

101	COUNTRY	Malaysia	NAME OF STUDY	Air Quality Management Study for Kelang Valley Region		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1993	SECTOR	Environmental Problems
	OBJECTIVES OF STUDY	Formulation of air quality management guidelines in order to improve air monitoring system.				
	MAJOR PROPOSED PROJECT(S)	Site area: Kelang Valley Region Contents: Establishment of ambient air quality monitoring system, establishment of comprehensive air pollution control center, installation of chassis dynamometers, introduction of car inspection system.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>(1)Establishment of ambient air quality monitoring system Up to now, 45 monitoring stations have been established. 6 are located in Kelang Valley Region. A total of 50 stations will be installed by April 2000.</p> <p>(2)Introduction of car inspection system Car Inspection System has been carried out by Road Transport Department.</p> <p>In addition, conversion of taxi fuel from diesel to gasoline, introduction of taxi utilizing natural gas, development of waste disposal system are all being implemented step by step.</p>				

MYS/S 103/93

102	COUNTRY	Malaysia	NAME OF STUDY	Forest Plantation Development in Northern Sabah		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1994	SECTOR	Forestry & Forest Conservation
	OBJECTIVES OF STUDY	Formulation of a M/P in order to attain sustainable forestation from the environmental and ecological view point, social & economic development of the local's life, and improvement of the damaged natural environment.				
	MAJOR PROPOSED PROJECT(S)	Site area: Northern Sabah(exclude Bengkoka Area) Contents: Industrial forestation(artificial forestation 73,000ha, artificially revisionary afforestation 12,000ha, natural forest treatment 152,000ha)				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>Subsequent study: JICA Development Study F/S was implemented (Mar.1996)</p> <p>The forest map and the land utilization map drawn up in the M/P are well utilized in the planning & implementation of the Sabah Forestry Department Authority. This Study will be followed up continuously in the JICA Development Study F/S from 1998.</p>				

MYS/A 102/94

103

COUNTRY	Malaysia	NAME OF STUDY	National River Mouths Study in Malaysia		
TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1994	SECTOR	River & Erosion Control
OBJECTIVES OF STUDY	Formulation of a M/P and F/S on management of the river mouths in order to attain flood control and to secure navigation route.				
MAJOR PROPOSED PROJECT(S)	M/P: 100 river mouths surveyed were categorized into 3 groups in accordance with its damage. 75 were chosen as the target of M/P. F/S: Tg. Piandang River Mouth (preliminary dredging, maintenance dredging) Marang River Mouth (flow introducing bank, water break, river water control, etc.)				
PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT, Counterpart training, Seminar		
DESCRIPTION					
<p>M/P: Subsequent study: D/D was implemented by own fund. Construction: Improvement works for Sg. Baru, Sg. Pahang, Sg. Cenang were completed in 1996, 1997, and 1997. Effects: functioned as fishery and commercial ports, securement of smooth sea transportation, economic benefits.</p> <p>F/S: Subsequent study: D/D was implemented by own fund. Finance: own fund Construction: Tg. Piandang River Mouth completed in 1996. Marang River mouth is scheduled to be completed.</p>					

MYS/S 213/94

104

COUNTRY	Malaysia	NAME OF STUDY	Comprehensive Management Plan of Muda River Basin		
TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1995	SECTOR	Water Resources Development
OBJECTIVES OF STUDY	Elaboration of Muda Basin Integrated Control Project intended for flood control, water resource management, river environment management.				
MAJOR PROPOSED PROJECT(S)	Site area: Muda Basin and its environs (states of Kedah, Penang, Perlis) Contents: River rehabilitation (extension length 44.64km), 3 water resources development dam construction, establishment of flow change system, establishment of river environment facility, establishment of water resources & river conservation area, etc.				
PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training, Seminar		
DESCRIPTION					
<p>1. River rehabilitation and construction of Beris water resources development dam Subsequent study: D/D was implemented by own fund. Finance: own fund (6,940mil.yen), Japan's ODA loan (Mar.1999 L/A 2,730mil.yen) Construction: implementing (1999-2002)</p> <p>2. Hydrological information system development Subsequent study: hydrological information system study was implemented by own fund.</p> <p>3. River basin information system development Subsequent study: JICA Development Study M/P+F/S (Mar.1997-Dec.1998)</p> <p>4. Gradual prohibition of gravel pitting Already implemented in Kedah and Penang.</p>					

