards of the antenna were changed when the study was completed.		

# STUDY SUMMARY SHEET

## (F/S)

ASE SGP/S 302/88

<b>1. COUNTRY</b>	Singapore		
<b>2. NAME OF STUDY</b>	Singapore Urban Transport Improvement		
<b>3. SECTOR</b>	Transportation / Urban Transportation		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Public Works Department, Ministry of National Development	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	ALMEC Corporation Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Aug.1987 ~ Nov.1988 15month(s) ~		
<b>8. SITE OR AREA</b>	5 routes		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The study prepared plans to improve the feeder transport systems by introducing a new transit system for five selected areas. A detailed analysis was made of the Ang Mo Kio New Town System.</p> <p>Major project components:</p> <ol style="list-style-type: none"> <li>1) Route and alignment plan, including location of stations</li> <li>2) Infrastructure plan (structures, stations, yards) and preliminary design</li> <li>3) Selection of a transit system and an operation plan</li> </ol>			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1)Sentosa Line The Sentosa Development Corporation and the Public Works Department show their interest on this project. The preparation is on-going to call for the tender for a part of the Orchard-Sentosa Route.</p> <p>(2)Simpang New Town System HDB is now planning the comprehensive new town development project. (FY 1998 Overseas Survey) The development of New Town is not completed yet.</p> <p>(3)Ang Mo Kio New Town-Marine Parade Route It has been officially included into the transport network plan. Subsequent Study: Evaluation study has conducted. (own fund) (FY 1998 Overseas Survey) Alternative route is being considered.</p> <p>Background: (FY 1990 Domestic Survey) Feb.1990 The seminar was held, based on the study results. 300 people participated and their understanding over the introduction of new traffic system was promoted. (FY 1991 Overseas Survey) The concept of LRT was generally accepted and integrated into the Concept Plan of Urban Transport.</p> <p>(FY 1993 Overseas Survey) There is no plan for the immediate implementation of the proposed projects. However, this study has promoted the better understanding on the LRT role played in the transportation network system in Singapore. LRT is integrated into the Long-Term Transportation Plan for 21st century.</p> <p>(FY 1994 Domestic Survey) As MRT (Mass Rapid Transit), which commenced its operation in 1989, has been extensively used, further improvement of feeder services become more important. In 1993 JICA was requested the implementation of F/S on the new transport system but it turned it down.</p> <p>(FY 1995 Domestic Survey)(FY 1995 Overseas Survey) From January to May, 1995, an international tender was conducted for the introduction of a new transport system in Cho chukan and Buena Vista. At present, the authorities concerned are negotiating with some successful bidders. In September 1995 the Government established the Land Transport Authority to handle land transport issues.</p> <p>(FY 1996 Domestic Survey) An American firm made a successful bid on the Bukit Panjang district (Choa Chu Kang new town included) and the negotiation to conclude a contract is now in progress. The project in the Buena Vista district was cancelled due to its low feasibility.</p> <p>Effect: (FY 1997 Domestic Survey) - Improvement of accessibility for residents in Choa Chu Kang new town - Increase of MRT users - Improvement of environment by reduction of traffic</p> <p>Impacts for Surrounding Area: (FY 1997 Domestic Survey) - Betterment of city view - Noise for residents - Reduction of air pollution, noise and traffic accident</p>		

# STUDY SUMMARY SHEET

## (F/S)

ASE SGP/S 303/90

<b>1. COUNTRY</b>	Singapore		
<b>2. NAME OF STUDY</b>	Selected Expressways		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Public Works Department (PWD), Ministry of National Development (MND)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Oriental Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Mar.1990 ~ Mar.1991 12month(s) ~		
<b>8. SITE OR AREA</b>	Central and northeastern parts of Singapore		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1)Improvement of PIE (Pan Island Expressway, 8.65km)			
2)New construction of KLE (Kallang Expressway 2.8km)			
3)New construction of PYE (Paya Lebar Expressway 9.2km)			

カラン・パヤレバ高速道路計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

Development of the expressway system is considered urgent to maintain high standards of social infrastructure services in Singapore.

**Implementation Schedule:**

PIE:PIE/Woodsville Road IC - PIE/CTE IC Completion in 1994

PIE/CTE IC West - PIE/BKE IC Completion in 1995

KLE:KLE/ECP IC - KLE/PIE IC Completion in 2005

PYE:PYE/PIE IC - PYE/TPE IC Completion in 2006

**Estimated Project Cost (million S\$)**

	PIE	KLE	PYE
Construction Cost	84.4	400	800
Land Acquisition and Compensation Costs	0.0	160	50
Contingencies (10%)	8.4	56	85
Total	92.8	616	935

**(1)PIE****Subsequent Studies**

1990~93 D/D was conducted in the part of the route.

**Finance:**

96.3 millions S\$ (financed by the Government of Singapore)

**Construction:**

Apr.1992 commenced

Jul.1994 completed (total cost 79 million S\$)

It is contributing to realize the policy for increase of the transportation demand.

**(2)KLE****Subsequent Studies****Finance:**

332.8 million S\$ (Kallang Expressway Project financed by the Government of Singapore)

**Construction:**

(FY 1998 Overseas Survey)(FY 1999 Overseas Survey)

2001~2005

Tender is expected in mid-2000.

**(3)PYE****Finance:**

(FY 1999 Overseas Survey)

Jul.1996 approved 1.27bil.S\$ (Paya Lebar Expressway Project financed by the Government of Singapore)

The target year for construction is set for 2009 owing to land borrowing. The change might be seen according to the economy of Singapore in the future.

**Maintenance and Operation:**

L.T.A.(Land Transport Authority)



**ASE    THA/S 301/76**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Project of Strengthening and/ or Replacement of Steel Bridges on the State Railway	
<b>3. SECTOR</b>		Transportation / Railway	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	State Railway of Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Japan Railway Technical Service (JARTS)	
<b>7. STUDY PERIOD</b>		Jan.1976 ~ Nov.1976 10month(s) ~	
<b>8. SITE OR AREA</b>		Southern line 1,159 km 110 bridges Northern line 751 km 22 bridges Northeastern line 1,205 km 45 bridges Eastern line 255 km 37 bridges	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The number of steel bridge on the whole railway in Tailand become 1,397 (2,853 span) at the end of 1976. 169 of them (214 span) are recommended to need improvement by the study of VKRAS(England). After this study, government of Thailand proposed gov. of Japan to cooperate a now detailed study of strengthening and replacement of them.</p> <p>So the purpose of this study are following;</p> <ol style="list-style-type: none"> <li>1) Evaluating strength of 214 span</li> <li>2) Suggesting a standard design and method of improvement / strengthening / replacement.</li> <li>3) Estimating a cost of this project.</li> </ol> <p>Proposals:</p> <p>Of the 214 spans:</p> <p>197 spans are to be repaired and strengthened.</p> <p>17 spans are to be replaced with the construction of new bridges</p>			

PRESENT STATUS	Completed or In Progress	Promoting										
	Completed											
	Partially Completed	Delayed or Suspended										
	Implementing											
	Processing	Discontinued or Cancelled										
Description :												
<p>The expert was dispatched by JICA.</p> <p>(1) Arterial Line (the Eastern Line Not Included ) Subsequent Studies: Conducted by the Civil Engineering Department of the State Railway of Thailand Finance: Own Fund of the State Railway of Thailand and a loan from the Thai banks Total Investment Cost: 350 mil.Bahts Construction: FY1978~FY2006 From 1979, based on the strdy results, the renovation of 104 bridges was completed and 17 of them were replaced by concrete bridges. Furthermore, the renovation of additional 37 bridges is either in progress or about to be commenced with the national budgets from 1987 to 1991. Except for the bridges in the closed lines, the remaining 25 bridges will be renovated after 1992. (FY 1995 Overseas Survey) The reinforcement of 214-span-bridge was designed with DL-16 standard weight. Most of them have been reinforced or replaced already.</p> <p>(FY 1997 Overseas Survey) As of the end of 1997, 135 bridges have been completed out of 169 bridges. Remaining 34 bridges will be completed gradually by 2006 as shown below.</p> <table><tr><td>Year</td><td>Number of Bridges</td></tr><tr><td>1999</td><td>3</td></tr><tr><td>2000</td><td>7</td></tr><tr><td>2001</td><td>6</td></tr><tr><td>2002~2006</td><td>18</td></tr></table> <p>(2) Eastern Line (FY 1991 Overseas Survey) Because the volume of traffic in this line has kept low, it has not been concluded whether the renovation work on the bridges will be implemented.</p> <p>(FY 1994 Domestic Survey) A new prestressed concrete bridge was constructed up to the khlong Sip Kao station. This construction aimed to upgrade the track standard to correspond to the new line between Khlong Sip Kao and Kaeng Khoi stations which is to be constructed in near futher. The upgrading of the remaining steel bridges in this line shall be sujet to the result of the Eastern Railway Corridor Study conducted by TDRI. A part of the reinforcement project of the remaining steel bridges in the branch lines will be revised due to the budget constraint. The construction works may be integrated into the track rehabilitation plan if necessary.</p>			Year	Number of Bridges	1999	3	2000	7	2001	6	2002~2006	18
Year	Number of Bridges											
1999	3											
2000	7											
2001	6											
2002~2006	18											

**ASE THA/A 301/77**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Irrigated Agricultural Development Project in the West Bank Tract of the Greater Chao Phraya	
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Agricultural Land Reform Office, Ministry of Agriculture and Cooperative	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc.	
<b>7. STUDY PERIOD</b>		Oct.1976 ~ Jul.1977 9month(s) ~	
<b>8. SITE OR AREA</b>		West bank tract of the Greater Chao Phraya, center of Ayutthaya Province	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Irrigation Area: 10,542 ha Circle Embankment : 114.5 km Pump station for irrigation and drainage :3 station Main irrigation canal/secondary, tertiary canal :36km/432km Main drainage canal/secondary, tertiary canal:30km/494km Main street/farm road : 177km/404km Village water supply : 4 places  * Above project costs are in 1985 prices.			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  Subsequent Studies: Jun.14.1979 L/A (Irrigated Agricultural Development Project in Chao Phraya (E/S), 150 mil.Yen) Jun.1979~Feb.1982 D/D (Sanyu Consultants Inc.)  Finance: Jul.16.1982 9th OECF L/A (Chao Phraya Irrigation Plan, 2,650 mil.Yen)  *Contents of OECF loan construction equipment 2.02 billion yen consultation service 390 million yen contingency 240 million yen  *Contents of the Project -Circle embankment -Pump stations -Irrigation and drainage canals -On-farm development (tertiary irrigation and drainage canals and farm roads) -Rehabilitation and improvement of rural roads and bridges.  Construction: Jun.1982 started Jul.1988 Yen loan expired. Construction continued by ALRO. 1990 completed		

# STUDY SUMMARY SHEET

## (D/D)

ASE    THA/S 401/77

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Bangkok Telephone Network Project : Junction Lines		
<b>3. SECTOR</b>	Communications & Broadcasting      / Telecommunication		
<b>4. TYPE OF STUDY</b>	D/D		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Telephone Organization of Thailand (TOT)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Telecommunication Consulting Co., Ltd.		
<b>7. STUDY PERIOD</b>	May.1977      ~      Feb.1978 9month(s) ~		
<b>8. SITE OR AREA</b>	Bangkok Metropolitan Area		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<div style="display: flex; justify-content: space-between;"> <span>Contents</span> <span>Scale</span> </div> <p>Construction of Junction cable    250,000 Pair-km</p>			

バンコク市内線路網実施設計

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  Finance: Jul.1978 L/A (EGAT Communication System Expansion Project, 1,464 mil.Yen) *Components of the project: 1.Exchange of UHF ultrasonic radio and extension of route. 2.Installation of PLC. 3.Exchange/installation of VHF communication device. 4.Installation of LFL. 5.Installation of data transmission device. (loan for equipments for projects above)  Project has been completed.  *The Economic Development Project 1977~84 of TOT.		

**(F/S)**

**ASE THA/S 302/78**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Pattaya Tourism Development	
<b>3. SECTOR</b>		Tourism / (Tourism in) General	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Dept. of Tourism	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Pacific Consultants International (PCI) TETRA Co., Ltd.	
<b>7. STUDY PERIOD</b>		Dec.1976 ~ Dec.1977 12month(s) ~	
<b>8. SITE OR AREA</b>		Pattaya, Ko lan Island	
<b>9. MAJOR PROPOSED PROJECT(S)</b>		-Infrastructure -Water supply and sewerage -Water drainage system -Solid waste management -Road, power, communication -Port	

パタヤ地区基盤整備計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Reasons of Stoppage: (FY1991 Overseas Survey)</p> <p>The Thai Government (National Economic and Social Development Board) applied for an OECF Loan in 1979 but was not accepted. A new local administrative office was established according to the new development plan and the new detailed design prepared by the Department of Town and Country Planning.</p> <p>The project has been revived in a new JICA study "Pattaya Tourism Development."</p>		



**ASE THA/S 303/78**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Separate System of Metropolitan Water Supply in Bangkok	
<b>3. SECTOR</b>		Public Utilities / Water Supply	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Metropolitan Water Works Authority	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Pacific Consultants International (PCI)	
<b>7. STUDY PERIOD</b>		May.1977 ~ Jul.1978 14month(s) ~	
<b>8. SITE OR AREA</b>		Bangkok metropolitan area	
<b>9. MAJOR PROPOSED PROJECT(S)</b>		1.Project: Separate System of Metropolitan Water Supply Project surrounding Bangkok 2.Area: The 9 Amephoes surrounding Bangkok city and the related housing and industrial project areas (168sq.km) 3.Target year: Completion set at 2000 (Start to work in 1982) 4.Water source: 8 Amphoes (excluding Nong Khaem) and Bang Chan from groundwater. The others from Central System. 5.Groundwater: 33 Deep Wells built in 9 areas.	

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  Reasons of Stoppage/Cancellation: The project was implemented in different form from the proposed project.  (FY1995 Overseas Survey) MWA has been implementing Bangkok Water Supply Project since 1980. The most parts of the project is through Central System. The project is financed by MWA for 25% of the total cost, OECF for 30-40%, and bond issuance for the rest. JICA studied Separate System, however OECF finance is for Central System. The Central System is carrying on for the implementation of this Project.		

**ASE    THA/S 304/78**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		Rural Long Distance Public Telephone Service
<b>3. SECTOR</b>		Communications & Broadcasting / Telecommunication
<b>4. TYPE OF STUDY</b>		F/S
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Telephone Organization of Thailand
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		Nippon Telecommunication Consulting Co., Ltd.
<b>7. STUDY PERIOD</b>		Aug.1978 ~ Mar.1979 7month(s) ~
<b>8. SITE OR AREA</b>		Each place of the country
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
<p>1. Installation of telephones Long distance telephone circuits, including public telephones, in major rural districts without telephones for the purpose of improving the telephone service in 469 rural areas. Telephone exchanges in 18 districts in 1989, and in 187 more districts in 1994.</p> <p>2. Transmission system: Terrestrial transmission system UHF (900 MHz band)</p> <p>3. Modulation system No much difference between FDM and PCM system from technical and economic viewpoints</p> <p>4. Equipment shelter Communication equipment Staton inclusive of power plant: This is to reduce construction cost and civil work period to the possible minimum.</p> <p>5. System maintenance The existing maintenance organization and practices can be applied to each Maintenance Center by increasing maintenance staffs to some extent when this project is completed. At the same time, it is desirable to introduce centralized supervisory system at each Maintenance Center so that it can have troubles at supervised stations under its control automatically recorded.</p>		

PRESENT STATUS	Completed or In Progress Completed Partially Completed Implementing Processing	Promoting Delayed or Suspended Discontinued or Cancelled
<b>Description :</b>  Finance: Sep.1984 L/A (Rural Public Telephone Expansion Project, 3,090 mil.Yen)  *Components of Project -Installation of radio communication system in 300 villages of 9provinces at the northern and north-eastern areas. -OECF loan for equipment to install transmission system like base station, relay station, tower, etc.  Construction: Dec.1986 contracted Sep.1990 completed		

**ASE    THA/S 305/78**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Phetchabun - Chai Badan Highway Project	
<b>3. SECTOR</b>		Transportation / Road	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Highway	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd. Katahira & Engineers International	
<b>7. STUDY PERIOD</b>		Mar.1978 ~ Mar.1979 12month(s) ~	
<b>8. SITE OR AREA</b>		Phetchanbun - Chai Badan. Northern Region	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Three Alternatives of route: I Improvement of local community II New land development III Improvement of transportation  1.Optimal route (I+II) Tha Maduk - Rang Yoi - Si Thep - Wichian Buri - Sap Bon - Nong Daeng - Pak Bot - Noen Sadao - Khok Charoen - Yang Lat - Tham Nam Bang - Nam Ron - Phetchabun 2.Road length 1)Improvement      130.1 km (85%) 2)New construction    21.2 km (15%) Total                151.3 km 3.Pavement type 1)SBST (asphalt)      94.2 km (62%) 2)Laterite              57.1 km (38%) Total                151.3 km 4.Road width 1)Formation width      9.0 m 2)Pavement width      5.5 m			

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PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting   Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies: 1980~1981 D/D undertaken (DOH)</p> <p>Finance: Aug.1980 L/A (The Productive Road Construction Project (II), 8,160 mil.Yen)</p> <p>*Components of Project The expence for the road improvement works from single to simple double lanes paved road for the existed non-improved 27 routes in the northern, north-eastern and central areas. The total cost of the Project was made up of 50% of OECF Loan &amp; 50% of DOH budget. (FY1992 Overseas Survey) 1,366 million yen was appropriated for this project from the OECF loan. The balance (6,794 million yen) was applied for rehabilitation of 22 rural routes in the northern, north-eastern and central areas. The total cost for the project was 171.42 million bahts.</p> <p>Construction: Jun.1981 started Sep.1983 completed</p> <p>(FY 1992 Overseas Survey) The construction was started in June 1981 for the Yang Lat-Phechabum route and was completed in September 1981 for Sithep-Wichian Buri route. The total length was 149.2 km. (Proposed length was 151.3km)</p>		

**ASE THA/A 101/79**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Irrigated Agricultural Development in the Greater Mae Klong River	
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General	
<b>4. TYPE OF STUDY</b>		M/P	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc.	
<b>7. STUDY PERIOD</b>		Dec.1977 ~ Mar.1980 27month(s) ~	
<b>8. SITE OR AREA</b>		Mid and down stream of Mae Klong River Basin : area 490,000ha	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1.Short-term development plan 1) Improvement of field of 185,900ha 2) Repair of irrigation and drainage canals of 1,082km 2.Long-term development plan 1) Improvement of field of 174,200ha 2) Repair of irrigation and drainage canals of 56km 3) Construction of irrigation and drainage canals of 345 km  * Cost 1) is for the short-term development plan and cost 2) is for the long-term development plan excluding the short-term development plan.			

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 1997 Overseas Survey) The outputs of the study have been incorporated into the 4th National Development Plan (1976~1981).</p> <p>In 1979, F/S on "Kamphaeng Saen Irrigation and Agricultural Development" was conducted in the area where the M/P was implemented.</p> <p>(1) Improvement of Rice Field along the Greater Mae Klong River (*This project targeted the land consolidation of approximately two million rai on the left bank of the Greater Mae Klong River.) 1. Improvement of 0.7 Million Rai Rice Field on the Right Band of the River (Phase-I) Finance: The World Bank loan Construction: Implemented (FY 1994 Domestic Survey)</p> <p>2. Improvement of 290 Million Rai Rice Field on the Left Bank of the River (Phase-II) (*the targeted area of this project) Subsequent Studies: F/S Please refer to "Kamphaeng Saen Irrigation and Agricultural Development"(THA/A 302/79)</p> <p>3. PhaseIII (FY 1996 Domestic Survey) Bang Rain District (192,800 rai) is targetted. Finance: Annual budget of RID Construction: 1995 Commenced (1999 scheduled to be completed)* *It is decided that the secondary canals will be constructed but the construction of the tertiary canals is not to be undertaken.</p> <p>Perspective or remaining works: (FY 1997 Domestic Survey) Schedule for construction of tertiary canals (192,800 Rai) at Bang Rain District was from 1995 to 1999. At present only 30% of work has been completed due to financial constraint. The period to complete was extended to 2001 but it will be extended more as to allocate budget is difficult.</p>	



# STUDY SUMMARY SHEET

## (M/P)

ASE THA/S 101/79

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Bangkok Suburban Transportation Project		
<b>3. SECTOR</b>	Transportation / Railway		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Expressway and Rapid Transit Authority(ETA), Royal State Railway of Thailand(SRT)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Oct.1978 ~ Aug.1979 10month(s) ~		
<b>8. SITE OR AREA</b>	Bangkok Metropolitan Area		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Formulation of Master Plan for large scale transportation for Bangkok and its surrounding areas.</p> <p>Basic policy is to make the utmost use of existing railway system as the transportation means for people commuting to work.</p> <p>Main components are:</p> <p>Suburban lines(new construction)</p> <p style="padding-left: 20px;">6 lines(11 segments) total length 102.8km</p> <p>Improvement of existing lines</p> <p style="padding-left: 20px;">(double track,new stations, signal and communication) total length 151 km</p> <p>Rolling stock(Year 2000)</p> <p style="padding-left: 20px;">Suburban line 756 or 478 (depending on fare)</p> <p style="padding-left: 20px;">Existing national railway 318</p>			

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Detail (FY 1991 Overseas Survey) The proposed projects have been integrated into the Infrastructure Section of the Ninth National Development plan.</p> <p>(FY 1993 Overseas Survey) The implementation of the projects has been suspended because (1)the Thai government puts higher priority on the settlement of the urban traffic problem. (2)the existing railway system in the suburban area can be used. There is unlikely that a new line will be constructed in the suburb of Bangkok.</p> <p>(FY 1995 Overseas Survey) The implementing agency of this project was changed from ETA to MRTA (Metropolitan Rapid Transit Agency) in 1992. The Hong Kong firm, Hopewell, is now in charge of the implementation of some part of the projects (Ban Su-Don Muang Line).</p> <p>(FY 1997 Overseas Survey) As for suburban lines proposed by the study, construction of track with total length of 234km is in progress. Other on-going projects are as follows. - Doubling of track on the section of Bang Sue-Taling Chan 1994 started    1998 to be completed - The construction of the third track on the section of Rangsit-Ayuthaya-Ban Phachi 1997 to be started    1999 to be completed (D/D was completed in Jul.1997)</p> <p>*Related Development Study "Improvement Plan for Railway Transport around Bangkok Metropolis in Consideration of Urban Development M/P+F/S (THA/S 217/95)"</p>	

**ASE THA/A 302/79**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Kamphaeng Saen Irrigated Agriculture Development Project in the Mae Klong River Basin	
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc.	
<b>7. STUDY PERIOD</b>		Jan.1979 ~ Oct.1979 9month(s) ~	
<b>8. SITE OR AREA</b>		Kamphaeng Saen District, Mae Klang River Basin, western part of Central Thailand, area 28,000ha, population 65,500	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
- Improvement of irrigation and drainage facilities constructed under the development project in Mae Klong River Basin.: 16,380 ha  - Improvement of terminal facilities such as irrigation and drainage ditches, farm roads, etc. : 16,380 ha  The project area is estimated about 28.000ha, being the east part of B. Mae Klang area and located at the north of Nakhon Pathom. Proposed irrigation area is 17,200ha within 22,800ha of available farming area. Proposed terminal irrigation plan, including land consolidation and related supporting facilities are as follows; - Renewing canal : 48km - Improvement of drainage : 176km - flood prevention, road : 24.8km - land consolidation : 17,200ha			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting   Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>The Mae Klong Project Phase II covers this project area (Refer to "Irrigated Agricultural Development in the Greater Mae Klong River (1979)")</p> <p>Finance  The World Bank loan and Own Fund  Total Investment Cost:approximately 1,944 mil. Bahts</p> <p>Construction:  1990 Commenced  1995 Completed (excluding 192,800 rai of Bang Rain District)  In many districts only the secondary canals were constructed. The tertiary canal was decided not to be constructed.  (FY 1996 Domestic Survey)</p> <p>Construction  (FY 1994 Domestic Survey)  Although the initial plan covered the area of 28,000ha (175,000rai), the target was revised after the construction of basic facilities such as the drainage canals, etc.</p> <p>(FY 1995 Domestic Survey)  The original plan was to consolidate the land of 28,000ha with the Extensive method, however, only 3,500rai was consolidated and the remaining area was done with the Ditch and Dyke method.</p> <p>Reasons of scale down  The priority of this project was lowered because the Thai government changed its agricultural policy after the Fifth Five-Year Plan and gave higher priority to the small-scale irrigation project over the land consolidation project.</p> <p>Maintenance &amp; Operation:  The secondary canals were managed by RID while the tertiary canals were managed by beneficiaries.</p> <p>Effect:  The present planting area in the dry season is about 10~15% of the area initially planned</p>		

# STUDY SUMMARY SHEET

## (F/S)

ASE    THA/S 306/79

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Nong Bua - Ban Lam Chi Bon Highway Project		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Road Ministry of communication	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Katahira & Engineers International		
<b>7. STUDY PERIOD</b>	Jun.1979      ~      Feb.1980 8month(s) ~		
<b>8. SITE OR AREA</b>	Nakkon Sawan Prefecture, Chiyaphum Prefecture		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Three alternatives of route: I Nong Bua-Wang Wat II Wang Wat-Tha Pong III Tha Pong-Lup Pho</p> <p>1. Objective: The project aims at accelerating socio-economic development in rural areas and, at the same time, at providing an inter-provincial road, in an east-west direction, to supplement the existing highway network which are mainly of radial type connection with Bangkok.</p> <p>2. Optimal route: Nong Bua-Nong Ngu Luam-Sap Bon-Wang Wat-Tha Pong-Nong Bua Rave- Lup Pho</p> <p>3. Road length</p> <p>1) Improvement: 41.9km</p> <p>2) Newconstruction: 112.8km total 154.7km</p> <p>4. Road width</p> <p>1) Formation width: 9.0-10.0m</p> <p>2) Pavement width (SBST): 5.5-6.0m</p> <p>5. Surface treatment</p> <p>1) SBST: 105.0km (68%)</p> <p>2) Soil aggregate surface: 49.7km (32%)</p>			

ノンプア - バンラムチボン道路建設計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Promoting Factors:  - large development impact  - good linkage with other major road  - high priority  - effective administration</p> <p>Subsequent Studies:  Dec.1984 D/D completed</p> <p>Finance:  Sep.1983 L/A (the Productive Road Construction Project 3, 5,770 mil.Yen)*</p> <p>*Components of project(The Productive Road Construction Project 3)  1.prefectural road construction in the northern and north-eastern Thailand.(165km)  2.rehabilitation works of 8 routes in the northern area.(293.9km)  3.consulting costs.</p> <p>(FY1992 Overseas Survey)  2,517 million yen was appropriated for the project from the OECF loan. The total cost for the project was 348.70 million bahts.  The total length was 162.2 km.</p> <p>Construction:  Feb.1986 commenced  Aug.1988 completed</p>		

# STUDY SUMMARY SHEET

## (F/S)

ASE THA/A 303/80

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Mae Wang-Kew Lom Irrigated Agriculture Development Project		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc.		
<b>7. STUDY PERIOD</b>	Jul.1979 ~ Mar.1980 8month(s) ~		
<b>8. SITE OR AREA</b>	Lampang City, Lampang Province, northern part of Thailand area 22,700 ha		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Irrigation area : 22,700ha Main irrigation canal : 100.12 km Tributary irrigation canal : 79.65 km Main drainage canal : 240.77 km Field improvement : 15,400 ha  * Above costs are in 1979 prices.			

メワンかんがい農業開発計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Reason for the Project Cancellation: Lowered priority of the land consolidation project due to the change in the agricultural policy.</p> <p>Detail: At the time of the study, the Thai government enforced the Law of Agricultural Infrastructure Improvement and vigorously undertook the projects for the improvement of agricultural infrastructure in order to expand the area of double cropping, which was expected to result in the promotion of the self-sufficiency and the expansion of the agricultural products for export.</p> <p>(FY 1996 Domestic Survey) As to a on-farm development project the sufficient level of technology transfer was conducted in the formerly completed projects. If this project should be implemented, no foreign assistance for the project implementation would be necessary.</p> <p>Related Project: Construction of Kew Kohma dam The kew Koham dam is considered to be one of water sources of this project.</p> <p>(FY 1995 Domestic Survey) Oct.1995 F/S is scheduled to be commenced by a local consultant (23 mil. Bahts)</p>		



**ASE THA/S 307/80**

## 首都圏トラックターミナル建設計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Reasons of Stoppage: This project was reviewed in "Greater Bangkok Truck Terminal (1992)" and discontinued.</p> <p>Situation before Stoppage: Subsequent Studies: D/D (local consultants)</p> <p>Modified Point: (FY1991 Overseas Survey) Project scale was reduced from four terminals to three.</p> <p>Situation: Private investment have been promoted for the construction of truck terminals. So far, contracts have been signed on two of the four sites. Due to rapid urbanization, some sites proposed for terminals have been already used for other purposes. JICA is conducting a restudy of Bangkok urban truck terminals since Dec. 1991, in which suggestions will be made to expedite the project implementation.</p>		

# STUDY SUMMARY SHEET

## (D/D)

ASE    THA/S 402/80

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Bangkok Telephone Network Project: Local Cable Network		
<b>3. SECTOR</b>	Communications & Broadcasting      / Telecommunication		
<b>4. TYPE OF STUDY</b>	D/D		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Telephone Organization of Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Telecommunication Consulting Co., Ltd.		
<b>7. STUDY PERIOD</b>	<div style="display: flex; justify-content: space-between;"> <span>Aug.1978      ~      Jun.1979 10month(s)</span> </div> <div style="display: flex; justify-content: space-between;"> <span>Oct.1979      ~      Aug.1980 10month(s)</span> </div>		
<b>8. SITE OR AREA</b>	Bangkok Metropolitan Area		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1) Detailed design of local cable network for five exchanges (Pronchit, Chinwatana, Packrett, Ramintra, and Onutt-I) 2) Additional detailed designs for three exchanges (Kurontoi, Labrana and Ekachai)			

バンコック市内線路網実施設計

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Finance: Jul.1978 L/A (EGAT Telecommunication Network Extension Project, 1,464 mil.Yen)</p> <p>*Components of Projects  1.Exchange of UHF telecommunication system and extension of route  2.Construction of PLC  3.Exchange or construction of VHF communication system  4.Installation of LFL  5.Installation of data transmission system</p> <p>OECF loan for equipments/machinery for projects above.  The project has been implemented.</p> <p>* The Economic Development Project 1977~84 of TOT.</p>		

# STUDY SUMMARY SHEET

## (F/S)

ASE    THA/A 304/81

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Kaeng Khoi-Ban Mo Pumping Irrigation Project		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc.		
<b>7. STUDY PERIOD</b>	<div style="display: flex; justify-content: space-between; align-items: center;"> <span>Jun.1981</span> <span>~</span> <span>Jan.1982 7month(s)</span> </div> <div style="text-align: center;">~</div>		
<b>8. SITE OR AREA</b>	Right bank of PaSak River, SaraBuri Province		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The objective of the project is to encourage the agriculture in the project area through stable irrigation water supply to the entire beneficial area together with introduction of the dry season crop as much as possible.</p> <p>Proposed cropping plans are about 14,000ha in wet season and 2,800ha in dry season within limited water resources allocation.</p> <p>Major facility of the project is summarized as follows;</p> <ul style="list-style-type: none"> <li>- Main pumping station: 1,000mm x 560kw, Q=17.5cu.m/sec, H-16.5m, 7 units</li> <li>- Irrigation canal   : 148km including lateral canals</li> <li>- Drainage canal    : 22km</li> <li>- Demonstration farm : 260ha</li> </ul>			

ケンコイ・バンモーポンプかんがい計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

## Subsequent Studies:

Jul.16.1982 L/A 940 mil.yen (Irrigation Development Project E/S)

## \*Contents of study

To stabilize the supply of irrigation water and to improve the drainage condition through the construction of a pumping station and drainage / irrigation canals along the lower Pasak River.

Jul.1984~Jun.1985 D/D

Consulting Firm/JV of Sanyu Consultants Inc. and Chuo Kaihatsu

D/D for Irrigation Project of Kaeng Koi-Ban Mo Pump was commenced as a part of the above Irrigation Development Project with 190 mil.Yen. However, the water right disputes with farmers along Chainat-Pasak waterway caused the project delay.

## Finance:

Sep.12.1995 L/A 3,308 mil.Yen (Pasak Irrigation Project)

	Foreign Currency (Yen)	Local Currency (Baht)	Total (Yen)
Civil Engineering	2,086	281	3,102
Procurement of Materials	90	13	139
Others	-	299	1,083
Reserve	401	54	594
Consultant Fee	461	43	618
Total	3,038	690	5,536

(In millions)

The consultant fee for D/D for Patana Nikom area (35,500rai) and Patana Nikom-Kaeng Koi area (20,000rai) and D/D review etc. for Kaeng Koi-Ban Mo is included in the above "Consultant Fee". The term for the consulting service is for four years.

## Construction:

(FY 1998 Domestic Survey)

July 1998 ~ April 1999 Review of contract for construction and D/D

Nov. 1999 ~ Dec. 2002 Construction (scheduled)

\*Contents of the project: Pump facility (D = 900mm X 5 units), pipeline (steel pipe, D= 1,700m, length=7.2km), open channel and additional facilities.

## Backgrounds:

(FY 1994 Demestic Survey)

Because the construction of Nakhon Nayok Dam was commenced in 1994, the resumption of this project is expected.

(FY 1997 Demestic Survey)

Consultant was selected for implementation of the project, but not signed yet. Consultant will start servicing early next year.

Contracted cost is 428,392,839 yens for foreign cost and 36,679,695 Bhats for local cost.

(FY 1997 Overseas Survey)

Decision making by MOAC is necessary.

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 201B/82

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Road Development in the Northern Region		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Katahira & Engineers International		
<b>7. STUDY PERIOD</b>	Jun.1980 ~ Mar.1982 21month(s) ~		
<b>8. SITE OR AREA</b>	17 changwats of the Norther Regions (170,000 sq.km)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt; The study selected priority road sections by taking into account development potentials by area. 44 links (total length 1,200km) were selected for improvement or for new construction. A pre-feasibility study was undertaken on 31 links (860km) which were considered for short- and medium term implementation and narrowed down to 16 links (410km) for the subsequent feasibility study.</p> <p>&lt;F/S&gt; The feasibility study was undertaken on 14 links(417.2km) requested by DOH. The analysis indicated the following 12 links (393.8km) as feasible.</p> <p>11 links(F4 standard) Total 378.1km:</p> <p>1)Khanu Woralaksa Buri ~ Kao Liao ~ Rt. 117 46.0km;</p> <p>2)B. Wang Chik ~ Rt.117(B. Pa Daeng) 13.0km;</p> <p>3)B. Wang Tham ~ B. Tha Makham 8.3km;</p> <p>4)B. Kiu Phrao ~ B. Kaen Tai 55.0km;</p> <p>5)Rt. 115(B. Thung Maha Chai) ~ B. Nong Takhian 53.5km;</p> <p>6)B. Thung Ngiu ~ B. Chomphu 47.8km; 7)A. Wang Chin ~ Thoen 54.0km;</p> <p>8)B. Nong Khanak ~ B. Wang Pong 21.0km;</p> <p>9)B. Rong Sua Ten ~ B. Huai Khom 13.2km;</p> <p>10)A Phrom Phiram ~ Rt.11(B.Nong Makhang) 14.4km;</p> <p>11)Rt.12(Muang Kao, Sukhothai) ~ Si Satchanarai 51.9km</p> <p>1 link (F5 standard):A. Wat Bot ~ B. Nakham 15.7km.</p>			

北部地方道路網整備計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Promoting Factors:</p> <p>1) Large impact Substantial contribution to the alleviation of regional disparities which was one of the major objectives of the 4th and 5th development plans.</p> <p>2) Linkage with other projects The proposed priority links were consistent with other priority road development projects.</p> <p>3) Consistency with government policy The Government of Thailand has been emphasizing public investments in the operation and maintenance of the existing roads, and the projects proposed by the study were consistent with this policy.</p> <p>4) High priority The Government has been emphasizing improvement of provincial roads and production-related roads, and the Norther Region has been given high priority in this regard.</p> <p>Subsequent Studies: 1983~1986 D/D (DOH)</p> <p>Finance:</p> <p>Sep.1983 L/A (The Productive Road Construction Project 3, 5,770 million yen)</p> <p>*Components of project</p> <p>1.prefectural road construction in the northern and north-eastern Thailand.(165km) 2.rehabilitation works of 8 routes in the northern area.(193.9km) 3.consulting costs.</p> <p>3,241 million yen was appropriated for the project. 2,517 million yen of remaining loan was allotted for another road construction and 12 million yen for supervising consultant. For the project, OECF loan (491.33 million bahts), World Bank loan (40 million bahts) and DOH budget (89.20 million bahts) were appropriated.</p> <p>Construction:</p> <p>Jan.1986 Construction started Dec.1991 Construction completed</p> <p>Number of link and total extension and financial resources: OECF:1)52.2km, 2)14.8km, 3)7.9km, 4)55.1km, 5)46.4km, 6)47.6km, 7)52.8km, 12)15.1km</p> <p>World Bank: 8)24.0km</p> <p>DOH: 9)13.2km, 11)48.5km, 13)6.7km, 14)17.0km</p> <p>Ministry of Interior: 10)not implemented</p> <p>Each number corresponds to the number in "3.contents of Major Project(s)". Total link extension 401.3km.</p>		



# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/A 201B/82

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Agricultural Cooperative Promotion		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Cooperatives Promotion Department MOAC	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Institute for the Development of Agricultural Cooperation in Asia		
<b>7. STUDY PERIOD</b>	May.1980 ~ Feb.1982 21month(s) ~		
<b>8. SITE OR AREA</b>	2 places in each part of north, central, northeast, south, totaling 8 places.<M/P> In the districts of north, central, northeast, south, where four proposed cooperatives as model agricultural cooperative are located<F/S>		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt; We pointed realities and problems of organization, operations and management of agricultural cooperative of Thailand, and proposed basic idea for their improvement, based on case studies in each area.</p> <p>1. Basic idea to strengthen the function of agricultural cooperative four strategic targets, strengthening of member's organization base, promotion of regional agriculture by conducting guidance of agriculture management, expansion of sales and purchase abiding by fair rule, realization of comprehensive agricultural financial system, are shown, and "total system" to facilitate all of them in a comprehensive way was proposed.</p> <p>2. Establishment of Agricultural Cooperative</p> <p>&lt;F/S&gt;</p> <p>1. Projects to nurture agricultural cooperative</p> <p>2. Establishment of consultant units and traveling guidance</p> <p>3. Strengthening of training by agricultural cooperative training centers</p> <p>4. Improvement of facilities of agricultural cooperative</p> <p>5. Comprehensive financial measures</p>			

農業協同組合組織育成計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

<M/P>

1. Thai Government requested Japanese Government for cooperation on the establishment of model agricultural cooperatives based on the final master plan report of Feb.1981

2. An S/W mission was sent to Thailand on F/S in July 1981.

After the S/W was concluded the study was conducted from July to Sept.

<F/S>

Mar.1982 The final report of F/S was submitted.

Dispatch of Experts.

Thai Govt. requested Japanese Govt. for dispatch of experts to establish consultant unit.

Dec.1982~Dec.1983 2 experts dispatched

Jun.1983~May.1984 2 experts dispatched

They made guidance travels to 5 agricultural cooperative at the north-eastern Thai.

Project-type Technical Cooperation "Agricultural Cooperative Promotion (1984.7.6~1991.7.5)"

Jun.1983 requested from Thai Govt.

Jul.1984 5 experts were dispatched continuously for 5 agricultural cooperative area.

Jul.1989~Jul.1991 follow-up cooperation

Grant Aid:

Jun.1983 requested from Thai Govt.

Sep.1984 B/D

Mar.7.1985 E/N (Project for the Construction of the Regional Agricultural Cooperative Training Center 598 mil.Yen)

Training Center was constructed and training courses for personnel of cooperative have been undertaken.

Investment Cost (thousand Baht)

	JICA	RTG	Total
Jan.-Jun.87	4,489	175	4,664
May -Nov.87	3,711	---	3,711
FY 87, 88	4,000	233	4,233
FY 89	4,000	200	4,200
Total	16,200	608	16,809

Thai side appreciate the model project of the agricultural cooperative development.

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 202B/82

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Bangkok Sewerage System Project		
<b>3. SECTOR</b>	Public Utilities / Sewerage		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Drainage and Sewerage, BMA	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nihon Suido Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	<div style="display: flex; justify-content: space-between;"> <span>Aug.1979 ~ Feb.1980 6month(s)</span> <span>Jul.1980 ~ Jul.1982 24month(s)</span> </div>		
<b>8. SITE OR AREA</b>	Bangkok City and Thonburi area located at the other side of Chao Phaya river.<M/P> Bangkok City<F/S>		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt; Bangkok City has some problems such as flooding in rainy season and water pollution of river in dry season. Several studies on those problems have been carried out. This study was to review the previous study reports and to make new master plan in order to obtain the practical plan. Scope of the study is limited for sewerage system planning.</p> <p>&lt;F/S&gt;</p> <p>Project area : 970 ha</p> <p>Intercepting sewer : d 3,000-2,400mm for L=7,100m</p> <p>Combined sewer : d 8,500-2,000mm for L=1,300m</p> <p>Intermediate Pumping Station: 3 stations, Q=13-24cu.m/min</p> <p>Plant : Q=135,000 cu.m/day</p> <p style="padding-left: 40px;">Inf.BOD= 160 mg/l</p> <p style="padding-left: 40px;">Eff.BOD= 60 mg/l</p> <p>(Modified aeration process: grit chamber, aeration tank, final sedimentationbasin, basin, chlorination chamber, digester,etc.)</p>			

バンコク市下水道整備計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> DDS reviewed JICA M/P from 1990 and the following five projects have been implemented. (1) Sipraya <Sewage Treatment Plant> capacity 30,000m <sup>3</sup> /day Finance:BMA 284 mil.Bahts 1993 Completed 1994 The operation started The Contact Stabilization Activated Sludge Process was adopted. <Collecting System> capacity 40,000m <sup>3</sup> /day. 1994-1996 Construction implemented (2) Rattanakosin Finance:national government 883 mil.Bahts 1995 Scheduled to be completed The Two Stage Activated Sludge Process was adopted. (3) Din Daeng (Waste Water Treatment Project Phase I) capacity 350,000m <sup>3</sup> /day. Finance:national government (75%) and BMA (25%) 6,382 mil.Bahts Dec.1996 Scheduled to be completed The Taper Conventional Activated Sludge Process was adopted. (4) Yannawa capacity 200,000m <sup>3</sup> /day. Finance:national government (60%) and BMA (40%) 4,552 mil.Bahts 1995 Construction commenced.Design and construction is planned to be completed in three years. The Sequencing Batch Reactor Activated Sludge was adopted. (5) Nongkham-Phasicharoen-Ratburana Finance:national government (60%) and BMA (40%) (7,094 mil.Bahts) The contractor is not confirmed yet, but it is scheduled to be completed by 2000. The treatment capacity is 157,000m <sup>3</sup> /day in Nongkham-Phasicharoen and 65,000m <sup>3</sup> /day in Ratburana.  Bofore the commencement of the project (M/P) This M/P was valued more practical than the existing reports concerning the sewage system. However, the Thai govnmnt put higher priority on the flood control to the improvement of the sewage facilities. Because the Thai government had requested the World Band to assist the improvement of the drainage system, the Japanese government had not been asked for the technical cooperation on this issue. After the completion of this M/P, a F/S and a dispatch of experts were implemented. Furthermore, "Master Plan on Flood Protection/Drainage Project in Eastern Suburban Bangkok (1986)" were implemented as a result of this study.  Related Projects: (FY 1997 Overseas Survey) Subsequent Study: Sep.1996~Mar.1998 F/S (BMA) *Components of study Waste water from household, factory, building and others, cost study for the whole system of waste water in the present time and future. Cost estimation for waste water management. Study for regulations and law related to waste water, management within and outside Thailand. Fee for waste water service study within and outside Thailand, including of criteria for fee calculation and user class, and other related matters. Consulting Firm / Asian Institute of Technology Study Cost / 2.8mil.Bahts.  Jul.1997~May.1998 F/S (BMA) *Components of study Agricultural use, Land appreciation alternatives Consulting Firm / Progress Technology and other Study Cost / 13mil.Bahts.		

**ASE THA/S 203B/82**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Bangkok Solid Waste Management	
<b>3. SECTOR</b>		Public Utilities / Urban Sanitation	
<b>4. TYPE OF STUDY</b>		M/P+F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Public Cleansing Dept., BMA	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Tokyo Metropolis Environmental Service Corporation	
<b>7. STUDY PERIOD</b>		Aug.1979 ~ Feb.1980 6month(s) May.1980 ~ Sep.1982 28month(s)	
<b>8. SITE OR AREA</b>		City of Bangkok	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;The master plan to improve waste disposal system by the year of 2000 and 67 immediate action programmes.</p> <p>(1) The master plan includes construction and introduction of;</p> <p>5 composting plants, 2 incineration plants,          3 final disposal sites,1,190 collection vehicles,          88 road sweepers, 5 river cleaning boats,          110 barges, 25 dump trucks, 18 bulldozers</p> <p>(2) The immediate action programmes in which 3 levels of priority is shown include improvements in :</p> <p>1] discharge and collection system          2] transport and transferring system          3] composting plants          4] final disposal system          5] administrative system          6] countermeasures to floods</p> <p>The total cost above pertains to the short-term improvement plan.</p> <p>&lt;F/S&gt;</p> <p>Construction of final disposal site 3 1,500t/d          Construction of refuse incineration plant 2 1,500t/d X2          Construction of rapid type composting plant 2 800t/d</p>			

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> Dispatch of Experts: The expert was dispatched from Kawasaki-city by 1989.  (1)Compost Plant (FY 1995 Overseas Survey) A new plant is under construction in On Nut (1,000t/day) (Scheduled to be completed in 1995) The construction of plants in Ram Intra and Nong Kean has been completed. The total capacity of three plants will be 2,000t/day. (Financed by the central government (60%) and BMA (40%))  (2)Construction of Incinerator Because of the land acquisition problem, this project was not implemented. The project was integrated into "Bangkok Solid Waste Management (II) (1990)". (FY 1997 Overseas Survey) On-Nut Medical Waste Treatment by Incinerator. F/S has not been undertaken yet.  (3)Others (FY 1991 Overseas Survey) Most of the short-term plans proposed in M/P, such as the introduction of compact trucks, the waste collection by boats, the supply of uniform to the collection workers, etc. have been implemented. (FY 1995 Overseas Survey) In 1984 the Tokyo Metropolitan Government provided 10 used trucks and BMA procured trucks with the own fund.  Remedying Project: (FY 1997 Overseas Survey) Waste minimization, Private collection, Transfer station (to be implemented) Seashore or wet-land landfill is not constructed because of economic reason.  *Bangkok Solid Waste Management (III) (1990) 1989-1991 M/P+F/S implemented Reasons for its implementation The amount of wastes exceeded that predicted in this Study. The construction cost of an incinerator was beyond the budget which BMA could have allocated to the project and BMA had not made any preparation for the procurement of a loan. Due to the rapid increase of land prices, the land acquisition was more difficult than it had been expected.		

**ASE THA/A 305/82**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Phetchaburi-Kaeng Krachan Irrigated Agriculture Development Project	
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc.	
<b>7. STUDY PERIOD</b>		Nov.1980 ~ Mar.1982 16month(s) ~	
<b>8. SITE OR AREA</b>		Phetchaburi River Basin, area : 52,600 ha, population: 192,000	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Development of irrigation agriculture centering on improvement of irrigation canal for Phetchaburi irrigated area of 45,000ha and new development of 7,100ha, and terminal facilities.			
<p>The Project aims to increase agriculture production in the project area with improvement and for readjustment of irrigation and drainage system in proper combination with existing facilities, those are Pechi Head Works and the Irrigation System constructed in 1950, Kan-Kra (hang Reservoir constructed in 1966 and the sea dike.</p> <p> Irrigation System                  Farm Land  new canal        : 120 km    land consolidation : 52600 ha  canal lining     : 167 km  canal improvement : 128 km </p>			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Reasons for the Project Cancellation: Lowered priority due to the change in the agricultural policy.</p> <p>(FY 1994 Domestic Survey) While this project mainly aims at the development of on-farm facilities, the Thai government put higher priority on the water resources development. Thus, no progress has been made for the project implementation. The thai government intends that farmland consolidation and agriculture infrastructure improvement to be undertaken by private sectors instead of the government. Besides this case, projects of farmland consolidation and agriculture infrastructure improvement are executed by organizations of farmers financed by private banks.</p>		



# STUDY SUMMARY SHEET

## (F/S)

ASE THA/A 306/82

<b>1. COUNTRY</b>	Thailand																							
<b>2. NAME OF STUDY</b>	Mae Kuang Irrigated Agriculture Development Project																							
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General																							
<b>4. TYPE OF STUDY</b>	F/S																							
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives																						
	<b>PRESENT COUNTERPART AGENCY</b>																							
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc. Taiyo Consultants Co., Ltd.																							
<b>7. STUDY PERIOD</b>	Feb.1981 ~ Feb.1982 12month(s) ~																							
<b>8. SITE OR AREA</b>	Chieng Mai and Lampoon Provinces																							
<b>9. MAJOR PROPOSED PROJECT(S)</b>																								
1. The dimension of dam <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Crest elevation (m)</th> <th style="text-align: center;">Embankment volume (MCM)</th> <th style="text-align: center;">Dam height (m)</th> <th style="text-align: center;">Dam length (m)</th> </tr> </thead> <tbody> <tr> <td>1) Left saddle dam</td> <td style="text-align: center;">395.0</td> <td style="text-align: center;">2.26</td> <td style="text-align: center;">52.0</td> <td style="text-align: center;">650</td> </tr> <tr> <td>2) Main dam</td> <td style="text-align: center;">395.0</td> <td style="text-align: center;">5.58</td> <td style="text-align: center;">77.0</td> <td style="text-align: center;">645</td> </tr> <tr> <td>3) Right saddle dam</td> <td style="text-align: center;">395.0</td> <td style="text-align: center;">1.44</td> <td style="text-align: center;">41.0</td> <td style="text-align: center;">655</td> </tr> </tbody> </table> 2. Main irrigation canal: 87.4km 3. Lateral irrigation canal: 146.6km 4. The capacity of hydropower generation 1) Optimum installed capacity: 3.7MW 2) Annual energy: 16.3GWH 5. New cropping patterns Rice-Rice, Rice-Groundnut, Rice-Soybean, Rice-Sweet corn, Rice-Tobacco, Rice-Garlic, Rice-Vegetables, Soybean-Tobacco, Soybean-Groundnut and Longan						Crest elevation (m)	Embankment volume (MCM)	Dam height (m)	Dam length (m)	1) Left saddle dam	395.0	2.26	52.0	650	2) Main dam	395.0	5.58	77.0	645	3) Right saddle dam	395.0	1.44	41.0	655
	Crest elevation (m)	Embankment volume (MCM)	Dam height (m)	Dam length (m)																				
1) Left saddle dam	395.0	2.26	52.0	650																				
2) Main dam	395.0	5.58	77.0	645																				
3) Right saddle dam	395.0	1.44	41.0	655																				

マイクワンかんがい農業開発計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies:  Jul.16.1982 L/A 940 mil.Yen  (Irrigated Agriculture Development Project E/S)  D/D undertaken using 190 mil.Yen of above  (Sanyu Consultants, Inc.)</p> <p>*Components of project  1.Review of F/S, proposal on additional study  2.D/D  3.Preparation of tender documents  4.Cost estimation, evaluation of project</p> <p>First Stage Construction:  Sep.18.1984 L/A 2,300 mil.Yen  (Mae Kuang Irrigated Agriculture Development Project)  *Components of the Project:  Construction of Mae Kuang left saddle dam  Construction:Under direct management of RID and supervised by Sanyu Consultants, Inc.</p> <p>Second Stage Construction:  Oct.4.1985 L/A 9,197 mil.Yen  (Mae Kuang Irrigated Agriculture Development Project II)  *Components of the Project:  Construction of Mae Kuang main and right saddle dam  Construction:Undertaken by a Chinese company (China State Const), supervised by Nippon Koei Co.Ltd.)</p> <p>Third Stage Construction:  Sep.21.1987 L/A 2,805 mil.Yen  (Mae Kuang Irrigated Agriculture Development Project III)  *Components of the project:  Construction of Main canal (68.6km), tributary canal (99.0km), administration facilities (32)  Construction:Undertaken by an Italian company (Lodigiani S.P.A.), supervised by Sanyu Consultants, Inc. and Team Consulting Eng.</p> <p>1993 Construction work has been completed</p>		

**ASE THA/A 307/82**

<b>1. COUNTRY</b>		Thailand			
<b>2. NAME OF STUDY</b>		Upper Pasak Medium Scale Irrigation Project			
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General			
<b>4. TYPE OF STUDY</b>		F/S			
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation Department, Ministry of Agriculture and Cooperatives			
	<b>PRESENT COUNTERPART AGENCY</b>				
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd. Chuo Kaihatsu Corporation			
<b>7. STUDY PERIOD</b>		Aug.1981 ~ Mar.1983 19month(s) ~			
<b>8. SITE OR AREA</b>		Upper Pasak river basin under PHETCHABUN Province (about 330km north from Bangkok)			
<b>9. MAJOR PROPOSED PROJECT(S)</b>					
Sub-Project	Huai SaduangYai	Huai Khon Kaen	Huai Yai	K.Chaliang Lab	
1.Irrigation Area(ha)	5,400	5,100	1,800	1,200	
2.Dam 1)Type	Earthfil	Earthfil	Earthfil	Earthfil	
2)Height(m)	38	57	38	35.3	
3)Crest Length(m)	467	950	816	1,259	
3.Irrigation Canal(km)	-	105.2	26.6	21.2	
4.Drainage Canal	-	72.3	36.7	20.0	
* Below implementation period is 10 years.					

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting   Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies:  1986~1992 F/S review and D/D for (1),(2) (RID)  Study Cost / Government budget 180mil.Bahts  Consulting firm / Thai Consultants</p> <p>(1) Huai Khon Kaen  Finance:  Government fund 653mil.Bahts  Construction:  &lt;Dam&gt;  1990 Commenced  1994 Completed  &lt;Distribution System&gt;  1998 to be commenced</p> <p>(2) K.Chaliang Lab  Finance:  Government fund 145mil.Bahts  Construction:  1993 Commenced  1997 Completed  Construction Trader / Local Trader</p> <p>(3)Huai Sadung and Huai Yai  (FY 1996 Overseas Survey)  The two Projects are placed in the next 5 years construction program (1997-2001). D/D at Huai Yai is scheduled for 1997 by local budget.  (FY 1997 Overseas Survey)  Huai Yai Project is expected to start in 1998 and Huai Saduang Yai in 2000.</p> <p>Maintenance &amp; operation:  The Thai Government has been in charge of the operation.</p>		

**ASE THA/S 308/82**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Rama VI Bridge Construction Project	
<b>3. SECTOR</b>		Transportation / Road	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Public Works Dept.(PWD), Ministry of Interior	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Chiyoda Engineering Consultants Co.,Ltd. Japan Overseas Consultants Co., Ltd.	
<b>7. STUDY PERIOD</b>		Jun.1981 ~ Mar.1982 9month(s) ~	
<b>8. SITE OR AREA</b>		Northern area of Bangkok	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1)New Highway Bridge Main Bridge: total length 290m, width 29.1m (6 Lanes+pedestrian), 85m+120m+85m=290m long(3 spans) (Freyssinet cantilever erection method) Approach Bridge: width 23.3m (6 Lanes), total length 650m 2)New Railway Bridge width 12.5m total length 71.9m(dual track) (3 span continuous prestressed concrete girder) 3)New Roads width 9.4m ~ 5.7m, total length 3,900m 4)Other structures Riverfront, side ditch, drainage network, pump station, utilities, electricity, water and telecom (Total 5,700m), parking spaces, park, landscaping, pedestrian bridges, signal, etc.			

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

- 1) Large impact: stimulation of the regional economy by the alleviation of congestion and the reduction of travel time
- 2) High priority: the completion of the Middle Ring Road ensures the balanced growth of the metropolitan area of Bangkok.
- 3) Administrative expertise: PWD has experiences in bridge construction (already constructed 5 bridges across Chao Phraya River)

(FY 1992 Overseas Survey)

The project is included in the 5th and 6th National Social and Economic Development Plan.

## Subsequent Studies:

Sep.1983 OECF (10th) L/A (New Rama VI Bridge Construction Project (E/S), 170 mil.Yen)

Aug.1986 D/D completed

## Finance:

Sep.1987 OECF (13th) L/A (New Rama VI Bridge Construction Project, 5,599 mil.Yen)\*

## \*Components of the Project

1.PC concrete bridge (total length 290m)

2.Approach bridge

3.Railway bridge

4.Land scape

5.Other road construction works

6.Supervision

(Loan for foreign currency and a part of local currency)

## Construction:

Dec.1988 PQ for construction completed

Jun.1989 Tender for construction closed

Nov.1989 Construction contract completed

Jan.1990 Notice to proceed received by the contractor

Sep.1992 Construction completed

Sep.1993 Maintenance period ended

\*Refer to "Rama IV Bridge Rehabilitation Project (THA/S 403/82) JICA D/D" for detail.

**ASE THA/S 309/82**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		East Coast Water Resources Development Project
<b>3. SECTOR</b>		Social Infrastructure / Water Resources Development
<b>4. TYPE OF STUDY</b>		F/S
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation Department
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		CTI Engineering Co., Ltd. Sanyu Consultants Inc. Nomura Research Institute
<b>7. STUDY PERIOD</b>		Feb.1981 ~ Mar.1982 13month(s) ~
<b>8. SITE OR AREA</b>		East Coast Region (changwats Rayong and Chon Buri)
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
<p>1. Nong Pla Lai Sub-project</p> <p>a. Reservoir and dam: Catchment Area 426 sq.m, Gross reservoir storage 200,700,000 sq.m; Dam type-Earth fill type with cut-off trench, Crest elevation EL. 49.0 m, Max. dam height 31.0 m, Crest length 4,000m</p> <p>b. Water transmission system: Supply to Mab Ta Pud: Design discharge 3.63 cu.m/s, Total length 27.6 km Supply to Sattahip from Mab TA Pud: Design discharge 1.09 cu.m/s, Total length 21.9 km Supply to Laem Chabang: Design discharge 1.01 cu.m/s, Total length 53.0 km</p> <p>c. Irrigation and drainage system Irrigation area 3,650 ha, Irrigation canal: Main length 46.2 km, Lateral length 20 km Drainage area: Inside the project area 21.3 sq.m, Outside the project area 14.9 sq.m; Drainage length 6.5 km</p> <p>2. Ban Bung Sub-project Reservoir and dam: Catchment area 53 sq.m, Gross reservoir storage 21,900,000 cu.m; Dam type-Earth fill type with cut-off trench, Crest elevation EL. 86.3 m, Max. dam height 21.5 m, Crest length 2,800 m</p>		

PRESENT STATUS	<p>Completed or In Progress</p> <p>Completed</p> <p>Partially Completed</p> <p>Implementing</p> <p>Processing</p>	<p>Promoting</p> <p>Delayed or Suspended</p> <p>Discontinued or Cancelled</p>
<p><b>Description :</b></p> <p>(1) Nong Pla Lai Project  Subsequent Studies:  July 1982 L/A 320 mil.Yen (E/S)  This is a part of the Irrigation Development Project (E/S) and for the construction of the dam on the upper Layon River in order to supply water to the urban area.  Finance:  Sep. 1988 L/A 4,357 mil.Yen (Nong Pla Lai Construction Project I)  *Components of project:  Construction of a dam with the capacity of 150 mil.tons and of related facilities  Construction:  1990-1993 (FY 1996 Overseas Survey) implemented  Contractor: Sanyu Consultants Inc.  Contractor Trader: Guohua International Contracting (FY 1996 Overseas Survey)  Maintenance and Operation: RID</p> <p>(2) Water Conveyance Facilities  Subsequent Studies:  Sep. 1982 D/D completed (Consulting firm:CTI Engineering Co., Ltd.)  Finance:  July 1982 L/A 6,570 mil.Yen for the construction of pipelines connecting the reservoir-Mab Ta Phud and Mab Ta Phud-Sattahip  Nov. 1988 L/A 1,459 mil.Yen for the construction of the Mab Ta Phud-Sattahip Pipeline  Construction:  Apr.1983 - Sep. 1984 Construction of pipelines connecting the reservoir and Mab Ta Phud  1991 - 1992 Construction of the Mab Ta Phud-Sattahip Pipeline  Contractor Trader:A.S.Associated Engineerring Co.Ltd.  (FY 1996 Overseas Survey)  Maintenance and Operation: Eastern Water Resource Development and Management Co.Ltd.(FY 1996 Overseas Survey)</p> <p>Detail:  (FY 1997 Domestic Survey)  No additional information.</p>		



**ASE    THA/S 403/82**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Rama VI Bridge Rehabilitation Project	
<b>3. SECTOR</b>		Transportation / Railway	
<b>4. TYPE OF STUDY</b>		D/D	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	State Railway of Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Japan Railway Technical Service (JARTS)	
<b>7. STUDY PERIOD</b>		Jan.1982 ~ Dec.1982 11month(s) ~	
<b>8. SITE OR AREA</b>		The Rama VI bridge and neighboring areas, northern Bangkok	
<b>9. MAJOR PROPOSED PROJECT(S)</b> (1) Survey to confirm present status riverbed scouring; Geological survey; Vibration survey (2) Analysis of causes of deformation (3) Study on repair policies ; (4) Basic design (5) Study on construction methods (6) Approximate calculation of costs (7) Detailed design (8) Preparation of calculation sheets for work execution (9) Cost estimation (10) Preparation of specifications * cost 1) above is for bridge piers and cost 2) for shoe resetting ** Implementation periods below are 1) for 10 months and 2) for 3 months.			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>1.Short-term plan  Finance:  Domestic fund (construction cost 31 mil.bahts)</p> <p>Realized Project:  Repair work on bridge piers and shoe resetting were implemented and the restriction on train speed lifted.</p> <p>2.Long-term plan  (1)Double-tracking of Rama VI Bridge</p> <p>Finance:  SRT (construction cost 47 mil.bahts)</p> <p>Construction:  May.1994 started  Jul.1995 completed</p> <p>(2)The approach at Bangkok side  Finance:  (Construction cost 45.2 mil.bahts)</p> <p>Construction:  The approach at Bangkok side was designed to use composite bridges similar to the existing track which is in parallel.</p> <p>(3)The approach at Thonburi side  Completed</p> <p>*Refer to "Rama VI Bridge Construction Project (THA/S 308/82, JICA F/S)" for detail.</p>		

**ASE THA/S 404/82**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Dok Krai - Mab Ta Pud Water Pipeline Project in the East Coast Area	
<b>3. SECTOR</b>		Social Infrastructure / Water Resources Development	
<b>4. TYPE OF STUDY</b>		D/D	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation Department(RID)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		CTI Engineering Co., Ltd. Sanyu Consultants Inc. Nihon Suido Consultants Co., Ltd.	
<b>7. STUDY PERIOD</b>		Nov.1981 ~ Aug.1982 9month(s) ~	
<b>8. SITE OR AREA</b>		Eastern Coastal Zone of Thailand between Dok Krai and Mab Ta Pud	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Nong Pla Lai Dam: 200MCM Pipeline: 27.6 km Irrigation Water Drainage System: 3,650 ha			

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended Discontinued or Cancelled
<p><b>Description :</b></p> <p>The reasons why this project has been realized are as follows:  (1) High degree of priority: The industrialization of the east coast region was the No.1 priority project of the Government of Thailand  (2) RID was directly commissioned by the Prime Minister to pushing forward of the project.</p> <p>Subsequent studies  Sep.1982 D/D completed (CTI Engineering Co., Ltd.)</p> <p>Finance:  Jul.1982 L/A 6,570 mil.Yen  (Water Pipe Line Project in the East Coast Area)</p> <p>*Components of Project  1)Water pipe line between Dok Krai Reservoir and Mab Ta Pud.  (length 26.5km, diameter 1,350mm)  2)Construction of water pipe line between Mab Ta Pud and Sattahip.  (length 22km, diameter 1,000mm)  OECS loan for construction works and supervision of 1) and E/S of 2)</p> <p>Construction:  Nov.1984 completed</p> <p>* "East Coast Water Resources Development Project (THA/S 309/82 JICA F/S)"</p>		

**ASE THA/S 501/82**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Water Supply Project to Laotian Displaced Persons: Nakhon Phanom Camp and Pak Chom Camp	
<b>3. SECTOR</b>		Social Infrastructure / Water Resources Development	
<b>4. TYPE OF STUDY</b>		Basic Study	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Interior	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Japan Engineering Consultants Co., Ltd.	
<b>7. STUDY PERIOD</b>		Feb.1982 ~ Nov.1982 9month(s) ~	
<b>8. SITE OR AREA</b>		Two camps for Laotian refugees in the northeastern part of Thailand	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1st phase study: Underground water survey at Nakhon Phanom Camp (test boring at 4 sites and identification of 2 sites for tube wells) 2nd phase study: Underground water survey at Pak Chom Camp (test boring at 4 sites and identification of 2 sites for tube wells)			

<b>PRESENT STATUS</b>	<div>In Progress or In Use</div> <div>Delayed</div> <div>Discontinued</div>
<b>Description :</b>  (FY 1996 Domestic Survey) As on urgent countermeasure for Lao refugees, wells were constructed at the same time of boring survey.  Finance: May.3.1983 E/N 495 mil.Yen  Construction: 6 deep wells were constructed in both camps. Nakhom phanom Feb.~Apr.1982 Pak Chom May.~Oct.1982  Effect: Water service for 20,000 persons in Nakhon Phanom and 50,000 persons in Pak Chom.	

**ASE THA/S 102/83**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Road Development in the Northeastern Region	
<b>3. SECTOR</b>		Transportation / Road	
<b>4. TYPE OF STUDY</b>		M/P	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Dept. of Highways, Ministry of Communications	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd. Katahira & Engineers International	
<b>7. STUDY PERIOD</b>		Mar.1982 ~ Mar.1983 12month(s) ~	
<b>8. SITE OR AREA</b>		16 changwats of the Northeastern Region (169,000 sq.km)	
<b>9. MAJOR PROPOSED PROJECT(S)</b>		<p>The study proposed the following priority projects.</p> <p>- New construction and improvement 18 routes (666.9km)</p> <p>- Rehabilitation 25 routes (468.0km)</p>	

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Subsequent Studies:  Among high priority projects, F/S was implemented on the construction and improvement of 15 routes (502.1km) and the renovation of eight routes (90km) (Road Development in the North-Eastern Region (Phase 2) (1985) ).  (FY 1997 Overseas Survey)  1984~1994 F/S, B/D and D/D were undertaken  Consulting firm / DOH</p> <p>Utilization of Outputs:  (FY 1997 Overseas Survey)  The recommendations made by the study were incorporated into the 5th(1982~1986), the 6th(1987~1991) and the 7th(1992~1996) national plan.</p> <p>Refer to "Road Development in the North-Eastern Region (Phase 2) (1985)" for detail.</p>	



# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 204B/83

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Development Project of the Industrial Port on the Eastern Seaboard		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Industrial Estate Authority of Thailand, Port Authority of Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI) Kokusai Kogyo Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jul.1982 ~ Nov.1983 16month(s) ~		
<b>8. SITE OR AREA</b>	Coastal Area, Layon Province		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;Development of Layon Province, Composed of Industrial Base, Port, Residential Area. The target year of the M/P is 2000.</p> <p>1)Industrial Development: Gas separation plant, Soda ash plant, Petro chemical complex, Fertilizer complex, Iron &amp; steel complex, Supporting industries, Down stream industries, Other industries.</p> <p>2)Port development: Amount of cargo handled 23 million tons annually, 45 berths, total length 5,750m.</p> <p>3)Urban Plan: New town 575ha, Population 71,500 Number of household 17,340</p> <p>4)Infrastructure: Road, Water supply, Sewerage, Waste treatment, Railway(branch of the Chachoengsao - Sattaship line. length 25km, annual traffic volume transported 3.7 million tons) Electricity(total demand 1,354MW) Telephone(number of lines 10,000) Telex/Telegram, terminals and other services 44</p> <p>&lt;F/S&gt;1)Industrial Development: petorochemical, fertilizer, soda ash, various supporting industries, industrial estate Area 410ha, Quay wall 820m</p> <p>2)Port Development: Quay-wall 850m, wharf 280m, breakwater 3,000m total length of berths 1,750m amount of cargo handled 4 million tons annually</p> <p>3)Urban Development: Area 131ha, population 18,300 Number of Household 4,360</p> <p>4)Infrastructure: Road, Water Supply, Sewerage, Waste treatment, Railway(Extension 24km, annual traffic volume transported 2 million tons), Electricity(total demand 133.5MW), Telephone(number of lines 3,000) Telex/Telegram terminals and other services(23)</p>			

東部工業港開発計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> Subsequent Studies: Sep.1983 L/A 1,720 mil.Yen (East coast Development E/S)*1 Oct.1985 D/D on Map Ta Phut Industrial Port completed Jan.1986 D/D on Map Ta Phut Industrial Estate completed  Finance: Sep.1984 L/A 5,611 mil.Yen (Map Ta Phut Port Project)*2 Oct.1985 L/A 16,045 mil.Yen(Map Ta Phut Port Project II)*3 3,207 mil.Yen (Industrial/Urban ComplexProject)*4 Sep.1988 L/A 3,002 mil.Yen(Sattahip-Map Ta Phud Railway Project)*5 Nov.1988 L/A 1,459 mil.Yen(Map Ta Phud-Sattahip Water Pipeline Project)*6 Sep.1991 L/A 3,395 mil.Yen (Map Ta Phut Port Project III)*7 *Components of Project *1-Improvement on port, industrial estate, railway, water pipeline at Map Ta Phud and Laem Chabang.(loan for E/S of Map Ta Phud Industrial Port, industrial estate, Laem Chabang Port and Sattahip-Rayon railway.) *2,*3-Construction of Map Ta Phud Industrial Port (loan for dredging, reclamation and supervision) *4-Construction of infrastructure (road, watersupply, drainage, power transmission) in Map Ta Phud industrial estate and urban area. *5-Construction of single track connecting Map Ta Phud Port, Chachansao and Cao Si Chang Station (24km), signal, lightning system, management building, drainage facility. *6-Construction of water pipeline between Map Ta Phud and Sattahip (length 22.9km, diameter 700~900mm) and related facilities. (loan for equipmet, civil engineering work, supervision) *7-Purchase of vessels and port machineries  Construction: Dec.1987 Map Ta Phud industrial estate. Construction started. 1989 Map Ta Phud industrial Port. Construction started, to be completed in 1992. 1990 Map Ta Phud industrial estate. 1st Phase completed 1991 Map Ta Phud industrial estate. 2nd Phase started, to be completed in 1992.  (FY1995 Overseas Survey) Four(4) million tons of cargo could be handled in Laem-Chabang Port in 1995.		

# STUDY SUMMARY SHEET

## (F/S)

ASE    THA/A 308/83

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Mae Chang Irrigation Project		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc. Taiyo Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jan.1983      ~      Jan.1984 12month(s) ~		
<b>8. SITE OR AREA</b>	Northern part of Thailand, Mae Chang River Basin		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
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 rolume 680,000m3, Zone type earthfill)			
Diversion dam 1 site (total storage capacity 7 MCM, Dam volume 72,000m3 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)			

メチャンかんがい農業開発計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

Reasons for Project Cancellation:

Lowered prioieity due to the change in the agricultural policy

The reservoir for the thermal-power generation was constructed after 1985 at the upstream of the proposed dam site. As a result, no water source is now available for this project.

**ASE    THA/S 310/83**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		East Coast Water Resources Development (Phase II)	
<b>3. SECTOR</b>		Social Infrastructure / Water Resources Development	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation and Drainage Dept.	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd. NIKKEN Consultants, Inc.	
<b>7. STUDY PERIOD</b>		Jul.1982 ~ Mar.1983 8month(s) ~	
<b>8. SITE OR AREA</b>		Eastern seaboard (Rayong and Chonburi changwats)	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1) Khlong Luang: (a)Multi-purpose dam (h.42.5.m); (b)canal connecting the dam and Chonburi; (c) irrigation and drainage (6,600ha) 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) 3) Khlong Thap Ma: (a)Multi-purpose dam (h. 28.9m); (b)irrigation and drainage			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1) Khlong Yai Subsequent studies: Feb.1990 L/A 204 mil.Yen for (E/S)</p> <p>Finance: Jan.1993 L/A 6,362 mil.Yen for the construction of the pipelines connecting Nong Pla Lai reservoir and Nong Kho reservoir.</p> <p>Construction: (FY 1991 Overseas Survey) Scheduled to be commenced after the completion of the Nong Pla Lai Dam. (FY 1997 Overseas Survey) The pipeline is being constructed by Public Works Department, not RID.</p> <p>(2) Khlong Luang and Khlong Thap Ma (FY 1991 Overseas Survey) The project has been suspended due to the problems concerning the resettlement of the residents.</p>		

# STUDY SUMMARY SHEET

## (F/S)

ASE THA/S 311/83

<b>1. COUNTRY</b>		Thailand			
<b>2. NAME OF STUDY</b>		Nong Kho - Leam Chabang Water Pipeline Project			
<b>3. SECTOR</b>		Public Utilities / Water Supply			
<b>4. TYPE OF STUDY</b>		F/S			
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Public Works Dept., Ministry of Interior			
	<b>PRESENT COUNTERPART AGENCY</b>				
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd. NIKKEN Consultants, Inc.			
<b>7. STUDY PERIOD</b>		Aug.1983 ~ Mar.1984 7month(s) ~			
<b>8. SITE OR AREA</b>		Chonburi			
<b>9. MAJOR PROPOSED PROJECT(S)</b>					
		<div style="display: flex; justify-content: space-around;"> <div>First Stage</div> <div>Second Stage</div> </div> <div style="display: flex; justify-content: space-around;"> <div>Nong Kho-Turnout</div> <div>Turnout-Receiving Well</div> <div>Nong Kho Turnout</div> <div>Turnout-Receiving Well</div> </div>			
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	-	6.3x4.4x16.4

ノンコー・ラムチャバン送水パイプライン建設計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Factors of realizing the projects are as follows:</p> <ol style="list-style-type: none"> <li>1) Large impact: the industrial development at the Laem Chabang area is dependent on this project;</li> <li>2) Close linkage with other projects: development in Laem Chabang and the source of water;</li> <li>3) High priority; and</li> <li>4) Strength of the executing agency: strong support by NESDB.</li> </ol> <p>&lt;Stage I&gt; Subsequent studies: Aug.1985~May.1986 D/D Consulting Firm / TEAM, Sanyu Sep.1984 L/A 144 mil.Yen for E/S Finance: Oct.1985 L/A 1,363 mil.Yen for the construction of (1) raw water pipeline (15km), (2) diversion facility, (3) water supply control facility and (4) raw water well. Construction: Jul.1986 Commenced Jan.1989 Completed Contractor / Italian -Thai Co., Ltd.</p> <p>Maintenance &amp; Operation: East Water Company (a private enterprise with 100% investment from PWA) is in charge of maintenance &amp; operation.</p> <p>Effect: This project contributes to the development of the Leam Chabang Industrial Housing and of the port.</p> <p>&lt;Stage II&gt; Finance: Government budget (Annual budget 200 mil. Bahts) (FY 1995 Overseas Survey) Construction: Jun.1998 to be completed (97% finished) (FY 1997 Overseas Survey)</p> <p>Detail: (FY 1995 Overseas Survey) To overcome the water shortage problem in Pataya, the Thai Government constructed water pipelines from Leam Chabang to Pataya with the own fund. This project has been managed by the East Water Resources Development &amp; Management Co., Ltd. since 1993. The company is a public enterprise owned by PWA but in future its stock will be sold to the private sector.</p>		



**ASE THA/S 312/83**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		Second Stage Expressway System in the Greater Bangkok
<b>3. SECTOR</b>		Transportation / Road
<b>4. TYPE OF STUDY</b>		F/S
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Expressway and Rapid Transit Authority(ETA)
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		Pacific Consultants International (PCI)
<b>7. STUDY PERIOD</b>		May.1982 ~ Nov.1983 18month(s) ~
<b>8. SITE OR AREA</b>		Greater Bangkok
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
-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)		
The project cost is 26,200 million bahts.		

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting															
	Completed Partially Completed Implementing Processing	Delayed or Suspended   Discontinued or Cancelled															
<p><b>Description :</b></p> <p>Subsequent study: (FY 1997 Overseas Survey) Jan.1986~1987 D/D, EIA Consultant / Consortium of five consulting firms, represented by National Engineering Co. Inc. Study Cost / 23.8mil. Bahts</p> <p>In September, 1988, ETA decided to implement the project with BOT and to make a contract with Bangkok Expressway Consortium. In December of the same year, ETA concluded a contract with Bangkok Expressway Limited to implement "the Second Expressway Project in Bangkok". To relieve the traffic congestion more effectively, a route adjustment was proposed, which would result in making the total length of the expressway 39km.</p> <p>The following table shows the plan proposed by this F/S and the actual implemented project.</p> <table border="1"> <thead> <tr> <th></th><th>Study Plan</th><th>Project</th></tr> </thead> <tbody> <tr> <td>Length</td><td>27.9km</td><td>39.05km</td></tr> <tr> <td>Expense</td><td>26,200 mil.Bahts</td><td>29,500 mil.Bahts</td></tr> <tr> <td>Construction Period</td><td>1986-1995</td><td>1989-1995</td></tr> <tr> <td>Finance</td><td>Government Budget Loan from Demesticand Foreign entities</td><td>BOT After Invested money will be collected in the next 30yrs, the facilities will be handed over to ETA</td></tr> </tbody> </table> <p>Finance: (FY 1997 Overseas Survey) Government budge (approved in Dec.1988) Land acquisition cost / 31,300mil.Bahts BOT Construction Cost /approx. 28,000mil.Bahts</p> <p>(FY 1997 Overseas Survey) Sector A ---- Ratchadapisek Road - Phaya Thai Interchange - Rama IX Road 12.4km Sector B ---- Phaya Thai Interchange Bang Khlo 9.4km, and another 2km of the Collector / distributor road Sector C ---- Ratchadapisek Road - Cheang Wattana Road 8km Sector D ---- Rama IX - Srinakarin Road 8km</p> <p>Work Progress Sector A ---- Sep.1993 completed Sector B ---- Oct.1996 completed Sector C ---- Sep.1993 completed Sector D and Collector / Distributor road will be completed in Oct.2000.</p> <p>(FY 1996 Domestic Survey) Most of the project components have been already turned over to the investor and have been fairly well operated. The traffic congestion is the biggest problem which the city of Bangkok is facing now. The implementation of this project is of use to mitigate such traffic congestion.</p>				Study Plan	Project	Length	27.9km	39.05km	Expense	26,200 mil.Bahts	29,500 mil.Bahts	Construction Period	1986-1995	1989-1995	Finance	Government Budget Loan from Demesticand Foreign entities	BOT After Invested money will be collected in the next 30yrs, the facilities will be handed over to ETA
	Study Plan	Project															
Length	27.9km	39.05km															
Expense	26,200 mil.Bahts	29,500 mil.Bahts															
Construction Period	1986-1995	1989-1995															
Finance	Government Budget Loan from Demesticand Foreign entities	BOT After Invested money will be collected in the next 30yrs, the facilities will be handed over to ETA															

# STUDY SUMMARY SHEET

## (M/P)

ASE THA/S 103/84

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Sub-Regional Development of the Upper Southern Part		
<b>3. SECTOR</b>	Development Plan / Integrated Regional Development Plan		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National Economic and Social Development Board (NESDB)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	International Development Center of Japan (IDCJ) Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Mar.1983 ~ Mar.1985 24month(s) ~		
<b>8. SITE OR AREA</b>	Upper part of the Southern Region (pop.1.1 million)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The study proposed 10 high priority projects at the total cost of 24,272 million baht.</p> <ol style="list-style-type: none"> <li>1) Surat Thani Industrial Estate</li> <li>2) Phuket Airport Industrial Estate and Export Processing Zone</li> <li>3) East-West Link</li> <li>4) Surat Thani International Port (Khanom Deep-sea Port)</li> <li>5) Krabi Oil Refinery and Pipeline</li> <li>6) Phuket Urban Development</li> <li>7) Surat Thani Urban Development</li> <li>8) Central Lowland Development</li> <li>9) Tapi-Phum Duang River Management</li> <li>10) Phuket Water Supply</li> </ol> <p>Note: The cost shown above pertains to the ten high priority projects.</p>			

南タイ北部地域総合開発計画

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

### Description :

After the completion of this study, ADB conducted the review study of ten high priority projects and confirmed their validity.

(1)Surat Thani Industrial Estate

(FY 1996 Overseas Survey)

The Industrial Estate Authority has already done F/S and EIA. The cabinet approved the implementation of the first phase of the project including the allocation of government budget of 625 mil.baht to the development of the utilities system of the project.

Implementing Period:1997~2000

(2)Phuket Airport Industrial Estate and Export Processing Zone

(3)East- West Link

With the technical assistance of JICA, the study on the road network in the Southern Thailand, which targeted East- West Link, was implemented by 1991.

(FY 1996 Overseas Survey)

Presently, D/D has been implemented for the construction of highway with 100 meters wide and 195 km long according to the cabinet resolution on June 14,1996.

Implementing Period:1997~2000

Project Cost:9,000 mil.Bahts

(4)Khanom Deep-Sea Port

(FY 1996 Overseas Survey)

It is planned to implement a F/S on environment, engineering and business from the beginning of 1997 over one year. 1999~2001 Construction schedule.

Project Cost:5,659 mil.Bahts

Subsequent Study:

(FY 1997 Overseas Survey)

Jul.1997~Mar.1998 F/S (EIA included)

\*Contents

Port configuration, traffic forecast etc.

Implementing Organization / NESDB

Consulting Firm / Moffatt & Nichol Int. Inc., AEC, Wilbur Smith Associates

Study Cost / 1mil.US\$

Difference with JICA's proposal:

Move the site from Kabi to Phangnga for the west coast and from Khanom to Sichon for the east coast.

(5)Krabi Oil Refinery and Pipeline

(FY 1994 Domestic Survey)

The refinery is planned to be constructed in Kanom, not in Krabi as proposed in this study. Also, crude oil will be transported through pipelines, not refined oil proposed here.

(6)Phuket Urban Development

With the technical assistance of JICA, the study on development in the Southern Thailand was implemented by 1989, in which the tourism promotion in Phuket, proposed in this study, was focused.

(7)Surat Thani Urban Development

(FY 1994 Domestic Survey)

Surat Thani was designated as one of the targeted cities where the intensive investment was made to improve the social infrastructure.

(8)Central Lowland Development

The private enterprises have been active in the Central Lowland Development.