MYS/S 107/95

105

COUNTRY	Malaysia	NAME OF STUDY	Standardization of the Bridge Design		
TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1996	SECTOR	Road
OBJECTIVES OF STUDY	To develop design/drawing system by using computer and to make a collection of standard design drawings and a design manual (plan, design, estimation, construction) for the purpose of standardizing the design for many bridges which have to be reconstructed.				
MAJOR PROPOSED PROJECT(S)					
PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	Counterpart training, Seminar		
DESCRIPTION					
<p>This study result is utilized in every bridge design that was implemented after the completion of the Study. Finance: own fund. Construction:</p> <ol style="list-style-type: none"> 1.Replacement of bridge No.546/0 above River Sebeherang Baroh, Kuala Terengganu, Terengganu (Aug.1998-Sep.1999). 2.Replacement of bridge No.30/2 above River Paya Rumput and Johore (Aug.1998-Sep.1999). 3.Replacement of bridge No.31/65 above River .Muar and Johore (Jun.1998-Mar.1999). <p>On-going: Bridge No.250/7, No.102/4, No.137/95, No.109/97, No.8/2, No.54/7, 3 bridges (Sg.Plus, K.Kangsar, Perak), No.240/60, No.258/4, No.50/7, No. 199/7, No.205/6, No.208/6, No.365/5, No.637/9, No.614/9, 3 bridges along the Padang Kubu to Sungai Mas Road, Kemaman, Terengganu. Japan's technical cooperation: A short-term expert was dispatched.</p>					

MYS/S 108/96

106

COUNTRY	Malaysia	NAME OF STUDY	Kuala Lumpur Outer Ring Road		
TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1996	SECTOR	Road
OBJECTIVES OF STUDY	To undertake a F/S for the construction of the Kuala Lumpur Outer Ring Road (length : 80km) connecting North-South Expressway to North-South Central Link Expressway.				
MAJOR PROPOSED PROJECT(S)	Site area: Eastern area of Kuala Lumpur(N-S Expressway to N-S Central Link) Section 1: Construction of expressway from KL-Karak Highway to N-S Expressway. Section 2: Construction of expressway from National Road 1 to KI-Karak Highway. Section 3: Construction of expressway from N-S Central Link to National Road 1.				
PRESENT STATUS	Promoting	TECHNICAL TRANSFER	Seminar		
DESCRIPTION					
Section 1 & 3 Finance: private fund Construction: In the process of the implementation of the project.					

MYS/S 307/96

107	COUNTRY	Malaysia	NAME OF STUDY	Forestry Development Project in Marak Parak, Northern Sabah		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1997	SECTOR	Forestry & Forest Conservation
	OBJECTIVES OF STUDY	Formulation of a F/S at selected areas for the forestation in Marak Parak forestation complex including the conservation area, to realize the M/P on northern Sabah forestation elaborated by JICA in 1994.				
	MAJOR PROPOSED PROJECT(S)	Site area: Marak Parak area in Northern part of Sabah(50,000ha) Contents: Silvicultural practice(Planted species: Acacia mangium, Paraserianthes falcataria) 1. Plan A(Planted area: 7,560ha) 2. Plan B(Planted area: 1,800ha)				
	PRESENT STATUS	Delayed or Suspended	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION					
	Concrete action has not yet been taken, as the government is now at the stage of land acquisition and establishing planted trees sales network.					

MYS/A 310/97

108	COUNTRY	Nepal	NAME OF STUDY	Integrated Rural Development Project in the Lumbini Zone		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1989	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	Formulation of the M/P for the Integrated Rural Development Project (agricultural infrastructure, human resources development, production, income increasing project, environment protection) in the Lumbini Zone.				
	MAJOR PROPOSED PROJECT(S)	Site area: Gulmi, Arghakhanchi, a part of Rupandehi, Kapilvatsu. Contents: Irrigation rehabilitation project, rural road rehabilitation project, rural water supply project, agriculture production promotion project, improvement of plan implementation of local government office.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION					
	Subsequent study: JICA Development Study F/S was implemented (Jun.1992-Sep.1993). Finance: Gulmi-Arghakhanchi Rural Development Project (GARDP) and Rural Water Supply and Sanitation Program are now under progress by foreign fund.					
	The basic policy of agricultural development proposed in this Study is utilized in the Ninth Development Plan (1998-2003).					

NPL/A 101/89

109	COUNTRY	Nepal	NAME OF STUDY	Development of Civil Aviation		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1989	SECTOR	Air Transportation & Airport
	OBJECTIVES OF STUDY	Elaboration of a M/P on the integrated air transport system considering Nepal's transportation situation. Formulation of the F/S on the priority plans.				
	MAJOR PROPOSED PROJECT(S)	Site area: Kathmandu, Pokhara, Jomsom, Simikot, Lukla, and Syangboche airports. Contents: construction of domestic passenger terminal building, apron expansion, development of air navigation system, runway extension, etc.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	Counterpart training		
	DESCRIPTION					
	<p>1.Kathmandu International Airport Development Project Subsequent study: JICA Development Study M/P+F/S was implemented (Jun.1993-Jul.1994). D/D was implemented by Japan's grant aid (Jan.1994 E/N 106mil.yen). Finance: Japan's grant aid (Jul.1994 E/N total 3,452mil.yen for FY 1994: 876mil.yen, FY1995: 2,371mil.yen, FY 1996: 206mil.yen). Construction: implementing.</p> <p>2.Jomsom, Lukla, and Pokhara Airports Development Project Finance: ADB. Construction: Pokhara (completed); Jomson and Lukla (to be completed by Jun.2001).</p> <p>3.Simikot Airport Development Project Finance: own fund. Construction: completed.</p>					

NPL/S 202B/89

110	COUNTRY	Nepal	NAME OF STUDY	Kathmandu Valley Urban Road Development		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1992	SECTOR	Air Transportation & Airport
	OBJECTIVES OF STUDY	Elaboration of a Urban Transport Study of Kathmandu City and formulation of a F/S on short term projects which have priority.				
	MAJOR PROPOSED PROJECT(S)	Site area: Kathmandu Valley F/S: 1.Construction of New Bagmati bridge and Bagmati corridor road. 2.Improvement of bus terminal access road.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT		
	DESCRIPTION					
	<p>1.Construction of New Bagmati bridge Subsequent study: D/D by Japan's grant aid (Jan.1994 E/N 51mil.yen). Finance: Japan's grant aid (Jul.1994 E/N 766mil.yen, 1995 E/N 475mil.yen). Construction: completed (1995). Effects: The connection between Kathmandu and Patan has considerably improved.</p> <p>2.Construction of Bagmati corridor road Subsequent study: D/D by ADB fund. Finance: ADB. Construction: implementing.</p> <p>3.Improvement of bus terminal access road Subsequent study: B/D was implemented. Finance: request for ADB loan was submitted.</p>					

NPL/S 203B/92

111	COUNTRY	Nepal	NAME OF STUDY	Rajkudwa Irrigation Project		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1993	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	1)To formulate an agricultural development plan for irrigation of the project area, selected from the study area. 2)To transfer technical and engineering knowledge to the Nepalese counterpart personnel.				
	MAJOR PROPOSED PROJECT(S)	Site area: Farm land between Gudurng and Kondre River, Kapilvastu district of Lumbini Zone Contents: Irrigation facility development (1 headwork, headrace: 0.45km, feeder canal: 26.9km, irrigation canal: 88.3km, drainage canal: 69.2km, 5 irrigation ponds, major village farm road: 49.5km, 6 agricultural support facilities).				
	PRESENT STATUS	Delayed or Suspended	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	Subsequent study: B/D was implemented (Mar.-May 1994). The government has difficulty in ensuring the fund source, therefore there is little possibility to implement this project.				

NPL/A 308/93

112	COUNTRY	Nepal	NAME OF STUDY	Topographic Mapping of Lumbini Zone		
	TYPE OF STUDY	Basic Study	STUDY COMPLETION YEAR	1993	SECTOR	Survey & Mapping
	OBJECTIVES OF STUDY	To prepare the Lumbini Zone topographic map on a scale of 1:25,000, and to transfer technology on aerial photogrammetry.				
	MAJOR PROPOSED PROJECT(S)	Site area: Lumbini Zone (9,000km ²) 1.Aerial photography (1: 50,000, 9,000km ²). 2.Topographic mapping (1: 25,000, 9,000km ² , 81 sheets). 3.Printing (1,000 copies for each 81 sheets).				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	Printed topographic maps that are the results of this Study are utilized in various government polices and rural development plans of public organizations in 5 districts of Lumbini zone.				

NPL/S 501/93

113	COUNTRY	Nepal	NAME OF STUDY	Terai Groundwater Resources Evaluation and Development Project		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1994	SECTOR	Irrigation, Drainage & Reclamation
	OBJECTIVES OF STUDY	Formulation of the M/P on the irrigation by means of deep wells in three counties located at the eastern, middle and western parts of the Terai Plain, the granary of the country.				
	MAJOR PROPOSED PROJECT(S)	Site area: Jhapa, Mahothari, Banke located in the Tera Plain M/P: 1. Water resources plan (Jhapa: water quantity of 120l/s, 150ha, etc.; Mahothar: water quantity of 163l/s, 163ha, etc.; Banke: water quantity of 110l/s, 157ha, etc.) 2. Facility development (well pump station, water pipelines, distributing lines, etc.)				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	<p>Subsequent study: The M/P work conducted in Jhapa area was almost intensive as that of a F/S. F/S is expected to be conducted in the future for Mahothari and Banke areas.</p> <p>Finance: Japan's grant aid was pledged in Aug. 1997 for Jhapa Groundwater Irrigation Project.</p> <p>The study result is utilized in other irrigation survey in Jhapa area.</p>				

NPL/A 106/94

114	COUNTRY	Nepal	NAME OF STUDY	Rehabilitation of Government Development Irrigation Schemes in the Kathmandu Valley		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1994	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	Elaboration of a M/P for irrigation area at Kathmandu Valley and a F/S in model area.				
	MAJOR PROPOSED PROJECT(S)	Site area: 3 provinces in Kathmandu Valley (Kathmandu, Bhaktapur, Lalitpur) Contents: Rehabilitation of 13 existing facilities (water intake facility improvement, water canal development, designing structural facilities of canal) and development of maintenance system based on farmers' participation.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	<p>Finance: ADB.</p> <p>Construction: The following schemes are under construction out of proposed 13 schemes.</p> <p>Completed Kothku, Tika-Bhairav I</p> <p>Partially completed Bashan, Dahkhsinkali, Mahadev Khola, Katunje</p> <p>Implementing Indrayani, Bishwambhara, Kutudhal</p> <p>The remaining schemes are now conducting/preparing a survey for implementation of the projects.</p>				