(9)Tapi-Phum Duang River Management

The Electricity Generating Authority has been in preparation for the construction of the Kaen Krung Dam proposed in the Tapi-phum Duang River Management Project. However, the problem concerning the resettlement of the residents remains unsettled.

(10)Phuket Water Supply

(FY 1996 Overseas Survey)

RID is implementing F/S. It is expected the first phase of the study of the water resource will be completed in Jan.1997.

Detail:

In 1989 The Southern Seaboard Development Committee was organized, represented by the Prime Minister.

(FY 1993 Overseas Survey)

The project of East- West link and of the Oil Refinery and Pipeline has been accommodated into the present Land Bridge Program.

(FY 1997 Overseas Survey)

F/S on the Southern Seaboard Port and Industrial Complex Development will be carried out.

Finance:

Government budget 12.5mil.Bahts

Jun.2.1997 USTDA grant 0.5mil.US\$

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 205B/84

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Development Project of Leam Chabang Coastal Area		
<b>3. SECTOR</b>	Development Plan / Integrated Regional Development Plan		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Industrial Estate Authority of Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jan.1984 ~ Mar.1985 14month(s) ~		
<b>8. SITE OR AREA</b>	Laem Chabang (120km southeast of Bangkok)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt; 1) Industrial Development</p> <p>2) Port Development: 16 berths, domestic wharf 1,100m, wharf area 258ha length of breakwater 3,070m</p> <p>3) Urban Development: New town population 120,000, Area 930ha</p> <p>4) Transportation Planning</p> <p>5) Utility Development</p> <p>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)</p> <p>* The project cost 1) above is for a short-term plan and 2) is for a long-term plan.</p> <p>&lt;F/S&gt;Major components of the short-term development plan:</p> <p>1) Industrial Development: Industrial estate 219ha</p> <p>2) Port Development: 6 berths, domestic wharf 280m, land area 116ha length of breakwater 2,400m</p> <p>3) Urban Development: New town population 24,000, area 130ha</p> <p>4) Transportation Development</p> <p>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)</p> <p>Note: EIRR and FIRR1)below are for the industrial estate, and 2)FIRR for the housing estate.</p>			

ラムチャバン臨海部開発計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

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

**Finance:**

Sep.1984 L/A (Laem Chabang Port Project, 4,172 mil.Yen)\*1  
 Oct.1985 L/A (Laem Chabang Industrial Estate Project, 2,922 mil.Yen)\*2  
 Nov.1986 L/A (Laem Chabang Port Project (II), 12,283 mil.Yen)\*3  
 Sep.1987 L/A (Laem Chabang Industrial Estate Project (II), 3,003 mil.Yen)\*4  
 Sep.1988 L/A (Siracha-Laem Chabang Railway Project, 1,013 mil.Yen)\*5  
 Feb.1990 L/A (Laem Chabang Port project (III), 6,436 mil.Yen)\*6

**\*Contents of OECF loan**

\*2, \*4-1) Civil engineering, construction of road, bridge, water supply and drainage facilities.  
 -2) Construction of sewage plant Loan for 1), all foreign currency and a part of domestic currency of 2) and supervision  
 \*1, \*3- Construction of Laem Chabang Port Loan for dredging, reclamation and supervision.  
 \*6-1) Container crane (6)  
 2) Vessels (11)  
 3) Navigation Support Facilities  
 Loan for foreign currency.  
 \*5- Single track between Laem Chabang Port and Siracha Station (9.3km), signal, lighting facilities, management building, drainage facilities.  
 Loan for foreign currency.

**Construction:**

1988~1991

**<M/P>**

-First Stage of New Town (16ha residential zone, 2,284 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.

**<F/S>**

Works have been completed as scheduled.

# STUDY SUMMARY SHEET

## (F/S)

ASE THA/A 309/84

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Lower Northeast Medium Scale Irrigation Package Project		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc. Naigai Engineering Co., Ltd. Kokusai Kogyo Co., Ltd.		
<b>7. STUDY PERIOD</b>	Feb.1983 ~ Jul.1984 17month(s) ~		
<b>8. SITE OR AREA</b>	NakhonRatchasima and BuriRam Provinces, northeastern part of Thailand		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
	Lam Plai Mat	Nong Lam Puk	Huai Phlu
Irrigation area	9,100	300	700
Dam height	44.6m	12.0m	20m
pondage	90 MCM	4 MCM	6 MCM
Diversion weir	1 site	-	-
Canal irrigation	215km	13km	29km
drainage	45km	-	1km

東北タイ南部中規模かんがいパッケージプロジェクト

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1) Lam Plai Mat  1.Construction of Dam  Subsequent studies:  D/D (government budget)  Finance:  Government budget 325 mil.Bahts  Construction:  1987-1991 Implemented and completed. Small-scale dams in the project area and the adjacent area have been constructed with the government budget since 1990.</p> <p>2.Irrigation Canals  Finance:  Phase I (1992-1993) 90 mil. Bahts  Phase II (1994/1995) 60 mil. Bahts each year  (1996) 39.77 mil. Bahts  Designing Work, etc. 40.23 mil. Bahts  Total 290.00 mil. Bahts</p> <p>Construction:  1992~1996 Completed  In the initial plan, the canal construction was planned to be divided into two phases. However, it was implemented at a time.  The 63km-long canal and the axillary facilities were completed.</p> <p>Maintenance &amp; Operation:  RID is in charge of M&amp;O.</p> <p>Impacts for surrounding area:  Standard of living has improved by reduction of flood and stable water supply.</p> <p>(2) Nonga Lam Puk (Name was changed to Huai Bug)  Subsequent Study:  D/D (national budget)  Construction:  (FY 1997 Overseas Survey)  The downs-sized dam was constructed.</p> <p>(3) Huai Phlu  Subsequent Study:  D/D (national budget)  Construction:  (FY 1997 Overseas Survey)  The downs-sized dam was constructed.</p>		



# STUDY SUMMARY SHEET

## (F/S)

ASE THA/S 313/84

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Comprehensive Development of Coastal Shipping		
<b>3. SECTOR</b>	Transportation / Marine Transportation & Ships		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Office of the Mercantile Marine Promotion Commission, Ministry of Communications	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI)		
<b>7. STUDY PERIOD</b>	Jul.1983 ~ Oct.1984 15month(s) ~		
<b>8. SITE OR AREA</b>	the entire coastal areas		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
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			

沿岸海運整備振興計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Reasons of Stoppage:            -Economic recession (1985-88)            -IFCT's attitude to the project            -Comparative advantage of road-transport.            Some legislative improvement is necessary for reviewing the operation of domestic shipping companies.</p> <p>Situation before Stoppage:            (FY 1991 Overseas Survey)</p> <p>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.</p> <p>Others:            A short-term expert (2 months) was sent in 1985 and 1986 to give advice on the legislation on domestic shipping and its promotion.            (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.(Construction cost of Chun-Pon port: 10 mil.B)</p>		

**ASE THA/S 314/84**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Track Elevation Project of Existing Railway Lines in the Bangkok Metropolitan Area	
<b>3. SECTOR</b>		Transportation / Railway	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	State Railway of Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Japan Railway Technical Service (JARTS)	
<b>7. STUDY PERIOD</b>		Aug.1983 ~ Jul.1984 11month(s) ~	
<b>8. SITE OR AREA</b>		Entire Bangkok Metropolitan Area	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Civil work	US\$	125 million	
Land procurement	US\$	2000 million	
Electric facilities	US\$	30.9 million	
Rolling stock	US\$	68.6 million	
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 }			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting   Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>Reasons of Stoppage/Cancellation: The project was implemented in totally different way from the proposal.</p> <p>Situation before Stoppage: 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.</p> <p>(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.</p> <p>(FY1994 Domestic Survey) The construction works of HOPEWELL Project on the "L" shaped route from Yammarat 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.</p> <p>(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.</p>		

**ASE    THA/S 601/84**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Traffic Safety Plan for Roads	
<b>3. SECTOR</b>		Transportation / (Transportation in) General	
<b>4. TYPE OF STUDY</b>		Other Studies	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Dept. of Highways, Ministry of Communications	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Central Consultant, Inc. International Engineering Consultants Association Chodai Co., Ltd.	
<b>7. STUDY PERIOD</b>		May.1983 ~ Dec.1984 19month(s) ~	
<b>8. SITE OR AREA</b>		Entire country	
<b>9. MAJOR PROPOSED PROJECT(S)</b>		<p>In order to promote traffic safety in road transport, the study conducted the following tasks.</p> <p>(1) Collection and analysis of road traffic data</p> <p>(2) Identification of high-risk areas</p> <p>(3) Guidelines of physical facilities</p> <p>(4) Planning of physical facilities</p> <p>(5) Medium- and long-term plan for installing physical facilities</p>	

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Utilizing the guid lines formulated by the study mission, the counterpart agency has increased the budget for the Department of Highways in order to improve the facilities for the road safety.</p> <p>(FY 1991 Overseas Survey) The study results were utilized to prepare a loan application to the World Bank in order to implement the Sixth National Economic and Social Development Plan, which was approved.</p> <p>(FY 1993 Overseas Survey) DOH has been utilizing the recommendations made by this M/P to implement the Traffic Safety Master Plan since 1987. Also, the guideline for the traffic safety program has been effectively utilized.</p> <p>(FY 1995 Overseas Survey) The proposed projects were integrated in the Seventh Five-Year Plan and were implemented. In particular, the progress was observed in the data collection and its analysis with computers.</p> <p>(FY 1997 Domestic Survey) Extension works of highway and construction of orbital transport system are going on. Revision of project will be needed after the completion of those works.</p>	

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 206B/85

<b>1. COUNTRY</b>	Thailand																
<b>2. NAME OF STUDY</b>	Master Plan on Flood Protection/Drainage Project in the Eastern Suburban Bangkok																
<b>3. SECTOR</b>	Social Infrastructure / River & Erosion Control																
<b>4. TYPE OF STUDY</b>	M/P+F/S																
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Dept.of Drainage and Sewerage, Bangkok Metropolitan Administration															
	<b>PRESENT COUNTERPART AGENCY</b>																
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI) Tokyo Engineering Consultants Co., Ltd.																
<b>7. STUDY PERIOD</b>	May.1983 ~ Feb.1986 33month(s) ~																
<b>8. SITE OR AREA</b>	Eastern Suburban Bangkok (study area of 260 sq.km)<M/P> East suburban area of Bangkok (Study area of 100 sq.km)<F/S>																
<b>9. MAJOR PROPOSED PROJECT(S)</b>																	
<p>&lt;M/P&gt;</p> <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.</p> <p>(Structural measures)</p> <p>- Polder dyke (62km), gate (55 places), pump station (10 places), channel improvement (133km), drain pipe (110km)</p> <p>(Non-structural measures)</p> <p>- Land use regulation, provision of storm retarding basin, establishment of flood forecasting and warning system</p> <p>&lt;F/S&gt;</p> <table style="width: 100%;"> <tr> <td style="width: 50%;">Facilities</td> <td>Scale</td> </tr> <tr> <td>Dyke(Barrier)</td> <td>5.1 km</td> </tr> <tr> <td>Sluice gate</td> <td>4 places</td> </tr> <tr> <td>Pumping Station</td> <td>5 stations(36 cu.m/s)</td> </tr> <tr> <td>Klong improvement</td> <td>93 km</td> </tr> <tr> <td>Main drain improvement</td> <td>4.3 km</td> </tr> <tr> <td>Flood control operation center</td> <td>1 set</td> </tr> </table>				Facilities	Scale	Dyke(Barrier)	5.1 km	Sluice gate	4 places	Pumping Station	5 stations(36 cu.m/s)	Klong improvement	93 km	Main drain improvement	4.3 km	Flood control operation center	1 set
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Flood control operation center	1 set																

バンコク市都市排水対策計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1) Donation of Materials Upon the completion of the study, 59 pumps were donated with the Japanese grant aid.</p> <p>(2) Flood Control Center in Bangkok Subsequent Studies: Jun.1988 B/D Finance: Jan.1989 Grant Aid E/N 924 mil.Yen Construction: Mar.1991 Completed</p> <p>(3)Pumping Station, Sluice Gate and Klong Improvement (FY 1996 Overseas Survey) Subsequent Studies: 1987~1990 D/D (DDS Budget) Finance: 1988~1991 500mil.Bahts (DDS Budget) Construction: 1988~1991 Completed Maintenance &amp; Operation: DDS is in charge.</p> <p>(4)Drainage System Improvement (FY 1997 Overseas Survey) Subsequent Study: 1995~1996 F/S, D/D Consulting Company / NEDECO, SPAN, WDC (joint) Cost / 80mil.Bahts *Contents of study (including up-date of JICA'S study) Klong improvement, pumping station improvement, operation of storage reservoir, secondary drainage system improvement Finance: FY 1997 BMA budget 1,300mil.Bahts (1st Stage) Total budget / 33,000mil.Bahts Construction: 1997~1999 Consultant, Contractor / local</p> <p>(5)Other Project (FY 1996 Overseas Survey) Due to the financial constraints, the project has been yet implemented. However, with the increase of budgets, the implementation of subsequent studies is planned in 2005.</p>		



# STUDY SUMMARY SHEET

## (F/S)

ASE THA/A 310/85

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Comprehensive Storage Facilities Development Project (Phase II)		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Public Warehouse Organization (PWO)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Overseas Merchandise Inspection Co., Ltd. Sanyu Consultants Inc.		
<b>7. STUDY PERIOD</b>	Feb.1984 ~ Jun.1985 16month(s) ~		
<b>8. SITE OR AREA</b>	Whole country		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1. Warehouse construction:</p> <p style="margin-left: 20px;">State level - 10 sites</p> <p style="margin-left: 20px;">Local level - 5 sites</p> <p style="margin-left: 20px;">Seaport Warehouse - 1 site at Laem Chabang</p> <p>2. Improvement on processing and loading facilities for shipping exportable rice:</p> <p style="margin-left: 20px;">River port - 2 sites (Nonthaburi, Rajburana)</p> <p style="margin-left: 20px;">Deep sea port - 1 site (Laem Chabang)</p> <p>3. Grain reprocessing facility: 6 sites</p> <p>4. Storage technology improvement and training center construction: 1 site (Nonthaburi)</p> <p>* Project costs above are in Dec.1984 prices.</p>			

穀物貯蔵施設整備拡充計画 (Phase II)

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

## Reasons of Stoppage:

Many government agencies joined rice export programme. It lowered PWO's rank as a rice exporter. (FY 1993 Overseas Survey)

## Situation before Stoppage:

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 was not materialized.

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.

**ASE THA/A 311/85**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Sakae Krang River Basin Irrigation Project	
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	RID (Royal Irrigation Department), Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd. Kyowa Engineering Consultants Co., Ltd. Nippon Giken Inc.	
<b>7. STUDY PERIOD</b>		Sep.1984 ~ Mar.1986 18month(s) ~	
<b>8. SITE OR AREA</b>		Sakae Krang River Basin(6,300 sq.km)	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
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.			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>EIA Completed in December, 1993. (FY 1993 Overseas Survey) The proposed Upper Mewong dam, with the capacity of 230MCM, is classified into a large-scale project which requires EIA before its implementation. EIA on this project was conducted by the Chongmai University.</p> <p>(FY 1994 Domestic Survey) After the completion of the study, the project site turned out to be included in a national park. Therefore, EIA was required before the commencement of the project.</p> <p>Finance: RID is in preparation for the request for an OECF loan. (FY 1993 Overseas Survey)</p> <p>Detail: (FY 1994 Domestic Survey) EIA was completed in December, 1993. OECF is planning to dispatch SAPROF survey team to update the JICA study which was conducted 10 years ago.</p> <p>(FY 1996 Domestic Survey) SAPROF was implemented by Sanyu Consultants in 1995.</p> <p>(FY 1996 Overseas Survey) Request OECF for Yen Loan</p> <p>(FY 1997 Overseas FU Survey) (FY 1998 Domestic Survey) NGOs get involved with resistance on dam construction while community is increasing and spread out over the Lower Mae Wong Dam Site area because the lower site is the land reform area. In 1996 the Joint Committee of Private and Government Sectors organized the meeting for the people in Nakhon Sawan and nearby provinces in order to get better understanding on the dam construction explained by RID. RID re-proposed the project implementation together with the result of EIA to the government for approval and this issue has been further forwarded to the Office of Environmental Policy and Planning and the National Environmental Board respectively in order to make decision of EIA matter. After the approval of the National Environmental Board the project can be implemented.</p>		

**ASE THA/S 315/85**

船舶修理ヤード建設計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**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.

## Subsequent Study

(FY 1997 Domestic Survey)

Apr. 1991

## \*Contents of the Project

Construction of dock (max. 15,000DWT) and ship yard for inland facilities.

(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.

(1)Floating Dock

(FY 1995 Overseas Survey)

## Finance:

Private fund 1,500mil. Bahts

## Construction:

1991~1994

The dock has capacity of repairing 80 vessels per year. In 1994, 40~50 vessels (about 600,000 DWT) have been repaired, of which the biggest one was 25,000 DWT.

8 years of Tax Holiday (normally 5 years) was given by Investment Committee as preferential treatment.

(2)Dry Dock

(FY 1995 Overseas Survey)

UNITHAI is constructing a dry dock.

(FY 1997 Overseas Survey)

Construction of a dry dock depends on market and economic situation.

# STUDY SUMMARY SHEET

## (F/S)

ASE THA/S 316/85

<b>1. COUNTRY</b>	Thailand																																														
<b>2. NAME OF STUDY</b>	Sanitary District Water Works Project in the Northeastern Region																																														
<b>3. SECTOR</b>	Public Utilities / Water Supply																																														
<b>4. TYPE OF STUDY</b>	F/S																																														
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Public Works,(DPW) Ministry of Interior																																													
	<b>PRESENT COUNTERPART AGENCY</b>																																														
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc.																																														
<b>7. STUDY PERIOD</b>	Oct.1984 ~ Feb.1986 16month(s) ~																																														
<b>8. SITE OR AREA</b>	10 towns and villages in the North-Eastern region of Thailand																																														
<b>9. MAJOR PROPOSED PROJECT(S)</b>																																															
<p>The main purpose of the project is to provide an improved living standard for the local people through a stabilized water supply in the Sanitary District areas. With the development of the project, it is expected that the urban activity in the areas, which would have the characteristics in-between of "Urban" and "Rural", will be encouraged to grow vigorously in future.</p> <p>Summary of the proposed project is tabulated as follows.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sub-project Name</th> <th style="text-align: right;">Served Population (cu.m/day)</th> <th style="text-align: right;">Max.Capacity</th> <th style="text-align: left;">Major Facility</th> </tr> </thead> <tbody> <tr> <td>Kham Sake Sang</td> <td style="text-align: right;">6,000</td> <td style="text-align: right;">900</td> <td>RSFP 1.0 unit, D.pipe 10.5km</td> </tr> <tr> <td>Nong Bua Lai</td> <td style="text-align: right;">4,500</td> <td style="text-align: right;">675</td> <td>RSFP 1.0 unit, D.pipe 6.9lkm</td> </tr> <tr> <td>Huai Thalaeng</td> <td style="text-align: right;">13,300</td> <td style="text-align: right;">1,995</td> <td>RSFP 1.0 unit, D.pipe 12.3km</td> </tr> <tr> <td>Nong Ki</td> <td style="text-align: right;">16,900</td> <td style="text-align: right;">2,535</td> <td>RSFP 1.0 unit, D.pipe 25.6km</td> </tr> <tr> <td>Huai Rat</td> <td style="text-align: right;">4,900</td> <td style="text-align: right;">735</td> <td>RSFP 1.0 unit, D.pipe 9.0km</td> </tr> <tr> <td>Khun Han</td> <td style="text-align: right;">5,000</td> <td style="text-align: right;">750</td> <td>RSFP 1.0 unit, D.pipe 6.7km</td> </tr> <tr> <td>Kusuman</td> <td style="text-align: right;">6,200</td> <td style="text-align: right;">930</td> <td>ASFP 1.0 unit, D.pipe 9.2km</td> </tr> <tr> <td>Phon Charoen</td> <td style="text-align: right;">10,600</td> <td style="text-align: right;">1,580</td> <td>RSFP 1.0 unit, D.pipe 12.1km</td> </tr> <tr> <td>Nong Song Hong</td> <td style="text-align: right;">8,600</td> <td style="text-align: right;">1,290</td> <td>RSFP 1.0 unit, D.pipe 13.2km</td> </tr> <tr> <td>Huai Kha Yung</td> <td style="text-align: right;">4,900</td> <td style="text-align: right;">735</td> <td>RSFP 1.0 unit, D.pipe 13.5km</td> </tr> </tbody> </table> <p>Note: RSFP =Rapid Sand Filtration Plant, ASFT=Aeration Sand Filtration Plant</p>				Sub-project Name	Served Population (cu.m/day)	Max.Capacity	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 6.9lkm	Huai Thalaeng	13,300	1,995	RSFP 1.0 unit, D.pipe 12.3km	Nong Ki	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
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東北タイ地方水道施設緊急整備計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies: 1992 ADB conducted the nationwide survey on the water supply in 100 sanitary districts, which included a review study of this F/S. 58 districts are under the jurisdiction of PWD and 42 are under Public Water Authority (PWA).</p> <p>Implementing Agency: (FY 1994 Domestic Survey) In November, 1994, the in-charge agency was changed from PWD to the Office of Urban Development of the Department of Local Administration (DOLA), Ministry of Interior. (FY 1995 Domestic Survey) As of August, 1995, due to the organizational restructuring of DOLA, three sections, Bureau of Local Affairs, Structure and System Development Division and Local Finance Division, are in charge of this project. (FY 1996 Domestic Survey) Due to the change of in-charge agency, it becomes difficult to obtain the information.</p> <p>(1)PWA project Subsequent Study: 1994 D/D Finance: (FY 1997 Domestic Survey) Own fund Construction: (FY 1997 Domestic Survey) Out of 10 sites, construction has completed at two sites and on going at three sites. As for remaining 5 sites, construction will be commenced successively after budget is allocated.</p> <p>(2)PWD project Subsequent Study: (FY 1997 Overseas Survey) 1994~1997 D/D (58 Sanitary District throughout the country) Consulting firm / local Study Cost / 32mil.Bahts Finance: (FY 1997 Overseas Survey) 1994 Government budget 1,261,443,000Bahts (for D/D and construction) Construction: (FY 1997 Overseas Survey) 1994~1998 Consulting Firm / local Out of 58 sites, construction has completed at 42 sites.</p>		



# STUDY SUMMARY SHEET

## (F/S)

ASE THA/S 317/85

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Road Development in the Northeastern Region (Phase II)		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Dept. of Highways, Ministry of Communications	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Katahira & Engineers International Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jun.1984 ~ Jul.1985 13month(s) ~		
<b>8. SITE OR AREA</b>	Northeastern Region		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>(1) New construction and improvement Total 502.1km:</p> <p>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 Khiu(J.R.2)~ A. Chok Chai 51.4km.</p> <p>(2) Rehabilitation 8 routes (90km)</p> <p>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.Chokhcai 10km</p> <p>The total project cost is 1,839.22 million bahts.</p> <p>* The project cost 1)above is the economic construction costs of Improvement and New Construction Routes.</p>			

東北部道路網整備計画(フェーズII)

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b>  (FY 1997 Domestic Survey) The projects are being implemented based on The 8th Road Development Plan (1997~2001) with national budget and loan. National budget for 1998 has been cut by 20%, therefore government relies heavily on loan.  Subsequent Studies: D/D conducted (1)OECF Finance: Nov.1988 L/A 4,085 mil.Yen (Highway Sector Project) 1,008 mil.out of 4,085 mil.Yen was allocated to the construction and improvement of seven routes in North-Eastern region (235.1km) and other routes shall be constructed or renovated with the World Bank loan or the Government fund. May 1993 L/A 2,184 mil.Yen (Highway Sector Project (II)) *Contents/construction and renovation of one route of the provincial road and two routes of the local road.  (2)IBRD Project (FY 1997 Domestic Survey) Finance: Feb.1988 L/A 46.48mil.Bhats *Contents/Expansion to two-lane of trunk roads in northern area and construction of bypass. Implementation: 1.RT.No.1 Chiang Mai bypass completed Lampang-Chiang Mai under construction 2.RT.No318 Doi Saket-Chiang Lai under construction  Situation of advance: (FY 1997 Domestic Survey) All the works scheduled for FY 1996 and 40% of works for FY 1997 have been completed. As for projects proposed by F/S on Highway System in Northern Area, 30% of works has been completed.  (FY 1997 Overseas Survey) Consturction and rehabilitation works for all sections have been completed. <Section>                      <Fund/Amount> <Completed in> 1)A.Khong-J.R.                      DOH/30.9      1987 2)A.Chonnabot-B.Dong Han                      IBRD.DOH/50.1      1994 3)A.Nam Phong-B.Nong Tum                      OECF.DOH/90.9      1995.5 4)B.Lao(J.R.210)-B.Tha Yom                      OECF.DOH/122.9      1996.3 5)B.Huai Koeng-A.Kumphawapi                      OECF.DOH/40.6      1995.9 6)A.Nong Han-A.Kumphawapi                      OECF.DOH/119.8      1993.9 7)A.Sawangdaendin-A.Song Dao                      DOH/19.2      1988 8)A.Selaphum-B.Kham Phonsung                      OECF.DOH/184.7      1993.12 9) B.Na Suang-B.Na Yia                      DOH/15.0      1991 10)Mahachana Chai-A.Kho Wang Mahachana Chai-Yangchum Noi                      OECF/98.9      1993.12 11)B.Som Poi Noi-B.Muang Mak                      DOH/54.5      1984 12)B.Nong Khao-A.Chom Pra                      DOH/21.8      1989 13)A.Parakhon Chai-A.Krasang                      OECF.DOH/142.7      1994.9 14)B.Nong Pha Ong-A.Nong Ki A.Lam Plai Mat-A.Nong Ki                      DOH/30.7      1991 15)A.Sikhiu(J.R.2)-A.Chok Chai                      IBRD.DOH/242.5      1993.8  Rahabilitation 16)A.Sikhui-A.Dan Khun Thot                      IBRD/187.2      1993.8 17)A.Prathai-A.Khok Chik                      DOH/52.2      1991.2 18)A.Kalasin-B.Lamshe                      IBRD/75.5      1991.4 19)Pakthong Chai-J.R.2                      DOH/60.9      1993.2 20)Nam Khong-Sithai                      DOH/134.4      1993.4 21)Chok Chai-Khonburi                      DOH/40.0      1991.3 22)B.Wat-A.Khong                      DOH/52.3      1995.2 23)Nakhon Ratchasima-A.Chok Chai DOH/60.9      1990.9  Operation & Maintenance: (FY 1997 Domestic Survey) Operation and maintenance by local construction department is going without problem.		

**ASE THA/A 312/86**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Bang Nara Irrigation and Drainage Project	
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	RID (Royal Irrigation Department)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc. Japan Engineering Consultants Co., Ltd.	
<b>7. STUDY PERIOD</b>		May.1985 ~ Jan.1987 20month(s) ~	
<b>8. SITE OR AREA</b>		Bang Nara River Basin of Nava Tik Province in Southern Thailand	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<ul style="list-style-type: none"> <li>- To construct tidal gates both in Nara Tik side and Tagbai side of Bang Nara River</li> <li>- Pumping irrigation by utilizing planned reservoir with 9 pumping stations</li> <li>- Rehabilitation of drainage rivers flowing into Bang Nara River</li> <li>- To install 6 check gates to control acid water</li> </ul>			
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			
	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 Contingeacy	56	52	108
Price Erealation	179	111	288
Total	746	516	1,262

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1) Bang Nara Irrigation and Drainage Project (Construction of Tidal Gates) Subsequent Studies: Feb.17.1988 E/N 94 mil.Yen Feb.~Jun.1988 D/D Finance: Sep.30.1988 E/N 888 mil. Yen Jul.21.1989 E/N 2,604 mil.Yen Jun. 6.1990 E/N 375 mil.Yen Construction: Construction Trader:Ohbayashi-Gumi Oct.1988 Commenced Nov.1990 Completed Maintenance &amp; Operation: RID is in charge of M&amp;O Effect: The implementation of this project has turned salt water into fresh water. Consequently, the irrigation in the dry season becomes possible.</p> <p>(2) Installation of Pumping Stations Eleven pumping stations are planned to be constructed while the construction of ten pumping stations was proposed by the JICA study. Finance: Government fund Construction: 1)Ku Chan station: Construction Cost-26.6 mil.Bahts. Completed in 1996 2)Moru Bo station:Construction Cost-55.7 mil.Bahts. Scheduled to be completed by Sep.1997 3)PmKorp Daeng:Sep.1997 contract was signed. Construction is scheduled to start. 4)Others:Land aquisition problem remains unsettled.</p> <p>*Presently approximately 18,100 rai of farmland, which is the area of less than two meters above sea-level, is irrigated by 164 portable pumps owned by the farmers.</p> <p>Situation: (FY 1997 Domestic Survey) To review remaining works would be difficult owing to financial constraint and difficulty to enter into the site.</p>		

**ASE THA/S 318/86**

## 港灣浚渫船隊整備計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  (1)Construction of Dredgers (FY 1995 Overseas Survey) This year the Harvor Department called for the international bid on the deferred-payment import* of dredgers. Approximately 40 companies, including some Japanese companies, have passed the preliminary screening. Currently, the Department is examining the bidders from the viewpoint of their technique and their proposed condition for the deferred-payment. (*Deferred-payment import: the scheme in which a shipbuilding company constructs a dredger with its own fund and subsequently the Harvor Department purchases it on a deferred-payment basis.)  Finance: (FY 1997 Overseas Survey) Private Fund 49.4mil.USS *Contents Dredger construction  Construction: 1995~1997 Contractor / Ellicott Machine Co. Int (USA)  Detail: (FY 1993 Overseas Survey) Requests have been made to various donors, including OECF, for a financial assistance, however, no favorable reply has been given.  (FY 1997 Overseas Survey) Most of projects should be postponed owing to crisis of present Thai economy.		

# STUDY SUMMARY SHEET

## (Other Studies)

ASE THA/S 602/86

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Road Improvement, Rehabilitation and Traffic Safety in Bangkok		
<b>3. SECTOR</b>	Transportation / (Transportation in) General		
<b>4. TYPE OF STUDY</b>	Other Studies		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Bangkok Metropolitan Administration	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Central Consultant, Inc. International Engineering Consultants Association Chodai Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jun.1985 ~ Mar.1987 21month(s) ~		
<b>8. SITE OR AREA</b>	Bangkok Metropolitan Area		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The study compiled basic information on traffic safety planning and recommended some road improvements.</p> <ul style="list-style-type: none"> <li>-Flyover-Intersection improvement</li> <li>-Pavement improvement</li> <li>-Busstop improvement</li> <li>-Pedestrian path                -Guard fence</li> <li>-Median                        -Safety island</li> <li>-Traffic sign                -Traffic signal</li> <li>-Pedestrian crossing bridge   -Road marking</li> </ul> <p>among others.</p>			

バンコク首都圏庁バンコク市道路改良・交通安全計画

<p><b>PRESENT STATUS</b></p>	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(1) Construction of Rama IV Flyover  Subsequent Studies:  Jan.1990   E/N 98 mil.Yen  Finance:  Aug.1991   E/N 2,506 mil.Yen</p> <p>(2) Construction of Flyovers in other roads  (FY 1993 Overseas Survey)  BMA constructed ten flyovers, based on this M/P, with own fund.</p> <p>(3) Other Projects  (FY 1995 Overseas Survey)  Because the proposed engineering guideline has not been ratified as a BMA's standard guideline, yet, it has not been fully utilized. BMA plans to translate it into Thai after it is ratified.  Most of the proposed projects, which require a substantial amount of money for the implementation, have not been commenced</p>	



# STUDY SUMMARY SHEET

## (M/P)

ASE    THA/A 102/87

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Aerial Photography and Forest Management Plan in the Encroached National Reserve Forest		
<b>3. SECTOR</b>	Forestry / Forestry & Forest Conservation		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Forestry Department, Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Forest Technical Association Kokusai Kogyo Co., Ltd.		
<b>7. STUDY PERIOD</b>	Oct.1985    ~    Mar.1988 29month(s) ~		
<b>8. SITE OR AREA</b>	An Area of 20,000sq.km extended over Kanchanaburi Province and other 4 provinces in the western part of the Central Plain Region		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>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:</p> <p>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.</p> <p>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;  - nurseries, 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.</p> <p>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 were proposed:  - forest village plan, - communal forest plan, - agrosilviculture plan,</p> <p>4. Conservation Area Plan: Conservation principles were formulated for National Park area and where is critical in terms of soil and water conservation.</p> <p>* Costs are not calculated.</p>			

国有林管理計画

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

## Reasons of Stoppage:

(FY1993 Overseas Survey)

1. The change of Thai Government policy on national forest land use.
2. There is no provision for after land use in the national park, therefore the agroforestry program cannot start in the model area.
3. The Government wanted RFD to be responsible for forest protection and nature conservation.  
Timber industry will be privatized. Nobody in RFD, at present, pays attention to the project.

## Situation before Stoppage:

In order to prepare a project based on the proposed plans, the Royal Forest Department has been coordinating the handling of the existing projects by itself. The proposed plans contain various types of projects.

Therefore Japan will be needed for supporting to prepare a project by conducting a follow-up survey and/or an experimental project.

**ASE THA/S 319/87**

<b>1. COUNTRY</b>		Thailand													
<b>2. NAME OF STUDY</b>		New Krungthep Bridge Construction and Thonburi Road Extension													
<b>3. SECTOR</b>		Transportation / Road													
<b>4. TYPE OF STUDY</b>		F/S													
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Public Works Department													
	<b>PRESENT COUNTERPART AGENCY</b>														
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd. Central Consultant, Inc.													
<b>7. STUDY PERIOD</b>		Feb.1986 ~ Jun.1987 16month(s) ~													
<b>8. SITE OR AREA</b>		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.													
<b>9. MAJOR PROPOSED PROJECT(S)</b>															
<p>(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.</p> <table border="1"> <thead> <tr> <th></th> <th>Thoribori Side</th> <th>Bangkok Side</th> </tr> </thead> <tbody> <tr> <td>Approach Bridge</td> <td>770m</td> <td>599m</td> </tr> <tr> <td>Interchange</td> <td>131m</td> <td>120m</td> </tr> <tr> <td>Rampway</td> <td>400m</td> <td>480m</td> </tr> </tbody> </table> <p>The project cost is 1,885 million bahts.</p> <p>(2)Thoribori Road Extention 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.</p>					Thoribori Side	Bangkok Side	Approach Bridge	770m	599m	Interchange	131m	120m	Rampway	400m	480m
	Thoribori Side	Bangkok Side													
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PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Factors of realizing the projects are as follows:            (1) Aging of the existing Krung Thep Bridge; and            (2) Strong support by Public Works Dept.</p> <p>(1) Construction of New Krungthep Bridge            The project is integrated into the 6th and 7th National Economic and Social Development Plan and is put on high priority. It was already approved by the cabinet in August,1987.</p> <p>Subsequent Studies:            D/D            Consulting Firm / JV of NORCON of Norway and the Thai Consultants)            Study Cost / 130 mil. Bahts including the cost of D/D for the construction of Tonburi Road financed by PWD</p> <p>Finance:            Budget / 1,950 mil.Bahts (FY 1995 Overseas Survey)            Jan.1993 L/A 7,546 mil.Yen for the construction of New Krungthep Bridge            Total Project Cost: 15,091 mil.Yen</p> <p>Construction:            End of 1995~Oct.1999 20% finished (end of 1997)</p> <p>(2) Construction of Tonburi Road            Subsequent Studies:            D/D for the first stage (3.5km)</p> <p>Finance:            Government budget / 4,370 mil.Bahts</p> <p>Construction:            Oct.1996~Oct.1999 12% finished (end of 1997)</p>		

**ASE THA/S 320/87**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Railway Yards Improvement	
<b>3. SECTOR</b>		Transportation / Railway	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	State Railway of Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Japan Railway Technical Service (JARTS) Pacific Consultants International (PCI) The Japan Electrical Consulting Co., Ltd.	
<b>7. STUDY PERIOD</b>		Dec.1985 ~ Jun.1987 18month(s) ~	
<b>8. SITE OR AREA</b>		Bangkok, Mae Noni, Bang Sue, and Hat Yai Stations	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>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.          Band 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.)          Hat Yai: 1.Modification of track layout for eliminating the concurrence of freight car shunting and handling of incoming and outgoing freight trains; 2.Additional construction of three sorting tracks for strengthening capacity for freight car sorting; 3.Additional construction of two storage tracks for passenger cars for coping with the increase in originating and terminating trains; 4.Improvement of signaling facilities entailed by track improvement (Erection of signals,etc.)</p>			

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**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 Pachi 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, Band 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.

## STUDY SUMMARY SHEET

### (Other Studies)

ASE THA/S 603/87

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Effective Port Management and Operation System		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	Other Studies		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Transport and Communication	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI)		
<b>7. STUDY PERIOD</b>	Aug.1986 ~ Mar.1988 19month(s) ~		
<b>8. SITE OR AREA</b>	Port of Bangkok, Port of Laem Chabang, Port of Map Ta Phut, Port of Sattahip, Port of Phuket, Port of Song Khla		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
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.			

効果的港湾システム調査

PRESENT STATUS	In Progress or In Use
	Delayed
	Discontinued

**Description :**

This is the first study in Thailand, which focused on the port management and operation system. The recommendations made in the study have been used as a guideline for the port M&O. The National Port Administration Commission was established in the Ministry of Transport and Communication by accepting the recommendations of the study and came into operation in December 1988.

(1) Port of Leam Chabang

The administrative body was established in PAT.  
 Three container terminals and one agricultural/bulk berth are leased to private companies and operated by them.  
 A multi-purpose terminal is under bidding for the lease.  
 The other bulk terminal is planned to be leased to a private company.

(2) Port of Map Ta Phut

Its operation started in 1992. IEAT is an administrative body and each berth is leased to private companies.

(3) Port of Song Khla and Port of Phuket

The private sector is in charge of the port management and operation.



**ASE THA/S 104/88**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		Flood Forecasting System in the Chao Phraya River Basin
<b>3. SECTOR</b>		Social Infrastructure / River & Erosion Control
<b>4. TYPE OF STUDY</b>		M/P
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation Department, Ministry of Agriculture and Cooperatives
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		CTI Engineering Co., Ltd. Nippon Koei Co., Ltd.
<b>7. STUDY PERIOD</b>		Feb.1987 ~ Jun.1988 16month(s) ~
<b>8. SITE OR AREA</b>		Chao Phraya River Basin(162,000 sq.km)
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
<p>Step 1: Flood forecasting system started with the existing facilities as the bases and by adding auxiliary 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.</p> <p>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.</p>		

<p><b>PRESENT STATUS</b></p>	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(1)Flood Control Center Subsequent Studies: Jun.1988 B/D (Pacific Consultant)</p> <p>Finance: Jan.1989 E/N 924 mil.Yen (Project for the Improvement of Equipment of the Flood Control Center in Bangkok) Project Content: Provision of machinery and equipment for the Flood Control Center, which is to be constructed for the purpose of the formulation of the flood mitigation measures.</p> <p>(2)Flood Mitigation Subsequent study: (FY 1997 Domestic Survey) Nov.1996~Dec.1998 (JICA, 5,400 mil.yen)</p> <p>Situation: RID has a strong desire to implement the projects. (FY 1993 Overseas Survey) Although RID was not trained a flood forecasting method during the implementation of this study, it is utilizing the existing method to obtain data, which is proved to be accurate.</p> <p>(FY 1996 Overseas Survey) RID requested to JICA for food mitigation in Chao Phraya River Basin as an urgent in 1996.</p>	

**ASE THA/A 202B/88**

<b>1. COUNTRY</b>		Thailand																																	
<b>2. NAME OF STUDY</b>		Agricultural Land Conservation for Integrated Rural Development in the East of Thailand																																	
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General																																	
<b>4. TYPE OF STUDY</b>		M/P+F/S																																	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Agriculture and Cooperatives Department of Land Development (DLD)																																	
	<b>PRESENT COUNTERPART AGENCY</b>																																		
<b>6. CONSULTANT(S)</b>		Taiyo Consultants Co., Ltd. Sanyu Consultants Inc.																																	
<b>7. STUDY PERIOD</b>		Sep.1987 ~ Sep.1988 12month(s) ~																																	
<b>8. SITE OR AREA</b>		Four provinces in the eastern Thailand facing or close to the sea (Chachoengsao, Chonburi, Rayon, and Chanthaburi)																																	
<b>9. MAJOR PROPOSED PROJECT(S)</b>																																			
<p>&lt;M/P&gt;&lt;F/S&gt; All over Thailand, soil erosion problems caused by random development is serious, 34% of national land is eroded. 47%(716,000ha) of the areas in 4 provinces of the East of Thailand are eroded.</p> <p>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.</p> <table border="1"> <thead> <tr> <th>Province</th><th>Study Area (sq.km)</th><th>Project Area (sq.km)</th><th>Planning Area (sq.km)</th><th>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> <p>Contents of Projects</p> <p>Soil conservation measures</p> <ol style="list-style-type: none"> <li>1. Agricultural measures: cropping methods, cultivation methods</li> <li>2. Mechanical measures: terracing systems, terrace channels</li> <li>3. Irrigation facility: farm ponds and reservoirs</li> <li>4. Supporting measures: infrastructures, agro-industry, farmers'education, institutional cooperation</li> </ol>						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
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PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(M/P) This M/P has been utilized to formulate a farmland development project. In order to reinforce the DLD's capability to implement projects, it is planned to establish "Technology Introducing Center" at the DLD main office and "Soil and Water Conservation Center" at every regional office of DLD.</p> <p>(F/S) The Thai Government is implementing the pilot projects in 16 districts, which were proposed in this F/S, according to the priority given to each project.</p> <p>(1)Procurement of Agricultural Machinery and Machinery for Construction Subsequent Studies:B/D financed by the Japanese Government Finance:May 1991 E/N 320 mil. Yen (Project for Providing Equipment for Land and Water Conservation in the Eastern Thailand).</p> <p>(2)Construction of Pilot Areas Subsequent Studies:1992~1994 D/D Finance:RTG Budget (136.1 mil.Bahts) (The cost to construct 16areas is estimated 99.16 mil.Bahts (FY 1993 Overseas Survey) ) Construction:1993~1998 (FY 1996 Overseas Survey) 13 pilot areas have already been constructed. (FY 1997 Domestic Survey) Other 3 areas, are being constructed gradually by own fund. (FY 1997 Overseas Survey) As for 3 areas, construction is scheduled to be completed within FY 1998. *The data will be collected; 1.to prepare for technical criteria for land and water conservation 2.to manage land and water conservation works 3.to prepare for a manual on cultivation and soil management 4.for training on land and water conservation. The pilot areas will be maintained by Land Development Regional Office II. (FY 1998 Domestic Survey) Construction has been completed.</p> <p>(3)Land and Water Conservation Center Project in the Eastern Thailand Project-type Technical Cooperation:Jun.1993~Jun.1998 "Agricultural Land Conservation in East Thailand" (FY 1998 Domestic Survey) The following Technical Transfer was conducted by this project-type Technical Cooperation: (1) Formation of technical criteria for land/water conservation; (2) Management of land/water conservation works; (3) Preparation of manual on cultivation and soil management; and (4) Training on land/water conservation.</p>		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 207B/88

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Road Development in the Central Region		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Dept. of Highways	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Katahira & Engineers International Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Aug.1987 ~ Mar.1989 19month(s) ~		
<b>8. SITE OR AREA</b>	Central Region (26 changwats, including Bangkok; 104,000 sq.km, pop. 17 million)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt; 1)Trunk highway network (ML projects), 8 Links, total length:288.8km. Project No.ML-1 ~ ML-8</p> <ul style="list-style-type: none"> <li>- The increase of lanes and new highway construction are necessary in many places.</li> <li>- It will be necessary in the future to develop a road network with inter-city expressways.</li> </ul> <p>2)Supplemental road network (IM projects), 23 Links,total length:718.2km.</p> <p>Project No.IM-1 ~ IM-23</p> <ul style="list-style-type: none"> <li>- It will be necessary in the future to improve 85 routes (2,017km)</li> </ul> <p>3)Rehabilitation (RH projects), 8 Links, total length:206.8km</p> <p>Project No.RH-1 ~ RH-8</p> <p>4)Improvement of intersections 48 places</p> <p>The project cost 1)is the ML project and. 2)is the IM project.</p> <p>&lt;F/S&gt;1)Trunk highway network (ML projects) 7 projects, total length 320.3km</p> <p>ML-1:13.6km, ML-2:23.7km, ML-3:44.6km, ML-4:61.9km,ML-5:50.3km</p> <p>ML-7:40.9km, ML-9:81.7km</p> <p>2)Supplemental road network (IM projects)</p> <p>11 projects, total length 297.2km</p> <p>IM-1:18.7km, IM-2:35.9km, IM-11:40.7km, IM-12:51km, IM-13:17.8km</p> <p>IM-14:25.6km, IM-15:24.7km, IM-16:20.8km, IM-17:19.2km,IM-22:15.9km</p> <p>IM-23:26.9km</p> <p>3)Rehabilitation (RH projects) 3projects, total length 96.7km</p> <p>RH-2:39.7km, RH-3:17.9km, RH-5:39.3km</p> <p>4)Improvement of intersections</p>			

中央部道路網整備計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b>  15 routes out of 21 routes surveyed in F/S will be constructed with the OECF loan.  Subsequent Study: 1989~1995 B/D, D/D (IBRD, ADB, DOH)  Situation: (FY 1995 Overseas Survey) Most of the ML-project and IM-project were implemented as the national project and most of the construction works were completed.  (FY 1997 Overseas Survey) (1) ML project (Section, Fund/Amount mil.B, Completed year.month) ML-1 Chonburi Bypass OECF.DOH/215.7 1993.5 ML-2 Pattaya - Satta Hip DOH/375.4 1995 ML-3 A.Satta Hip - C.Rayong DOH/800.9 1995 ML-4 A.Klang - C.Chantaburi DOH/798.0 1996 ML-5 Chonburi - Pattaya OECF.DOH/1685.7 1994.6 ML-6 Pak Tho - Ratchaburi ADB.DOH/169.9 1995.5 ML-7 Minburi - Chachengsao DOH/1831.9 1994.1 ML-9 Bangkok - Chonburi OECF.DOH 1998.12  <ML-1/ML-5> Finance: Nov.1988 L/A 4,117 mil.Yen (Chonburi-Pataya Highway Construction Project Phase I) Sep.1991 L/A 5,670 mil.Yen(Chonburi-Pataya Highway Construction Project Phase II) *Contents of project/Widening of Chonburi bypass by 14m, Construction of road connecting Chonburi bypass and Pataya, Construction of five interchanges Construction: Aug.1990 ~ Dec.1996 Contractor/Kampangphetviwat, Thaiwat Engineering, Thaipipatana <ML-9> Finance: Dec.1990 L/A 15,497 mil.Yen (Bangkok-Chonburi Highway Construction Project Phase I) Sep.1993 L/A 13,631 mil.Yen(Bangkok-Chonburi Highway Construction Project Phase II) *Contents of project/Construction of Inter-city Highway connecting Bangkok and Chonburi (Total length 83km). Construction: Jun.1994 ~ May.1998 (schedule) Operation & Maintenance: (FY 1997 Domestic Survey) ML-9 was leveled up to City toll road. Toll plaza will be constructed in 1998 to utilize for two years. Consultant recommended to DOH the early establishment of M/P regarding to national toll system. Effect: (FY 1997 Domestic Survey) 1 or 1 and a half hour of time reduction between Bangkok~Chonburi~Pataya and increase of traffic are expected. <Outer Ring Road (Eastern area)> Nov.1998 scheduled to be completed  (2) IM project IM-3 B.Nong Ei Pang-B.Sam Chuk DOH/130.0 1995 IM-5 A.Lan Sak-B.Khao Chon Kan DOH/150.0 1995 IM-6 B.Thap Krit Klang-B.Phanon Rok DOH/76.7 1994.7 IM-7 K.A.Khok Charoen-B.Mai Samakki DOH/96.4 1994.9 IM-8 B.Lam Som Pung-Rt.2256 ADB.DOH/38.1 1994.10 IM-10 B.Rong Sung-Lopburi DOH/101.8 1994.8 IM-11 B.Channa Soot-A. Po Thong DOH/241.2 1992.12 IM-12 A.Po Thong-A.Sena DOH/400.5 1994 IM-13 A.Bang Pa In-Ayuttaya OECF.DOH/185.7 1991.1 IM-14 A.Thanyaburi-A.Wang Noi OECF.DOH/284.8 1998.8 IM-16 A.Lamlukka-B.Khlong Siphok OECF.DOH/305.1 1993.12 IM-18 Nakhon Nayok-A.Basang DOH/58.8 1995 IM-20 B.Pluang-Khao Lak Chang DOH/108.0 1995 IM-21 B.Nong Chang-J.R.3138 DOH/96.5 1994 IM-22 J.R.304-A.Bangnamprieo DOH/472.7 1995 IM-23 J.R.32-J.R.3022 OECF.DOH/159.0 1993.3  <Samut Prakan~Banga Hilly> (connect to RT.No.34 Bunke~Bunpakong toll road) Finance: Sep.1997 L/A ADB *Contents of Project/Up and down separate structure, 3 lanes for each side.Soft soil treatment  (3) RH project RH-1 B.Hang Nam-Chainat DOH/136.6 1993 RH-2 Nakhon Sawan-A.Chum Saeng DOH/162.8 1994.6		

**ASE    THA/S 208B/88**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Potential Tourism Development for the Southern Region	
<b>3. SECTOR</b>		Tourism / (Tourism in) General	
<b>4. TYPE OF STUDY</b>		M/P+F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Tourism Authority of Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Pacific Consultants International (PCI)	
<b>7. STUDY PERIOD</b>		Nov.1987 ~ Mar.1989 16month(s) ~	
<b>8. SITE OR AREA</b>		Phuket, Phangnga, and Krabi (Greater Phuket)	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;</p> <ul style="list-style-type: none"> <li>- Development of tourism resources Conservation of historical sites in Phuket; village tourism; Andaman Historical and Cultural Research Center; National park development; training center</li> <li>- Improvement of tourism infrastructure: Airport; water supply; roads; cruising route improvement urban development; tourism manpower training school</li> <li>- New resort complex: Thai Muang, Khok Kloi beach resort, Phuket Marine center</li> </ul> <p>&lt;F/S&gt;</p> <ol style="list-style-type: none"> <li>1) New resort complex: <ul style="list-style-type: none"> <li>- Thai Muang international beach resort base (5,000 hotel rooms)</li> <li>- Khok Kloi public beach development (1,000 hotel rooms)</li> </ul> </li> <li>2) Phuket marine center (100ha) <ul style="list-style-type: none"> <li>- Yacht harbor (200 berths for yachts and a basin for boats)</li> <li>- Marine hotel (200 rooms)</li> <li>- Marine center (restaurants, supermarkets)</li> </ul> </li> </ol>			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY 1996 Overseas Survey) Finance: Sep.1993 L/A 4,268 mil.Yen for the improvement of the social infrastructure to promote the tourism in four cities in the northern, southern and northeastern Thailand, and for D/D and the construction of Andaman Historical and Cultural Research Center.</p> <p>(1)Andaman Historical and Cultural Research Center (117,600,000 Bahts) Subsequent Study: Sep.1996~Jun.1997 D/D Consulting Firm / Team Consulting Engineers Co., Ltd. , PCI Study Cost / 9,207,500 Bahts Construction : (FY 1997 Overseas Survey) Apr.1998~Jul.1999</p> <p>(2)Por Bay Tourist Pier, Chalong Bay Tourist Pier (Improvement of Tourist Infrastructure) (Por Bay --35,916,700 Bahts, Chalong Bay -- 47,698,400 Bahts) Subsequent Study: (FY 1997 Overseas Survey) Mar.1997~Jan.1998 D/D, EIA Consulting Firm / Team Consulting Engineers Co., Ltd. , PCI Study Cost / 15mil.Bahts Finance: (FY 1997 Overseas Survey) Sep.1993 L/A 200mil.Bahts *Components Chalong Bay Tourist Pier (minor component from JICA's proposal) Situation: (FY 1997 Overseas Survey) The implementation was delayed because of the large project scale, economic deterioration and high land price. There is less possibility to implement Por Bay Project because the inland area is not enough and the land price is very high.</p> <p>Others: 1)TAT is compiling the summary of the study report in Thai. 2)TAT has been in cooperation with Royal Forest Department and Fine Arts Department to implement the following project: *Andaman Historical and Cultural Research Center (Krabi) *Training School for Tourist Industry (Phuket) *National Park Training Center (Phuket)</p> <p>(FY 1993 Overseas Survey) After the M/P report was submitted, TAT held the seminar for the related agencies. The Committee composed of related provincial authorities, TAT, FAD, etc. has been examining the project.</p> <p>(FY 1997 Domestic Survey) No information.</p>		



# STUDY SUMMARY SHEET

## (F/S)

ASE THA/S 321/88

<b>1. COUNTRY</b>	Thailand																																		
<b>2. NAME OF STUDY</b>	Project of the Regional Truck Terminals																																		
<b>3. SECTOR</b>	Transportation / Land Transportation																																		
<b>4. TYPE OF STUDY</b>	F/S																																		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Dept. of Land Transport (DLT), Ministry of Communications																																	
	<b>PRESENT COUNTERPART AGENCY</b>																																		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI)																																		
<b>7. STUDY PERIOD</b>	Jan.1987 ~ Jul.1988 18month(s) ~																																		
<b>8. SITE OR AREA</b>	Bangkok, Chiang Mai, Khon Kaen, Nakhon Sawan, Nakhon Ratchasima, Hat Yai/Songkhla																																		
<b>9. MAJOR PROPOSED PROJECT(S)</b>																																			
<p>Construcion of three truck terminals;</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Stage1(1991-1992)</th> <th style="text-align: center;">Stage2(1991-1992)</th> <th style="text-align: center;">area</th> </tr> </thead> <tbody> <tr> <td>1. Chaing Mai</td> <td style="text-align: center;">27berth</td> <td style="text-align: center;">18berth</td> <td style="text-align: center;">24,555sq.m</td> </tr> <tr> <td>2. Khon kaen</td> <td style="text-align: center;">30</td> <td style="text-align: center;">20</td> <td style="text-align: center;">27,246sq.m</td> </tr> <tr> <td>3. Hat Yai/Songkhla</td> <td style="text-align: center;">50</td> <td style="text-align: center;">45</td> <td style="text-align: center;">49,104sq.m</td> </tr> <tr> <td>Freight Volume Handled</td> <td style="text-align: center;">1996</td> <td colspan="2" style="text-align: center;">2006 (1000ton/year)</td> </tr> <tr> <td>1. Chaing Mai</td> <td style="text-align: center;">436</td> <td colspan="2" style="text-align: center;">667</td> </tr> <tr> <td>2. Khon Kaen</td> <td style="text-align: center;">661</td> <td colspan="2" style="text-align: center;">1,107</td> </tr> <tr> <td>3. Hat Yai/Songkhla</td> <td style="text-align: center;">840</td> <td colspan="2" style="text-align: center;">1,598</td> </tr> </tbody> </table> <p>Newly established joint venture company(limited com.) composed of the Government and private company operates terminal. One company is assigned each terminal.</p>					Stage1(1991-1992)	Stage2(1991-1992)	area	1. Chaing Mai	27berth	18berth	24,555sq.m	2. Khon kaen	30	20	27,246sq.m	3. Hat Yai/Songkhla	50	45	49,104sq.m	Freight Volume Handled	1996	2006 (1000ton/year)		1. Chaing Mai	436	667		2. Khon Kaen	661	1,107		3. Hat Yai/Songkhla	840	1,598	
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地方トラックターミナル整備計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended   Discontinued or Cancelled
<b>Description :</b>  Reasons for Delay or Suspension: The regional truck terminal and the Bangkok truck terminal are operationally complementary. In particular, the regional truck terminal becomes in use only if the Bangkok truck terminal is in operation. Thus, the delay in the construction of the Bangkok truck terminal has caused the delay in the implementation of this project.  Detail: Oct.1992 The Study on the Bangkok Truck Terminal Project was updated. The Thai government considers the Bangkok truck terminal project as one of measures to ease the traffic congestion in Bangkok and established the Truck Terminal Construction committee (Secretariat is in DLT) to promote the project implementation. The implementation of the regional truck terminal will be commenced after necessary arrangements are made to start the construction of the Bangkok truck terminal. In case the Bangkok truck terminal project is successfully implemented, the Thai government will apply various implementation methods used in the Bangkok truck terminal project to this regional truck terminal project such as the provision of public land, the use of the local fund, etc. A JICA expert has been dispatched to DLT since November 1988 and as of March 1993 he is working on the implementation of the truck terminal projects.  (FY 1995 Overseas Survey) Because the regional truck terminal will be in use only if the Bangkok truck terminal is in operation, the project implementation has been delayed. However, as the Bangkok truck terminal project has moved into the implementation, the regional truck terminal project has also moved into realization. The project is now integrated into the Eighth Five-Year Plan.  (FY 1996 Domestic Survey) While the construction of the Bangkok Metropolitan Truck Terminal has been determined, no progress has been made for the implementation of this proposed project, Regional Truck Terminal.  (FY 1997 Overseas FU Survey) The project is in the process of land acquisition. Only project in Nakhon Ratchasima Province(Korat) already finished land acquisition process. In fact other projects have been proposed by JICA to be implemented prior to Nakhon Ratchasima Project but the land acquisition process has not been achieved yet. To be sure that priority for project implementation of DLT will be changed to be started at Nakhon Ratchasima Province first. The project implementation will be done after completion of the Greater Bangkok Truck Terminal Project, which is scheduled to be completed in late of 1998. The JICA study on the Regional Truck Terminals Project is now not feasible because many factors in the proposed provinces are changed, especially, land price, location, and scale of the project. Many components of the proposed projects are currently under estimated.		

**ASE THA/S 502/88**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Topographic Mapping of Bangkok Metropolitan Area	
<b>3. SECTOR</b>		Social Infrastructure / Survey & Mapping	
<b>4. TYPE OF STUDY</b>		Basic Study	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Bangkok Metropolitan Administration(BMA)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		International Engineering Consultants Association Kokusai Kogyo Co., Ltd.	
<b>7. STUDY PERIOD</b>		Sep.1986 ~ Mar.1989 30month(s) ~	
<b>8. SITE OR AREA</b>		Bangkok Metropolitan Region	
<b>9. MAJOR PROPOSED PROJECT(S)</b>		<p>Aerial photography Bangkok Metropolitan Region 4,000 sq.km</p> <p>Topographic mapping Bangkok Metropolitan Area 2,000 sq.km (Scale:1/10,000)</p> <p>Topographic mapping Builtup Area of Bangkok 300 sq.km (Scale:1/4,000)</p>	

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**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

(FY 1996 Domestic Survey)

Although the counterpart of this project is BMA, Royal Thai Survey Development has been undertaking the operation and the produced materials have been kept there.

(FY 1996 Overseas Survey)

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. The Map needs to be updated and digitized. Thus, additional technical assistance is desired.

**ASE THA/S 604/88**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		City Planning Manual	
<b>3. SECTOR</b>		Social Infrastructure / Urban Planning & Land Development	
<b>4. TYPE OF STUDY</b>		Other Studies	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Dept. of Town and Country Planning(DTCP), Ministry of Interior	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Yachiyo Engineering Co., Ltd.	
<b>7. STUDY PERIOD</b>		Nov.1987 ~ Feb.1989 15month(s) ~	
<b>8. SITE OR AREA</b>		Major cities	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>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.</p> <p>The proposed center will be attached to the DTCP and work with the NESDB, 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&amp;D. Major facilities are seminar houses and dormitories.</p>			

PRESENT STATUS	In Progress or In Use
	Delayed
	Discontinued

**Description :**

Utilization of Outputs:

(FY 1997 Domestic Survey)

Outputs of the study are being utilized for urban planning.

(FY 1997 Overseas Survey)

The outputs of the study have been utilized for elaboration of the 8th National Economic and Social Development Plan.

(1) Construction of Training Center (15th-Story)

Finance:

Government Fund (Construction cost: 80 mil.Bahts)

\*It is planned to receive the assistance (equipment, facility) from the Ministry of Construction of Japan.

\*The Preparation to open the Center is made.

(FY 1997 Domestic Survey)

Project type technical cooperation.

(2) Others

(FY 1993 Overseas Survey)

The planning technique appeared in the manual has been utilized in various division of DTCP.

The Thai Government requested the Japanese government for the technical cooperation for the development study on the land re-adjustment project.

The land re-adjustment project, etc. have been in progress.

(FY 1993 Overseas Survey)

A JICA expert was dispatched to DTCP.

(FY 1997 Overseas Survey)

Rama 9 Land Readjustment Pilot Project has started in 1993.

**ASE    THA/A 103/89**

チャオピャ川流域水管理システムおよび監視計画

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>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.</p> <p>(1)Water Management System Project Finance: (FY 1999 Overseas Survey) JICA &amp; Thai Government 604 mil. bahts Implementation Period: 1999-2004 *Difference with JICA's proposal: Proposed project cost(786 mil.bahts) (FY 2000 Domestic Survey) The construction has not been commenced because of the lack of the local budget.</p> <p>(2)Telemetering and Data Communication System Finance: (FY 1999 Overseas Survey) Own fund 220 mil. bahts *Contents: D/D, installation of telemetering, and data communication system of the selected sites in Chao Phraya Basin. Impentation Period: 2000-2002 (FY 2000 Domestic Survey) D/D has been conducted, however, the construction has not been commenced because of the lack of the local budget.</p> <p>Project-Type Technical Cooperation Apr.1990~Mar.1997 "Irrigation Engineering Center Project Phase-II"</p> <p>*The telemetering monitoring system was introduced at the site proposed in the water management model project as a part of this Technical Cooperation.</p> <p>Situation: (FY 1996 Domestic Survey) The implementation of the monitoring system enables to conduct the flood watch by monitoring irregular water flow in the Chao Phraya River, etc. After the completion of this M/P, the Irrigation Engineering Center examined the proposals. As a part of water management system improvement project, the stream analysis at the upperstream, the irregular stream analysis in canals and the examination of the amount of irrigation water were conducted. Other proposed projects will be incorporated into related projects which are to be implemented with annual budget.</p> <p>(FY 1996 Overseas Survey) RID has the Third Country Training Programme on "Irrigation Systems for Sustainable Development ". The Course will be held once a year from FY 1996 to 2000, subject to annual consultations between both Governments. And RID has a request of the project-type technical cooperation named"Modernization of Irrigation and Drainage Systems Management for Sustainable Agricultural Development".</p> <p>(FY 1996 Domestic Survey) Concept of this M/P is utilized for improvement and rehabilitation of each system at Chao Phraya river basin. It is impossible to grasp the situation of each construction because whole area is vast.</p>	



# STUDY SUMMARY SHEET

## (M/P)

ASE    THA/S 105/89

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Telecommunications Development		
<b>3. SECTOR</b>	Communications & Broadcasting      / Telecommunication		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Telephone Organization of Thailand (Corporate Planning Office)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	NTT International Corporation		
<b>7. STUDY PERIOD</b>	Sep.1988      ~      Dec.1989 15month(s) ~		
<b>8. SITE OR AREA</b>	Whole area of the Kingdom Thailand		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>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.</p> <p>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.</p> <p>3.The outline of the 15-year telecommunications network expansion plan is as follows:</p> <p>1)switching systems:4,491 thousand switching line capacity,</p> <p>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.</p> <p>3)outside plant(OSP): local cables of 8,088 thousand pairs are to be expanded and</p> <p>4.1 billion Baht is required as for the rehabilitation of OSP.</p>			

国内電話網拡充長期計画

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

### Description :

\*Related Development Study

"Study on Regional Development Plan for Telecommunications

Networks in the Bangkok Metropolitan Area M/P+F/S (THA/S 214B/92)"

Apr.1990 Based on the suggestion made in M/P, the Thai government requested the Japanese government for the implementation of the study.

Jul.1991-Oct.1992 Implemented

Seventh Five-Year Expansion Plan (1992-96) BOT project

The Thai government has decided to adopt the BOT scheme to finance the plan and, subsequently, to undertake the smooth implementation of the project. Telecom Asia Co. will be in charge of two million lines in the Bangkok Metropolitan area and Thai Telephone and Telecommunications Co. will be responsible for one million lines in the provincial area.

This study suggested the future privatization of TOT in order to undertake the smooth implementation of telephone line expansion projects. It is said that the Thai government decided to apply the BOT scheme as the first step toward the privatization of TOT.

This study report has been utilized in the formulation of TOR to select the contractors as well as database.

(FY 1997 Overseas Survey)

Following projects are implemented or planned by TOT.

(1)The Rural Long Distance Public Telephone Project 1992-1996

Finance: ADB,TOT Bond

1.Stage I

To install the rural public telephone in 35,000 tumbols and 1,000 important places

--TDMA System

-3,509 stations have been installed completely.

-3,417 stations are already occupied.

--Satellite System

-500 stations(1,000lines)are occupied already.

2.Stage II

To install the rural public telephone for 25,000 lines

--The system have been completely founded in 4,003 tumbols and already occupied in 1,241 places.

--To install the systems in 1,884 tumbols(5 lines per tumbol) they have been installed completely in 1,584 tumbols and already occupied in 1,1176 tumbols.

(2)The Telephone Service Development Project 1995-1999

Finance:TOT,Jarkee

1.The Network Expansion Project of TOT 1995-1998

1-1.To Install Switching Equipment of Transit Exchanges with CCS.No.7 System (8 units in Metropolitan and 18 units in Provincial Areas)

--Currently, 8 exchanges and 10 units are occupied. Entirely, 9 exchanges and 11 units have been installed and dued in the inspection process.

1-2.To install Transmission Equipment of optical fiber and microwave equipment on SDH network(29 exchanges in Metropolitan Areas, 14 routes for optical fiber and 6 routes for microwave in Provincial Areas)

--In the procurement process.

2.Replacement of Analog to Digital System Project

2-1.Switching Equipment(to replace analog exchanges for 468,374 lines, to install new digital exchanges for 496,640 lines)

--92 exchanges, 287,744 lines have been occupied.

2-2.To improve the transmission equipments and replace the analog transmission systems that are PCMs and install Optical fiber in multimode for 24 routes in provincial areas.

--In the implementation process.

2-3.For the outside plants,link the existing cable to the new MDF

--In the implementation process.

3.The Rehabilitation Project 1995-1997

To improve and change all of the deteriorated cables,drop wires, cabinets and other equipments for 251,500 pairs-km both in the metropolitan and provincial area.

--127 exchange have been installed completely.(52.26% actived)

(3)The Short Term Telephone Expansion Project 1996-1998

Expansion of telephone lines by TOT(200,000 lines in metropolitan area and 600,000 lines in provincial area)

--In the implementation process

(4)The Rural Long Distance Public Telephone Project at the Village level 1996-1998

To install the rural public telephone on the coverage for 3 lines per village.

--This plan covered 43,000 villages and 2,000 significant places.TDMA systems have been installed in 1,845 villages. Satellite systems have been installed in 7,471 villages. TDMA,CDMA and WLL systems will be installed in the 15,311 villages.(In the procurement process)

--1,000 lines of NMT 470 MHz systems are in the renewal process.

--to install new cables in 4,790 villages

(5)The Personal Digital Cellular 1500 MHz Project

Phase 1/To provide services in metropolitan and surrounding area, installing 1 exchange and 182 radio base stations.

Phase 2/To install 1 new exchange and 137 radio base stations in the province with high density population.

Phase 3/To install 356,000 lines and add 279 base stations for expanding services to cover all provinces and the main highways throughout the country.

--In the process of ministry consideration(wait for decision from MOTC)

(6)The one-million telephone lines expansion Project 1998-2002

To expand basic telephone services(200,000 lines in metropolitan area and 800,000 lines in provincial area)

--In the process of cabinet considerations with telecom act.

(7)The Wireless Local Loop Service(WLL)

--In the process of cabinet considerations with telecom act.

Situation:

(FY 1996 Domestic Survey)

The implementation of the proposed projects will be decided in the BOT-financed projects.

(FY 1996 Overseas Survey)

TOT has been implementing proposed projects of M/P and Regional Development Plan, while taking situation, budget, etc. into consideration.

(FY 1997 Domestic Survey)

国内電話網拡充長期計画

**ASE THA/A 203B/89**

9. MAJOR PROPOSED PROJECT(S)			
<M/P>Major agricultural infrastructural development Projects:			
1. Short-term Plan (1990 - 1996)			
	No.of projects	Irrig.Area (ha)	Cost (mil.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
2. Medium-term Plan (1996 - 2006)			
Medium-size water storage	12	7,260	5,640
Small-size water storage	87	4,350	1,560
Small river diversion	40	2,600	1,040
Pump stations	41	4,030	1,560
Total	180	18,240	9,800
<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.			
Project	River Basin	Irrig.Area(ha)	Cost(mil. 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

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Although it was planned to implement the project during the period of the Seventh Five-Year Plan (1991-96), it has not been commenced due to the problems on designing or environment problems.  RID has various projects to be implemented. Because this is a relatively new project, the project implementation will be after 1997 at earliest.</p> <p>(FY 1996 Overseas Survey)  The reasons that the project was not undertaken during the period of the Seventh Five-Year Plan may be project's priority and lack of man power(engineer)in RID.</p> <p>Situation:  (FY 1996 Domestic Survey)  At present, five projects along Sebai basin and two projects along Sebok basin have been completed/implemented. Although some of the proposed projects of this Study may be incorporated into these projects, it can't be confirmed because the project names are changed once a while.</p> <p>(FY 1997 Domestic Survey)  RID has no schedule to materialize the proposed projects.  DECP is implementing pump irrigation (Con Chi Mung Project) by constructing regulator at a mouth of river.</p> <p>(FY 1997 Overseas FU Survey)  Proposed projects have been put in the list of the Five Year Plan of RID. Small-size irrigation project proposed by this study is being implemented by RID budget.  The project of the 5 medium scale sites are delayed because the result of JICA study showed that rate of economic return is very low. Only the small scale sites proposed by JICA study were implemented.  According to the report of Irrigation Regional Office 5 there are a number of local people do not agree with this project.</p> <p>(FY 1999 Overseas Survey)  Medium-size Water Storage Project is still suspended due to the land acquisition problem. In order to adapt the study to the changing socio-economic condition of the country, an update study will start from FY 2000.</p> <p>(FY 2000 Domestic Survey)  As for the small-size irrigation project, RID has been conducting the design, construction and management by themselves.</p>		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 209B/89

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Medium to Long Term Improvement/ Management Plan of Road and Road Transport in Bangkok		
<b>3. SECTOR</b>	Transportation / Urban Transportation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Bangkok Metropolitan Administration (BMA)Medium and long - term road plan Area within the, Outer Ring Road	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Yachiyo Engineering Co., Ltd. ALMEC Corporation		
<b>7. STUDY PERIOD</b>	Nov.1988 ~ Mar.1990 16month(s) ~		
<b>8. SITE OR AREA</b>	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>		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;</p> <p>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</p> <p>(2) Ordinary Roads (44 projects) 2) Bus-ways (13 projects)</p> <p>&lt;F/S&gt;</p> <p>(ATC)..... Improvement and expansion of the area traffic control system.</p> <p>1. Stage I 143 intersections</p> <p>2. State II 92 intersections (CUD).....Case Study</p> <p>1. Trunk line CUD.....1,200m 2. Supply line CUD.....700m</p>			

バンコク首都圏中・長期道路交通計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>&lt;M/P&gt; Upon the request of BMA, IECA dispatched a preliminary study team to undertake necessary studies in order to promote the bus way project. Based on the report of the IECA study, BMA intends to prepare an official request for the grant aid to implement the project.</p> <p>&lt;F/S&gt; (1)ATC 1.Stage I Subsequent Studies: Mar.- Nov.1990 D/D and preparation for tender documents conducted under the JICA study "Area Traffic Control Project in Bangkok". Finance: Australia (FY 1997 Domestic Survey) Construction: Oct.1995 Installation scheduled was completed (expanded from the proposed 143 intersections to 146 intersections) 2.Stage II Subsequent Studies: Jun.1996 D/D scheduled was commenced (expanded from the proposed 92 intersections to 226 intersections) Finance: Australia (FY 1997 Domestic Survey)</p> <p>(2)CUD Finance: Australia (FY 1997 Domestic Survey)</p> <p>(3)Exclusive Road for Automobiles The construction of an exclusive road for automobiles utilizing San Saep Canal, as proposed in the Road Network Plan, has been decided to be implemented with BOT scheme. The negotiation with interested private contractors are now in progress.</p> <p>(4)Bus Way The project has not been implemented, however, the introduction of bus-lanes has been carried out.</p> <p>(5)CUD (FY 1994 Domestic Survey) The study results of CDU have been widely utilized. (FY 1995 Overseas Survey) The preliminary study has been undertaken by a Japanese consulting firm.</p> <p>Detail (FY 1993 Overseas Survey) Jun.1991- Mar.1994 Dispatch of a JICA expert This M/P was utilized to formulate "Fourth Development Plan of BMA". Many of the proposed projects have been implemented. (FY 2000 Overseas Survey) M/P review study is conducted.</p>		

**ASE THA/S 210B/89**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Provincial Water Supply Projects	
<b>3. SECTOR</b>		Public Utilities / Water Supply	
<b>4. TYPE OF STUDY</b>		M/P+F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Provincial Waterworks Authority	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Nippon Jogesuido Sekkei Co., Ltd.	
<b>7. STUDY PERIOD</b>		Jul.1988 ~ Mar.1990 20month(s) ~	
<b>8. SITE OR AREA</b>		Patum Thani & Prachatipat, Phuket, Su Ngai Golok	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;</p> <p>(1) Patum Thani &amp; 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>&lt;F/S&gt;</p> <p>(1)Patum water &amp; Prachatipat; Phase I: Raw water intake, water treatment plant(141,500cu.m/day), 8 distribution reservoirs(47,250cu.m), distribution and transmission pipelines</p> <p>Phase II: Raw water intake, water treatment plant, distribution reservoir and pipeline</p> <p>(2)Phuket; Phase I: Khlong Bang Yai area, coastal resort area</p> <p>Phase II: 3 other systems</p> <p>(3)Su Ngai Golok; Raw water intake ,treatment plant(9,400 cu.m/day), distribution reservoirs and transmission pipeline</p>			

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b>  (1) Patum Thani & Prachatipat Subsequent Studies: Dec.1993~May 1995 F/S review study financed by ADB grant aid in order to assess the possibility to privatize the project. D/D scheduled to be implemented with PWA's own fund (FY 1993 Overseas Survey) *The name of the Project "Patum Thani & Prachatipat" was changed to "Patum Thani & Rangsatt" Project. The privatization of this project was decided and its contractor has been pointed out. However, due to the unclear procedure in the process of the contraction, the Ministry of Interior has refused to accept the decision (Sep.1995). Under the privatization, this project will be implemented that a private sector undertakes the intake and purification of water and PWA purchases the purified water. Finance: (FY 1997 Overseas Survey) BOT Construction: Contractor/ Pathum Thani Water Co., Ltd. *Contents: construction of raw water intake, treatment plant and facilities, water storage reservoirs and pumping stations and distribution mains (FY 1997 Overseas Survey) Mar.1998 to be completed. (FY 1999 Overseas Survey) Oct.1998 Completed Technical Assistance: (FY 1997 Overseas Survey) Sep.~Dec.1997 Study was conducted to assess the privatization of distribution system, granted by the World Bank.  (2) Phuket Subsequent Studies: Dec.1993~May 1994 F/S review study financed by ADB grant aid in order to assess the possibility to privatize the project *In June 1995, the privatization of the project was decided. However, it is unknown how the privatization will be promoted. (FY 1995 Overseas Survey) Finance: (FY 1997 Overseas Survey) BOT (now in process of selection of investor) (FY 1999 Overseas Survey) BOT scheme was cancelled in 1998 due to the nonresponsiveness of the investors. However, in order to cope with the increasing demand for water supply, PWA signed a 10-year BOO contract with Require Construction Ltd. in Nov. 1999, to provide 10,000m3 per day of water supply to serve the people at Patong, Kata and Karon areas. Construction: (FY 1999 Overseas Survey) ~Oct.2000 Under construction  (3) Su Ngai Golok Subsequent Studies: 1994~1995 D/D with own fund of PWA Finance: Government budget (in FY 1995 103.41 mil.Bahts) *It is at the stage of tender (FY 1995 Overseas survey) Construction: (FY 1999 Overseas Survey) Jul.1996~Dec.1998 Completed Contractor/ M.Consolidated Co., Ltd. *Contents: construction of raw water intake, 400 m3/hr. treatment plant, 4000m3 clear water tank, clear water pumping house, raw water transmission pipeline, distribution pipeline(20.5km)  (4) Thung Soung Subsequent Studies: 1996 D/D scheduled to be implemented with the government fund (75%) and the PWA fund (25%). (Consulting firm: Local Consultant)  Finance: 75% of the project cost will be financed by the government budget (in 1996 98.82 mil.Bahts) and the remaining 25% will be funded by PWA. FY 1998 Government subsidy 101.352mil.Bahts (FY 1997 Overseas Survey) Tender shall be carried out. Construction: Contractor: Charoensangmanee Partner, Ltd. *Contents: construction of raw water intake, 300m3/hr. treatment plant, 2,500m3 clear water tank, water pumping house, transmission main(19km), distribution pipeline(18.5km) (FY Overseas Survey) Sep.1998~Mar.2000 85% of the construction work has completed. Installation of pumping system only remains.		



# STUDY SUMMARY SHEET

## (F/S)

ASE    THA/A 313/89

<b>1. COUNTRY</b>	Thailand														
<b>2. NAME OF STUDY</b>	Agricultural Water Development Project on Chantaburi River Basin														
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General														
<b>4. TYPE OF STUDY</b>	F/S														
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation Department, Ministry of Agriculture and Cooperatives (MOAC)													
	<b>PRESENT COUNTERPART AGENCY</b>														
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc. Pacific Consultants International (PCI) NHK Integrated Technology														
<b>7. STUDY PERIOD</b>	Mar.1988      ~      Jul.1989 16month(s) ~														
<b>8. SITE OR AREA</b>	Chantaburi River Basin (East Coast)														
<b>9. MAJOR PROPOSED PROJECT(S)</b>															
<p>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.</p> <p>1. Storage Dams:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Type</th> <th style="text-align: left;">Cap.(cu.m)</th> <th style="text-align: left;">Dam Height(m)</th> <th style="text-align: left;">Embankment(cu.m)</th> </tr> </thead> <tbody> <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: homogeneous earth</td> <td>10.55</td> <td>16.2</td> <td>571,000</td> </tr> </tbody> </table> <p>2. Diversion Weir: water intake 3.5 cu.m/sec.</p> <p>3. Water Conveyance Pipeline: Length 111.6km, dias. 350mm - 1,600mm</p> <p>4. Main Pumping Stations: 3 places (dia.150mm, 200mm, and 250mm)</p>				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: homogeneous earth	10.55	16.2	571,000
Type	Cap.(cu.m)	Dam Height(m)	Embankment(cu.m)												
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Khlong San Sai Dam: homogeneous earth	10.55	16.2	571,000												

チャントブリ川流域農業水利開発計画

PRESENT STATUS	<p>Completed or In Progress</p> <p>Completed</p> <p>Partially Completed</p> <p>Implementing</p> <p>Processing</p>	<p>Promoting</p> <p>Delayed or Suspended</p> <p>Discontinued or Cancelled</p>
<p><b>Description :</b></p> <p>(1)Khlung San Sai  Subsequent Studies:  1994 D/D commenced  Finance:  Own fund 273 mil.B  Construction:  1994 Commenced  1997 completed  Construction Traider / Local Traider  Operation &amp; Maintenance:  RID is in charge.  Effects:  (FY 1999 Overseas Survey)  The stored water have been released for farmers since 1999. It is apparent that the demand to use water is very high.</p> <p>(2)Khlung Ta Liu  Subsequent Studies:  (FY 1996 Domestic Survey)  A part of the targeted area is classified as 1a district, for which the restriction on land use is imposed. Thus, it is considered that the study review should be implemented.  (FY 1997 Domestic Survey)  D/D and EIA have been implemented by RID (95% has been completed)  (FY 1997 Overseas Survey)(FY 1999 Overseas Survey)  F/S Review is being conducted.  (FY 2000 Domestic Survey)  D/D has been completed, however, the construction has not been commenced because the part of the targeted area was designated as the preservation area for wildlife by the Forest agency.</p> <p>Detail:  (FY 1991 Overseas Survey)  The project is integrated into the Seventh National Development Plan (1992-1996).  (FY 1997 Domestic Survey)  Implementation of remaining project is not clear because of budget squeeze resulted from economic confusion.</p>		

**ASE THA/S 322/89**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		Purification of Klong Water in Bangkok
<b>3. SECTOR</b>		Public Utilities / Sewerage
<b>4. TYPE OF STUDY</b>		F/S
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department Drainage and Sewerage, Bangkok Metropolitan Administration
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		Pacific Consultants International (PCI) Tokyo Engineering Consultants Co., Ltd.
<b>7. STUDY PERIOD</b>		Dec.1987 ~ Feb.1990 26month(s) ~
<b>8. SITE OR AREA</b>		Bangkok City Study Area 380 sq.km Population 3.7 milion
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
<p>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.</p> <p>Aerated lagoon treatment of Klong water in two regulating reservoirs to realize a net pollution load reduction and to abate water quality deterioration of the Chao Phraya River by the dilution water introduction.</p>		

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1)Rehabilitation of Pump Station, Dredging of Major Klongs, Embankment along the Klongs. Installation of aerator in Klongs, etc. (the covered area is 380km2). Two JICA experts were dispatched to the counterpart agency to promote the project implementation. Subsequent Studies: 1993~1994 D/D (BMA fund) Finance: Own Fund 318 mil.Bahts Construction: 1994~1997</p> <p>(2)Construction of Masakan Pond and Lama IX Pond Lagoon Subsequent Studies: 1992~1993 D/D Study Cost/15 mil.B (government budget) Finance: 1992 Government budget 318 mil.Bahts Construction: (FY 1996 Overseas Survey) Expected to be completed in 1997 . * JICA provided the aerators to be installed in the ponds.</p> <p>Maintenance &amp; Operation: DDS is in charge.</p> <p>Effects: (FY 1999 Overseas Survey) The most important effect was the improvement of water quality of klong water in Bangkok City. The removal of the color of klong water and its strog odor in dry seasons were effectively improved. Use of klong water for living has increased.</p> <p>Remaining Project: (FY 1997 Overseas Survey) Operation system and monitoring of water quality.</p>		

# STUDY SUMMARY SHEET

## (F/S)

ASE THA/S 323/89

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Measures to Promote the Container Handling System through Laem Chabang Port		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	OESB, NESDB, NOTC, PAT, SRT, BSAA	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI) Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Mar.1988 ~ Jul.1989 16month(s) ~		
<b>8. SITE OR AREA</b>	Bangkok and Laem Chabang		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Construction of an inland container depot(ICD)</p> <p>(Long-term) a 48ha ICD including 6 CFSs for handling 2.1 million tons of container cargo in 2001. (6 berths)</p> <p>(Short-term) a 32ha ICD including 4 CFSs for handling 1.3 million tons of container cargo in 1996.</p> <p>Stage 1: container berth 2, break-bulk berth 1, agri-bulk loading facilities (total 4 berths)</p> <p>1)Facilities in each ICD: container freight station, container yard, container handling machines, gates, office, maintenance repair shop, parking space.</p> <p>2)Administration Zone: main office 1,200sq.m, overtime cargo warehouse 2,100sq. m</p> <p>3)Spur Line: The Lat Krabang ICD will be connected to the Eastern Line. (radius at least 300m, length 500m)</p>			

ラムチャバン港輸送施設計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting   Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies:          1993-1994 D/D financed by the Thai government          (Site area was increased to 100ha)</p> <p>Finance:          Own fund          land Acquisition Cost : 939 mil.Bahts          D/D : 37 mil.Bahts          Construction Cost : 874 mil.Bahts          Operation Cost : 7 mil.Bahts          Total : 1,857 mil.Bahts</p> <p>Construction:          (FY 1995 Overseas Survey)          The construction of ICD including six CFSs, proposed in the long-term plan, was completed.</p> <p>Impact of Phase I          (FY 2000 Overseas Survey)          After the completion of the phase I project, the volume of container transshipment was exceeding the anticipated volume by JICA study, which is 400,00-600,000 TEU. The growth in facilitating container was steadily increased approximately 20-30% per year.          Recently, the Ministry of Transportation has targeted to facilitate transshipment at 1,000,000 TEU.          The number of facilitated container is 106,703 in 1996, 291,295 in 1997, 439,661 in 1998, 581,078 in 1999, and 769,094 in 2000.</p> <p>Hereafter          (FY 1995 Overseas Survey)          The operation of four out of six constructed CFSs will be started from January, 1996. The operation, including the procurement of equipment, is planned to be handled by a private company (ICFS).</p> <p>(FY 2000 Overseas Survey)          Although phase I project shows a highly satisfied figure, internal and external transportation are lacked. It is necessary to construct the routes such as Chao Khun Taharn, Bangplec, Meanburi, Interchange linking with motorway.</p> <p>Detail:          SRT is now in charge of the construction of ICD and has obtained the permission to construct it in Lard Krabang area. However, the increase of land prices has caused the project delay.</p> <p>(FY 1991 Overseas Survey)          SRT is planned to review the number of ICD to be constructed. This is because a private company started the operation of IDS closed to the project site.</p> <p>(FY 1995 Overseas Survey)          It is planned to construct a truck terminal adjacent to the project area.</p> <p>(FY 1997 Overseas Survey)          Phase 2 Stage 1 of port construction has been started in Nov.1997 and scheduled to completed in Feb.2001.          Consulting Firm / PATD          Contractor / Italian-Thai Development Co.          (fund from government budget and international loan)</p>		

**ASE THA/S 106/90**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Traffic Operation Plan for Roads	
<b>3. SECTOR</b>		Transportation / Road	
<b>4. TYPE OF STUDY</b>		M/P	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Highways Ministry of Transport and Communications	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Central Consultant, Inc. Oriental Consultants Co., Ltd.	
<b>7. STUDY PERIOD</b>		Feb.1989 ~ Jun.1990 16month(s) ~	
<b>8. SITE OR AREA</b>		All trunk roads managed by DOH	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
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  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  The above project cost is 8,105.6 (local cost: 7,855.6 and foreign cost: 250.0) in million bahts.			