NPL/A 201/94

115	COUNTRY	Nepal	NAME OF STUDY	Tribhuvan International Airport Modernization Plan in Nepal		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1994	SECTOR	Air Transportation & Airport
	OBJECTIVES OF STUDY	To draw up the M/P for improvement of the Tribhuvan International Airport, F/S for short range plan of improvement and to implement technological survey for urgent project to promote the security.				
	MAJOR PROPOSED PROJECT(S)	Site area: Tribhuvan International Airport, Kathmandu Contents: 1.Urgent project (installation of radar and training facilities); 2.Ground facilities improvement plan(apron construction for big planes, new terminal construction for international flights, conversion of existing terminal building to domestic flights).				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION					
	<p>1.Urgent Project</p> <p>(1)Phase 1 Subsequent study: D/D by Japan's grant aid (Jan.1994 E/N 106mil.yen). Finance: Japan's grant aid (Jul.1994 E/N 876mil.yen, 1995 E/N 2,371mil.yen, 1996 E/N 206mil.yen). Construction: completed (Aug.1997).</p> <p>(2)Development of other equipment that is causing troubles to the new radar is planned before the implementation of Phase II.</p> <p>2.Ground facilities improvement plan Finance: ADB. Construction: commenced (Sep.1997).</p> <p>3.Japan's technical cooperation: acceptance of 42 trainees in total, dispatch of 6 experts in total.</p>					

NPL/S 204/94

116	COUNTRY	Nepal	NAME OF STUDY	Disaster Prevention Plan for Severely Affected Districts by 1993 Disaster in the Middle and South Area		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1996	SECTOR	River & Erosion Control
	OBJECTIVES OF STUDY	1) To undertake a basic survey for the selected 15 areas severely affected by 1993 disaster. 2) To undertake F/S for formulation of appropriate/practical disaster prevention plan for 5 areas which need community/infrastructure disaster prevention plans.				
	MAJOR PROPOSED PROJECT(S)	Site area: 5 severely affected areas by 1993 disaster in Makwanpur District (Phedigaon, Namtar, Chisapani, Mahadevbesi, and Kulcljani). Contents: basic landslide prevention, development of residents' participatory disaster prevention, community development, 2 groundsills development, river side park development, etc.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	Seminar		
	DESCRIPTION					
	<p>1.Community Disaster Prevention (Phedigaon, Namtar, Chisapani)</p> <p>(1)Basic landslide prevention; Finance: request for Japan's grant aid was submitted.</p> <p>(2)Participatory Disaster Prevention Projects: a)Phedigaon: financial assistance is requested; b)Chisapani: project implemented with Japanese government finance</p> <p>(3)Community Development Projects: a)Wireless telephone development in Namtar: making efforts to ensure fund source; b)Sericulture project in Namtar: project was implemented with private fund, c)Water supply in Chisapani: request for small-scale Japan's grant aid was submitted.</p> <p>(4)Japan's technical cooperation: an expert on rural development was dispatched.</p> <p>2.Kulckhani Reservoir development for infrastructure disaster prevention: The implementation of the project is now under consideration using balance of Japan's ODA loan procured to other project.</p>					

NPL/S 315/96

117	COUNTRY	Nepal	NAME OF STUDY	Integrated Watershed Management in the Western Hills		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1997	SECTOR	Forestry & Forest Conservation
	OBJECTIVES OF STUDY	Social economic base line study and M/P on integrated watershed management to improve the living environment for residents and to make land management more appropriate in the southern part of Khaski and Parbat.				
	MAJOR PROPOSED PROJECT(S)	Site area: Southern parts of Kaski District and Parbat District (120,000ha) Contents: Integrated Watershed Management Plan (Land Use Improvement Programs, Erosion Control Program, Living Environment Improvement Program, Income Generation Program, Extension and Education Program).				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER			
	DESCRIPTION	The results of this Study are utilized in various projects in Nepal.				

NPL/A 111/97

118	COUNTRY	Nepal	NAME OF STUDY	Trishuli Irrigation Project		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1997	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	Formulation of a F/S on Trishuli irrigation project in the terrace of Trishuli River, 70 km north west from Katmandu, with the area of approx.1,000 ha and a population of 10,000 (2,000 households).				
	MAJOR PROPOSED PROJECT(S)	Site area: Trishuli area in the Nuwakot District (750ha) Contents: 1.Irrigation development (area: 749ha, 2 intake facilities, main canal: 5.95km, branch canal: 10.30km) 2.Social Preparation Program, Water Management Program, Monitoring Program.				
	PRESENT STATUS	Promoting	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	The government has submitted a request for Japan's grant aid on irrigation construction on Jul.8, 1998.				