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 1995 Overseas Survey)</p> <p>The newly introduced computer-networking system enabled the implementation of the proposed projects 1)Introduction of Traffic Census System, 2)Introduction of Traffic Information System, 3)Introduction of Road Inventory System and 4)Technical Guideline and Engineering Specification of Traffic Safety and Traffic Control Devices. However, no progress has been made concerning the organizational restructuring suggested by the JICA study.</p> <p>Detail</p> <p>Mar.-Nov.1991 Implementation of "Traffic Operation Plan for Roads (follow-up) (1991)"</p> <p>Based on this study result, the 1991 study aimed at the formulation of the effective projects on the traffic safety and the traffic operation and their implementation. The improvement of 24 intersections, the improvement of six road sections and the enactment of measures to protect the safety of pedestrians at 29 road sections were proposed.</p> <p>(FY 1992 Overseas Survey)</p> <p>Integrating the recommendations made in M/P, the Seventh Five-Year Road Improvement Plan (Oct.1991-Sep.1996) was formulated. Approximately 2,400 mil.Bahts was allocated to the traffic safety projects.</p> <p>(FY 1993 Overseas Survey)</p> <p>DOH established the Road Research and Development Center where few DOH staff are engaged.</p>	



**ASE THA/S 107/90**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		Upper Central Region Study
<b>3. SECTOR</b>		Development Plan / Integrated Regional Development Plan
<b>4. TYPE OF STUDY</b>		M/P
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National/Economic and Social Development Board (NESDB)
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		International Development Center of Japan (IDCJ) Pacific Consultants International (PCI)
<b>7. STUDY PERIOD</b>		Dec.1988 ~ Jul.1990 19month(s) ~
<b>8. SITE OR AREA</b>		Ayutthaya, Saraburi, Lopburi, Angthong, Singburi, and Chainat Area=16450 s.km, Population = 3740000(1987)
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
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)		
* Project costs above were not calculated.		

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

The project area was designated as the target area in the Seventh National Economic and Social Development Plan commenced in October 1991 and the proposed projects has been integrated into it.

To promote the implementation of "Greater Saraburi Industrial Core Development Package" which is one of the high priority projects proposed by this M/P, the Thai government established the interministerial committee.

This area is a prime target area for Decentralization Policy in the present Eighth National Economic and Social Development Plan.

(1)Integrated Pasak River Basin Development

1.Pasak Dam Development

Jul.1992-Jul.1993 F/S by RID with the Government fund  
(FY 1991 Overseas Survey)

Consulting Firm / TEAM Co., Ltd.

Finance:

(FY 1997 Overseas Survey)

May.3.1994 Government budget 18,500mil.Bahts

\*Contents: Construction, railway, road, heritage conservation

Construction:

(FY 1997 Overseas Survey)

1994~2002 (Dam construction is to be completed in 1999)

2.Environmental Monitoring and Management Project

(FY 1996 Overseas Survey)

Small group training has been conducted in Ayuthaya as a pilot project.

Foreign assistance is desired because the public and private sectors, including NGO, must coordinate among them to give environmental information to local population for better understanding and awareness of environmental crisis. Besides, management of people's organizations should be underlined to enable the people to solve the problems by themselves through effective and appropriate technologies.

(2)Greater Saraburi Industrial Core Development

1.Suphan Buri-Talua-Sara Buri Highways

(FY 1994 Domestic Survey) Construction completed with the local fund.

2.Klong Sip Kao-Kaeng Khoi Railway

Feb.1990 L/A 8,158 mil.Yen

(Klong Sip Kao-Kaeng Khoi Railway Project)

(FY 1996 Overseas Survey) The construction was completed.

3.Sara Buri Industrial Estate

(FY 1994 Domestic Survey) Completed by the local fund.

(3)Agro-Industrial Linkage Development Package (6 projects)

1.Agricultural Cooperative Development

(FY 1999 Overseas Survey)

On-going.

2.Agricultural Products Distribution Center

(FY 1999 Overseas Survey)

Small market places have been developed.

3.Distribution Center Complex and Agro-Industrial Park

(FY 1999 Overseas Survey)

The development is slowly proceeding.

4.Secondary Order Center

(FY 1999 Overseas Survey)

On-going process

5.Pasak River Collector Roads

(FY 1999 Overseas Survey)

Completed by local fund.

6.Agro-tech Center

(FY 1999 Overseas Survey)

Only small units have been developed.

(4)Human Resources Development Package (3 projects)

1.Pilot Project of Compulsory Secondary Education

(FY 1999 Overseas Survey)

The principle of compulsory education has just been put in the National Educational Development Act.

2.Strengthening of Provincial Non-formal Education Center

(FY 1999 Overseas Survey)

On-going.

3.Audio-Visual System Development

(FY 1999 Overseas Survey)

On-going.

中央平原北部地域総合開発計画

**ASE THA/S 108/90**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Development of Pattaya Area	
<b>3. SECTOR</b>		Development Plan / Integrated Regional Development Plan	
<b>4. TYPE OF STUDY</b>		M/P	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Office of Eastern Seaboard	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd. Yachiyo Engineering Co., Ltd.	
<b>7. STUDY PERIOD</b>		Mar.1989 ~ Jul.1990 16month(s) ~	
<b>8. SITE OR AREA</b>		Pattaya Municipality (53.4 sq.km)	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
(1) South Pattaya land reclamation: Land reclamation plan of total area of 19ha. (2) Port facilities: Construction of berth for tourist boat, terminal buildings, berth for hydrofoil and boat yard. (3) Pattaya beach restoration: Beach expansion plan. (4) Ta-Van pier: Construction of pier in Ta-Van beach, Kolan island. (5) Sewerage project: Emergency improvement plan in Na Klua area and Jomtien area and expansion and improvement of existing facilities in Pattaya city area. (6) Rainwater drainage project: 4 plans for improvement or constructions projects. (7) Water supply project: 2 stages development plans based on the water demand. (8) Solid waste disposal project: Construction of final disposal field. (9) Road project: Expansion and improvement of Pattaya 3 roads.			

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

(1)South Pattaya Land Reclamation, (2)Pattaya Tourist Port, (3)Pattaya Beach Restoration

(FY 1997 Overseas Survey)

Subsequent Study:

1993~1994 F/S, D/D, EIA

Consulting Firm / TEAM, Scott Wilson Kirkpatrick, ASDECON

Study Cost / Government budget 60.5mil.Bahts

\*Difference with JICA's proposal: National Environmental Board has approved only 18.79 Rai for land reclamation area instead of 120 Rai proposed by JICA due to environmental concerns.

The project must be approved by the National Environmental Board. EIA process delays the project.

Finance:

(FY 1998 Domestic Survey)

Own fund

(FY 1999 Overseas Survey)

Oct.1999 Government budget(400 mil. bahts)

\*Contents: South Pattaya land reclamation, Construction of pier for tourist boat and tourism facilities

Construction:

(FY 1998 Domestic Survey)

A pier for sightseeing boats (proposed by JICA) was constructed.

Contractor: local contractor

Situation after the completion:

(FY 1998 Domestic Survey)

It has become safe to get on and off the boat going to Ko Lan Island, and congestion of the boats at the beach has been alleviated.

(FY 2000 Domestic Survey)

The construction of the sewage system gave the ratchet effect on the ocean water pollution and the number of tourists became increasing.

(4)Ta Van Pier, (9)Pattaya 3 Road

(FY 1997 Overseas Survey)

Subsequent Study:

1993~1994 F/S, D/D

Consulting Firm / PAL Consultant, Index International Group

Study Cost / 20.4mil.Bahts

Finance:

(4) 1994 Government budget 68.5mil.Bahts

(9) 1995 Government budget 234.7mil.Bahts

Construction :

(4)1994~1998

Contractor / U.C.D.International

Although PWD was responsible for the construction, the project was transferred to Pattaya City for management. The completion of the project has provided safety in embarking and disembarking a ship and, consequently, facilitates tourism.

(9)1995~1997

Contractor / Namprasert Construction

It is expected to mitigate traffic congestion, enhance safety and promote tourism.

(5)Sewerage Project

(FY 1997 Overseas Survey)

Subsequent Study:

F/S, D/D (Pattaya City, Pollution Control Department)

Finance:

1997 Environment Fund 1,799.45mil.Bahts

\*Components

Construction of drainage, sewerage (137,500m3/day)

Construction:

1997~1999

Contractor / Summit Grade Ltd.

(6)Rainwater Drainage Project

(FY 1997 Overseas Survey)

Finance:

1992 Government budget 310.7mil.Bahts

\*Components

Na Jomtien Rd, Pratumnak Rd and Pattaya Canal (Soi Kasemsuwan), Potisarn Rd rehabilitation to improve drainage system.

Construction:

1992~1995

(FY 1996 Overseas Survey)

Pattaya City was responsible for the construction and is in charge of management after completion. Road condition has been improved and flood problems have been mitigated.

(7)Water Supply

(FY 1997 Overseas Survey)

Subsequent Study:

1986~1987 F/S (Provincial Waterworks Authority)

パタヤ地区総合開発計画

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/A 204B/90

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Agricultural Water Resources Development Project of Bang Pakong River Basin		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation Department, Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc.		
<b>7. STUDY PERIOD</b>	Sep.1989 ~ Sep.1990 12month(s) ~		
<b>8. SITE OR AREA</b>	M/P for Tha Lat River Basin, Chachoengsao Providence. F/S for Bang Pakong River Basin which encompasses four Provinces of Chonburi, Chachoengsao, Nakhon Nayok and Prachinburi		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
M/P (target year: 2000) 1. 1st Stage: 3 sub-basins, 2 storage dams, 2 diversion weirs, agri.land dev.46,400ha 2. 2nd Stage: 2 sub-basins, 2 storage dams, agri.land dev. 66,400ha 3. 3rd Stage: 8 sub-basins, 9 storage dams, agri.land dev. 294,400ha  The feasibility study was undertaken on the most downstream area(Tha Lat River Basin) next to the Bangkok Economic Sphere. Bang Pakong River is a tidal river, and it is impossible to utilize river water in the downstream areas during the dry season because of the rising sea water.  1) Stage I : 14,300ha Bang Pakong River-mouth Diversion Weir: length 170m, 5 gates (span 30m x height 10.6m) Pumping Station: 17 cu.m/s, dia.1,500mm, 4 pumps Main irrigation canals: left bank main 12km, right bank main 24km, other 0.7km Drainage canals: 14km 2) Stage II : 28,200ha Klong Si Yat Storage Dam: 396 million cu.m Tha Lat diversion weir: length 33.5m, rehab. of rubber-type gates Tha Lat irrigation dev.: rehabilitation of main (44km) and secondary canals Si Yat irrigation dev.: construction of main (45km) and secondary canals			

バンパコン川流域農業水利開発計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

It is an urgent need to secure water sources both for irrigation and for industrial and domestic use in the Bangkok Metropolitan area.

(1)Construction of Bang Pakong River-Mouth Diversion Weir

Subsequent Studies:

1992 D/D (JICA)

"Bang Pakong Diversion Dam Project (THA/A 402/93)"

80% of the project site has been acquired.

(FY 1993 Overseas Survey)

Finance:

Own fund (240M/M:105 M/M for foreign currency and 135M/M for local currency--Total 132 mil.Bahts)

Construction:

Oct1996 started.

Nov.1999 completed (FY 1999 Domestic Survey).

Contractor/J.V of Nishimatsu Construction and Itar Thai

(FY 1998 Domestic Survey)

Operation and Management: RID will be in charge.

Effect: Effects on agriculture, fishery, industry, and water supply are expected.

\*Refer to "Bang Pakong Diversion Dam Project (THA/A 402/93)" for detail.

(2)Klong Si Yat (construction of dam and agricultural development)

Subsequent Studies:

(FY 1993 Overseas Survey)

1992~1994 D/D (RID)

1994~1995 EIA (RID)

Finance:

Government budget 4,016mil.Bahts (land acquisition is not included)

Construction:

<Whole Project>

1994~2002

<Construction of Dam>

Oct.1996 started

Dec.1999 scheduled to be completed (As of the end of 1997, 30% has been completed)

Construction Traider / Saga Construction (FY 1996 Overseas Survey)

(FY 1999 Overseas Survey)

Si Yat Dam: Construction of 95% has completed.

Irrigation & Drainage System: 15% was developed.

(3)Thandan Dam

Oct.1996 D/D (FY 1996 Domestic Survey)

(FY 1998 Domestic Survey)

Finance: Own fund

Project period: 1997 ~ 2003, Budget: 10,193 MB

Construction: 1999 ~2003, Budget: 8,400 MB

(4)Klong Luang Dam

(FY 1998 Domestic Survey)

EIA is underway with own fund. If it is feasible, D/D will be started.

(5)Huai Srmeang Dam

(FY 1998 Domestic Survey)

D/D is underway.

(6)Huai Khrai Dam

(FY 1996 Domestic Survey)

This dam was decided unfeasible. No plan has been made for implementation.

(7)Klong Nong Kaew Dam

(FY 1998 Domestic Survey)

F/S is underway.

(8)Phraprong Dam

(FY 1998 Domestic Survey)

Preliminary F/S is underway.

(9)Lanphrayathan Dam

(FY 1998 Domestic Survey)

EIA is underway.

(10)Sainoi-Saiyai Dam

(FY 1998 Domestic Survey)

バンパコン川流域農業水利開発計画

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE    THA/S 211B/90

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Sewerage and Drainage Improvement Project for Phuket Municipality		
<b>3. SECTOR</b>	Public Utilities / Sewerage		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Public Works Authority Ministry of Interior	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Jagesuido Sekkei Co., Ltd. Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jul.1989    ~    Aug.1990 13month(s) ~		
<b>8. SITE OR AREA</b>	Phuket Municipality, Thailand		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;1.Sewerage:</p> <p>1)Designed Population: 78200 (Year 2006)</p> <p>2)Designed Sewage Flow: 34500 cub.m/D (Daily Average)</p> <p>3)Treatment Method: Oxidation Ditch Method, Drying Bed</p> <p>4)Outline of Facilities: Length of Sewer: 41.1km Pump Station : 10    Treatment Plant: 1</p> <p>2.Flood Control (Urgent Plan):</p> <p>1)East Flooding: Length = 4.3km, Width = 13km, Excavation = 1500 thousand cub.m</p> <p>2)River Improvement in the Town:</p> <p>Excavation: 33800 cub.m/ 1.3 km</p> <p>Embankment: 74400 cub.m/1.7 km ; Revetment: 0.8 km</p> <p>Bridge Construction: 6</p> <p>Others: Road-side U-shaped, Drain Improvement</p> <p>&lt;F/S&gt; 1)Sewerage:</p> <p>-Target Year : 2001 -Designed Population : 29600</p> <p>-Designed Sewage Flow: 18300 cub.m/D (Daily Average)</p> <p>-Outline of Facilities: Length of Sewer: 14.3km Pumping Station: 4    Planed Treatment: 4</p> <p>2)Flood Control:</p> <p>-East Flooding: Length = 3.4km, Width = 11m, Excavation = 442 thousand cub.m</p> <p>-River improvement in the Town: Excavation: 18400 cub.m Revetment : 10470 cub.m    Bridge Reconstruction: 6</p> <p>The implementation period for flood control component is four years.</p>			

プーケット市下水排水改善計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting   Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY 1991 Domestic Survey)  Phuket Island is well known in the southern part of Asia not only in Thailand. The pollution caused by the underdevelopment of sewerage becomes an serious problem. The urgent implementation of the project is expected.</p> <p>Subsequent Studies:  Aug.1994~Apr.1995 D/D financed by PWA fund (11.3 mil.Bahts)</p> <p>Finance:  (FY 1997 Overseas Survey)  May.1994 388.42mil.Bahts (PWA budget)</p> <p>*Contents  Drainage, Wastewater Sewer Treatment Plant  Service area is 4km2 (JICA proposed service area of 12km2)</p> <p>Construction:  Apr.1995 Commenced  Nov.1996 Completed  Consulting Firm / Progress Technology Consultant, Act Consultant  Contractor / Phuket Consortium</p> <p>Detail:  (FY 1993 Overseas Survey)  PWA will implement the project with the turn-key contract. PWA's budget constraints caused the reduction of designed sewage flow from the JICA proposal.</p> <p>(FY 1997 Overseas Survey)  Phuket city is declared as water pollution control area by Ministry of Science, Technology and Environment.  Further countermeasure is to be taken by the municipality under MOSTE supervision.</p> <p>Details after completion of the construction:  (FY 1999 Overseas Survey)  The municipality of Phuket will start the second project for total service area of 12km2 using budget of Ministry of Science, Technology and Environment.</p>		



# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 212B/90

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Bangkok Solid Waste Management		
<b>3. SECTOR</b>	Public Utilities / Urban Sanitation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Bangkok Metropolitan Administration (BMA) Department of Public Cleaning (DPC)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	EX Corporation Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Dec.1989 ~ Mar.1991 15month(s) ~		
<b>8. SITE OR AREA</b>	Bangkok Metropolitan Administration Area		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<M/P>			
1.1 Construction of Sanitary Landfill at Ram Intra a)Place: A burrow pit at Ram Intra, b)Capacity: 1830000ton c)Area: 15 ha., d)Construction Cost: \$18 million			
1.2 Construction of Sanitary Landfill in the East Part of Bangkok a)Place: East part of Bangkok (Not specified), b)Capacity: 3,650,000 ton c)Area: 123ha, d)Construction: \$36 million			
2. Construction of an Incineration Plant a)Place: The existing On Nut dumping ground b)Capacity: 200t/d/unit * 3 units = 600t/d c)Gas cooling system: Water infection system d)Construction cost: \$74 million			
3. Improvement on Waste Collection System			
<F/S>			
1. Construction of Sanitary Landfill at Ram Intra a. Place: A burrow pit at Ram Intra b. Capacity: 1830,000ton c. Area: 15 ha. d. Construction Cost: \$18 million			
2. Construction of an Incineration Plant a. Place: The existing dumping ground at On Nut b. Capacity: 200t/d/unit * 3 units = 600t/d c. Gas cooling system: Water infection system d. Construction cost: \$74 million			

バンコク廃棄物処理計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (M/P, F/S) In October 1990 the Department of Public Cleaning (DPC) submitted an explanatory letter to the governor of the Bangkok Metropolitan Administration in order to facilitate the construction of a sanitary landfill and an incineration plant.  (1)Construction of Sanitary Landfill (FY 1993 Overseas Survey) Because it is difficult to acquire the land at Ram Intra, BMA is now examining the possibility to construct the transfer stations at Ram Intra, Nongkam and On Nut and to construct the sanitary landfills at Nokhon pathom and Chachoengsao. (FY 1995 Overseas Survey) The transfer stations have been constructed in Taling and under construction in Nong Kean. The preparation has been in progress in On Nut. (FY 1996 Overseas Survey) Both landfill sites in On Nut and Nong kean were closed. Presently, private entrepreneurs manage transfer stations and landfill sites and at least three entrepreneurs are in charge. BMA is responsible for the garbage collection and the transport of garbage to the transfer stations owned by private entrepreneurs. (FY 1997 Domestic Survey) Bidding for the most appropriate system of waste treatment in Bangkok (BOO scheme) was called in July 1997 and 6 companies have submitted proposal. (FY 1998 Domestic Survey) BMA called for a tender for waste treatment facility in July 1997. Several companies submitted proposals and a Thai company was accepted. However, the project itself was cancelled due to the monetary and economic crisis. BMA seems to consider requesting OECF loan to introduce the waste treatment facility. It seems that a tender will be called within the near future. (FY 1999 Overseas Survey) All sanitary landfill sites currently belong to private entrepreneurs. BMA is responsible for only collection of garbage and transport of garbage to the transfer station sites. (FY 2000 Domestic Survey) It is difficult to acquire the land for the sanitary landfill in Bangkok, therefore, BMA promotes to acquire the land by private entrepreneurs. In case of acquiring the sites outside Bangkok, it is difficult to plan to acquire the land as the BMA projects. However, the concept for the sanitary landfill proposed by this study is enough utilized. The possibility still remains to landfill the seaside area by BMA.  (2)Construction of Incineration Plant (FY 1995 Domestic Survey) BMA called for a tender for E/S to construct an incineration plant with a capacity of 1,200t/day. BMA plans to finance a half with its own budget and the other half with the BOT scheme. (FY 1995 Overseas Survey) Oct.1993-Sep.1994 The construction of an incineration plant for hospital wastes at On Nut was implemented. (Theoperation started from July 1995) Oct.1993-Sep.1995 F/S for an incineration plant was conducted. (BMA is expected to finance the project but if possible, it hopes to finance it with the BOT scheme.) It is highly likely to construct a plan at On Nut where the open-dumping is on-going. (FY 1996 Overseas Survey) BMA is to construct two incineration plants with a capacity of 1,000t/day:one with the own fund and the other with the BOT scheme (Their capacity was 600t/day respectively in the initial plan). An engineering consultant was appointed through the tender in 1996. B/D and the draw-up of an estimate have been conducted for the incineration plant which is to be constructed with BMA fund. (FY 1999 Overseas Survey) BMA has submitted Environment Impact Assessment(EIA) Report for approval to National Environment Board(NEB). Then after, BMA will propose the Report to National Economic & Social Development Board(NESDB) for final approval. After the approval of NESDB and of the Cabinet, a request for Japan's ODA Loan will be submitted to JBIC in 2000 at the earliest. (FY 2000 Domestic Survey) Based on this Study, BMA planned to construct the incineration plant with a capacity of 1,600t/day in On Nut. BMA conducted the survey by their budget at January 1999 and required Japan's ODA loan. However, as it is necessary to consider the political aspects for justifying the incineration, pre-SAPROF by JABIC has begun October 2000.  (3)Improvement of Waste Collection Systems (FY 2000 Domestic Survey) Owing to the expansion of the collection materials, the waste collection ratio improved over 90%.  Improvement on the systems (FY 2000 Domestic Survey) No information  Difference with JICA's proposal: Adoption of BOO scheme for waste treatment project means that the project will not be implemented as proposed by JICA study(construction of 1 incineration plant and 2 sanitary landfill). The proposal which recommends that plant should be sanitary landfill, is taken into consideration.  *Others: Compost Plant (FY 1996 Domestic Survey) It is said that the compost plant, which was constructed by BMA a few years ago, is still operated by BMA while the privatization of the plant was discussed. (FY 2000 Domestic Survey) Because of the troubles on the contract, it seems that the compost plant in On Nut has stopped its operation since 1998.		

**ASE THA/A 314/90**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Sukhothai Integrated Agricultural and Rural Infrastructure Development Project	
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Agricultural Land Reform Office (ALRO), Ministry of Agriculture and Agricultural Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc.	
<b>7. STUDY PERIOD</b>		Jul.1989 ~ Jul.1990 12month(s) ~	
<b>8. SITE OR AREA</b>		Thung Sai Yart (5,600ha) and Nong Khon Kaen (1,300ha) in Sukhothai Provic	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Thung Sai Yart Nong Khon Kaen			
(1) Construction of 14 places 8 places Reservoir (2.4 MCM) (0.32 MCM)			
(2) Irr./Drai. Canal 60.3 Km 31.7 KM			
(3) Farm Road 50.5 Km + 7.2 Km 21.1 Km + 3.8 Km (New + Rehabil.)			
(4) Rehabil. of Ext. Pond 2 places (1.4 MCM) 2 places (0.38 MCM)			
(5) Village Water Supply 10 villages (3,000 persons) 5 villages (818 persons)			
(6) Rural Electrification 399 households 50 households			



**ASE THA/S 405/90**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Area Traffic Control Project in Bangkok	
<b>3. SECTOR</b>		Transportation / Urban Transportation	
<b>4. TYPE OF STUDY</b>		D/D	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Bangkok Metropolitan Administration (BMA)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Yachiyo Engineering Co., Ltd. Fukuyama Consultants International, Inc.	
<b>7. STUDY PERIOD</b>		Mar.1990 ~ Oct.1990 7month(s) ~	
<b>8. SITE OR AREA</b>		Area 31 sq.km in Central Bangkok	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1) ATC signalized intersections....143 2) Control center....The control center will be located on the 1st floor of the existing BMA, central computer and peripheral devices etc. will be provided. 3) Transmission system and communication lines will be installed. 4) 143 local controllers and 460 vehicle detectors will be equipped. 5) 5 CCTV cameras will be provided at intersection. 6) 67 intersections will be improved.			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>This project was developed from "Medium to Long Term Improvement/Management Plan of Road and Road Transport in Bangkok"</p> <p>Subsequent Studies: Aug.1992- June 1993 D/D (Review study ) financed by BMA (40 mil.Bahts)</p> <p>Finance: BMA budget 227 mil.Bahts</p> <p>Construction:</p> <p>1.ATC System Stage I Installation scheduled to be completed in October,1995 (Expanded from the proposed 143 intersections to 146 intersections) Stage II D/D scheduled to be commenced in June 1996 (Expanded from the proposed 92 intersections to 226 intersections) Stage III Examining 200 intersections</p> <p>2.CCTV System Installed at five points. This project is under the jurisdiction of the Police Department</p> <p>3.Vehicle Detectors Under the jurisdiction of the Police Department</p>		

# STUDY SUMMARY SHEET

## (M/P)

ASE THA/S 109/91

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Toll Highway Development		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Highways, Ministry of Transport and Communications	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Katahira & Engineers International Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Feb.1990 ~ Jun.1991 16month(s) ~		
<b>8. SITE OR AREA</b>	Whole of Thailand (Area:513,000 sq.km, Population: 55 million)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Construction of 4,300km inter-city toll motorway network. Phase 1 1991-1995 900km Phase 2 1996-2000 1,000km Phase 3 2001-2010 2,400km			

有料高速道路計画

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

About 600km inter-city toll motorways construction plan has been made in the 7th 5-year National Economic and Social Development Plan (1992-1996).

(1)Bangpong~Cha-Am Route and Lampang-Chiang Mai Route

Subsequent study:

(FY 1993 Overseas Survey)

F/S undertaken (JICA)

(Refer to "Inter-City Toll Motorway Project (S325/1994)")

(FY 1998 Domestic Survey)

JICA D/D on Lampang-Chiang Mai Route (stage I, Oct. 1996 - Mar.1997).

D/D on Bangpong~Cha-Am Route with own fund.

Finance:

OECF loan is to be provided after the completion of stage II of JICA D/D on Lampang-Chiang Mai Route.

(FY 2000 Overseas Survey)

Lampang-Chiang Mai Route was divided into 2 projects (Lampang-Lamphun: 60km, Lamphun-Chiang Mai: 39km).

The implementing agency was privatized and funded the projects..

Funds: total 26,980mil. Bahts: 21,330mil. (Lampang-Lamphun)+ 5,650mil(Lamphun-Chiang Mai)

Source: Privatization

(2)Other Routes

(FY 1997 Domestic Survey)

Subsequent study:

Sep.1998 D/D scheduled to be completed (ADB, 1.2mil.USS)

D/D on outer Ring Road, Cross Route over Chaopraya.

Finance:

Aug.1998 (schedule) The 24th OECF loan (request will be submitted before April 1998)

(FY 2000 Overseas Survey)

1. Outer Ring Road

The implementing agency was privatized and funded the project whose name is "Southern Kanchanapisek Ring Road (Section: Suk Sawad -Bang Pli)" .

Funds: 12,100mil. Bahts

Source: Privatization (Turnkey)

Date of pledge or approval: 28 March 2000

Contents of project: 6 lanes elevated highway (20km), 4 interchanges, toll system and building

2. Cross Route over Chao-Phraya

The implementing agency was privatized and funded the project whose name is "Cable Stayed Bridge across Chao-Phraya River" .

Funds: 4,800mil. Bahts

Source: Privatization (Turnkey)

Date of pledge or approval: 28 March 2000

Contents of project: 8 lanes cable stayed bridge

(3)BOT scheme Project

(FY 1997 Domestic Survey)

1.Don Muang Toll Motorway (DOH)

Construction:

Sep.1997 Second Stage Start

2.Banna Banpakong Toll Motorway (DOH)

Construction:

Aug.1995~Aug.1998

Effect:

(FY 1997 Domestic Survey)

This road is a bypass road of ML-9 and Bangkok~Chombri toll road, and is a principal highway to contribute to development of eastern coast industrial area.

Situation:

(FY 1997 Overseas Survey)

The recommendations by the study have been incorporated into the 8th national economic and social development plan (1987-2001).



# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/A 205B/91

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Integrated Rural Development of Salt Affected Land in Northeast Thailand		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Land Development, Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc.		
<b>7. STUDY PERIOD</b>	Mar.1990 ~ Oct.1991 19month(s) ~		
<b>8. SITE OR AREA</b>	Amphoe Phra Yun, Changwat Khon Kaen, Norht-east Thailand		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;Major project components</p> <p>1) Irrigation Facilities: Total gross area 3,715ha; 6 new weirs &amp; rehab. of 11 existing weirs; 27 new ponds &amp; rehab. of 3 existing pond; 50 pumps</p> <p>2) Drainage Facilities: Drainage improvement (5,000ha)</p> <p>3) Rural Road: 31km improvement &amp; rehab. of 3 bridges</p> <p>4) Rural Water Supply: 4 Villages (3,800 persons)</p> <p>5) Forestry: Afforestation 583ha Agro-forestry 15,830ha</p> <p>6. Social Services: Training and recreation, Market facilities</p> <p>&lt;F/S&gt;The pilot area is selected to represent major development components which characterize the entire study area.</p> <p>1) Irrigation facilities: Two sites along Huai Yang (158ha and 166ha) and one site along the canal to Nong Khu Weir (57ha) salt-affected land 520ha</p> <p>3) Rural Road: Surface raising at 10 flooded places(total 1km); concrete drainage pipes (10 places); simple asphalt paving within 15 villages (total 7.5km)</p> <p>4) Rural Water Supply: 4 Villages (3,800 persons)</p> <p>5) Forestry &amp; Social Services: Training and recreation, Market facilities</p> <p>*Project life of M/P and F/S is assumed 50 years.</p>			

東北タイ塩害地域農村総合開発計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b>  <p>Due to the policy change in ODA, in 1992 the Japanese government was determined to end the provision of a grant aid to Thailand.</p> <p>(FY 1992 Domestic Survey) Since grant aid by Japanese Government is difficult, Thai government will finance this project. However, project-type technical assistance can be sought.</p> <p>(FY 1993 Overseas Survey) The pilot area was reduced to approximately 800ha from 4,500ha which was initially planned. DLD is now planning to implement the small trial project for rural development.</p> <p>(FY 1995 Domestic Survey) DLD planned to implement the small trial project with a foreign loan, however, it has not made any progress. Currently, the Thai government is examining the possibility to promote the project with the own fund.</p> <p>(FY 1996 Overseas Survey) Reclamation of severe salt affected land has been carried out by the cooperation between Japan Society for the Promotion of Science, the National Council of Thailand, Khon Kaen University and Department of Land Development (DLD) from 1995 to 1997 through the combination of engineering and revegetation methods. DLD is requesting a support for a small pilot project from the Mekong River Committee. D/D will be based on not only the results of this development study but also the results of other associated research studies of the project which have been implemented in cooperation with the Government of Japan.</p> <p>(FY 1997 Domestic Survey) DLD has requested to the government to allocate budget for the project but government has not approved yet due to the financial constraint. Based on the study, small-scale project is being implemented in Korat.</p> <p>(FY 1997 Overseas Survey) The high project cost and the problem of which implementing agency will be in charge (as many of the proposed plan concern with engineering system) are main problems for the project delay. Moreover, social problem is coming from conflict between landowners. Mini trial farm project in Khon Kaen was completed in 1997 resulting in unsuccessful, as they could not control the drain water.</p> <p>(FY 1999 Overseas Survey) Procurement of the fund hasn't been ensured yet.</p> <p>(FY 2000 Domestic Survey) There is no concrete action to implement the proposed projects in this Study, however the survey and research has continued in the targeted area.</p>		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 213B/91

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Road Development in the Southern Region		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Highways Ministry of Transport and Communications	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI) Oriental Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Feb.1990 ~ Sep.1991 19month(s) ~		
<b>8. SITE OR AREA</b>	Southern region in Thailand		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;The road improvement M/P until 2001 is as follows:</p> <ol style="list-style-type: none"> <li>1. Widening to six lanes : 150km</li> <li>2. Widening to four lanes : 1,210km</li> <li>3. Widening to seven-meter lanes: 970km (in total: 2,330km)</li> <li>4. Solid crossing of multi-lane roads</li> <li>5. Pavement completion of provincial roads</li> <li>6. Upgrading of substandard roads to six-meter pavement</li> <li>7. Bypass construction in the urban areas and major towns</li> </ol> <p>The master plan projects with a target completion year 1996 is as follows:</p> <ol style="list-style-type: none"> <li>1. Construction of new roads : 120km</li> <li>2. Construction of additional lanes: 780km</li> <li>3. Widening to seven-meter lanes : 1,460km</li> <li>4. Widening to six-meter lanes : 130km</li> <li>5. Reconstruction and upgrading : 132km (in total: 2,622km)</li> </ol> <p>&lt;F/S&gt; The priority projects with the target year 1996 are as follows:</p> <p>[No./ Project / Length(km) / Cost(in mil.bath)] [NC-1 / Chumphone Road / 9.1 / 110.2] [ AD-2-1 / Phuket Road / 38.4 / 612.6]  [AD-1-2 / Surat Thani Road / 40.1 / 468.6] [NC-5 / Connection 4/406 / 24.1 / 285.3] [WD7-4-1 / Hua Sai Road / 96.3 / 215.6]</p> <p>To carry out a study on required transport capacity of the Krabi-Khanom link which consists of the Seashore Development Plan (SSDP: the isthmus transformation to new international economic zone through the construction of "Trans Thai Land Bridge"). The project and construction costs of three route alternatives are as follows:</p> <p>[Plan / Project Cost (in mil.bath) / Construction Cost (in mil.bath)]  [A / 8,442.2 / 6,365.5] [B / 9,419.6 / 7,264.4][C / 8,438.8/ 5,634.9]</p>			

南部道路網整備計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b> <M/P> The study results provided the basic information for the seventh Economic and Social Development Plan. <F/S> 19 projects formulated in F/S and pre-F/S were integrated into the Road Development Plan under the Seventh Economic and Social Development Plan. In particular, DOH recognizes the importance to promote the Phuket-Surat Thani Road Project. Projects under the Seventh Economic and Social Development Plan are considered to be implemented during the period from 1992 to 1996.  Subsequent Study: (FY 1997 Overseas Survey) 1994~ B/D, D/D  (1) Krabi-Khanom Highway (FY 1996 Domestic Survey) This section was incorporated into F/S with relation to the Coastal Development in the Southern Region (M/P) which was commenced before this M/P. After the completion of F/S, DOH divided this section (200km) into two sections, Section I and II and implemented D/D with own fund. Section I (Krabi Side) was undertaken by the Thai Consultant, TEC, and Chiyoda Consultant while Section II (Khanom side) was implemented by the Thai Consultant, AEC, and PCI. Based on the proposal of the Coastal Development in the Southern Region, oil pipelines and railways were planned to be constructed at the center of Highway. Because Section I covers the mountainous area, it includes the construction of tunnels. The delay of designing works was observed. Later, the environmental problems arose at both Krabi and Khanom. Then, PCI, who was entrusted by AEC, is now conducting the environmental study. (FY 1997 Domestic Survey) Thai government had started the implementation of a part of a Highway project by own fund but the project was suspended due to the environmental problem of project of the ports located at both ends of a highway. As a result of study conducted in 1996 by NESDB to change location of ports, highway route was altered. (FY 2000 Overseas Survey) "Krabi-Khanom Special Highway" project was funded by Thai government. Amount of fund: 3,532mil. Baht Date of pledge: 28 June 1996 Contents of project: 4 lanes Divided Highway (134.1km)  (2) Other Roads (FY 1996 Domestic Survey) DOH submitted a few years ago the requests for an OECF loan to conduct the nationwide road widening project and the U.S. company, DCI, was appointed. This project targets national roads in the eastern and southern regions and some of roads, which were examined in these F/S, were included. Several local-consulting firms with the DOH fund have implemented D/D.  (FY 1997 Overseas Survey) Projects under implementation and completed are as follows. 1. Phatthalung - Had Yai (AD-4) Addition Lane Construction Khuha Intersection - Phatthalung section Finance: OECF  2. B. Song - A. Phrasang (WD-7) Widening Finance: IBRD 214.5 mil.B Construction: Completed in Apr. 1997  (FY 1998 Domestic Survey) 30 Sep. 1994 L/A 16,029mil.yen. "Regional Road Improvement Project (I)". 15 Sep. 1995 L/A 13,374mil.yen. "Regional Road Improvement Project (II)". Rehabilitation and widening of the national trunk road () in the central and southern Thailand.  Detail: (FY 1995 Overseas Survey) DOH has been smoothly implementing the Road Development Projects in the southern region with its ample funds. Other than roads mentioned above, the other road projects will be implemented under the Eighth Five-Year Plan.  (FY 1997 Domestic Survey) There would be no progress in the project for a while because of financial circumstances in Thailand.  (FY 1997 Overseas Survey) The difficulties in procuring fund and recessing economy are reasons for suspension of remaining projects. They will be implemented in the future.		

**ASE THA/A 315/91**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Integrated Rural Development Project at Lower North Thailand	
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Office of Accelerated Rural Development, Ministry of Interior.	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc. Pacific Consultants International (PCI)	
<b>7. STUDY PERIOD</b>		Jun.1990 ~ Aug.1991 14month(s) ~	
<b>8. SITE OR AREA</b>		4 Provinces (Phitsanulote, Sukhothai, Kamphaeng phet and Tak)	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1.Irrigated agriculture development - Irrigation of 9,300ha - Improvement of rained agriculture - Development of sericulture, cattle raising and inland fisheries (108projects) 2. Rural road development - Construction of rural roads (1,070km) - Pavement of existing roads (60km) 3. Rural water supply (574 deep wells) 4. Rural infrastructure development - Rural youth and agriculture technology training - Cottage industry group working facilities (36)			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>"Four model areas are selected"</p> <p>(1)Fai Non kho (where highest priority is given)</p> <p>Finance: Own fund (50.58 mil.Bahts)</p> <p>Construction: Feb.1995~Dec.1995 Reservoir Construction Completed ARD supervised the construction. Consulting firm / Sam Phet Co., Ltd.</p> <p>(2)Fai Sam Lu</p> <p>Finance: Own fund (23.98 mil.Bahts)</p> <p>Construction: Mar.1995~Jan.1996 Reservoir completed Consulting firm / Phisanulokviwat Phatana Co., Ltd.</p> <p>Effect: After the completion of reservoir, water management committee was established to use water effectively. Moreover, orchard committee and village bank have been founded to activate agriculture and raise successors.</p> <p>(3)Khleng Samo Khon (Kampaeng Phet)</p> <p>Construction: Measurement of dam and a part of road rehabilitation are going on. (FY 1997 Overseas Survey) Construction of the reservoir was cancelled.</p> <p>(4)Khleng Sai (TOK)</p> <p>There is no need for project as Phet Chaboon reservoir had been constructed already at 2 km from the study site. (FY 1997 Overseas Survey) Construction of the reservoir was cancelled.</p> <p>Detail: (FY 1993 Overseas Survey) In February 1993, the counterpart agency submitted an application to DETC for the request for the dispatch of an expert. (FY 1995 Domestic survey) In April 1995 a JICA expert was dispatched to promote the project. The Agricultural Development Association has been examining the request for the financial cooperation to conduct a promotion survey on the projects in which four model areas are included. (FY 1996 Overseas Survey) Sep.1996 US\$ 2.5 mil. (JICA) Model of Rural Development (Technical Transfer) The study conducted by Overseas Agricultural Development Association team identified the shortage of water, low productivity, low income, and village migration to urban areas as the critical problems of this area just as this F/S found. ARD has been implementing the projects such as the construction of rural roads with the limited budget. Nevertheless, the critical problems like water shortage have been yet solved. As mentioned above ARD constructed two reservoirs out of four proposed by this F/S and it will submit the proposal for the construction of the remaining two reservoirs to the Cabinet for approval. ARD sets policy to pave asphalt roads all over the country and the access roads into Huai Nong Kho and Huai Sum Ru will be paved later. To solve the critical problems which these areas are facing, the assistance of the Japanese Government is desired.</p> <p>(FY 1997 Domestic Survey) In August 1997, a short term expert was dispatched for a month and had a guidance on measurement of farm land, drawing, and designing of water canal.</p> <p>(FY 1997 Overseas Survey) Four reservoirs were proposed to be constructed, but only two reservoirs were completed and now under operation. There is no plan for construction of other two reservoirs namely Samoh Kon and Klong Sai. ARD has cancelled the projects because both sites are forest conservative areas.</p>		

# STUDY SUMMARY SHEET

## (Other Studies)

ASE THA/S 605/91

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Traffic Operation Plan for Roads (Follow-Up)		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	Other Studies		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Highways, Ministry of Transport and Communications	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Central Consultant, Inc. Oriental Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Apr.1991 ~ Nov.1991 7month(s) ~		
<b>8. SITE OR AREA</b>	DOH roads within the area of the Outer Ring Road of Bangkok		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The Dept. of Highways (DOH), Ministry of Transport and Communications, prepared the 7th Highway Development Plan (Oct.1991-Setp.1996), by partly incorporating the findings and proposals of the JICA TOPR Study (Traffic Operation Plan for Roads) conducted from Jan.1989 to July 1990. The present follow-up study of the TOPR Study was conducted in response to the additional request of the DOH, and aimed to propose a traffic operation plan for reducing traffic accidents in the area inside the Outer Ring Road of Bangkok, to prepare preliminary designs for selected sections, and to continue the transfer of technology to the Thai counterparts.</p> <p>In consultation with DOH, the present study selected ten sites out of 59 sections under study and prepared preliminary designs (scale:1/500) for improvement as follows; 1)Road improvement curvature improvement and installation of a motorcycle lane):S-44; 2) Improvement of intersections with signals:S-18 and S-22; 3) Creation of grade separation :S-19 and S-48; 4) Improved channelization at intersections and median openings: S-10, S-15, and S-24; and 5) Improved signalizaitn and channelization at intersections:S-43, S-52, and S-48.</p>			

道路交通運用計画(アフターケア)

PRESENT STATUS	In Progress or In Use
	Delayed
	Discontinued

**Description :**

Finance:

Implemented with the annual budget of the Thai government  
(FY 1997 Overseas Survey)  
Government budget 3,159.26.mil.B

Detail:

In the Seventh Five-Year Road Improvement plan (Oct.1991-Sep.1996),  
10 bil.Bahts was allocated to the traffic safety projects. The proposed projects will be implemented together with the projects  
formulated in the previous TOPR Study. The Grade Separation  
Project and the Motorcycle Lane Project will be undertaken as one  
of the Road Construction Projects and the Road Maintenance Projects.

(FY 1993 Overseas Survey)

The Study results have been utilized by DOH.

(FY 1995 Overseas Survey)

The Information Collection System, necessary to realize TOPR, has been satisfactorily completed with the utilization of the computer networking system. Most of the recommended projects were  
implemented except for the improvement of the U-Turn section.

(FY 1997 Overseas Survey)

The results of the study have been incorporated into the 7th National Highways Development Plan and used for The Traffic Safety Program for National Highways.



**ASE THA/A 206B/92**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Lam Dom Yai Basin Irrigation Project	
<b>3. SECTOR</b>		Agriculture / Irrigation, Drainage & Reclamation	
<b>4. TYPE OF STUDY</b>		M/P+F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal irrigation Department, MDAC	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc. Naigai Engineering Co., Ltd.	
<b>7. STUDY PERIOD</b>		Oct.1991 ~ Sep.1992 11month(s) ~	
<b>8. SITE OR AREA</b>		Ubon Ratchathani Province and Si Sa Ket Province(717sq. Km)	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;</p> <p>The irrigable areas form 29 new water resources were selected in the river basin, and the Lam Dom Yai Project was the one with highest priority.</p> <p>&lt;F/S&gt;</p> <ol style="list-style-type: none"> <li>Water Resources Development <ul style="list-style-type: none"> <li>- construction for D-28 Dam (Storage capacity=117.1MCH)</li> </ul> </li> <li>Irrigation and Drainage System Development <ul style="list-style-type: none"> <li>- construction for irrigation and drainage system (benefit area=4,000ha).</li> </ul> </li> <li>Irrigated Agriculture <ul style="list-style-type: none"> <li>- establishment for land use plan, planted area and farming practices</li> </ul> </li> <li>Improvement for Agricultural support policy</li> </ol>			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Since the final report was submitted in December 1992 the Thai government has taken no particular action for the project implementation. However, the executing agency desires to implement this project for the poverty alleviation in the northeastern region.</p> <p>Subsequent Studies: (FY 1995 Domestic Survey) Since EIA is legally required before the implementation of the project, RID made TOR for it. However, due to the financial constraints, its implementation was postponed to the next year.</p> <p>(FY 1996 Domestic Survey) The construction will be commenced in 2000 after the completion of the environment assessment (Eighth Five-Year Plan).</p> <p>(FY 1997 Domestic Survey) Tender for D/D was called in May 1997 and JV of Thame consultant and Sanyu Thai were selected, but contract was not signed due to financial constraint. Alteration of plan is unclear because D/D to check the plan will not be undertaken.</p> <p>(FY 1997 Overseas FU Survey)(FY 1999 Overseas Survey) RID have already submitted the result of EIA conducted by a local consulting company to the Office of Environmental Policy and Planning for consideration. There is no response yet. RID will ask the Ministry of Finance for fund procurement when government approves the implementation of the project. This project is put in the National Plan and recognized as high priority project. RID requests further cooperation with JICA, especially in the aspect of human resource development.</p> <p>(FY 2000 Domestic Survey) Thai government has commenced the D/D study on Apr. 2000 by their budget, however, the Study had to be discontinued in August because of the NGO's movement against the Pack Moon dam that was constructed in the neighboring area. There still remains no prospect to re-commence the Study. The Study has been conducting by the joint venture of three local consultants and it is decided to support the analysis of basis of dam, the design of the structure and the design of the pump system by Snyu Consultants Inc..</p>		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 214B/92

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Regional Development Plan for Telecommunication Networks in the Bangkok Metropolitan Area		
<b>3. SECTOR</b>	Communications & Broadcasting / Telecommunication		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Telephone Organization of Thailand (TOT), Corporate Planning Office	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	NTT International Corporation		
<b>7. STUDY PERIOD</b>	Jul.1991 ~ Oct.1992 15month(s) ~		
<b>8. SITE OR AREA</b>	Bangkok Metropolitan Area (Bangkok, Pathum Thani, Samutprakarn, Nonthaburi) & the surrounding area (Nakhon Pathum, Samut Sakhon, Ayutthaya)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;</p> <p>1. To meet the telephone demand at the end of FY 1997 in the Bangkok Metropolitan Area and at the end of FY 2002 in the surrounding area. The outline of the telecommunication expansion plan is calculated.</p> <p>2. The outline of the rehabilitation plan for upgrade of the telecommunication service quality is as follows; (1997-2007 total)</p> <p>Switching system: 356,000 lines capacity, Transmission system: 87,000 circuits, Local cables: 431,000 pairs</p> <p>&lt;F/S&gt;</p> <p>"Improvement of fault ratio" and "Improvement of call completion ratio" were selected for the study objectives to improve telecommunications service quality. The major projects proposed are as follows:</p> <p>1) Rehabilitation of local cables - replacement of drop wires with cables and renewal of drop wires - replacement of local cables</p> <p>2) Check and consulting for customer premises</p> <p>3) Replacement of public telephone sets 4) Changing P.D. timing</p> <p>5) Promotion of Multi-hunting system</p> <p>6) Increasing number of circuits (switching, transmission)</p> <p>7) Dial consulting activity</p> <p>8) Expansion of subscriber lines</p>			

バンコク首都圏電気通信網開発計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

&lt;M/P&gt;

The Thai government employed the BOT scheme for the early implementation of the Seventh TOT ESDP expansion project (1992-1996). As a result, the expansion of three million telephone lines has been implemented nationwide. In the Bangkok Metropolitan area, Telecom Asia Co., was awarded the concession to conduct the two million telephone lines expansion project. It is expected not only to finance and to implement the project but also to conduct the maintenance service for the constructed facilities.

This study report has been utilized as a reference by TOT to supervise the company and has been integrated into the TOT managerial guideline to upgrade its service quality.

(FY 1993 Overseas Survey)

M/P has been utilized in the implementation of the following projects.

- (1) Rehabilitation Project (1994-2001)
- (2) Analog Switching Replacement Project (1994-2001)
- (3) Public Phone Service Expansion project (1994-95)
- (4) Network Reliability Improvement Project (1995-97)
- (5) Regional Development Plan for Telecommunication Network in Provincial Area (1993-94)
- (6) Revisional Study on a Regional Development Plan for Telecommunication Networks in the Bangkok Metropolitan Area (1994-95)

&lt;F/S&gt;

CPO submitted to the TOT committee the request for the implementation of 26 projects proposed by the study report.

Currently, it is under examination.

(FY 1993 Overseas Survey)

CPO submitted four project proposals to TOT committee. However, a financial source needs to be secured.

(FY 1997 Domestic Survey)

Telecom Asia has completed the installation of 2.6 millions of lines by September 1996.

(FY 1997 Overseas FU Survey)

Finance:

ADB, private sector, TOT

Construction:

26 projects proposed by JICA's study are almost completed.

**ASE THA/S 215B/92**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		The Tourism Development of the Hoa-Hin/Cha-Am Beach Area	
<b>3. SECTOR</b>		Tourism / (Tourism in) General	
<b>4. TYPE OF STUDY</b>		M/P+F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	The Tourism Authority of Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Pacific Consultants International (PCI) Yachiyo Engineering Co., Ltd.	
<b>7. STUDY PERIOD</b>		Jan.1992 ~ Jan.1993 12month(s) ~	
<b>8. SITE OR AREA</b>		Hoa-Hin / Cha-Am beach area and its surroundings, including Phet Buri and Prachuap Xhiri Khan.	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<M/P>			
1. Cultural and recreational center in Cha-am			
2. Road development program in Peet Kasem 0.67 km 2.50 km			
3. Improvement of Phet Buri coastal road			
4. Improvement of circulation roads in Phet Buri			
5. Municipal sewerage system development in Cha-am			
6. Water supply development in Cha-am and Hua hin.			
7. Tourism promotion program			
8. Environmental management program			
<F/S>			
1. Cultural and Recreational, Center in Cha-am To build a cultura and recreational center on a 327 Rai Government other site in Takard pilee in Northern Cha-am			
2. Improvement of Circulation Road in Phet Buri - 20.5km of the Road unber Rid oo - 14.0km under Oa			
3. Water Supply development in Cha-am and to complete the water distribution system with includes rooting and replacement of distribution pipes, construction of distributor facilities, etc.			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>&lt;M/P&gt;  1.&amp; 7.are under processing for implementation.  2.~6.are requested to the relating implementation agencies.  2.3.and 4.will be taken care by DOH.  5.&amp; 6.will be carried out by PWA.  Further study by Japanese Government is necessary for 8.  However, implementation agencies are not clarified.  (FY 1999 Overseas Survey)  7.Tourism promotion program: It has not started yet because of the lack of budget according to the economic crisis.</p> <p>&lt;F/S&gt;  (1)Cultural and Recreational Center in Cha Am  Request of budget (amount:700 million Bahts) has been submitted to the cabinet.  (FY 1993 Overseas Survey)  TAT requested OECF loan for the Center (Phase II). However, it was not selected. TAT will implement the center under cooperation between the government and private sector.  (FY 1997 Overseas Survey)  The project will be pending until Thai economy will be in stable situation.  (FY 1998 Domestic Survey)  Not yet started.  (FY 1999 Overseas Survey)  It has not started yet because of the lack of budget according to the economic crisis.</p> <p>(2)Improvement of Circulation Road  (FY 1997 Overseas Survey)  Road is being improved by government budget (DOH in charge). According to the reduction in traffic, the project has been scaled down.  (FY 1998 Domestic Survey)  It has been partially completed with their own fund.</p> <p>(3)Water Supply and Sewerage System  (FY 1997 Overseas Survey)  Under implementation by government budget (PWA in charge). Partially completed.  (FY 1998 Domestic Survey)  It was completed with own fund.</p> <p>Impacts:  (FY 2000 Domestic Survey)  Due to the reduction of the quantity of the sewage water flowing into the sea, the environment in the seashore has been improved.</p> <p>Detail:  (FY 1996 Overseas Survey)  It is expected that some sub-projects will be implemented with the OECF 22nd Loan.</p>		

# STUDY SUMMARY SHEET

## (F/S)

ASE    THA/A 316/92

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Integrated Agriculture and Water Resources Development Project of the Menam Chumphon Basin		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation Department, Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc. Kokusai Kogyo Co., Ltd.		
<b>7. STUDY PERIOD</b>	<div style="display: flex; justify-content: space-between;"> <span>Oct.1991    ~    Mar.1992 5month(s)</span> </div> <div style="display: flex; justify-content: space-between;"> <span>May.1992    ~    Dec.1992 7month(s)</span> </div>		
<b>8. SITE OR AREA</b>	Nong Yai area: 2,260 ha, 10,800 population Tha Taphao basin: 35,700 ha, 66,000 population		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
the selected priority projects are composed of:  (1) Nong Yai Agriculture Development - Rehabilitation of Nong Yai swamp (Storage: 4.5 MCM) - Irrigation (1,200 ha) - Livestock development (Beef cattle, pig) - Swamp fisheries (543 surface water area)  (2) Drainage Improvement of The Taphao River System - Improvement of The Taphao river (34.3 Km, 350~880cu.m/s) - Improvement of tributaries (48.5 Km, 50~800cu.m/s) - Construction of floodways (10.0Km, 270~540cu.m/s) - Improvement of canal (4.8Km, 260cu.m/s)			

チュンボン地区農業総合開発計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1)Nong Yai Agriculture Development Project Subsequent study: 1993~1995 F/S, EIA Consulting Firm / local (FY 1994 Domestic Survey) Rehabilitation of Nong Yai Swamp has not been commenced. (FY 1999 Overseas Survey) 1999 Rehabilitation of swamp has already completed by local budget. Agricultural development and drainage improvement around Nong Yai is under programming. (FY 2000 Domestic Survey) The construction of the main structure and drainage has been almost completed by local dubget.</p> <p>(2)Drainage Improvement of Taphao River Construction of Wang-Phanang Tuk Canal (4.5km) and renovation of Sam Kaeo Canal (4.8km) Subsequent Studies: D/D Finance: Own fund 768.9 Million Baht (FY 1996 Overseas Survey) Construction: 3.5km was completed (FY 1994 Domestic Survey) &lt;Components&gt; Construction of floodway Improvement of drainage facilities Dredging of the Taphao River and Tributaries</p> <p>(FY 2000 Domestic Survey) Improvement of canal, drainage: on-going Sam Kaeo Canal has not been commenced because the targeted land has not been bought yet.</p> <p>(3)Construction of Multi-Purpose Dam Subsequent Studies: F/S and EIA (government budget) Consulting Firm / Local Consultant (FY 1995 Domestic Survey) F/S and EIA for two multi-purpose dams of Tha Sae and Rop Ro have been implemented. (FY 1997 Domestic Survey) D/D will start after approval of the results of EIA by EIA committee. (FY 2000 Domestic Survey) D/D for the Tha Sae dam was completed and SAPROF is on going by JBIC(Oct. 2000-Dec. 2000). There is no progress on the Rop Ro dam because of the environmental problems.</p> <p>Maintenance &amp; Operation: The key facilities are to be managed by RID while the terminal facilities are to be managed by beneficiaries.</p>		



**ASE THA/S 324/92**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Greater Bangkok Truck Terminal	
<b>3. SECTOR</b>		Transportation / Land Transportation	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Mini. of Transport and Communications. Department of Land Transport	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Pacific Consultants International (PCI)	
<b>7. STUDY PERIOD</b>		Dec.1991 ~ Sep.1992 9month(s) ~	
<b>8. SITE OR AREA</b>		32 Km north of the CBD of Bangkok	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
- To construct a public terminal with 500 berth - Construction stage is divided into 2 stages: 1. First Stage : 350 berth (144 Rai) 1. Second Stage : 150 berth ( 63 Rai) - Terminal facilities includes platform, apron, parking administration building, service station, green belt and road.			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies: EIA Sep.1995 D/D completed (15 mil.Bahts)</p> <p>Finance: (FY 1995 Overseas Survey) The Government ratified to implement the project with in 1993 its own fund. The project was considered as an urgent project.</p> <p>Construction: (FY 1997 Overseas Survey) The construction of 3 truck terminals has been delayed because of economic crisis of Thailand.</p> <p>(1)Bhuddamanthon (West) Jan.1996 started May.1998 completed Construction Cost / 921,900,00 Bahts Contractor / Bangkok Motor Equipment</p> <p>(2)Klong Luang (North) Apr.1997 started Aug.1999 completed Construction Cost / 1,069,569,123 Bahts Contractor / Prayoonvisava Karnchang</p> <p>(3)Rom Khiao (East) Nov.1996 started Jan. 1999 completed Construction Cost / 1,054,314,000 Bahts Contractor / Sri Nakorn Karn Yotha</p> <p>Impact: (FY 1999 Overseas Survey) Not much interest are shown in using the public truck terminal. The government will start implementing a new truck ban measure within inner Bangkok on Feb. 1, 2000. This will prohibit truck parking for 24 hrs in the inner city of Bangkok. With this measure, it is predictably expected that public truck terminal users increase and road traffic situation improves.</p> <p>Detail: In October 1992 the Truck Terminal Construction Project Committee was organized in DLT. It aims to decide a final policy and to formulate the construction plan and schedule.</p> <p>(FY 1993 Overseas Survey) DLT is currently in the process of the land acquisition for three truck terminal sites. One site (120ha) is likely to be acquired during the year of 1994. At present, the land accession is the biggest issue to be handled.</p> <p>(FY 1994 Domestic Survey) The government has decided to commence the construction of a truck terminal. The construction will be commenced next year and be completed within three years. The private fund may be accepted for the project implementation.</p> <p>(FY 1995 Overseas Survey) The land acquisition problem has not been completely settled.</p> <p>(FY 1996 Domestic Survey) This Study proposed the construction of truck terminals at three places. Based on the concession scheme, the construction of three truck terminals will be commenced at a time.</p> <p>(FY 1997 Domestic Survey) Project was going to be implemented with private investment based on this study. Private sector imposed conditions as 1. Operation starts at the same time when an additional truck terminal is constructed and 2. Monopolization of truck transportation business at Bangkok. The government is against them because of the difficulty in acquiring additional land and monopolistic operation right. They have not brought the negotiation to conclusion so far. It is said that the project will be implemented based on JICA's proposal but not confirmed yet.</p> <p>(FY 1998 Domestic Survey) The proposed projects are included in three construction projects of Bhuddanmanthon, Klong Luang, Rom Khiao. These construction works were completed and are used.</p>		

# STUDY SUMMARY SHEET

## (M/P)

ASE    THA/S 108/93

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Regional Development Plan for the Lower Northeast and the Upper East Regions in the Kingdom of Thailand		
<b>3. SECTOR</b>	Development Plan / Integrated Regional Development Plan		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National Economic and Social Development Board (NESDB)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Feb.1992    ~    Jul.1993 17month(s) ~		
<b>8. SITE OR AREA</b>	Seven provinces in the Lower Northeast and two provinces in the Upper East Regions (Land Area: 89,000km2, population:9,900 thousand)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Regional/inter-regional projects 1.Regional artery establishment 2.Railway improvement 3.Route No.24 improvement 4.Second Mekong bridge 5.Local air services network development 6.Small pumping reservoirs development 7.Phanom Dong Rek water resources development 8.Lam Thakong pumped storage power generation 9.Pak Man hydropower  Area Development Program 1.Greater Nakhon Ratchasima Industrial Center Development, 2.Ubon Ratchathani Agro-industrial Forefront Development, 3.Buri Ram-Surin Integrated Central Area Development  Other projects 1.Nakhon Nayok/Pachin Buri multipurpose development, 2.Yasothon water network development, 3.Yasothon aquaculture center, 4.Groundwater exploration, 5.Haai Bang Sai multipurpose development, 6.Mukdahan IUD/border trade center, 7.Avanyapvathet IUD/border trade center			

東北タイ南部・東部タイ北部地域総合開発計画調査

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

1. This project was undertaken timely in the proper area with the background of economic liberation of Indochina Countries.  
2. In terms of implementation of plans, Thailand Government requested action-oriented plans. JICA Study Team then responded to it.

The final report was approved by NESDB as an official plan of the study area.  
(FY 1996 Domestic Survey)  
This M/P is incorporated into the National Land Development Plan of NESOB. However, the development in the area along the west coast and in the southern region has been given higher priority.  
(FY 1997 Overseas Survey)  
The results of the study have been utilized for Area and Community Development to Boost Economic Potential and Generate Income (The 8th National Economic Development Plan, 1997~2001)

(1) Regional Projects  
1.Regional Artery (one of the highest priority projects)  
Before the submission of the final report, the project was proposed to the Diet. The Thai government mission to Vietnam (1993) announced the NESDB plan to Vietnam that through the implementation of this project the Eastern Coastal area would be connected to Da Nang of Vietnam, which would result in the promotion of the mutual development.  
(FY 1996 Overseas Survey)  
F/S scheduled to be undertaken in 1997 (Government budget).  
(FY 1995 Domestic Survey)  
<R.331>Planned to expand the width to four lanes under the Eighth Five-Year Plan.  
(FY 1996 Domestic Survey)  
<New Indochina Gateway Road>  
The improvement works have been implemented with the own fund.

2.Railway Improvement:  
(FY 1996 Overseas Survey)  
1994~1995 F/S (Ban Pai-Roiet-Mukdahan) (SRT)  
SRT proposed the length of 142km which is longer than that of JICA.

3.R24 Improvement  
(FY 1996 Overseas Survey)  
Finance:Thai Government  
(5,076 mil.Bahts:for 226km out of 390km of the total length)  
Construction:1998~2005

4.Second Mekong Bridge  
The ADB survey of 1992 concluded that the Second Mekong bridge should be constructed at Mukdahan-Sabanaket as proposed in this study. In addition, this project was integrated into the ADB Development Plan 'TA' covering the area from the southern part of Chain to Myanmar, and the construction of the route going to Dan Nang via Myanmar was designated as one of the high priority road development projects.  
Subsequent Studies:  
Aug.1996~Sep.1997 D/D (ADB grant US\$ 300 mil.)  
Bidding and construction works are supposed to begin in 1998. 1,400 mil.Baht for the construction works is likely to be paid by Thai and Fench.

7.Phanom Dong Rek Water Resources Development  
(FY 1995 Domestic Survey)  
F/S for Phase I completed  
(FY 1996 Domestic Survey)  
Being implemented.

8.Lam Ta Klong Pumped Storage Project:  
(FY 1996 Overseas Survey)  
Finance:  
Sep.1994 L/A 18,242 mil.Yen (Lam Ta Klong Pumped Storage Project)  
Construction:  
1996~2002

9.Pak Mun Hydropower Dam  
(FY 1996 Overseas Survey)  
Finance:  
1990 Thai Government and Foreign Loan (6,600 mil.Bahts)  
Construction:  
1990~1996 Completed.  
Effect:  
Irrigated area:25,600ha  
Flood Control  
Fisheries that yield 1,312 tons/year of additional newly protein sources.  
Attractive tourist spot, etc.  
Impact on Environment:  
Forest encroachment, Diseases, etc.

(2)Special Center Program

東北タイ南部・東部タイ北部地域総合開発計画調査

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 207/93

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Application Scheme of Land Readjustment (L/R) National Urban Development Trust		
<b>3. SECTOR</b>	Social Infrastructure / Urban Planning & Land Development		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Town and Country Planning Ministry of Interior	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Yachiyo Engineering Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jan.1991 ~ Jun.1993 29month(s) ~		
<b>8. SITE OR AREA</b>	Bangkok Urban Metropolitan Area		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>In Thailand especially in/around Bangkok, urbanization triggered by the rapid economic and industrial development has been expanded faster than expected, resulting in the serious urban problems, typically worst traffic congestion. To solve the urban problems, development of the following area is required urgently.</p> <p>Travelling Area : Bangkok Huai Khwang 85ha District          Builder : Development of Town and Country Planning or Bangkok Municipality          Project cost : 909 million Bt          Period of work : 5 years(On condition that the preparation necessary for the project be completed within one year)          Reduction Ratio : 29.5-30.7%          Exchange Rate : 1Bt=5yen</p>			

区画整理事業適用調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  1.Under preparation of the National Cabinet Council approval on Land Readjustment law. 2.Under preparation of implementation to designation plot (including relocation/removal). 3.Under support this project with a dispatch of JICA's specialists.  (FY 1996 Overseas Survey) Presently, a JICA expert is preparing a handbook for concerned agencies, which would be used for the promotion of nationwide urban planning and development.  (FY 1997 Domestic Survey) Opposition from some landowners at the site is one of impediment factors.  (FY 1997 Overseas FU Survey) DTCP have initiated the pilot project for Land Readjustment in the area of RAMA IX. The project is almost ready to be executed but need the L/R Law to support. The RAMA IX project is planned according to the propose of JICA study. The pilot project already has financial support from fund with amount of 50 mil.B. DTCP have planned to implement L/R in up-country like Chiang Mai Province and other big cities. During waiting for the issue of L/R Law, DTCP is conducting public relations on L/R aspect to public and press both in greater Bangkok and up-country areas. Thus, seminar and workshop on L/R matters were planned and would be firstly started in Chiang Mai Province but no budget was allocated in this fiscal year because of the crisis of economic in Thailand.Currently under the budget constraint problem of DTCP, only printed matter on L/R via brochure and folder are distributed to public. JICA study and expert are much appreciated by DTCP in term of transferring of technical knowledge on L/R. The JICA's cooperation on dispatch of expert and establishment of Urban Development Training Center Project are strongly requested by DTCP.  (FY 1999 Overseas Survey) Rama 9 Land Readjustment Pilot Project Amount: 200 mil. bahts(including loan) DTCP will start implementing the project with the approval of Land Readjustment Committee.		

**ASE THA/S 208/93**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Phuket International Airport Development Plan	
<b>3. SECTOR</b>		Transportation / Air Transportation & Airport	
<b>4. TYPE OF STUDY</b>		M/P+F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Airports Authority of Thailand (AAT)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Pacific Consultants International (PCI) Pasco International Inc.	
<b>7. STUDY PERIOD</b>		Aug.1992 ~ Sep.1993 13month(s) ~	
<b>8. SITE OR AREA</b>		Phuket International Airport Area and the Surrounding areas.	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The scope of the short-term development plan at the existing airport for the target year 2000 are summarized as shown below.</p> <p>(1)Runway : Pavement overlay for structure strengthening (Length:2280m, Average overlay thickness 12.7cm)</p> <p>(2)Passenger Terminal Building : Expansion(6,980m<sup>2</sup>)</p> <p>(3)Road and Car park : Expansion of parking Slots(420slots)</p> <p>(4)Utilities : Installation of power generator, incinerator and telephone exchanger, and construction of deep water wells.</p> <p>(5)Others : Construction of additional security fence(L=800m)</p>			

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1)Runway Overlay Finance: AAT budget 100 mil.Bahts Construction: Aug.1993- Mar.1994 Implemented and completed In order to make the landing of B747 possible, 8-14 cm-overlay was undertaken over 3.5km runway.</p> <p>(2)Passenger Terminal Subsequent Studies: D/D commenced in 1993 Finance: AAT fund (294 mil. Bahts) Construction: (FY 1997 Overseas Survey) Jan.1997~Dec.1998 (It may be delayed due to the economic situation) It will complete by Feb.2000(FY 1999 Overseas Survey) Consulting Company / Noppawong Kosarn Co., Ltd. The expansion area will be 5,500m3.</p> <p>(3)Parking Lot for 200 Vehicles / Road Subsequent Studies: D/D commenced in 1993 Finance: AAT budget (25 mil.Bahts) Construction: Sep.1996- May.1997 Scheduled to be implemented (It was delayed because the land acquisition problem between AAT and Dep. of Aviation needed to be settled). (FY 1997 Overseas Survey) Completed</p> <p>(4)Wasted Water Treatment Plant Finance: AAT budget Construction: 1993 implemented</p> <p>(5)Additional Security Fence (FY 1997 Overseas Survey) modified from 800m to 1000m Finance:AAT Construction :Completed</p> <p>(6)Others The Expansion of the Cargo Terminal Building has been undertaken for the period of 1993 to 1994 while it was planned in the Long -Term Development Plan to be implemented after 2000. (FY 1996 Domestic Survey) Completed</p> <p>Maintenance &amp; Operation This project aimed at the improvement and expansion of the existing facilities. Because the M&amp;O of the facilities had been well conducted, it seems that the M&amp;O of the improved and expanded facilities have been also well conducted.</p> <p>Effect: The implementation of this project resulted in the expansion of the transport capacity, corresponded to the increased demand.</p>		



**ASE THA/S 209/93**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Sewerage Development Project for Lower Chao Phraya River Basin	
<b>3. SECTOR</b>		Public Utilities / Sewerage	
<b>4. TYPE OF STUDY</b>		M/P+F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	PWD	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Nippon Jagesuido Sekkei Co., Ltd. Pacific Consultants International (PCI)	
<b>7. STUDY PERIOD</b>		Mar.1992 ~ Jan.1994 22month(s) ~	
<b>8. SITE OR AREA</b>		Lower Cha Phraya River Basin	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1. Water Pollution Control Plan Area: Lower Cha Phraya Basin (6,037.4 sq.km, 7 provinces, population 3.35mil.) Contents: Installation of sewage system, Regulation of waste water, etc.			
2. Basic Plan for Drainage System Area: 8 municipalities Contents: Legal regulation of waste water, Establishment of sewage corporation by local and central government, Installation of sewage system, etc.			
3. Preliminary Design of Drainage System Area: 2 municipalities Contents: Installation of drainage collection system, etc.			

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  (FY 1997 Overseas Survey) As for Chainat, Singburi and Angthong, sewerage development project has been completed or in progress. As for other areas, there is almost no possibility to materialize the project because acquiring land for construction of treatment plant is difficult and the dispute over wastewater management policy with Ministry of Science has not settled.  (1)Chai Nat Subsequent Studies: 1994 F/S and D/D (PWD) Finance: 1995 PWD budget 204mil.Bahts Construction: 1995 (Scheduled to be completed in Mar.1998) *Contents: stabilization pond wastewater treatment plant(6,000m3/day) Contractor / S.K.Y.  (2)Sing Buri Subsequent Studies: 1994 F/S, 1995 D/D (PWD) Finance: 1997 PWD budget 280mil.Bahts Construction: 1994~2000 Contractor / S.K.Y.  (3)Ang Thong Subsequent Studies: F/S and D/D (PWD) Finance: 1994 PWD budget 180mil.Bahts Construction: Completed in March, 1995. It is in operation. *Contents: treatment plant(8,200m3/day), service area(2km2), operating cost(1.48baht/m3) Contractor / Angthong Pattana  (4)Lop Buri Subsequent Studies: Under the plan, the implementation of D/D and F/S was to be commenced with PWD fund in 1996. However, it has been postponed until the problem over the jurisdiction of the project is settled between PWD and the Ministry of Science, Technology and Environment.  (5)Bang Bua Thong Subsequent Studies: F/S and D/D (PWD) *The land preparation is under way now.  (6)Pa Mod, Sena and Rangsit The project will be commenced after the municipality governments acquire the land for a sewage treatment plant.		

**ASE    THA/A 310/93**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		Agricultural Development for Peat/Acid Sulfate Soil Areas in Narathiwat Province
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General
<b>4. TYPE OF STUDY</b>		F/S
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	The Department of Land Development (DLD) Ministry of Agriculture and Cooperatives
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc. Taiyo Consultants Co., Ltd.
<b>7. STUDY PERIOD</b>		Feb.1992 ~ Jan.1994 23month(s) ~
<b>8. SITE OR AREA</b>		Peat/acid sulfate soil areas in the Narathiwat province
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
Land Improvement 997ha Drainage Canal(New) 9,900m Drainage Canal(Reform) 11,910m Embankment 17,800m Fish Nursery Pond 21ponds  Project cost: approx. 1.71billion yen. Imp. period: 5 or 6 years		

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> <p>Aiming at the implementation of the project at the earliest, DLD is trying to secure the necessary budget. In view of the size of the project, DLD considers that the required budget is within the range of DLD authority. Funding is brought not only from domestic but from foreign sources.</p> <p>(FY 1995 Domestic Survey)  Despite it does not have any idea to implement, DLD, the Governmental organization in charge of this project, is planning to hold a seminar. Additionally, DLD is considering to commence a technical cooperation project regarding to the treatment of particular soil together with another implementing project of farmland maintenance at Southern Thailand within this fiscal year.</p> <p>(FY 1996 Domestic Survey)  Taking into account the discussion at the Environmental Conservation and Sustainable Agricultural Land Management in Boggy Region held in Nov.1996, DLD will decide a implementation plan at the next stage.</p> <p>(FY 1996 Overseas Survey)  DLD is looking for the assistance from JICA to establish On-farm trials and studies on drainage control and water management referring to the methods recommended in F/S. It considers difficult for DLD alone to implement the project due to the shortage of suitable specialists and the budget constraints.</p> <p>(FY 1997 Domestic Survey)  DLD has requested to government for implementation of the project, but it is not approved yet due to financial constraint.</p> <p>(FY 1997 Overseas FU Survey)  The pilot farm model setting up is well recognized and initiated by LDD. The main problem is financial source to run the pilot farm model. The proposes of JICA will be tested and proved whether it is feasible or not.  The problem facing for this trial farm is irrigation system which LDD must lean on the RID only. LDD performances on this matter cannot be run without irrigation system provided by RID.  The recommendations of JICA study have been partially implemented at Bajo District such as soil improvement, crop trial(oil palm planting) and drainage system.</p> <p>(FY 1999 Overseas Survey)  There is no further information.</p>		

**ASE THA/A 402/93**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Bang Pakong Diversion Dam Project	
<b>3. SECTOR</b>		Agriculture / (Agriculture in) General	
<b>4. TYPE OF STUDY</b>		D/D	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation Department (RID)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc.	
<b>7. STUDY PERIOD</b>		Sep.1992 ~ Nov.1993 14month(s) ~	
<b>8. SITE OR AREA</b>		Tha Lat River Basin in Chachoengsao Province	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
One diversion dam and related structures, and one pumping station			

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

This study is D/D of "Agricultural Water Resources Development Project of Bang Pakong River Basin (THA/A 204B/90, JICA M/P+F/S)"

(1) Diversion dam and pumping station

Finance:

(FY 1996 Domestic Survey)(FY 1997 Overseas Survey)

1996 Government budget 210mil.Bahts (for construction and consulting service)

Construction:

(FY 1997 Domestic Survey)(FY 1998 Domestic Survey)(FY 1999 Domestic Survey)

Oct.1996 Commenced

Nov.1999 Completed

Construction Trader / JV of Nishimatsu & Itar Thai Construction

Cost: 1,970 million Baht (Own fund)

Progress situation: As of Nov. 1998, 60 % was completed.

(2) Construction of irrigation channel

(FY 1998 Domestic Survey)

Finance: 614 million Baht (Own fund)

Construction:

- Upper stream (8km, contracted), Dec. 1998 ~ 600 days, Cost: 114 M Baht

- Lower stream (24.5km, preparing for bid), 1999 ~ 2 years, Cost: 500 million Baht

(FY 1999 Overseas Survey)

Construction: It is scheduled to complete by 2001.

(3) Construction of drainage channel (60km) and embankment (16km)

(FY 1998 Domestic Survey)

D/D was completed.

Finance: 100 million Baht (Own fund)

Construction: 2000 ~ 2001

**ASE THA/S 110/94**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		Management of Groundwater and Land Subsidence in the Bangkok Metropolitan Area and its Vicinity
<b>3. SECTOR</b>		Social Infrastructure / Water Resources Development
<b>4. TYPE OF STUDY</b>		M/P
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Mineral Resources (DMR), Ministry of Industry and Public Works Department (PWD), Ministry of Interior
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		Kokusai Kogyo Co., Ltd.
<b>7. STUDY PERIOD</b>		Jul.1992 ~ Mar.1995 32month(s) ~
<b>8. SITE OR AREA</b>		Bangkok metropolitan area and its vicinity (approx. 5,600sq.km)
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
1)Establishment of new facilities for observation. 2)Hydrological/geological investigation for all area of the Chao Phraya River basin. 3)Investigation for the reasonable utilization of river water.		