NPL/A 311/97

119

COUNTRY	Pakistan	NAME OF STUDY	Swat District Integrated Rural Development Project			
TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1989	SECTOR	(Agriculture in) General	
OBJECTIVES OF STUDY	Draw up integrated rural development plan and carry out the F/S for the area which is given the priority.					
MAJOR PROPOSED PROJECT(S)	Site area: Shangla Par District F/S: Agricultural Infrastructure Development, Agricultural Supporting Service Development, Road Improvement, Rural Electrification Development, New Water Supply System Development, Rural Infrastructure Development, Village Community Development.					
PRESENT STATUS	Implementing	TECHNICAL TRANSFER				
DESCRIPTION	<p><M/P> The Study results are utilized in the Seventh and Eighth Five-Year Plans. Furthermore, the results have been utilized as a guideline for the development of the mountainous area of Northwest district. [Shangla Par Integrated Rural Development Project] Finance: request for Japan's grant aid has been submitted.</p> <p><F/S> Agricultural Infrastructure Development/ Agricultural Supporting Service Development/Road Improvement/ New Water Supply System Development Construction of road is being implemented with the government fund. Finance: request for Japan's grant aid has been submitted.</p>					

PAK/A 201B/89

120

COUNTRY	Pakistan	NAME OF STUDY	Establishment of the Second TV Channel for Education			
TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1989	SECTOR	Broadcasting	
OBJECTIVES OF STUDY	To study the Plan on the national broadcasting network of the TV channel for education.					
MAJOR PROPOSED PROJECT(S)	Construction of TV program production centers (Islamabad, Karachi, and Lahore), installation of broadcasting equipment, installation of TV program transmission facilities via satellite (Earth Stations and TVROs).					
PRESENT STATUS	Completed	TECHNICAL TRANSFER	OJT			
DESCRIPTION	<p>Phase I: Islamabad ETV Center, 15 Broadcasting Stations, TVRO, and 2 Earth Stations Finance: Japan's Grant Aid (Dec.1989 E/N 1,634mil.yen, Jun.1990 E/N 1,783mil.yen). Construction: Completed in Nov. 1992.</p> <p>Phase II: TV Center, 30 Rebroadcasting Stations, and 2 Earth Stations Finance: Japan's Grant Aid (Feb.'95 E/N 333mil.yen, May'95 E/N 214mil.yen, '96 E/N 578mil.yen). Construction: Completed in Apr. 1998.</p> <p>Effects: This project has been contributing to the improvement of the literacy rate and been highly effective in the field of health, family planning and micro-industry.</p>					

PAK/S 304/89

121	COUNTRY	Pakistan	NAME OF STUDY	Irrigation Water Resources Development with Delay Action Dams Project in Balochistan		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1997	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	Determine the order of priority of the 13 groundwater dams (approx. 3,800 ha) at the highland of Balochistan and F/S on priority dams.				
	MAJOR PROPOSED PROJECT(S)	1.First year: Construction of 5 dams (Brewary, Kad Kocha II, Mangi, Jigda, Dara) and rehabilitation of irrigation facilities; 2.Second year: Construction of 4 dams (Kach, Arambi, Murgi Kotal, Sakhol) and rehabilitation of irrigation facilities; and 3.Third year: Construction of 5 dams (Iskal Koo, Wali Dad, Sanzali, Samaki, Ghutai Shela) and rehabilitation of irrigation facilities.				
	PRESENT STATUS	Promoting	TECHNICAL TRANSFER			
	DESCRIPTION	The request for a grant aid assistance has been submitted to Japanese Embassy on Apr.6, 1998.				

PAK/A 312/97

122	COUNTRY	Philippines	NAME OF STUDY	Integrated Agricultural Development Project in Marinduque		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1989	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	<M/P> Establishment of Master Plan on Agricultural Development in Marinduque Island. <F/S> Pre-F/S study within the priority project areas.				
	MAJOR PROPOSED PROJECT(S)	Agricultural Development, Agricultural Infrastructure Improvement, Rural Infrastructure Improvement, Fishery Development, Accelerated Development of Agricultural Project (MADPP).				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	Counterpart training		
	DESCRIPTION	MADPP (Marinduque Agricultural Development and Promotion Project) was selected as the highest priority project. Subsequent study: B/D and D/D (Sep. 1991 - 1992). Finance: Japan's Grant Aid (Aug. 1992 E/N 2,028 mil. yen). Construction: Jan. 1993 - Jun. 1994.				