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Utilization of Outputs: (FY 1997 Overseas Survey) The results of the study have been incorporated into National Development Plan (1998~2002).</p> <p>At Pathum Thani Province, a part of investigating area, construction plan of an observation well is in progress by DMR with its own budget.</p> <p>(FY 1996 Domestic Survey) A part of an observation well, which had been constructed in this Study, was struck by lightening either in Sep. or Oct.1995 and damaged. Therefore, the counterpart requested the dispatch of short-term expert for the examination and repair of machinery. Nissaku, which produced and installed related machinery and equipment, and Kokusai Kogyo, which implemented this Study, are planning to dispatch an employee.</p> <p>(FY 1996 Overseas Survey) DMR is responsible for monitoring groundwater level and land subsidence from three stations which were constructed during this study. Data cards have regularly been taken from the installed digital records for data processing. The results of the study have been used for groundwater management in Bangkok and adjacent provinces. At present, some electronic parts of digital records are out of order. Request for follow-up project has already been submitted JICA.</p> <p>(FY 1997 Domestic Survey) New observation well is not constructed because of budget squeeze of Thai Government. Out of the observation wells constructed in this study, AIT and a station in Samut Sakong were damaged by lighting. JICA is considering rehabilitation and renovation of a part of damaged facilities because record of subsidence is needed for development study on Chaophraya flood control which is being undertaken.</p> <p>(FY 1997 Overseas Survey) The study on possibility of flood water recharge in the Greater Bangkok has been carried out by Public Works Department from 1996 to 1997.</p> <p>(FY 1998 Domestic Survey) The operational situation of the observation well was followed up in "Study on the Flood Control Project of Chao Phraya River" conducted by JICA in 1997, and the facilities damaged by lightening were repaired. As a result, data on the groundwater level and the subsidence are automatically recorded and utilized. The projects (regarding the establishment of new observation wells, hydrological/geological investigation for all area of the Chao Phraya River Basin, Investigation for the reasonable utilization of river water) have not been realized due to the difficulty in funds procurement caused by the economic crisis since July 1997. However, since drought and shortage of water is predicted in the dry season of 1999, DMR is planning to monitor the groundwater and subsidence in lower Chao Phraya River Basin and intends to request the Japanese government to conduct a development study.</p> <p>(1)Details Assessment of Groundwater Resources (FY 1999 Overseas Survey) Subsequent Study: 1994~2001 Development Study(Government budget: 30 mil. bahts) Finance: Government budget 15 mil. bahts *Contents: Drilling of Observation Wells and Installation of Automatic Water Level Recorders, Hydrogeological Investigation</p> <p>Construction: 1-1.Construction of Observation Wells in Lower Chao Phraya (FY 1999 Overseas Survey) 1997~ 22 Observation Wells were drilled. Drilling of 60 Observation Wells remains. *Contents: Drilling of Observation Wells and Installation of Automatic Water Level Recorders in Lower Chao Phraya.</p> <p>(2)A Feasibility Assessment of a Pilot Scale Artificial Recharge Trial in Bangkok and its Vicinity (FY 1999 Overseas Survey) Subsequent Study: 1998 F/S(Government budget: 800,000 bahts) Finance: Oct.1998 Government budget(800,000 bahts) *Contents: To investigate the feasibility of using surface water to artificially recharge Bangkok's problem.</p>	



# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 216/94

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Modernization of Bangkok Port in the Kingdom of Thailand		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	PAT	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI) Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Mar.1993 ~ Jul.1994 16month(s) ~		
<b>8. SITE OR AREA</b>	Bangkok Port		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> &lt;M/P&gt;            1)Introduction of the closed terminal system,            2)Expansion of the marshalling yard and            3)New establishment of Import CFS and Export CFS.         </div> <div> &lt;F/S&gt;            1)Introduction of the closed terminal system,            2)Introduction of the closing time,            3)Expansion of the marshalling yard at the eastern wharf,            4)Rationalization of the container yard at the western wharf, and            5)New establishment of Import CFS at Area II.         </div>			

バンコク港近代化計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (FY1995 Overseas Survey) Port Authority of Thailand(PAT) decided to implement a short-term-improvement plan. (budget: 800 million baht) (1) Terminal operation will become easier by dividing the container-cargo-handling-place from conventional-cargo-handling-place. (2) Closed Terminal operation will be applied.  Finance: (FY 1997 Overseas Survey) FY 1994 PAT budget 775mil.Bahts *Contents Construction plan, procurement of container handling equipment, human resources development and restructuring of organization and computerization of the port.  Implementation: (FY 1997 Overseas Survey) FY 1995 ~ FY 1997 (As for the end of 1997, 85% of the action plans has been completed)  Construction: (FY 1999 Overseas Survey) The following construction works have already completed. 1.Construction of container yard to replace ex-supplementary shed No.11, shed No.11, and shed No.12 *Contents:Demolition of existing sheds, pavement, Development of drainage system, development of lighting system 2.Construction of Terminal gate No.1 & No.2 *Contents:Construction of terminal gate control room, pavement, development of lighting system 3.Construction of a concentrated reefer yard *Contents:Pavement(12,120m2), Implementation of reefer plugs(360 units) 4.Construction of Terminal No.2 Office Building *Contents:Office building(4 floors) 5.Construction of Gas station at east quay 6.Construction of repair and maintenance shop for container equipment at west quay *Contents: Main shop(1,500m2), Minor shop(1,000m2), Out door pavement(3,000m2) 7.Adding one traffic lane to the bridge connecting the east and west quays *Contents:Demolition of foot part, adding one traffic lane		

# STUDY SUMMARY SHEET

## (F/S)

ASE THA/S 325/94

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Inter-City Toll Motorway Project		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Bureau of Road, Ministry of Transportation & Communication	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Katahira & Engineers International Nippon Koei Co., Ltd. Kokusai Kogyo Co., Ltd.		
<b>7. STUDY PERIOD</b>	Aug.1993 ~ Mar.1995 19month(s) ~		
<b>8. SITE OR AREA</b>	1)From Lampang to Doi Saket (98.72km) 2)From Bangpong to Cha Am (113.74km)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1) Construction of an expresseway from Lampang to Doi Saket with a distance of 98.72km passing through the prefectures of Lampang, Lamphun and Chiang Mai including followings :</p> <p style="margin-left: 20px;">Interchange : 5 Tunnel : 2 (3.80km, 0.75km) Bridge : 30 (Total length 720m) Overhead bridge: 35 (Total length 13,365m)</p> <p>2) Construction of an expresseway from Bangpong to Cha Am with a distance of 133.74km passing through Ratcha-Buri and Petcha-Buri prefecture including followings :</p> <p style="margin-left: 20px;">Interchange/Junction: 8 Bridge : 111 (Total length 1,334m) Overhead bridge : 21 (Total length 14,585m)</p>			

都市間有料高速道路建設計画調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>1)The Government of Thailand intends to construct the expressways in early stage. 2)The reason to ask JICA the detailed design is that Thailand does not have any experience to design and establish any tunnel before and it becomes a technical bottleneck.</p> <p>(1)Tunnel Section in Lampang - Doi Saket Expressway Subsequent Studies: (FY 1998 Domestic Survey) Oct.1996~Mar.1997 D/D implemented by JICA "Lampang - Chiang Mai Expressway (D/D, Stage I)" Consulting Firm / Katahira &amp; Engineers International Stage II of D/D is to be conducted by JICA.</p> <p>Finance: (FY 1998 Domestic Survey) OECF loan is to be provided after the completion of D/D (Stage II). (FY 2000 Overseas Survey) "Lampang - Doi Saket" project was divided into 2 projects named "Lampang - Lamphun (60km)" and "Lamphun - Chiang Mai (39km)". Both projects were funded by a privatezed executing agency. Amount of funds: 21,330mil Baht (Lampang - Lamphun) , 5,650mil Baht (Lamphun - Chiang Mai)</p> <p>Effect: (FY 1997 Domestic Survey) This Toll Highway will provide better service to users than ML-5 and ML-9.</p> <p>Background: (FY 1997 Overseas Survey) The implementation of the project depends on the economic situation of the country.</p> <p>*This construction work is the same one referred in "Road Development in the Central Region (1988)" as ML-5 and ML-9.</p> <p>(2)Bangpong - Cha Am Subsequent study: (FY 1998 Domestic Survey) D/D is underway with their own fund.</p> <p>(FY 2000 Overseas Survey) "Bangpong - Cha Am" project was divided into 2 projects named "Bang Pong - Pak Tho (62km)" and "Pak Tho - Cha Am (72km)". Both projects were funded by a privatezed executing agency. Amount of funds: 17,500mil Baht (Bang Pong - Pak Tho) , 11,900mil Baht (Pak Tho - Cha Am)</p> <p>Related projects: (FY 1995 Overseas Survey) The implementation will be carried out in five years. At present, a part of Outer Ring Road (60km) and the road between Inner Ring Road and Chonburi (82km) are under construction and scheduled to be completed in 1998. The partial construction cost is financed by OECF loan. (FY 1997 Domestic Survey) 2000 scheduled to be started. 2001~2006 scheduled to be completed.</p>		

**ASE THA/S 606/94**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		Inspection and Maintenance System for the Expressway
<b>3. SECTOR</b>		Transportation / Road
<b>4. TYPE OF STUDY</b>		Other Studies
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Expressway and Railway Transportation Agency (ETA) Ministry of Interior
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		Oriental Consultants Co., Ltd. Pacific Consultants International (PCI)
<b>7. STUDY PERIOD</b>		Jun.1993 ~ Sep.1994 15month(s) ~
<b>8. SITE OR AREA</b>		Expressways in Bangkok metropolitan area
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
1)To prepare the ledger database of expressways. 2)To prepare database and manual for inspection of the ground surface portion. 3)To prepare database and manual for inspection of the Rama IX Bridge. 4)To prepare database and manual for repair of the ground surface portion. 5)To prepare database and manual for repair of the Rama IX Bridge.		

PRESENT STATUS	In Progress or In Use
	Delayed
	Discontinued

**Description :**

(FY1995 Overseas Survey)

Expressway and Rapid Transit Authority(ETA) is proceeding with most of the JICA plan, including kilo-post-operation, safety measures and maintenance computenization.

(FY1997 Domestic Survey)

Computerized control system is utilized based on the inventory data at all sections. Because officers of ETA become accustomed to the system, efficiency of work has improved and time spent for data processing has reduced.

No serious problem occurred under the computerized control system which treats data check, data input and analysis of existing data.

(FY 1997 Overseas Survey)

The outputs of the Study have been incorporated into the 8th National Economic and Social Development Plan (1997~2001).

(FY 2000 Overseas Survey)

ETA accepted a JBIC's proposal of SAPS(Special Assistance for Project Sustain ability) study in order to review current operation and maintenance system. JBIC dispatched Japanese consultant team for the study.

**ASE THA/A 207/95**

南部農地復旧保全計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Finance: (FY 1996 Overseas Survey) Domestic fund</p> <p>Construction: (FY 1996 Overseas Survey) Scheduled to be implemented from 1998</p> <p>Maintenance &amp; Operation after Completion: (FY 1996 Overseas Survey) It is to be handed over to the individual farmer through Farmer's Group under supervision of Local DLD Station in Regional Office.</p> <p>Situation: (FY 1997 Domestic Survey) DLD has constructed a demonstration farm of soil protection with an area of 10 Rai at target areas of the study in Surat Thani and Nakhon Si Thammarat. Cabinet approved the project. Its implementation was scheduled in 1996, but was not started due to financial constraint.</p> <p>(FY 1997 Overseas Survey) Budget allocation is difficult because of economic constraint.</p> <p>(FY 1999 Overseas Survey) The construction has not yet started since the project has not received any budget from the government due to the national economic constraint. However, the Land Development Department realizes the importance of the soil and land rehabilitation and has a strong intention to complete the project. Therefore, an amount of budget is allocated for conducting advisory and demonstrative activities to present a suitable way of soil and land rehabilitation in the project area. At the same time, the Land Development Department is now under process to request external fund.</p> <p>(FY 2000 Domestic Survey) DLD requests the approval by the Thai government, however they has not obtained the budget and prepared the workshop for the realization.</p> <p>(FY 2001 Overseas Survey) Due to economic constraint, the Government has policy to slowdown the establishment of new project. At the same time, LDD has tried to submit projects to request for external fund support, but they have not got approval. However, LDD has regularly supported budget for conducting soil improvement by using organic matter and green manure as well as strengthen orchard cultivation in the project areas. At present, those areas can be used for cultivation as soil fertility has been rehabilitated.</p> <p>(FY 2001 Domestic Survey) The government currently restricts the allocation of budget for new projects due to economic deterioration. Also, procurement of foreign fund is restricted. However, the concerned authorities are trying to improve the soil quality of the project area within the range of annual budget.</p> <p>(FY 2005 Domestic Survey) No information to be specifically mentioned.</p> <p>(FY 2005 Overseas Survey) Monitoring and Evaluation for the effect of sedimentary soil management to productivity of rambutan and durian were conducted from October 1996 to September 1998 by regional land development office. The study aims to compare sedimentary soil management methods and to clarify utilisation of methods for production of rambutan.</p>		



# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/S 217/95

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Improvement Plan for Railway Transport around Bangkok Metropolis in Consideration of Urban Development		
<b>3. SECTOR</b>	Transportation / Urban Transportation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	State Railway of Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Railway Technical Service (JARTS) Yachiyo Engineering Co., Ltd. ALMEC Corporation		
<b>7. STUDY PERIOD</b>	Aug.1993 ~ Oct.1995 26month(s) ~		
<b>8. SITE OR AREA</b>	Bangkok Metropolitan Area		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;</p> <p>M/P settlement on the integrated urban development and railway improvement in Bangkok Metropolitan Area. F/S proposals for SRT East Line and New SRT Line to SBIA.</p> <p>&lt;F/S&gt;</p> <p>(1)Development Plan of Model City -Lat Krabang-East New Urban Community:120.9ha</p> <p>(2)Railway Improvement Plan</p> <p>1)Commutation transport improvement</p> <p>a.Yommarat-Hua Mak (13.0km)</p> <p>b.Hua Mak-Khlong Luang Phaeng (24.1km)</p> <p>c.Khlong Luang Phaeng-Chachoengsao (20.1km)</p> <p>d.Others</p> <p>2)New SRT Line to SBIA (5.1km, electrify a railroad)</p> <p>3)High Speed Rail Plan (Hua Lamphong-Map Ta Phut)</p> <p>a.Increase a number of diesel car</p> <p>b.Railroad crossing improvement</p> <p>c.Others</p>			

都市開発と一体化した首都圏鉄道輸送力増強計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

## Description :

(FY 1996 Overseas Survey)

On Jan.29.1996 National Economic and Social Development Board and SRT organized the seminar on "The Integration of Future Railway Transport and Urban Development". The purpose of the seminar was to share perceptions of related organizations. Although this study proposed the involvement of many authorities for the implementation, it is considered difficult to implement in such a way. To realize the project quickly, SRT would include the electrification of the eastern line to Chachoengsao in the current investment plan (1997~2001). Since the urban development along the railway line has not yet come into reality, the project financing and physical configuration of the system will be slightly different from what recommended. The Study suggested to finance the project with fare charges, taxes, etc. but SRT will request for a Government budget. Number of railway stations will be as it is now. New station will be built later to serve new communities after the future urban development makes progress. OECF is now interesting in financing the private sector project in Thailand. If OECF agrees to support the private project for urban development along the railway line while supporting the construction of railway infrastructure (double-tracking, electrification, etc.), the project implementation will be accelerated.

(FY 1997 Overseas FU Survey)

The project delay is caused by the problem of Hopewell Project which will be terminated the contract by the Thai government soon. Moreover SRT faces the problem of budget constraint. After the cancellation of the Hopewell Project, it is believed that SRT may further implement the Hopewell Project itself or award the contract to private company again.

Priority for the project implementation mentioned by the management team of SRT is 1) double track, out of the Hopewell station area, 2) electrification, 3)urban development. Total project cost is 10 bil.Bahts. The double track project in Bangkok area is now put in the Eighth Five Year Plan. The amount of 4.5 bil.Bahts allocated by the government may be first planned for the implementation of the Northern Line double track. The Eastern Line double track will be implemented in order to support the Second International Airport, Nong Ngu Hao, and Laem Chabang Seaport. Actually, the double track for Eastern Line will become triple track in stead because the double track project will not be enough for demand of Laem Chabang Seaport in the future. There is no budget allocated for implementation of the Southern Line double track and North Eastern Line double track. According to the management team of SRT, NESDB not SRT, should be the core organization for implementation of the Lad Krabang Urban Development Area Project.

(FY 1999 Overseas Survey)

Northern Line (Rangsit - Ban Pa Chi, 61km) triple track: 1993 ~ 1999 (completed). Northern Line (Ban Pa Chi - Lop Buri, 43km) double track: 2 years. D/D has been completed. Currently in the process of negotiation with potential contractor. North-Eastern Line (Ban Pa Chi - Mab Ka Bao, 44km), Eastern Line (Hua Mark - Chachoengsao, 45km, triple track), Southern Line (Bang Su - Nakhon Pathom, 41km): waiting for cabinet consideration of the change of construction cost and source of fund.

Under the direct order by the Prime Minister, Taksin in Sep.2001 after change in his administrations, the Bangsue Junction has been recognized as the center of the railways to be developed to have a function to control the railways from north and south. The posts on the Northern Line have been removed and the new double track from Bangsue to Donmuang has come to be constructed there. Total cost will be about 7 to 8 billion Baht. On the Eastern Line, the present double track will be four-tracked from Bangsue to Hua Mark. They came out with the policy to construct and expand only the benefit productive routes.

Four-track Project:

(FY 2001 Domestic Survey)

1. Eastern Line (from Hua Mark to Chachoengsao, 45 km)

Finance: 5.9 billion Baht (Civil works 1.6 billion., Track laying 1.4 billion, Bridge construction 2.9 billion)

Period: 28 months from Dec.2000

Content: Triple track

Situation: completed until 21 %

2. Southern Line (from TARINCYAN to Nakhon Pathom, 42 km)

Finance: 4.2 billion Baht

Period: 24 months from Jul.2000

Content: Double track

Situation: completed until 53 % \* It has been double-tracked between Bang Su and TARINCYAN.

3. North-Eastern Line (from Ban Pa Chi to Mab Ka Bao, 44 km)

Finance: 2.4 billion Baht (Civil works 1.0 billion., Track laying 1.3 billion, Bridge construction 0.1 billion)

Period: 24 months from Jul.2000

Content: Double track

Situation: completed until 58 %

4. Northern Line (from Ban Pa Chi to Lop Buri, 43 km)

Finance: 2.0 billion Baht (Civil works 0.8 billion., Track laying 1.0 billion, Bridge construction 0.2 billion)

Period: 24 months from Jul.2000

Content: Double track

Situation: completed until 40 %

(FY 2005 Domestic Study)

There was a possibility of financing engineering works of the extension of underground which was planned to acquire 30% from government budget and 70% from foreign loans totalling 315.115 million BHT. However, due to change of Minister of the Ministry of Transportation, the plan is under a revision.

Subsequent Study: Metropolitan railway maintenance plan

Implementing period: January 2004 to April 2005

Implementing party: Local consultant company

Objectives: Considering the route change for the commute railway maintenance and detailed design.

Subsequent project: Construction of the access lines to the new airport.

Funding: Own funds 28,000 million BHT

Construction period: January 2005 to December 2007

Progress: approximately 5 %

Description: Construction of an access line between Bangkok city center and the new airport. (28km, 25kv alternating)

Technical cooperation:

Dispatch of experts: Two technical advisors to the Thai National Railway and the Traffic Policy Department, the Ministry of Transport.

都市開発と一体化した首都圏鉄道輸送力増強計画

**ASE THA/S 326/95**

道路防災対策調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  -Improvement of Road Disaster Prevention System. -Reconsideration of Disaster Prevention Method.  (FY 1996 Overseas Survey) DOH has set up services of training program targeting all level of field staff. The senior maintenance engineers have been already trained. Besides training on prevention and restoration works have been done to prevent piers and abutment from collapsing.  (FY 1997 Overseas Survey) In order to implement the proposed plan and manual due to the importance of the study, The Department of Highways would like JICA to review the study.  (FY 1998 Domestic Survey) The manual made by this study is utilized among the concerned technical staff. Finance: own fund. *Project contents/ some of the proposed measures especially for slope protection and bridge protection are to be implemented. Effect: damage by disaster is to be alleviated and the smooth traffic is to be ensured. Future prospect: the proposed projects are to be gradually implemented.  (FY 2005 Domestic Survey) No information to be specifically mentioned.		

**ASE THA/A 102/96**

モン・スアイ・ルアン川流域農業水資源開発計画

<b>PRESENT STATUS</b>	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Subsequent Study: (FY 1997 Domestic Survey) 1) RID sent this report to all of agencies concerned for coordination in planning and implementation. 2) Huai Mong Basin     RID formulate medium scale development for detailed design in 1999, but the present economic condition is not good, this project will be postponed. (FY 1999 Overseas Survey)     Huai Mong Irrigation Project: F/S is conducted from 2000 to 2001 by local fund.</p> <p>Finance: (FY 2001 Domestic Survey) 1. Construction of Mong Dam Finance: local fund</p> <p>Construction: (FY 2001 Domestic Survey) 1. Construction of Mong Dam     On going (expected completion periods: 2-3 years)</p> <p>(FY 2002 Overseas Survey) Huai Mong Headwork, Huai Mong Weir downstream: completed Feasibility Study for Huai Mong Dam which was planned to be carried out in 2002 has not started due to the necessity of the project have to be reviewed and reconsidered.</p>	

**ASE THA/S 110/96**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		Urban Environmental Improvement Program in Bangkok Metropolitan Area	
<b>3. SECTOR</b>		Administration / Environmental Problems	
<b>4. TYPE OF STUDY</b>		M/P	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Pacific Consultants International (PCI) Research, Analysis and Computing	
<b>7. STUDY PERIOD</b>		Aug.1995 ~ Feb.1997 18month(s) ~	
<b>8. SITE OR AREA</b>		Bangkok Metropolitan Area	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
- Mass Rapid Transit System Development - Sub-center Development - Sewerage and Drainage Development - Transit Facilities and Final Disposal Sites for Solid Waste Management			

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

(FY 1997 Domestic Survey)  
The following projects proposed by the Study Team and the projects positioned in the Urban Environmental Improvement Master Plan are on-going for implementation:

(1) Sewerage Project  
(FY 1997 Domestic Survey)  
It is proceeded with OECF Loan.  
Subsequent study:  
(FY 1998 Domestic Survey)  
Dec.1998~April 1997  
OECF SAPROF (50 mil.yen)

(2) Sub-center Development  
(FY 1997 Domestic Survey)  
Feasibility Study on it was requested to GOJ as JICA Development Study.  
(FY 1998 Domestic Survey)  
BMA is to request for F/S.  
(FY 2001 Domestic Survey)  
The request was made to JICA. Waiting the answer.

(3) MRTA Initial System Project (Blue Line)  
Finance:  
(FY 1998 Domestic Survey)  
27 Sep.1996 L/A 26,586 mil.yen(MRTA Initial System Project (I))  
30 Sep.1997 L/A 32,659 mil.yen(MRTA Initial System Project (II))  
(FY 1999 Domestic Survey)  
30 Sep.1998 L/A 23,343 mil.yen (MRTA Initial System Project (III))  
(FY 2001 Domestic Survey)  
29 Sep.1998 L/A 33,461 mil.yen (MRTA Initial System Project (IV))

Construction:  
On-going  
(FY 2001 Domestic Survey)  
The construction had been divided into 3 packages of northern and southern parts and car depository and has been proceeding.

(4) Solid Waste Management  
(FY 1997 Domestic Survey)  
BMA tried to find private sector to operate transit facilities and final disposal, but it is still uncertain.  
(FY 1998 Domestic Survey)  
It was planned to develop the final disposal sites by BIT scheme. Since bids were unsuccessful, implementation with OECF loan is under consideration.  
(FY 2001 Domestic Survey)  
Although the SAPROF was made in order to introduce the incinerator in 2000, the Yen loan is not provided yet.

Application of the result of this Study:  
(FY 2001 Domestic Survey)  
"Urban Environment Geographic Information System" provided by this Study is applied to "Master Plan of Urban Railways in Bangkok" which is under implementation.



**ASE THA/S 109/97**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		The Western Seaboard Regional Development	
<b>3. SECTOR</b>		Development Plan / (Development Plan in) General	
<b>4. TYPE OF STUDY</b>		M/P	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National Economic and Social Development Board(NESDB)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd. PADECO Co., Ltd.	
<b>7. STUDY PERIOD</b>		Jan.1996 ~ Jul.1997 18month(s) ~	
<b>8. SITE OR AREA</b>		6 provinces in Western Seaboard(Kanchanaburi, Ratchaburi, Phetchaburi, Samut Songkhram, Prachuap Khiri Khan, and Chumphon)	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1. Kanchanaburi Tourism Promotion Development		(US\$ 43,000,000)	
2. Kanchanaburi Agricultural Intensification Development		(US\$ 15,000,000)	
3. Bang Pong Industrial / Distribution Development		(US\$ 269,000,000)	
4. Samut Songkhram Free Trade Area Development		(US\$ 800,000,000)	
5. Petchaburi Science City Development		(US\$ 2,244,000,000)	
6. Bang Saphang Free Trade Area Development		(US\$ 465,000,000)	
7. Chumphon Tropical Fruit Development		(US\$ 194,000,000)	

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 1998 Domestic Survey)</p> <p>Japanese project-type technical cooperation is continuously requested for the project below.</p> <ol style="list-style-type: none"> <li>1. Chumphon tropical fruit center project</li> </ol> <p>Japanese specialists are requested for the development programs below.</p> <ol style="list-style-type: none"> <li>1. Touristic development specialist (long term)</li> <li>2. Traffic security specialist (short term)</li> </ol> <p>(FY 1999 Overseas Survey)</p> <ol style="list-style-type: none"> <li>1. Kanchanaburi-Tavoy Corridor Development Plan: The road construction will start in June, 2000.</li> <li>2. The development of Regional Link Road(North-South Link) is being considered to be implemented by government budget.</li> <li>3. Hua Hin Airport Expansion is under construction.</li> <li>4. Mangrove Preservation Program in Samut Songkhram is under operation.</li> <li>5. The development of Scenic Coastal Road is under consideration by Public Works Development and Department of Highways.</li> <li>6. The Independent Power Produces(IPP) Project in Prachuap Khiri Khan for provision of energy in Bang Saphan and the nearest area is under consideration by the Cabinet.</li> <li>7. The Industrial Estates Expansion in Bang Saphan Area is under consideration by Sahaviriya Group.</li> </ol> <p>(FY 2001 Overseas Survey)</p> <ol style="list-style-type: none"> <li>1. Kanchanaburi-Tavoy Corridor Development Plan: The road construction will start in Jan.2002.</li> <li>2. The development of Regional Link Road is under construction and there will be a seminar in this issue chaired by the Minister of Transportation and Communication in the beginning of 2002 in Kanchanaburi Province.</li> <li>3. Hua Hin Airport Expansion is under operation.</li> <li>4. Mangrove Preservation Program in Samut Songkhram is under operation.</li> <li>5. The development of Scenic Coastal Road is still under consideration by the Ministry of Interior.</li> <li>6. The Independent Power Produces (IPP) Project in Prachuap Khiri Khan is still under consideration by the Cabinet.</li> <li>7. The industrial Estate Expansion in Bang Saphan Area is still under consideration by the industrial Estate Authority of Thailand and Sahaviriya Group.</li> </ol> <p>(FY 2002 Domestic Survey)</p> <p>Subsequent Studies:</p> <ol style="list-style-type: none"> <li>1. was conducted during 6 months from Aug. 2000. The Study proposed the plan for dam project, aimed at irrigation development. Bang Saphang Free Trade Zones is proposed. And conducted survey on its technology, environment, and economy.</li> <li>2. F/S was conducted as during 5 months from Sep. 2000. The F/S is related to water transmission through the pipeline from Tasae Dam.</li> </ol> <p>(FY 2002 Overseas Survey)</p> <ol style="list-style-type: none"> <li>1. Kanchanaburi-Tavoy Corridor Development Plan: The road construction will be started in early 2003 after the Political Situation between Thailand-Myanmar was stable.</li> <li>2. The development of Regional Link Road: The seminar will be conducted in the beginning of 2003 in Kachanaburi Province.</li> <li>3. Hua Hin Expansion: It is ready for operation.</li> <li>4. The development of Scenic Coastal Road: The Department of highway is studying the feasibility study of road between Samut Sakhon Province and Ban-Lam/Cha-am District.</li> <li>5. The independent Power Producers (IPP): In Prachuap Khiri Khan that was delayed about 2 years depended on shortage of power demand. The Cabinet will consider this project again in 2004/2005.</li> <li>6. The Industrial Estate Expansion in Bang Suphan Area: under consideration by IEAT and Sahaviriya group.</li> <li>7. The Industrial development in Kanchanaburi Province: This project is going desirable by IEAT and local investors for tannery and leather finishing and textile bleaching and finishing which will be relocated from Bangkok and vicinity.</li> </ol> <p>(FY 2003 Domestic Survey)</p> <ol style="list-style-type: none"> <li>1. Tasae Dam Construction Project: Fund raising: Approved by the cabinet in July 2003, land acquisition started on the FY2004 budget (from October 2003 onward) Construction: Construction is expected to start for the directly operated part such as the gate.</li> <li>2. Kanchanaburi-Danaway Road Construction Project: although a development joint venture has been already established in 2001 between Kanchanaburi Chamber of Commerce and Myanmar, the construction has not progressed. The problem appears to lie in logistics. There is a possibility that the project will be included in the aid program of Thailand for Myanmar.</li> <li>3. Bang Saphani Industrial Park Project: The project has not progressed due to deterioration of financial condition of the Safaveri group. It is partly because of the uncertain implementation of the water conveyance due to the delay in commencement of the Tasae Dam.</li> </ol>	

**ASE THA/A 314/97**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		Fishery Complex on Andaman Sea Coast
<b>3. SECTOR</b>		Fishery / Fishery
<b>4. TYPE OF STUDY</b>		F/S
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Fisheries, Ministry of Agriculture and Co-operatives
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		TETRA Co., Ltd. System Science Consultants Inc.
<b>7. STUDY PERIOD</b>		Dec.1995 ~ Aug.1997 20month(s) ~
<b>8. SITE OR AREA</b>		Andaman Sea Coast
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
1.Wharves for Large Purse Seniers and Carrier Vessels <Landing wharves>Thai offshore fishing boats: 155m, Long liners: 137m, Deep-sea purse seiners: 210m <Lay-by wharves>Thai offshore fishing boats: 115m, Long liners: 380m(available extension l.: 320m) 2.Functional Facilities (1)Land Improvement(Site: Si Rae Island, FMO owned: 65.4ha) (2)Infrastrucuture Development(City water, Electricity, Water Treatment Facilities) (3)Marketing Hall for fish landing(324m will be enlarged) (4)Office Development(FMO office, DOF office, Radio Communication System, Custom and Immigration Office) (5)Construction of Ice Plant and Ice Storage (6)Construction of Cold Storage (7)Construction of Supply Facility for Sea Water (8)Establishment of Rubbish Disposal Area (9)Establishment of Workshops where tentative repairing works for pumps and engines (10)Establishment of Fishing Gear Repairing Area (11)Construction of Fishing Gear Storage (12)Fish Box Storing Area (13)Service Building for Wharf Workers		

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

(FY 1998 Domestic Survey)

(1)The current fishery situation shows tendency toward decrease of a fish catch volume by present fishing operation in Thai territorial waters in the Andaman Sea. The tendency leads Thai fishery to necessity of stock control and new fishing ground development for sustainable fishing in the Thai waters of Andaman Sea and Indian Ocean. The former represents necessity to introduce resources management to fishing in Andaman Sea and the latter means development of tuna fishing in the sea and Indian Ocean. Fishery Complex Project is planned to develop Phuket Fishing Port as a pilot fishing port for future fishery development.

(2)The present project aims at relocating fish process plants to the estate. Implementation of the project will enable to reduce transportation costs for processing plants in Phuket and other provinces since these plants will obtain stable supplies of reasonable raw material from the Phuket Fishing Port. The products will be distributed in the local market and exported to the international market.

(3)Investment to fishing port facilities for the existing fishery will be minimized with utilizing the existing facilities efficiently. The Project will provide exclusive landing wharves which are expected to improve landing efficiency and exclusive wharves for lay-by and preparation.

(4)One segment of this project proposes the relocation of fish processing factories in Bangkok and its surrounding areas to the project site, Phuket. This move is recommended in terms of environmental conservation, alleviating the disparities between urban and rural areas and it is in line with the national plan. In addition, relocated factories will receive special tax benefits. Some of the infrastructure of the industrial estate, low interest capital for relocation activities, procurement of labor, low purchasing cost of raw materials, etc. Therefore, a "Phuket Industrial Estate Operation and Management Committee" will be established to promote the cooperation of relevant agencies and private companies through an exchange of opinions and information. This committee will be comprised of members from DOF, FMO, IEAT, Thai Industrial Financing Corporation, regional autonomous bodies, and other public agencies, and fish processors, and raw material improters from the private sector.

(5)The total project cost is estimated at 2,869 million Baht and construction term is estimated at 4 years for civil works and FMO facilities, and 3 years for construction of processing plants.

(6)The EIRR of the project was calculated at 12.02% and the project is evaluated as feasible from a viewpoint of the national economy. The FIRR of the project exceeds the interest rate of loan. The project is financially viable because of securing profitability and financial soundness.

(FY 1999 Overseas Survey)(FY 2001 Domestic Survey)

Request for conducting the subsequent study (2001~2004, US\$1mil.) was submitted to JICA.

Request for ODA loan (1,920 mil.baht) is to be submitted after the Cabinet approval in Apr. 2000.

(FY 2002 Domestic Survey)

Thailand government has not submitted the request for JBIC loan. There is little possibility to submit the request in the near future.

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE THA/A 222/98

<b>1. COUNTRY</b>	Thailand			
<b>2. NAME OF STUDY</b>	Integrated Agriculture Development in the Agricultural Land Reform Areas in the Upper Northeastern Region			
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General			
<b>4. TYPE OF STUDY</b>	M/P+F/S			
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Agricultural Land Reform Office, Ministry of Agriculture and Cooperatives, Thailand.		
	<b>PRESENT COUNTERPART AGENCY</b>			
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc.			
<b>7. STUDY PERIOD</b>	Dec.1996 ~ Jul.1998 19month(s) ~			
<b>8. SITE OR AREA</b>	Khon Kaen, Maha Sarakham, Mukdahan, Sakon Nakhon.			
<b>9. MAJOR PROPOSED PROJECT(S)</b>				
Project Cost (1,000 B)				
	1)Khon Kaen	2)Maha Sarakham	3)Mukdahan	4)Sakon Nakhon
1.Construction	75,370	44,690	28,885	86,741
Farm Pond	27,750	18,375	10,125	23,592
Farm Road	47,620	26,315	18,760	63,149
2.Design	10,944	6,701	4,027	14,245
3.Administration	7,537	4,469	2,889	8,674
4.Contingency	9,385	5,586	3,580	10,966
5.Escalation	8,845	5,263	3,412	10,436
Total	112,081	66,708	42,793	131,062
Cost per Rai	3.05	4.57	4.98	5.22
Project Evaluation				
	1)Khon Kaen	2)Maha Sarakham	3)Mukdahan	4)Sakon Nakhon
1. IRR (%)	17.7 (24.7)	10.6 (21.0)	10.9 (18.2)	11.4 (19.6)
2. B/C Ratio	1.37 (1.89)	0.92 (1.62)	0.94 (1.57)	0.96 (1.50)
3. Sensitivity Analysis (EIRR, cost over-run by 10%)	15.9 (23.0)	9.1 (19.0)	9.4 (17.1)	9.8 (16.4)

東北タイ北部農地改革地区農業総合開発計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

1) Revitalization of Deteriorated Environment of Land Reform Area through Integrated Agricultural Development / Stage 1

Finance:

(FY 1999 Domestic Survey)

30 Sep. 1998 L/A 3,617mil.yen "Revitalization of the Deteriorated Environment in the Land Reform Areas through Integrated Agricultural Development (Stage I)"

\*Project components

Project period: 2000 - 2003 (48 months).

1. Development of integrated agriculture: 1) Construction and maintenance of agricultural infrastructure (construction of farm ponds, community ponds, farm and village roads, and irrigation facilities, and production of maps of all the project areas; 2) Procurement of goods and equipment; 3) Conserving protected areas adjacent to LRAs and the environment in and around LRAs (soil and water conservation by means of reforestation, etc.).

2. Consulting services: 1) Detailed design, assistance related to tenders and project construction supervision; 2) Technical assistance to farmers for promoting integrated agriculture; 3) Conducting training for staff members of ALRO.

The procedure of consulting and procurement is currently in progress. The implementation will be started immediately after the evaluation.

Construction:

(FY 2001 Domestic Survey)

Period: Feb. 2001 - Nov. 2004. The followin works are implemented in the four provinces of Khon Kaen, Maha Sarakham, Mukdahan, and Sakon Nakhom.

1. Design and construction of small farm pond, midium farm pond, and farm roads.

2. Instruction on agricultural production, stockbreeding promotion, and horticulture promotion.

3. Instruction on marketing system planning, farmers organiation, and farmers participation.

Contractor: Design/construction management/instruction to farmers: Consaltants J/V

Situaiton of progress: Construction: Local medium and small sized contranctors.

(FY 2003 Domestic Survey)

45% of construction completed

(FY 2002 Overseas Survey)

1) Development of Rural Community and People Organization Network

- Strengthening the people's organization: 50 farmers' group and 2,350 farmers are strengthened by the project.

- Training for communities and people's organization: 29 training courses on community and 860 farmers attended the course.

- Study tour for community and people's organization: 23 trips and 546 farmers are organized by the project.

2) Infrastructure Development

- Farm pond: 1,980 farm ponds are now being in the construction contract of which 527 sites are completed. The remained farm ponds will be completed in the next rainy season.

- Enlargement of Existing Farm Ponds: 372 sites out of 469 applied sites are found eligible and suitable, but the construction has not started.

- Community Ponds: 20 sites out of 35 applied sites are found eligible and suitable. The construction started in Oct. 2002 for the first 4 sites.

- Farm and Village Roads: Total of 587.9 km of the roads are completely designed. 249.2 km are now being in the construction contract.

- New Irrigation Facilities: Design is nearly completed and now being revised.

- Soil and Water Conservation: The design has been completed. Bid will be issued during Nov. to Dec. 2002.

1/4,000 Topographic Mapping: At the end of Oct. 2002, 75% of work was accomplished.

3) Agriculture Development

- Integrated Farming Development: The project organized training courses and study tour on Integrated farming and involved activities to about 10,000 farmers.

- Agricultural Land Reform Fund for Agricultural Development: ALRO has approved the agricultural credit to 1,240 farmers at the amount of 25.75 mil. Baht.

4) Environmental Revitalization and Forest Conservation

13 training courses (involved 400 farmers) and 7 study tours (involved 250 farmers) were organized by the project.

2) Revitalization of Deteriorated Environment of Land Reform Area through Integrated Agricultural Development / Stage 1

**ASE THA/S 103/99**

全国地方空港整備計画調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 2002 Domestic Survey)  After the economic crisis in Thailand in 1997, the privatization policy was introduced by the Thai Government in parallel with the IMF aids. Since then, the institution of civil aviation has been examined including the organization separation of the DOA and airport ownership. In addition, there has cast the financial policy to shrink the budget, it has not yet decided who will run the regional airports. Because of these conditions in Thailand, implementation of the projects is not certain.</p> <p>(FY 2003 Domestic Survey)  Under present circumstances, with downturn of local airports and the basic policy of the aeronautical station focusing on strengthening of safety regulations, priority of airport improvement has been relatively lowered.</p> <p>(FY 2003 Overseas Survey)  While a part of extension constructions shown bellow are in progress, the construction project of new airport is considered difficult to be implemented.  Lampang: Extension construction of a runway  Mae Hong Son: Extension construction of an apron</p> <p>(FY 2004 Domestic Survey)  No information</p> <p>(FY 2005 Domestic Survey)  No information to be specifically mentioned.</p>	



**ASE THA/S 104/99**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		Master Plan on Sewage Sludge Treatment/Disposal and Reclaimed Wastewater Reuse in Bangkok
<b>3. SECTOR</b>		Public Utilities / Urban Sanitation
<b>4. TYPE OF STUDY</b>		M/P
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Bangkok Metropolitan Administration (BMA)
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd.
<b>7. STUDY PERIOD</b>		Sep.1998 ~ Nov.1999 14month(s) ~
<b>8. SITE OR AREA</b>		Bangkok Metropolitan Administration Area (1,569km <sup>2</sup> )
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
<p>1) In this M/P, 9 new sewerage development program were proposed diving and combining the existing plans. The combined sewerage system applying interceptors was adopted.</p> <p>2) The night soil collection and disposal system was planned based on the division of 4 collection areas and estimated amount of night soil for 2020 was 2,445 m<sup>3</sup>/d.</p> <p>3) Out of the total generation of treated wastewater for 2020, watering to street plants with the amount of 15,000 m<sup>3</sup>/d and khlong purification with 23,000 m<sup>3</sup>/d were proposed. The realization of khlong purification will be totally depends on the future necessity and demand.</p> <p>4) For sludge disposal, the following 3 scenarios were considered in compliance with heavy metal inclusion.</p> <p>Scenario 1(Agricultural reuse):</p> <p>Low risk sludge: All the sludge are used for organic fertilizer after composting</p> <p>High risk sludge: All the sludge are disposed to the landfill site after dewatering</p> <p>Scenario 2 (Incineration introduction)</p> <p>Low risk sludge: All the sludge are used for organic fertilizer after composting</p> <p>High risk sludge: Up to 2009: All the sludge are disposed to the landfill site after dewatering</p> <p>After 2010: 75% of sludge are disposed to the landfill site [after dewatering, The rest(25%) is incinerated.</p> <p>Scenario 3(50% Agricultural reuse) :</p> <p>Low risk sludge: 50% of sludge is used for organic fertilizer after composting. The rest(50%) of sludge is disposed to the landfill site after dewatering.</p> <p>High risk sludge: All the sludge are disposed to the landfill site after dewatering.</p> <p>5) When the sludge is used for agricultural purpose, compost plant construction at the North, West and East provinces were proposed. The detail construction site will totally depends on the results of future market survey and the demand surveys.</p>		

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 2000 Domestic Survey)  After completion of wastewater system in Bangkok, the proposed sludge treatment system will be carried out.  At the moment, the Wastewater system in Bangkok is still first stage, so it may take more than 5 years to start the proposed Sludge Treatment System</p> <p>(FY 2001 Domestic Survey)  There are 9 projects on the sewage by the BMA and 3 projects of them were already completed. It seems to take a time for the proposed projects by this Study because they are started after the completion of the projects on the sewage.</p> <p>(FY 2002 Overseas Survey)  The reason of the status of delayed:  The Central Sludge Treatment Construction that is the precondition of this proposed project has been delayed and just completed in 2002. The proposed project will be implemented within 1 or 2 years.  Current Status:  BMA tries to operate and set some equipment to get suitable treatment systems. Sludge characteristics from digestion are also being analyzed to find out risk assessment according to JICA's method in ranking procedure. After BMA gets the conclusion of sludge risk level, BMA will select the appropriate way for disposal, from the proposed scenarios in this Study.</p> <p>(FY 2003 Domestic Survey)  Improvement of sewerage facilities in Bangkok are underdeveloped because the Bangkok City Government has difficulties in fund raising of the vast capital required to complete the improvement of sewerage facilities in the whole area of Bangkok and because Thailand restricts borrowing of loans from foreign donors as its national policy. Since improvement of sewage treatment plants is especially underdeveloped, there is little generation of sludge and thus, there is no opportunity for recycling the sludge.</p> <p>(FY 2004 Domestic Survey)  No information to be specifically mentioned.</p> <p>(FY 2004 Overseas Survey)  The characteristics analysis of purified sludge, to clarify a risk assessment, showed low risk of a heavy material pollution, according to the ranking methods of JICA. Therefore, as proposed in Plan 1 of the JICA Master Plan 1, sludge will be utilised as organic fertiliser after been composted.  For the possibility of utilising sludge as organic fertiliser social, economic, and environment impact analysis will be conducted to determine the possibility of re-cycling sludge. Research proposal for sludge composting has been prepared before requesting budget to the mayor.</p> <p>(FY 2005 Domestic Survey)  No information to be specifically mentioned.</p> <p>(FY 2005 Overseas Survey)  BMA is planning to implement a detail design study on sewage sludge composting plant in FY 2007. The objectives of the study are to develop sewage sludge quality after digestion in order to utilise in agricultural land, and to prepare tender documents, and to prepare composting plan in order to estimate construction cost. The project requires approval of the governor before requesting for the fund. Composed sludge is planned to be used in BMA public parks and BMA district office as an organic fertiliser.</p>	

**ASE THA/S 209/99**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		The Study on Integrated Plan for Flood Mitigation in Chao Phraya River Basin
<b>3. SECTOR</b>		Social Infrastructure / River & Erosion Control
<b>4. TYPE OF STUDY</b>		M/P+F/S
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation Department, Min. of Agriculture and Cooperative
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		CTI Engineering International Co., Ltd. INA Corporation
<b>7. STUDY PERIOD</b>		Dec.1996 ~ Aug.1999 32month(s) ~
<b>8. SITE OR AREA</b>		M/P: Entire Chao Phraya River Basin (164,000km2) F/S: Entire Chao Phraya River Basin (164,000km2)
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
<p>&lt;M/P&gt;</p> <p>(1)Alternative-1: Modification of Dam Operation: 2000 Improvement of Drainage and Water Distribution in Agricultural Areas: 2001-2018 River Improvement in Delta Area (Return Period of 10 years): 2001-2005</p> <p>(2)Alternative-2: Modification of Dam Operation: 2000 Improvement of Drainage and Water Distribution in Agricultural Areas : 2001-2018 River Improvement in Delta Area( Return Period of 10 years): 2001-2005 Heightening of Bangkok Barrier: 2004-2007</p> <p>(3)Alternative2-2: Modification of Dam Operation: 2000 Improvement of Drainage and Water Distribution in Agricultural Areas : 2001-2018 River Improvement in Delta Area ( Return Period of 25 years): 2001-2005,2016-2018 Diversion Channel (Ayuttaya-East Bangkok-Sea) : 2005-2013, 2013-2016</p> <p>&lt;F/S&gt;</p> <p>(1)Modification of Operation Rules for 3 Dam Reservoirs (Sirikit, Bhumipol, Pasak): 2001</p> <p>(2)River Improvement in Delta Area(Return Period of 3 years) : 2001-2005</p>		

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (FY 2000 Domestic Survey) A request of implementation of a Feasibility Study on the proposed diversion channel was expected to be submitted soon from the Thai government when this study was completed. However, coordination towards the Feasibility Study among the agencies concerned has not been made well. Any concrete progress has not been seen so far not only for the Master Plan but also for the F/S projects.		
(FY 2001 Domestic Survey) The main counterpart agency, RID and EGAT should mutually agree and cooperate to materialize the priority project as the basic agreement was made at the time of Study. However, there is a financial problem on the exact implementation and there is no progress. Moreover, although the request for F/S on the Flood Control Channel Project was made by the Bangkok Metropolitan Agency, the RID is not working positively because the project scale is big, therefore the Japanese side is keeping wait-and-see attitude. The situation to be materialized of the other proposed projects is not well. The organizations concerned recognized well the importance of the implementation of disaster control because the flood disasters have been occurred frequently after the Study. However, the ONWRC (the Office of National Water Resource Committee) which would be the rightful to take an initiative to coordinate the related organizations (RID, EGAT, PWD and others) cannot work effectively because of the lack of finance and personnel. To support for this matter might be important.		
(FY 2002 Domestic Survey)(FY 2003 Domestic Survey) The request for F/S of Construction of Tailwater project was submitted to Japanese Govt., as was proposed by the M/S. Since Japan has pointed out the necessity of reaching agreement among Thai concerned organizations, the project seems to have been brought to the deadlock. However, Thai Govt. recognizes the importance to implement F/S, and it is anticipated that projects may got rolling, according to changes in situations.		
(FY 2002 Overseas Survey) The alternative 2-2 is selected and approved by Office of National Water Resources committee for continuing consultation with agencies concerned to formulate the implementation process. According to the serious flood in 2002, the government is considering to implement flood mitigation program in Chao Phraya Basin by using the proposed plan from this Study and the additional study are formulated by RID and other agencies concerned.		
(FY 2004 Domestic Survey) No information to be specifically mentioned.		
(FY 2005 Domestic Survey) Although a F/S study on diversion channel in Chao Phraya River was proposed as a subsequent study, the C/P could not make an internal agreement.		
(FY 2005 Overseas Survey) Several project proposed in the study has been scrutinised by RID to mitigate flood disaster of Chao Phraya River.		

**ASE THA/S 306/99**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		The Study on the Kok-Ing-Nan Water Diversion Project	
<b>3. SECTOR</b>		Social Infrastructure / Water Resources Development	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Irrigation Department, Ministry of Agriculture and Cooperatives	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		Sanyu Consultants Inc. Nippon Koei Co., Ltd.	
<b>7. STUDY PERIOD</b>		Dec.1997 ~ Dec.1999 24month(s) ~	
<b>8. SITE OR AREA</b>		Northern part of Thailand (Kok and Ing River)	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The diversion canal and tunnels of about 150 km long, consisting of the following facilities, are required by the Project.</p> <p>1. Kok Intake : At the intake structure to be constructed immediate upstream of the existing Chiang Rai weir, water is diverted from the Kok river with water levels raised by the Chiang Rai weir.</p> <p>2. Kok to Ing Diversion Canal : A series of open canal, siphon, tunnel and culvert with a total length of 54.4 km and a capacity of 140 cu.m/sec to link the Kok intake and the Ing diversion weir.</p> <p>3. Ing Diversion Weir : A rubber-type weir constructed on the Ing river near Amphoe Thoeng to divert 175 cu.m/sec of water from the Ing river together with the diverted from the Kok river.</p> <p>4. Lao Diversion Canal : Diversion canal of 13.1 km long and 175 cu.m/sec capacity to connect the Ing diversion weir and the Ing Yot tunnel, consisting of open canal, siphon, tunnel and culvert.</p> <p>5. Ing-yot Tunnel : The diversion tunnel of 50.9 km long and 175 cu.m/sec capacity with 7 adits of 17.4 km long in total is planned to transport the water transbasin from the Ing basin to the Nan basin connecting the outlet of the Lao diversion canal and the Yot river, a tributary of the Yot river.</p> <p>6. Yao Flood Control Dam : This works to control flood runoffs during wet season from the upstream reaches of the Yao river and to provide in dry season irrigation water to the beneficiary areas situated along the Yao and Nan river.</p> <p>7. Yao River Training Works : Improvement works of Yao river channel extending over 41.9 km to let the 200 cu.m/sec at most of discharge flow smoothly</p>			

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (FY 2000 Domestic Survey) This project is expected to be implemented by JBIC loan, however, no concrete action has been taken for the realization.  (FY 2001 Domestic Survey) The last public hearing was held in Nan Province from June to July 2001. Rehabilitation of some irrigation facilities is in progress from the viewpoint that water users in each basin should be provided with enough water before the Kok-Ing-Nan Water Diversion Project is started.  (FY 2002 Domestic Survey) This project is a huge project, with a cost of reaching 2 trillion Yen. The project becomes infeasible, unless local residents' requirements are satisfied. Royal Irrigation Department (RID) conducted a Study, and is currently preceding/examining formulation of plans for irrigated agriculture is under consideration.  (FY 2002 Overseas Survey) Following precedent projects of each basin had been getting the government budget, 2 projects in designing stage in the last 2 fiscal year and one another in designing stage and also in the EIA stage in last fiscal year. 1) Nong Lunag Swamps Improvement Project Kok river basin 2) People's Irrigation Weir System Improvement in Ing river basin 3) Samun Irrigation Reservoir in Nan river basin The three selected projects of each basins so called ' Samoon Reservoir Project, the above 1) and 2) have been launched on detail design level during Thailand Fiscal Year 2002- 2003.  (FY 2003 Domestic Survey) Soon after the completion of the study, the nation experienced the currency/economic crisis in 1997. As a result, with rapid decrease in water demand, the momentum for the project has lowered and remained short of development into the next step up to now. However, under the favorable economic growth of recent years and the strong leadership of the current Thaksin administration, solution of water shortage in the near future is promoted as an important policy and the momentum for implementation of a large-scale water conveyance project such as Kok-Ing-Nan is examined including the alternative plan. Thus it is likely that the project may enter the implementation stage in a stroke depending on the situation.  (FY 2003 Overseas Survey) RID has submitted the F/S EIA Report to the Environmental Policy/Planning Office, Ministry of Science, Technology and Environment and is waiting for the result of deliberations at present.  (FY 2004 Domestic Survey) In recent years, Thai Gov. is enthusiastically propelling corporative projects with neighbouring countries. In water development/management field, it is conducting a research taking into account the perspectives of irrigating water from neighbouring countries to supplement water shortage in dry season. Therefore, storage and irrigation of water in dry season from neighbouring countries, which were not on a premise of the project, is becoming to have a possibility and is emerging as an effective irrigation plan to replace Kok, Nan, Ing water irrigation project. For this reason, Ministers of Myanmar and Thai have signed a MOU to promote bilateral agreement on water development/management, which the irrigation project is on the ripe to be propelled as a improved version of the Kok, Nan, Ing water irrigation project.  (FY 2005 Domestic Survey) No information to be specifically mentioned.		

**ASE THA/S 206/01**

<b>1. COUNTRY</b>		Thailand	
<b>2. NAME OF STUDY</b>		The Master Plan Study for the Coastal Channels and Ports Development	
<b>3. SECTOR</b>		Transportation / Port	
<b>4. TYPE OF STUDY</b>		M/P+F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Marine Department (Harbour Department)	
	<b>PRESENT COUNTERPART AGENCY</b>	Marine Department	
<b>6. CONSULTANT(S)</b>		Pacific Consultants International (PCI)	
<b>7. STUDY PERIOD</b>		Jan.2001 ~ Feb.2001 1month ~	
<b>8. SITE OR AREA</b>		M/P: Southern Coast on the Gulf of Thailand F/S: 1) Songkhla, 2) Sichon, 3) Bang Ra Pha	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>M/P: There are 10 projects to be implemented as long-term development. In Songkhla, the coastal shipping terminal should be expanded to have one more coastal berth and one more Ro/Ro berth. Sand bypassing should be implemented at 10 channels: namely, Songkhla, Na Thap, Sakom, Thepha, Bang Ra Pha, Teyong Pao, Panare, Bang Maruat, Sai Buri and Narathiwat.</p> <p>F/S: 1) Songkhla Port: The project consists of construction of port facilities (coastal shipping Berth, Ro/Ro berth) and shore protection facilities, 2) Sichon Channel: the new jetty is planned to prevent the channel from shoaling and protect the village from storms, and, 3) Bang Ra Pha Channel: the project consists of sandbypassing and shore protection facilities.</p>			

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (FY 2002 Domestic Survey)(FY 2003 Domestic Survey) 1) Songkhlat Project: PCI submitted I/P to the counterpart personnel, 2) Sichon project: shore protection facilities project is under construction by C/P, 3) Dredging Operation of Pump dredger: due to lack of budget, any operation has not been conducted, and, 4) Harbour Department reorganized to Marine Department, a part of OMPC (Office of the Marine Promotion Commission)  (FY 2002 Overseas Survey) The Marine Department has improved the dredging in accordance with this Study's recommendation as follows; 1) The dredger was moved without lifting the dredge head. 2) Reduced the diameter pipe: - 14" is reduced to 12". - 20" is reduced to 16" - 18". Due to the reduction, the engine revolution was reduced from 1,000 rpm to 800 rpm and the vibration of engine was reduced accordingly, resulting in less fuel consumption.  (FY 2004 Domestic Survey)(FY 2004 Overseas Survey) No information to be specifically mentioned.  (FY 2005 Domestic Survey) Subsequent project: Sichon Channel jetty construction Funding: Funding party: own funds Implementing period: 2003 Construction progress: 100% Contents: construction of additional jetty Technical cooperation: Dispatch of experts: Dredging technical guidance - There was no expert in dredging techniques thus inefficient dredging work was conducted. With a guide from 3 experts in dredging techniques of the JICA team, amount of dredging increased more than 200% which doubled dredging efficiency. Japanese dredging techniques were also inspected / introduced in C/P trainings.		



**ASE THA/S 207/01**

<b>1. COUNTRY</b>		Thailand
<b>2. NAME OF STUDY</b>		The Study for Urban Redevelopment Plan and Case Study in the Bangkok Metropolitan Area
<b>3. SECTOR</b>		Social Infrastructure / Urban Planning & Land Development
<b>4. TYPE OF STUDY</b>		M/P+F/S
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National Housing Authority of Thailand
	<b>PRESENT COUNTERPART AGENCY</b>	
<b>6. CONSULTANT(S)</b>		Nippon Koei Co., Ltd.
<b>7. STUDY PERIOD</b>		Dec.2000 ~ Mar.2002 15month(s) ~
<b>8. SITE OR AREA</b>		M/P: Study Area Level: Din Daeng, Makkasan and Huai Khwang Areas (500ha) F/S: Din Daeng Community Area
<b>9. MAJOR PROPOSED PROJECT(S)</b>		
M/P 1. constructing new 4,411 housings 2. using 1,612 housings for low income level households 3. step-wise escalation of housing rent 4. building construction of commercial facility, housings for middle-income level, and service apartment 5. infrastructure development for roads, plaza, underpass, etc.  F/S Construction of NHA housing Site-A: 1,210 households Site-B: 200 households Site-C: 1,380 households Total: 2,790 households		

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (FY 2002 Domestic Survey) From the beginning, the project was to be implemented, based on the funding from Thai Government and the private sector. As of Nov.30, 2002 Environmental Impact Assessment for the project (phase I) was approved, which need to be followed by the Cabinet approval and Prime Minister's agreement. Currently, NHA is engaged in lobbying for the cabinet approval; in sum, lobbying for NESDB and Ministry of Finance. In terms of NESDB, they have had favorable reaction on the project as well as Japan's urban management policy. Ministry of Finance, on the other hand, seems to be difficult to persuade. As a result of the series of consultation, NHA was required to revise the schedule, cost estimates, and computing FIRR for the projects because they failed to obtain the site of B' plot.  At present, though NHA needs to reexamine EIRR, they lack necessary know-how for evaluating EIRR. Therefore, they have requested JICA Thailand office to dispatch an expert(s), specialized in economic evaluation.  (FY 2002 Overseas Survey) Since Jan. 2002: Din Daeng Urban Renewal Project was submitted to the NHA's board of directors for the approval of Social Implementation Plan. After the approval, the social activities such as social survey and public participation have been carried out. 2 Project Information Centers were established within the project. Sep. 2002: 90% of the target residents participated in the process, the response of the residents towards the project was submitted. Feb. 2002: Din Daeng Urban Renewal Project was submitted to the Ministry of Science and Environments for EIA, and approved in Nov. 2002. Current situation: The results from the meetings between the concerned governmental agencies such as BMA and NESDB and the financial agreements derived from the meetings will be summarized and submitted to the Cabinet for the Approval of the First Phase Implementation Plan. It is expected that the Cabinet approve in Jun. 2003.  (FY 2003 Overseas Survey) The Din Daeng Urban Redevelopment Project is waiting for an approval from local residents, the related ministries and the congress, and as for the fund raising of the project, either of the following plans will be submitted to the congress: a) investment in the project by the government, b) investment in the project by NHA with subsidization by the government, c) investment in the project by general investors with subsidization by the government.  (FY 2004 Domestic Survey) Thai has completed a review of the master plan for Prioritised redevelopment are (100 ha). Investment promotion activities have been conducted to redevelop existing NHA owned residences. NHA has visited Singapore and Taiwan and is planning to visit Japan for above purpose. Requesting courtesy visits to JICA HQ.  (F Y 2004 Overseas Survey) Board of directors of NHA has made a consideration for the subsequent studies on 22nd June 2003 and has reached to the following conclusions. 1) The project require an enormous investment 2) Government is considering to promote private investment rather than public investment. 3) Several buildings in the target site is not suitable for winter. Measures such as amendment of regulation is required. 4) NHA should promote transfer of residents 5) Submission of the project within 3 month time. In addition, discussion with the residents are as follows. 1) NHA has established an office in the project area and is continuing a discussion over 2 years. 2) NHA has contacted Kin Prajadhipok's Institute an is calling for residents participation.  (FY 2005 Domestic Survey) Subsequent Study: The Feasibility Study for Din Daeng Community Urban Renewal Project Implementing period: 2005 Implementing body: National Housing Authority (NHA) Objectives: 1) JICA D/S review 2) Implementation of EIA Relation with the study: Review of content planned including the residential planning Funding: Own funds Contents: NHA is requesting for the Cabinet approval of the implementation of proposed study. In addition, international tender for investor and constructor is planned. Search for investor is concerned as issue to be solved, which the NHA has visited Japan in 2005 to search for an investor.		

**ASE    THA/A 101/02**

農村活性化のための人的資源開発計画調査

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

(FY 2003 Domestic Survey)

On completion of the Study, the director of Human Resources Development Division, NESDB, reported the results of the Study to the Cabint (Ministries), announcing that the proposed projects would be implemented. It is assumed that its result will give an impact on establishment of the next 5-year-national-plan.

As mentioned above, it can be said that this Study has contributed to the Counterpart in the form of staff members' capacity building, rather than technical transfer, in which they have been encouraged to put policies into practice.

(FY 2003 Overseas Survey)

The suggestions made in the studies were submitted to the Thailand government as a master plan in relation to the human resources development in rural areas of Thailand. The project is waiting for the approval expected to be given at the beginning of 2004 at present.

(FY 2004 Overseas Survey)

NESDB has sent report of the study to 75 CEO mayors to encourage use of proposal in preparing HRD measures in individual regions/districts.

# STUDY SUMMARY SHEET

## (M/P)

ASE THA/A 102/02

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	The Study on East Asia/ASEAN Rice Reserve System		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Office of the Permanent Secretary, Ministry of Agriculture and Cooperatives (MOAC), Thailand	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Apr.2002 ~ Nov.2002 7month(s) ~		
<b>8. SITE OR AREA</b>	The Study covers ASEAN+3 countries: Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam, China, Japan and Korea		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1)To study the present status (First Step)</p> <ul style="list-style-type: none"> <li>-review the rice reserve policy and, management system and also rice utilization, production, trade and stock situation</li> <li>-review the commitment for rice trade transaction, bilateral and multilateral, especially with AFTA and WTO</li> <li>-review trades (qualities, quantities, price) and food aid mechanism</li> <li>-review the existing mechanism under the agreement of AFSR with the view to assess its strengths and weakness</li> </ul> <p>2)To explore a rice reserve mechanism in East Asia (second step) related for China, Japan and Korea including;</p> <ul style="list-style-type: none"> <li>-identify the total amount of reserve and the reserve for each country,</li> <li>-determine the manner in which the stock can be maintained and managed efficiently,</li> <li>-elaborate on the trigger and release mechanism and its relation to WTO's Agreement on Agriculture,</li> <li>-determine options for pricing mechanism and its relation to food aid programmes</li> <li>-identify the stock management,</li> <li>-assess benefits and losses of each member countries participating in the scheme,</li> <li>-identify the required rice market information system which includes coverage of information, acquisition, management and dissemination of the information, frequency of the dissemination.</li> </ul> <p>3)Implementation (Third step)</p> <ul style="list-style-type: none"> <li>-institutional arrangement / formulating consensus among organizations concerned,</li> <li>-funding / estimated cost of Reserve System,</li> <li>-preparation of a draft legal structure.</li> </ul>			

東アジア食料安全保障及び米備蓄計画調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 2003 Overseas Survey)</p> <p>Please describe the status / situation concerning to the proposed projects in the Development Study, such as the request for the fund procurement or subsequent studies.</p> <p>The second AMAF+3 meeting in October 2002, in Vientiane, Lao PDR, it has been agreed on proposed 3-year. Pilot Scheme for the East Asia / ASEAN Emergency Rice Reserve on voluntary basis.</p> <p>To implement the pilot project, the meeting has further agreed on 3 major issues:</p> <ol style="list-style-type: none"> <li>1) Establishing a Project Steering Committee (PSC), comprising of nominators from ASEAN+3 countries as well as representatives from AFSRB, to coordinate and supervise the pilot project</li> <li>2) Thailand with assistance of Japan as the Interim Coordinator, would continue to serve as the coordinating country for implementation of Pilot Scheme.</li> <li>3) Setting up a Management Team to administer the project. The pilot project need collaboration among ASEAN+3 countries. The existing mechanisms of AFSRB should be reformed to the following principles:             <ol style="list-style-type: none"> <li>1) The scheme should be simple and flexible to accommodate the need of member countries</li> <li>2) Focus on the emergency and poverty alleviation</li> <li>3) Market enhancing and WTO consistent</li> <li>4) Complementing the existing domestic and bilateral arrangements as well as the existing international food aid scheme</li> <li>5) Transparency and effective use of information</li> <li>6) Contribution is voluntary but all members are urged to participate, minimize cost of operation and management of the scheme</li> <li>7) Project should be managed by professional team</li> </ol> </li> </ol> <p>Interim Coordinator have organized the first PSC meeting on 25 July 2003, in Bangkok, Thailand. The meeting discussed and approved as follows:</p> <ol style="list-style-type: none"> <li>1) The TOR and scope of work of the Management Team would cover four areas namely: planning, implementation, reporting and organizing the PSC meeting</li> <li>2) The Management Team would be required to have technical and professional qualifications and work experiences in international public and private organizations dealing with rice production, trade, inventory management and food aid.</li> <li>3) Interim Coordinators with the ASEAN Secretariat will be responsible for the recruitment of General Manager</li> <li>4) The Implementation schedule of Pilot Project will start from January 2004 as a 3-year project.</li> </ol> <p>Interim coordinators (Thailand and Japan) with ASEAN Secretariat now work in the process of recruitment of the General Manager. The General Manager Announcement has been sent to the PSC members and posting on the ASEANWEB. The contract Agreement for the GM will be drafted and forwarded to Interim coordinator to make comment and will discuss and finalize the contract agreement in early December, 2003.</p> <p>Ministry of Agriculture and Cooperatives, Thailand, has domestic study which hired Faculty of Economics, Chulalongkorn University, to review and analyse the strengthening mechanism on rice reserve system, stabilize rice price and improve efficiency of rice stock holding in Thailand. The study started to implement in March 2003 and finish in March 2004</p> <p>Office of Agricultural Economics, Ministry of Agriculture and Cooperatives, Thailand, has been requested the individual expert on Planning for food security in Thailand and ASEAN countries from JICA to contribute and support during the implementation on the pilot project.</p> <p>(FY 2004 Domestic Survey)</p> <p>No information to be specifically mentioned.</p> <p>(FY 2004 Overseas Survey)</p> <p>Coordinator (Thai and Japan), in the presence of ASEAN secretariat, has conducted selection of the general manager, which Indian national Dr. Mulyo Sidik was selected as the general manager of the pilot project, concluding the contract period from March 2004 to 28th February 2007.</p> <p>(FY 2005 Domestic Survey)(FY 2005 Overseas Survey)</p> <p>New progress for the East Asia Emergency rice Reserve Pilot project (EAERR) are as follows:</p> <ol style="list-style-type: none"> <li>1. The 4th project steering committee (PSC) meeting was held on 21-22 March 05. The meeting approved guidelines for the release of EAERR stocks.</li> <li>2. The 5th project steering committee (PSC) meeting was held in 5-6 July 05. The meeting took case study on the implementation of release. EAERR stocks under tier 1, 2, and 3.</li> <li>3. Joint meeting of ASEAN food security reserve board (AFSRB) and PSC of EABRR was held on 16th September 2005. The meeting discussed and agreed on the principles of proposal. The principle were considered to be most effective in revising the guideline for tier 1 and 2 stock release.</li> </ol>	

# STUDY SUMMARY SHEET

## (M/P)

ASE THA/S 115/02

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	The Study on Improvement of Road Traffic Environment		
<b>3. SECTOR</b>	Transportation / Urban Transportation		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Royal Thai Police, Chiang Mai Municipality	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	PADECO Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jul.2001 ~ Sep.2002 14month(s) ~		
<b>8. SITE OR AREA</b>			
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1) Intersection improvements: 20 intersections including 8 new signals and additional pedestrian lanterns at 7 existing signals(Estimated cost: 1,094*1)</p> <p>2) New signal installation: 12 signals 4 signals only(Estimated cost: 270*2)</p> <p>3) Signal upgrading (Connection to ATC): 10 existing signals(Estimated cost: 377)</p> <p>4) Addition of pedestrian lantern : 26 existing signals(Estimated cost: 470)</p> <p>5) Pedestrian/bicycle network in Old City: Total length: 7,270 m(Estimated cost: 1,034)</p> <p>6) Hazardous location improvement: 16 locations(Estimated cost: 23)</p> <p>Estimated cost : US\$1,000*3</p> <p>Notes:</p> <p>1) 410: The cost of the works to be done by DOH.</p> <p>2) 725: The figure includes cost of eight (8) new signals under Intersection improvements</p> <p>3) Original cost estimation was calculated in Thai Baht. Firstly, the rate between JPY and THB which was presented by the final report was used (1 JPY = 0.35 THB), and secondly, the USD-JPY rate on the submission of this follow-up study was used (1 USD = 110 JPY)</p>			

チェンマイ市交通環境改善計画調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 2003 Domestic Survey)</p> <p>Among the proposed projects, the intersection improvement of Wat Ched Yod was adopted as the pilot project, which was done from September 2001 to June 2002. That the traffic flow at Wat Ched Yod became more consistent and stable. Thus, a reduction in accidents can be expected. Such expectation is supported by the results of the interview survey. Before the project, drivers felt that the intersection was dangerous. After the project, however, more than 95% of drivers feel safer at the intersection and can make a turn more easily.</p> <p>There are both positive and negative lessons learnt from the project.</p> <p>1) Measures implemented are extremely effective for traffic safety</p> <p>2) Drivers' behavior becomes more disciplined if intersection and signal are well designed</p> <p>3) Construction took much longer time than expected</p> <p>4) Quality of work was not satisfactory</p> <p>(FY 2004 Domestic Survey)</p> <p>No information to be specifically mentioned.</p>	



# STUDY SUMMARY SHEET

## (M/P)

ASE    THA/S 116/02

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Study on the Acid Deposition Control Strategy in the Kingdom of Thailand		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Pollution Control Department, Ministry of Science, Technology and Environment	
	<b>PRESENT COUNTERPART AGENCY</b>	Pollution Control Department, Ministry of Natural Resources and Environment	
<b>6. CONSULTANT(S)</b>	Research, Analysis and Computing Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Jan.2002      ~      Feb.2003 13month(s) ~		
<b>8. SITE OR AREA</b>			
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
M/P: 1) SO2 Mitigation; Shift to Natural Gas (Stationary Source)    3,500 MBt. For enhancement of the shift, public relation for raising public awareness and financial support by the government is necessary.    2) NO2 Mitigation: Countermeasures for mobile sources    total 45,000 MBht (1) Substantial compliance with the latest Emission Standard All large-size cars should comply more strictly with latest emission standard when they come onto the market.    (2) Low Emission Vehicle Promotion Urban buses should be replaced with new Natural Gas ones.			

酸性雨対策戦略調査

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

(FY 2003 Domestic Survey)

The systematic approach for preparation of acid deposition control strategy was applied to Thailand. The approach can be applied to other East Asian countries. After evaluation of the condition, the Study revealed that the current issues for mitigation was atmospheric pollution in the BMR. The outputs of the Study were as follows.

For draft acid deposition control strategy :

- Countermeasure for SO<sub>2</sub> is concentrated to the shift from high sulfur fuel to natural gas in the industrial sector in the BMR. - Enhancement of environmental management for acid deposition and atmospheric pollution. Moreover, one of important factors of the Study was technology transfer.

- Technology transfer activities for inventory, simulation and policy setting were built in to the Study. And it was undertaken on various parts of the Study.

- Through the activity of transfer, series of technology, i.e. from monitoring to simulation and preparation of countermeasures were transferred.

- The technology transfer to East Asian countries was carried out by the International seminar.

During the Study, the inventory for stationary and mobile sources was prepared. And based on the inventory, the simulation analysis was implemented. The inventory and the outcome of the simulation were utilized for the preparation of strategy, and they were regarded as the quantitative basis for countermeasures against acid deposition and air pollution in Thailand.

(FY 2003 Overseas Survey)

Future activities after the completion of the study are as follows:

1. Extensive monitoring of acid rain and environmental air pollution will be regularly conducted.
2. A program aiming at enhancement of quality of analysis will be continuously executed through simulation and inventory activities.
3. Technology transfer to East Asia nations will be implemented through JICA's Third Country Training Program (acid rain monitoring and assessment).
4. PCD will continuously implement the environmental pollution control measures with the objective of improving the natural environments of Thailand.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2004 Overseas Survey)

1. Subsequent Studies: The study will be a part of the third acid rain monitoring and assessment national training, titled "Release inventory and modelling". It is planned from 2005 to 2006.
2. Finance: Cost will be borne by the Thai government and Japanese government (cost sharing). Amount will be approximately 1.2 million THB per year.
3. Other progress:

Currently Implementation is proposed to National Environmental Board and Pollution Control Board for the implementation of the output of the project.

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

# STUDY SUMMARY SHEET

## (M/P)

ASE THA/S 117/02

<b>1. COUNTRY</b>	Thailand		
<b>2. NAME OF STUDY</b>	Study on Development for Securing System of Building Safety		
<b>3. SECTOR</b>	Social Infrastructure / (Social Infrastructure in) General		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Public Works Department (PWD),	
	<b>PRESENT COUNTERPART AGENCY</b>	Since 2002 October name of department was changed to Department of Public Works and Town and Country Planning (DPT)	
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jun.2001 ~ Mar.2003 21month(s) ~		
<b>8. SITE OR AREA</b>	<p>1.Target Area and Type of Building: Supposing that the fire prevention system proposed by the Study be legislated in the future, the study area is basically set the whole country. However, since the area which has many large-scale/special building are limited to the Area of Bangkok Metropolitan Administration (BMA) and some other regional cities, the Study puts emphasis on these areas.</p> <p>The target buildings in the Study are those used by many or unspecified people, including ten kinds of building uses, namely: 1) hotel 2) office building 3) theater 4) hospital 5) school 6) factory 7) multi-story</p>		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>As mentioned in the Objectives of Study, predominant proposals are the amendment of the Ministerial Regulations and study on the establishment of the related institutions.</p> <p>Therefore, there is no project proposal which based on the financial assistance.</p>			

建築防火システム開発計画調査

<b>PRESENT STATUS</b>	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 2003 Domestic Survey)</p> <p>One long-term expert will be dispatched from March 2004 in order to follow up the full-scale study. Prioritized areas of technical assistance include advice and guidance on amendment of the Ministerial regulations, as well as to establish the testing, evaluation and appraisal system for building materials.</p> <p>It is expected that the involvement of the expert would enable procedure of law amendment to be enforced promptly, and that Ministerial regulations concerning the testing, evaluation and appraisal system will be integrated into the building fire safety standard.</p> <p>Following effectiveness of the technical cooperation were appeared during the this development survey project.</p> <p>[Amendments of Ministerial Regulation on Fire Safety]</p> <p>a) It reformed the regulation on the fire rates from only 3 hours rate.</p> <p>b) Fire test method of the fire door was conformed to ISO</p> <p>c) Established the technical committee on technical approval system</p> <p>[Enhancement of Assessment / Inspection System]</p> <p>d) It commenced the examination on the interim inspection system</p> <p>e) It commenced the discussion on the periodical inspection system</p> <p>[Establishment of Testing &amp; Evaluation system]</p> <p>f) It clarified the establishment of new fire test laboratory in cooperation between DPT and Chulalongkorn University.</p> <p>Furthermore, after finished the development survey, the Sub-committee on the building fire safety was established under the Building Control Committee Board (BCCB), and the sub-committee planned to hold once in a two weeks.</p> <p>(FY 2004 Domestic Survey)</p> <p>1. Real legal reform have been taking place.</p> <p>2. Fire security institute has been established (March 2004) to prepare for fire resistant examination system. This institute has been established by repairing a building used for fire experiment demonstration. Fire examination furnace is by a Yen loan.</p> <p>3. Central administrative reform has planned to establish the Ministry of Construction and the Construction Regulation Department. Inclusion of functions to evaluate building techniques is considered. This, taking based on the experience and knowledge as a institution to evaluate the building techniques, corresponds to the proposal for the requirement to prepare technical evaluation scheme.</p> <p>(FY 2004 Overseas Survey)</p> <p>1. Technical cooperation:</p> <p>1) Revision of MR, EIT standard revision and new ASA standard.</p> <p>2) Preparation of rules for fire examination procedures and report for the result of fire examination.</p> <p>3) Preparation of rules for technical evaluation procedures and report.</p> <p>4) Rules for planning permission procedures by a architect focusing on fire security measures of the building.</p> <p>5) Guidelines for financial assistance and incentive system</p> <p>6) Training manual for an architect.</p> <p>7) Technical evaluation report (for architect, engineer, constructor, and others)</p> <p>As a result Ministerial Regulations of Building Control has been modernised.</p> <p>2. Other progress</p> <p>1) Revision of Ministerial Regulation (MR) No. 48 (2003 - 2004)</p> <p>Department of Public, Works, Towns &amp; Country Planning has agreed on the revision of MR 48 related to basic structure fire resistance period rating. MR 48 states that fire resistance period rating must not be below 3 hours. However, as an output of the study, Japanese expert has suggested in revising now 3 hours fire resistant period rating to 1 to 3 hours depending on scale, height, and use.</p> <p>2) Establishment of subcommittee (2003 - 2005)</p> <p>Building Management Committee has revised MR for a fire resistance period rating and established subcommittee to prepare the Thailand Building Standard Act. Building Standard Act consists of construction material, structure or fire security facilities, interior standards, fire-prevention shutter, evaluation and approval of building structure, fire resistant materials, and technical certification system for construction methods. Building Management Department under the jurisdiction of DPT has prepared Building Standard Act and submitted DS final report for a MR revision. Guideline.</p> <p>(FY 2005 Domestic Survey)</p> <p>Training for the inspectors for fire prevention security inspection has been conducted by the Department of Public Works and the Town and Country Planning (DPT) in FY 2004 and FY 2005. 90 persons have participated in the training course in FY 2005, which have seen improvement in work place, and continuous revision of the contents of the inspection.</p> <p>Technical cooperation:</p> <p>Training:</p> <p>Counterpart training: 1 personnel from DPT to limit construction fire prevention zones and interior materials, to inspect the facilities related to construction fire prevention security, and to hear construction administration and construction technology appraisal.</p> <p>Dispatch of experts:</p> <p>Long-term experts: 1 personnel in construction regulation March 2003-March 2006</p> <p>Others:</p> <p>JICA group training: Construction administration training to introduce details of the development study and proposed tasks</p>	

# STUDY SUMMARY SHEET

## (M/P)

ASE VNM/S 101/94

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Transport Development in the Northern Part of Viet Nam		
<b>3. SECTOR</b>	Transportation / (Transportation in) General		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Transport Economic Science Institute (TESI) Ministry of Transport	
	<b>PRESENT COUNTERPART AGENCY</b>	Transport Development and Strategy Institute(IDSI)	
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Jun.1993 ~ May.1994 11month(s) ~		
<b>8. SITE OR AREA</b>	The northern part of Viet Nam		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1)Road : 10 items including improvement of the national highways of route 1, 2, 18, 70 and 379, bridges across national highways and local roads. 2)Railway : 9 items including improvement of the passenger transportation system of Hanoi - Haiphong line, rolling stocks factory at San Ram and the transportation for the border area. 3)Port : Renovation and development of Haiphong and Cailan. 4)Inland Waterway : Improvement of Ninh Binh, Hanoi and Viettri river ports, dredge and improvement of main waterways.			

北部地域交通システム開発計画調査

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

As this is the first integrated development project for the northern part of the country, it is considered to make improvement of transportation.

**1.Road**

Implementations of the works are being actively progressed by means of the financing from the government of Japan, the World Bank and the Asian Development Bank.

Subsequent Study: JICA-F/S(1996), D/D WB-F/S(1996)

(FY 1997 Domestic Survey)(FY 1998 Domestic Survey)(FY 1999 Domestic Survey)

- Rehabilitation of National road 1 (Hanoi-Vinh) --- World Bank

- Rehabilitation of bridges with the length of more than 20m in the section Hanoi-Vinh --- OECF

Finance:

(1)National Highway No.1 Bridge Rehabilitation Project

28 Jan. 1994 L/A 3,870 mil. yen (I)

18 April 1995 L/A 2,859 mil. yen (II)

29 March 1996 L/A 8,808 mil. yen (III)

29 March 1997 L/A 2,239 mil. yen (II-2)

30 March 1999 L/A 13,170 mil. yen (II-3)

Construction:

(FY 1999 Overseas Survey)

OECF 1995-2001 under construction(Hanoi-Vinh / Nhatrang-Cantho / Hanoi-China border / Dongha-Nhatrang)

WB 1996-1999 almost completed(HCM-Cantho / Vinh-Dongha / Ouangngai)

ADB 1997-2000 under construction

(2)Expansion of National Highway No. 5 (two-lane ---> four-lane) Taiwan / OECF

28 Jan. 1994 L/A 8,782 mil. yen (I)

18 April 1995 L/A 5,470 mil. yen (II)

29 March 1996 L/A 6,709 mil. yen (III)

(FY 1999 Domestic Survey)

Jan. - March 1999 OECF SAPS "National Highway No.5 Improvement Project".

Construction:

(FY 1999 Overseas Survey)

OECF 1995-2000 almost completed

(3)National Highway No10 Road & Bridge Rehabilitation Project

30 March 1998 L/A 17,742 mil. yen (I)

Construction:

(FY 1999 Overseas Survey)

OECF 1998-2003 under construction

(4)National Highway No18 Road & Bridge Rehabilitation Project

30 March 1998 L/A 11,863 mil. yen (I)

Construction:

OECF 1998-2003 under construction(Noibai-Chi Linh / Bieunghi-Cuaong)

Korea loan 1996-1999 completed(Chi Linh-Bieunghi)

**2.Railway**

Feasibility Study for the improvement of the passenger transportation system of Hanoi - Haiphong line is now being carried out by the assistance of U.K. Other projects are progressed by the aid of JICA and OECF.

Subsequent Study: JICA-F/S(1996) Germany-F/S

(FY 1998 Domestic Survey)

Improvement projects of the Transportation for the border area are underway with their own fund.

Finance:

(FY 1997 Domestic Survey)(FY 1998 Domestic Survey))

Ha Noi - Ho Chi Minh City Railway Bridge Rehabilitation Project

28 Jan. 1994 L/A 4,042 mil. yen (I)

18 April 1995 L/A 54 mil. yen (II)

29 March 1996 L/A 7,341 mil. yen (III)

Project contents: Rehabilitation of nine prioritized bridges on North-South railway (Ha Noi - Ho Chi Minh City).

(FY 1999 Domestic Survey)

Jan. - Mar., May - Aug. 1999 OECF SAPI "Ha Noi - Ho Chi Minh City Railway Bridge Rehabilitation Project".

Construction:

(FY 1999 Overseas Survey)

OECF 1995-2001 under construction Hanoi-HCM

1999-2001 under construction Hanoi-Vinh

**3.Port**

Subsequent Study: JICA-F/S(1994)

Finance:

Jan.1994 L/A 3,945 mil.Yen (Haiphong Port Rehabilitation Project I)

29 Mar. 1996 L/A 10,273 mil. yen (Expansion of Cailan Port)

(FY 2000 Domestic Survey)

29 Mar. 2000 L/A 13,287 mil. yen (Haiphong Port Rehabilitation Projectt II)

Construction:

(FY 1998 Domestic Survey)(FY 1999 Overseas Study)

Haihpong Port: 1995-2000 On-going

Cailan Port : 1996-2001 On-going

北部地域交通システム開発計画調査

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 201/94

<b>1. COUNTRY</b>	Viet Nam																
<b>2. NAME OF STUDY</b>	Urban Drainage and Wastewater Disposal System in Hanoi City																
<b>3. SECTOR</b>	Social Infrastructure / River & Erosion Control																
<b>4. TYPE OF STUDY</b>	M/P+F/S																
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	People's Committee of City of Hanoi Hanoi Sewage/Drainage Corporation															
	<b>PRESENT COUNTERPART AGENCY</b>																
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. CTI Engineering Co., Ltd.																
<b>7. STUDY PERIOD</b>	Oct.1993 ~ Feb.1995 16month(s) ~																
<b>8. SITE OR AREA</b>	Urban district of Hanoi City (approx. 135sq.km)																
<b>9. MAJOR PROPOSED PROJECT(S)</b>																	
<p>&lt;M/P&gt; Following two(2) projects were proposed in order to protect flood disaster and improve the environment of urban life:</p> <p>1)Drainage Plan; Drainage Plan of Toric River Basin (77.5sq.km) Drainage Plan of Nuwe River Basin (57.9sq.km)</p> <p>2)Rehabilitation of Drainage System; Plan for 5 sewage collecting and treatment facilities, Plan for 2 separate sewage treatment facilities.</p> <p>&lt;F/S&gt; The project of drainage for Toric River Basin, which is selected to five top priority, is devided by two(2) stages as shown below:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">1st Stage</th> <th style="text-align: center;">2nd Stage</th> </tr> </thead> <tbody> <tr> <td>Capacity of Pump Station</td> <td style="text-align: center;">45cu.m/s</td> <td style="text-align: center;">45cu.m/s</td> </tr> <tr> <td>Regulating Reservoir</td> <td style="text-align: center;">3,870 thousand cu.m</td> <td style="text-align: center;">1,320 thousand cu.m</td> </tr> <tr> <td>River Renovation</td> <td style="text-align: center;">33km</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Sewarage</td> <td style="text-align: center;">45km</td> <td style="text-align: center;">230km</td> </tr> </tbody> </table>				1st Stage	2nd Stage	Capacity of Pump Station	45cu.m/s	45cu.m/s	Regulating Reservoir	3,870 thousand cu.m	1,320 thousand cu.m	River Renovation	33km	-	Sewarage	45km	230km
	1st Stage	2nd Stage															
Capacity of Pump Station	45cu.m/s	45cu.m/s															
Regulating Reservoir	3,870 thousand cu.m	1,320 thousand cu.m															
River Renovation	33km	-															
Sewarage	45km	230km															

ハノイ市排水下水整備計画調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY 1996 Domestic Survey)  Subsequent Studies:  Implementing Period:Feb.1997~Jul.2001  Fund:OECF loan  Amount to be Procured:US\$179,000,000  (Local Currency \$61,800,000/ Foreign Currency \$117,900,000)</p> <p>Difference with JICA's Proposal:  Construction of two Pilot Waste Water Treatment Plants at Kim Lien and Truc Bach.</p> <p>1.Drainage Project for Environment Improvement in Hanoi City-1st Stage  Finance:  18 Apr. 1995 L/A 6,406 mil.yen  *Component of project  1.Reservoir and Pumping Station.  2.Improvement of major rivers and rehabilitation of drainage channels.  3.Rehabilitation of sewerage.  4.Procurement of sewer cleaning machinery and undertaking of cleaning works.  5.Construction of Pilot Waste Water Treatment Plants.  6.Improvement of environment of lakes and ponds.</p> <p>Construction:  Jul.1998~Feb.2001 (scheduled)  (FY 1997 Domestic Survey)  Shortening of construction period is required.  (FY 1999 Overseas Survey)  14 packages were planned and P-3, P-5, P-6, P-7c, P-14 are already completed.</p> <p>2.Drainage Project for Environment Improvement in Hanoi City-1st Stage  (FY 1998 Domestic Survey)  Finance:  30 March 1998 L/A 12,165 mil.yen  *Component of project  1.Rehabilitation of drainage facilities.  2.Construction of regulating reservoir/ pump station.</p> <p>Future prospects:  (FY 1998 Domestic Survey)  Government of Viet Nam is expecting the Japanese government to implement the F/S on the sewage development project which was proposed by M/P.</p>		



# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/A 202/94

<b>1. COUNTRY</b>	Viet Nam											
<b>2. NAME OF STUDY</b>	Improvement Project of Drainage System in South Bac Duong Agricultural Area											
<b>3. SECTOR</b>	Agriculture / Irrigation, Drainage & Reclamation											
<b>4. TYPE OF STUDY</b>	M/P+F/S											
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Agriculture and Rural Development										
	<b>PRESENT COUNTERPART AGENCY</b>											
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc. Taiyo Consultants Co., Ltd.											
<b>7. STUDY PERIOD</b>	Mar.1994 ~ Mar.1995 12month(s) ~											
<b>8. SITE OR AREA</b>	South Bac Duong area in Nothern Viet Nam											
<b>9. MAJOR PROPOSED PROJECT(S)</b>												
<p>1)Improvement of drainage: Repair of the pump stations and canals for drainage.</p> <p>2)Improvement of irrigation system: Securement of water quantity and repair of waterways.</p> <p>3)Establishment of sustainable agriculture: Introduction of intensive and diversified agricultural system.</p> <p>4)Improvement of social-environmental circumstances: Mitigation of poverty and disease.</p> <p>The activities contain the followings:-</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Option I</th> <th style="text-align: center;">Option II</th> </tr> </thead> <tbody> <tr> <td>Area for</td> <td style="text-align: center;">6,420 ha</td> <td style="text-align: center;">8,540 ha</td> </tr> <tr> <td>Pumping facility</td> <td style="text-align: center;">16.0cu.m/s</td> <td style="text-align: center;">26.0cu.m/s</td> </tr> </tbody> </table>					Option I	Option II	Area for	6,420 ha	8,540 ha	Pumping facility	16.0cu.m/s	26.0cu.m/s
	Option I	Option II										
Area for	6,420 ha	8,540 ha										
Pumping facility	16.0cu.m/s	26.0cu.m/s										

南バクドゥン地区農村地域排水計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Study: (FY 1997 Domestic Survey) Oct.1997~Feb.1998 B/D "Drainage System Improvement in Tanchi"</p> <p>Different with JICA's proposal: (FY 1997 Overseas Survey) Area was narrowed.</p> <p>Finance: (FY 1997 Overseas Survey) Government budget Grant aid assistance with amount of approx. 17mil.US\$ has been requested in 1996. (FY 1998 Domestic Survey)(FY 1999 Domestic Survey)(FY 1999 Overseas Survey) 9 Jun. 1998 E/N 252 mil.yen "Drainage System Improvement Project in Tanchi (1/3)", provision of materials and equipment. 30 Sep. 1998 E/N 1,491 mil. yen "Drainage System Improvement Project in Tanchi (2/3)", construction of pumping station. * The expense for the construction of drainage channel is born by Vietnam side. E/N for Phase 3/3 is to be signed in FY 2000.</p> <p>Construction: (FY 1998 Domestic Survey)(FY 1999 Overseas Survey) 2/3 1999~Mar. 2000 (scheduled to be completed).</p> <p>Remaining Project: (FY 1998 Domestic Survey) As for remained area, it is planned to rehabilitate a drainage system by 2005. Japanese grant is expected for the project, especially for the proposed project option I.</p>		

# STUDY SUMMARY SHEET

## (F/S)

ASE VNM/S 301/94

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Cai Lan Port Construction Project		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Transport Engineering Design Incorporated (TEDI)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI) Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Dec.1993 ~ Dec.1994 12month(s) ~		
<b>8. SITE OR AREA</b>	Cai Lan port		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
(1)Sea Route : depth -11m, width of the bottom 130m (2)Wharf : 7 wharfs, extension 1,461m, depth of water -9 to -13m (3)Shed, Open freight storage. (4)Cargo handling facility.			

カイラン港拡張計画調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Study:  (FY 1997 Overseas Survey)(FY 1997 Overseas Survey)  Nov1997~Jul.1998 Review, D/D  Consulting Firm / Nippon koei, Nedeco, Paweco  *Difference with JICA's proposal: The numbers of berths were changed from 7 to 4.</p> <p>Finance:  Mar.1996 L/A (Cai Lan Port Expansion Project, 10,273 mil.Yen).</p> <p>*Contents  Construction of 4 berth, access channel, equipment</p> <p>Construction:  (FY 1997 Overseas Survey)  1998~2001</p>		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 202/95

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Upgrading the Hanoi-Ho Chi Minh Railway Line to Speed Up the Passenger Express Trains to Average Speed of 70km/h in the Year of 2000		
<b>3. SECTOR</b>	Transportation / Railway		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Viet Nam Railway, Ministry of Transport	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Railway Technical Service (JARTS)		
<b>7. STUDY PERIOD</b>	Feb.1994 ~ Jan.1996 23month(s) ~		
<b>8. SITE OR AREA</b>	1,762km between Hanoi-Ho Chi Minh		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;</p> <p>To formulate M/P which aims to achieve the social and economic development and to stabilize the society by 2000 (to realize the high-quality safetiness and reliability, rehabilitation of all points where trains are force to slow down and the improvement of a disaster prevention system, railroads, signals, a communication system and a vehicle repair method are to be implemented).</p> <p>-To determine F/S projects based on M/P (The implementation of F/S on 1)the Hanoi-Ho Chi Minh Line and 2)the Lao Cai-Cai Lan Line is determined)</p> <p>&lt;F/S&gt;</p> <p>1)F/S on the rehabilitation and improvement of the Hanoi-Ho Chi Minh Line. Improvement of the financial situation and the implementation of safety measures on high priority sections of Hanoi-Thao Hoa, Hue-Da Nang and Saigon-Muong Man.</p> <p>a)Improvement of cargo service and passenger service</p> <p>b)Improvement of rail tracks, bridges, signals and a communication system</p> <p>c)Installation of optic cable and telephone exchanges</p> <p>2)F/S on the rehabilitation and improvement of the Lao Cai-Cai Lan Line</p> <p>a)To construct the Ha Long-Cai Lan Port Section</p> <p>b)To improve the transport system for tourists in Ha Long Port</p> <p>c)To improve the Kep-Ha Long section</p> <p>d)To implement construction works to change the width of railroad</p>			

南北縦貫鉄道整備計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b> (FY 1998 Domestic Survey) The social infrastructure in Vietnam is of urgent necessity for the development of its economy, Transportation sector is the important field of Japan's assistance and the study is expected for effective utilization in the future. Subsequent Study: (FY 1999 Overseas Survey) 1996 F/S Netherlands Government(Development of signaling and telecommunication of Hue-Da nang section) Finance: (FY 1999 Overseas Survey) Kfw 8.5 mil. yen(Improvement of the Hanoi-Ho Chi Minh Line) Kfw 179mil. yen(Improvement of the Hanoi-Ho Chi Minh Line) Construction: (FY 1999 Overseas Survey)(FY 2001 Overseas Survey) Construction of 8 bridges between the Hanoi-Ho Chi Minh Line: Completed in 2000 Improvement of signal & telecommunication between Hanoi-Vinh / Tunnel improvement: designs are now planned. (FY 2001 Domestic Survey) Period: Mar. 1998 - Oct. 2000 Contractor: Package I - Rinkai Kensetsu, Matsuo Kyoryo, JV of DIEZOI (Vietnamese company), Package II - Mitsui, JV of TangLong  As Phase II of the rehabilitaiton of Hanoi-Ho Chi Minh Line, rehabilitaiton works of 10 bridges were started in Jun. 2001 with the 20-months scheduled construction period.  ( FY 2001 Overseas Survey) Phase II of the rehabilitation fo Hanoi-Ho Chi Minh Line. Package III (5 bridges) : Jun.2001~Jan.2003. Rinkai Kensetsu, Matsuo Kyoryo, JV of CIENCO1 (Total construction cost: 1,147 million yen) Package IV (5 bridges) : Jun. 10, 2000 ~ Jun.2003: Mitsui, JV of TangLong (Total construction cost: 1,350 million yen)  Package III: 3.15% completed. In progress in good circumstances. Package IV: being prepared  Remaining works: A request has been submitted to JBIC and the related organization of the Vietnamese government to implement Phase II construction with the remaining fund after 10 bridges are completed. F/S was completed for rehabilitation of 34 bridges.  (FY 2005 Domestic Survey) Hanoi-Ho Chi Minh City Railway bridge safety improvement project (phase II) has been fully completed in March 22005, including additional work.  Subsequent project: Hanoi-Ho Chi Minh City Railway bridge safety improvement project (phase III) Funding: Funding party: Yen loan L/A March 31st 2004 Description: STEP loan (L/A No. VNX1-8) Implementing period: Construction starting: September 29th 2005 Implementing party: JTC, PCI, JARTS, JV Objective: Included training of rehabilitation and protecting of 44 bridges. Relation with the study: A part of component proposed in the study Progress: Design is in progress		

# STUDY SUMMARY SHEET

## (F/S)

ASE VNM/S 302/95

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Highway No.18 Improvement		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	No.18 Projects Management Unit(PMU18), Ministry of Transport	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI) Oriental Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jul.1995 ~ Mar.1996 8month(s) ~		
<b>8. SITE OR AREA</b>	Route 18 Noi Bai Bac Luan (except for Chi Linh-Bieu Nghi section)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>National road construction: 31km  National road improvement : 206km  Principal works: soil construction, pavement, drainage structure (culvert, etc.), bridge, accompanying facility</p>			

国道18号改修計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Study: (FY 1997 Overseas Survey) May.1998~Mar.1999 D/D, B/D</p> <p>Finance: (FY 1997 Overseas Survey) (FY 1998 Domestic Survey) March 30, 1997 L/A 11,863mil.Yen (National Highway No.18 Improvement Project (I)) (not including Baichay Bridge) *Component Road improvement project (total length is approx. 320km) including the bridge of National Route No.18. Noibai~Cua Ong section (except for Chi Ling~Bien Nghi) (FY 2001 Domestic Survey) March 29,2000 L/A 11,586mil.Yen (National Highway No.18 Improvement Project (II)) *Component Road improvement project including the bridge of National Route No.18. Noibai~Chi Ling section (70km), Bien Nghi ~Cua Ong (65km)</p> <p>Construction: (FY 1997 Overseas Survey) (FY 1998 Domestic Survey) Apr.1988~Feb.2002 (planned) (FY 1999 Overseas Survey) The project is dividend into 5 packages 1.Package 1 (Noi Bai- Bac Ninh) Feb.2000~ 24 months scheduled *Contents: road construction(34.13km), bridge construction(21 bridges, L.:3.500m), construction of drainage system, construction of intersections 2.Package 2(Bac Ninh-Chi Linh) The bidding is already finished. Feb.2000-28 months scheduled *Contents: road improvement(width: 7m to 15m, Total L.:29.6km), bridge construction(7 bridges, L.:276m) 3.Package 3 (Pha Lai Bridge) The bidding is already finished. Jan.2000-28 months scheduled *Contents: bridge construction(1,239m), construction of approach road(1,011m), construction of drainage system 4.Package 4 (Bieu Nghi-Bai Chay) Oct.1999-Dec.2000 on-going *Contents: road improvement(width: 7m to 12m, Total L.:26km), bridge construction(9 bridges, L.:245m), construction of drainage system 5.Package 5 (Hon Gai-Cua Ong) May 2000 -24 months scheduled *Contents: construction of 4 lanes(W.:31m, L.:19km) and 2 lanes(W.:13m, L.:13m), bridge construction, construction of drainage system (FY 2001 Overseas Survey) 1. Package1 (Noi Bai-Bac Ninh): 6.7% implemented. Push and catch up with the schedule. 2. Package2 (Bac Ninh-Chi Linh): 37.14% implemented. Keep the progress. 3. Package3 (Pha Lai Bridge): 56% implemented. Being completed 4-6 months earlier than schdure is predicted. 4. Package4 (Bueu Nghi-Bai Chai): 100% implemented. Addition of package is being changed to Bai-Chai Bridge project. 5. Package5 (Hon Gai-Cua Ong): 3.81% implemented. Speeding up to catch up with the schedule.</p> <p>Remaining Project: (FY 1997 Overseas Survey) Road improvement of Cua Ong~Bac Luan section is to be implemented in Phase II from 2010.</p>		



# STUDY SUMMARY SHEET

## (M/P)

ASE VNM/S 111/96

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Coastal Shipping Rehabilitation and Development Project		
<b>3. SECTOR</b>	Transportation / Marine Transportation & Ships		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	VINAMARINE (Vietnam National Maritime Bureau)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Overseas Ship-building Cooperation Centre (OSCC) ALMEC Corporation		
<b>7. STUDY PERIOD</b>	Dec.1995 ~ Mar.1997 15month(s) ~		
<b>8. SITE OR AREA</b>	Coastal and Water Transport Area of Vietnam		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1) Coastal Shipping Fleet Development and Modernization. 2) Rehabilitation of Ports and Navigation Routes. 3) Modernization of Shipping Management. 4) Secondary Transport in connection with Coastal Shipping. 5) Human Resource Development of Maritime. 6) Maritime Safety and Protection of Marine Environment.			

全国沿岸海上輸送整備開発計画調査

<b>PRESENT STATUS</b>	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 1997 Domestic Survey)  Next step should be proceeded towards Yen Credit of OECF based upon the Coastal Shipping Rehabilitation and Development M/P study and Short-Term Priority Packages A, B, C.  Regarding to the maritime communication system, the procedure for OECF loan to install GMDSS is on process.</p> <p>Finance:  (FY 1998 Domestic Survey)(FY 1999 Overseas Survey)  Yen Loan to install GMDSS was decided to be procured in FY 2000.  Requested amount: 1,860 mil. yen  (FY 2001 Overseas Survey)  L/A has not been signed. The following project was implemented.  Amendment and Improvement Project for Vietnam's Lighthouse System.  Financial Source: Spain ODA (400 million USD)  Approval: Mar. 8, 1999  Contents: Supply equipment/facility for lighthouse and training service. (6 Lighthouse Class I, 3 Lighthouse Class II, 9 Lighthouse Class III, 14 months and Harbor Entrance Lighthouses)</p> <p>(FY 1998 Domestic Survey)  1.Development of coastal route  Demands for coastal transportation are floundering because of the economic crisis and careful policy of Viet Nam's government is making the situation worse. A review survey on North, South coastal shipping regarding for profit is required.</p> <p>(FY 2000 Domestic Survey)  JICA's Project-type technical cooperation was requieed for VIMARU(Viet Nam Maritime University) and as the result of evaluation by the JICA's short-term expert, both Viet Nam and Japanese governments discussed the details of cooperation on Jul. 2000 and expected to implement the technical cooperation on Jul. 2001.  (FY 2001 Overseas Survey)  Contents of the review study: Make M/P for development of port system up to 2010. Study in detail 8 main port groups in Vietnam. Study on development of Southern Port System.</p> <p>2.Maritime manpower development  Due to the STCW treaty of IMO, improvement of maritime crew's training has become an urgent issue and JICA's project-type cooperation has been considered.  (FY 2001 Overseas Survey)  JICA's project type cooperation. (Planning)  Period: one month.  Contents: Construction of Search and Rescue System on GMOSS (Global Maintenance of the LES). Operation and maintenance of the LES: 6 months.</p> <p>3. Shipping Modernization Project  (FY 2000 Domestic Survey)  After completed this study, the domestic industries in Viet Nam were damaged by the Asian economic crisis, there is no concrete action to develop the North.South coastal shipping. In the present situation, VINALINES (Viet Nam national maritime company) operates the domestic shipping industry on a small scale by the ship chartering.  Japanese Technical Cooperation</p> <p>Japanese Experts :  (FY 2000 Domestic Survey)  Long-term expert for GMDSS is being dispatched (Vietnam Maritime University).  Project-type technical cooperation :  (FY 2001 Domestic Survey)  Cooperation period 1 Oct.2000~30 Sep.2004  Project on the Improvement of Higher Maritime Education  Training in Japan :  (FY 2001 Domestic Survey)  3persons(three years)  On-the-job training in Maritime University and shipyard</p>	

# STUDY SUMMARY SHEET

## (M/P)

ASE VNM/S 112/96

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Dong Nai and Surrounding Basins Water Resources Development		
<b>3. SECTOR</b>	Social Infrastructure / Water Resources Development		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Agriculture & Rural Development	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Sep.1994 ~ Sep.1996 24month(s) ~		
<b>8. SITE OR AREA</b>	Dong Nai and its surrounding river basins with an area of 48,500 km2		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1.Rural Agricultural Development Projects (US\$ 231 mil) 2.Rural Water Supply Projects (US\$ 72 mil) 3.Combined Development of Dong Nai No.3 and No.4 Hydropower Projects (US\$ 888 mil) 4.Phan Ri-Phan Thiet Irrigation Project (US\$ 180 mil) 5.Water Supply Project along National Highway No.51 (US\$ 464 mil) 6.Action Plan on Institutional Strengthening for Implementation of the Dong Nai Water resources Development Project			

ドンナイ川流域水資源開発計画調査

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued
<p><b>Description :</b></p> <p>1. Combined Development of Dong Nai No.3 and No.4 Hydropower Projects</p> <p>Subsequent Study: (FY 1997 Domestic Survey) Jan.~Oct. 1997 SAPROF study was conducted by OECF on the Water Supply Project along National Highway No.51. (93.81million yen) Dec.1998~March 2000 JICA F/S Combined Development project of Dong Nai No.3 &amp; 4 Hydropower.</p> <p>Finance: (FY 1998 Domestic Survey) The combined development project of Dong Nai No.3 &amp; 4 Hydropower will be realized by OECF loan after the completion of F/S by JICA. (FY 2000 Domestic Survey) For preparing the request to JBIC loan, it is necessary to obtain the acceptance from the Viet Nam Government, therefore the EVN is drawing up the report concerning to the result of the Feasibility Study (1998 completed by JICA) including the residents transferring plan.</p> <p>2.Dong Nai and Ba Ria-Vung Tau Water Supply Project (I)</p> <p>Finance: (FY 1998 Domestic Survey) 30 March 1998 L/A 5,771 mil. yen ("Dong Nai and Ba Ria-Vung Tau Water Supply Project (I)")</p> <p>*Contents: Construction of water supply facilities (water intake facilities, water treatment facilities, main water pipes, distribution pipes, etc.) to supply enough water for daily and industrial use.</p> <p>Construction: (FY 2000 Domestic Survey) D/D Nov.2000 ~ (FY 2001 Overseas Survey) Progress situation: Partly under construction. Contents: At present, about 20,000m3/day of surface water is supplied for Ba Ria Vung Tau by existing Song Dinh 2 weir and 10,000m3/day for Ba Ria area and 5,000m3/day for Phu My area. Stage 1: Ministry have funded to build Song Dinh reservoir (or Song Soai reservoir) to supply water with amount of 110,000m3/day for Ba Ria -Vung Tau area and to irrigate about 2,000ha downstream the reservoir. By 2015: Additional 400,000m3/day will be supplied by Song Ray reservoir for Ba Ria and the area along national road No.51.</p> <p>3. Phan Ri-Phan Thiet Irrigation Project.</p> <p>Subsequent Study (FY 2001 Overseas Survey) SAPROF Study has been completed in Oct. 2000. The feasibility study for Song Luy dam has been completed within 2001. (FY 2002 Domestic Survey) JBIC E/S Details: E/S on the Irrigation Development Program which aims at utilizing running water from Hydropower Projects at Dong Nai and its surrounding river basins</p> <p>Trend of the related projects: (FY 1998 Domestic Survey) Dai Ning Proejct, which generates power by utilizing the gap between the Dong Nai River Basin and the coastal area, is in the process of being implemented. It is desired to implement the Phan Ri-Phan Irrigation Project in order to utilize the water resource and alleviate the regional disparity.</p> <p>(FY 2000 Domestic Survey) SAPROF Study for the Phan Ri-Phan Thiet Irrigation Project has been conducted by JBIC and expected to complete in Oct. 2000. After making the Loan Agreement concerning to the E/S(Phase I), the D/D study is expected to start in FY 2001.</p>	

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 211/96

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Urban Transportation for Hanoi City		
<b>3. SECTOR</b>	Transportation / Urban Transportation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Yachiyo Engineering Co., Ltd. Katahira & Engineers Inc.		
<b>7. STUDY PERIOD</b>	Sep.1995 ~ Dec.1996 15month(s) ~		
<b>8. SITE OR AREA</b>	Hanoi City 923km2		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> &lt;M/P&gt;  1. Road Development 1,190km  2. Rail Development 17.4km  &lt;F/S&gt;  Xuan la New City Development (592ha) </div> <div style="border: 1px solid black; padding: 5px;"> [Imp. Period]  &lt;M/P&gt;  1. 1996~2005  2. 2001~2015  &lt;F/S&gt;  2000~2005 </div>			

ハノイ市都市交通計画調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>1. Transportation Development Project in Hanoi. Subsequent study: (FY 1999 Domestic Survey) Feb. - Jun. 1998 OECF SAPROF</p> <p>Finance: (FY 1999 Domestic Survey) 30 Mar. 1999 L/A 12,510mil.yen "Transport Infrastructure Development Project in Hanoi". *Contents: Improvement of various roads and crossings in Hanoi city.</p> <p>Construction: (FY 2001 Overseas Survey) Period: 1999-2015. Phase I: 1999-2004. Including 4 intersections, 2 roads, 1 resettlement area. Total investment cost: USD 138 million. Phase II, III, IV: Inner city area (inside Ring Road 3): Intersections, roads, resettlement area. Contractor: Consultant: Japan Bridge Steel Institute. Situation of progress: Dec. 2001- Starting construction work in first component part Nga Tu Vong Intersection. Perspective for remaining works: Starting next 6 component parts in 2002 as below. Nga Tu So Intersection, Minibypass South Thang Long Bridge, Dike Road, Kimlien Intersection, Ring Road No.1 Kimlien-O Cho Dua, Resettlement Area 56ha.</p> <p>2. Public Transportation by Bus for Hanoi City. Finance] (FY 2001 Overseas Survey) Financial source: State budget. Amount: VND 500 billion. (570 bus buying, Construct the bus stations, Training course) Construction: (FY 2001 Overseas Survey) Period: 2001-2002.</p> <p>Others: F/S on Public Transportation by bus for Hanoi City are planned in 2000. (FY 2001 Domestic Survey) -- The concrete study on railways is expected to be implemented in future. -- The Study on the public transportations improvement is requested to be implemented.</p>		

# STUDY SUMMARY SHEET

## (F/S)

ASE VNM/S 309/96

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	New Development Plan of Hanoi International Airport		
<b>3. SECTOR</b>	Transportation / Air Transportation & Airport		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Mar.1995 ~ Mar.1996 12month(s) ~		
<b>8. SITE OR AREA</b>	Hanoi, Noi Bai International Airport		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1. Medium-term Project</p> <p>a) New 3,600 x 45m runway and associated taxiway system.</p> <p>b) New international Passenger Terminal bldg. and Conversion of the Passenger Terminal bldg. T1 to the domestic terminal bldg.</p> <p>c) New International Cargo Terminal bldg.</p> <p>d) Air Navigation Systems for the new runway and taxiways.</p> <p>e) Power supply, telephone, water supply, sewerage, solid waste disposal and aviation fuel supply systems.</p> <p>f) Procurement of fire fighting vehicles and airport maintenance equipment.</p> <p>2. Long-term Project</p> <p>a) New airport facilities for international services in an area south of the existing airport.</p> <p>b) Utilization of the existing airport facilities for domestic services.</p> <p>c) Location of the new runway 1,850m to the south of and parallel with the existing runway.</p> <p>d) Dual taxiways connecting the existing and new airport facilities on the eastern side.</p> <p>(Imp. Period) 1. 1997 July~2005 Dec. 2. Design Target year 2015</p>			

ハノイ新国際空港整備計画調査

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

Finance:

(FY 1997 Domestic Survey)

The Vietnam National Construction Company is building the new air traffic control tower and passenger terminal building.

The first phase is to be completed by the end of 1998. The second phase is by 2007. A second runway may be built after 2007.

The Noi Bai project is being overseen by Aeroports de Paris (ADP), under a contract financed 70% through long-term French government loan and 30% by the Vietnamese Ministry of Finance. ADP completed the conceptual design review and traffic forecast in December 1996, and is now close to completing the detail design for the technical equipment and systems.

Construction:

(FY 2000 Overseas Survey)

Medium-term project:

In 2001, the construction of the landing line of the wing 1B and the northern taxiway will be launched and planned to be completed by the end of 2002.

Long-term project:

To be in compliance with the plan and master plan under the Decision 152 of the government.

(FY 2001 Overseas Survey)

Perspectives for the construction works:

1) The landing line of the wing 1B and the northern taxiway.

New 3,800m x 45m runway and associated taxiway system.

completion period: Nov.2001-Jun.2003.

2) Other progress for the study.

- New Passenger Terminal Building (T1) opened for traffic in Oct.2001 and completed at the end of 2001.

- Cargo Terminal Building: at F/S stage.

- New Navaid system for the new runway will be completed in 2003.

- Other projects such as Power supply, Telephone, sewerage system are in progress.



# STUDY SUMMARY SHEET

## (M/P)

ASE VNM/S 103/97

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Economic Development Policy in terms of Transition toward Market Oriented Economy		
<b>3. SECTOR</b>	Development Plan / (Development Plan in) General		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Development Strategy Institute(DSI), Ministry of Planning and Investment	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Daiwa Institute of Research Ltd. The Japan Economic Research Institute Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Dec.1995 ~ Sep.1997 21month(s) ~		
<b>8. SITE OR AREA</b>	Whole country.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Study-conducted period: Phase I (Dec.1995 ~ June 1996); Phase II (Dec. 1996 ~ Sep. 1997)			
<p>Phase I</p> <p>1) Macro Economy: a)Examination of 5-year development plan; b)Policy for foreign exchange rate; c)Change of economic statistic system; d)Environmental policy; and e)Poverty alleviation.</p> <p>2) Financial &amp; Banking Policy: a)Tax system reform; b)Efficient financial expenditure; c)Clarification of the relation between the central and local governments; d)Development of banking system; e) Provision of funds form the household sector to industrial sector; f) Medium/long-term fund provision for the industries; and g) Strengthening the foreign debt management.</p> <p>3) Industrial Policy: a)Withdraw of the potential of labour-intensive industries; b)Examination of heavy chemical industries; c)Policy for direct foreign investment; d)Promotion of small/medium-sized industries and rural industries; e)Participation in APEC and AFTA.</p> <p>4) Agricultural and Rural Development: a)Diversification and intensiveness of agriculture; b) Policy framework for agricultural development; c)Improvement of rural banking system; d) Re-organization of farmers' organizations.</p> <p>Phase II</p> <p>1) Agricultural and Rural Economy: a)Diversification of agriculture; b)Establishment of agricultural cooperatives; c)Increase of non-agricultural employment opportunities; d)Development of rural infrastructure in the Red Delta; e)Improvement of rural banking system, and f)Poverty alleviation.</p> <p>2) Participation in AFTA/ APEC/ WTO and Industrial Policy: a) Nurture of export-oriented industries, and b) Policy for small/medium-sized industries.</p> <p>3) Financial and Banking Policy: a)Financial management reform; b)Financial system reform; and c) Improvement of banking functions.</p> <p>4) Public Enterprise Reform</p>			

市場經濟化支援開發政策調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Finance: (FY 1999 Domestic Survey) 29 Sep. 1999 E/N 20,000mil.yen (OECF loan).</p> <p>(FY 1998 Domestic Survey) No information has been acquired about the concrete utilization of the outputs of the study. However, it seems that the outputs will be utilized since Vietnam is in the transitional period toward the market economy.</p> <p>(FY 1999 Overseas Survey) The study results was utilized in formulating Viet Nam's social and economic five year plan(1996-2000) by Ministry of Planning and Investment.</p>	

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 209/97

<b>1. COUNTRY</b>	Viet Nam																						
<b>2. NAME OF STUDY</b>	Water Supply Development for Hanoi City																						
<b>3. SECTOR</b>	Public Utilities / Water Supply																						
<b>4. TYPE OF STUDY</b>	M/P+F/S																						
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Hanoi Water Business Co., Hanoi People's Committee																					
	<b>PRESENT COUNTERPART AGENCY</b>																						
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI) Hokkaido Engineering Consultants Co., Ltd.																						
<b>7. STUDY PERIOD</b>	Feb.1996 ~ Sep.1997 19month(s) ~																						
<b>8. SITE OR AREA</b>	Hanoi City																						
<b>9. MAJOR PROPOSED PROJECT(S)</b>																							
<p>(M/P)</p> <p>The M/P consists of improvement of the existing facilities and the extension projects to supply water for the non-water service area. Target year: 2010</p> <p>The water demand forecast and the projected water capacity for extension program are shown as below.</p> <table style="width: 100%;"> <tr> <td>(1) Population</td> <td style="text-align: right;">3,200,000</td> </tr> <tr> <td>(2) Water demand</td> <td style="text-align: right;">760,000m3/d</td> </tr> <tr> <td>(3) Estimated capacity of the facility</td> <td style="text-align: right;">1,100,000m3/d</td> </tr> <tr> <td>(4) Capacity of existing facility</td> <td style="text-align: right;">500,000m3/d</td> </tr> <tr> <td>(5) Water for extension program</td> <td style="text-align: right;">600,000m3/d</td> </tr> </table> <p>Construction cost for new extension program is to be US\$540mil.</p> <p>(F/S)</p> <p>Water supply system for Cau Giay &amp; Thanh Xuan Areas. F/S is selected urgent and necessity project in the M/P.</p> <table style="width: 100%;"> <tr> <td>(1) Target year</td> <td style="text-align: right;">2000-2003</td> </tr> <tr> <td>(2) Capacity of facility</td> <td style="text-align: right;">60,000m3/d</td> </tr> <tr> <td>(3) Facility</td> <td style="text-align: right;">Intake, purification plant, distribution, house connection</td> </tr> <tr> <td>(4) Construction cost</td> <td style="text-align: right;">US\$54mil.</td> </tr> <tr> <td>(5) Construction period</td> <td style="text-align: right;">about 3 years</td> </tr> </table>				(1) Population	3,200,000	(2) Water demand	760,000m3/d	(3) Estimated capacity of the facility	1,100,000m3/d	(4) Capacity of existing facility	500,000m3/d	(5) Water for extension program	600,000m3/d	(1) Target year	2000-2003	(2) Capacity of facility	60,000m3/d	(3) Facility	Intake, purification plant, distribution, house connection	(4) Construction cost	US\$54mil.	(5) Construction period	about 3 years
(1) Population	3,200,000																						
(2) Water demand	760,000m3/d																						
(3) Estimated capacity of the facility	1,100,000m3/d																						
(4) Capacity of existing facility	500,000m3/d																						
(5) Water for extension program	600,000m3/d																						
(1) Target year	2000-2003																						
(2) Capacity of facility	60,000m3/d																						
(3) Facility	Intake, purification plant, distribution, house connection																						
(4) Construction cost	US\$54mil.																						
(5) Construction period	about 3 years																						

ハノイ上水道整備計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

(FY 1998 Domestic Survey)

Since the development of social and economic infrastructure is urgently needed, the sewage development proposed by JICA Development Study "Urban Drainage and Wastewater Disposal System in Hanoi City (M/P + F/S, S201/94)" has been realized with OECF loan. Likewise, it is expected that some actions will be taken for realizing the projects proposed by this Study.

(FY 1999 Domestic Survey)(FY 1999 Overseas Survey)

There is no further information.

(FY 2003 Overseas Survey)

Study conducted on improvement of Hanoi water supply utility management in February 2002.

No financing has been requested up to date.

Concrete actions towards implementing the Master Plan:

- 1) Renovating / replacing water piping system and installing water meters to consumers in the urban center of Hanoi.
- 2) Constructing additional wells to secure the capacity of a number of water plants.
- 3) Constructing North Thang Long water treatment plant with 30,000.00 m<sup>3</sup> / day capacity.
- 4) Having compiled pre-F/S for 150,000.00 m<sup>3</sup> / day surface water treatment plant construction and submitting the project to the approval of the Government.
- 5) Designing the extension of Cao Dinh plant to 60,000.00 m<sup>3</sup> / day.
- 6) Preparing F/S for the extension of Nam Du Thuong plant to 60,000.00 m<sup>3</sup> / day.
- 7) Preparing F/S for the construction of 60,000.00 m<sup>3</sup> / day surface water treatment plant Thuong Cat.
- 8) Project for increasing the capacity of Gia lam plant up to 60,000.00 m<sup>3</sup> / day: according to the Master Plan, this project was proposed to be executed in 2005-2010, however due to fast development of Gia Lam area, at present, F/S for increasing the capacity of Gia Lam plant up to 60,000.00 m<sup>3</sup> / day is under preparation.

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/A 219/97

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Model Rural Development in Nam Dam District, Nghe An Province		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Agriculture & Rural Development	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI) Pasco International Inc.		
<b>7. STUDY PERIOD</b>	Sep.1996 ~ Feb.1998 17month(s) ~		
<b>8. SITE OR AREA</b>	The Study area covers Nam Dan District in Nghe An Province, which is located 300 km south of Hanoi, the capital city of Viet Nam. The Nam Dan District has approximately 30,000 ha of area and 160,000 of population. In addition to the Study area, the Study will also cover certain areas outside of Nam Dan District including Vinh city for the agro-industry and marketing studies.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>(M/P)</p> <p>1. Irrigation / Drainage : (a) Reservoir Irrigation System ; Ho Thanh Reservoir System, Trang den Reservoir System, Cua Ong Reservoir System, Rao Bank Reservoir System, (b) Pumping Irrigation System ; Nam Dong Pumping System, Nam Cuong2 Pumping System, (c) Inundation Mitigation, Drainage Improvement : Nam Nam Dike. 2. Agricultural Supporting Services ; Agr. Extension Center, Seed Supply Center, Agr. Mechanization S.C. 3. Agro-industry and Marketing ; Agro-processing Complex, Market-oriented Forwarding Center. 4. Health and Sanitation ; Rural Health and Sanitation Improvement. 5. Education Facilities ; School Electrification, Rehabilitation of School Facilities. 6. Rural Road ; Route 15A (North), Route 15A (South), 42 Dike Road, Phan Boi-Chua Road, Hung Tien-Nam Linh Road, 42 Dike-Kim Lien Road, Kim Lien-Nam Cat Road, Nam Tam-Nam Loc Road, Nam Nam Dike Road, Nam Kim-N.Phuc-N. Cuong Road. 7. Rural Electrification ; Complete Electrification, Rehabilitation of Distribution Network. 8. Rural Water Supply ; Public Water Supply System (Dried-up Area), Public Water Supply System (Inundation Area), Material Supply of Filter Tank. 9. Environmental conservation ; Erosion Control.</p> <p>(F/S)</p> <p>[Agricultural Production] 1. Irrigation and Drainage : (a) Reservoir Irrigation Project ; Ho Thanh, Trang den, Cua Ong, Rao Bang, (b) Pumping Irrigation Project ; Nam Dong, Nam Cuong 2, (c) Inundation Mitigation Project, Drainage Improvement Project ; Nam Nam Dike. 2. Supporting Services ; Agriculture Extension Center, Seed Supply Center, Agricultural Mechanization Service Center. 3. Agro-industry and Marketing Improvement ; Agro-processing Complex, Market-oriented Forwarding Center.</p> <p>[Rural Living Condition] 1. Education ; School Electrification, Rehabilitation of School Facility. 2. Rural Water Supply ; Public Water Taps System for Semi-mountainous, Installation of Filter Tanks to all of existing wells.</p> <p>[Rural Social Infrastructure] 1. Rural Road ; Route 15A (Northern Part), Route 15A (Southern Part), 42 Dike Road, Phan Boi-Chua Road, Nam Nam Dike Road, Nam Kim-Nam Phuc-Nam Cuong Road. 2. Rural Electrification ; Rehabilitation of Distribution Network.</p> <p>[Environment] Environmental Conservation ; Erosion Control.</p> <p>[Imp. Period]</p> <p>(M/P) 1999~2010 (F/S) 10 years</p>			

ゲアン省ナムダン県モデル農村開発計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

(FY 1998 Domestic Survey)

Based on the Result of F/S, Nam Nam Model Agricultural Development Project was formulated which concentrate to develop at 5 communes in South-western part of Nam Dan District and an application letter for Japanese Grant Aid was submitted to Japanese Embassy from MPI in August, 1998. The letter was transferred to Ministry of Foreign Affairs in September 1998. According to MOA, the project will be implemented as one of high priority projects considering that Mr.Hochimin was born in Nam Dan District. However, as many of projects to be implemented are waiting for Viet Nam, B/D will be started at the end of next fiscal year.

(FY 1999 Domestic Survey)

The procurement of Japan's grant aid was decided. However, the date of its procurement has not been settled yet. A preliminary survey is scheduled on Dec.1999 and after then, the schedule of B/D will be determined on Jan.2000.

(FY 1999 Overseas Survey)

The procurement of Japan's grant aid was decided (requested amount: 23,856,000US\$).

\*Contents: Rehabilitation of irrigation & drainage, rehabilitation of rural electricity

(FY 2001 Overseas Survey)

Based on the results of F/S, Nam Nam Model Agricultural Development Project was formulated and an application letter for Japanese Grant Aid was submitted to the Japanese Embassy from MPI in August 1998. However, it has not been pledged or approved. Preparatory Study was conducted from Jul.25 to Aug.3, 2000.

Facility Building

(FY 2001 Domestic Survey)

Finance:

Own budget (By the stage in which the preliminary survey mission of the grant aid arrived at the country, it was progressing steadily facility building based on F/S of this Study by their own budget, and about irrigation equipment, most projects proposed by this Study were completed by their own budget also about the bridge which considered sources of funds other than the grant aid was implementing.)

(FY 2001 Overseas Survey)

Some project contents have been implemented with the local contribution, particularly,

1) Irrigation and drainage sector:

a. A part of canal in Ho Thanh reservoir irrigation system has been improved.

b. Canal system in Nam Dong pumping irrigation system has been improved.

2) Rural road sector:

Nam Nam dike road has been under improvement. Road surface is to be paved with the project fund.

3) A bridge acrossing Lam river was constructed which replaces ferry.

Perspective for the future:

(FY 2001 Domestic Survey)

The People's Committee made a request of enforcement promotion about a non-carried out project, and the request is submitted to the Ministry of Foreign Affairs from the local Japanese embassy.

Development Impacts:

(FY 2001 Overseas Survey)

Through the implementation of the Project, it is possible to predict that the living standard of local people in and around the study area will be greatly improved, by improving agricultural production, stabilizing food supply, creating employment opportunity, diversifying and increasing income, and improving living condition, etc. Any remarkable negative environmental impact from the implementation of the project is not confirmed by the environmental evaluation and the project is assessed as a soundly sustainable agricultural and rural development plan

# STUDY SUMMARY SHEET

## (Basic Study)

ASE VNM/A 503/97

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Marine Resources Survey		
<b>3. SECTOR</b>	Fishery / Fishery		
<b>4. TYPE OF STUDY</b>	Basic Study		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Research Institute of Marine Products, Ministry of Fisheries	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>			
<b>7. STUDY PERIOD</b>	Feb.1995 ~ Feb.1998 36month(s) ~		
<b>8. SITE OR AREA</b>	The sea-bone survey: The central region's offshore area 40m in depth within the Viet Nam EEZ, 8~18 degrees N, shoreline~112 degrees E, excepting internationally disputed area.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Provinces (and fishing land site) selected for the land site survey were as follows: Ba Ria-Vung Tau (Vung Tau); Binh Thuan (Phan Thiet); Khanh Hoa (Nha Trang); Qunag Nam Da Dang (Da Nang); and Quang Binh (Dong Hoi).</p> <p>Guidelines for Fisheries Resources Management were suggested and Policy Consideration for Development of Fisheries were recommended. Recommended Policy Considerations were as follows:</p> <ol style="list-style-type: none"> <li>1. Test fishing in offshore area by semi-commercial fleet;</li> <li>2. Compilation of fisheries statistic;</li> <li>3. Continuation and expansion of scientific survey;</li> <li>4. Review of fisheries regulation;</li> <li>5. Fishermen's organization;</li> <li>6. Technological improvement;</li> <li>7. Retention of catch freshness and expansion of market through processing;</li> <li>8. Expansion of activities of patrol-, guard-, guiding- and research- vessels; and</li> <li>9. Fisheries infrastructure development.</li> </ol>			

水産資源調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 1998 Domestic Survey)</p> <p>1. This study was conducted by using the surface drift gillnet and Vietnamese mid-layer gillnet in order to survey on marine resources, especially on the large-sized pelagic fish.</p> <p>2. Vietnam side highly evaluated the results of this study. They expressed their intention to request Japanese government to undertake the continuous survey on other large-sized pelagic fish such as tuna which swim in the deeper layer and were not the target of this study. They have strong desire to realize this continuous survey to promote the offshore fishery.</p> <p>3. However, the study team proposed that Vietnam side should make a formal request for conducting that continuous survey through Japanese Embassy.</p> <p>(FY 1999 Overseas Survey)</p> <p>JICA's study on Tuna resources in off shore is scheduled from 2001.</p> <p>(FY 2000 Domestic Survey)</p> <p>Concerning to the proposal in this Study, there is no concrete progress because of the economical stagnation and the undeveloped legal system. It seems that the Japanese company and the local company are negotiating to establish the Joint Venture for the processing the marine products.</p> <p>(FY 2001 Overseas Survey)</p> <p>The study results have been utilized for offshore deep sea fishery development.</p> <p>The test fishing in the offshore fishery area is done by gill net and longline fishing.</p> <p>The fisheries statistics system is being set up.</p>	



# STUDY SUMMARY SHEET

## (M/P)

ASE VNM/S 121/98

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Hoa Lac Xuan Mai Areas Urban Development Project		
<b>3. SECTOR</b>	Development Plan / (Development Plan in) General		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Development Strategy Institute, Ministry of Planning and Investment	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI) Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Dec.1997 ~ Mar.1999 15month(s) ~		
<b>8. SITE OR AREA</b>	The areas of Son Tay, Hoa Lac, Xuan Mai, and Mieu Mon, located along the National Road 21A (NR21A).		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Hoa Lac and Xuan Mai Areas Urban Development Project as "New Research and Education Town".</p> <p>1.The Vietnam National University (VNU) will be relocated to the New Town, and at the same time, VNU will be expanded to a multi-disciplinary and comprehensive university, including, among other faculties and universities, the newly established Faculties of Technology, Economics, and Law.</p> <p>2.By developing the Hoa Lac High-Tech Park (HHTP), the functions of research and development (R&amp;D) and training of high-level engineers and researchers will be developed by keeping close linkage with VNU and industrial locators.</p> <p>3.Part of the important urban functions such as international exchange, cultural exchange, recreation, and so on will be shared with HMA.</p> <p>4.As to the infrastructure development, water will be supplied from the Da River, electricity will be transmitted from the Hoa Binh Dam, high-order telecommunication network will be provided, and adequate sewerage treatment plants and solid waste management will be provided properly. The road network in the New Town will form a grid pattern compatible with the site conditions, and appropriate public transportation systems, will be introduced such as a bus system in the short to medium term and a mass transit system in the long term.</p>			

ホアラック・ソンマイ地域開発計画調査(フェーズ1)

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 1999 Domestic Survey) There has not been any progress.</p> <p>(FY 2000 Overseas Survey) The following 2 projects are on going. 1. Relocation and expansion of VNU 2. Development of HoaLac High-Tech Park(HHTP) The following 3 projects are prepared for implementation. 1. Development of HoaLoc Ceneter City 2. Development of infrestructure for HoaLac-XuanMai City 3. Development of sport center for 2003's SEAGAMES</p> <p>1. Relocation and expansion of VNU (FY 2001 Domestic Survey) Although VNU was planned to be relocated during the study to Hoa Lac, 32km west from Hanoi, the VNU secretariat was finally relocated to NguyerDu in Hanoi. It seems that there was no advantage to relocate VNU to Hoa Lac, and that it became impossible to apply for financial plan after the new secretariat was established. (FY 2001 Overseas Survey) Relocation of VNU was started in the end of 2000. Student Biological Village was being constructed near Muc Hill where is used as a students' picnic place. VNU has found underground water availavle for the VNU area. The details of the VNU M/P are in progress.</p> <p>2. Development of the Hoa Lac High-Tech Park (FY 2001 Domestic Survey) The High-Tech Park secretariat was newly established in Hoa Lac. However, foreign invment is decreasing due to the weak power of MOSTE and the financial crisis of ASEAN as well as the economic depression in the United States and Japan. Currently foreign investment has gathered in the Hanoi suburbs and lacks economic vitality as private sector participation. (FY 2001 Overseas Survey) E-Learning Center for learning PC skills adopted the Japanese standards in the begining of Sep.2001. Until now. three counpanies received approval for construction of the center in HHTP area.</p> <p>3. Development of the City of Hoa Lac Center (FY 2001 Domestic Survey) Since the private sector investment is declined, it is necessary to precede the public investment. Since the High-Tech Park secretariat was founded, it is necessary to relocate the public housing and the university facilities. (FY 2001 Overseas Survey) HoaLac Center development is included in the project. The land for the center has been acquired in Muc Hill Area.</p> <p>4. Infrastructure building at the Cities of Hoa Lac and Xuan Mai (FY 2001 Domestic Survey) The expressway between Hanoi and Hoa Lac was completed and National Highway 21A between Hoa Lac and Xuan Mai is in operation. About the water supply to Hanoi, a plan to install a pipeline along the Hanoi- Hoa Lac expressway is progressing. Electric power can be supplied from the Hoa Binh hydroelectric power station. (FY 2001 Overseas Survey) Construction of the basic system between HoaLac and Xuan Mai is on-going. Construction of the road between Lan HoaLac Highway and the center of High Tech Park area is in progress and will be completed by the end of 2000. E-learning Center was constructed in HTTP area by Japan's fund in 2000. Intensive resettlement of the residents is on going. Sub-projects are deleyed due to the lack of finance. Japan's aid is important and indispensable for the development of HoaLac and Xuan Mai.</p> <p>5. Construction of Sports Center for SEAGAMES in 2003 (FY 2001 Domestic Survey) The location plan of the Sport Center was changed to Hanoi suburbs. Therefore, it is necessary to change the usage of the first site for a different purpose such as urban park or theme park. (FY 2001 Overseas Survey) Sport Center for SEAGAME in 2003 is being constructed intensively as the basic system of Lan HoaLac Highway.</p>	

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 208/98

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Port Development Plan in the Central Region of the Key Area		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Transport Engineering Design Inc.(TEDI)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI) Japan Port Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Feb.1997 ~ Aug.1998 18month(s) ~		
<b>8. SITE OR AREA</b>	1)Chan May 2)Lien Chieu 3)Dung Quat		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt; 1)Chan May Port: Develop as a gateway to the industrial park in the hinterland.  2)Lien Chieu Port: Develop as a commercial port serving for the key area of central Vietnam as well as for other industrial zones.  3)Dung Quat Port: Develop as an oil refinery port and a gateway to the petrochemical plant.</p> <p>&lt;F/S&gt;  1)Chan May Port  Develop a multi-purpose berth with a provisional alongside depth of -12m (to be deepened to -13m in the future) which will accommodate 40,000GT class car carriers and bulk carriers. Development of 2 conventional berths with an alongside depth of -8m are also planned to accommodate conventional cargo ships and ocean going passenger ships.</p> <p>2)Lien Chieu Port  Berth E1 is designed as a multi-purpose berth. The design depth of channel and turning basin is -11m and the pocket dredging in front of the Berth E1 is -12m.  2 conventional cargo berths, W1 and W2, are designed with alongside depth of -8m.</p> <p>3)Dung Quat Port  Develop a port required to cater 1,000-50,000 DWT class product oil tankers.</p>			

中部重点地域港湾開発計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b> Situation: (FY 2000 Overseas Survey) From the view of TEDI, the role of 3 ports has not been changed in comparison with the result of this study.  Status: (1)Chan May (FY 1999 Domestic Survey)(FY 1999 Overseas Survey) Chan May Port is waiting for industrial development of hinterland. (FY 2000 Overseas Survey) To promote the development of Chan May Industrial Zone, the road connecting NHI to Chan May Port has been constructed and TEDI is preparing a project of constructing 1 berth for 10,000 DWT ships. This project is supported by People Committee of Hue City. Fund Procurement: (FY 2001 Overseas Survey) Source: State Budget (160 billion VND) Pledge or approval: Dec. 2000 Contents: Wharf, Reclamation, Dredging, Warehouses, etc. Construction: (FY 2001 Overseas Survey) Period: 2 years.  (2)Lien Chieu (FY 1999 Domestic Survey)(FY 1999 Overseas Survey) Port of Da Nang(including Lien Chieu, Tiensa, Song Han) is defined as a general key port in the central region. Port of Tiensa, of which development study was conducted by ADB, is under improvement in Danang City, and Lien Chieu Port plan will be followed by Low Case. (FY 2000 Overseas Survey) Da Nang Port (Tien Sa, Lien Chieu, Song Han) is still considered as the largest commercial port in Central Region. First, Tien Sa Port will be rehabilitated and then Lien Chieu Port will be developed. "Da Nang Port Improvement Project" (including improvement of Tien Sa Port and the access road) is under implementation and funded by JBIC. It is expected that construction will be started early 2001 and under operation in 2002. (FY 2001 Overseas Survey) No works for Lien Chieu. Priority is now given to development of Tien Sa Port. Fund Procurement: Mar. 30, 1999 L/A (10,690 million yen) "Da Nang Port Improvement Project"  (3)Dung Quat (FY 1999 Domestic Survey)(FY 1999 Overseas Survey) Refinery project in Dung Quat was authorized as a national project which is announced to begin its operation in 2001, however there has been no progress yet. (FY 2000 Overseas Survey) Construction of Dung Quat Refinery No.1 is under implementation in hinterland of Dung Quat Port. The refinery is managed by VietRoss, a JV between PetroVietnam and Russia. The following facilities belong to the management of VietRoss: Breakwater, Crude-oil import berth, Oil-product export berth, berth to serve the refinery. The berth to serve construction of the refinery will be under operation in the early 2001. VietRoss is proceeding with bidding procedures for construction of breakwater and oil berth. It is expected that these facilities will be completed in 2003. The breakwater and the oil berth were proposed in JICA's study. Construction: (FY 2001 Overseas Survey) 1)Breakwater ( Length: 1,550m) Period: 2001-2003 Situation of Progress: Starting. 2) Crude-oil import berth Situation fo Progress: Bidding evaluation. 3) Oil product export port Period: 2001-2003 Contents: 2 berths for 30,000 DWT Tanker, 4 berths for 5,000 DWT Tanker. Situation of Progress: Starting.		

# STUDY SUMMARY SHEET

## (F/S)

ASE VNM/S 303/98

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Thanh Tri Bridge and the Southern Section of Ring Road No.3 in Hanoi		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	PMU Thang Long Ministry of Transport.	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Jul.1997 ~ Sep.1998 14month(s) ~		
<b>8. SITE OR AREA</b>	The Area Between National Highway No.1 and No.5 of Ring Road No.3.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1.Thanh Tri Bridge (3.1km): main bridge, approach and dyke bridges. 2.Than Tri Section of SHTRR (6.1km): lane throughways, frontage roads, border facilities, interchanges, prestressed concrete girder throughway bridges. 3.Gia Lam Section of SHTRR (3.2km): lane throughways, frontage roads, border facilities, interchanges, toll plaza, prestressed concrete girder throughway bridges. * SHTRR = Southern section of Hanoi Third Ring Road.			

タインチ橋建設調査

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

Subsequent study:

(FY 1999 Domestic Survey)(FY 1999 Overseas Survey)

Apr. 1999 - May 2000 D/D in collaboration of JICA and OECF "Thanh Tri Bridge and Can Tho Bridge Construction Project".

\*Contents: D/D of 1)the Thanh Tri (Red River) Bridge; 2)Gia Lam Side; 3)Thanh Tri Side (1); 4) Thanh Tri Side (2); and 5)Infrastructure in the Resettlement Area.

Finance:

(FY 1999 Domestic Survey)

Dec.1999 Japan's ODA Loan was pledged.

(FY 2000 Overseas Survey)

L/A of Japan's ODA Loan(10,000 mil. yen) was contracted in Mar. 2000.

L/A of Japan's ODA Loan(14,863 mil. yen) was contracted in Mar. 2002.

Construction:

(FY 2003 Overseas Survey)

Selection of Supervision Consultant:Consulting Services Contract was signed on 26 August 2002 between PMU My Thaun and the JV Nippon Koei Co.,Ltd. ChodaiCo.,Ltd. TEDI and TEDIS.

Review Detailed Design Work: is now under way.

(FY 2003 Domestic Survey)(FY 2003 Overseas Survey)

Conditions of construction progress:

PK1: November 28, 2002 - 72 months (as of end of September: 11.62%)

PK2: October 2003 - 55 months

PK3: Not yet started (15 months)

# STUDY SUMMARY SHEET

## (F/S)

ASE VNM/S 304/98

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Can Tho Bridge Construction		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Transport(PMU-My Thuan)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. PADECO Co., Ltd.		
<b>7. STUDY PERIOD</b>	Aug.1997 ~ Nov.1998 15month(s) ~		
<b>8. SITE OR AREA</b>	The main bridge will locate between Vinh Long and Can Tho Province in Vietnam.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1.Project</p> <p>The main bridge which spans the Hau River will be constructed to connect Vinh Long and Can Tho provinces. Approach road on both riversides will be also constructed.</p> <p>2.Outline of the project</p> <p>Length: 14.6km</p> <p>Bridge length: 2.6km</p> <p>Approach road: 12.0km (Vinh Long side 5.0km, Can Tho side 7.0km)</p> <p>Approach span bridge: prestressed concrete box girder</p> <p>Service area: 2 locations</p> <p>Toll gate: 1 location</p> <p>[Imp. Period]</p> <p>Detailed Design : June 1999-Sep. 2000</p> <p>Construction : Oct. 2001-June 2005</p>			

カントー橋建設計画調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent study: (FY 1999 Domestic Survey) Dec. 1998 D/D "Thanh Tri Bridge and Can Tho Bridge Construction Project".</p> <p>Finance: The government of Viet Nam requested to Japan for ODA loan on Detailed Design and bridge construction on Nov. 1998. (FY 2000 Domestic Survey) The project was included in Japan's ODA loan long list. (FY 2001 Domestic Survey) 30 Mar. 2001 L/A 248,47 mil. Yen</p> <p>Construction: (FY 1999 Domestic Survey) Land acquisition and construction of infrastructure will be implemented from March 2000 to June 2001. Main construction is divided into 3 phases, which will be commenced on Feb.2002 and completed by Aug.2006. (FY 2001 Overseas Survey) Land acquisition: Procedures are being fulfilled for requesting the approval of the land acquisition costs. The infrastructures of the Resettlement Areas in Can Tho and Vinh Long provinces are being built, using local counterpart funds. UXO clearance: completed. Procurement: The selection fo a Supervision Consultant is now under way. (FY 2003 Overseas Survey) Start in April 2004 with a Period of 50 moonths. Land acquisition: neary completed. Section of Supervision Consultant: The Consulting Services Contract was signed on 2 August 2002 between PMU MyThuan and the JV pf Nippon Koei Co.,Ltd. Chodai Co.,Ltd. TEDI and TEDIS.</p> <p>Background (FY 1999 Overseas Survey) The construction of Can Tho Bridge which is aimed as a part of the arterial road of National Highway No.1, is the top priority project in infrastructure development strategy of Viet Nam to the year 2010. Can Tho ferry which is the only transport means to cross Hau River experiences heavy traffic and is a bottleneck for the development of the area. Therefore, the construction of Can Tho Bridge is essential for improving transportation and promoting development of the economy and society of the concerned areas as well as Viet Nam.</p>		



# STUDY SUMMARY SHEET

## (M/P)

ASE VNM/S 105/99

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Study on Environmental Management for Ha Long Bay		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Science, Technology and Environment / People's Committee of Quang Ninh Province, the Socialist Republic of Viet Nam	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Feb.1998 ~ Nov.1999 21month(s) ~		
<b>8. SITE OR AREA</b>	The bays that are designated for the World Heritage and its buffer area, and the hinterland areas that may affect the environment of the bay. (Total area: 2,500km <sup>2</sup> )		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1) Bach Dang wastewater treatment project 2) Pilot project on rehabilitation 3) Improvement of sanitation condition-Phase I 4) Rehabilitation of mangrove swamps 5) Environmental monitoring( water quality, environmental resources) 6) Establishment of Visitor Center			

ハロン湾環境管理計画調査

<b>PRESENT STATUS</b>	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Priority projects were selected among the proposed projects and programs in the proposed environmental management plan from viewpoints of urgency, effects and locations. Selected priority projects are shown below. Vietnamese government agreed to commence these projects as soon as possible.</p> <ol style="list-style-type: none"> <li>1) Bach Dang Wastewater Treatment Plant Construction Project</li> <li>2) Pilot Rehabilitation Project on Coal Mining Areas</li> <li>3) Tourism Area sanitation Improvement Project(Phase I)</li> <li>4) Mangrove Swamps Rehabilitation Project</li> <li>5) Environmental Monitoring Program</li> <li>6) Visitor Center Construction Project</li> </ol> <p>The Visitor Center Construction Project has highest priority to commence among the priority projects in terms of importance of the environmental education and public awareness. The Visitor Center is planned to have functions of exhibition, research, and library on environmental conservation and management of Ha Long Bay. Vietnamese government requested grant assistance for the Visitor Center Construction Project from Japanese government. The project site is planned the coastal area of Hung Thang.</p> <p>(FY 2001 Domestic Survey)</p> <p>The grant aid request on Construction of the Environment Monitoring and Information Center for Ha Long Bay has not been adopted yet. The Environment Management Plan provided by the Quang Ninh Province has been under the procedure to be approved by the government.</p> <p>1. Visitor Center Construction (FY 2001 Overseas Survey)</p> <p>Project Name: Environment Information and Monitoring of Halong Bay. Financial Source: Japan's ODA Total Amount: JPY 619,300,000 (USD 5,630,000) USD 1=JPY 110 Contents: 1) Short term objective: Enhancing the environment management by compiling environment monitoring and analyzing program, implementing trial tests at tourist resorts and natural resources conservation. Enhancing the awareness by collecting environmental information in general and Halong Bay-Quangninh province in particular. 2) Medium and long-term objective: Sustainable development of Halong Bay and Quangninh.</p> <p>2. Progress Situation (Subsequent studies, fund procurement, etc.) (FY 2001 Overseas Survey)</p> <p>Quangninh People's Committee submitted the Vietnamese Government project file in fiscal year 2000 and Ministry of Planning and Investment transferred the project file for Japan's ODA. People and leaders of Quangninh province and Halong Bay expect the project to be implemented at the earliest time.</p> <p>(FY 2002 Domestic Survey)</p> <p>The Study on assisting water environment management is to be implemented by Global Environmental Centre Foundation</p> <p>(FY 2004 Domestic Survey)</p> <p>No further progress after 2002. No progresses can be seen for the applied Grant Aid projects requests.</p> <p>(FY 2005 Domestic Survey)</p> <p>No information to be specifically mentioned.</p> <p>(FY 2005 Overseas Survey)</p> <p>Project related to the study has been implemented with own funds and private sector funds. Project related to the study:</p> <ul style="list-style-type: none"> <li>- Environment improvement <ol style="list-style-type: none"> <li>1. Waste water treatment project in marine product processing sector: 2004-2005 private fund (Quang Ninh Seafood JV) Contents: Construction of Waste water treatment system with a capacity to process 150 square metres per day.</li> <li>2. Construction of Waste water treatment system in Quang Ninh province hospitals: 2004-2005 own fund (provincial budget) Contents: Construction of Waste water treatment system with a capacity to process 300 square metres per day</li> <li>3. Improvement of dust pollution and inundation condition in residential area of Nam Cau Trang Coalmine Plant peripheral Contents: Concretisation of roads, construction of drainage channels</li> <li>4. Garbage collection in Ha Long Bay: 2005 own fund Contents: Collection of garbage at tourist sites and fishery villages</li> <li>5. Coalmine waste water treatment: 2005 own fund Contents: Construction of waste water treatment system with a capacity to process 1,200 square meters per day</li> </ol> </li> <li>- Environmental monitoring <ol style="list-style-type: none"> <li>1. ha Long Bay environmental monitoring project: 2005 own fund Contents: Infrastructure preparation (office equipment), technical transfer, and training</li> <li>2. Quang Ninh annual environment monitoring: 2005 own fund (provincial budget) Contents: Environmental monitoring of entire Quang Ninh province</li> </ol> </li> </ul>	

# STUDY SUMMARY SHEET

## (M/P)

ASE VNM/S 106/99

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Study on Telecommunication Development		
<b>3. SECTOR</b>	Communications & Broadcasting / Telecommunication		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department General of Posts and Telecommunications (DGPT), Vietnam National Posts and Telecommunications(VNPT)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	NTT International Corporation		
<b>7. STUDY PERIOD</b>	<div style="display: flex; justify-content: space-between;"> <span>Jul.1998 ~ Mar.1999 8month(s)</span> <span>Jun.1999 ~ Aug.1999 2month(s)</span> </div>		
<b>8. SITE OR AREA</b>	Whole area in Vietnam		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1. Project No.1: North Province Project(20 provinces, 101,000 lines) 2. Project No.2: Mekong Delta Province Project(12 Provinces, 125,000 lines) 3. Project No.3: Central Province Project(12 Provinces, 92,000 lines) 4. Project No.4: Inter-Province Network Project (14 SDH OFC loops, 4 radio & SDH links) 5. Project No.5: Frequency Monitoring Project(8 locations including Yen Bai) 6. Project No.6: OPMC(Outside Plant Management Center) Project (Panoi) 7. Project No.7: VSAT for government emergency communications system(Nationwide)			

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

Subsequent Study:

(FY 2001 Overseas Survey)

F/S has being updated to increase previously designed numbers of 30,000 lines to 50,000 lines. As planned, the F/ S is to be completed by the end of first quarter of 2002 (Mar. 2002) and the project implementation is to be completed by fourth quarter of 2002. The F/S has applied latest technologies to meet the current situation. Design stage is budgeted by French ODA non-refundable fund and implementation stage is budgeted by French ODA loan fund.

1. Northern Province Project

(FY 2001 Overseas Survey)

Finance: French ODA 2000 (10.3 mil. EUR for purchasing equipment)

Approval Date: 17th May., 2000

Contents: Expanding the capacity of switchboard system. Installing 50,000 new lines in 15 provinces: Ha Giang, Cao Bang, Long Son, Lao Cai, Lai Chau, Yen Bai, Tuyen Quang, Bai Kan, Hoa Binh, bai Gaiang, Phu Tho, Vinh Phu.

2. Communication Networks Expansion Project for 9 provinces in Central Vietnam

(FY 2001 Domestic Survey)

The request on Yen Loan has not yet been submitted for the proposed project of this research, the "Communication Networks Expansion Project for 9 provinces in Central Vietnam". It depends on "Electric Communication Network Expansion Project for 10 Provinces in Central Vietnam", which is now on tender pre-evaluation. The delay of an implementation of the project has postponed a request for this project.

3. Submarine Cable Construction Plan

(FY 2001 Domestic Survey)

Yen loan has been requested

Related Project:

(FY 2000 Domestic Survey)

Central Vietnam Rural Telecommunications Network Expansion Project

At the same time of the completion of this project, "Central Vietnam Rural Telecommunications Network Expansion Project", a Yen Loan project, has been implemented as described below.

Finance: L/A Mar. 1998 11.3 bill. YEN

Contents of the project are to improve telecommunication facilities of rural networks. (77 switchboard facility, approx. 119,000 lines; WLL facilities, approx. 9,000 lines; subscriber line facilities, approx. 166,000 lines; optical fibre communication system, approx. 1,700km; micro-radio communication system, 3 blocks).

Status:

(FY 2001 Domestic Survey)

- 25th Dec. 2001, Placed switchboard package and fibre communication facilities package on tender pre-evaluation.. Public announcement of the tender is planned on Mar. 2003.

- Other packages are waiting for an approval of pre-evaluation documents from Vietnam Gov. Tender pre-evaluation is planned to be publicly announced on Mar. 2002

(FY 2001 Domestic Survey)

Vietnam has a strong interest in priority projects proposed in this study, which plans to request Yen Loan by considering the progress of implemented projects mentioned above and selecting candidates for the next Yen Loan from the priority projects.

(FY 2005 Overseas Survey)

Subsequent study: North-South submarine fibre optical cable construction project

Construction period: 2004-2008

Funding:

Funding party: Yen loan L/A concluded 31st March 2003 No. VN X-04

Amount: 19,947 million JPY (30 years)

Status:

Mine detection and disposal, cable run survey, and technical design

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 210/99

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Study on Urban Drainage and Sewerage System in Ho Chi Minh City		
<b>3. SECTOR</b>	Public Utilities / Urban Sanitation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	People's Committee of Ho Chi Minh City, the Socialist Republic of Viet Nam	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Jul.1998 ~ Dec.1999 17month(s) ~		
<b>8. SITE OR AREA</b>	M/P: The urbanized are of about 650 km <sup>2</sup> in Ho Chi Minh City F/S: The area covers the central portion of Ho Chi Minh City with an area defined as Tau Hu, Ben Nghe -Doi, Te basin(about 3,065 ha) and also the isolated are of Thanh Da area(15ha), Ben Me Coc(1) area (71ha), Ben Me Coc(2) area (46ha)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
M/P: 1. Urban Drainage Improvement The study area is divided into 6 drainage zones(C,N,W,S,NE and SE zones). Each zone has different natural, social and living environmental conditions, such as topography, geology, land use, urbanization, urban drainage system, flood situation, etc. Therefore, to improve the drainage system, the canal improvement, natural retarding pond construction and setting up a law system for on-site detention pond construction are proposed for every each zone. Also, pumping drainage improvement is proposed to three low-lying areas situated on the fringe of inner city, Thanh Da area(15ha), Ben Me Coc(1) area(71ha), Ben Me Coc(2) area (46ha). 2. Sewerage Development Sewerage development system is proposed for the area with population of more than 200 person/ha(190km <sup>2</sup> ) in year 2020. Remaining area is covered by on-site sanitation system with population density of below 200 person/ha(446km <sup>2</sup> ). Proposed sewerage development area is divided into 9 individual sewerage zones. F/S: Proposed features are summarized as follows. 1. Urban Drainage Improvement 1) Canal Improvement(Total length: 13,380m Apr. 2003-Mar. 2005, Jul. 2006-Jun.2008) Ben Nghe Canal: 3,140m, Tau Hu Canal 9,030m, Ngang No.1-3 Canal 1,210m 2) Pump Drainage Improvement(Oct. 2001- Dec. 2003, Jul. 2006-Jun.2007): Thanh Da area(15.4ha), Ben Me Coc(1)area (79.9ha), Ben Me Coc(2) area (46.0ha) 3) Existing combined sewer improvement: Additional 10,272m, Replace: 1,320m 2. Sewerage Development: 1) Interceptor sewer(Jul. 2002-Mar. 2005, Jul.2007-Mar.2010): Interceptor sewer 28,939m, Diversion Chamber 103units 2) Intermediate Wastewater pumping station(Jan. 2003-Mar. 2005, Jan. 2009-Mar.2010): Pump capacity: 13.3m <sup>3</sup> /min. 2 units, 105.0m <sup>3</sup> /min. 3 units 3) Conveyance sewer(Jul.2002- Mar.2005): 6,400m 4) Wastewater treatment plant(Oct. 2001- Dec.2005, Oct. 2006-Dec.2010): Inflow pump, Primary sedimentation basin, Aeration Tank, Secondary sedimentation basin, Disinfections tank, Gravity thickener, Dewatering, Composting plant			

ホーチミン市排水・下水道整備計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> 1. Ho Chi Minh City Water Environment Improvement Project Subsequent Study (FY 2001 Overseas Survey) Mar. 2000 - Jul. 2001. D/D on Urban Drainage and Sewerage System in Ho Chi Minh City (FY 2001 Domestic Survey) Finance: 30 Mar., 2001 L/A 8.2 billion Yen Contents: Pump drainage, Wasted water intercepting sewer installation, Wasted water connect pump terminal construction, Sewage disposal plant construction, Rehabilitation of existing drainage pipes Progress situation: The consultant is to be selected (FY 2003 Overseas Survey) Finance: 31 Mar., 2003 L/A 15.794 billion Yen HCMC Water Environment Improvement Project is divided into 5 packages: Package A: Tau Hu-Ben Nghe Canal Improvement Package B: Pump Drainage Improvement Package C: Interceptor Sewer and Intermediate Wastewater Pumping Station Construction and Procurement of Sewer Cleaning Equipment Package D: Conveyance Sewer Construction Package E: Wastewater Treatment Plant Construction  In October 1999, following the result of JBIC mission regarding Phase I project among the priority project selected in F/S, S/W for The Detailed Design Study on Ho Chi Minh City Water Environment Improvement Project was conducted between Vietnamese government and Japanese government (JICA) in January 10, 2000. JICA has started the D/D study since April 2000, and a final report will be submitted in May 2001, receiving the result from JBIC mission, Japanese government understood this project would be implemented by JBIC loan after completion of the JICA D/D. JICA study team for the D/D study has submitted the Definitive Plan Report in August 2000, and after the agreement made with Vietnamese government, the project carried out to its Detailed Design. After the discussion on the project, JBIC mission and Vietnamese government signed up on M/D. (FY 2001 Domestic Survey) The study have acquired JBIC loan and is now in progress.  (FY 2004 Domestic Survey) No information.  (FY 2004 Overseas Survey) Subsequent study: Progress: Pre-qualification-Bidding-Construction Bidder: Package A: Toa, Shimizu JV (Toa bid the lowest, though over the ceiling estimated by MOC) Package B: Toa, Shimizu JV (Toa bid the lowest, though over the ceiling estimated by MOC) Package C: Nishimatsu, Ebara, Shimizu JV Package D Toa, Shimizu JV (Shimizu JV bid the lowest, though over the ceiling estimated by MOC) Package E: Nishimatsu, Ebara, Shimizu JV Date and period of the planned start of construction: Package A: April 2005 Package B: April 2005 Package C: February 2005 Package D: January 2006 Package E: November 2004 Possibility: Funds were secured, and bidders were selected. Other new progress: Package A: The Ministry of Construction (MOC) is revising the ceiling price, since the lowest bid is over the ceiling. Package B: The Ministry of Construction (MOC) is revising the ceiling price, since the lowest bid is over the ceiling. Package C: A construction contract was concluded between PMU and Nishimatsu, Ebara, Shimizu JV on 8 November 2004. Waiting for the concurrence of the construction contract by JBIC. Package D: The Ministry of Construction (MOC) is revising the ceiling price, since the lowest bid is over the ceiling. Package E: A construction contract was concluded between PMU and Nishimatsu, Ebara . Shimizu JV on 29 September 2004. The notice of Commencement was issued on 8 November 2004.  (FY 2005 Overseas Survey) Project tendered: The Study on Urban Drainage and Sewage System in Ho Chi Minh City Bidder: Package A: Toa Package B: Toa Package C: Nishimatsu, Ebara, Shimizu JV Package D Toa, Shimizu (Shimizu bid the lowest, though over the ceiling) Package E: Nishimatsu, Ebara, Shimizu JV Construction period (planned): Package A: December 2005 Package B: December 2005 Package C: February 2005 Package D: July 2006 Package E: November 2004 Other progress: Tender for package A and B have been concluded. Now both are being negotiated, and constructions are expected to commence from December 2005.		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 211/99

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Study on Groundwater Development in the Northern Part		
<b>3. SECTOR</b>	Social Infrastructure / Water Resources Development		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Center for Rural Water Supply and Environmental Sanitation (CERWASS), Ministry of Agriculture and Rural Development	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Kokusai Kogyo Co., Ltd.		
<b>7. STUDY PERIOD</b>	Aug.1998 ~ Feb.2000 18month(s) ~		
<b>8. SITE OR AREA</b>	M/P: 20 Communes of the Northern 5 Provinces F/S: 15 Communes of the Northern 5 Provinces		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>M/P: Targeting the year 2010 covering 20 communes of the northern 5 provinces by house-connected piped water supply systems at a rate of 154 l/capita/day population of 149,700. Facilities are composed of water source, treatment system, and distribution and service pipelines</p> <p>F/S: Targeting the year 2002 covering prioritized urgent communes of the 5 northern provinces by house-connected piped water supply systems at a rate of 154 l/capita/day, population of 138,000.</p> <p>Facilities are composed of deep wells, biological filtration basin, receiving well and distribution pipelines.</p>			

北部地方地下水開発計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (FY 2000 Domenstic Survey) After completion of the Study, Vietnam government requested Japan's grant aid for implementation of the priority project.  (FY 2001 Domenstic Survey) JICA B/D is on going.  (FY 2001 Overseas Survey) Project requested for Japan's grant aid: Goundwater Development Project in the Rural Provinces of Northern Part of Vietnam. Source: Japan's Grant Aid Amount: 2 billion Yen (US\$ 13.7 million) Contents: Facilities construction: Water Supply facilities: 15 sets (Coposed of deep well, treatment system, distribution systems) Equipment Supply: Pipe, electric pumps, water meters etc. necessary for the above facilities: 15 sets. Drilling Rigs. The cost of operation and maintenance will be covered by users. O&M organization will collect water fee from the users.  Finance: (FY 2002 Domenstic Survey)(FY 2003 Overseas Survey) 4 Aug. 2002 E/N 8,670 mil. Yen (The Groundwater Development in Rural Part Northern Provinces I) 29Aug.2003 E/N 6,870 mil. Yen (The Groundwater Development in Rural Part Northern Provinces II)  Construction: (FY 2003 Overseas Survey) -for the first stage Consultantis DOCON. Contractor is Hazama Corp. -for the second stage Consultantis DOCON. Contractor is under tendering. -Date and period of the planned Start of Construction For the first stage Mar. 2003. For the second stage Mar. 2004.  (FY 2004 Domestic Survey) No information to be specifically mentioned.  (FY 2004 Overseas Survey) 1.The Project for the Groundwater Development in Rural Part of Northern Provinces: Phase 2 - Contents: Construction of 5 water supply facilities in 4 communities of Thai Nguyen - Period: Mar. 2004 - Mar. 2005 - Finance: Grant Aid (E/N concluded: 29th Jul. 2003), 687 mil. YEN 2. Construction of 3 water supply facilities in 4 communities of Thanh Hoa region - Finance Grant Aid (E/N concluded: 12th Jun. 2004), 520 mil. YEN  (FY 2005 Overseas Survey) Subsequent study: The project for the groud water development in rural parts of Northern provinces (Stage 3) Implementation period: April 2005 - March 2006 Implementing body: P-CEWASS Thanh Hoa Funding: Funding party: Yen Grant Aid E/N concluded 16th July 2004 Amount: 502 million JPY Contents: Construction of 3 water supply facilities in 4 communes in Thanh Hoa Status: 83.7% Technical cooperation: OJT on O&M water supply facilities.		



# STUDY SUMMARY SHEET

## (M/P)

ASE VNM/S 107/00

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Study on the National Transport Development Strategy in Vietnam		
<b>3. SECTOR</b>	Transportation / (Transportation in) General		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Transport Development and Strategy Institute	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	ALMEC Corporation Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Jan.1999 ~ Jun.2000 17month(s) ~		
<b>8. SITE OR AREA</b>	All transport mode for the whole of Vietnam		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1. Roads: Rehabilitation of roads and bridges 2. Railroads: Rehabilitation and small-scale improvement. 2. Ports and Ships: Improvement, expansion and development. 4. Airports: Expansion and developmet.			