PHL/A 201B/89

123	COUNTRY	Philippines	NAME OF STUDY	Rehabilitation and Maintenance of Bridges along Arterial Roads		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1989	SECTOR	Road
	OBJECTIVES OF STUDY	Bridge Rehabilitation program. Bridge Data Base. Bridge Inspection and Maintenance.				
	MAJOR PROPOSED PROJECT(S)	1. Reconstruction (12 bridges). 2. Replacement of Superstructure (15 bridges). 3. Repair (25 bridges).				
	PRESENT STATUS	Completed	TECHNICAL TRANSFER	OJT, Counterpart training, Seminar		
	DESCRIPTION	<p>1.Rehabilitation of Bridges along Arterial Roads (I)(reconstruction of 7 bridges, replacement of 13 bridges, rehabilitation of 17 bridges): D/D (Nov. 1990 - Apr. 1992), Japan's ODA Loan (Feb. 1990 L/A 2,079mil.yen), Construction (Apr. 1992 - Mar. 1997).</p> <p>2.Rehabilitation of Bridges along Arterial Roads (II)(reconstruction and widening of 4 bridges): D/D (Apr. - Jun. 1992), Japan's ODA Loan (Jul. 1991 L/A 2,065mil.yen), Construction (Jul. 1992 - May 1997).</p> <p>3.Rehabilitation of Bridges along Arterial Roads (III)(construction of 8 bridges): D/D (Nov. 1995 - Sep. 1996), Japan's ODA Loan (Dec. 1994 L/A 4,616mil.yen), Under construction.</p> <p>Effects: creation of sound traffic network system, creation of employment opportunities.</p> <p>4.Rehabilitation of Bridges along Arterial Roads (IV): Japan's ODA Loan (Dec. 1999 L/A 5,068mil.yen).</p>				

PHL/S 322/89

124	COUNTRY	Philippines	NAME OF STUDY	Rural Road Network Development Project (II)		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1990	SECTOR	Road
	OBJECTIVES OF STUDY	Conduct a F/S on the development of a rural road network.				
	MAJOR PROPOSED PROJECT(S)	Construction and rehabilitation of rural roads in 11 provinces (Nueva Vizcaya, Nueva Ecija, La Union, Rizal, Occidental Mindoro, Antique, Albay, Samar, Leyte, Misamis Oriental, Davao del Norte). Phase I: Major Roads 714.0km Minor Roads 1,130.8km; and Phase II: Major Roads 533.0km Minor Roads 924.6km.				
	PRESENT STATUS	Processing	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	<p>Subsequent Study: OECF SAFROP (Mar. - Jul. 1991), D/D by Japan's ODA loan (Jan. - Feb. 1998).</p> <p>Finance: Japan's ODA Loan (Aug. 1995 L/A 12,895mil.yen, Rural Road Network Development Project (II)), Seven provinces (Nueva Vizcaya, La Union, Occidental Mindoro, Antique, Albay, Samar, Leyte) out of eleven provinces which were selected in F/S were changed to other seven provinces (Pangasinan, Ilocos Sur, Cagayan, Camarines Sur, Iloilo, Negros Oriental, Eastern Samar).</p> <p>Construction: Construction in 4 provinces (Pangasinan, Nueva Ecija, Camirines Sur, Iloilo) is to be commenced in May 2000. Construction in other 7 provinces is to be commenced in Oct. 2000.</p>				

PHL/S 323/90

125	COUNTRY	Philippines	NAME OF STUDY	Calabarzon Integrated Regional Development		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1991	SECTOR	Integrated Regional Development Plan
	OBJECTIVES OF STUDY	To formulate the Integrated Regional Development Plan in Calabarzon.				
	MAJOR PROPOSED PROJECT(S)	Port dev.; Roads/highways dev.(Cavite Coastal Road); Industrial support (Cavite EPZA); Urban dev. (Laguna West Urban Dev.); Agriculture dev. (Batangas East Agriculture Dev.); Rural dev. (Laguna Upland IRD Projects); Social dev. (Southern Tagalog Manpower Training/Employment Program); Environmental management (Marikina Watershed Dev. and Management).				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>Subsequent study: JICA Development Studies (1994, M/P+F/S), (1994, F/S).</p> <p>Finance: Japan's ODA Loan (Mar.1993 L/A 6,112mil.yen, Calaca Coal-Fired Thermal Plant No.1 Environmental Improvement Project, Dec.1994 L/A 5,513mil.yen, Calaca Coal-Fired Thermal Plant No.2 Project (additional loan)).</p> <p>Port: Batangas Port was constructed in Aug. 1997, Dalahican Port is under construction.</p> <p>Road: Proposed projects were completed or are under construction with Japan's ODA Loan, USAID Fund, ADB Loan, own fund, and BOT.</p> <p>Power: Pagbilao Coal-Fired Thermal Plant was constructed (BOT), Calaca Coal-Fired Thermal Plant No.1 & 2 were constructed (Japan's ODA Loan), Malaban D&E Modular Geothermal Plant was constructed (ADB Loan), Makban Binary Cycle Geothermal was constructed (USEXIM Bank).</p>				