運輸交通開発戦略調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 2001 Overseas Survey) Based on the Vitranns' results, MOT formulated a transport strategy up to 2020 and a masterplan up to 2010, and submitted them to the Prime Minister. Three meetings were held by MPI (Standing Member of Approval Commition) for approval and the Approval Committe submitted the meeting results to the Prime Minister on July 9, 2001. At present , the Prime Minister is reviewing them for approval.</p> <p>(FY 2002 Domestic Survey)(FY 2003 Overseas Survey) Ministry of Transportation (MOT), Gov. of Vietnam, has submitted the draft for action plan to the Presidential Office, based on the proposal made to VITRANSS for transportation development strategy till 2020 and master plan till 2010. Evaluation at the Committee has completed and is now waiting for a final approval from the President. After the VITRANSS, MOT is continuing to conduct development study, such as "Port System Development Study in Southern Part of Vietnam", "The Study on Improvement Plan of Water Transportation in Inland Red River", "The Study on Ho-Chi-Minh City Transportation Plan", and "The Study on Status of Traffic Accident" (overseas D/S). In addition, study on transportation sector is conducted with Multinational Development Bank, which is in progress to actualise a project. Therefore, MOT acknowledges that the outcome of VITRANSS is being a basis of the national transportation development.</p> <p>(FY 2005 Overseas Survey) Subsequent project: My Thuan Bridge construction Benefits: Benefits: Impacts the socio-economic development in Mekong delta by providing important connection between Mekong delta and Hochiminh city, reducing transportation time.</p> <p>Subsequent project: Thanh Tri bridge construction project (refer project No. VNM/S 303/98) Funding: Funding party: Yen Loan Amount: 400 million USD Implementation period: 2003- 2006 Content: Consists from construction of Thanh Tri bridge and eastern part of Hanoi Ring road No. 3</p> <p>Subsequent project: Cau-Gie-Ninh Binh-Thanh Hoa Expressway construction project Implementation period: 2006 - 2012 Content: Construction of 62.4km of 4-6 lanes expressway sections from Cau Gie to Ning Binh and 80km of 4-lane expressway sections from Ning Binh to Thanh Hoa</p> <p>Technical cooperation: Training: 8TDSI staffs Dispatch of experts: 2 JICA long-term experts supported MOT and TDSI</p>	

# STUDY SUMMARY SHEET

## (M/P)

ASE VNM/S 118/00

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Study on Environmental Improvement at Hanoi City in the Social Republic of Viet Nam		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Hanoi People's Committee	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. EX Corporation		
<b>7. STUDY PERIOD</b>	Jul.1998 ~ Aug.2000 25month(s) ~		
<b>8. SITE OR AREA</b>	Whole Hanoi City (927.5km <sup>2</sup> )		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Various counter-measures are recommended to be implemented with short, middle and long-term timeframes. Among all, the following projects are recommended to be placed high priority so that they should be completed by the year 2005 or by 2010 at the latest.</p> <p>1.Integrated Environmental Management (Non-Structural) Establishment and Reinforcement of the Monitoring System, Establishment of Environmental Coordination Committee and Revising Environmental Master Plan Procedure, Reinforcement of Hanoi DOSTE, Strengthening of Environmental Management at District Level</p> <p>2.Sanitary and Clean Water (Structural) To Lich Drainage, West Lake Water Quality Improvement, 14 City Lakes in Old City Center, Public Sewerage for Old City Center, Septage Collection and Disposal</p> <p>3.Clean City (Structural) Improvement Collection of Solid Waste (Non-Structural) Shift of SWM Authority to Districts and Privatization of SWM services</p> <p>4.Diversification of Financial Facility (Non-Structural) Establishment of Environmental Fund</p>			

ハノイ市環境保全計画調査

<b>PRESENT STATUS</b>	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 2001 Domestic Survey)          Since the Hanoi municipality made a request for assistance for solid waste landfill site, construction of solid waste transfer stations and grant of solid waste transportation vehicle were made to Japanese Gov. preliminary study team was dispatched in September 2001. As a result, solid waste transportation vehicle will be grated to Hanoi city.</p> <p>(FY 2002 Domestic Survey)          The concerned parties presented a request of a Grant Aid for Phase 2 project (construction of transfer station), when visiting Japan for a tender, formal request is yet to be made. There are possibilities of a request for Phase 2 construction to be a Grant Aid or a Yen Loan.</p> <p>(FY 2003 Overseas Survey)          Hanoi People's Committee, through MARD, has requested JICA to implement phase 2 of the project, which is now waiting for a reply.</p> <p>Subsequent Study:          (FY 2002 Domestic Study)          December 2001 - July 2002 B/D</p> <p>Finance:          (FY 2002 Domestic Study)          9th September, 2002 E/N 896 million YEN "Solid Waste Management Equipment Preparation Plan for Hanoi City"</p> <p>Technical Cooperation:          (FY 2002 Domestic Survey)          October, 2002 JICA seminar: 5 personnel          October - November, 2002 Grant Aid Counterpart Training: 1 personnel</p> <p>(FY 2004 Domestic Survey)          Project Name: "Solid Waste Management Equipment Preparation Plan for Hanoi City"          1) Construction: 2002          2) Completion: July 2003</p> <p>(FY 2005 Domestic Survey)          No information to be specifically mentioned.</p>	

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/A 203/00

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Study on Integrated Agricultural Development Plan in the Dong Thap Muoi Area		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Agriculture and Rural Development Sub-Institute of Water Resource Planning(SIWRP), National Institute for Agricultural Planning and Protection(NIAPP)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Taiyo Consultants Co., Ltd. Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Mar.1999 ~ Oct.2000 19month(s) ~		
<b>8. SITE OR AREA</b>	Dong Thap Province( 1 town, 6 Districts), Tien Giand Province( 2 Districts)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
M/P Master Plan includes 25 projects. 1) Agricultural Infrastructure : Flood Control 2) Forestry Management : Concentrated Plantation of National Forest 3) Environmental Conservation : Monitoring of Water Quality etc.,  F/S 1) Small Dike Improvement Plan In this plan ,the mitigation of inundation damage, stabilization of agricultural production and increasing formers income are expected through the improvement of small dike system. 2) Rice Production/Marketing Improvement Project Project aims at improvement of nice quality though which increase formers income and support increasing job opportunities in the related sectors. The project consist of following 3 sub projects. (1) High Quality Seed Production/Supply Project (2) Model Cooperation Project (3) Improvement Project of Training/Extension System			

ドンタップモイ農業開発計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY 2001 Domestic Survey) The request for grant aid has been made to implement the project at the model development site of 2,000ha.</p> <p>(FY 2001 Overseas Survey) A request for Japan's grant aid has been submitted to implement the proposed project. The situation of Dong Thap Muoi Area is still severe due to the yearly flood and inundation in which many residents were killed and lost their assets. Therefore, the government as well as the regional government and the residents strongly expect the realization of the proposed project. The implementation of the project will contribute significantly to improve the lifestyle of the area and to maintain a good relationship between Vietnam and Japan.</p> <p>(FY 2003 Overseas Survey) Request for a grant aid assistance has not been approved yet.</p> <p>(FY 2004 Domestic Survey) Although, a request for the Grant Aid has been submitted, it has not been implemented.</p> <p>(FY 2005 Domestic Survey) No information to be specifically mentioned.</p> <p>(FY 2005 Overseas Survey) All components of the proposed project were accepted by Vietnamese authorities. However, those projects were not implemented due to lack of financial resources. Vietnamese side has applied for a grant aid to GOJ to implement the proposed project in the F/S from 2001, though the request was not accepted.</p> <p>Subsequent Study (Project)</p> <ol style="list-style-type: none"> <li>1. Planning embankment system for early flood control</li> <li>2. Detail planning for flood control in the Plain of Red</li> <li>3. Implementation of a permanent waste quality monitoring network in the Dong Thap Muoi area</li> <li>4. Improving rice quality and marketing capacity</li> </ol> <p>The Vietnamese government have conducted projects to realise the proposed projects. These projects are; 1) 60 inhabitants risen-bed area (approximately 100-300 households each) has been built in flood prone area of Co Long Delta, which was the M/P target area, by the welfare program, 2) 150,000 ha of agricultural area has been transferred to higher benefit model, 3) 240km of provincial roads are upgraded, in which 128km belongs to M/P area (all bridges are temporary), 4) 224km of embankment is upgraded with 66million square metres of land, and 5) On-farm model has been adopted for changing agricultural schemes, such as shrimp with rice and fish with potato.</p>		

# STUDY SUMMARY SHEET

## (D/D)

ASE VNM/S 404/00

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Detailed Design of the Red River Bridge (Thanh Tri Bridge) Construction Project in the Socialist Republic of Viet Nam		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	D/D		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Transport	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Apr.1999 ~ Mar.2000 11month(s) ~		
<b>8. SITE OR AREA</b>	Southern area of Hanoi City		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The results of the F/S indicate that the Project is technically sound and economically feasible. Taking into account the direct and enormous indirect benefits to regional development other than the quantative savings in travel costs, the Project should be implemented at the earliest opportunity. Based on the above recommendation of the F/S, the D/D was conducted.</p> <p>This project (approximately 13km) consists of the construction of the Red River Bridge (Thanh Tri Bridge) and Southern Section of Ring Road No.3 in Hanoi which is a toll road.</p> <p>The Project was divided into 4 packages as follows:</p> <p>Package 1: Red River Bridge 3.2km Bridge (6-lanes)          Package 2: Gia Lam Section 3.4km Toll Road (4-lane)          Package 3: Thanh Tri Section 6.6km Toll Road (4-lanes)          Package 4: Infrastructure in Resettlement area 120ha</p> <p>The structure consists of bridges, road structures, and embankments including 5 interchanges.</p>			

紅河橋(タインチ橋)建設計画実施設計調査

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>Background of the Study: (FY 2001 Domestic Survey)</p> <p>According to the request to implement the Project from the Government of Vietnam, JICA has conducted the following studies: - The Study on Traffic System in Northern Area (1994) - The Master Plan of Urban Transport for Hanoi City (1996) - The Feasibility Study on Thanh Tri Bridge and Southern Section of Hanoi Ring Road No.3 in Hanoi (1998) - The Detailed Design of the Red River Bridge (Thanh Tri Bridge) Construction Project (2000). Currently Hanoi City does not have enough capacity to absorb the increasing traffic volume flowing into the city. Also, it is concerned that the industrial areas developing in the suburbs will cause serious traffic congestion in the city in the near future. Therefore, the D/D of the ring road rehabilitation including new bridge construction was implemented in the Study.</p> <p>Finance: (FY 2001 Domestic Survey)</p> <p>While conducting D/D, the implementation plan was coordinated between both the governments of Japan and Vietnam. JBIC gave a pledge on the Japanese ODA loans for the Project. The Loan Agreement for the Project was concluded for a part of the total project cost. ("Red River Bridge Constructuin Project I" 10,000 mil.yen) (FY 2003 Overseas Survey)</p> <p>29. Marth 2000 L/A 10,000 mil.yen "Red River Bridge Constructuin Project I" 29. Marth 2002 L/A 14,863 mil.yen "Red River Bridge Constructuin Project II"</p> <p>Construction: (FY 2001 Domestic Survey)</p> <p>The Consultants were selected for the implementation stage of the Project in Dec. 2000. The review of the D/D and the preparation of Tender Documents were conducted by the Consultants between Jan. and May, 2001. Continuously, the PQ process for package 1 has been proceeding now. The schedule from now shall enter the Tender Stage after the selection of the applicants in the PQ process. It is forecasted in the current situation that the construction may start from the middle of 2002. (FY 2003 Overseas Survey)</p> <p>Selection of Supervision Consultant: Consulting Services Contract was signed on 26 August 2002 between PMU My Thaun and the JV Nippon Koei Co.,Ltd. ChodaiCo.,Ltd. TEDI and TEDIS. Review Detailed Design Work: is now under way. (FY 2003 Domestic Survey)(FY 2003 Overseas Survey)</p> <p>Conditions of construction progress: PK1: November 28, 2002 - 72 months (as of end of September: 11.62%) PK2: October 2003 - 55 months PK3: Not yet started (15 months)</p> <p>(FY 2004 Domestic Survey)</p> <p>No information to be specifically mentioned.</p> <p>(FY 2005 Domestic Survey) (FY 2005 Overseas Survey)</p> <p>Subsequent Study: Red River Bridge (Thanh Tri Bridge) Construction Project</p> <p>Funding: Funding party: Japanese government Yen Loans Loan Agreement (I) No. VN VII-4 dated 29 March 2000, Loan Agreement (II) No. VN LX-5 dated 29 March 2002, Loan Agreement (III) No. VN XI-5 dated 31 March 2004 Management/operational body after construction: Vietnam Road Administration (under jurisdiction of the Ministry of Transport)</p> <p>Description: - Thanh Tri Bridge (3km bridge, paving, facilities, shore protection, riverbed protection), - Installed roads (bridge, interchange, risen bed, vulnerability measures, paving, facilities), - Construction of resettlement location PK1: Thanh Tri Bridge PK2: Gia Lam Section PK3: Thanh Tri Section PK3 A: Extension of Phap Van Viaduct PK4: Resettlement Site PK6: Second Phu Dong Bridge</p> <p>Design and construction period: PK1: November 28 2002-September 30th 2006 PK2: March 28th 2005-March 27th 2008 PK3: March 24th 2005-March 23rd 2008</p> <p>Progress: PK1: 76.6% PK2: 3.5% PK3: 7.5% PK3A: Designing is in progress PK6: Designing is in progress</p> <p>Contract of the Thanh Tri Bridge (PK1) is till end of November 2006, though it is planning to complete the construction till the end August 2006 according to a request made to shorten construction period.</p> <p>Part of site acquisition for the Thanh Tri Bridge road (PK3) has not been completed, which may affect progress of the PK3. Two additional package has been approved, which are now under D/D (as noted below). Tender is planned around next autumn.</p> <p>Technical Cooperation: Seminars: 1) Seminars on new technology, 2) Monthly technical discussion with local technicians.</p> <p>Others: Subsequent studies: 1) Feasibility Study on PK6, 2) Extension survey on PK3A</p>		

紅河橋(タインチ橋)建設計画実施設計調査



# STUDY SUMMARY SHEET

## (D/D)

ASE VNM/S 405/00

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Detailed Design of the Can Tho Bridge Construction Project in the Socialist Republic of Viet Nam		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	D/D		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Transport of Socialist Republic of Viet Nam	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Mar.1999 ~ Nov.2000 20month(s) ~		
<b>8. SITE OR AREA</b>	The project site is located in the Can Tho in the Lower Mekong Delta.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1) Project Length 15,850m (Feasibility: FIRR 5.6~11.7%)</p> <p>2) Bridge Feature Total Bridge Length 2,750m, Main Bridge Length 1,090m, Bridge Width 23.1m</p> <p>3) Approach Roads Total Length 13,100m, Vinh Long Side 5,410m, Can Tho Side 7,690m</p> <p>4) Service Area: 2 locations</p> <p>5) Toll Gate and Management Office: 1 each</p> <p>Construction Cost            Package 1 (Local Cost: 17,547,000 US\$, Foreign Cost: 8,339,000 US\$)            Package 2 (Local Cost: 63,202,000 US\$, Foreign Cost: 144,164 US\$)            Package 3 (Local Cost: 23,903,000 US\$, Foreign Cost: 8,774 US\$)            Package 4 &amp; 5 (Local Cost: 2,130,000 US\$, Foreign Cost: 0)</p>			

カントー橋建設設計調査(連携D/D)

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting   Delayed or Suspended   Discontinued or Cancelled
<b>Description :</b> Finance: (FY 2001 Domestic Survey)(FY 2002 Domestic Survey) 30th March, 2000 L/A 24.847 billion YEN "Cuu Long (Can Tho) Bridge Construction Project" - Consultant selection in progress (D/D review and C/S) Construction: (FY 2003 Domestic Survey) On tender (FY 2004 Overseas Survey) Purchase of site has nearly completed. Consulting service has been concluded with Nihon Koei and Chodai on 22nd August, 2002  (FY 2004 Domestic Survey) 1. Subsequent studies: Pre-construction Stag, Construction Stage Among 3 packages, 1 package is under construction and 2 packages are under construction negotiation. 2. Finance: Yen Loan 1) Special Yen Loan (L/A No.VN VIII-7) 2) General Yen Loan (L/A No.VN VIII-6) 3) L/A conclusion data: both on 30th March, 2001 4) Amount: Special Yen Loan - 24.847 billion YEN, General Yen Loan - 8.393 billion YEN 5) Content: Among 3 packages, the main bridge and bridge installation block (package 2) is by Special Yen Loan. The road block, which will be connected to both sides of the main bridge (package 1 and 2) is by general Yen Loan. 6) Tender status - Package 1: 3 Vietnamese JV, 2 Chinese entity Construction Start Date: Under bid evaluation, as of 2004. Planned to be started in mid December, 2004 - Package 2: Taisei, Kashima, Shinnittetsu, and JO Construction Start Date: 18th October, 2004, Notice of Proceed was delivered and has started. - Package 3: 2 Chinese entity Construction Start Date: Bid Evaluation/ contract Negotiation has been conducted in November and December, 2004 and is assumed to start around January, 2005.  (FY 2004 Overseas Survey) Presently in construction observation stage. 1. Finance: - Yen Loan: L/A 30th March, 2001 L/A No. VNVIII-6 (8.393 billion YEN) L/A No. VNVIII-7 (24.847 billion YEN) - Counterpart fund from Vietnamese Gov.: 3.766 billion YEN 2. Constructor 1) Construction Package 1: TLC+CIENCO6+CIENCO8 Collaboration Project: Vietnam 2) Construction Package 2: Taisei+Kashima+Shinnittetsu Collaboration Project: Japan 3) Construction Package 3: CSCEC: China 3. Construction Period 1) Construction Package 1: Started from February 2005, 42 months period 2) Construction Package 2: Started from September 2004, 50 months period 3) Construction Package 3: Started from February 2005, 47 months period  (FY 2005 Domestic Survey) No information to be specifically mentioned.		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 208/01

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Study on Sanitation Improvement Plan for Haiphong City		
<b>3. SECTOR</b>	Public Utilities / Urban Sanitation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Haiphong People's Committee (HPCC)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. EX Corporation		
<b>7. STUDY PERIOD</b>	Mar.2000 ~ Jun.2001 15month(s) ~		
<b>8. SITE OR AREA</b>	Haiphong City		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
M/P Target year:2020, target area 20,900ha 1. water supply: area 19,500ha, population 794,000, supply amount 197,400m3/day 2. drainage: area 5,241ha, population 681,000, length of drainage pipe 204.6km 3. sewerage: service area 11,861ha, population 723,000, sewerage treatment plant 7 sites 4. lake: dredging 5 lakes (32ha), drainage pipe 2-6km 5. septic tank: installation works 6. solid waste management: population 859,400, quantity collected 1,441t/day, disposal site 52.7 ha F/S 1. drainage (target year 2010): area 1,103 ha, population 240,000, length of the targeted drainage channel for rehabilitation 10km 2. sewerage (target year 2010): area 1,103 ha, population 240,000, quantity treated 36,000 m3/day 3. solid waste management (target year 2005): population 608,000, quantity collected 75t/day, disposal site 32.7ha			

ハイフォン市都市環境整備計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (FY 2002 Domestic Survey) Though the government intends to implement some of urban drainage system project, funded by the World Bank, they are preparing for the request of Yen Loan for the rest of the project.  (FY 2003 Domestic Survey)(FY 2003 Overseas Survey) In June 2003, the Haiphong People's Committee requested MPI for request of yen loan with a long list. Since the Haiphong City Infrastructure Improvement (a part of the city drainage project proposed in this study) funded by IDA started in August 2003, there is a possibility that construction of sewage treatment plants is included in objectives of JBIC loan.  (FY 2004 Domestic Survey) Newly requesting for a Yen loan. Requested date: September, 2004 In October, 2004, appraisal study was conducted by JBIC.  (FY 2004 Overseas Survey) Subsequent project: Drainage and waste disposal project for Haiphong City, Phase I Implementing period: 2004-2010 Maintenance and operational body: Haiphong UREN Co. SAD Co. Objectives: To prepare a comprehensives environmental management plan for efficient and effective management skills. Funding: Funding party: Yen loan L/A concluded 2005/3/31 (No. VNXII-4) Amount: 1,517 million JPY Status: After the completion of JICA study in July 2001, in the end of 2003, and in early 2004, Haiphong City has appointed a consultant to conduct pre-F/S, F/S, EIA, resettlement plan and preparation of documents for JBIC loan procedures, which is planned to be signed in March 2005. (FY 2005 Overseas Survey) Procedures for approval is in progress according to the Vietnamese Law. JBIC has supported and supplied a guidance to Haiphong city to request a grant from the Cities Alliance (C/A), which has submitted a request to C/A, JBIC, and UNEP till 11/2005. As a result, C/A, UNEP, and Haiphong City will procure the amount below; C/A: 639,000 USD, UNEP: 54,000 USD, Haiphong City: 174,000 USD		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 209/01

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Study on Tourism Development in the Central of Social Republic of Vietnam(Preparatory Study)		
<b>3. SECTOR</b>	Tourism / (Tourism in) General		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI) ALMEC Corporation		
<b>7. STUDY PERIOD</b>	Dec.2000 ~ Feb.2002 14month(s) ~		
<b>8. SITE OR AREA</b>			
<b>9. MAJOR PROPOSED PROJECT(S)</b>			

中部観光開発計画調査

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

(FY 2002 Domestic Survey)

- Vietnam Tourism Provision Bureau (VTPB) established.
- Establishment of overseas offices of VTPB in major site - planning phase.
- Tourism Information Centre established under Tourism department of ministries.
- Grant Aid for establishing Danang Tourism Academy - requesting
- Improvements of airport terminal and navigation assistance system in Danang, Hue, and Yancheng - implementation phase
- Preparation of Michinoeki (roadside station) by Peoples Committee of ministries. - preparation phase
- Development of accommodation in Langoco beach of Hue. - planning phase
- Resort development in Cua Dai Beach, Binh Thuan province - requesting for an adoption in the National Plan
- Products improvement of traditional crafts and craft center to demonstrate production process - JICA study in progress
- Flood disaster measures presented as a prioritized project in Hoi An - JICA P/S in progress.

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2005 Domestic Survey)

No information to be specifically mentioned.

# STUDY SUMMARY SHEET

## (D/D)

ASE VNM/S 401/01

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Detail Design Study on Ho Chi Ming City Water Environment Improvement Project		
<b>3. SECTOR</b>	Public Utilities / Sewerage		
<b>4. TYPE OF STUDY</b>	D/D		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	People's Committee of Ho Chi Minh City	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Mar.2000 ~ Jun.2001 15month(s) ~		
<b>8. SITE OR AREA</b>	The central of Ho Chi City with an area of 3,065.4 ha, defined as the THBNDT Basin for sewerage development , and the isolated area of Thanh Da of 15.4 ha, Ben Me Coc (1) of 70.9 ha and Ben Me Coc (2) of 46.0 ha.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1) Package A : Tau Hu - Ben Nghe Canal Improvement (Local Cost48.8 MUS\$, Foreign Cost6.9 MUS\$) 2) Package B : Pomp drainage improvement (Local Cost15.2 MUS\$, Foreign Cost2.9 MUS\$) 3) Package C : Interceptor sewer construction, intermediate wastewater pumping station construction and procurement of sewer cleaning equipment (Local Cost15.1 MUS\$, Foreign Cost23.8 MUS\$) 4) Package D : Conveyance sewer construction, existing combined sewer improvement (Local Cost12.8 MUS\$, Foreign Cost4.8 MUS\$) 5) Package E : Wastewater treatment plant construction (Local Cost53.3 MUS\$, Foreign Cost70.8 MUS\$) 6) Consulting Service (Local Cost4.7 MUS\$, Foreign Cost13.2 MUS\$)			

ホーチミン市排水・下水道整備実施計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> Finance: (FY 2002 Domestic Survey) March 30.2001 L/A 8,000 mil Yen Ministry of Construction of Government of Viet Nam conducted the evaluation of the final report submitted by JICA in June 2001 and completed the evaluation in October 2002. Subsequently, PMU started the procedure for obtaining an approval of the detailed design from People's Committee of Ho Chi Minh City. Meanwhile, Government of Viet Nam and Japan Bank International Cooperation have signed the Loan Agreement (L/A) for the Phase I project on March 30.2001. PMU and People's Committee of Ho Chi Minh City selected Pacific Consultants International as the consultant for construction supervision service in May 2002.  Construction: (FY 2002 Domestic Survey) - PCI started a review work of the JICA D/D as the 1st stage of the service in June 2002 and completed the work on October 2002. - Procedure for obtaining an approval of bidding documents JBIC was started and the pre-qualification document for Package E(Wastewater Treatment Plant Construction) was approved by JBIC in November 2002 and was officially announced to the public. - The construction is scheduled to commence in 2003.  (FY 2004 Domestic Survey) No information to be specifically mentioned.  (FY 2005 Domestic Survey)(FY 2005 Overseas Survey) Subsequent study: The detailed design of Ho Chi Minh city water environment improvement project Tender: Package A: Toa Package B: Toa Package C: Nishimatsu Construction Co., Ebara, Shimizu Construction JV Package D: Toa, Shimizu JV (Shimizu JV has priced the lowest, though exceeding maximum price set by MOC) Package E: Nishimatsu, Ebara, Shimizu JV Implementing period: Package A: 12/2005 Package B: 12/2005 Package C: 2/2005 Package D: 7/2006 Package E: 11/2004 Progress: Conclusion of tender for Package A and B and are in negotiation. Construction planned for 12/2005.		



# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/A 202/02

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Feasibility Study on Forest Management Plan in Central Highland in Viet Nam		
<b>3. SECTOR</b>	Forestry / Forestry & Forest Conservation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Overseas Forestry Consultants Association Pasco Inc.		
<b>7. STUDY PERIOD</b>	Jan.2000 ~ Dec.2002 35month(s) ~		
<b>8. SITE OR AREA</b>			
<b>9. MAJOR PROPOSED PROJECT(S)</b>			

中部高原地域森林管理計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (FY 2003 Domestic Survey) Utilisation status: According to the Department of Agriculture and Rural Development and the Department of Forestry Development of Kon Tum province, amount of tree to be cut down by model Forestry Corporation (Manra Forestry Corporation) has been reduced due to importance placed on policies for natural forestry reservation by the central government, which felling are implemented in accordance with the forest management plan prepared in D/S. Although community assistance plan, which is one of the major components of the study, has not been implemented, it is planned to be implemented from 2004 in "Feasibility Study on Forest Management Plan in Central Highland" of the JICA technical cooperation project.  (FY 2004 Domestic Survey) Progresses are unknown.  (FY 2004 Overseas Survey) 1. Technical Cooperation: dispatch of experts 4th April - 31st May 2004: short-term experts to be dispatched for PD and ODM preparation 2. Other progress: Based on the proposal made in the study, "Forest Management Plan Implementation Project" will be implemented.  (FY 2005 Domestic Survey)(FY 2005 Overseas Survey) Subsequent study : The feasibility study on forest management plan in central highland of Viet Nam (Forest management plan implementation project) Implementing period: June 2006-September 2008 Implementing body: JICA, Department of Forestry, and Department of Agriculture and Rural Development Kon Tum Province Objectives: Upper goal: Alleviation of pressures towards forest resources caused by slash and burn activity of the villager. Overall goal: 1) To introduce best practice of model villages located in two districts to other villages. 2) To improve living standards of villagers in two districts where 5 model villages are located. Project goal: To improve agriculture, forestry, animal husbandry, and agro-forestry activities. Funding: Funding party: Yen Grant Aid, E/N concluded on 12 April 2005 Amount: 156,900 USD Technical cooperation: Dispatch of experts: 1) Chief advisor/participatory community development (June 2005-) 2) Sustainable agroforestry planning (June 2005-) 3) Participatory community development / training (June 2005-) 4) Dissemination planning / sustainable forest management (June 2005-)		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 210/02

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Port System Development Study in Southern Part of Vietonam		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	MOT, VINAMARINE	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI) Japan Port Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Dec.2000 ~ Aug.2002 20month(s) ~		
<b>8. SITE OR AREA</b>	M/P: SFEA (Southern Focal Economic Area) F/S: 1) Cai Mep, 2) Thi Vai		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
M/P: (Target year 2020) 1) container terminal : 15 berths 2) general cargo terminal : 20 berths 3) passenger terminal : 1 berths  F/S: (Target year 2010) 1) Cai Mep : Container terminal, 50,000DWT, 2 berths 2) Thi Vai : general cargo terminal, 50,000DWT, 2 berths 3) Cai Mep - Thi Vai : Dredging of channel			

南部港湾開発計画調査

<b>PRESENT STATUS</b>	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting   Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY 2003 Domestic Survey) November, 2003 Appraisal Mission by JBIC</p> <p>(FY 2003 Overseas Survey) Appraisal Mission of JBIC has working visit to Vietnam in November 2003. After series of discussion, following items is agreed:  (1) It was agreed that total investment cost of Thi Vai Cai Mep International Port Development is about 328.652 million USD. Vietnamese side strongly wishes that Consulting Services Cost of Detailed Design Stage will be granted by JICA and 85% of the total investment cost less Detailed Design Cost (construction cost) will be funded by JBIC Loan. The remaining cost will be financed by the Government.  (2) The implementation is drawn up in two options:  (a) Option 1: JICA will implement the Detailed Design from early 2004 and the Loan Agreement will be concluded in March 2005.  (b) Option 2: JICA will implement the Detailed Design from January 2005 and the Loan Agreement will be concluded in March 2006.  As forecast, the cargo volume throughput in Baria- Vungtau port system (mainly are ports in Thi Vai River) in 2010 includes 1.1 million TEUs for container and 5.96 million tons for general cargoes, respectively. To meet the mentioned demand forecast, simultaneous operation of two container terminals and two general cargo terminals should be started in 2010. Therefore, Vietnamese side strongly proposed that commencement of detail design should be in early 2004 and the conclusion on Loan Agreement should be done in March 2005.</p> <p>(FY 2004 Domestic Survey)  1. Subsequent studies: from August 2004, "Detailed Design Study of CAI MEP-THI VAI International Terminals" Coordination D/D in progress  2. Funding request:  1) Requested party: JBIC  2) Requested period: 2003  3) Implementation status: L/A concluded in 2005, affectation planned, planned to be constructed from 2007</p> <p>(FY 2005 Domestic Survey)  Subsequent study: Detailed Design Study of CAI MEP-THI VAI International Terminals (coordinated D/D)  Implementing period: August 2004-January 2006  Implementing body: JICA  Objective: To conduct D/D in coordination with the CAI-MEP-THI VAI port development project planned to be implemented with Yen Loan from JBIC. In addition, to conduct technical transfer on D/D, construction, and management of port facilities to PMU85 and VIINAMARINE, the C/P.  Relation with the study: Based on the result of F/S, Vietnamese government has requested the Japanese government for a loan to develop container berth (2 berths) in Cai Mep and to general cargo berth (2 berth) in Thi Vai together with the request conduct a study requiring high order technical skills and promptness. As a response, JBIC and Vietnam discussed and basically agreed on port maintenance policy mentioned in the Minutes of Discussion in November 2003.  Funding:  Funding party: Yen Loans (L/A concluded on 31 March 2005) 85%, Government of Vietnam 15%  Amount: 36,364 million JPY</p> <p>Contents:  1)Cai Mep international container terminal  (1) Quays (2 berths, 14m depth, 600m long) and Wharfs  (2) Terminal (Approximately 43ha)  (3) Access road (Including bridges)  2) Thi Vai international terminal  (1) Quays (2 berths, 14m depth, 600m long) and Wharfs  (2) Terminal (Approximately 21ha)  (3) Access road  3) Dredge of passage  (1) Passage of 14m depth (Downstream of Cai Mep container terminal)  (2) Passage of 12m depth (Cai Mep container terminal-Thi Vai container terminal)  4) Construction (Control tower etc.)  5) Loading machinery etc. (Gantry cranes, multi-purpose cranes, Jib cranes, VTS system, and etc.)</p> <p>Status:  The progress report II of the coordinated D/D was submitted to the Vietnamese side in mid October. Following the result of the report, draft final report is to be submitted in mid December. The final report is to be submitted in January 2006 after a discussion. P/Q, selection of bidders, tender, selection of constructor, and contract is planned in 2006. Construction will commence from 2007.</p>		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 211/02

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Feasibility Study on Red River Navigation Improvement, the Segment through Hanoi		
<b>3. SECTOR</b>	Transportation / Marine Transportation & Ships		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Transport = MOT Project Management Unit of Water Way	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI) Japan Port Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Aug.2001 ~ Jun.2002 10month(s) ~		
<b>8. SITE OR AREA</b>	M/P: The Study Covers.The entire Red River Delta for the long term strategy and The Hanoi Segment for the Master plan and the short Term Development Port.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>It is estimated that by 2020, the number of cargo through the Hanoi Segment will increase threefold, compared to today. With a view to respond to increasing demands to inland water way, it is crucial to develop new ports and enhance existed ports' capacities immediately.</p> <p>(1)Water way improvement: the Hanoi Segment</p> <p>(2) Port management: Hanoi Port, New northern and eastern Ports</p> <p>By 2010: Berthing facilities (0.9km), 4 Satellite customer terminals, cargo-handling gear, preservation facilities, inland container  with a distribution center, Customer terminal</p> <p>By 2020:Access roadways related facilities,Berthing facilities (2.4km)</p>			

紅河内陸水運改善計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY 2003 Domestic Survey) No information.</p> <p>(FY 2003 Domestic Survey) Based on the Feasibility Study report by JICA, the Feasibility Study on the Red river Waterways Improvement in the Segment through Hanoi following Vietnamese procedures and Environment Impact Assessment as required by JBIC were completed. Being aware of the importance and urgent ness of this project in terms of waterway transport development and the implementation of this project is a basic conditions for Hanoi city development as this river segment runs through Hanoi center in near future, PMU-Waterways, thought the Ministry of Transport and the Ministry of Planning and Investment, has also requested JICA for Detailed Design, as an speed up the project to meet the requirement.</p> <p>(FY 2004 Domestic Survey) Currently, priorities of the request from Vietnam are placed on road, bridge, railroad, and port projects, thus probability of project implementation is low. Finance: 1) Requested party: Yen loan (JBIC) 2) Requested period: 2003 3) Implementation status: low priority for the request</p> <p>(FY 2004 Overseas Survey) 1. Subsequent studies Based on M/P and F/S report "The Feasibility Study on the Red River Waterway Improvement in Hanoi Area", request from JBIC to Vietnam on the following process were executed. In addition, Environment Impact Assessment (EIA) was conducted. EIA was reviewed and approved by the Ministry of Natural Resources and Environment (MONRE), and has been submitted to JBIC. PMU-water way has prepared examination papers as mentioned in JBIC request. 2. Finance: 1) 2003: PMU-Waterway has requested JICA for a Grant Aid for D/D through the Ministry of Transport and the Ministry of Planning and Investment (MPI). 2) 2004: Instead of the Vietnam government, MPI has submitted a diplomatic document to Japan requesting for a Grant Aid. 3) Currently, project approval is anticipated to be made by Japanese government through JICA or JBIC in fiscal year 2005. Application for the ODA by the Vietnamese government will continue in the future. Cooperation from JICA is anticipated.</p> <p>(FY 2005 Domestic Survey) The project has been short-listed for a Yen Loan in the Ministry of Transport, and is under consideration in JBIC.</p> <p>(FY 2005 Overseas Survey) The Ministry of Transport (MOT) had submitted F/S to the government of Vietnam for an approval of the investment. Ministry of Planning and Investment (MPI) had arranged a meeting for project adoption on 11th November, 2005 participated by representatives from Hanoi People Committee and related ministries. The project was strongly supported by Hanoi People Committee, which MPI has proposed to the government for an approval. As a result, MPI on behalf of the Vietnamese government enlisted the project on the short-list and had included the project in a diplomatic letter of 1st August 2005 to the Japanese government (through Japanese Embassy) for preferred credit.</p>		

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 212/02

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Study on Groundwater Development in the Rural Provinces of the Central Highlands in the Socialist Republic of Viet Nam		
<b>3. SECTOR</b>	Social Welfare / Disaster Relief		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Agriculture and Rural Development, Center for Rural Water Supply and Rural-Development	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Nov.2000 ~ Mar.2002 16month(s) ~		
<b>8. SITE OR AREA</b>	M/P: 41 Water Supply Systems in 20 Communes in Kon Tom, Gia Lai and Dac Lac Provinces. F/S: 21 Water Supply Systems in 20 Communes in the same area above.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>M/P:</p> <p>Among 41 Water Supply Systems, 21 systems were selected as priority projects to be implemented in 1st stage. The proposed Water supply systems consist of 1)pumping system of Ground water 2) piped-water delivery system and Public water taps.</p> <p>F/S: Total Estimated Cost US\$13,717</p> <p>Further prioritization was made for the selected 21 systems and a 4-step-wise implementation was proposed.</p> <p>Imp. Period</p> <p>1) 2002 ~2004      2) 2004 ~2006      3) 2006 ~ 2008      4) 2008~ 2010</p>			

中部高原地方地下水開発計画調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b>  (FY 2003 Domestic Survey)  Awaited for B/D Study</p> <p>(FY 2003 Overseas Survey)  The Government of Viet Nam has requested Grand aid from Japan Government according to MPI' letter dated on 16 September 2002.</p> <p>(FY 2004 Domestic Survey)(FY 2004 Overseas Survey)  Although requests have been made for a Grant Aid in 2002, 2003, and 2004, none of them has been selection.</p> <p>(FY 2005 Domestic Survey)(FY 2005 Overseas Survey)  Subsequent study: Basic Design on Groundwater Development in the Central Highland Area  Implementing period: August 2005-March 2006  Implementing body: JICA  Funding:  Requested date: 1 September 1999  Funding party: YEN Grant Aid  Objective: To survey target communes for data collection, information gathering and prepare B/D  Relation with the study:  1) 13 communes received a Grant Aid from Japanese Government (less 1 communes)  2) Dak Lak province has been divided into 2 provinces as; Dak Lak and Dak Nong, which 4 communes (D1, D2, D3, and D4) belongs to Dak Lak province and 1 commune (D6) belongs to Dak Nong province.  3) Numberof supporting vehicles reduced from 4 to 2 units  4) Photovoltaic energy systems not included in the project.  Status:  La Rsiom commune of Gia Lai province (G6) has constructed 3 small-scale water supply systems. Two of the system were received an assistance from ADB and the remaining was assisted by UNICEF. These water supply systems is providing clean water to 2,500 - 3,000 residents (about 1,000 household) in project area.</p>		



# STUDY SUMMARY SHEET

## (M/P)

ASE VNM/S 101/03

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Study on Nationwide Water Resources Management in the Socialist Republic of Vietnam		
<b>3. SECTOR</b>	Social Infrastructure / Water Resources Development		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Institute of Water Resource Planning (MARD)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. NIKKEN Consultants, Inc.		
<b>7. STUDY PERIOD</b>	Sep.2001 ~ Sep.2003 24month(s) ~		
<b>8. SITE OR AREA</b>	14 river basins in Vietnam		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Phase 1: water resources development and management plan for major 14 river basins</p> <p>Phase 2-1: Integrated River Basin Management Plan for the Huong River basin</p> <p>Phase 2-2: Kone river basin comprehensive management plan</p> <p>Phase 2-3: F/S on Kone river basin prioritized project</p>			

全国水資源管理計画調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 2004 Overseas Survey)</p> <p>1. Houng river basin: Procedure for securing financial resource to realize constructions which were selected for the 1st stage (Ta Trach reservoir): Vietnam government have decided to study about the construction of multipurpose reservoir on the Ta Trach branch and planned to land capital from Japanese ODA for the construction in 2007. However for ealier prevention of food from Houng river on Jan. 26 2005, the People committee of Thua Thien Hue Province suggested MARD to allocate budget from the international bodies (institutions) to Ta Trach reservoir.</p> <p>2. Kone river basin: Below is the work in relation to the emphasized projects in Kona river basin.</p> <p>1) Dinh Binh multiple purpose reservoir: MARD acknowledged the technical plan, and its part of it has implemented by the central government budget.</p> <p>2) Von Phong Weir System: MARD decided to implement Feasibility study.</p> <p>3) F/S for construction projects, including Drainage Project for Central Area: ADB4 is finished, and acknowledged by MARD.</p> <p>Projects are as below</p> <ul style="list-style-type: none"> <li>- Construction projects in La Tinh basin: Analyzing content of water taken as a sample from Kona River.</li> <li>- Construction projects in Thuan Phong River basin: irrigation and drainage system and Thuan Ninh reservoir.</li> </ul> <p>4) F/S for the flood prevention in the bottom basin of Kan River basin project has not been implemented.</p> <p>(FY 2005 Domestic Survey)</p> <p>Vietnamese government requested for a F/S on Ta Trach reservoir operation project to Japanese government in 2004, while showing intension to implement the project with JBIC fund in the future. However, the Vietnamese government have changed its policy to implement the project with their funds. Thus, request for the Japanese F/S has been withdrawn.</p> <p>(FY 2005 Overseas Survey)</p> <p>Subsequent project: Ta Trach reservoir</p> <p>Construction period: From 2005</p> <p>Funding:</p> <p>Funding party: Own fund</p> <p>Status: Under construction</p> <p>Subsequent project: Dinh Binh reservoir</p> <p>Construction period: From 2003</p> <p>Funding:</p> <p>Funding party: Own fund</p> <p>Status: Under construction</p> <p>Subsequent project : East dike system</p> <p>Funding:</p> <p>Funding party: Other donors</p> <p>Status: Under construction</p>	

# STUDY SUMMARY SHEET

## (Other Studies)

ASE VNM/S 601/03

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	Support Program on Primary Education Development in the Socialist Republic of Vietnam		
<b>3. SECTOR</b>	Human Resources Development / Education		
<b>4. TYPE OF STUDY</b>	Other Studies		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	MOET: Primary Education Department	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	PADECO Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jul.2001 ~ Mar.2004 32month(s) ~		
<b>8. SITE OR AREA</b>	Vietnam		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1. Formulation of PEDP 2. Donor coordination for the PEDP 3. Formulating Japan's cooperation program 4. Monitoring and management of the PEDP			

初等教育セクタープログラム開発調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(2004 Domestic Survey) No specific mentioning</p> <p>(FY 2004 Overseas Survey) Following are results of the Project: - Established National Primary Education Development Program (PEDP). The PEDP was used in forming Education for all (EFA) plan and was referred to when forming central level and local level plans. Participatory Approach applied in the project for establishing provincial PEDP is utilized not only in establishing plans but also in other activities such as teachers training teaching etc. - Suggestions: In order to make the Project be sustainable, it necessary to assist provinces which have low capacity or which are newly established in forming their provincial PEDP.</p> <p>(FY 2005 Domestic Survey) Subsequent project: Strengthening cluster-based teacher training and school management in Vietnam Phase I Objectives: The project will place 3 training systems as an output; 1) Teacher training school management skills improvement program 2) Head teacher school management skills improvement program 3) Regional education official planning and management skills improvement program Technical cooperation: Training: 133 rectors and 133 teachers from Bac Giang and 15 officials from DOET and BOET Dispatch of experts: 5 personnel September 2004 - July 2007 1. Team leader, 2. Planning and training, 3. School management/small-scale planning, 5. Monitoring and evaluation Benefits: Beneficiaries: Provincial and sub-district level officials, such as DOET and BOET Benefits: Experts from JICA has been requested by the director of Bac Giang DOET to expand its cooperation to other areas of Bac Giang province. Corresponding to the request, the project has partially begun inputting in the area. Central Working Group has acknowledged undiversified relation between central and regional educational institution, which has given an opportunity to diffuse outcome of the project to institutions in Bac Giang province.</p>	

# STUDY SUMMARY SHEET

## (M/P+F/S)

ASE VNM/S 201/04

<b>1. COUNTRY</b>	Viet Nam		
<b>2. NAME OF STUDY</b>	The Study on Urban Transport Master Plan and Feasibility Study in HCMi Metropolitan Area in the Socialist Republic of Vietnam (HOUTRANS)		
<b>3. SECTOR</b>	Transportation / Urban Transportation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	ALMEC Corporation		
<b>7. STUDY PERIOD</b>	Aug.2002 ~ Jun.2004 22month(s) ~		
<b>8. SITE OR AREA</b>	M/P and F/S: 5,076 square km, comprising Ho Chin Ming city and part of surrounding 3 provinces with 7.5 million populations.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
M/P: 1. Road projects: 1) primary road 2) secondary road, 3) urban highway, and 4) overpass 2. Traffic management system projects: 1) traffic management capacity building, 2) CBD traffic management, and 3) bus corridor management 3. Public transportation service: 1) urban transport, 2) bus way, 3) bus system modernization, 4) public traffic terminal, and 5) urban water-borne traffic 4. Traffic environment projects: 1) district traffic improvement, 2) green network, 3) air pollution improvement, and 4) traffic safety improvement  F/S: 1. Ring road No.2: a) construction of eastern section, b) expansion of south-west section, c) flyover throughout No.2 2. UMRT No.1 a) urban railway (underground), b) urban railway (overhead), c) urban railway (ground), and d) bus way			

ホーチミン都市交通計画調査（社会開発部）

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

(FY 2005 Domestic Survey)

Subsequent study: Ho Ting Minh UMRT No.1 eastern section construction plan

Implementing body: Ministry of Economy, Trade, and Industry

Objective: Depth analysis by JARTS, based on HOUTRANS F/S report due to alteration made to the design of new bridge construction (Tu Tiem bridge). Estimate of the project cost has increased to 625.9 million USD based on revision of lines, detailed budgeting, and survey on resettlement target occupants. In addition, EIRR and FIRR have been recalculated, which were estimated to be 19.3% and 10.9% respectively.

Status: Prospecting to proceed Yen loan procedures based on the study result. Construction Investment Report (CIR) and Construction Investment Plan (CIP) is currently prepared for an approval of the Prime Minister.

# STUDY SUMMARY SHEET

## (Other Studies)

EAS CHN/S 601/79

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Port Construction		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	Other Studies		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National Basic Construction Committee	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI)		
<b>7. STUDY PERIOD</b>	Jan.1980 ~ Feb.1980 1month ~		
<b>8. SITE OR AREA</b>	Shijiusuo and Qinhuangdao		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Feasibility study on Shijiusuo as a port of coal export and iron ore import and on Qinhuangdao as a port of coal export.			

港湾建設計画

EAS

CHN/S 601/79

(Other Studies)

PRESENT STATUS	In Progress or In Use
	Delayed
	Discontinued

Description :

Finance:  
OECF loans have been agreed as follows.

		Yanzhou- Shijusuo Port Construction	Shijusuo Railway Construction	Beijing- Qinhuangdao Railway Improvement
1st	Apr.1980	7,085	10,100	2,500
2nd	Dec.1981	9,860	3,110	11,200
3rd	Apr.1982	18,500	3,200	9,200
4th	Oct.1982	2,300	11,800	30,900
5th	Aug.1983	5,200	11,500	33,200

(million yen)



# STUDY SUMMARY SHEET

## (Other Studies)

EAS CHN/S 602/81

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Railway Modernization Project		
<b>3. SECTOR</b>	Transportation / Railway		
<b>4. TYPE OF STUDY</b>	Other Studies		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Dept. of Railway	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>			
<b>7. STUDY PERIOD</b>	Jul.1979 ~ Sep.1981 26month(s) ~		
<b>8. SITE OR AREA</b>	Beijing - Tianjin and Beijing - Hengyang		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>A group of long-term and short-term experts was assigned to assist for the modernization of Chinese railways.</p> <p>Cooperation was centered on (1) technical guidance for renovating the sections between Beijing-Tianjing and between Beijing-Hengyang, (2) the survey on the transport capacity expansion and electrification of Beijing-Tianjing section, (3) the survey on the automation of the marshalling yards, and (4) the survey on the automation of train operations.</p>			

鉄道近代化計画

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>The important sections of this study were surveyed by JICA and yen loan was concluded.</p> <p>Subsequent Study: Jul.1983~Aug.1984 "Railway Electrification Project between Chengchow and Paoki" and the "Double Tracking and Electrification Project between Hengyang and Kwangchow"</p> <p>(FY 1994 Overseas Survey) Technical guidance for Chinese Ministry of Railways(Jul. 1979 - Sep. 1981) contributed to the railway modernization in China.</p> <p>1) Technical guidance to improve transportation capacity by shortening interval between train services is working effectively. The interval was shortened from ten to eight minutes. 2) Technology transfer of alarm systems, train radio communications, or automatic train stop (ATS) for natural disaster contributes to prevent railway accidents. 3) The technical guidance also contributed to the "Railway Electrification Project between Chengchow and Paoki" and the "Double Tracking and Electrification Project between Hengyang and Kwangchow(CHN/S 302/84)" completed after this project. 4) Technology transfer of the Japanese yard-automation method was not effective because of huge China's railway freight compared with Japan's. The north yard in Chengchow was fully automated based upon the Canadian method which had nearly the same size of freight. The method will be gradually spread to other districts.</p> <p>(FY 1995 Domestic Survey) Since the Japan National Railway had been devided and privatized, it is impossible to gain the informations concernnd (According to JR Eastern Japan Co.).</p>	

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 301/84

<b>1. COUNTRY</b>		China	
<b>2. NAME OF STUDY</b>		Improvement Project of Chimwangtao, Lieyunkang and Tsingtao Ports	
<b>3. SECTOR</b>		Transportation / Port	
<b>4. TYPE OF STUDY</b>		F/S	
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National Planning Committee, National Science and Technology Committee, Transport Department	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>		The Overseas Coastal Area Development Institute (OCDI)	
<b>7. STUDY PERIOD</b>		Jul.1983 ~ Sep.1984 14month(s) ~	
<b>8. SITE OR AREA</b>		1.Qinhuangdao 2.Lianyun 3.Qingdao	
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
	1) Qinhuangdao	2) Lianyun	3) Qingdao
Break water	1,326m	3,170m	930m
Berth	(-12.5) 967m	(Container) 560m	(Coal) 295m
	(-10.0) 410m	(Grain) 280m	(Timber) 200m
		(Timber) 450m	(General) 200m
			(sand) 215m
Dredging	4,300,000cu.m	10,341,000cu.m	8,969,000cu.m
Land Reclamation	4,260,000cu.m	4,900,000cu.m	7,670,000cu.m

秦皇島港丙丁バース建設、連雲港廟嶺二期工事、青島港前湾港区建設工事

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

Description :

Finance:  
(FY 1994 Domestic Survey)  
OECF loans were provided as follows.  
Qinhuangdao Lianyun Qingdao (mil.yen)  
Oct.1984 46.31 24.45 22.03  
Aug.1985 37.23 57.72 39.37  
Jun.1986 70.11 110.85 26.20  
Jul.1987 34.51 119.11 86.83  
Aug.1988 31.84 82.97 130.43  
Mar.1989 - 74.9 265.14

Construction:  
(FY 1992 Overseas Survey)  
(1)Tsingtao Port  
1985-1990 Completion of port facilities  
1986-1990 Completion of water supply facilities  
1991-1993 Completion of railway  
The Chinese side acknowledges that construction works of the Phase 1 was basically completed. Construction of additional 6 berths in the Phase 2 was requested to the National Planning Committee.  
(2)Lianyun Port  
Nov.1990 Timber Berth completed  
Jun.1992 Container Berth completed  
Dec.1992 Grain Berth completed  
Oct.1993 Completion on Break Water  
(3)Qinhuangdao Port  
Jan.1989 Opening of operation on western Ding Berth of Qinhuangdao.

\*Related Projects  
Finance:  
Oct.15.1992 L/A 590 mil.yen (Lianyun Port First Expansion Project)  
Jan.13.1995 L/A 3,041 mil.Yen  
(Qinhuangdao Port E and F Berths Construction Project(II))  
L/A 7,178 mil.Yen  
(4th Stage Coal Terminal Construction Project(II))  
\*Contents of loans  
Materials and equipment needed for the construction of berthes.  
Dec.26.1996 L/A 2,700 mil.yen  
(Qindao Port Second Phase Expansion Porject)  
\*Contents of loan  
Construction of container berth(2) and general cargo berth(4)

秦皇島港丙丁バース建設、連雲港廟嶺二期工事、青島港前湾港区建設工事

# STUDY SUMMARY SHEET

## (F/S)

**EAS CHN/A 301/84**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Sanko Heigen Ryutokyo Model Area Agricultural Development Project		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Agriculture, Animal Husbandry and Fishery	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Agricultural Development Consultants Association		
<b>7. STUDY PERIOD</b>	Aug.1981 ~ Mar.1984 31month(s) ~		
<b>8. SITE OR AREA</b>	East region of Hei Long Jiang Province, Central part of Quan San Jiang Plain (arable land area 400million ha), Model District of Bao Qing Xian (6 million ha)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
- Irrigation Area : 46,170 ha  - Filldam : Crest 1,478,000 cu.m  - Diversion Weir : 2 places (Wang Jin Shan 75m, Tou Dao Crest 45m)  - River Improvement : 99 km  - Drainage Construction : 158.8 km  - Irrigation Construction : 172.3 km  - Road Construction : 137 km  - Farm Land Improvement : 46,170 ha  * Implementation period below is 2 years for design and 10 years for construction.			

三江平原龍頭橋典型区農業開発計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b>  Finance: (FY1991 Overseas Survey) The study result has incorporated in the provinces 8.5 Plan with planned project budget of 3.47 bil. yuan. In Jan.92, the National Water Supply Dept. decided to provide a financial support to the project. A request has been made to the National Planning Committee for the utilization of foreign fund, and presently in process toward ratification. (FY1992 Overseas Survey) The National Planning Committee approved the implementation of the project with budget of 3.45 billion yuan in Oct., 1992. The foreign funds can be utilized to finance the project if the project is implemented after 1995. The Local Water Supply Department plans to send a mission to Japan for the negotiation of Japan's Grant Aid in Feb., 1993. (FY1995 Domestic Survey) It is learnt that both countries have agreed to make this Project as one of the 4th yen Credit Project on the annual conference on FY 1994. (FY 1997 Domestic Survey) It seems that JICA Follow up study team was dispatched in Oct.1997.  Dec.1996 L/A 3,000 mil.Yen (Sanjiang Plain Long touqiao Reservoir Construction Project)  Construction: (FY 1997 Domestic Survey) Construction has not started yet. The project will be implemented under the direct control of Water Supply Department.  Detail: (FY1992 Overseas Survey) The entire plan of Sanko Heigen Development Project was designed between 1974 and 1977. Rehabilitation projects of five rivers at the Sanko Heigen are under way. About a half of the construction work was completed with the financial support of the World Bank and the local funds. The lower parts of the river has been improved.		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 302/84

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Double Tracking and Electrification Project of Railways between Hengyang and Kwangchow, and Electrification Project of Railways between Chengchow and Paoki		
<b>3. SECTOR</b>	Transportation / Railway		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Planning and Statistics Bureau, Ministry of Railways	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Railway Technical Service (JARTS)		
<b>7. STUDY PERIOD</b>	Jul.1983 ~ Aug.1984 13month(s) ~		
<b>8. SITE OR AREA</b>	Between Hengyang and Gwangchow--Section 1 Between Zhengzhou and Baoji--Section 2		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1.The electrification (Chengchow-Paoki) (1)Electrification of the track and equipment of electricity. - Construction of a transformer substation, a track of 2,375km, 5 distribution lines. - Replace of a distribution line, etc. (2)Signalisation and communication equipment. (3)Construction of a station yard for goods wagon: 1.6 million sq.m. 2.The electrification and the construction of double track. (Hengyang - Kwangchow) (1)Construction of double track(514km, 67 stations) - Construction of three tunnels (2)Construction of station yards in four areas. (3)Electrification(155km) (4)Signalisation and communication equipment.			

鄭州・宝鶏間複線鉄道電化計画、衡陽・広州間鉄道複線化及び電化計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1)Hengyang-Guangzhou Subsequent Studies: D/D was conducted by Ministry of Railways according to Japan's F/S. Finance: Oct.1984 L/A 10,192 mil.Yen (Hengyang-Guangzhou Railway Expansion Project) Aug.1985 L/A 26,822 mil.Yen (as above II) Jun.1986 L/A 24,491 mil.Yen (as above III) Jul.1987 L/A 8,789 mil.Yen (as above IV) *Contents Double tracking of Hengyang-Guangzhou road (514km), construction of tunnel, electrification (155km) Construction: This project was completed in 1988 aiming at strengthening the transport capacity. (FY 1994 Domestic Survey) Geological survey centering on geophysical exploration was conducted in the Nan-ling Tunnel between Heng Yang and Guang-Zhou as a joint work by Chinese and Japanese experts. Effect: Annual transportation capacity between Hengyang and Guangzhou was raised from 20 million to 40 million tons by the double tracking and electrification. Train was also due to improvement of gradients and curves. The method of tunnel construction at the time of Dayan Shan Tunnel has been utilized for subway construction as well as automation and reduction of other tunnel constructions.</p> <p>(2)Zhengzhou-Baoji Subsequent Studies: D/D was conducted by Ministry of Railways according to Japan's F/S. Finance: Oct.1984 L/A 7,250 mil.Yen (Zhengzhou-Baoji Railway Expansion Project) Aug.1985 L/A 13,258 mil.Yen (as above II) Jun.1986 L/A 9,482 mil.Yen (as above III) Jul.1987 L/A 31,396 mil.Yen (as above IV) Aug.1988 L/A 7,500 mil.Yen (as above V) *Contents Electrification (684km), construction of yard Construction: Of 684km between Zhengzhou and Baoji, the 269km section between Zhengzhou and San-men-xia was completed in 1986. After the construction of the remaining sections was promoted in accordance with the 7th five-year plan (1986-90), it was completed in 1991. Japan's railway-yard technology is not adequate for China due to the huge railway freight in China. Automation of the north yard at Zhengzhou was done based upon Canadian technology transfer. Effect: After the electrification, annual transportation capacity between Zhengzhou and Baoji was raised from 40 million to 60 million tons (50%) by 80 electric locomotives purchased from Japanese firm. And also, this led to the great increase of the capacity of coal transport from northern Hebei and north of Wei-he to eastern districts.</p> <p>In the execution of this construction, various kinds of technical guidance was conducted by short-term experts dispatched by JICA.</p>		



# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/A 302/84

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Basic Plan on the Sanjiang Plain Agricultural Experiment Station		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Committee on Science and Technology, Hei Long Jiang Province	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Agricultural Development Consultants Association		
<b>7. STUDY PERIOD</b>	Sep.1984 ~ Mar.1985 6month(s) ~		
<b>8. SITE OR AREA</b>	Harbin and Jiamusi Cities in Hei Long Jiang Province, Bao Qing Xian		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Following researches will be conducted to get basic technical data for agricultural development in San Jiang Plain</p> <p>1.Research on breeding and cultivation of cold-proof seeds  2.Research on farm land improvement in a cold area with low humidity</p> <p>After the final report was submitted on March 1985, a pilot firm was established. Technical cooperation had been carried out for 5 years since then. Now all are transferred and managed by China's counterpart.</p>			

三江平原農業総合試験場基本計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  Subsequent Studies: Mar.1985 F/S Final report submitted Mar.1985 Basic planning study completed  Technical Cooperation Project "Sanjiang Plain Agricultural Research Center Project" (1985.9.20~1993.3.19) After the completion of F/S, research center was established as a technical cooperation project. Technical cooperation for 5 years has been completed and the facility and all equipments were handed over to Chinese side. The basic study on agriculture in a cold area was started in September 1986 and completed in March 1993.  Dispatch of Experts: After the completion of basic planning, seven long-term experts and some dozens of short-term experts were dispatched as technical cooperation. Field improvement work, setting up of machineries and equipments were completed.		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 303/84

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Tianjin, Shanghai and Guangzhou Telecommunication Expansion Project		
<b>3. SECTOR</b>	Communications & Broadcasting / Telecommunication		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Posts and Telecommunications of the People's Republic of China	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Telecom. Eng. and Consulting Service (JTEC)		
<b>7. STUDY PERIOD</b>	Jul.1983 ~ Jun.1984 11month(s) ~		
<b>8. SITE OR AREA</b>	Tianjin(area 46.3 sq.m : pop.778), Shanghai(area 35.3 sq.m : pop.1,181), and Guangzhou (area 318.3 sq.m : pop.5,987) * Population:ten thousands, 1982)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
	Tianjin	Shanghai	Guangzhou
1)Exchange Terminals	22 40,000	9 70,000	10 (Stations) 40,000
2)Transmission	41	31	13 (areas)
3)Subscriber cable	22 (1226km)	9 (2146km)	10 (stations) (2556km)
4)Junction cable	19 (75.2km)	20 (97.2km)	12 (areas) (82.2km)
5)Mobile Communication	o	o	o

天津・上海・広州電気通信網改造計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  1. Size of effect: Being recognized as a national project in order to establish efficient economy. 2. Degree of priority: National project. 3. Other: Strong support by the Japanese agencies concerned.  Subsequent Studies: Oct.1987 D/D completed (Japan Telecommunications Engineering and Consulting Service)  Finance: Oct.1984 L/A 1,154 mil.Yen (Tianjin, Shanghai and Guangzhou Telecommunication Network Expansion Project) Aug.1985 L/A 9,235 mil.Yen (as above (II)) Jun.1986 L/A 7,916 mil.Yen (as above (III)) Jul.1987 L/A 9,398 mil.Yen (as above (IV)) Total cost: 35 bil.Yen (foreign currency)  Realized Project: Target area: Tianjin, Shanghai, Guangzhou Contents:1)Exchange terminals (150,000) 2)Cable 3)Mobile Communication  Tianjin      Shanghai      Guangzhou  Contractor    Sumitomo Shoji    Nissho Iwai    Marubeni  Sub Contractor    NEC            Fujitsu      NEC		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 304/86

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Port Development Project in Dapeng Bay		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Transportation	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI) Toko Engineering Consultants Ltd.		
<b>7. STUDY PERIOD</b>	Jan.1986 ~ Mar.1987 14month(s) ~		
<b>8. SITE OR AREA</b>	Dapeng Wang, Kwang Tung prefecture		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
The 1st Phase Plan for the year of 1990 is as follows:			
	Unit		
- Wharf	m	920	
- Berth	-	2(25,000DWT) 1(15,000DWT) 3(1,000DWT)	
- Revetment	m	500	
- Breakwater	m	100	
- Dredging	X 1,000cu.m	2,860	
- Reclamation	X 1,000cu.m	4,210	

大鵬灣港灣整備計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  Finance: Jan.1991 L/A 7,613 mil.Yen (phase I) Oct.1991 L/A 3,691 mil.Yen (phase II) Oct.1992 L/A 3,377 mil.Yen (phase III) *Contents of OECF loan -Construction of 6 berths handling cargo volume of 2.8 million tons (1 container berth, 1 multi-purpose berth, 1 bulk berth, 3 general berth) and port facilities -Railway(24km) -Road(72km)  Construction: 1988 Commencement of reclamation and dredging Oct.1989 Opening of trial operation on 3berths (1,000; 3,000; 10,000 tonnage)  (FY 1992 Overseas Survey) The Phase I construction of 2 container berths and 1 multi-purpose berth is in progress. (Completion is scheduled at the end of 1993) 1990 Commencement of construction of railway and road  (FY 1992 Overseas Survey) Construction of road(72km) is in progress. (Completion is scheduled at the end of 1993) Construction of railway(25km) is in progress. (Completion is scheduled at the end of 1993)		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 305/86

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Subway Project of Shanghai		
<b>3. SECTOR</b>	Transportation / Railway		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Science and Technology Commission of Shanghai Municipality, Bureau of Shanghai Municipal Engineering Administration, etc.	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Railway Technical Service (JARTS)		
<b>7. STUDY PERIOD</b>	May.1985 ~ Aug.1986 15month(s) ~		
<b>8. SITE OR AREA</b>	Shanghai and its suburbs(Shanghai new station-Xin Longhua)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Construction of a express-railway line (underground line) between xinlonghua station and Shanghai new station --- Major purpose is the improvement of the traffic situation of Shanghai city.</p> <ul style="list-style-type: none"> <li>- Between Xinlonghua and Shanghai new; 13.5km</li> <li>- Structures; station part middle part sealed tunnel</li> <li>- No. of stations; 13, management facilities (including air conditioner, prevention of disaster system). passenger control facilities.</li> <li>- line facilities; floors, ties, rails, etc.</li> <li>Electric facilities; power transformation facilities, contact wire facilities, power transmission and distribution wire facilities, signaling facilities planning, telecommunications facilities.</li> <li>- Rolling stocks; section to be opened (the year 1991)138 cars. Section to be planned north-south line facilities (xinlonghua -Ji Yun Lu) (the year 2013) 392 cars.</li> <li>- Rolling stock bases 1) base facilities; facilities for main pare inspection or overhaul, temporary repair, trip inspection, regular inspection, car cleaning facilities, storage track.</li> <li>2) Inspection and repair facilities; management office, workshop building, wheel grinding shop, maintenance base, other buildings.</li> <li>- Operational safety and traffic control systems; automatic- signal bloc system, cab signal system, 1st-type electric relay system, automatic train controll system (CS-ATC), centralized train control system (CTC).</li> </ul>			

上海都市快速鉄道整備計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies: The review of the F/S and the basic designs were undertaken by the Chinese authorities.</p> <p>Finance: The total planned budget for the project is 2,543 bil.yuan, of which 1.58 bil.yuan is domestic financing and US\$ 262 mil.is foreign borrowing. Foreign fund (US\$ 26.2 billion) was mainly financed by Germany. Trains, Telecommunication devices, Station facilities, and electric facilities were also purchased from Germany. Loans from the United States and France were also made. Traffic-signal-control systems, disaster-prevention and waterproof facilities were purchased by US loans, and cutting/sharpening machines were by French loans. OECD loan was not requested. Local fund was previously prepared by Shanghai Public Bureau of Subways. Afterwards a municipal bureau under Shanghai City Office took over the position to procure and repay the fund since September 1994. The municipal bureau is an original organization of Shanghai City to operate and manage funding for the projects under the jurisdiction of the City.</p> <p>Modified Point: (FY 1992 Domestic Survey) The subway plan (Route 1, South-north line) was once proposed 13.5km between Xin Longhua-Shanghai. But it was extended to 15km because one section was added between Xin Longhua and Jin-Jiang Dong Yuan. Oct.1994 completed May.1995 used</p> <p>Utilization of outputs: As the report of this F/S is studied in detail, some part of it could be utilized for D/D. Moreover, this F/S report was translated into Chinese and used as a textbook for other cities subway projects.</p>		



# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 101/87

<b>1. COUNTRY</b>	China																																										
<b>2. NAME OF STUDY</b>	Shanghai Air Pollution Control																																										
<b>3. SECTOR</b>	Administration / Environmental Problems																																										
<b>4. TYPE OF STUDY</b>	M/P																																										
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Department of Environment, Municipality of Shanghai																																									
	<b>PRESENT COUNTERPART AGENCY</b>																																										
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI) Research, Analysis and Computing																																										
<b>7. STUDY PERIOD</b>	Jan.1986 ~ Feb.1988 25month(s) ~																																										
<b>8. SITE OR AREA</b>	Shanghai city																																										
<b>9. MAJOR PROPOSED PROJECT(S)</b>																																											
<ul style="list-style-type: none"> <li>- Installation of desulfurization equipment at the power plant</li> <li>- Large-scale concentrated power supply (for factories in the western part of Shanghai City)</li> <li>- Introduction of various pollution control devices and measures at 301 factories of Shanghai</li> </ul> <p>Proposed master plan for air pollution control leading to the year 2000 is as follows;</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Reduction policy</th> <th style="text-align: center;">Reduction Factory</th> <th style="text-align: center;">Initial of SOx (ton/year)</th> <th style="text-align: center;">Investment (million yuan)</th> </tr> </thead> <tbody> <tr> <td>Energy Saving,</td> <td style="text-align: center;">58</td> <td style="text-align: center;">496</td> <td style="text-align: center;">14.53</td> </tr> <tr> <td>Coal Pelleting,</td> <td style="text-align: center;">14</td> <td style="text-align: center;">196</td> <td style="text-align: center;">0.84</td> </tr> <tr> <td>Fuel Change (Coal to oil),</td> <td style="text-align: center;">1</td> <td style="text-align: center;">12,732</td> <td style="text-align: center;">0.01</td> </tr> <tr> <td>Factory removal,</td> <td style="text-align: center;">4</td> <td style="text-align: center;">2,519</td> <td style="text-align: center;">225.63</td> </tr> <tr> <td>Floating floor combustion,</td> <td style="text-align: center;">133</td> <td style="text-align: center;">23,087</td> <td style="text-align: center;">389.80</td> </tr> <tr> <td>Desulfurization of the factories,</td> <td style="text-align: center;">73</td> <td style="text-align: center;">16,891</td> <td style="text-align: center;">208.61</td> </tr> <tr> <td>Desulfurization of the power plants,</td> <td style="text-align: center;">1</td> <td style="text-align: center;">238,301</td> <td style="text-align: center;">396.03</td> </tr> <tr> <td>Large-scale Concentrated power supply. 21km<sup>2</sup></td> <td></td> <td style="text-align: center;">12,233</td> <td style="text-align: center;">336.00</td> </tr> <tr> <td style="text-align: center;">Total</td> <td></td> <td style="text-align: center;">306,897</td> <td style="text-align: center;">1,574.88</td> </tr> </tbody> </table>				Reduction policy	Reduction Factory	Initial of SOx (ton/year)	Investment (million yuan)	Energy Saving,	58	496	14.53	Coal Pelleting,	14	196	0.84	Fuel Change (Coal to oil),	1	12,732	0.01	Factory removal,	4	2,519	225.63	Floating floor combustion,	133	23,087	389.80	Desulfurization of the factories,	73	16,891	208.61	Desulfurization of the power plants,	1	238,301	396.03	Large-scale Concentrated power supply. 21km <sup>2</sup>		12,233	336.00	Total		306,897	1,574.88
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上海市大气污染对策

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY1996 Overseas Survey)</p> <p>All the strategies and measures formed in the project have a progress in different scales. Some areas have more work completed, like factories relocation, energy saving, etc.</p> <p>Finance:</p> <p>Self-financing of enterprises/Government fund</p> <p>Construction/Implemented Project:</p> <p>The engineering for increasing the gasification rate has been implemented in a big scale. Pudong Gas Plant was constructed and put into the operation during the Eight-Five Year Plan.</p> <p>From 1988, Shanghai Environment Protection Bureau continues the efforts for the work of dust/smoke controlling. Actions were taken for renewing the dust remover, which improved the dust removing efficiency for Shanghai average from 70% to 80%. In another hand, some of the extensive technical upgrade work has been done towards the dust remove facilities for bigger size industrial stoves in the factories of cement plants and steel works. In air quality management, it has been established an operational management standard, which makes the possible to the quantified and scientific management.</p> <p>Effect:</p> <p>The concentration of both TSP and SO<sub>2</sub> is reducing down every year.</p> <p>Situation:</p> <p>(FY1991 Overseas Survey)</p> <p>The study results led to the establishment of the Shanghai City Program for the Protection against Air Pollution.</p>	

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 306/87

<b>1. COUNTRY</b>	China																													
<b>2. NAME OF STUDY</b>	Shanghai-Nanjing Expressway Construction Project																													
<b>3. SECTOR</b>	Transportation / Road																													
<b>4. TYPE OF STUDY</b>	F/S																													
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Highway Planning & Design Institute, Ministry of Communication																												
	<b>PRESENT COUNTERPART AGENCY</b>																													
<b>6. CONSULTANT(S)</b>	Katahira & Engineers International Nippon Koei Co., Ltd.																													
<b>7. STUDY PERIOD</b>	Feb.1986 ~ Dec.1987 22month(s) ~																													
<b>8. SITE OR AREA</b>	Between Shanghai and Nanjing																													
<b>9. MAJOR PROPOSED PROJECT(S)</b>																														
<p>The main road existing between Shanghai and Nanjing is gone around and its total length reaches to 359km. So almost all sections are always tied up and traffic accidents happens frequently. So a new highway is intended.</p> <p>The route is planned to connect industrial and cultural cities and go through the most active area between Shanghai and Nanjing.</p> <p>(1) Extension</p> <p>- route of extension ; main route ( Shanghai - Nanjing ) : 274.04km</p> <p style="padding-left: 100px;">Zhenjiang branch route : 10.70km</p> <p style="padding-left: 100px;">Total : 284.74km</p> <p>- sort of extension ; roadway : 266.74km (93.7%)</p> <p style="padding-left: 100px;">bridge : 18.00km (6.3%)</p> <p>(2)Standard</p> <p>- a full road for motoring ; main route Zhenjiang branch</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Grade</td> <td style="width: 30%;">express</td> <td style="width: 30%;">first</td> </tr> <tr> <td>Design Speed (km/h)</td> <td>120</td> <td>100</td> </tr> <tr> <td>Lane</td> <td>4</td> <td>4</td> </tr> <tr> <td>Total width (m)</td> <td>26.0</td> <td>20.5</td> </tr> </table> <p>18 interchanges including 1 junction are planned</p> <p>(3)Construction periods.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"></td> <td style="width: 30%;">year to start construction</td> <td style="width: 30%;">year to start operation</td> </tr> <tr> <td>Magunic - Danyang IC</td> <td>1992</td> <td>1996</td> </tr> <tr> <td>Danyang IC - Wvxi North IC</td> <td>1993</td> <td>1998</td> </tr> <tr> <td>Wuxi North IC - Suzhou East IC</td> <td>1992</td> <td>1997</td> </tr> <tr> <td>Suzhou East - Zhenru IC</td> <td>1991</td> <td>1996</td> </tr> </table>				Grade	express	first	Design Speed (km/h)	120	100	Lane	4	4	Total width (m)	26.0	20.5		year to start construction	year to start operation	Magunic - Danyang IC	1992	1996	Danyang IC - Wvxi North IC	1993	1998	Wuxi North IC - Suzhou East IC	1992	1997	Suzhou East - Zhenru IC	1991	1996
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Danyang IC - Wvxi North IC	1993	1998																												
Wuxi North IC - Suzhou East IC	1992	1997																												
Suzhou East - Zhenru IC	1991	1996																												

上海・南京間高速道路建設計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting   Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies: 1990~92 D/D conducted (by both the provincial and national funds)</p> <p>Finance: All the fund for this project was domestically financed. Total 5.04 billion yuan was shared by Shanghai (0.7 billion yuan) and Jiangsu State (4.34 billion yuan).</p> <p>Construction: 1992 Commenced Aug.1996 Started to operate</p> <p>Detail: (FY 1991 Overseas Survey) Japanese technical cooperation is expected when some major technical problems arise during the construction process.</p> <p>(FY 1994 Overseas Survey) Due to rapid economic growth, huge traffic volume over the capacity of the expressway is predicted.</p>		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 307/87

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Kouhokou River Bridge Construction Project		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Public Relations Office for Kouhokou Bridge Construction	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Chodai Co., Ltd. Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Feb.1987 ~ Mar.1988 13month(s) ~		
<b>8. SITE OR AREA</b>	Southern zone of Shanghai City		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Municipality of Shanghai, PRC, is making great effort to develop the Pudong New Area which expands at east bank of Huangpu River flowing down in the central part of Shanghai urban area. This Pudong New Area is connected only by tunnels and new transportation facilities crossing the River are indispensable element for the development of the Area. The project aims to construct the six lanes traffic corridor between both banks. Total length of the corridor is some 8km. Main bridge is cable stayed bridge having 400m center span length (total bridge length 657m). For project site aguisition compensation for factories, stores, etc 123 thousand m2), construction of new houses (350 thousand m2), and farm land acquisition (133 thousand m2) are planned.</p>			

上海市黄浦江架橋計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<b>Description :</b>  Subsequent Studies: Mar.1988 F/S reviewed by the Urban Planning and Design Bureau of the Shanghai Municipal Government Oct.1989 D/D completed by the Urban Planning and Design Bureau and the Donji University  Finance: Fixed cost of the project Total cost 330 million US\$ Local cost 225 million US\$ Finance Local 225 million US\$ ADB 105 million US\$  Construction: The construction was completed as the Nanpu Bridge.  Effect: (FY1994 Domestic Survey) After the opening of the bridge on Nov.1991, the number of vehicles using the bridge is steadily increasing with the progress of the Pudong Area development. Together with the completion of Yangpu Bridge between Puxi and Pudong Areas, both bridges are being used as the two major traffic corridors between the two areas. The Pudong Area in Shanghai is developing remarkably in recent years, which means that the completion of the Nanpu Bridge greatly contributes to the improvement of investment circumstance for Pudong Area.		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 308/87

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Hokkou Hiraikyo Multipurpose Dam Construction Project		
<b>3. SECTOR</b>	Social Infrastructure / Water Resources Development		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Pearl River Water Resources Commission	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. INA Corporation		
<b>7. STUDY PERIOD</b>	Jun.1986 ~ Oct.1987 16month(s) ~		
<b>8. SITE OR AREA</b>	Hokkou River basin, Guangzhou Province		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<ul style="list-style-type: none"> <li>- Catchment area : 34.097km<sup>2</sup></li> <li>- Effective storage volume : 1,459 x 10<sup>6</sup> m<sup>3</sup></li> <li>- Rockfill dam 1,887.5m long, 50m high 3,568,000 m<sup>3</sup> in volume</li> <li>- 16 radial gates (14m wide and 19.5m high) for spillway, 38,100m<sup>3</sup> in concrete volume</li> <li>- Power plants (4 units, 43.5MW each), surface type 100m(L) x 88m(W) Bulb turbine</li> <li>- Navigation lock, lock with single chamber type, 190m(L) 16m(W), minimum draft depth 3m, 281,000m<sup>3</sup> in concrete volume</li> <li>- River diversion, trapezoidal channel type, design flood 15,500 m<sup>2</sup>/s, first stage cofferdam 1,560,000m<sup>3</sup>, second stage cofferdam 710,000m<sup>3</sup></li> <li>- Construction, period - 7 years, cost 1,074,456 x 10<sup>3</sup> Chinese yen (US\$ 298.5 x 10<sup>6</sup>) base year 1986</li> </ul>			

北江飛来峡多目的ダム建設計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
Description :		
The project was included in the application list for the Third Yen Loan (1990-1994), but was not approved.		
(FY1991 Overseas Survey)		
Presently the provincial government is conducting a preliminary design mostly in accordance with the F/S result.		
The project is planned to be implemented as soon as the approval of the central government is issued, with budget from the provincial fund and a national subsidy.		
(FY1994 Domestic Survey)		
No progress in the form of a project.		
(FY1995 Domestic Survey)		
No additional information.		



# STUDY SUMMARY SHEET

## (Basic Study)

EAS CHN/S 501/87

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Groundwater Development Project in Tianjin City		
<b>3. SECTOR</b>	Social Infrastructure / Water Resources Development		
<b>4. TYPE OF STUDY</b>	Basic Study		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Science and Technology Council and Dept. of Geology and Mining of Tianjin City	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Japan Engineering Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Nov.1985 ~ Dec.1987 25month(s) ~		
<b>8. SITE OR AREA</b>	Tianjin City		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>The study examined the possibility of water supply to four industrial development areas in Tianjin City. However, the Chinese authorities plan to work on the project from their own resources, and they have not yet made the detailed design.</p>			

天津市地下水源開発計画

<b>PRESENT STATUS</b>	<div>In Progress or In Use</div> <div>Delayed</div> <div>Discontinued</div>
<b>Description :</b> <p>Finance: The Government included the D/D on ground water development in the request for the Third Yen Credit (1990 - 1994), but has been unsuccessful.</p> <p>Situations: (FY1991 Overseas Survey) Due to a city's own project, the problem of water supply in Tianjin for both the civil life and industrial development has basically been solved. Accordingly there is no planned project based on the study, the studied areas still have a role as potential water resources for future urban and industrial development.</p> <p>(FY1995 Overseas Survey) The results of this survey work are not utilized because the water resource is very far from the city and the cost to send the water is quite expensive.</p>	

# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 102/88

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Hainan Island Integrated Development		
<b>3. SECTOR</b>	Development Plan / Integrated Regional Development Plan		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National Planning Commission Dept. of Land, Province of Guangdong and Office of Integrated Development, Hainan District	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	International Development Center of Japan (IDCJ) Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Mar.1986 ~ Mar.1988 24month(s) ~		
<b>8. SITE OR AREA</b>	Hainan Island (pop. 5.98 million, 33,900 sq.km)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Based on the nation's policy which is "open-market", the basic strategy of this project is to grow the island as the nation's largest open-economy area.</p> <ul style="list-style-type: none"> <li>- Agricultural development (upland crops, irrigation development, high-profit tropical crops).</li> <li>- Mining and industry (agro-industries, processing of mineral products, wood and fishery products, export products industries).</li> <li>- Tertiary industries (tourism, development of core cities).</li> <li>- Energy (natural gas development, power).</li> <li>- Selection of five economic development areas.</li> <li>- Establishment of total traffic control system in Haikou.</li> <li>- Development of Eastern Greater Haikou (construction of a bridge over Nanto-ko river).</li> </ul> <p>Note: The cost above is the total investments during 1986 - 2005 (1985 price).</p>			

海南島総合開発

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Finance :</p> <p>(1) Road</p> <p>East trunk road (272km) improvement (total cost 938 mil.yuan)</p> <p>Jan.22.1991 L/A 7.1 bil.yen (Road I)</p> <p>Oct.4.1991 L/A 2.602 bil.yen (Road II)</p> <p>To be completed in Jun.1994</p> <p>(2) Port</p> <p>1.Deep-sea berth of Haikou Port</p> <p>Oct.7.1991 L/A 2,589 mil.yen (Haikou port)</p> <p>To be completed in Dec.1993</p> <p>2. 3 berths (20,000 DWT) of Yangpu Port (total cost 320 mil.yuan)</p> <p>Nov.1995 L/A 4,300 mil.yen (Yangpu Port)</p> <p>*Contents</p> <p>Construction of multipurpose berth(2) and general cargo berth(2)</p> <p>(3)Communication</p> <p>1.Telecommunication Development (total cost 320 million yuan)</p> <p>Jan.22.1991 L/A 2,663 mil.yen (Communication I)</p> <p>Oct.4.1991 L/A 4.17 bil.yen (Communication II)</p> <p>To be completed in Dec.1994.</p> <p>Detail</p> <p>Based on this report, following assistance have been offered.</p> <ul style="list-style-type: none"> <li>- World Bank (Dam construction, agricultural development, regional development)</li> <li>- ADB (studies on the energy sector and environmental conservation)</li> <li>- UNDP (studies on policy about economic structure reforms)</li> </ul> <p>Activities toward the development of infrastructure and resources have been started in two core cities following the proposals of this report.</p> <p>(1)Development of airport (expecting assistance from England or France)</p> <p>(2)Establishment of Integrated Agricultural Development Experiment Area (agriculture, fish-farming, agricultural and marine products processing)</p> <p>(3)Industrial investment projects like exploitation of natural gas, the steel industry, the paper industry, are included in the eighth 5 year plan. To realize these projects, negotiations with foreign companies are being made.</p> <p>(4)Development of business area and road network based on the M/P of Haikou City</p> <p>(5)Development of the trade center area of Haikou.</p> <p>(6)Development of the area used to be Haikou airport.</p>	

# STUDY SUMMARY SHEET

## (M/P+F/S)

**EAS CHN/S 201B/88**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Dalian Port Development Project		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Traffic Dept., Dalian Port Authority	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI) Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Apr.1987 ~ Oct.1988 18month(s) ~		
<b>8. SITE OR AREA</b>	Dalian Port(1986 throughput of 44.3 million tons) and Daiyou Bay		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;(1)Construction of a new port in the Daiyou Bay by the year 2000 (15 berths, breakwater, access railway and road)</p> <p>(2)Construction of the new port by the year 1995 (10 berths and access railway and road)</p> <p>(3)Improvement of the old Dalian Port (berth for passenger boats, wharves, information system for container management)</p> <p>&lt;F/S&gt;(1)Wharfs (1,440 m)</p> <p style="padding-left: 20px;">Berths 2(50,000DWT)</p> <p style="padding-left: 40px;">3(20,000DWT)</p> <p style="padding-left: 40px;">1(15,000DWT)</p> <p>(2)Temporary and reclamation revetment (1,150 m)</p> <p>(3)Dredging (5,145 m)</p> <p>(4)Reclamation by land excavation (3,070 m)</p> <p>(5)Reclamation by sea-bed sediment (772 m)</p> <p>(6)Pavement of roads and yards (250,800 sq.m)</p>			

大連港港湾整備計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1)Phase I (Construction of first 4 berths)</p> <p>Finance: World Bank</p> <p>Construction: Aug.1987 Commencement of shore protection works 1991 Opening of trial operation on a container berth and a multi-purpose one. Dec.1992 Opening of operation on all 4 berths</p> <p>(2)Construction of second 6 berths The loan agreement of 6 berths in the Daiyou Bay had not been realized due to the Tianamen incident, but was signed in FY 1994.</p> <p>Finance: Jan. 1995 L/A 6,655 mil.Yen (Dalian Port Dayao Bay First Phase Construction Project)</p>		

# STUDY SUMMARY SHEET

## (M/P+F/S)

**EAS CHN/A 201B/88**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Lujingxiang Model Stock-Farming Project in Gansu Province		
<b>3. SECTOR</b>	Animal Husbandry / Animal Husbandry		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National Scientific Technology Committee, Ministry of Animal Husbandry of Kansyuku Region	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Agricultural Land Development Agency		
<b>7. STUDY PERIOD</b>	Oct.1987 ~ Mar.1989 17month(s) ~		
<b>8. SITE OR AREA</b>	8 villages and 6th regional cattle breeding examination center of Minsan which surround east Rosei village of Min district of Kanshuku Region (Area 7,150 ha)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;</p> <ol style="list-style-type: none"> <li>1. Grassland establishment: meadow 6,444ha, pasture 899ha</li> <li>2. Road development for grassland management and marketing : asphalt pavement 48.5km, sediment pavement 106.1km</li> <li>3. Fence setting for proper management of tame pasture 412km</li> <li>4. Introduction of machineries for grassland management and meadow cutting: tractor 55 units etc.</li> <li>5. Machinery maintenance center</li> <li>6. Cattle barn and ensilage for non-grazing season: 181 paddocks</li> <li>7. Artificial insemination center for animal improvement</li> <li>8. Feed mising plant for stable supply of superior grain feed</li> </ol> <p>&lt;F/S&gt;</p> <ol style="list-style-type: none"> <li>1. Verification research and diffusion: research and diffusion center in sub-grassland No. 5 and experimental stock-farm in No.6</li> <li>2. Grassland establishment: meadow 1,630ha, pasture 242ha</li> <li>3. Livestock facility and machinery necessary for the items mentioned above</li> <li>4. Road development: main and branch roads in the study area 47km</li> <li>5. Drainage improvement : 5.1km of drainage channel in sub-grassland No.6</li> <li>6. Meat processing plant</li> <li>7. Rural development: water supply, electrification, education and medical service in the area</li> </ol>			

甘肅省閭井地区牧畜業開発計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b>  Technical Cooperation through Mini-Project Scheme:1990.6.1~1994.5.31 "Swine Cenetis and Breeding"  Background: (FY 1992 Overseas Survey) A research cooperation (study on production technology of beef cattle and feed) as a mini-project based on the results of this Development Study is under way. 3 long-term experts and 7 short-term experts have been dispatched. Main items of the study are 1) improvement of beef cattle breed and breeding management and 2) improvement of a grassland. The following construction works were completed with finance of the local funds: an experiment center with 30 rooms, 2 breeding farms (200sq.m), 6 breeding farms (1,200sq.m), artificial insemination facility (40sq.m), offices and a dinning room (540sq.m). The Chinese side plans to execute the following projects to widespread the satisfactory results obtained by this study among farm houses. 1) Establishment of a company group with beef cattle production firms, 2) Establishment of Technical Service Center, 3) Construction of basic facilities, 4) Establishment of efficient and scientific beef cattle production system The Chinese side reduced cost of investment in basic facilities from 68.39 million yuan suggested by the Development Study to 42.05 million yuan. A half of the investment cost (21.025 million yuan) will be requested to the Japan's Grant Aid.  (FY 1997 Domestic Survey) After the completion of Mini-project type Technical cooperation, Chinese side requested Project type technical cooperation newly. But the realization of the project seems to be difficult owing to other projects to be financed.  (FY 1995 Overseas Survey) The peoples' government of Gansu Province much appreciates the results of this survey works of the project, however, is anxious about to find the financial resources. At present, Japanese grant aid has been requested for the project "to recover the balance of ecology and to develop the resources of animal husbandry" and for the mini-project. "Transplantation of the embryonic region of cows."  (FY 1997 Overseas Survey) The region where mini-project was implemented suffers extreme poverty. Technical cooperation is necessary continuously because only one fifth of the plan was implemented. So far, technical guidance has good results. Gansu Province submitted request for grant aid assistance (approx. 500mil.Yen) to the central government in March, 1995.  (FY 1998 Domestic Survey) There are many projects to be requested for grant aid assistance. Therefore, it seems difficult to realize the proposed project.		



# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/A 303/88

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Irrigation Development Project in Northern Hubei		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Committee of Science and Technology	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Taiyo Consultants Co., Ltd. Japan Engineering Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jul.1987 ~ Jun.1988 11month(s) ~		
<b>8. SITE OR AREA</b>	Located on the northern Hubei province in the inland China or middle courses of the Yangtze River (The total land rea: 1,540 sq.km, population: 1,170 thousand)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
In Ebeigangdi, Hubei Province where there are frequent typhoons, the F/S of the projects was completed to provide stable irrigated agriculture.			
		Shitaisi	Yintan (Qingquangou)
Irrigated area(ha)	14,053		140,000
Pumping station	6		1
Intake(cu.m/sec)	7.00		60.00
Irrigation canal(km)	182.2		1,703.2
Substation	5		2
Above costs were calculated in 1987.			

湖北省北部農業水利開發計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting   Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1)Shitaisi Area  Subsequent Studies:  May.~Aug.1990 Basic design study  Finance:  Jul.1.1991 E/N 1,635 mil.Yen  (Project for Improvement of Agricultural Water  Supply in North District of Hubei Province)</p> <p>The Government of Japan approved donation of 13 pumps out of 23 pumps and incidental machines. Public engineering/construction works are done by the Chinese side.</p> <p>Construction:  a) An alteration of the Intake Plan from 5.5cu.m/sec estimated by the JICA Study to 8.4 cu.m/sec. b) Installation of 3 pumps at the 1st class station is completed. c) Installation of 3 pumps at the 2nd class station is in progress. d) Installation of 3 pumps at the 3rd class, the 4th class and the 4-1 class stations is expected to end in March 1993. e) Construction of the bridge for canals is delayed due to lack of finance. f) Construction of power stations is in progress. g) Construction of all irrigation facilities is scheduled to end in 1995.</p> <p>Demand for Japan:  Dispatch of 3 short-term experts (management, pump, electricity) at the time when the operation starts.</p> <p>(2)Yintan Area  Finance:  Own fund  Japanese Grant Aid is expected for 4 pumps (approx. 500 million yen)  and provision of equipment for model irrigation area.</p> <p>Construction:  a) The Intake Plan was altered from 60 cu.m/sec estimated by the JICA Study to 87 cu.m/sec due to 20,000ha increase of the proposed irrigation area b) Completion of buildings at the pumping station c) Installation of 8 out of 12 pumps.(cost: 2 bil. yuan) Started operation. d) Rest of construction work is discontinued due to lack of finance.</p> <p>Aug.1994 Completed</p>		

# STUDY SUMMARY SHEET

## (F/S)

**EAS CHN/S 309/88**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Guanyinye Reservoir Project		
<b>3. SECTOR</b>	Social Infrastructure / Water Resources Development		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Bureau of Water Resources and Electric Power, Liaoning Province	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Dam Engineering Center		
<b>7. STUDY PERIOD</b>	Apr.1987 ~ Oct.1988 18month(s) ~		
<b>8. SITE OR AREA</b>	Taizi River, 40 km upstream from Benxi City, Liaoning Province		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1)Reservoir (size 2,785 sq.km, the total amount of water 2,168 million cu.m)  2)Dam (height 82m, length 1,040m, width 10m, volume 1.97 million cu.m)  3)Hydro-power plant (3 units of 6,500kw each)  4)Sub-dam (height 36.2m, length 194m, volume 88,000 cu.m)			

観音閣ダム建設計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies: E/S undertaken by Nippon Koei Co. and Dam Engineering Center</p> <p>Finance: About 50% (18,200 million yen) of the total amount of constructing cost is derived from Japanese OECF loan. (Local Currency:1,124 mil.Yuan)</p> <p>The Second Yen Loan (1985-1989) Aug.1988 L/A 2,846 mil.Yen (Dam construction I) May.1989 L/A 8,936 mil.Yen (Dam construction II)</p> <p>The Third Yen Loan (1990-1994) Nov.1990 L/A 6,445 mil.Yen (Dam construction III) for construction, equipment, generators, early flood warning system, etc.</p> <p>*Components of OECF Loan 1.Main-dam(Gravity concrete type, Height 82m, Length 1,140m, the total amount of water 2,168 million cu.m) 2.Sub-dam 3.Hydro-power plant(3units of 6.5MW each) 4.Electric delevry line(4.5km, 66kv) 5.Flood pre-caution system</p> <p>Construction: The Second Yen Loan Spring.1990 Construction commenced Dec.1995 Completed</p> <p>The Third Yen Loan Spring.1992 Commenced Dec.1995 Completed On Sep.28,1994 reservoir impounding was commenced by closing the gate of temporary bypass conduit. Constrcution Trader:Hazama-Gumi</p> <p>Effect: By the end of 1996, total 150mil.kw/h of power was generated and 1.4 billion m3 of water was impounded.</p>		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 310/88

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Beijing Airport International Terminal Area Development		
<b>3. SECTOR</b>	Transportation / Air Transportation & Airport		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Civil Aviation of China (Air China International after April 1991)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Airport Consultants, Inc.		
<b>7. STUDY PERIOD</b>	Mar.1988	~	Jan.1989 10month(s)
<b>8. SITE OR AREA</b>	Beijing Airport		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
-Passenger terminal expansion 129,000 sq.m -New cargo terminal 9,000 sq.m -Administration building 9,000 sq.m -Staff housing (family, single use) 65,000 sq.m -Car park extension 41,700 sq.m -Power substation extension 10,000KVA x 2 -Storage tank and accessories (expansion) 2,700 cu.m x 2 -Sewage treatment 3,300 cu.m/day -Dump pit treatment & disposal 30 cu.m/day -Aircraft refueling tanks 3,500kl x 6 -Apron expansion, loading 19 night stay 6 positions -Utilities (power, boiler 65t/hr x 5, generator 3,000KW x 3, gas, etc.)			

北京首都空港施設地区拡張計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Study: Apr.1991~Dec.1994 B/D and D/D</p> <p>Major points of revision on JICA's F/S are as follows: 1.passenger terminal expansion from 120,000sq., to 268,000sq.m, 2.plane arrival/departure spot 25 ---&gt; 36 3.the shape of the passenger terminal change into H-shaped, 4.rise of estimated total cost from 2.2 bil.yuan to 9.1bil.yuan (only for passenger terminal)</p> <p>Finance: Sep.1993 L/A 8,106 mil.Yen (860 mil.Yuan) (Beijing Airport Improvement Plan (I)) Nov.1995 L/A 13,435 mil.Yen (Beijing Airport Improvement Plan (II)) Dec.1996 L/A 8,459 mil.Yen (Beijing Airport Improvement Plan (III)) Local Fund: Approximately 60,000 mil.Yuan (FY 1996 Domestic Survey) (FY 1997 Domestic Survey) In addition to basic civil works, baggage facility and boarding bridge will be constructed by Chinese fund and passengers guidance facility and administration system will be established by yen loan.</p> <p>Construction: Oct.1995~Oct.1999 Implemented Contractor / local</p> <p>Progress: (FY 1996 Overseas Survey) -New terminal building: Foundation work completed such as earthwork -Infield road (cargo road):Completed -Roads in front of the terminal building:50% of foundation work completed -East runway rebuilt project: Completed (FY 1997 Domestic Survey) As for a passengers terminal, steel frame was attached for a roof. Installation of shingles will be started. (FY 1998 Domestic Survey) Terminal building: Exterior decoration will be completed by the end of Jan.1999. Construction for heating and other facilities has almost been completed. Packing building: Construction has almost been completed. Installation of facilities for collecting charge is underway. Terminal building curve side: Construction of apron has been completed.</p> <p>Operation/Management: (FY 1998 Domestic Survey) Capital Airport Authority will establish a company responsible for operation and management.</p> <p>Background: Beijing Capital International Airport Authority invited concept design proposals in December 1992 for construction of Beijing International Airport terminal building from 4 airport design consulting firms including foreign firms. The accepted concept design was bought out by the Government and the detailed design was developed from this concept design. A group of Chinese design houses commenced the design development work in the middle of 1993.</p>		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/A 304/89

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Integrated Agricultural Infrastructure Development in Dong Ting Lake Area in Hunan Province		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Hunan Science and Technology Commision	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Sanyu Consultants Inc. Japan Engineering Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Aug.1988 ~ Feb.1990 18month(s) ~		
<b>8. SITE OR AREA</b>	Northern part of Hunan Province (right bank of Yangzi River middle basin)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1)Model Block at Nan-da-ti Area (15,400ha: Nan-da area 8930ha; Huang Mao Zhou area 6,470 ha)</p> <ul style="list-style-type: none"> <li>- Drainage facilities for dike improvement work</li> <li>- Electric-transmission for Xiang-nan Drainage Pump Station</li> <li>- New pump station at the Nan-da District</li> <li>- On-farm level irrigation land in the Huang Mao Zhou district</li> </ul> <p>2)Model Block at Shi-ji-hu-ti Area (105ha)</p> <ul style="list-style-type: none"> <li>- Drainage facilities and Horticultural facilities for technical Development</li> <li>- Experimental Center</li> <li>- Pump station land and other auto-irrigation facilities</li> <li>- Tunnel house</li> </ul> <p>* Implementation period below is 5 years.</p>			

湖南省洞庭湖地区総合水利及び農業開発計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1)Model Block at Nan-da-ti Area and Shi-ji-hu-ti Area Subsequent Study: Feb.~Jun.1995 B/D (FY 1995 Domestic Survey) Jul.~Aug.1997 Study for Promotion. (FY 1997 Overseas Survey) Finance: 1. Project cost 2.55bil.yen (local cost / 1.35bil.yen) (FY 1991 Overseas Survey) Project covered by local cost: Agriculture project mainly based on civil work. Project covered by foreign cost: Construction of infrastructure.</p> <p>2. 1.1bil.yen of grant aid was approved in June 1994. (FY 1992 Overseas Survey)</p> <p>3. The provision of the Japanese grant aid assistance has been suspended. (FY 1995 Overseas Survey)</p> <p>4. If in case of the Japanese grant aid, becomes available within the year of 1996, it will be able to complete the construction works until 1997. (FY 1995 Overseas Survey)</p> <p>5. The provision of the Japanese grant aid assistance has been started again. Nov.1997 E/N 1,127mil.yen (provision of machinery and materials) *Contents of the project Renovation of drainage irrigation facilities, reinforcement of bank, improvement of flood control telecommunication facility, in house vegetable growing model project, reinforcement of horticultural technology development center and agricultural technology promotion center, hog raising project and special aquaculture. (FY 1997 Domestic Survey)</p> <p>Cost born by Chinese government: 7,222,000 yuan (approx. 103.78 million yen) *Contents: additional improvement works, cost for inland transportation, and cost for installation and adjustment.</p> <p>Provision of machinery and materials: (FY 1998 Domestic Survey) July 1998 ~ March 1999 * Machinery and materials provided: machines for construction, vehicles, irrigation facilities, communication facilities, materials for horticultural development, agricultural technology extension center.</p> <p>Construction: (FY 2000 Overseas Survey) Novt.1997~May 1999 Works implemented with own fund.</p> <p>1) Nan-da-ti Area -The dike improvement work is in progress. -The repair of drainage facilities was completed. (89 places) -The drainage construction plan was modified in order to reduce the cost of constructing substations.</p> <p>2) Shi-ji-hu-ti Area -Construction of the electric-transmission facilities was completed. -Construction of irrigation canal &amp; farm land is in progress. -The drainage work was completed. (155km)</p> <p>Operation and management: (FY 1998 Domestic Survey) Both Bureau of Water Supply and Bureau of Agriculture, Yuanjiang City are to be in charge.</p> <p>Effects: (FY 1998 Domestic Survey) - 2,000 ha of the cultivated land in the Nan-da-ti Area will avoid the damage by flood, the damage by flood on houses and roads will be alleviated. - Increase in horticultural products will be expected. - Technology will be extended to the farmers in the Nan-da-ti Area.</p>		



# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 311/89

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Construction Projects of the Three Ports		
<b>3. SECTOR</b>	Transportation / Port		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Communications	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	The Overseas Coastal Area Development Institute (OCDI) Yachiyo Engineering Co., Ltd.		
<b>7. STUDY PERIOD</b>	Dec.1988 ~ Feb.1990 14month(s) ~		
<b>8. SITE OR AREA</b>	1.Port of Quihuandao; 2.Port of Lianyungang; and 3.Port of Shijiu		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
The main project relating port facilities for the year of 1995 are as follows:			
	Unit	1)Quihuandao Port	2)Lieyun Port
			3)Shijiu Port
Breakwater	(m)	300	-
Wharf	(m)	1,802.5	1,100
Berth		2(35,000DWT)	6(1.5DWT)
		3(20,000DWT)	1(20,000DWT)
		2(15,000DWT)	4(15,000DWT)
Revetment	(m)	610	1,865
Dredging	x 1,000cu.m	4,400	9,816
Reclamation	x 1,000cu.m	3,230	3,775
			2,596

三港湾整備計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Finance:</p> <p>(FY 1992 Overseas Survey, FY 1994 Domestic survey)</p> <p>(1)Shijiu Port Second Phase Construction Project Oct.1991 L/A 2,506 mil.Yen (I) Oct.1992 L/A 3,583 mil.Yen (II) *Major Components 3 berths (15 kilo ton class), 2 berths (10 kilo ton class)</p> <p>(2)Liangyungang Port Xugou Area First Phase Construction Project Oct.1992 L/A 5,900 mil.Yen *Major Components 6 berths, Port equipment</p> <p>(3)Qinhuangdao Port E Berth Construction Project Oct.1992 L/A 3,418 mil.Yen (I) Jan.1995 L/A 3,041 mil.Yen(II) *Major Components 7 berths</p> <p>(4)Qinhuangdao Port F Berth Construction Project Aug.1993 L/A 3,944 mil.Yen (I) Jan.1995 L/A 7,178 mil.Yen(II) *Major Component 3 coal terminals (30 mega ton / year)</p> <p>Construction:</p> <p>(1)Shihjiu Port (FY 1992 Overseas Survey, FY 1994 Domestic Survey) Extension of the wharf(780m) was completed. Construction of the breakwater was completed in 1990. 5 berths are scheduled to be completed in 1995.</p> <p>(2)Qinhuandao Port (FY 1992 Overseas Survey, FY 1994 Domestic Survey) The entire plan incorporated in the long-term port development plan was approved in Hebei and the Dept. of Traffic. (FY 1999 Overseas Survey) Most of the construction works of wharf has completed. The construction will be finished by the end of 2001 and will start its operation.</p> <p>(3)Lianyun Port (FY 1992 Overseas Survey, FY 1994 Domestic Survey) Some parts of the plan were altered by the national examination. May 1993 Commencement of construction Jun.1996 Completion scheduled</p> <p>Detail:</p> <p>(FY 1992 Overseas Survey, FY 1994 Domestic Survey) The Phase 2 construction of the three ports(Qinhuandao, Lianyun, and Shijiu) is the subject of this study. Construction of the Phase 1 at all three ports was completed in the past. The study has already been completed by the Chinese side, and the study was incorporated in the 7th Five Year Plan and requested to the OECF's 3rd Yen Credit Loan.</p>		

# STUDY SUMMARY SHEET

## (F/S)

**EAS CHN/S 312/89**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Construction Project of Wuhan/ Tanhe Civil Airport		
<b>3. SECTOR</b>	Transportation / Air Transportation & Airport		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Civil Aviation Administration of China(People's Government of Wukan City)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Airport Consultants, Inc.		
<b>7. STUDY PERIOD</b>	Nov.1988 ~ Mar.1990 16month(s) ~		
<b>8. SITE OR AREA</b>	Wuhan City(Population 6.244 million, Area 8392 sq.km)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Construction of the following airport facilities and other related facilities;  Runway(3,000m), Taxiway, Apron(19 Spots), Passenger Terminal Build(Total Floor Area 27,300 sq.m). Cargo Terminal Build, Maintenance Facility, G.S.E. Facility, Roads and Car park, Drainage Facility, Radio-Nav.Aids, Airfield Lighting System, Air Traffic Control Facility, Communication Facility, Meteorological Facility, Electric Power Supply Facility, Water Supply Facility, Electric Facility, Exclusive Railway, Sewerage Disposal Facility, Fuel Supply Facility, Air-conditioning Facility, Rescue and Fire-Fighting Facility, Access Road etc.</p>			

武漢天河空港建設計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies: 1991 After F/S was completed, detailed design was presented by 8 Chinese consultants (Civil Aviation Administration of China and South China Institute of Architectural Design as central members), based upon the F/S.</p> <p>Finance: Mar.1991 L/A 6,279 mil.Yen (Construction Project of Wuhan/Tanhe Civil Airport)</p> <p>*Contents 1.Arrival/Departure Area(Runway 3,000m x 45m, Terminal Apron 8,700m2) 2.Terminal Area (Passenger Terminal 25,000m2, Cargo Terminal 3,000m2) 3.Airport utility, related facilities, access road, etc.</p> <p>(FY 1994 Overseas Survey) Total cost of the construction is 655 million yuan. Funding details are as follows: OEFC (the third loan) 5 billion yen (200 million yuan) Chinese Government 100 million yuan Wuhan City Office 90 million yuan The rest (265 million yuan) will be financed by Wuhan City Office, with a condition that the development right of South Wuhan Airport will be given to the city authority.</p> <p>Construction: Dec.16.1990 ordered to start The first architecture section of Wuhan City started construction in 1992. One of the most critical difference between the F/S and the detailed design was runway extension from 3,000m to 3,400m. The reason of the change was to cope with arrival/departure of B747-400 (international flight) which was bigger than B747- 200 expected. Oct.1992 Runway and a part of Terminal Building, completed the end of 1993 Airport facility, completed Freight check, completed Dec.1994 Access road and employees residential facilities, under construction Dec.27.1994 The opening ceremony was held and commenced its services as for the new airport.</p>		

# STUDY SUMMARY SHEET

## (M/P+F/S)

EAS CHN/S 202B/90

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Municipal Solid Waste Treatment Plan in Xian City		
<b>3. SECTOR</b>	Public Utilities / Urban Sanitation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Joint Venture of Study for Municipal Solid Waste Treatment Plan in Xian City	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Japan Engineering Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jan.1989 ~ Jun.1990 17month(s) ~		
<b>8. SITE OR AREA</b>	The old area & a part of expansion area in Xian City (172 sq.km)<M/P> Inner City in Xian City (Final Disposal Site) Outer City in Xian City (Intermediate Treatment Site)<F/S>		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt; Recommended plans for solid waste management system of the target year 2000 in Xian City are as follows:</p> <p>(1) Collection system Setting up of collection container and vehicle with a promotion of separate discharge system and establishment of 2 steps transportation system with transfer station.</p> <p>(2) Final disposal facility construction of final disposal facility (12,000,000 cu.m) assumed 10 years life.</p> <p>&lt;F/S&gt;The First Phase Project of which the target year is 1995 should be as follows:</p> <p>1) Construction of controlled type of final disposal facility.</p> <p style="margin-left: 20px;">Location : Chian-Sun District</p> <p style="margin-left: 20px;">Landfill method : Semi-Anaerobic Metabolism in Landfill</p> <p style="margin-left: 20px;">Major facilities : Reservoir type deposit</p> <p style="margin-left: 40px;">Water insulation</p> <p style="margin-left: 40px;">Underground Water Discharge</p> <p style="margin-left: 40px;">Rainwater Discharge</p> <p style="margin-left: 40px;">Access road</p> <p>2) Construction of transfer station.</p> <p style="margin-left: 20px;">Contents of Major Project</p> <p style="margin-left: 40px;">Targeted Population : 475,343 (1995)</p> <p style="margin-left: 40px;">Planned waste collection volume : 477 tons/day</p> <p style="margin-left: 40px;">Capacity of Planned Facilities : Compactor Container 160 tons/day</p> <p style="margin-left: 80px;">Flat Landfill 360 tons/day</p>			

西安市生活废弃物处理計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1)Phase I (Chian-Sun Landfill Site)</p> <p>Subsequent Studies: (FY1991 Overseas Survey) 1991 D/D Own fund</p> <p>Finance: This project was inevitable from the legal point of view and implemented by means of local financing which was deposited year by year.</p> <p>Construction: Apr.1993 Commenced Apr.1994 Completed Jun.1995 Operation Started (FY 1996 Overseas Survey)</p> <p>Operation &amp; Maintenance: The Management Organization was established.</p> <p>Effect: 70% of solid waste disposed in Xian City is treated in this site. It helps to mitigate the negative impact of waste on environment.</p> <p>Problem: The environment problems such as flies, mosquitoes, bad smell, etc. have arose in the area surrounding the site.</p> <p>Remaining Projects: (FY 1996 Overseas Survey)(FY 1997 Overseas Survey) It is planned to submit a request for 1,000 mil.Yen grant aid assistance to Japan in order to implement the following projects.</p> <ol style="list-style-type: none"> <li>1.Phase II construction of waste disposal plant</li> <li>2.Construction of transfer station</li> <li>3.Construction of incineration facilities in hospitals and hotels</li> <li>4.Construction of filtrate treatment plant</li> <li>5.Procurement of necessary equipment</li> <li>6.Improvement of technology</li> <li>7.Construction of methane utilization system</li> </ol> <p>Detail: (FY 1991 Overseas Survey) The project is assigned high priority in the city's eighth Five-Year Plan (1991-95).</p>		

# STUDY SUMMARY SHEET

## (F/S)

**EAS CHN/A 305/90**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Agricultural Water-use Development Project on Haizi Dam Area in Beijing City		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Water Resources	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Engineering Consultants Co., Ltd. Sanyu Consultants Inc.		
<b>7. STUDY PERIOD</b>	Dec.1989 ~ Mar.1991 15month(s) ~		
<b>8. SITE OR AREA</b>	Beijing city, Pinggu Prefecture		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
(1) Rehabilitation of North Main Canal, l = 24.3 Km  (2) Rehabilitation and Construction of Appurtenant Facilities of North/South Main Canal, 149 nos.  (3) Construction of Branch Pipeline Canal, l - 171.94 Km  (4) Construction of Farm Pond, 238 nos.  (5) Construction of Pump Station and Delivery Pipeline, 105,000 mu  (6) Sprinkling Equipment, 2,544 sets  (7) Construction of Road, l - 87.5 Km  (8) Installation of Water Management Equipment, L.S.			

北京市海子ダム農業水利開発計画

PRESENT STATUS	<p>Completed or In Progress</p> <p>Completed</p> <p>Partially Completed</p> <p>Implementing</p> <p>Processing</p>	<p>Promoting</p> <p>Delayed or Suspended</p> <p>Discontinued or Cancelled</p>
<p><b>Description :</b></p> <p>This project consists of two parts: (1)technical transfer for water saving irrigation by the project-type technical cooperation (2)introduction of the water management equipment through Japan's Grant Aid Assistance.</p> <p>(1) Project-type Technical Cooperation          "Irrigation and Drainage Engineering Development and Training Center Project" (Jun.1993~Jun.1998)          -Improvement of water use efficiency, irrigation and drainage technique by introduction of Japanese technique.          -Training of technician.          Jun.1993 Five experts were dispatched and the center started to operate.          Nov.1993~Dec.1994 Model infrastructure improvement project was implemented at model farm. Approx.20ha of farmland was improved and irrigation facility and greenhouse for vegetables were constructed.</p> <p>(2) Water Management System Pilot Infrastructure Project          Finance:          (FY 1997 Domestic Survey)          33mil.yen JICA          *Contents of Project          Establishment of long-distance observation system and rehabilitation of related facilities.          - Rehabilitation of 5 dispersion gate          - Installment of telemeter (5)          - Observation computer (2)          etc.</p> <p>(3) Project Implemented by Chinese Fund          Dec.1991 Repair work of the North Main Canal was completed with the local fund.          1993 The Government of China invested 6.16 million yuan as construction cost to carry out the following projects:          1)gate for the main canal (2 places), 2)branch pipeline canal (30km), 3)Reservoir (15 places), 4)Irrigation areas (10,000 mu)          (FY 1998 Domestic Survey)          It seems to be difficult to implement the remaining projects.</p> <p>(FY2000 Overseas Survey)          Redevelopment of the North Main Canal was completed in 1996.</p>		



# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 313/90

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Rapid Railway Construction Project in Tianjin		
<b>3. SECTOR</b>	Transportation / Railway		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Tianjin Science and Technology Commission	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Railway Technical Service (JARTS) Yachiyo Engineering Co., Ltd.		
<b>7. STUDY PERIOD</b>	Feb.1989 ~ Jun.1990 16month(s) ~		
<b>8. SITE OR AREA</b>	Tianjin City Area: 11,312km Population: 8.15 Million (1986)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Construction by Tianjin City of a new passenger railway line of about 50 km between Tianjin and Tanggu --- Major purpose is the development of regions along the route, especially, the improvement of commuter transport in Tianjin and Tanggu, and balanced development of regions along the Hai He River.</p> <p>-Section to be opened at the 1st Stage(end of 1995): between Shuang Lin and He Bey Lue,38.70km,Structures: viaduct 31.50km,embankment:7.20km,No.of stations:9 rolling stock:58 cars(commuter electric railways),maximum operation speed of trains 120km/h</p> <p>-Section to be opened at the 2nd stage(early 2000):between He Bey Lue and Tianjin New Port,10.85km,No. of stations:2,rolling stock:84 cars</p> <p>Operational safety and traffic control systems: cab signal block system, cab signal system,1st-type electric relay or electronic relay system, automatic train control(ATC) system, centralized train control(CTC) system; Rolling stock base:1)Base facilities: facilities for main part inspection or overhaul, temporary repair, trip inspection, regular inspection(monthly, etc.),car cleaning facilities, storage track, etc.</p> <p>2)Inspection and repair facilities: management office, inspection building, workshop building, wheel grinding shop, maintenance base, other buildings.</p> <p>Electric facilities: power transformation facilities, contact wire facilities, power transmission and distribution wire facilities, signaling facilities planning, telecommunications facilities planning.</p>			

天津市津塘快速鐵道新線建設設計圖

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Detail (FY 1991 Domestic Survey) To date neither a detailed study nor official request for financial cooperation has been made.</p> <p>(FY 1994 Domestic Survey) In this project, Solin station is planned to be the starting point, on the precondition that the Tianjin Subway Line No.1 will be extended to Solin. However, the request for financial assistance has not yet been made, because the extension work of the subway is being delayed.</p> <p>(FY 1994 Overseas Survey) Although a loan from Japan was applied to the National Planning Committee after F/S, the loan was not admitted as a national project and Tianjin City is seeking for a funding method. At present, BOT method is discussed. The city asked American investment banks and corporations in Hong Kong, Singapore, Germany, France, Canada, Thailand or Taiwan for finance. These corporations are inspecting profitability of the project. Since the New Seacoast Development Project (10 years) was expanded and this project became more important, Tianjin City Representative Assembly and Planning Committee determined to promote this project. One of the most critical changes from the JICA's F/S is the change of areas for railway construction. Replacing the F/S plan of locating the starting point at the south side of the sea/river, the plan to make Tianjin Station a starting point of the railway and expand the line through Tianjin Airport, development district, bonded warehouse district, and the New Tianjin Harbor is now discussed by the Tianjin City Committee of Arts and Science. Reasons of the changes are as follows: (1)The profitability of the line will be raised by cutting unnecessary railway service(11km between Tianjin Station and the starting point at the south side of the sea/river); (2)According to changes of the regional development plan, on which this project is based, demand expectation at present has become largely different from the expectation at the time of F/S.</p> <p>(FY 1997 Overseas Survey) In November 1995, JV company of Chinese "Tianjun Economic Technology Development Invt" and Thai "Starwell" was founded. This company will be in charge of constructing the Tianjin rapid railway. As for a schedule at present, F/S will be carried out from 1998 and construction will be started in 2000. Investment amount and consulting company for F/S are not settled yet. The route is not determined due to the extension of the existing subway.</p> <p>(Note) An Australian corporation financed A\$ 100mil, for the subway construction at Tianjin City, as a relating project. The section between Tianjin and the original starting point of railway(11km southeast from Tianjin Station) planned in JICA's F/S will be served by the subway after completion.</p> <p>Situation: (FY 1999 Overseas Survey) The government of Tianjin considers the development of Tianjin and Tanggu new passenger railway line as an important policy, therefore the government is proceeding the project accordingly to Tianjin City Plans. Development of Beijing-Tianjin-Tanggu Highway road was completed and its traffic condition has improved.</p>		

# STUDY SUMMARY SHEET

## (Basic Study)

EAS CHN/S 502/90

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Groundwater Development Project in Urumuqi		
<b>3. SECTOR</b>	Social Infrastructure / Water Resources Development		
<b>4. TYPE OF STUDY</b>	Basic Study		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Geology & Mineral Resources	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Yachiyo Engineering Co., Ltd.		
<b>7. STUDY PERIOD</b>	<div style="display: flex; justify-content: space-between; align-items: center;"> <span>Jun.1988</span> <span>~</span> <span>Jul.1990</span> <span>25month(s)</span> </div> <div style="text-align: center;">~</div>		
<b>8. SITE OR AREA</b>	Su-Shan water source area		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Groundwater Development: 30,000t/day (15 drilling production wells with pump equipment)  Water Supply System: Su-Shan, Urumuqi City Diameter 500mm Ductile iron pipe; 16000m Distribution in Reservoir; 6000 sq.m			

ウルムチ地下水開発計画

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

Groundwater Development in Su-Shan Water Source Area

Subsequent study:

(FY 1998 Overseas Survey)

Study has been conducted with their own fund. The original plan to connect to the water supply system in Urumuqi was changed. Water transport pile was shortened.

Finance:

(FY 1998 Domestic Survey) (FY 1998 Overseas Survey)

Starting the project is delayed due to the shortage of funds. The request is to be submitted to the central government. Amount of 8.8 million yuan (60 % from the central government, the remaining 40 % from the local government of Urumuqi City) is demanded.

Construction:

(FY 1998 Overseas Survey)

Water source in Su-Shan has been developed with fund of the area and 2 X 10,000m<sup>3</sup>/day of water is being provided. Its comprehensive development plan is to be conducted.

Detail:

The local government hopes for the project implementation by the grant aid from the Japanese Government. However, the priority of the project at the national level is reportedly not high enough to be included in the project list for the Japanese grant aid program.

Although the local government is keen to implement the project, no action has been taken because of the budgetary limitations.

(FY1995 Overseas Survey)

At the end of 1994, the local government of Urumuqi City made this project as one of the 10 important projects of the year of 1995, and commenced preparatory works. Trying to find some finance from abroad and to implement designing works for the development. Future cooperation of JICA is eagerly expected.

(FY 1996 Domestic Survey)

Although some desired to implement the project with a BOT scheme, it has not been realized because no Japanese company showed interests on such investment.

(FY 1996 Overseas Survey)

This project is incorporated into the Urumuqi Ninth-Five Year Development Plan and will be implemented between 1998 and 2000. However, finance has not been secured, yet. The Finnish Government provided US\$ 1.23 mil. loan for the procurement of equipment and the introduction of advanced Technology.

(FY 1997 Domestic Survey)

The proposed project was not implemented in FY 1997 in consequence of other priority project (road project).

Local government of Urumuqi tries to assure finance to implement the project because the lack of water is still serious problem.

(FY 1998 Domestic Survey)

It was expected that the project would be realized with Japanese grant aid assistance. However, since other projects in the central area are given higher priority, the policy was changed to implement the project with their own funds.

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/A 306/91

<b>1. COUNTRY</b>	China																														
<b>2. NAME OF STUDY</b>	Improvement of Agricultural Land Reclamation Dike and Agriculture Development Project, Qinzhou Region, Guangxi Zhuang Autonomous Region																														
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General																														
<b>4. TYPE OF STUDY</b>	F/S																														
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	China Guangxi Water and Power Department																													
	<b>PRESENT COUNTERPART AGENCY</b>																														
<b>6. CONSULTANT(S)</b>	Taiyo Consultants Co., Ltd.																														
<b>7. STUDY PERIOD</b>	Aug.1990 ~ Sep.1991 13month(s) ~																														
<b>8. SITE OR AREA</b>	Qinzhou Region, Guangxi Zhuang Autonomous Region Area: 34,363 ha, Population: 135(thousand) (1990)																														
<b>9. MAJOR PROPOSED PROJECT(S)</b>																															
<p>The project sites are in Baiquwei and Kangxilingwei along the Qinzhou bay. The project is to reclaim dikes to protect cultivated land (reclamated water areas) from billows by typhoons and flood waters from back marshes and to promote agricultural development.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Baiquwei</th> <th style="text-align: center;">Kangxilingwei</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>* Reclamation Area</td> <td style="text-align: center;">: 7,930 ha</td> <td style="text-align: center;">3,333 ha</td> <td style="text-align: center;">11,263 ha</td> </tr> <tr> <td>* Reclamation Dike</td> <td style="text-align: center;">: 23.4 km</td> <td style="text-align: center;">12.4 km</td> <td style="text-align: center;">35.8 km</td> </tr> <tr> <td>* River Embankment Improvement</td> <td style="text-align: center;">: 43.8 km</td> <td style="text-align: center;">39.6 km</td> <td style="text-align: center;">83.4 km</td> </tr> <tr> <td>* Headworks</td> <td style="text-align: center;">: - unit</td> <td style="text-align: center;">1 unit</td> <td style="text-align: center;">1 unit</td> </tr> <tr> <td>* Main Irrigation Canal</td> <td style="text-align: center;">: 31 km</td> <td style="text-align: center;">9.6 km</td> <td style="text-align: center;">40.6 km</td> </tr> <tr> <td>* Roads</td> <td style="text-align: center;">: 463 km</td> <td style="text-align: center;">40.0 km</td> <td style="text-align: center;">503 km</td> </tr> </tbody> </table>					Baiquwei	Kangxilingwei	Total	* Reclamation Area	: 7,930 ha	3,333 ha	11,263 ha	* Reclamation Dike	: 23.4 km	12.4 km	35.8 km	* River Embankment Improvement	: 43.8 km	39.6 km	83.4 km	* Headworks	: - unit	1 unit	1 unit	* Main Irrigation Canal	: 31 km	9.6 km	40.6 km	* Roads	: 463 km	40.0 km	503 km
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広西壮族自治区欽州地区農業海河堤整備及び農業開発計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>Reasons for Delay or Suspension:</p> <p>(FY 1995 Overseas Survey) The works of this project were suspended due to the change of circumstances at the region.</p> <p>(FY1996 Domestic Survey) It is difficult to secure the local fund.</p> <p>(FY 1998 Domestic Survey) The impact of the reclamation project on agricultural land and the harbor has been simulated for several years. During the period of this simulation, economic/social situation of this area has been drastically changed due to the economic growth. Objection has also been made against using the reclaimed land as agricultural land. The project cannot be launched until there will be some consensus that the reclaimed land will be used for agriculture as planned.</p> <p>(FY 1999 Overseas Survey) The autonomous region and coastal cities are anxious about effects of large scale land reclamation such as the erosion toward the bay and harm on the security of Qinzhou Port and Guangxi Zhuang Port as well as the environment quality of the bay. They are planning to conduct an ocean survey and simulation in order to make clear of the effects of land reclamation to decide the policy of the project.</p> <p>Due to the new local regulation of Guangxi autonomous region, the environment protection of the ocean and the management of ocean development has been enforced. Therefore, adjustment of the plan is required as the land reclamation project effects the environment of mangrove trees and moreover its area exceeds the limit of the present law.</p> <p>For these reasons, it is considered difficult to implement the project as it was proposed. China Guangxi Water and Power Department will decide a new embankment construction plan by taking into account the opinions of other relevant organizations. The Department is not much interested in implementing a large scale land reclamation in the area where there are ports and mangrove trees.</p> <p>Detail:</p> <p>The project implementation requires approval from the Provincial Planning Committee. An application was filed in Jan. 1992. The Guangxi Water and Power Department applied to register the project to the National 8th Five Year Plan. At the same time, the environmental studies were being carried out. In consideration of the peculiarities of the project, the cost for the D/D would be requested to the JICA. Local costs for the implementation would be provided by the local funds, and foreign costs by the OECF loan.</p> <p>In June 1992, the sea dike in Baigumei suffered damage from the 4th typhoon.</p> <p>On the other hand, Beibai city, adjoining Baigumei, which is selected as a special economic development zone, is recognized as an important trading point in the south-western part of China due to its role for national border trade with Vietnam and domestic trade within adjoining provinces. Therefore, the Guangxi Regional Planning Committee emphasizes on the expansion of the Beihai harbor, development of railways and roads, and the construction of a new harbor at the entrance of the Qinzhou bay in the National 8th Five Year Plan. However, the Guangxi Regional Planning Committee also recognized importance of this agricultural development project. The committee will register this project to the National 9th Five Year Plan (1996/2000), once the environmental study is finished.</p> <p>(FY 1997 Domestic Survey) Chinese side expects for D/D but has not requested yet. Yen loan will be requested after completion of D/D.</p>		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 314/91

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Telephone Network Automatization Plan in Dehui County, Jilin Province		
<b>3. SECTOR</b>	Communications & Broadcasting / Telecommunication		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Posts and Telecommunications Administration of Jilin Province	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	NTT International Corporation		
<b>7. STUDY PERIOD</b>	Jul.1990 ~ Sep.1991 14month(s) ~		
<b>8. SITE OR AREA</b>	Whole area of Dehui County in Jilin Province (Population 820,000; Area 3,435 sq.km)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>This telephone automatization and expansion plan designates 1995 as the targets. In Dehui county, the telephone sets for the areas, where 24 local government offices are located, are installed so as to cope with the demands until 1995. For about 300 villages, 5 telephone sets are installed for office in every 5 hamlets. The total number of telephone sets will be about 8,100. The necessary facilities for implementation of this project are following.</p> <p>1. Exchange      1 Toll/ Local switch Unit    4,700 L.U.                          11 remote switch Unit      3,160 L.U.</p> <p>2. Transmission    11 sections 33 systems    4,800 pair-km</p> <p>3. Subscriber Cable    55,500 pair-km</p> <p>4. Others    Building, Power    12 locations</p> <p>This implementation plan will be divided into two(2) terms. In the first term, subscriber cables for the areas where local government offices are located, buildings, power, exchanges and transmission facilities will be expanded. In the second term, subscriber cables for official institutions and hamlets will be installed. Implementation period is 3 years.</p>			

吉林省德惠縣電話網自動化計畫

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

## Detail:

On July 1991, the Committee organized by "The Association for the Promotion of International Trade, Japan" visited at China, vice-president of Ministry of Posts and Telecommunication of China requested promotion of this project.

Chinese Government has not yet requested the implementation of this project to Japanese Government.

## (FY 1992 Overseas Survey)

A request has been made to the Ministry of Foreign Economic Relations and Trade for the utilization of Japanese Grant Aid and presently in progress toward ratification.

## (FY 1997 Domestic Survey)

Requests for subsequent study nor financial assistance have not been submitted. It is possible that Chinese side has implemented already.

## (FY 1997 Overseas Survey)

In 1992, Trade and Economy Department of Jilin Province submitted a request for Japanese grant aid to the Ministry of Trade and Economy. But Chinese side did not request to Japan concerning that the project was not suited to a grant aid scheme and grant aid assistance should be provided for BHN.

Dehui County is promoting the automation of telephone system with own budget. In response to the central government's notice which encourages the installation of more than 10,000 lines in each county, Dehui County leased a switch unit for 10,000 lines from NEC. Moreover, Dehui County purchased another switch unit for 10,000 lines from JV of NEC and Tensing in 1996. At present, 20,000 lines are in use.



# STUDY SUMMARY SHEET

## (M/P+F/S)

EAS CHN/A 202B/92

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	The Integrated Agricultural and Animal Husbandry Development Project in Xiangxi Nanzhi Shanno Area		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Agriculture, Hunan province	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Agricultural Land Development Agency		
<b>7. STUDY PERIOD</b>	Feb.1991 ~ Jul.1992 17month(s) ~		
<b>8. SITE OR AREA</b>	<M/P> Site of area: 202,260 ha of Project area located in the center of mentioned autonomous district. <F/S> Model project area: 4,943ha in Changle region Huayaon prefecture.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<M/P> Pasture development 31,000ha Farm road development 282km Agricultural instrument introduction 48,000 units live stock barn establishment, Livestock introduction. Meat processing facility (7 centers), Establishment or improvement of technical verification and promotion center for agriculture and animal husbandry). Agricultural and rural development (Irrigation 1,345ha, Drainage 562ha, Rural water supply, school, Library, Marketing center, Medical Service and equipment, Rural electrification). <F/S> Pasture development 973ha, Farm road development 30.9km, Agricultural instrument introduction 1,882 units. Live stock barn establishment. Livestock introduction, Agricultural and animal Husbandry development center, Sub-sector, Agricultural and rural development (Irrigation 47ha, Rural water supply, School, Library, Marketing center, Rural electrification.			

湘西南支山脈地区農牧畜業総合開発計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended   Discontinued or Cancelled
<b>Description :</b>  Detail: (FY 1993 Domestic Survey) It is only one year after completion of the study. Accordingly the Chinese Government is considering next step for the execution of the project.  (FY 1994 Domestic Survey) As a project based on this study, the Chinese Government is preparing for the agricultural and livestock development project in the model region (5,000ha), and dispatch of expert.  (FY 1997 Domestic Survey) It seems that action will be taken to realize Project type Technical Cooperation "Animal Husbandry Development Plan in Xiangxi". Local government has requested the implementation of this project to central government after the completion of development study, but it has not been realized due to some reasons.  (FY 1998 Domestic Survey) Request for the project-type Technical Cooperation "Animal Husbandry Development Plan Xiangxi" has been submitted to the central government. However, the Chinese Government has not submitted the request for this project to the Japanese Government since they have other projects to request and also they do not have enough funds. Rather, it seems that the priority of this project has been lowered.  (FY 2000 Overseas Survey) Preparing for the implementation of the project. Ministry of Agriculture, Hunan province, submitted a request of Japanese grant aid for "Animal Husbandry Development Plan Xiangxi" to the Central Government.		

# STUDY SUMMARY SHEET

## (M/P+F/S)

EAS CHN/A 203B/92

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Liao Ho Delta Agricultural Resources Integrated Development Project in the Liaoning Sheng		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Water Resources and Electric Power Liaoning Province	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Hokkaido Engineering Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Dec.1990 ~ Jan.1993 25month(s) ~		
<b>8. SITE OR AREA</b>	Liao-Ho Delta, Liaoning Province 1,140,000ha		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>*Project costs are shown in "million yen" instead of US\$ 1,000 &lt;M/P&gt;</p> <p>1) Bai-shi Multipurpose Dam Project for irrigation, municipal and industrial water supply, hydropower and flood control. Concrete gravity type having the dam volume of 560,000m<sup>3</sup>. Reservoir storage capa. 1,600 MCM. Effective storage 660 MCM.</p> <p>2) Da-ling-he Delta Agricultural Development Project (Irrigation and drainage development with land consolidation of the existing up land field of 9,000ha for paddy cultivation and irrigation water supply to the existing paddy fields of 8,000ha)</p> <p>3) Improvement of existing three ponds located in the paddy field of Liao Ho Delta. (Storage capa. 7.5 MCM increased by 2.4 NCM)</p> <p>4) Irrigation and drainage development for the existing feed fields about 69,000ha.</p> <p>5) Da-Wa Delta Agricultural Development Project. (land reclamation and consolidation for 10,000ha for paddy.)</p> <p>&lt;F/S&gt;</p> <p>Hai-shi Multipurpose Dam Project for irrigation, municipal and industrial water supply, hydropower and flood control. Concrete gravity type having the dam volume of 560,00m<sup>3</sup>. Reservoir storage capa. 1,600 MCM.</p> <p>Da-Wa Delta Agricultural Development Project. (land reclamation and consolidation for 1,000ha for paddy.)</p>			

遼河三角洲農業資源総合開発計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(1) Bai-shi Dam Construction Subsequent Studies: (FY 1996 Domestic Survey) Apr.1995 The contact mission was dispatched for the technical assistance for hydraulic test of the model dam. Sep.1995 The mission was dispatched to sign S/W for the various experimental survey works for the construction of the Bai-Shi Dam at Da-Ling-He. Aug.1996~Aug.1997 The above survey works have been implemented. Consulting Firm / Nippon Koei (The Bai-shi Dam is the first-class dam. Thus, the hydraulic test of the model dam must be implemented.) (FY 1999 Domestic Survey) Dec.1998~Mar.1999 OECF SAPROF</p> <p>Finance: Dec.1996 L/A 8,000 mil Yen. Liaoning Baishi Reservoir Construction Project. (FY 1996 Domestic Survey) The Chinese government will finance the balance.</p> <p>Construction: (FY 1996 Domestic Survey) Implementing Period:May.1995~Nov.2000 The preliminary construction work was commenced in May.1995 and the fundamental construction work was started in Sep.1996. The construction will be completed in 2000. (FY 1997 Domestic Survey) At the point of October 1997, more than 50% of concrete works has been completed. Construction trader:Unknown (Local Contractor) Operation &amp; Maintenance: (FY 1997 Domestic Survey) Water Resources Department of Liaoning Province is in charge of operation and maintenance. Regarding to construction management, Nippon Koei contracted with an implementing organization and started its work in September 1997. (FY 1998 Domestic Survey) As of the end of Oct.1998 80% was completed. Sep.1999 Scheduled to be completed. (FY 1999 Domestic Survey)(FY 1999 Overseas Survey) Sep.1999 Flooding was implemented. Dec.2000 Completion(scheduled)</p> <p>Situation: (FY 1995 Overseas Survey) Major part of the former half (concerning with water, electricity, transportation, communication, building, etc.) is already completed.</p> <p>(2) Da-Wa delta agricultural Development Project (FY 1997 Overseas Survey) Finance: Government budget and private fund 383mil.Yuan *Contents: Expansion of rice field, Expansion of reed field Construction: (FY 1999 Overseas Survey) Jan.1994~Dec.1997 *Contents: Cultivation area(40.75 furrow), Paddy field expansion area(15 mil.furrow), Farm improvement area(8.2 mil. furrow), Shrimp culture(4 mil. furrow), Freshwater fish culture(2.27 mil. furrow), Embankment(26.3km), Water reservoir(5,580m3)</p>		

# STUDY SUMMARY SHEET

## (F/S)

**EAS CHN/S 315/92**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Flood Forecasting and Warning System in the Middle and Lower Reaches in the Chang Siang		
<b>3. SECTOR</b>	Social Infrastructure / River & Erosion Control		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Changjiang Water Resources Commission	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jul.1990 ~ Jul.1992 24month(s) ~		
<b>8. SITE OR AREA</b>	Catchment area and river length of Hang Kou: 159,000 sq.km and 1,577 km respectively		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>* Proposed project costs are shown in 1,000 yuan instead of US\$ 1,000</p> <p>Provision of flood forecasting and warning system with the following sub-systems was proposed:</p> <ol style="list-style-type: none"> <li>1) Data observation and collection system: control center (1), sub-control center (3), repeater station (18), tele-meter station (61)</li> <li>2) Data processing system: computer system with file server (1), work-station (2), display (3), hard disk, printer, and so on.</li> <li>3) Data transmission system: transmission of data and information by multiplex transmission line including facsimile and telephone</li> </ol>			

漢江中下流区間洪水予警報計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Finance: (FY 1998 Domestic Survey) Request for a grant aid assistance is to be submitted (on and after FY 1999). (FY 1999 Domestic Survey) Even though the following request for Japan's grant aid was not accepted, Chang Siang Water Resources Development Authority still has a strong intention to implement the project. Chang Siang Water Resources Development Authority submitted supplementary explanation data in May, 1998 to the Japanese embassy. *Contents of request: Submitted Date: Oct.1997 Amount of request: 1,695mil.Yen Contents of request: Development of flood forecasting and warning system, which is composed of the following 3 sub-systems, in the middle and lower reaches in Chang Siang. 1. Data observation and collection system: Control center (1), sub-control center (3), repeater station (18), tele-meter station (61) 2. Data processing system: Computer system with file server (1), work-station (2), display (3), hard disk, printer, and so on. 3.Data transmission system: Transmission of data and information by multiplex transmission line including facsimile and telephone *After 7 years from the completion of the Study, China is considering to install VSAT communication line independently, due to the change in communication situation.</p> <p>Construction: (FY 1998 Domestic Survey) 2 years.</p> <p>Detail: (FY 1996 Domestic Survey) The provision of Japanese grant aid assistance was suspended due to the nuclear testing conducted by the Chinese Government. Thus, the request for grant aid assistance (requested in 1992 with amount of 1,695mil.Yen) to implement this project was turned down. Although the provision of grant aid assistance was resumed this year, it seems that no request has been submitted for this project.</p> <p>(FY 1998 Domestic Survey) Considering the terrible damage by flood occurred in the Yangzhau River Basin, emergency of this project has been enhanced. Although this project plans to use the ground circuit, Chinese government strongly desires to use satellite communication. Therefore, the review study on communication facilities should be conducted for implementing the proposed projects.</p>		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 316/92

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Jilin Fengman Dam Rehabilitation Project		
<b>3. SECTOR</b>	Social Infrastructure / Water Resources Development		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Fengman Power Plant, Northeast China Electric Power Administration, Ministry of Energy	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	INA Corporation		
<b>7. STUDY PERIOD</b>	Mar.1991 ~ Mar.1993 24month(s) ~		
<b>8. SITE OR AREA</b>	Fengman Dam, upstream and relevant lower reaches		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;Immediate Measures&gt;</p> <ul style="list-style-type: none"> <li>- Grouting</li> <li>- Pre-stressing work</li> <li>- Additional drain hole</li> <li>- Rearrangement of dam observation facility</li> <li>- Reservoir capacity survey</li> <li>- water stop measure for upstream surface of dam</li> <li>- Rehabilitation for penstock</li> <li>- Dam crest pavement, rehabilitation for gallery &amp; handrails</li> </ul> <p>&lt;Long-term measures&gt;</p> <ul style="list-style-type: none"> <li>- Spillway expansion</li> <li>- Dam stability measures</li> <li>- Anti-frozen measures of dam</li> </ul>			

吉林豐満ダム修復強化計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> Detail: -Inquiry for the project from Fengman Power Plant on 16, March 1993 -The detailed cost was sent to Fengman Power Plant on 22, March  (FY 1995 Overseas Survey) Both countries' authorities concerned had agreed on the necessity of the immediate measures consisted of 8 items. A grant aid of J.yen 1 billion was requested from China to Japan in Dec.,1994, taking into consideration that the circumstances of Japan despite of the Japanese budget is going to be allocated J.yen 1.86 billion.  (FY 1996 Overseas Survey) The Chinese Government has been continuously requesting the Japanese Government for the provision of grant aid assistance.  (FY 1997 Overseas Survey) In December 1994, the Ministry of Trade and Economy submitted a request for Japanese grant aid assistance for provision of machinery and materials. But in Japan - China Conference held in 1997, Japanese side gave an opinion that a power generation project might be assisted not by grant aid but by loan. As a result, Chinese side deleted the project from a list of grant aid request. The possibility to request for yen loan seems to be low because National Planning Committee doesn't tend to use loan for rehabilitation of dams.  (FY 1998 Domestic Survey) Northeast part of China was damaged by flood in Aug.1998. Therefore, northeast China Electric Power Administration planned to implement the immediate measures by their own fund and inquired a Japanese construction firm, which was involved in the construction of this dam, whether or not they tender a bid. Construction of raising the dam crest, though it was not proposed by JICA, was on-going as of Nov.1997 and Remaining Project : "Jilin Fengman Dam Rehabilitation Project : Long-term measures." Impeding Factors : - Difficulty in funds' procurement. - Spillway expansion requires large-scale reconstruction of dam crest. The prospects for the future are unknown. (FY 2000 Domestic Survey) There is little possibility to obtain Yen loan, therefore it is expected to implement immediate measures by their own fund. It is regarded as the cancelled project.  (FY 1999 Overseas Survey) 8 components of Immediate Measures were all implemented. Implemented: Road development at upper embankment, Construction of anchour ground, Rearrangement of dam observation facility Impact: This project contributed the stable power generation and the safety for the dam Implementing: Rehabilitation for penstock, Reservoir capacity survey Impeding Factors: The scale of all the projects is too large. Concerning to the construction of the Additional drain holes, it is necessary to improved the lower river channel to control the floods at the lower reaches of the River. Remainings: Special irrigation project, Additional drain hole, Water stop measure for upstream surface of dam *Above construction works were implemented by funds procured from power plant.		



# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 101/93

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Water Quality Protection for Poyan Lake in China		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National Environment Protection Bureau	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Yachiyo Engineering Co., Ltd.		
<b>7. STUDY PERIOD</b>	Mar.1992 ~ Sep.1993 18month(s) ~		
<b>8. SITE OR AREA</b>	Poyan Lake and its basin(162,000km2)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
Plan-A : To maintain present water quality level (1)Waste water-treatment for large-scale factory (activated sludge process) (2)Waste water-treatment for small-scale factory (natural settling process) (3)Improvement of Sewer System (capital of city 40% main cities 30%)  Plan-B : To improve up to international level (1)Waste water-treatment for large-scale factory (activated sludge process) (2)Waste water-treatment for small-scale factory (activated sludge process) (3)Improvement of Sewer System (capital of city 40% main cities 30%)			

はん陽湖水質保護対策計画調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Detail:</p> <p>(FY 1994 Domestic Survey) Local Government is making an effort to accomplish the Plan-A proposed by the study team, using national budget.</p> <p>(FY 1997 Domestic Survey) No information</p> <p>(FY 1998 Domestic Survey) There has been little progress in Plan A (maintenance of present water quality level) and B (improvement up to international level) due to the following reasons. 1) Shortage of fund. 2) Water quality of Poyan Lake has been drastically deteriorated.</p> <p>(1)Integrated Control Project of "Four Rivers" (FY 1998 Overseas Survey) The project including the study is on-going (1996~2000) with the fund of the enterprises, the subsidy from the central government, and loan (300 million yuan in total). (FY 1999 Overseas Survey) Controlling the polluted four rivers will contribute to the water improvement of Poyan Lake. Amount of 120 mil. yuan of funds was gathered mostly from enterprises, reflecting the polluter-pay principle, along with the government's subsidy and bank's loan. Construction: 1997~end of 2000</p> <p>(2)Aftercare of Water Quality Observation (FY 1998 Overseas Survey) System for Poyan Lake Under implementation with foreign fund (1998~2002).</p> <p>(FY 2000 Domestic Survey) No information.</p> <p>*Related Project: (FY 1995 Overseas Survey) In addition to the existing measurements folowings are planned and will be in the designing stage. -Bridge construction at the exit of Poyan Lake to Yangtze Kiang, -Dam construction across the Poyan Lake near to Sun-Men-Siang. The data concerning the contamination from small-scale factories in the final report seem to be insufficient. It will be necessary to investigate again.</p>	

# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 102/93

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Integrated Regional Development Planning Study on Jiujiang City, Jiangxi Province		
<b>3. SECTOR</b>	Development Plan / Integrated Regional Development Plan		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Economic Planning Committee, Jiujiang People's Government, Jiangxi Province	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	International Development Center of Japan (IDCJ) Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Sep.1992 ~ Jan.1994 16month(s) ~		
<b>8. SITE OR AREA</b>	Two Wards (Xunyang Ward and Lushan Ward) in Jiujiang City, Jiangxi Province. Total area is 669 km <sup>2</sup> .		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>This study selected 18 priority projects which are necessary to achieve development goals and strategies and are expected to lead the reform of economic and social structure of Jiujiang City. The selected sectors and projects are as follows.</p> <p>Industry : 1)Industrial Estate for Small Scale Enterprises Bonded Area Development 2)Balihu Special Area for Industrial Development and Institutional Building to Attract Foreign Enterprises 3)Jiujiang Technical Center</p> <p>Tourism : 1)Jiujiang-Lushan Convention City 2)Lushan Resort Development</p> <p>Distribution : 1)Truck Interchange Terminal 2)Freight Through Transit Terminal 3)Wholesale Estate</p> <p>Transport : 1)Changjiang River South Bank High Standard Highway 2)Jiujiang City Road 3)Jiujiang New Port 4)Port District Trunk Road</p> <p>Urban Development and Environment : 1)Sanitary Facilities Improvement 2)Solid Waste Treatment Facilities</p> <p>Human Resources : 1)Industrial Management Development in Central China 2)Jiujiang University</p>			

九江市総合開発計画調査

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

## (1)Industry

Baliu Special Area for Industrial Development became full of factories.

(FY 1997 Overseas Survey)

Construction of industrial estate for small scale enterprises, bonded area development, Baliu special area for industrial development, institutional building to attract foreign enterprises and establishment of Jiujiang Technical Center are planned.

(FY 1999 Overseas Survey)

Many factories were constructed in Baliu Special Area which now serves as primitive industrial complex. Main industries are architecture, electronics, machine, spinning, etc.

## (2)Tourism

In accordance with Lushan Resort Development, cottages are being constructed. Ropeway to the summit was installed.

(FY 1997 Overseas Survey)

Jiujiang-Lushan Convention City project and Lushan Resort Development project are being implemented. Lushan is considered as a base for tourism since it was authorized by UNESCO for "World Cultural Scenery" Cottages are being constructed smoothly.

(FY 1999 Overseas Survey)

Lushan Resort Development is at the stage of progress. Environment such as of roads, water service, and electricity was developed by government's debt financing. Development of another 2 new resort areas along with the development of Jiujiang-Lushan Convention City is coming under further review.

## (3)Distribution

Central government is preparing to authorize the city as a truck interchange terminal.

(FY 1997 Overseas Survey)

Truck interchange terminal and freight-through transit terminal are being constructed. Moreover, wholesale estate, distribution center are under construction.

(FY 1999 Overseas Survey)

Construction of Truck Interchange Terminal was completed and as an effect continuous goods transport is possible. The terminal also serves as places such as basic ingredients sales centers and agricultural products sales center.

## (4)Transport

## 4-1.Railway

(FY 1996 Overseas Survey)

## 1.Jiujiang-Hefei Railway Construction Project

Constructed as a provisional route of the Beijing-Shenzhen line.

1996 Operation commenced

## 2.Jiujiang-Beijing Railway Construction Project

Constructed as a part of the Beijing-Shenzhen line.

Sep.1996 Operation commenced

\*The existing line between Jiujiang and Hefei is not utilized in this project. The new line, Beijing-Shangqiu-Jiujiang, is to be used. The line will be extended to kowloon, Hongkong.

## 4-2.Road

(FY 1996 Overseas Survey)

## 1.Jiujiang-Jingdezhen Road Construction Project

It is expected to expand the regional economic zone in the eastern part.

Implementing period:1996~2000

Finance:Own fund (2,880 mil.Yuan)

ADB loan (US\$ 150 mil.)

(FY 1999 Overseas Survey)

Jiujiang-Jingdezhen Highway and bridge will be opened at the end of 2000.

## 2.

## 3.Chang ku Highway (expanded)

## 4.Jiujiang-Yoyang Highway

Wuhan Highway route opened. Drivers can drive this road directly from Jiujiang via Chang Ku Bridge.

## 5.Jiujiang City Road

(FY 1997 Overseas Survey)

Under construction

## 4-3.Port

(FY 1996 Overseas Survey)

## 1.Jiujiang-Uhang Highspeed Boat

(FY 1997 Overseas Survey)

## 2.Improvement of New Port

Container berth is under construction.

## 3.Construction of trunk road at port area

Changjiang road is being constructed as a trunk road.

## 4-4.Airport

(FY 1997 Overseas Survey)

## 1.Jiujiang Airport

Phase I - completed

Phase II- under implementation (total investment 9.6 mil.yuan)

\*Components airport terminal, etc

Out of amount mentioned above, 41.3 mil.yuan has been invested so far.

(FY 1999 Overseas Survey)

九江市総合開発計画調査

# STUDY SUMMARY SHEET

## (M/P+F/S)

EAS CHN/S 202/93

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Waiqaochao District in Pudong New Economic Zone in Shanghai		
<b>3. SECTOR</b>	Social Infrastructure / Urban Planning & Land Development		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Shanghai Urban Planning and Design Institute	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Pacific Consultants International (PCI) ALMEC Corporation The Overseas Coastal Area Development Institute (OCDI)		
<b>7. STUDY PERIOD</b>	Jul.1992 ~ Oct.1993 15month(s) ~		
<b>8. SITE OR AREA</b>	Waiqaochao District in Pudong New Economic Zone in Shanghai		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1) Ports Development Containerization of existing 2 berths, new ports, ship building 2) Industrial Development Free trade Zone development 3) Urban Development loop road, arterial road network, LRT, residential area development, town center, urban utilities development			

上海市浦东新区外高桥地区開發計画調査

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended   Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies: (FY 1995 Overseas Survey) F/S and D/D have been conducted for some of those projects such as Pudong International Airport, the 2nd stage construction in Waigaochao District and Pudong Rail Traffic.</p> <p>Construction: (FY 1995 Domestic Survey) The First Stage The land reclamation and the sell-off The Second Stage The Yang-Gao Road that connects the port and each development areas and the Yang-Gao great bridge that connects the port and the old city have been completed the construction works. And in the old city zone, a part of the circulated expressway and the subway have also been completed. The transportation network, which will support the industrial development, are gradually constructed.</p> <p>Effect: (FY 1997 Domestic Survey) - Improvement of efficiency in distribution - Reduction of concentration of population in the city - Reinforcement of international competitive power of Shanghai</p> <p>Detail: Development of Pudong New Economic Zone is now paid remarkable attention as a new industrial base, in accordance with Shanghai's rapid economic growth due especially to increase of foreign direct investment. In reflect this situation, the first phase of the free trade zone has been successfully sold out. This study focuses mainly on the second phase of the free trade zone including recommendations regarding management and organization. Some of the recommendations have already approved and applied. The LRT recommended in the study is forwarded to next step of the study. The consultant selected by international bidding is making a detailed plan.</p> <p>(FY 1995 Domestic Survey) Through the land reclamation and the sell-off of the first stage, now the administration systems of the Free-trade zone had been established nicely with gates and fences. Passengers going in and out are strictly checked at the gates, and the actual operation of the Free-trade zone are carrying on at the full scale. The activities of 2nd stage have been commenced by the other organization, including development company of the Free-trade zone. At present, the land reclamation works are progressing rapidly and the actions to transfer the inhabitants are already commenced. At the areas nearby, it has begun to attract enterprises to the places such as Chang-Shen Gao technical area and Jin Qiao Processing and exportation area. The Yang-Gao Road that connects the port and each development areas and the Yang-Gao great bridge that connects the port and the old city have been completed the construction works. And in the old city zone, a part of the circulated expressway and the subway have also been completed. Thus, the transportation network, which will support the industrial development, are gradually and steadily constructed to improve socio-economic infrastructures to attract foreign investment to the city very actively.</p> <p>(FY 1995 Overseas Survey) The findings of this study have been well utilized in order to formulate the development projects.</p>		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 301/93

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Rapid Guided Transport System Planning in Chongqing		
<b>3. SECTOR</b>	Transportation / Railway		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Science and Technology Commission of Chongqing Municipality	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Railway Technical Service (JARTS) Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Dec.1992 ~ Jan.1994 13month(s) ~		
<b>8. SITE OR AREA</b>	Chongqing City : area 120km Population 2,100,000(year 1990)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1)New line construction for a straddle-type monorail system between Jiao chang ko and Xin shan cun, about 17.4km</p> <p>Stations : 17 stations</p> <p>Main civil structures : viaduct(about 14km),tunnel(about 2.2km), depot(one place)</p> <p>Electrification system : DC 1500V</p> <p>Rolling Stock : 64 cars(year 2000),112 cars(2010), 160cars(2020)</p> <p>2)Construction and opening schedules</p> <p>1996 : Start of construction</p> <p>End of 2000 : opening of the section between Jiao chang kou and Da yan cun(about 13.5km,the 1st phase construction)</p> <p>End of 2010 : opening of the section between Da yan cun and Xin shan cun(about 3.9km, 2nd phase construction)</p>			

重慶市快速軌道交通計畫調查

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Studies:  (FY 1996 Overseas Survey)  1996 F/S evaluation, examination and designing works.  The number of rolling stock has increased 64 cars to 88.</p> <p>Finance:  (FY2001 Domestic Survey)  30 Mar. 2001 L/A 27.1 bill yen  (FY 1995 Domestic Survey)  An amount of 8 billion Yen has been allocated as for the first half (1996-1998) of the fourth Yen Credit for PRC.  12,085 mil.Yen is to be provided for the second-half (1999~2000) of the project.  (FY 1997 Domestic Survey)  According to information from OECF, loan agreement has not been signed yet.  (FY 2000 Overseas Survey)  Japan's ODA loan (July, 2000 E/N, 27.1 billion yen)  Contents of Loan: 14 stations, 2 main electric substations, 6 electric substations for traction, train base, control center. Apply elevated single-track system. Provide 84 stock cars in the beginning.  Difference with JICA's proposal: The number of rolling stock has increased from 64 cars to 84.</p> <p>Construction:  (FY 1997 Overseas Survey)  1997~2001 Scheduled to be implemented   (FY 2000 Overseas Survey)  Construction is to be started in 2000, and completed in June 2004.</p> <p>Other:  (FY 1996 Overseas Survey)  The dispatch of a JICA expert is desired to provide training for the counterpart during the project implementation period.  Also, the Chinese Government hopes the construction of the Monorail Training Center with the cooperation of the Japanese Government.   (FY 1997 Overseas Survey)  3 experts are to be dispatched in March, 1998 for 3 months.</p>		



# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/A 309/93

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Facilities Improvement Project in Second Irrigation Section in Qianguo Area in Jilin Province		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Committee of Science & Technology, Ministry of Water Resouses in Julin Pro.	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Taiyo Consultants Co., Ltd. Nippon Giken Inc.		
<b>7. STUDY PERIOD</b>	Feb.1991 ~ Mar.1993 25month(s) ~		
<b>8. SITE OR AREA</b>	Second Irrigation Section in Qianguo Area in Jilin Province Area : 37,200ha, Population : 51,575(1990)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1.Improvement of the New Second Pumping Station and Water Facilities 2.Construction of Fish Farm 3.Land Consolidation 4.Improvement of Water Management Facilities -Water Supply Station : vertical mixed flow type 2,000(Q=9.4m3/s) X 3 64ZLB-50 1,625(Q=8.4m3/s)(Made in China) -Water Facility : 85.3km -Drainage Station : 20ZLB-100 500(Q=0.5m3/s) X 2(Made in China) -Drainage Facility : 89.6km -Fish Farm : 250ha -Land Consolidation : 8,005ha, Farm Road;126km, Bridge;24 places -Water Management Facilities :			

吉林省前郭地区第二灌溉区施設整備計画

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

In respect of the Second Irrigation Section, which is the object of F/S on this project, it has been on urgent task to construct pumping station diverged at 48t per second from the Second Shokako which is water resources, main canals, and Water Management Facilities along the pumping station. Under these circumstances, the Ministry of Water Resources in China has requested the grant aid of Japan.(1994,5)

(FY 1995 Domestic Survey)

The Jilin Provincial Foreign Economic Cooperation Bureau has submitted the official request for the grant aid to the Ministry of Foreign Economic Relations and Trade.

(FY 1996 Domestic Survey)

No official request has been submitted for the procurement of Japanese grant aid assistance.

(Japanese government has freed financial assistance to China from May.1995 till May.1997)

(FY 1997 Domestic Survey)

Though priority is low, this project is considered important among the National Development Plan. Official request will be submitted soon.

(FY 1997 Overseas Survey)

In 1997, Trade and Economy Section submitted a request to Japanese Government for a grant aid assistance. (1.3bil.Yen)

Given the request, JICA office conducted a survey on background of the request in August 1997.

Construction is scheduled from May.1998 to Aug.2002.

(FY 1998 Domestic Survey)

The request for a grant aid assistance was submitted again in Sep.1998.

(FY 1999 Domestic Survey)(FY 1999 Overseas Survey)

Preliminary survey is to be conducted by JICA within this fiscal year.

\*Contents: Amount 221,225 yuan(Japan's grant aid: 97,177yuan, local fund:37,680 yuan, Chilin Province government fund: 86,368 yuan)

Contract of Japan's grant aid has not been concluded.

\*Construction Implemented with the Chinese Budget

This project is referred to the Eighth Five-Year Plan in Jilin Province. Chinese government has been constructing the Chimonto drainage station and the canals along it which are the main drainage facilities in the study area. The drainage station is expected to complete in 1994.

With regard to the First and Third Irrigation Sections, Chinese government carried out the construction of tailed canals based on the Five-Year Plan.

(FY 1996 Domestic Survey)

The Development Projects in Qianguo Area were commenced before the implementation of this Study. The improvement works are still in progress. The construction of the Chimonto drainage station was incorporated into the original project and was not newly proposed in this F/S. In fact, at the time when this F/S was commenced the construction works were about to be completed. The project proposed in this F/S was formulated on the assumption that the facilities which had been constructed or under construction in the original plan could be utilized for the project implementation. In other words, the utilization of the Chimonto drainage station was taken into consideration when the project was formulated. Therefore, the construction of the Chimonto drainage station should be considered a part of the proposed project while it was implemented with the local fund and was commenced before this F/S was started.

# STUDY SUMMARY SHEET

## (M/P+F/S)

EAS CHN/S 203/94

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Primary Road Network Development Study in Zhe-jiang Province		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Ministry of Transportation, Zhe-jiang Province	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Katahira & Engineers International Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Aug.1992 ~ Jul.1994 23month(s) ~		
<b>8. SITE OR AREA</b>	M/P: Whole area of Zhe-jiang Province F/S: Hang-zhou City and Qu-zhou City		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1) Target of this project is to construct:</p> <p>1. Network of expressway approx. 1,600km</p> <p>2. Network of general trunk road approx. 11,000km</p> <p>upto the year of 2020, with a total estimated amount of about 40 billion yuan.</p> <p>2) For the time being, at the area of Zhe-jiang province, the motorway connecting Han-zhou, Jin-hua and Quzhou, and Hang-zhou circular road connected with above-mentioned motorway will be renovated with the first priority.</p> <p>3) Extension of the road will be a length of 231.23km (width 24.5m, 4 lanes, designed speed 100km/hr), and the construction works will be consisted of 93.9% of earthworks, 5.4% of bridge construction and 0.7% of tunneling. 15 interchanges, 1 junction, 5 service areas and 5 parking areas are also constructed.</p> <p>4) In future, the road will be extended towards west until Jiang-xi province as for a part of Shang-hai - Kunming line, one of the main trunk line of the National highway.</p>			

浙江省幹線道路網計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b>  (FY 1996 Domestic Survey) The request for Yen Loan has been submitted.  (FY 1997 Domestic Survey) Request for OECF loan was submitted to construct a highway connecting Hang-zhou and Qu zhou (231km). OECF will examine the request from December to March.  (FY 1998 Domestic Survey) Chinese government submitted the request for yen loan in FY 1998. Amount requested: approx. 80 billion yen. Project contents: 231km long, 4 lanes, 10 km/h in designed speed, 13 inter changes, 5 service areas, 2 traffic control centers, bridges (long: 14, medium/small: 134), 1 tunnel. The reason why the request for loan has not been approved is that although OECF conditioned the management of construction by foreign consultants, especially Japanese consultants, Chinese government has not accepted this condition. However, some actions are taken for the agreement of OECF loan.  (FY 1999 Domestic Survey) A highway connecting Hang-zhou and Qu zhou construction project (Dec.1998 L/A 300mil.yen) Construction of expressway(237km) between Hangzhou and Quzhou in Zhejiang Province, as a part of the National Trunk Highway from Shanghai City to Kunming in Yunnan Province.		

# STUDY SUMMARY SHEET

## (M/P+F/S)

EAS CHN/A 204/94

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Integrated Agriculture Development Project in Heilongjiang		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	General Department of Heilongjiang National Firm	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Hokkaido Engineering Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jul.1993 ~ Nov.1994 16month(s) ~		
<b>8. SITE OR AREA</b>	Nonjiang National Firm (54,000ha) and Yoyi National Firm (189,000ha) in Heilongjiang Development Area		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Cultivation/Infrastructure: Improvement of drainage, irrigation of uplands and paddy fields and farm roads.</p> <p>Livestock: Forage production, breeding, improvement of breeding technology, establishment of an animal husbandry center.</p> <p>Support for agricultural production: Seeds processing, sryers, facilities for storage, warehouse for materials, repairshop for agricultural tools and equipment, etc.</p> <p>Agricultural equipment: Renewal or new introduction of big agricultural equipment</p> <p>Processing of agricultural products: Rice mill (Nonjiang), flour mill (Yoyi)</p> <p>Rural infrastructure: Rural roads, water supply and drainage, heating apparatus, power distribution and communication facilities.</p> <p>Inland water fishery: Only at Yoyi National Firm.</p> <p>It has been recommended to separate the administration and the management when above mentioned activities are implemented.</p>			

黒龍江省国営農場典型区農業総合開発計画



# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/A 310/94

<b>1. COUNTRY</b>	China																				
<b>2. NAME OF STUDY</b>	Improvement Project of Drainage System in Qixing-Polder, Shunde City, Guangdong Province																				
<b>3. SECTOR</b>	Agriculture / Irrigation, Drainage & Reclamation																				
<b>4. TYPE OF STUDY</b>	F/S																				
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Water Conservancy and Power Department of Guangdong Province																			
	<b>PRESENT COUNTERPART AGENCY</b>																				
<b>6. CONSULTANT(S)</b>	Taiyo Consultants Co., Ltd.																				
<b>7. STUDY PERIOD</b>	Feb.1994 ~ Mar.1995 13month(s) ~																				
<b>8. SITE OR AREA</b>	Qixing-Polder, Shunde City, Guangdong Province																				
<b>9. MAJOR PROPOSED PROJECT(S)</b>																					
<p>Drainage Plan in rural agricultural area :</p> <table style="width: 100%;"> <tr> <td>1)New establishment and renewal of drainage pump station</td> <td style="text-align: right;">4 places</td> </tr> <tr> <td>2)Maintenance of inland river flow</td> <td style="text-align: right;">43.9km</td> </tr> <tr> <td>3)Repair of lock gates</td> <td style="text-align: right;">8</td> </tr> <tr> <td>4)Maintenance and repairment of river bank</td> <td style="text-align: right;">52.4km</td> </tr> <tr> <td>5)Control facilities and inspection equipment</td> <td style="text-align: right;">1 set</td> </tr> </table> <p>Basic Plan of rural development :</p> <table style="width: 100%;"> <tr> <td>1)Repair of lock gates</td> <td style="text-align: right;">9</td> </tr> <tr> <td>2)Reinforcement of river bank</td> <td style="text-align: right;">52.4km</td> </tr> <tr> <td>3)Arrangement of the fish pond</td> <td style="text-align: right;">2,000ha</td> </tr> <tr> <td>4)facilities for aquaculture</td> <td style="text-align: right;">1 set</td> </tr> </table>				1)New establishment and renewal of drainage pump station	4 places	2)Maintenance of inland river flow	43.9km	3)Repair of lock gates	8	4)Maintenance and repairment of river bank	52.4km	5)Control facilities and inspection equipment	1 set	1)Repair of lock gates	9	2)Reinforcement of river bank	52.4km	3)Arrangement of the fish pond	2,000ha	4)facilities for aquaculture	1 set
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広東省順德市齋杏輪中地区農村地域排水計画

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Finance:  Own fund (for a part of project).  In July 1995, the State Planning Committee received the request for the Japanese Government loan.</p> <p>Construction:  (FY 1997 Domestic Survey)  As new establishment of Tong-Hai drainage pump station and accompanying trunk drainage canal, a part of the drainage plan in rural agricultural area, phase I of this project, is necessary in very urgent. Chinese side has been completed it in December 1995.</p> <p>Detail:  The necessary measures have been taken to request the Japanese Yen Credit in order to implement the remaining part of project (relocation of aquaculture site).  (FY 1996 Domestic Survey)  This project aims to improve the drainage system with which the traditional agricultural method has been adopted. The increase of high-quality fish produce will enable to finance the O/M cost.</p>		



# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 317/94

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	West-bound Trunk Road Construction Project in Municipality of Xiamen		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Transportation Bureau, Amoy City	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Chodai Co., Ltd. Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Mar.1993 ~ Jul.1994 16month(s) ~		
<b>8. SITE OR AREA</b>	Xiamen (Amoy) City and surrounding area		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1)Construction of a suspension bridge with a total length of 1,108m and a length of central span of 648m. 2)Construction of a Prestressed Concrete Box Girder Bridge with a length of 380m over the sub sea route. 3)Construction of an approaching overhead bridge with a length of 1,652m. 4)Construction of an approaching road with a distance of 2,786m. 5)Others (Construction of Tall Gates, Approaching Ramps, etc.)			

廈門市西通道建設計画調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY 1997 Domestic Survey) Apr. 1996~ B/D (Own find 320,000US\$+4mil.yuan)</p> <p>Difference with JICA's proposal: (FY 1997 Domestic Survey) Splitting space of a main bridge was changed from 220+650+220m to 230+648+230m.</p> <p>Finance: First half (FY 1996 Overseas Survey) Own fund (2,776 mil.Yuan) Second half (FY 1997 Domestic Survey)(FY 1997 Overseas Survey) Dec.1997 Im.Ex Bank L/A 130mil.\$ (schedule) *contents of a project provision of materials (cable, etc.)</p> <p>Construction: (FY 1996 Overseas Survey)(FY 1999 Domestic Survey) 18 Dec.1996 Commenced. 30 Dec.1999 Completed and open. Contractor / Lower part - Kantong chodai, 1 other Upper part - 4 Local contractors Consulting Service / Chodai Co. Ltd, Chinese company</p> <p>Detail: (FY 1995 Overseas Survey) The foreign fund with an amount of 1.26 bil.Yuan (equivalent to 0.15 bil.USD) is not available as yet.</p> <p>(FY 1997 Overseas Survey) Study on fee, and construction will be carried out in FY 1998.</p> <p>(FY 1998 Domestic Survey) Construction as a whole has been smoothly progressed. The funds for covering the construction expensed have been procured.</p> <p>(FY 1998 Domestic Survey) Progress situation was as follows as of November 1998. Main bridge: main cable and main girder are under construction. Sub bridge: upper part of the pier was constructed and lower part of the pier is under construction. Attached bridge: upper part of the pier is under construction and lower part of the pier was almost constructed. Attached road: the foundation is under construction.</p>		

# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 103/95

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Total Air Quality Management Study for Linzhou City and Acid Deposition Monitoring Study for Wide Area		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	National Science and Technology Council Dept. of Social Development	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Research, Analysis and Computing Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Nov.1993 ~ Dec.1995 25month(s) ~		
<b>8. SITE OR AREA</b>	Liuzhou, Guilin, Wuzhou, Guangzhou		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1)Promotion of utilization of gas as fuel for civil at town area. 2)Utilization of petroleum for boiler fuel at city center. 3)Desulfurization of smoke gas at thermal power station. 4)Improvement of boiler facility. 5)Denitration of NO2 exhaust gas at fertilizer plant. 6)Improvement of combustion administration. 7)Transfer of factories as Zinc Plant to suburbs. 8)Desulfurization of gas from coke furnace at steelworks.			