PHL/S 109/91

126	COUNTRY	Philippines	NAME OF STUDY	Master Plan on Maritime Safety		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1992	SECTOR	Marine Transportation & Ships
	OBJECTIVES OF STUDY	1)To formulate the M/P Maritime Safety in the Philippines; and 2)To conduct the Pre-F/S on the selected priority project.				
	MAJOR PROPOSED PROJECT(S)	Study of/for 1.Seafarer School Education Improvement; 2.Retaining Teaching Staff/Seafarers; 3.Vessel Safety Standard & Vessel Inspection System; 4.Inter-island Shipping/Shipbuilding Dev.; 5.Safe Navigation; 6.Reinforcing Maritime Safety Telecom.; 7.HF Network Linking PCG; 8.SAR Vessel Improvement; 9.Navigation Improvement; 10.Regional Marine Transportation Safety.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	Counterpart training, Seminar		
	DESCRIPTION	<p>Proposals by this M/P study have been utilized as a policy or strategies to strengthen the maritime safety program in Mid-term Development Plan (MTPDP).</p> <p>Proposed project 3: On-going.</p> <p>Proposed projects 4 and 6: Request for Japan's ODA loan is to be made.</p> <p>Proposed project 8: Request has been made to Australian Government to finance the project.</p> <p>Proposed project 9: Seeking for other external funds to finance the project.</p>				

PHL/S 111/92

127	COUNTRY	Philippines	NAME OF STUDY	Nationwide Roll-on Roll-off Transport System Development		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1992	SECTOR	Port
	OBJECTIVES OF STUDY	1. M/P including the formation of the National RO/RO Transportation Strategy and the prioritization of 42 routes; and 2. F/S of Iloilo/ Bacolod RO/RO Route.				
	MAJOR PROPOSED PROJECT(S)	<M/P>1.M/P of RO/RO Routes; and 2.Maritime Policy, Road Improvement, and Traffic Monitor. <F/S> Six-time-round-voyages between Bacolodo and Iloilo by 4 vessels. Port of Iloilo: Construction of one berth (115m length, -5.5m depth) with ancillary facilities by 1997. Construction of one more berth by 2010.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	Counterpart training, Seminar, Workshop		
	DESCRIPTION	Development of the ports are handled by DOTC, PPA (Philippine Port Authority), and CPA (Cebu Port Authority) using either local or foreign funds. Request for technical and financial assistance has been submitted to EC for construction of RORO facilities.				

PHL/S 208B/92

128	COUNTRY	Philippines	NAME OF STUDY	The Development Plan of Davao International Airport		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1992	SECTOR	Air Transportation & Airport
	OBJECTIVES OF STUDY	Formulation of master plan and feasibility study on the medium-term development plan of Davao International Airport.				
	MAJOR PROPOSED PROJECT(S)	<M/P>1.Short-Term Development Plan (1999-2000), 2.Long-Term Development Plan (2001-10). <F/S>Construction of runway, connecting taxiways, apron, passenger terminal building, cargo terminal, cargo terminal building, administration buildings & control tower, fire station, car park, air navigation systems, airport utilities, and fuel supply system.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	Counterpart training, Seminar		
	DESCRIPTION	Subsequent study: Review of F/S (1994, ADB). Finance: ADB (Mar.1993 L/A US\$41mil.), EIB (US\$31.3mil.), Own Fund (US\$32.7mil.). Construction: Airside Civil Works (Sep.1998 - Feb.2000), Landside Civil Works (Feb.1999 - Nov.2000), Equipment (2nd quarter of 2000 - 2nd quarter of 2001), Capacity Enhancement for CATC (1st quarter of 2000 - 4th quarter of 2002).				

PHL/S 209B/92

129	COUNTRY	Philippines	NAME OF STUDY	Luzon Island Strategic Road Network Development Project		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1993	SECTOR	Road
	OBJECTIVES OF STUDY	Formulation of a master plan for Luzon Island Strategic Road Network Development.				
	MAJOR PROPOSED PROJECT(S)	1.First Six-Year Program (1993 - 1998): Construction/Rehabilitation of Road (2,600.8km). 2.Second Six-Year Program (1999 - 2004): Construction/Rehabilitation of Road (2,246.9km). 3.Third Six-Year Program (2005 - 2010): Construction/Rehabilitation of Road (2,218.5km).				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	<p>1.Manila Tollways: 1)North Luzon Expressway: under implementation with BOT, 2)Manila - Bataan Coastal Road (North): under implementation with BOT.</p> <p>2.South Luzon Expressway: under implementation with BOT.</p> <p>3.ADB related projects (Mauban-Lucban, Malicboy-Macalelon-Mulanay Road, Mulanay-Panagon, Lian-Talisay-Balayan): ADB loan (Jun.'97 L/A \$337mil.), under construction.</p> <p>4.IBRD related projects (Capas-Botolan, Rosales-Sta.Fe, Burgos-Bani, etc.): IBRD Loan (\$1mil.), Subsequent studies were conducted, under construction.</p> <p>5.Projects with own fund: Carmen-Bautista (completed), San Miguel-Tagkawayan (completed).</p> <p>6.ODA loan related projects: Completed (Pan Philippine Road, Rehab. of Laoag-Magapit,Naguilian, South Luzon Expressway extension), under implementation (Cabanatuan-Baler, Rosario-Pugo-Baguio, Bongahon-Baler Rd.).</p>				