柳州市大気汚染総合対策計画調査及び広域酸性降下物モニタリング調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Finance: (FY 1997 Domestic Survey) Total of own fund --- approx. 8bil.yen (schedule), Total of OECF loan --- approx. 10bil.yen (schedule) OECF loan: (FY 1997 &amp; 1998 Domestic Survey) (FY 1998 Overseas Survey) Dec.1996 L/A 2,300 mil. Yen (Liuzhou Environmental Improvement Project) 12 Sep.1997 L/A 3,679 mil. Yen (Liuzhou Environmental Improvement Project II) 25 Dec.1998 L/A 4,759 mil. Yen (Liuzhou Environmental Improvement Project III)</p> <p>Contents:Support for construction of gas supply facility and waste disposal plant and environment improvement at plants. 1) Utilization of gas as fuel for civil at town area (the 3rd) (proposed project 1) (to be completed by 2002). 2) Waste disposal plant project (to be completed by 2000). 3) Denitration of NO<sub>2</sub> exhaust gas at fertilizer plant (proposed project 5) completed by 2000). 4) Desulfurization of gas from coke furnace at steelworks (proposed project 8) (to be completed by 1999). 5) Transfer of zinc plant with environmental consideration (proposed project 7) (to be completed by 2003). 6) Desulfurization of smoke gas at thermal power station (proposed project 3) (to be completed by 2003).</p> <p>Progress Situation &amp; its Effects: (FY 1999 Overseas Survey) 1) Promotion of utilization of gas as fuel for civil at town area.(Completion scheduled by Dec.2002): On-going. The situation of air pollution will be alleviated. 2) Waste disposal plant project(Completion scheduled by Mar.2001): Under Construction. 600tons of wastes will be disposed per day. By this, the problems of waste disposal and secondary pollution will be solved and as a effect, air &amp; water pollution will be alleviated. 3) Denitration of NO<sub>2</sub> exhaust gas at fertilizer plant(Dec.1999: Test run, Mar.2000: Completion): 816.9tons of NO<sub>2</sub> exhaust gas will be reduced per day. There are remarkable impacts of improvement in Liuzhou's atmosphere. 4) Desulfurization of gas from coke furnace at steelworks(Completion scheduled by Jun.2000): Under construction. 0.178 mil. tons of SO<sub>2</sub> exhaust will be reduced per year. 5) Transfer of zinc plant with environmental consideration(Completion scheduled by May 2003): Designs are now being drawn. With the transfer of the factory which is the source of pollution, remarkable improvements of air &amp; water environments are expected. Effective measures against exhaust air, drainage, and waste problems will also be taken in factory transferred area. The target amount of SO<sub>2</sub> exhaust is 0.128 mi. tons per year. 6) Desulfurization of smoke gas at thermal power station(Completion scheduled by Jun.2003): Desulfurization techniques are now being investigated. SO<sub>2</sub> exhaust of 2 power generators will be reduced from 10,900 mil. tons/year to 3,400 mil. tons/year.</p> <p>(FY 2000 Domestic Survey) 1) Promotion of utilization of gas as fuel for civil at town area: Situation in progress: 65% 2) Utilization of petroleum for boiler fuel at city center: The conversion from coals to petroleum has been promoted. 3) The thermal power station (20 mil kw, 2 plants): Fund: Yen loan, Under procedure. 4) Improvement of boiler facility: With the conversion of the fuel, the coal boilers in the governmental offices, hospitals, hotels and schools were replaced to the petroleum boilers. 5) Denitration of NO<sub>2</sub> exhaust gas at fertilizer plant: The construction has been completed and conducting the trial operation. 6) There is no progress. 7) Transfer of factories as Zinc Plant to suburbs: F/S: completed, under procedure for D/D. 8) Desulfurization of gas from coke furnace at steelworks: The construction of the desulfurization plant has been completed and will receive inspection within one year.</p> <p>(FY 2001 Domestic Survey) Utilization of town gas: Progress situation: 96%. Utilization of petroleum for boiler fuel at city center: All boiler facilities fueled coal will be removed. Each user is to provide the finance and convert into the boiler fueled oil or electricity. Thermal power station (Additional installation of the desulfurizers on the present two power units with a capacity of 200 thousand kw): preparation step of the early part. Denitration of NO<sub>2</sub> exhaust gas at fertilizer plant: All work was completed and all is well after the trial. The average exhaust density is 665.5 mg/m<sup>3</sup> and the exhaust quantity is 139 kg/h of NO<sub>2</sub> to make clear the second standard stipulated by the National Comprehensive Emission Standards of Air Pollution Source with the successful social and environmental beneficial effect. Transfer of factories as Zinc plant to suburbs: The D/D was implemented. Desulfurization of gas from coke furnace at steelworks: It was completed in Dec.2000 and the operational situation is well. It was confirmed that the rate of desulfurization was 99.7 %. The proposed project (6) as the Desulfurization of smoke gas at thermal power station Project is delayed. This Project is the most important measure on this Development Study. The reason of the delay is that the central government does not approve the construction of desulfurization facility. Some pressure is needed.</p> <p>Others: (FY 1998 Domestic Survey) Standard density of SO<sub>2</sub> was changed from 0.224mg/m<sup>3</sup> in 1995 to 0.124mg/m<sup>3</sup> in 1997.</p> <p>Backgrounds: (FY 1996 Domestic Survey) It is learnt that the procedures for fund assistance on Pollution Source Control (the 4th Yen Loan) is on progress and also at Liuzhou, following measures are being taken by own fund.  1) Utilization of town gas (the 3rd). 2) Improvement of boiler facility. 3) Desulfurization of smoke gas at thermal power station. 4) Improvement of combustion method. 5) Transfer of zinc plant. 6) Denitration of NO<sub>2</sub> exhaust gas at fertilizer plant. 7) Desulfurization of gas from coke furnace at steelworks. 8) Fuel change of boiler (to petroleum) at city center.</p> <p>(FY 1996 Overseas Survey) In order to obtain OECF loan more easily, the number of the projects was reduced. The left projects have been and/or will be on their ways gradually. The air pollution and acid disposition monitoring was planned to be continuously conducted. However, due to the shortage of monitoring device and equipment and of the running cost, it has not been implemented as it was planned.</p> <p>(FY 1998 Domestic Survey) Problems in procurement of local fund have delayed the implementation of desulfurization project on smoke gas at thermal power station. The prospect for the transfer of Zinc Plant to suburbs is vague due to the difficulty in local fund's procurement and land acquisition.</p> <p>(FY2005 Domestic survey) No information to be specifically mentioned.</p>	

# STUDY SUMMARY SHEET

## (M/P+F/S)

EAS CHN/S 204/95

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Shanghai Pudong International Airport Basic Planning Study		
<b>3. SECTOR</b>	Transportation / Air Transportation & Airport		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Science and Technology Comission of Shanghai Municipality	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Nikken Sekkei Ltd.		
<b>7. STUDY PERIOD</b>	Jun.1994 ~ Aug.1995 14month(s) ~		
<b>8. SITE OR AREA</b>	Shanghai city Pudong New Zone		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Construction of Hub Airport with 4 runways in Pudaong Zone, Shanghai city (25km<sup>2</sup>). One runway and necessary facilities are planned to provide from Oct.1.1999, the 50th National Foundation Day.</p>			

上海浦東國際空港基本計画

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>Subsequent Study: 1995~1997 Shanghai Pu-dong International Airport Study (D/D)</p> <p>(FY 1997 Domestic Survey) Project name: "Shanghai Pudong International Airport Construction Project"</p> <p>Funding: Own fund Sep.1997 L/A 40bil.yen</p> <p>Content: Construction of a passenger terminal (0.2 mil.m2), construction of a runway (4km) and accompanied facilities.</p> <p>Construction: (FY 1997 Domestic Survey)(FY 1999 Overseas Survey)(FY 1999 Overseas Survey) Sep.1.1996~ The foundation processing work commenced Nov.1996~ Pile draiving at Terminal Building to be commenced Oct.1999 to be completed</p> <p>Contents:</p> <ol style="list-style-type: none"> <li>1) Runway <ul style="list-style-type: none"> <li>One 4000*60m main runway</li> <li>Two 4000*29m parallel taxi way</li> <li>Four vertical taxi way</li> <li>Six express evacuation taxi way</li> <li>800 thousand square meters apron</li> </ul> </li> <li>2) Navigation light <ul style="list-style-type: none"> <li>One main navigation light transformer substation</li> <li>One Sub navigation light transformer substation</li> </ul> </li> <li>3) Refuel facilities <ul style="list-style-type: none"> <li>Pipeline system</li> </ul> </li> <li>4) Fire &amp; rescue center <ul style="list-style-type: none"> <li>One fire station</li> <li>One duty station</li> <li>One emergency medical center</li> </ul> </li> </ol> <p>The project is being carried out so called CM, starting the construction works from possible parts side by side with design work.</p> <p>Profit effects: (FY 2001 Domestic Survey) Resulting from opening of the new airport, the new airport company jointed with the old airport started its operation. Therefore, the plan to shift the organism system of the old airport to the new one was gradually taken, the number of flights which were a few at the beginning of its open are also increasing gradually, and it is functioning as an international gateway airport in Shanghai now.</p> <p>Related Projects: (FY 2001 Domestic Survey) 2001 Aug.: The approach radar control system was commenced to operate. 2001 Oct.: The exclusive apron and terminal building with 320,000 m2 for VIP were completed for the APEC Conference. The terminal building for CAT II was completed 3 years after the commencement of its operation. 2003 scheduled: The high speed train between the airport and Shanghai city (total length is about 30 km) are under construction.</p> <p>(FY 1998 Domestic Survey) Construction has been progressed as scheduled.</p> <p>(FY 1999 Overseas Survey) The outputs are on a trial from Oct. 1. The final test will be done after a trial use of one year.</p> <p>Remaining Projects: (FY 1997 Domestic Survey) Four 4km runways are scheduled to be constructed in Phase IV (2020). (FY 1999 Overseas Survey) The construction plan of Phase II has not been under consideration yet. (FY 2001 Domestic Survey) Construction Progress (Phase II): Ground improvement work for the second runway is almost completed. The runway construction is to be completed by 2005. The second terminal building construction plan to complete the building and the associated facilities by 2010, is in progress.</p> <p>(FY 2005 domestic survey) After the study conducted by JICA, consultant who have conducted the study has advised higher categorisation of Shanghai Pudon Airport security facilities. Funding for the advisory has been made internally. Although expansion of the airport has been continuously made, there is no information to be specified in relation with the study.</p>		

# STUDY SUMMARY SHEET

## (M/P+F/S)

EAS CHN/S 205/95

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Comprehensive Transportation System in Dalian City		
<b>3. SECTOR</b>	Transportation / Urban Transportation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Dalian Public Government National Science and Technology Committee	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Fukuyama Consultants International, Inc.		
<b>7. STUDY PERIOD</b>	Jul.1994 ~ Jan.1996 18month(s) ~		
<b>8. SITE OR AREA</b>	Dalian City		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
M/P (1) Public Transportation facility <ul style="list-style-type: none"> <li>1. High-Speed Track construction project</li> <li>2. Bus improvement project</li> </ul> (2) Road Improvement Project (3) Traffic Control Project (4) Other Transportation Facilities project <ul style="list-style-type: none"> <li>1. Parking lot improvement project</li> <li>2. Traffic terminal project</li> </ul> F/S (1) High-speed Track Transportation <ul style="list-style-type: none"> <li>Phase I (the construction of South-North Line).</li> </ul> (2) Traffic Control Project			

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (1)Construction of High-speed Track Transportation (phase I) (FY 1996 Overseas Survey) The formulation of High-Speed Track Transportation Project (F/S on South-North Line) provided the counterpart with the useful experience which can be utilized in the modification of the Dalian City Comprehensive Transportation-System Plan and the improvement of the High-Speed Track Transportation Network. However, because of the national macroeconomic policy and the financial constraints, the implementation of this project is postponed and no related D/D has been undertaken. (FY 2000 Domestic Survey) The proposed South-North Line has been partially changed and the Line has been constructed with the West Sea Line. The 2nd stage construction, the Line to the Economic Development Area is under construction. (FY 2001 Overseas Survey) No.1 Construction period: November 1999 - July 2001 Content: Total length: 9km Funding: Cost: 160 million RMB, Funding party: Dalian municipality budget Progress: 9km construction has practically completed and is planned to open for service in 2002. No 3 express way Content: Total length: 49.15km, 14 station Funding: Cost - 3,701 million RMB Progress: Planned to be in service from 2004  (2)Traffic Control Project The study proposed improvement on 16 crossings. Nakayama Park crossing and Friendship Park crossing will be improved in 1996 and other proposed crossings will be fixed in sequence. (FY 2000 Domestic Survey) The proposed 16 crossing have been already improved in 2000. (FY 2001 Overseas Survey) Funding party: Dalian municipality budget Period: 1996 - 2000 Content: 1) Construction of traffic network: (1.1) Most of the construction has completed, partially under construction and others are waiting for the completion. (1.2) Construction of 85.6km of highway in 4 central district and along economic development area. (1.3) Networking 138.0km long main highway and 170.1km long sub-highway 2) Traffic management plan: (2.1) Improvements of traffic facilities, (2.2) 5,500 traffic sign, (2.3) 200 thousand square meter road mark (2.4) Construction of new roadway according to traffic light and speed, (2.5) Alteration of intersection, (2.6) Alteration for 16 intersections indicated in the study, (2.7) Improvement of roads and one-way roads, (2.8) One-way has increased from 22 before 1996 to 51 (2.9) Adoption of traffic restrictions (14 passport, Restricted access to the city for freights over 5 tons in daytime, Limited access for freights below 5 tons, Peak restrictions, Restricted access to Chungshan road for empty taxis). (2.10) Installment of wide-area traffic control system (Installment of England made SCOOT system, Investments of 4.7 million RMB to improve comprehensive public traffic security management system). (2.11) Improvement of institution (Traffic zone and management: 1998 Established planning division, 2000 Established traffic congestion relief process office, 2002 Established traffic discipline promotion division). (2.12) Promotion of traffic safety education (Primary education, Established elementary traffic police and recognized concurrent work system for traffic police in schools) Benefit: Traffic congestion has reduced and gas emission has decreased. (3). Heishijiao public bus station improvement plan (FY 2001 Overseas Survey) Funding Funding party: Dalian municipality Amount: 3.8 million RMB Period: October 1999 - January 2001 Content: Substituting Heishijiao as a long-distance bus terminal to Lushun via southern districts for banned Tangshan bus stop. 203 buses on 3 lines will be in service transporting 3,000 to 4,000 people a day and 6,000 to 8,000 on active day. Benefit: 1) Comfortableness of waiting has increased and service facilities such as bank, entertainment, and shopping has been added by constructing a waiting lounge. 2) Promoted development for business and culture by centering people's activity. 3) Contributed to travel industry by improving traffic and atmosphere conditions.  Context: (FY 1997 Overseas Survey) In regard to a rapid railway, D/D and construction which were to be proceeded by Chinese side, have not been conducted due to the lack of finance. In Dalian City, two other development studies namely Study on Traffic Pollution and Study on Establishment of Environmental Model Area, were undertaken continuously. Dalian City considers that this study and study on Traffic pollution be integrated into Establishment of Environmental Model Area Project. Therefore implementation of this project would be after the completion of development study above mentioned. In case that the city is selected as a model city, Dalian City has an intention to include urban traffic project into the Environmental Model City Project. Application of yen loan will be difficult for a while, as the Department of the States noticed in 1996 that no request for loan in regard to railway construction would be accepted for several years except for request from Beijing, Shanghai and Guangzhou City.  (FY 1999 Overseas Survey) Due to the shortage of fund, even the proposed priority plans of this project haven't started yet. However, in order to alleviate the condition of traffic congestion, Xian City has promoted some measures such as road development of port, construction of road(city-northeast route), etc. Improvement of Trolley is now under implementation. Future prospects: Due to organizational issues, Dalian city can not establish unified authority for traffic management. Currently, transit, rural, and port authority, transit management committee, and traffic congestion relief office have gradually started to work on integrated management, which improvement for the unified transit management is anticipated.		



# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 101/97

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Integrated Management Master Plan for the Water Environment of Li-Jiang River		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Central Consultant, Inc. CTI Engineering Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jun.1996 ~ Sep.1997 15month(s) ~		
<b>8. SITE OR AREA</b>	The Li-Jiang Basin upstream from the Yangshuo with the catchment area of approximately 5,600km <sup>2</sup> .		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1. Flood, Water Resource Li-Jiang Embankment, Flood Forecasting and Warning System, Gullin City Inland Water Control, Diversion Channel Scheme for Li-Jiang River and Taohuajiang River, Chuanjiang Dam, Li-Jiang Navigation System Improvement, Xiaorongjiang Scheme / Wulixla Scheme.</p> <p>2. Securing Water Quality Guilin City Sewage, Lingchuan Prefecture Sewage, Industrial Pollution control for Nanxihe River, Industrial Pollution control from Taohuajiang River, Industrial Pollution control for Xiaorongjiang River.</p> <p>3. Ecosystem, Environment Scenery Li-Jiang Watershed forest Plantation, Li-Jiang Waterfront Plantation, Rural living Development, Ecosystem Study for Li-Jiang River, Ecosystem Conservation and Enlightenment, Lake Clean Shanhu and Yonhu.</p> <p>4. Organization system Water Use System Improvement, Underground Water Use System Improvement, Water Tariff System, Industrial Pollution Control and Strengthening, Water Environment Management Committee, River Environment Management Information System.</p>			

漓江水環境総合管理計画調査

<b>PRESENT STATUS</b>	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 1998 Domestic Survey) World Bank loan and domestic capital have implemented some of selected projects.</p> <p>As Japan's grant aid, the following project is being requested. China 'Project of Maintenance of Li-Jiang River Environmental Management Information System in Guangxi Zhuangzu Zizhiqu'</p> <p>Institutions Maintained as River Environment Management Information System are as follows.</p> <p>(1) Observation Institution - Water Quality Automated Observatory - Underground Water Observatory</p> <p>(2) Flood Forecasting and Warning Institution - Hydrology Observation Telemeter - Radar Rain Gauge</p> <p>(3) Environmental Information Center - Information Collection and Delivery Tele-equipment - Information Processing Equipment - Software (GIS etc.)</p> <p>(4) PR Facilities of Environment in Li-Jiang River - Museum of Ecosystem in Li-Jiang River - Equipment of Exhibition - PR Car</p> <p>(FY 2001 Domestic Survey) The above projects were requested officially as the grant aid projects, however they are still under requested because their priority in China are low and the grant aid project on the Poverty Relief at TIANHU District were selected from the same autonomous region.</p> <p>1. Flood, Water Resource (FY 2001 Domestic Survey) LiJiang Embankment, Flood forecasting and Warning System, Gullin City Inland Water Control: implementing by the own cost Diversion Channel Scheme for Li-Jiang River and Taohuajiang River, Chuanjiang Dam: under Planning</p> <p>2. Securing Water Quality (FY 2001 Domestic Survey) Guilin City Sewage: implementing by the WB Fund Lingchuan Prefecture Sewage: implementing by the own cost Others: implementing by the own cost and private fund (FY 2002 Overseas Survey) Cleaning surrounding and Bank protection work of Lake Shanhu and Yonhu was implemented. The former was completed in March of 2000, and the latter, in January of 2001.Total 44.36 mil. yuan consisted from 37.88 yuan of national debt, 3.6 mil. yuan of self-financing, WB loans of 3 mil. yuan.</p> <p>3. Ecosystem, Environment Scenery (FY 2001 Domestic Survey) Li-Jiang Watershed forest Plantation, Lake Clean Shanhu and Yonhu: implementing by own cost Others: unknown</p> <p>4. Organization System (FY 2001 Domestic Survey) River Environment Management Information System: requested as the grant aid project to the central government Others: unknown</p> <p>(FY 2003 Overseas Survey) The &lt;&lt;Lijiang River in Guilin Comprehensive Environmental Improvement&gt;&gt; Project where Guilin City utilizes a loan from the World Bank is positioned as one of key projects in Guangxi Province and as a key construction project of the city. The project consists of seven projects including construction of urban sewage treatment and collection system, garbage collection and disposal, water replenishment to Lijiang River and soil and water conservation, improvement of three lakes, improvement of water supplied to housing complexes, enhancement of drainage companies and organizations for environment conservation and water resources management of Lijiang River basins. The total investment amount is 661,210 thousand yuans, of which loan borrowed from the World Bank amounts to 41,504 thousand yuans. Total number of contracts concluded in 2001 was 21, of which 14 contract agreements have been already completed. At present, other seven projects have already started construction. The accumulated amount directly invested in the construction has amounted to 115 million yuans, representing 127% of the already concluded total contract amount of 90,220 thousand yuans. Of the amount, construction for investment amount of 76,000 thousand yuans was completed in 2001. Thus the construction project has been progressing at a fast pace.</p> <p>Other Information (FY 2001 Domestic Survey) The Guilin City and Guilin District were merged into an administrative district in order to aim at the unification of the projects on Li-Jiang River. Moreover, the Water Environment Committee were set up for the water environment control of Li-Jiang River and are working on the project along with the proposes by this Study.</p> <p>(FY 2001 Overseas Survey) Guilin and Li-Jiang River environmental project financed by World Bank is a priority project in Guilin City and Jiangxi Province. It consists of seven projects including construction of urban wastewater treatment system and merging system, waste management, water supply to Li-Jiang River, erosion protection, environmental improvement of three lakes, improvement of residential estate and establishment of wastewater treatment company, environmental protection, enforcement of Li-Jiang River catchment water resource administration. The total investment has reached</p>	

漓江水環境総合管理計画調査

# STUDY SUMMARY SHEET

## (M/P+F/S)

EAS CHN/S 202/97

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Integrated Management Master Plan for the Water Environment of Min River in Chengdu District		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Environmental Protection Bureau, Chengdu City	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Kyowa Engineering Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jan.1996 ~ Mar.1997 14month(s) ~		
<b>8. SITE OR AREA</b>	Chengdu District, Sichuan Province		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
(F/S)			
1. Ukupe Wastewater Treatment Plant Treatment capacity : 0.33mil.m3/day Land area : 30.1 ha			
2. Factory Wastewater Treatment Facilities Construction of wastewater treatment facilities at 9 factories.			
3. Water Environment Management Center Water quality monitoring system, Water environment experiment facility, Water environment management facility.			

岷江成都地区水環境総合管理計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY 1998 Domestic Survey)</p> <p>1. Ukupe Sewerage Treatment Project Application for Japanese yen loan was submitted to National Planning Committee by Chendu City Construction Committee through Chendu City Planning Committee.</p> <p>2. Industrial Waste Water Treatment Project Application for Japanese yen loan was submitted to National Planning Committee by Chendu City Economic Committee through Chendu City Planing Committee.</p> <p>3. Water Environmental Management Center Project Implementation program is under study by Environmental Protection Bureau of Chendu City.</p> <p>1. Ukupe Sewerage Treatment Project (FY 1999 Overseas Survey)</p> <p>Finance: World Bank Dec. 1999 L/A 5,000 mil. \$ Own fund(Sichuan government)</p> <p>Construction: It will start in the middle of 2000.</p> <p>(FY 2001 Overseas Survey)</p> <p>The construction site application submitted to the provincial Land Information Center is being reviewed. The Basic Design was complete. The construcion of main sewage pipeline (within 9km from the factory) and basic infrastructure will be started after the construction site is approved.</p> <p>(FY 2003 Overseas Survey)</p> <p>The construction of the sewage treatment facility with daily treatment capacity reaching 350 thousand tons will be implemented from 2003 and completed at the end of FY2005 with an estimated investment amount of 819 million RMB.</p> <p>2. Industrial Wastewater Treatment Project (FY 2001 Overseas Survey)</p> <p>Construction is being implemented by national fund. The application for World Bank's loan to implement the water resource environmental protection projects has been submitted. There was no request for yen loan.</p> <p>(FY 2003 Overseas Survey)</p> <p>As for the sewage treatment project of nine companies, with the city's introduction of strict regulation against the paper manufacturing/pulp manufacturing industries and the pharmaceutical industry, the city shut down and relocated several companies determined so far and established sewage treatment intended for chemical and electromechanical companies.</p> <p>3. Water Environment Integral Improvement Management Project in Minjiang and Chengdu District The Water Environment Management Center is not in progress at present as a result of not further examining the "Water Environment Integral Improvement Management Project in Minjiang and Chengdu District" after the aforementioned project was completed in March 1997.</p> <p>Basic condition of the water environment integral improvement implemented by the Chengdu City: (FY 2003 Overseas Survey)</p> <p>1. The Integral Improvement Construction for Chengdu City and Shahe was implemented and integral improvement of ecology was implemented for the water channel of the whole basin of Shahe extending over 22.2 km with investment of a little more than 2 billion yuans.</p> <p>2. Integral improvement of water environment was implemented with cities at the nucleus by inputting a little more than 6 billion yuans. Piping lines with cities at nucleus were divided between rain water and sewerage. In addition, three sewage treatment plants with capacity of 100 thousand tons are expected to be constructed.</p> <p>Related Projects: (FY 1999 Overseas Survey)</p> <p>Development of wastewater treatment and waste disposal in Sichuan</p> <p>Finance: World Bank 150 mil. dollars</p>		

# STUDY SUMMARY SHEET

## (D/D)

EAS CHN/S 401/97

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Detailed Design Study on Shanghai Pu-dong International Airport		
<b>3. SECTOR</b>	Transportation / Air Transportation & Airport		
<b>4. TYPE OF STUDY</b>	D/D		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Nikken Sekkei Ltd.		
<b>7. STUDY PERIOD</b>	May.1996 ~ Nov.1997 18month(s) ~		
<b>8. SITE OR AREA</b>	Pudong New Area, Located in the suburb of Shanghai		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1. Airside Civil Works Site Preparation and Earth Work Plan, Drainage, Pavement, Ancillary Facilities 2. Airfield Lighting System 3. Fuel Supply System 4. Fire Fighting and Rescue Facilities [Imp. Period] 3 years. To open the airport on October 1, 1999 was taken as the target date in schedule planning.			

上海浦東國際空港實施設計調查

PRESENT STATUS	Completed or In Progress	Promoting
	Completed Partially Completed Implementing Processing	Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY 1998 Domestic Survey) Finance: 12 Sep. 1997 L/A 40 billion yen. (Shanghai Pudong International Airport Development Project)</p> <p>Construction: (FY 1999 Overseas Survey) Sep.1999 Completed Oct. 1.1999 Airport opened.</p> <p>Profit effects: (FY 2001 Domestic Survey) Resulting from opening of the new airport, the new airport company jointed with the old airport started its operation. Therefore, the plan to shift the organism system of the old airport to the new one was gradually taken, the number of flights which were a few at the beginning of its open are also increasing gradually, and it is functioning as an international gateway airport in Shanghai now.</p> <p>Phase II Construction: (FY 2001 Overseas Survey) Jan.2003~Dec.2004 (FY 2002 Overseas Survey) Preparation for comprehensive regulation and the 2nd of work is underway. Method of procurements will be determined later. (FY 2003 Domestic Survey) Pre-F/S Reporting Review Panel in association with the Phase 2 Construction was held in the middle of August 2003 in Shanghai under the auspices of National Development and Reform Commission, where it was determined that construction of the second runway and associated facilities will be completed by the end of June 2004 and the operational test will be started in 2005. As for the terminal building in response to the Phase 2 Construction, an international competition for the design proposal will be implemented from September 2003, with assessment committee members invited from Japan. The funds required for implementation of the project is expected to be raised domestically. (FY 2003 Overseas Survey) Such works have been in progress as planning of the whole airport terminal area and invitation for international bidding in relation to the construction proposal for airport terminal building. The progress condition is as follows: 1. Construction of flight area and its auxiliary facilities The second phase of the flight area, which has already entered the basic improvement works, is expected to go into full-scale operation from March 2005. 2. Invitation for bidding of the airport terminal area plan and the second phase construction proposal of the airport terminal building The airport terminal building to be constructed in two phases is expected to go into full-scale operation from the end of FY2008. 3. Other facilities Auxiliary facilities such as the flight area and the freight transport area are expected to be expanded in accordance with forecasted flight operation work load and the specific scale is expected to be finally determined after the study on the whole plan is completed.</p> <p>Related Projects: (FY 2001 Domestic Survey) 2001 Aug.: The approach radar control system was commenced to operate. 2001 Oct.: The exclusive apron and terminal building with 320,000 m2 for VIP were completed for the APEC Conference. The terminal building for CAT II was completed 3 years after the commencement of its operation. 2003 scheduled: The high speed train between the airport and Shanghai city (total length is about 30 km) are under construction.</p>		

# STUDY SUMMARY SHEET

## (Other Studies)

**EAS CHN/A 601/97**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	The Hydraulic Model Test for Baishi Dam in Liaoning Province		
<b>3. SECTOR</b>	Agriculture / Irrigation, Drainage & Reclamation		
<b>4. TYPE OF STUDY</b>	Other Studies		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Aug.1996 ~ Sep.1997 13month(s) ~		
<b>8. SITE OR AREA</b>	Baishi Dam Construction Site in Liaoning Province.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			

遼寧省大凌河白石ダム工事に關する実験計画

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued
<p><b>Description :</b></p> <p>Finance: (FY 1998 Domestic Survey) 24 Dec. 1996 L/A 8 billion yen. (Baishi Dam Construction Project in Liaoning Province)</p> <p>Construction: (FY 1999 Overseas Survey)(FY 2000 Domestic Survey) Jun.1996 Commenced Oct.1997 Dam completed 25.Sep.1999 Waters filled in Lower weir Nov.2000 Completed</p> <p>*Contents:Embankment(514m), Capacity(16.45 billion m3), Freeing port mouth(W:12m x 11 places), Bottom(W:4m x L:5.5m x 12 places), 3 Power generators *Progress of situation: (FY 1999 Overseas Survey) 95% of the whole construction is completed. Installation of power generators are under progress. Out of 17,933 residents in dam area, 7,873 residents of 2,342 households have moved out. Water and electricity is available in some areas. Improvement of broadcasting, communication system, and roads are on-going as a part of resident relocation project. *Future prospects: (FY 1999 Overseas Survey) Treatment of extra concrete of dam, Installation of 12 freeing ports and switch gear, Establishment of electric power plant, Relocation of 10,110 remaining residents and its relating projects will all complete at the end of 2000. (FY 2002 Overseas Survey) The Study on environment and socio-economic conditions is to be implemented during the period between June-December, 2003. The Study will be to be financed by Grant Aid and 870 mil. yuan (both are equivalent of 13 billion yen at the current exchange rate).In terms of technical assistance, trainings in Japan (10 trainers each year), and dispatching experts (50 persons in tall) will be requested. By maintaining facilities, it will become possible to extend expiration date for use of Baishi Dam for 10 years, which would stimulate local production activities and increase current profits up to 72.715 bil. yuan.</p> <p>Profit effects: (FY 2001 Domestic Survey) Agricultural water: annual production increase of irrigated rice is about 120,000 tons at the rice paddy with 18,100 ha, annual production increase of reed is about 220,000 tons at the paddy fields Water supply: the amount of newly developed water is 0.26 billion tons annually. Flood control: The safety degree of flood control was developed from 1/20years to 1/50years of the probability at Jin Xian. Power generation: the annual electric energy production is 31 million kWh. Fisheries: Fisheries benefits from the cultivation of freshwater fish at the Baishi reservoir and river crab at the lower basin of Liaoning river. (FY 2003 Overseas Survey) Flood prevention years were increased from 20 years to 50 years. Water supply to Fuxin City and Jinzhou City, irrigation and supply of industrial water to urban areas at the downstream of Dalinghe. The flood prevention criteria intended for 52,693 ha of agricultural land in urban areas and rural areas was increased. The project supplied irrigation water to 13,340 ha of paddy fields and 15,341 ha of reed planted fields, and played a role in supplying irrigation water and industrial water to Panjin and Jinzhou, power generation and fish farming.</p> <p>Japanese Technical Cooperation: acceptance of a trainee (FY 2001 Domestic Survey) 1998~2001 32persons</p>	

遼寧省大凌河白石ダム工事に関する実験計画



# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 101/98

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Eutrophication Control of Tai Lake		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Taihu Basin Management Agency, Ministry of Water Resources	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Kokusai Kogyo Co., Ltd. CTI Engineering Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jan.1996 ~ Jun.1998 29month(s) ~		
<b>8. SITE OR AREA</b>	Area (21,969km <sup>2</sup> ) that is a potential source of pollutant load flowing into Tai Lake.		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1.Installation of secondary sewage treatment facility for domestic wastewater treatment. 2.Effluent load reduction and installation of highly advanced sewage treatment facility for industrial wastewater treatment. 3.Construction of a water environment monitoring and observation facility.			
During the Study, the economic growth rate in the area was over 15%. Assuming that the pollutant generation load is in proportion to the GDP, the inflow load in the Tai Lake was estimated to have doubled in a five-year period, and quadrupled in a ten-year period. Consequently, maintaining the lake water quality at a certain level required tremendous capital. About twice the normal cost for treatment was required as the measures carried out not only targeted organic load reduction, but also the reduction of properties such as nitrogen and phosphorous that impact eutrophication.			

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued
<p><b>Description :</b></p> <p>(FY 1999 Domestic Survey)</p> <p>The F/S was carried out for the establishment of a water environment observation and monitoring system. In this regard, the opinions of the study team and the counterpart agency were in agreement. However, internal conditions (power struggle between the Ministry of Water Resources and the Environmental Protection Bureau) impeded the realization of the study.</p> <p>The Ministry of Water Resources and the Environmental Protection Bureau simultaneously monitor conditions in the Tai Lake, with the latter being financially well off and active in the monitoring work.</p> <p>Although the Ministry of Water Resources tries to compromise to establish an independent network, nothing materialized.</p> <p>Thereafter, the mission from Japan proposed the establishment of a monitoring system for water quality and air pollution in principal districts under the Japanese grant aid program for environmental projects. The proposal also included Tai Lake. The agency in the recipient country in charge of the project was the Environmental Protection Bureau.</p> <p>(FY 2001 Domestic Survey)</p> <p>The implementation agency for the proposed projects of '1.Installation of secondary sewage treatment facility for domestic wastewater treatment' and '2.Effluent load reduction and installation of highly advanced sewage treatment facility for industrial wastewater treatment' is each local government or company and for the project of '3.Construction of a water environment monitoring and observation facility' is the Environment Conservation Agency. The progress situations are unknown.</p> <p>(FY 2003 Overseas Survey)</p> <p>The Water Use Department, which is the C/P organization of these studies, remains to be the main department for water administration and has jurisdiction over all activities relating to water. Since China is currently in the process of reforming water resources management system, the urban drainage management in the basin of Lake Taihu is also under the self-responsibility of the Shanghai City Water Resources Bureau (viz. Water Use Department).</p> <p>The most important benefit is that, with the hydrological ordinance promulgated in China last year, the monitoring data of the Water Use Department (including the data of river-head area for water service) was published on the Internet and enabled the general public to search and browse it.</p> <p>The Water Use Department is also expected to gradually develop the construction of the automatic water quality monitoring system.</p> <p>1. Construction of secondary sewage treatment facility for domestic wastewater treatment.</p> <p>(FY 2001 Overseas Survey)</p> <p>Finance: National budget.</p> <p>Construction:</p> <p>Construction of 29 wastewater facilities were partialy or completely finished. 25 are on-going. The total capacity will reach 2,794,000 ton/day</p> <p>81 more facilities will be constructed in the period of the tenth five-year plan and the capacity will reach 3,913,000 ton/day.</p> <p>2. Effluent load reduction and instalation fo highly advanced sewage treatment facility for industrial wastewater treatment</p> <p>(FY 2001 Overseas Survey)</p> <p>Many industrial firms reached the effluent standards. Clean production is promoted through adjustment of industrial structure and the effluent is being minimized. Also, the elimination process mannual of phosphorous and nitrogen organic matter was tightly restricted for Tai Lake is polluted by organic matter. Fund for construction was procured from local budget.</p> <p>3. Construction of a water environment monitoring and observation facility</p> <p>(FY 2001 Overseas Survey)</p> <p>The Ministry of Water Resources is responsible for construction and Taihu Basin Management Agency is in charge of the implementation of construction. All the data concerning operation after construction will be disclosed to public agencies such as Environmental Protection Bureau to share the information and to provide better public services.</p> <p>The project is under preparation and an application to construct a monitoring and observation facility by Japan's grant aid will be submitted to JICA.</p> <p>(FY 2003 Overseas Survey)</p> <p>Name of the implemented project: Automatic Monitoring System of Water Quality in the Basin of Lake Taihu</p> <p>Fund raising: currently raised domestically with an eye on procurement from overseas is intended.</p> <p>Amount: 110 million yuans.</p> <p>Description: the systems will be constructed at 22 places at the early stage in main water channels that introduce water from Chang Jiangto Lake Taihu, main water channels flowing into Lake Taihu, and water channels in the region of Lake Taihu and at borders of provinces.</p>	

# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 112/98

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Jilin Province Integrated Regional Development Plan in China		
<b>3. SECTOR</b>	Development Plan / Integrated Regional Development Plan		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	State Planning Commission, Jilin Province Planning Commission	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	International Development Center of Japan (IDCJ) UNICO International Corporation		
<b>7. STUDY PERIOD</b>	Sep.1996 ~ May.1998 20month(s) ~		
<b>8. SITE OR AREA</b>	The area from Changchun to Hunchun (46,000sq.km)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>A total of 18 Core Programs were identified which addressed principal development issues facing the area like farmers' organization, livestock development, water resources development, forestry conservation, industrial development, highway construction, and tourism development.</p>			

吉林省地域総合開発調査

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued

**Description :**

(FY 1999 Domestic Survey)

An official delegation led by Mr.Wang Guo Fa, Vice Governor of Jilin Province, visited Japan for two weeks in June 1998 to hold a series of investment promotion seminars in Tokyo, Niigata, Joetsu, Kanazawa, and Nagoya. Accordingly, progress of the project is expected.

(FY 2001 Overseas Survey)

Jilin Province submitted 30 projects for yen loan including the sectors of industry, water supply, urban wastewater treatment, urban waste management, water and soil conservation, environmental improvement, tourism and education through the State Planning Commission. The result of the application has not been informed yet.

(FY 2002 Overseas Survey)

Building facilities for saving water at irrigation districts

Next phase of Study - 2001

Procurement: 1,000 yuan (cost is shared evenly)Period of work: 20th Apr., - 15th Nov., 2002

Outcomes: 4 targeted areas cover existing paddy (2,267ha), newly cultivated paddy (867 ha) and improved irrigated paddy (1,400 ha).

(FY 2003 Overseas Survey)

Projects in progress:

1) Project for Construction of National Large-size High Quality Products and Food Base (Changchun Area)

2) Beef Cattle Development Project in Changchun

Study projects expected to be implemented in the next stage:

1) Changchun - Harbin Area Economic Development Study

Study implementation period: January - June 2004

Fund raising plan: 3 million US dollars worth of grant aid is expected to be requested

Request for technical cooperation of Japan:

Acceptance of Technical Training Participants: 5 -10 trainees. The training on the sustainable development of regional economy will be implemented in 2004.

Dispatch of Experts: 3 - 5 persons. Cooperation to study and planning is desired for a period in 2004.

# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/A 116/98

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Ansai Mountain Area Integrated Agricultural Development Project in Shanxi		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	(provincial committee of science and technology)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Agricultural Land Development Agency		
<b>7. STUDY PERIOD</b>	Nov.1997 ~ Mar.1999 16month(s) ~		
<b>8. SITE OR AREA</b>	The whole study area: 1080km <sup>2</sup>		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>&lt;M/P&gt;</p> <ol style="list-style-type: none"> <li>1. Land utilization.</li> <li>2. Agricultural land conservation.</li> <li>3. Cultivation.</li> <li>4. Livestock.</li> <li>5. Support for farmers.</li> <li>6. Processing and marketing of agricultural products.</li> <li>7. Agricultural/rural infrastructure.</li> <li>8. Afforestation.</li> </ol> <p>&lt;Model area project&gt;</p> <p>The target area was divided into three according to the social, geographical, and topographical conditions.</p>			

中国陕西省安塞县山间地区農業総合開発計画

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 1999 Domestic Survey) Shanxi provincial government is examining how to deal with M/P proposed projects.</p> <p>(FY 2001 Domestic Survey) The Ansai authority submitted the report to the Shanxi provincial government on the matter of all projects in three areas were to be requested as the grant aid projects. However, this matter is not adopted because it will cost 1.76 billion Yen in case all projects are implemented together, and there were no rooms for any projects in FY2001. The grant aid projects as the Center for Forestry and Rice Paddy on a slope, the Village Development Promotion in the case of the Project Type Technical Cooperation Scheme and the Rehabilitation of the Riverside Irrigation Facilities are expected. However, the coordination in the Chinese government is making slow progress.</p> <p>(FY 2001 Overseas Survey) After the study, the two Shanxi provincial agencies, Science and Technology Agency and Foreign Economic Trade Agency, requested the Dept. of Foreign Economic Trade for the implementation of the proposed project. Regarding the request, they received an answer that the amount of Yen loan was limited and it was not available for small-scale projects. However, the provincial government is continuously making efforts to implement the project by yen loan.</p> <p>(FY 2003 Overseas Survey) At the same time with the completion of the "Ansai Mountain Area Integrated Agricultural Development Project in Shanxi" in 1999, the Shanxi Provincial Bureau of Foreign Trade and Economic Cooperation submitted the implementation plan to the Ministry of Foreign Trade and Economic Cooperation in the same fiscal year with the request for implementation under the yen loan from Japan. The aforementioned project has been waiting for its realization so far without entering an implementation stage.</p>	

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 302/98

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Groundwater Development in Tuoketuo County, Inner Mongolia		
<b>3. SECTOR</b>	Social Infrastructure / Water Resources Development		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Institute of Water Resources for Pastoral Areas, Ministry of Water Resources	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Sumiko Consultants Co., Ltd. Yachiyo Engineering Co., Ltd.		
<b>7. STUDY PERIOD</b>	Mar.1997 ~ Mar.1999 24month(s) ~		
<b>8. SITE OR AREA</b>	62 villages within the 3 village communities (Yong sheng yu xiang, Wu shi jia xiang, Hei cheng xiang) in Tuoketuo Country, Inner Mongolia		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>Difference in groundwater quality has been recognized between the northern and southern parts of the study area, which are separated by a major fault running in E-W direction. The groundwater in the northern part is contaminated with excessive arsenic and/or fluorine, at locations in the proximity of the graven structure, which is covered by thick Quaternary beds. Therefore, an appropriate supply system of uncontaminated water should be established taking account of the geological condition.</p> <p>Case 1: Where water sources with satisfactory conditions both in quality &amp; quantity could be assured within nearby village. Case 2: Where water sources with satisfactory conditions both in quality &amp; quantity could not be assured within nearby village.</p> <p>In case 1, it is necessary to construct water source well and pipe lines for local water supply system in the relevant village. In case 2, it is necessary to construct an aqueduct from a water source to the relevant village and to construct a pipeline for a local water system.</p> <p>The construction term consists of 2 stages: 5 years for the improvement stage and 5 years for construction of new water supply system in near future. The overall project term is 30 years including the depreciation period of 20 years after the construction term.</p>			

内モンゴル自治区トクト県地下水開発計画調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY 1999 Domestic Survey) Finance: The beneficiaries are able to share in the expenses for operating &amp; managing water supply system, however they have difficulty to share the cost of facilities construction. Therefore, the inhabitants are looking forward to the subsidy from local government but the plan to implement construction is not certain yet. The procedures for JICA grant aid has already been completed in Ministry of Water Resources, but its aid has not been procured yet until now.</p> <p>(FY 1999 Overseas Survey) The water supply facility model operated without any problem. Residents desire JICA to formulate a further water supply plan. If the project will be implemented, large social and economic effects are expected. At present, local government is trying to collect funds from various routes in order to implement the proposed project.</p> <p>(FY 2001 Overseas Survey) The project has not been realized yet.</p> <p>(FY 2003 Overseas Survey) In China, with implementation of the "National Drinking Water Scarcity Solution Project" with the objective of solving drinking water scarcity for residents and cattle in water-starved areas, the water supply project was implemented in villages that became objects of the water supply project. In TOKUTO province, the Water Supply Project was incorporated into the provincial Drinking Water Scarcity Solution Plan, and consequently the water supply project was implemented in villages that became objects of the project.</p>		



# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 101/99

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Environmental Management Plan for the Environmental Model Zone in Dailian Municipality		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Environmental Protection Bureau of Dailian Municipality, Liaoning Province	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	UNICO International Corporation Japan Weather Association Nippon Koei Co., Ltd.		
<b>7. STUDY PERIOD</b>	Nov.1996 ~ Mar.2000 40month(s) ~		
<b>8. SITE OR AREA</b>	4 central districts in Dalian City(Zhonhshan, Xigang, Shahekou and Ganjingizi)		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1) Cleaner production of Dalian Steel Co. To prevent dust emission by means of replacement small scale aged electric furnaces to new large-scale furnace equipped with dust collector in closed premises.</p> <p>2) Cleaner production of Dalian Cement Group Corp To prevent dust emission by means of replacement of small scale aged coal mills and cement mills to new large scale ones equipped dust emission prevention devices, and save energy by installation of heat generator.</p> <p>3) Cleaner production of Dalian Dyestuff Plant To reduce COD discharge and to save energy by moving of the plant in the city to suburb, and modernization of sodium hydroxide, waste sulfuric acid concentration and di-nitrobenzen process.</p> <p>4) Cleaner production of Dalian Pharmaceutical Plant To reduce COD,SS and bad smell by plant moving to suburb of city and installation of circuit fluidized bed combustion boiler, de-sulphurization process, de-nitration process, dust collector, active carbon treatment process for emission gas, and water treatment process.</p> <p>5) Cleaner production of 2nd phase expansion work of Chunhai Thermo-electrification Plant To replace 27 small-scale boilers to 2 new large-scale boilers and to improve capacity of the boiler installed in 1st phase construction work.</p> <p>6) Cleaner production of Dalian Gas Co. To move the plant from city centers to suburb and change htefuel from coal to LPG.</p> <p>7) Modernization of environmental management To enhance the environmental management by improvement of existing monitoring system bad environmental education facilities, and training of human resources.</p>			

大連市環境モデル地区整備計画調査

<b>PRESENT STATUS</b>	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>Status of Application</p> <p>Environmental management plan prepared by the study have been applied to various issues in Dalian city, such as; Relocating aged factories from urban area, Expansion of environment monitoring system, Promotion of environmental education.</p> <p>(FY 2000 Domestic Survey)</p> <p>Dalian has historically developed as economic and trading center in north east of China and industrialized city. Recently, environmental problem is getting serious in the city due to rapid urbanization. So, the Chinese Government decided four central districts in Dalian City as Environmental Model Zone, and requested to the Japanese Government to conduct a study for formulation of environmental management plan for it. The study was carried out from November 1996 to March 2000 and during the period the study team visited the city seven times for field survey. The study was cooperated with Kitakyushu city, which is a friendship city of Dalian city for long time, and its know-how was efficiently put in the recommendation especially in the field of political management system.</p> <p>The study covers wide area and details are as follows;</p> <p>1) Monitoring and analysis of meteorology and air quality, water, deposit and living things in Dalian Bay, and noise at main traffic roads. 2) Sampling and analysis of emission gas and discharged water from plants(point sources of pollution) and sewage water from residential houses(apartment). 3) Measuring and analysis of emission gas from vehicles(non-point source). 4) Identification of present environmental situation, analysis of environmental pollution, and formulation of environmental pollution estimation model(satellite image analysis and simulation model). 5) Identification of presents socio-economic development and study on future industrial framework and energy changeover plan. 6) Assuming of socio-economic development framework and estimation of future environmental condition. 7) Setting of future(at 2010) environmental target figures and identification of the theme to be investigated. 8) Survey on present situation of collection and middle and final treatment of the solid waste from plants, hospitals and residential houses, study on the theme and countermeasures, and making a recommendation for improvement plan. 9) Survey on present situation of organization, institution and environmental education, and making recommendation for the mprovement plan. 10) Study on the items to be implemented in a political field and summarize in the modernization plan for environmental management. 11) Formulation of action plan for important project in the items of countermeasures recommended. 12) Pre-Feasibility study and EIA for the priority projects selected from the important projects. 13) Formulation of the environmental basic plan including whole study results. Formulation of "Dalian Basic Plan for Environmental Pollution Protection", which is useful for Dalian Environmental Protection Bureau to prepare the Basic Plan by themselves. It was used in 2nd seminar as a textbook.</p> <p>(FY 2001 Domestic Survey)</p> <p>Finance: 28 Mar.2000 L/A 5,315 mil. Yen Dalian Environment Model City Project Part I, 30 Mar.2001 L/A 3,202 mil. Yen Dalian Environment Model City Project Part II</p> <p>1. Improvement of the plant for which F/S was implenented.</p> <p>(FY 2001 Overseas Survey)</p> <p>1) Dalian Pharmaceutical Plant: Improvement and relocation were completed. Procured 136 million yuen by land transfer and joined the domestic stock market. 2) Dalian Dye Plant: Improvement and relocation were completed. Dalian Chemical Industry Company payed the relocation expense, 180 million yuen in advance. 3) Chunhai Thermoelectric Plant: Pollution reduction improvement was completed. Fund was procured by themselves. 4) Dalian Steel Plant: Pollution reductin improvement of electric furnace was completed. Fund was procured by themselves.</p> <p>2. Urban wastewater treatment</p> <p>(FY 2001 Overseas Survey)</p> <p>1) Construction of MA RAN River wastewater treatment plant was completed. Finance: 330 million yuen (including 83 million yuen loan from World Bank)</p> <p>2) Construction of CHUN RYU wastewater treatment plant was completed. Finance: 90.66 million yuen (including 34 million yuen loan from World Bank)</p> <p>3) Construction of HAKKESO wastewater treatment plant was completed. Finance: BOT (procured by themselves)</p> <p>(FY 2002 Overseas Survey)</p> <p>Contamination and maintenance of electric furnace of Dalian Steel Cop: reforming old furnace, abating emission of smoke and grime (the period 20th of March-June of 2004, 12 mil dollars). Dust collector in cement factories: in renovating facilities, clean production will be launched,The 1st phase of Environmental Protection Project for Dalian pharmaceutical factories: The factory is moved and transformed to actualize clean production (Financed 6.37 mil. dollars). Establishment of the Model Center (requested): establishing a model center for environmental education which serves as contact between environmental educational enlightenment and clean production in Northern Region.</p> <p>3. Air pollution reduction</p> <p>(FY 2001 Overseas Survey)</p> <p>The result of the joint research between China and Japan, the sulfur dioxide inhibition method , was utilized and the SO2 concentration rate in the air decreased from 60mg/m3 (1997) to 30mg/m3 (present).</p> <p>4. Proviton of equipments</p> <p>(FY 2001 Overseas Survey)</p> <p>Through the study, the Japanese side provided equipments of approx. 20 million yuan. Among the equipments, five automatic monitoring stations are working properly. Based on the stations, the Environmental Protection Bureau constructed five more new stations with own procured fund. However, some equipments are not exchangable due to lack of spare parts.</p> <p>5. Others</p> <p>(FY 2001 Overseas Survey)</p> <p>Dalian City was highly evaluated in its environmental protection activities and selected as one of the world top 500 cities by the United Nations.</p> <p>(FY 2004 Overseas Survey)</p> <p>Chongqing Tianyuan Chemical Industry District Thermal Power Plant Expansion Project (October, 2002 - January 2004)</p> <p>Reducing discharges of 1,610 ton sulphur dioxides, 5,800 ton fine particles, and 80 ton NOx annually.</p> <p>Anti Daiko group made Thermo-electrification Furnace Pollution Project (March 2002 - July 2004)</p> <p>Introduced a 40 ton AOD furnace, square alloy casting dust-proof system. Dust-proof has accomplished 50mg/square metres. Realised reduction of 1,536 tons of dust per year.</p> <p>(FY 2005 Overseas Survey)</p> <p>No information to be specifically mentioned.</p>	

# STUDY SUMMARY SHEET

## (M/P+F/S)

EAS CHN/S 201/99

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Study on Integrated Countermeasure Plan for the Environment of Maotiao River Basin (Lake Hongfeng and Lake Baihua) in Guizhou Province		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Central Consultant, Inc.		
<b>7. STUDY PERIOD</b>	Dec.1997 ~ Jul.1999 19month(s) ~		
<b>8. SITE OR AREA</b>	Maotiao River Basin (3,246km <sup>2</sup> )		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>M/P:</p> <p>(1) Water utilization: Effective utilization of water resource. Targeted industrial water recycling rate: 75%.</p> <p>(2) Targeted water quality standards : Lakes - apply the surface water standard category II, Rivers-apply the category III, Total mercury content in irrigation soil - apply the Japanese standard (3mg/L), Industrial waste water - apply the waste water disposal standard.</p> <p>(3) Ecosystem, Landscape, and Hydrophilicity</p> <p>Ecosystem - Conserve natural environment and biodiversity in the basin while maintain the balance of economical activities.</p> <p>Landscape/Hydrophilicity - Conserve natural landscape for tourism promotion.</p> <p>Based on the above, 21 measures were selected as the measures for water quality conservation, mercury contamination prevention, ecosystem conservation, and the related organization/system improvement.</p> <p>(1) Works for early stages</p> <p>Sewage disposal system of residential houses. Rationalization of factory effluent utilization. Waste water disposal system improvement for the targeted four factories for F/S. Prohibition of fish farming in the lakes. Waste water disposal system development in rural areas. Mercury contamination prevention. Ecosystem survey and conservation management planning.</p> <p>(2) Preparation for implementation</p> <p>Establishment of Lake Hongfeng and Lake Baihua environmental management committee. Water environmental monitoring. Organization enforcement for the environmental protection. Man-power development. Enforcement of the sewage and waste system.</p> <p>(3) Future study targets</p> <p>Rationalization of industrial production systems. Reduce mercury contamination in Guizhou. Undergroundwater conservation and development. Review water quality standards.</p> <p>F/S:</p> <p>Formulate projects for improvement of waste water disposal system of the targeted four plants below.</p> <p>(1) Organic Chemistry Plant in Guizhou - Acetic acid production process: utilization of mercury-free production system</p> <p>(2) Chemical Fertilizer Plant in Guizhou - Application of ammonia stripping method for carbonate ammonia waste water treatment.</p> <p>(3) Chemical Fertilizer Plant in Hebei - Application of closed system for synthesis ammonia plant waste water treatment. Fluorinate process: Recommendation of coprecipitation techniques</p> <p>(4) Power Plant in Qingzhen - Deacidification system by sulfuric acid for waste water from ash disposal site. PH control after the treatment.</p>			

貴州省猫跳河(紅楓·百花湖水域)流域環境総合対策計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (FY2000 Domestic Survey) There is no information after the completion of the project.  1. Organic Chemical Plant in Guizhou (FY 2001 Domestic Survey) Finance: Mar.28,2000 L/A 6.266 Billion Yen 'Guiyang environment Model City Project ' Mar.30,2001 L/A 8.169 Billion Yen 'Guiyang environment Model City Project II'  2. Chemical Fertilizer Plant in Guizhou (FY 2001 Domestic Survey) It was not approved as the JBIC Project because the loan scale was small.  3. Power Plant in SEITIN (FY 2001 Domestic Survey) It was not approved as the JBIC Project because the loan scale was small.  4.Countermeasures Plan for Environment and Water Pollution Maotiao River Basin in Guizhou Province (FY 2002 Overseas Survey) The project was integrated into JBIC's Yen Project from 2002-2004 (around 100 mil.dollars). The work is to be started in 2004, and lasted for 3 years. (FY 2003 Overseas Survey) Next stage study: China desires implementation of the project in 2004 or 2005 with the study expense funded by JICA in addition to its own fund but It has not made the request yet. Details of study: Systemicity and feasibility of the water environment improvement method of the Maotiao River Basin in the Guizhou. Dispatch of experts is desired.  5. Other Project (FY 2001 Domestic Survey) Sewage disposal plant and rationalization of factory effluent utilization: implementing by the own cost Ecosystem survey and conservation management planning: unknown Water environment monitoring: implementing by the own cost Organizational enforcement of the environment protection direction: personnel cut by the government was made Enforcement of the Sewage and waste system: not yet implemented  Profit effects: (FY 2002 Overseas Survey) Through project implementation, Kweichow province will contribute to regional economic development, social progress including quality control of water resources, as well as improvement in life standards including some sense of security, provided safe drinking water.  Situation: (FY 2001 Domestic Survey) The projects are implemented based on this Study. Three Plants are under reexamination from the viewpoints on rationalization and scale expansion except the Organic Chemical Plant among the Plants on F/S. The measure for mercury pollution is made partially by soil covering. The joint experiment for the soil improvement by the low temperature heat treatment are preparing to be requested as the grant aid by JICA.  (FY 2001 Overseas Survey) Fund was procured from various sources. High temperature mercury removal method was used for contaminated land, however, it was not successful. Therefore, the low temperature mercury removal method proposed by the study is being examined.  (FY 2004 Overseas Survey) Status of the measures taken against 4 major pollutant source related to the plan of immediate measures prepared in this study are as follow: 1. Organic Chemical Plant in Guizhou: Measures against mercury pollution are taken by using Yen Loan 2. Chemical Fertiliser Plant in Guizhou: Construction of new chemical fertiliser production system is in progress using a loan from ADB 3. Power Plant in Seiten: Measures against waste water are taken using its own capital. 4. Chemical Fertiliser Plant: Measures against water waste pollution are taken, using Gov. allotment and its own capital.		

# STUDY SUMMARY SHEET

## (M/P+F/S)

**EAS CHN/A 223/99**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Taihang Shan Integrated Agricultural Development Project in Hebei Province		
<b>3. SECTOR</b>	Agriculture / (Agriculture in) General		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nippon Koei Co., Ltd. Hokkaido Engineering Consultants Co., Ltd.		
<b>7. STUDY PERIOD</b>	Jun.1998 ~ Oct.1999 16month(s) ~		
<b>8. SITE OR AREA</b>	4 Priority Areas, 6 Villages		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
M/P: 17 Development models for participatory implementation approach 3 Public investment projects pre-requisite of the participatory projects 4 programs to support implementation of the participatory projects F/S: 6 participatory projects, 3 public investment projects, 4 programs to support implementation of the participatory projects			

河北省太行山農業総合開発調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b> (FY 2000 Domestic Survey) No information available.</p> <p>1. Farmers participatory projects (FY 2001 Overseas Survey) The following activities are on going. - 4 science and technology model areas are being selected related to mountain district development. - Preparing an application for yen loan. (FY 2002 Overseas Survey) 2 mil. yuan from Ministry of Science and Technology, 3 mil. yuan has been collected so far, combined with 6 mill. yuan of farmers' private funds.</p> <p>2. Public Works 1) Dam drinking water project by Japan's aid (FY 2001 Overseas Survey) The Ministry of Foreign Trade and Economic Cooperation has submitted an application to JICA and is waiting for approval. (FY 2002 Overseas Survey) The next phase of Study: in practice Request for Grant Aid, amounting for 5,110 mil. yuan (the cost will be shared evenly) was submitted to the Japanese Govt. (FY 2003 Overseas Survey) As of FY2003, the request for a grant aid has been submitted to JICA through the former Ministry of Foreign Trade (also approved by the present Ministry of Commerce)</p> <p>2) Underground water environmental research (FY 2001 Overseas Survey) The Ministry of Science and Technology applied for a joint research with Japan, however, it has not been approved yet. The Chinese side has already spent two years from 2000 to 2001 for the research project with Japanese experts joined the project. A request for dispatch of Japanese experts was submitted to the ministry in 2002. (FY 2003 Overseas Survey) 2001 - 2003: Dispatch of experts (3 persons including personnel from Chiba University) was realized and annual studies and research activities were conducted in the mountain area of Taihang Shan.</p> <p>3) Farmers market project (FY 2001 Overseas Survey) The application has been submitted to the Ministry of Science and Technology. Japan's aid is expected and approval is awaited.</p> <p>3, Farmers support project (FY 2001 Overseas Survey) The project has not implemented yet. (FY 2003 Overseas Survey) 1) The request for yen loan was continuously made in 2003. 2) Based on the final report of the study, Hebei Mountain Area Economy and Technology Development Office prepared the "Agriculture, Science and Technology Development Plan in Hebei Mountain Area" (2003-2005-2010), which the aforementioned office is expected to implement the plan by bringing concerned experts together from 2004 under the leadership of the Mountain Area Economy and Technology Development Office. The framework is likely to be expanded based on four development zones where the project has been previously implemented into dozen or so plantation areas in Taihang Shan and eight industries in Yanshan. The gross investment amount is 1.91 billion yuans, of which 3 million yuans, expected to be input from the provincial government from 2004, will be used to attract investment from various fields as a lead aiming for joint implementation.</p> <p>(FY 2004 Domestic Survey) No information to be specifically mentioned.</p> <p>(FY 2004 Overseas Survey) Hebei province has set forth 4 points in improving the living condition of 30 thousand farmers in 18 villages of the target water irrigation area. 1) To implement construction of an asphalt-paved roads to each villages. Construction completed for 12 villages in the end of 2004. 2) To construct water container for household. To prepare for a water shortage in dry seasons by containing rainwater. Presently completed for 70 percent of the household. 3) To implement actions for reforestation of arable land. To improve the ecosystem. 4) To train and assist farmers in popularising "water efficient farming". In addition, to introduce drought resistant species. Other than these, projects such as development of wasteland within project area, damming of rivers, land generation, and dam construction for village and land protections are in progress. The objectives of the above projects are to improve the environment and to overcome poverty of the farmers.</p> <p>(FY 2005 Domestic Survey) No information to be specifically mentioned.</p>		

# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/S 302/99

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Study for Road Network Development Plan in Changsha City		
<b>3. SECTOR</b>	Transportation / Road		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	Construction Committee, Changsha City	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Fukuyama Consultants Co., Ltd Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Jul.1998 ~ Oct.1999 15month(s) ~		
<b>8. SITE OR AREA</b>	Changsha City, Hunan Province		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1. Road improvement plan in Changsha City by the year 2010 2. Proposed priority projects(F/S) 1) East-side section of River Side Road(24.90km) 2) West-side section of River Side Road(20.63km) 3) Rodo-Bridge and its approach road(2.99km)			

長沙市道路整備計画調査

<b>PRESENT STATUS</b>	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled

**Description :**

Situation:

(FY 2000 Domestic Survey)

The proposed projects in this study, namely construction projects of the East-side Road and West-side Road and Rodo- Bridge, were approved in the Counseling Committee Meeting of Changsha City Government.

The Construction Committee of the Changsha City Government has already asked the Japan Bank for International Cooperation (JBIC) to finance the construction projects of River-side Road based on the decision of Counseling Committee Meeting.

Section between Syoko No.3 Bridge and West Lake Road of the East-side Road has been constructed by their own funds.

(FY 2001 Overseas Survey)

The application for yen loan was submitted in the end of 1999, however, it has not been approved yet.

1. East-side section of Riverside Road.

(FY 2001 Overseas Survey)

Finance: Own fund.

Construction : Completed.

2. West-side section of Riverside Road.

(FY 2001 Overseas Survey)

Finance: Own fund.

Construction: Will be completed in Oct. 2002.

3. Roudou Bridge and its approach road.

(FY 2001 Overseas Survey)

Finance: Own fund.

Construction: On-going. The roads were partially completed.

4. River side road

Subsequent studies

2003

(FY 2004 Domestic Survey)

No information to be specifically mentioned.

(FY 2004 Foreign Survey)

The project is till 2003 and has already been completed.



# STUDY SUMMARY SHEET

## (F/S)

EAS CHN/A 304/00

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	The Study on Yellow River Basin Agriculture and Fisheries Development		
<b>3. SECTOR</b>	Fishery / Fishery		
<b>4. TYPE OF STUDY</b>	F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	(Central Level) Department of Agriculture (Provincial Level) Shanxi Provincial Water Resources Agency (Regional Level) Yuncheng Administrative Regional Water Resources Department (District level) Yondji and Ruicheng	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Overseas Agro-Fisheries Consultants Co., Ltd. Sanyu Consultants Inc.		
<b>7. STUDY PERIOD</b>	Mar.1999 ~ Mar.2000 12month(s) ~		
<b>8. SITE OR AREA</b>	Yondji district (3 areas) and Ruicheng district (5 areas), Yuncheng region, Shanxi Province		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1. Agriculture & Fisheries Technological Development Plan 1) Aquaculture Farms 2) Village roads 3) Electric lining 4) Drainage canals  2. Agriculture & Fishing Farmers Support Plan 1) Freshwater Fish Hatcheries (Yondji and Ruicheng) 2) Fish Feed Factories (Yondji and Ruicheng) 3) Fisheries Technology Center (Yondji) 4) Equipment Center (total 8 sites, each at the projected sub-districts)			

黄河沿岸漁業総合開発計画調査

PRESENT STATUS	Completed or In Progress  Completed Partially Completed Implementing Processing	Promoting  Delayed or Suspended  Discontinued or Cancelled
<p><b>Description :</b></p> <p>(FY2001 Domestic Survey) Based on the results of this study, the government of P.R. China has been trying to coordinate towards the earliest Implementation by loans from Japan Bank for International Cooperation (JBIC), but no progress has been observed as of today.</p> <p>(FY2002 Domestic Survey) Shanxi Province shows a positive attitude toward implementation of the project. The draft of request for grant aid was allegedly submitted to the Central Govt. of China (Agricultural Dept.). The progress/result of discussion within the govt was not fully known. Though perhaps, there would be a high possibility that the project will be carried forward operation, the policy direction of govt. of China remains ambiguous at the moment. Therefore, even if the request is submitted, it is unclear whether its details are compatible with JBIC's aid policies towards the country (focused on environment protection and poverty alleviation).</p> <p>(FY2002 Overseas Survey) It would be essential to dispatch Japanese specialist for 2nd phase of Study. Moreover, the Grand Aid is to be proposed for operational cost. The proposal will be prepared in FY2003, and submitted for FY 2004. The Ministry is examining research plan on agriculture/fishery and environmental protection in the Yellow River coastal area.</p> <p>(FY2003 Domestic Survey) Because realization of financing is likely to be continuously difficult from the progress hitherto, it is considered desirable to revise the requested project as needed and prepare the ground for the project toward systematization by Dispatch of Experts (for a short time of approximately six months) as described in the "Study by Overseas Offices in FY2002".</p> <p>(FY2003 Overseas Survey) 1) Culture ponds of 220 hectares as a standard have been already developed and one breeding place for juvenile fish that makes use of the waste heat of power generation was constructed. 2) Future development of coastal fishery in the Yellow River will chiefly aim at quality enhancement. In terms of construction, for example, existing culture ponds will be modified to raise the level higher than a standard culture pond and develop it into what will serve as a model, and no new construction is expected. 3) The modification of culture ponds need financing from Japan and a grant aid is desired.</p> <p>(FY 2004 Overseas Survey) Refer 2003 survey results.</p> <p>(FY 2005 Domestic Survey) No information to be specifically mentioned.</p>		

# STUDY SUMMARY SHEET

## (M/P)

**EAS CHN/S 112/01**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	The Study on Improvement of Marine Environmental Monitoring System for the Pearl River Estuary		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	State Oceanic Administration (SOA)	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	UNICO International Corporation		
<b>7. STUDY PERIOD</b>	Mar.2000 ~ Sep.2001 18month(s) ~		
<b>8. SITE OR AREA</b>			
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1.Satellite land surveying and field observation and admeasurements, 2.Maritime survey, survey on conditions during wet season, and drought period, and usual conditions, and 3. Field survey/research.			

珠江口海域環境モニタリング整備計画調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY 2002 Domestic Survey)          SOA recognizes the low probability that JICA cooperates SOA project again although SOA expects assistance to the next marine survey project driven by SOA.          Guangxi and Beihai authorities contacted the study team to seek a possibility of marine survey project in Beihei coast. Their reason to request assistance is that Guangxi dose not have financial source to invest in environment due to its low standard of living although survey and measures are urgent needs in the sea with mangrove and coral reef due to its serious pollution.          Participants in the study meeting of "Comprehensive Environmental Plan of Pearl Rive Estuary" showed high interest in activities of environmental conservation in Seto Inland Sea of Japan and the topic of "total amount regulation" introduced by the study team. It is worth considering dispatch of short- or long-term experts who have such organizational and institutional know-how if there is a request because the dispatch would contribute a lot in improving monitoring in Pearl River Estuary.          Chinese engineers will be able to make the best use of the technologies transferred in the study because of their high level skills. However, there is a possibility that China requests short-term expert dispatch in the future on treatment of chemical substances such as dioxin and endocrin on simulation technology in unique sea like Shenzhen which are not serious issues yet in China.</p> <p>(FY 2002 Overseas Survey)          Environment Assessment Center for the State Oceanic Administration has carried out "An Assessment on Environmental Quality in Pearl River Estuary" in 2002. This Study set 44 assessment points. The assessment on water quality, low quality and marine life has started in May, August, and October respectively. The assessment will be continued in 2003.</p> <p>(FY 2004 Domestic Survey)          Neither a concrete proposal equivalent to the subsequent study, nor related plans has been prepared. This study is to prepare a monitoring plan to be conducted continuously taking into account the local environment status, which does not include a proposal for subsequent studies including improvement of facilities using a Yen loan. Although system development to utilise monitoring results of the target area was proposed in this study, which requires sufficient amount of fund, this project has completed with a confirmation that the SOA, the counterpart, and other Guangdong province government agencies will collaborate to proceeding the issue.          Although use of Yen loan has been considered other than a Chinese budget, China is continuing its own monitoring, which there are no request made for a Yen loan.</p> <p>(FY 2004 Overseas Survey)          No information to be specifically mentioned.</p> <p>(FY 2005 Domestic Survey)          No information to be specifically mentioned.</p>	

# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 113/01

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	The Study for Improving the Housing Finance Reform		
<b>3. SECTOR</b>	Development Plan / (Development Plan in) General		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	People's Bank of China	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Nomura Research Institute		
<b>7. STUDY PERIOD</b>	Mar.2000 ~ Mar.2002 24month(s) ~		
<b>8. SITE OR AREA</b>			
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1.Integration of small Housing Provident Fund Management Centers. 2.Development and reinforcement of training programs. 3.Standardization of Housing Provident Fund Management Center's administration procedures and management systems. 4.Promotion of Asset Liability Management in Housing Provident Fund Management Centers and reinforcement of the supervising functions by the central government. 5.Management of funds in larger area 6.Independent operation of large Housing Provident Fund Management Centers 7.Increasing control of housing policy by the central government 8.Increasing housing policy funds and political loans by the central government 9.Aligning Housing Provident Fund Management Centers. with local government housing planning 10.Establishing Mortgage/Guarantee Systems 11.Developing Housing information system			

住宅金融制度改革支援調査

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued
<p><b>Description :</b></p> <p>(FY 2002 Domestic Survey)  The eleven major projects listed in II can be categorized into three types.  -1 through 4: Short-term projects  Concerning the short-term proposals, Ministry of Construction in China announced that the Ministry decided to study the feasibility of system integration and other reforms in June 2002.  -5 through 9: Long-term projects  These projects will be considered for implementation once the short-term projects are completed and the new systems are established.  -10 and 11:  Regarding 10, a Japanese electronics manufacturer has been conducting a feasibility study on the integrated information system of Housing Provident Fund Management Centers in cooperation with JBIC.  Concerning 11, a Japanese real estate information provider also has shown strong interests in the housing market information system and will start the study in near future in China</p> <p>(FY 2003 Domestic Survey)  Of the "chief proposed projects" described in the FY2002 Follow-up Studies, in the JBIC's "housing finance information system improvement project", that started in March 2003, along with indication of problems and presentation of preparation methods based on the actual conditions of the business flow of the public housing finance system, a new system concept was formulated with Chongqing as a target city. Also in this connection, a specific estimate of investment scale and evaluation of profitability were implemented. We are expected to accept technical training participants (4 people) are expected to be accepted from Chongqing Municipal People's Government in Japan to provide them with trainings at the Ministry of Land, Infrastructure and Transport and the Government Housing Loan Corporation within this fiscal year.  On the other hand, the final report of this study by the study committee was brought into publication in Chinese under responsibility and editing of the CP, The People's Bank of China (with approval of the JICA Peking Office).</p> <p>(FY 2003 Overseas Survey)  The studies are receiving widespread attention and highly regarded as useful in the housing loan reform policy of China. Among others, the study results in relation to the project in question are supported by the People's Bank of China and are likely to be utilized in establishment of a future policy.</p> <p>Technical cooperation of Japan (Acceptance of Technical Training Participants):  (FY 2003 Overseas Survey)  Trainee received: 3  Technical fields: The housing loan system of Japan, etc.  Period: 20 days from March 2002</p> <p>(FY 2004 Domestic Survey)  No information to be specifically mentioned.</p> <p>(FY 2004 Overseas Survey)  No new progress.</p> <p>(FY 2005 Domestic Survey)  No information to be specifically mentioned.</p>	

# STUDY SUMMARY SHEET

## (M/P)

EAS CHN/S 114/01

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	The Study on Urbanization of Rural Districts (Haichen City)		
<b>3. SECTOR</b>	Development Plan / Integrated Regional Development Plan		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>	The State Development Planning Commission, the Development Planning Committee of Jiangsu Province	
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	International Development Center of Japan (IDCJ) Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	May.1999 ~ Nov.2001 30month(s) ~		
<b>8. SITE OR AREA</b>	Haichen City of Liaoning Province, Jiangsu Province, 8 pilot cities for urbanization project		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
<p>1) Agriculture: enforcing fruit marketing in the Southeast mountainous area, water-saving agriculture project.</p> <p>2) Industry: intensification of SMEs, reestablishment of magnesia material processing industry.</p> <p>3) Commercial and distribution system: developing the pilot district as a shopping street in Haicheng City, Establishing wholesale fish market, reactivating clothing market in Seiryu District</p> <p>4) Transportation: developing the by-pass function of west side of the loop road in Haichen City, widening Kanno-Seiry-Haichen Route of Kaiko Line, Construction inner loop road.</p> <p>5) Environment and water resource: Haichen River rehabilitation project</p> <p>6) Urban Development: Redevelopment project of the central area, afforestation project in Haichen River Park, developing area on river banks, transfer and integration of administrative functions, improvement of housing environment for low income residents</p> <p>7) Overall developing fruit-line project</p>			

郷村都市化実験市(海城市)総合開発計画調査

PRESENT STATUS	<p>In Progress or In Use</p> <p>Delayed</p> <p>Discontinued</p>
<p><b>Description :</b></p> <p>(FY2002 Domestic Survey)</p> <p>The guidelines, recommended in the Study have been shared among other concerned parties in Nanjing, Shanghai and Guangzhou. Additionally, the government has submitted request for preparation of development plan in medium-sized city in the Southern area.</p> <p>(FY 2002 Overseas Survey)</p> <p>For the traffic sector, each project based on the plans presented below is in progress in Haichen city.</p> <p>2001: Constructed western outer circular road: 14.2km, Newchwang - West forth: 10.3km</p> <p>2002: Chi highway: 14.2km, millennium bridge</p> <p>2003: Eastern circular road 9.078km, Ijyo line: 25.5km</p> <p>2004: Suejyo line 10km</p> <p>2005: Yuhoi line 15km</p> <p>Finance: Funded from the government and the municipality.</p> <p>Status of progress: Newchwang - West forth: improvement, To be constructed and used i 2001 construction. Started to be used from 2001. Millenium bridge and Chi highway: Completed in 2002. Eastern circular road: Completion planned in October 2003. Ijyo line: Construction planned. Suejyo and Yuhoi line will be conducted according to the district road development plan.</p> <p>(FY 2003 Domestic Survey)</p> <p>Following the outcome of the project, western administrative official training and western national development training were conducted in March 2003. In addition, Strategic Study for Development of Medium-Sized Cities in the Western Region has been implemented from May 2004.</p> <p>(FY2003 Overseas Survey)</p> <p>1) Agricultural sector: Project for strengthening the marketing for fruits of the mountainous area in the Southeast region: in urban areas of Haichen City, in addition to establishment of a market especially for fruits(wholesale market) , general markets have been established in 64 places. The sale of fruits is intended for domestic markets.</p> <p>Water saving agriculture project: The water-saving irrigation project for agriculture was implemented from June 1998 and completed in October 2001. The area that realized water saving reached 4800 hectares in three years.</p> <p>2) Commercial sector: A concentrated industrial development ward is expected to be constructed with an eye on xiangzhen companies scattered over Haichen and companies in urban areas of Haichen City.</p> <p>3) Haichen River Rehabilitation Project: After commenced on April 1, 2001, the construction has entered the phase where water is dammed in stages. Under the circumstances, one rubber-made dam to dam accumulate surface water, one unit of dam to dam service water and one unit of dam to accumulate the service water have been already completed, which have formed an artificial lake of 660 thousand m2 in water area that can accumulate 920 thousand? of water. The implementation will enable use of surface water of the Haichen River, which will allow solution of the water pollution problem.</p> <p>4) Traffic sector: -Project for strengthening the function of the Haichen City Loop Road West Side Bypass Passage: the total investment amount is 146 million yuans, of which the bank loan is 18 million yuans and the self-financed funds of Haichen City is 48 million yuans. The project was commenced in March 2000 and completed in October 2001, and the roads have been entirely opened.</p> <p>-Road Width Expansion Project for Urban Areas and Haichen along Expressway Lines: construction of the Haichen Expressway Line and expansion of road width in urban area of Haichen were determined. The total investment amount is 30 million yuans, of which allowance from the senior-level administration is 12 million yuans and the self-financed funds of Haichen City is 18 million yuans. The project was commenced in May 2000 and completed in May 2001, and the roads have been entirely opened.</p> <p>-Central Circular Road Construction Project: the project was implemented with the city government's investment of 20 million yuans and has already completed.</p> <p>-Urban Area Central District Redevelopment Project: the project was implemented with the city government's investment of approximately 10 million yuans has already been completed.</p> <p>5) Improvement of urban areas: -Haichen River Park Greening/Riverfronts Improvement Project: the city government will improve the construction of the Haichen River Park by investing 60 million yuans, and will complete it in two construction phases. The first construction phase has been already completed and the second construction phase is expected to be completed in 2003.</p> <p>-Low income housing complex function improvement project: the city government will standardize low income housing complexes to standardize the holding area in the new housing based on the area in the existing housing and provide appropriate allowances. The program intends to improve the housing condition of low-income groups.</p> <p>6) Overall: Project for new construction of fruit processing and production lines: China campany constructed a production line of fruit juice by inputting 17 million yuans. This line has enabled production of 8 tons of fruit juice per hour and 10 thousand tons of fruit juice in five months.</p> <p>Although the project is not at the stage of making a formal financing application to main dealing banks or related financial institutions, economic advisors of the government issued an alert relating to the national debt ability. They indicated that the nation does no have enough debt ability to complete the whole project. In the light of this point, increase of domestic production and recovery of economic growth are needed. It is expected that improvement of the condition will lead to enhancement of the debt ability, everything will turn for the better, and overseas loan enough to implement all stages of the project will become obtainable.</p> <p>At present, efforts have been made to acquire economic grant aid for part of the projects listed in the first phase study. The examples include the afforestation program and the agroforestry system intended for small-scale producers.</p> <p>(FY 2004 Domestic Survey)</p> <p>No changes what so ever.</p> <p>(FY 2004 Overseas Survey)</p> <p>1 Magnesia material processing reestablishment project: Haichen Lien group hi-tech fireproof material project has started in early 2003, which 110 million RMB will be invested. Presently, phase 1 construction has completed, which in part are already starting production.</p> <p>2. Haichen city ward business model area construction plan: 1) Yamato plaza, building area, 24,000 square meters. 140 million RMB was invested for new construction, which will start from early 2004. Now in progress. 2) Kyorin group. 10 million RMG was invested for a new shopping centre construction. Area, 24,000 square metres. Completion in November, 2004.</p> <p>3 Development of central Haichen: Construction of Haichen Osteopathy Hospital complex building. 35 million RMB was invested and construction will start in early 2003. Operation from the end of 2004</p> <p>(FY 2005 Domestic Survey)</p> <p>The study has prepared urbanization plan as well as Haichen comprehensive development plan. In the second year, focus was especially on the later plan, which has taken up Jiangsu province as a model to consider provincial urban policy and organization both from small and medium, and large and medium city perspectives. The study has also prepared urbanization strategy for Jiangsu province, which has been reflected to urbanization guideline. In the course of preparing the provincial development plan, Jiangsu city have adopted strategies considered and prepared in the mentioned study.</p>	



# STUDY SUMMARY SHEET

## (M/P+F/S)

**EAS CHN/S 210/01**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Study for Public Transportation Improvement in Chendgu city		
<b>3. SECTOR</b>	Transportation / Urban Transportation		
<b>4. TYPE OF STUDY</b>	M/P+F/S		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	ALMEC Corporation Chodai Co., Ltd.		
<b>7. STUDY PERIOD</b>	Mar.2000 ~ Jul.2001 16month(s) ~		
<b>8. SITE OR AREA</b>	Central area of Chengdu City		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			

四川省成都市公共交通システム整備計画調査

PRESENT STATUS	Completed or In Progress	Promoting
	Completed	
	Partially Completed	Delayed or Suspended
	Implementing	
	Processing	Discontinued or Cancelled
<b>Description :</b> (FY2002 Overseas Survey) The proposed projects of the Study were integrated into the Urban Transportation Plan in Chengtu. Nothing was determined with regards to fund procurement.  (FY2002 Domestic Survey) There is no information available on the current situations of this project .  (FY2003 Overseas Survey) Public roads and private roads or semi-expressway will be opened on the assumption that conditions are prepared for new construction and reconstruction of roads aiming for successive construction of expressway networks. As for funds, government investment and private investment are supposed to be introduced. With acceleration of city construction in Chengdu City, urban area has been gradually expanded, newly constructed housing complexes are gradually increasing and establishment of road network construction is gradually getting improved. As citizens who used to live in the center of the city are gradually relocating to newly constructed housing complexes, civil needs for public transportation system are rapidly increasing. The government is intending to emphasize improvement and investment in public transportation system. Details of traffic-related projects already implemented in China are as follows. 1.Urban transportation project 2.Construction project of nucleus stations for public transportation 3. Roads exclusively for traffic were newly constructed in 36 places. 4. Chengdu City Public Transportation Network Improvement Project 5. Transportation markets were opened to encourage privatization of public transportation.  (FY 2004 Domestic Survey) Visitor to the site confirmed satisfactory progress.  (FY 2004 Overseas Survey) Concerned city has still not implemented/conducted prioritised project corresponding to the proposal of this project. However, by only referring to the outcome of this project and corresponding to related development policies of Chinese government and field situation, metropolitan transportation project will be commenced.		

# STUDY SUMMARY SHEET

## (M/P)

**EAS CHN/A 103/02**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	The Study on Reforestation in Anning Watershed in Sichuan Province		
<b>3. SECTOR</b>	Forestry / Forestry & Forest Conservation		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Japan Overseas Forestry Consultants Association Aero Asahi Corporation		
<b>7. STUDY PERIOD</b>	Sep.2000 ~ Feb.2002 17month(s) ~		
<b>8. SITE OR AREA</b>			
<b>9. MAJOR PROPOSED PROJECT(S)</b>			

四川省安寧河流域造林計画調査

<b>PRESENT STATUS</b>	In Progress or In Use
	Delayed
	Discontinued
<p><b>Description :</b></p> <p>(FY 2003 Overseas Survey)  The project will be implemented for five years including the first three years for afforestation and low-cost construction for mountain improvement and the remaining two years for concentration on cultivation of infant forests.  Building of forests: First year - 3,800.00 hectares ; second year - 5,078.00 hectares ; third year - 3,800.00 hectares  Mountain improvement works: First year - 54.00 hectares ; second year - 72.00 hectares ;third year - 54.00 hectares  Breakdown of funds:  1,599 thousand yuans purchase of equipment and materials - 3,990 thousand yuans study and design - 5,892 thousand yuans ; technical training, study, dissemination and promotion - 2,942.5 thousand yuans emergency fund - 5,892 thousand yuans. Total amount of investment for project construction - 294,600 thousand yuans. The total amount becomes 4.464 billion yen when calculated at a rate of 100 yen =6.6 yuans.</p> <p>(FY 2004 Domestic Survey)  "Model Afforestation Project in Sichuan" is conducted in Chang Jiang basin, which has a relation with the implementation of the project, thus it is anticipated that further plans be decided upon the completion of the project.</p> <p>(FY 2004 Overseas Survey)  1. Subsequent studies:  1) Content: Revise, adjust, and collate to the forestation plan, reflecting situations of an actual activity of previously conducted projects, such as natural forest preservation project, "land to a forest" project, forestation in wasteland and mountains.  2) Period: August 2004 - October 2004  2. Finance:  1) Project Name: Sichuan Chang Jiang basin forestation and afforestation model project  2) Funding party: Japanese Grant Aid  3 )Amount: 2,600 million YEN  4) Content: forestation of 5,000 ha in dried valley of Chang Jiang Basin and dried valley and afforestation model 180ha  3. Design/Construction  1) Sichuan Chang Jiang Basin forestation and afforestation model project  2) Construction from: 1st July 2006  3) Completion: 30th June 2010  4. Technical cooperation  1) Training: total of 14 personnel for an afforestation, total of 14 personnel for forestation  2) Dispatch of experts: Will dispatch 1 group each in 2006 and 2007. 1 personnel each for forestation and afforestation chief advisor, and coordinator.  5. Benefits:  1) Beneficiaries: Sichuan Department of Forestry  2) Benefits: Concept, principle, method, equipment, and process of the study have made a revolutionary innovation and breakthrough in Sishuan forestation.</p> <p>(FY 2005 Domestic Survey)  No information to be specifically mentioned.</p>	

# STUDY SUMMARY SHEET

## (M/P)

**EAS CHN/S 101/04**

<b>1. COUNTRY</b>	China		
<b>2. NAME OF STUDY</b>	Study on the Master Plan for Air Pollution Control in Guiyang Municipality		
<b>3. SECTOR</b>	Administration / Environmental Problems		
<b>4. TYPE OF STUDY</b>	M/P		
<b>5.</b>	<b>COUNTERPART AGENCY AT THE TIME OF DEVELOPMENT STUDY</b>		
	<b>PRESENT COUNTERPART AGENCY</b>		
<b>6. CONSULTANT(S)</b>	Research, Analysis and Computing Pacific Consultants International (PCI)		
<b>7. STUDY PERIOD</b>	Jan.2003 ~ Oct.2004 21month(s) ~		
<b>8. SITE OR AREA</b>	Throughout Guiyang Municipality		
<b>9. MAJOR PROPOSED PROJECT(S)</b>			
1. Establishment of 4 desulphurization equipments for SO2 measures. 2. Establishment of 10 desulphurization equipments in aluminum factory for SO2 measures 3. Establishment of 5 desulphurization equipments in organic chemical factory for SO2 measures 4. Establishment of electronic dust collection equipment for granulated material measures			

貴陽市大氣污染対策計画調査（地球環境部）

EAS		CHN/S 101/04		(M/P)	
PRESENT STATUS	In Progress or In Use				
	Delayed				
	Discontinued				
<b>Description :</b> (FY 2005 Domestic Survey) No information to be specifically mentioned.					

貴陽市大氣污染対策計画調査（地球環境部）