PHL/S 106/93

130	COUNTRY	Philippines	NAME OF STUDY	Metro Manila Urban Expressway System Study		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1993	SECTOR	Road
	OBJECTIVES OF STUDY	1.To formulate urban expressway master plan; and 2.To undertake a feasibility study of high priority routes.				
	MAJOR PROPOSED PROJECT(S)	First Stage: Construction of 58.6km of expressways Second Stage: Construction of 66.1km of expressways Third Stage: Construction of 23.4km of expressways				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	Counterpart training, Seminar		
	DESCRIPTION	<p>First Stage:</p> <p>1.Metro Manila Sky Way (Radial 3/Loop 3/Radial 9): Implemented with BOT scheme. Stage I (Biktan~Buendia) was completed.</p> <p>2.Radial 4, 3.Loop 3/Radial 10, 4.Radial 7: scheduled to be implemented with private fund or BOT scheme.</p> <p>Second Stage:</p> <p>5.Radial 1-3/Loop 5 (Radial 7-10) and extension of Radial 1: completed with BOT scheme.</p> <p>6.Loop 5, 7.Radial 2/Radial 6: scheduled to be implemented with BOT scheme.</p> <p>Third Stage:</p> <p>8.Radial 5/Radial 8: scheduled to be implemented with BOT scheme.</p>				

PHL/S 206/93

131	COUNTRY	Philippines	NAME OF STUDY	Greater Capital Region Integrated Port Development Study		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1994	SECTOR	Port
	OBJECTIVES OF STUDY	Formulation of a basic strategy to develop main ports (2010) and the Master Plan (2010).				
	MAJOR PROPOSED PROJECT(S)	Master Plan for Major Ports: 1.Manila Port: foreign trade container terminal, international terminal, domestic trade container terminal; 2.Sungray Point: foreign trade container terminal; 3.New Naic/Cavite Port: foreign trade container terminal; and 4.Batangas Port: foreign trade container terminal, domestic trade container terminal.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER			
	DESCRIPTION	<p>The results of this study were utilized for the formulation of the 25-year Port Development Plan of PPA (Philippine Port Authority), especially the development of the Ports of Manila and Batangas.</p> <p>1.Manila South Harbor Project (Cavite): in the process of selecting local consultants to undertake the F/S.</p> <p>2.Manila North Harbor Project (Bataan, Pampanga): in the process of selecting local consultants to undertake the F/S.</p>				

PHIL/S 112/94

132	COUNTRY	Philippines	NAME OF STUDY	Cebu Integrated Area Development		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1994	SECTOR	Integrated Regional Development Plan
	OBJECTIVES OF STUDY	Formulation of the Master Plan as the scenario of continuous development of Cebu, the second biggest city in the country with the target year of 2010.				
	MAJOR PROPOSED PROJECT(S)	1.Industrialization: Reinforcement of industrial section, diversification of service section, training of human resources, etc.; 2.Internationalization: Introduction of foreign capitals/technology, development of tourism industry, etc.; 3.Integration: Integration of public and private resources for development, integration of foreign and domestic capital/technologies.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Seminar		
	DESCRIPTION	<p>The Results was utilized for the formulation of National Development Plan and Cebu Land Utilization Policy.</p> <p>1.Water Resources: Mananga Dam is to be implemented under BOT scheme, Buhisan Dam is under rehabilitation.</p> <p>2.Agriculture: Japan's ODA Loan (Aug.1995 L/A 6,151mil.yen).</p> <p>3.Industry: Industrial Estate in West was developed with private fund.</p> <p>4.Transportation: 1)Mactan 2nd Bridge: ODA loan (Aug.'93 L/A 6,872mil.yen), completed; 2)Ring Road: ODA loan (2,570mil.peso), implementing; 3)South Coastal Highway: ODA loan (Aug.'95 L/A 18,391mil.yen), implementing; 4)South Reclamation: ODA loan (Aug.'95 L/A 12,315mil.yen), implementing; 5)North Road: WB (400mil.peso), completed; 6)Cebu Port rehabilitation: completed.</p> <p>5.Human Resources/Social Services: Japan's Grant Aid (Sep.1995 E/N 1,430mil.yen).</p> <p>6.Project-type technical cooperation (Mar.1999~Feb.2004).</p> <p>7. Dispatch of experts (Mar.1999 ~ Feb.2001, 4 experts), Acceptance of trainees.</p>				

PHIL/S 115/94

133	COUNTRY	Philippines	NAME OF STUDY	Marikina Watershed Development Project		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1994	SECTOR	Forestry & Forest Conservation
	OBJECTIVES OF STUDY	Formulation of the control plan of Marikina River basin in order to recover the capacity of water resources and conform more stable rural environment by means of afforestation, etc.				
	MAJOR PROPOSED PROJECT(S)	<M/P>1.Five-Year Forest Management Program 2.Five-Year Social Forestry Program <F/S> Establishment of 6,000ha Forest Plantation; Social Forestry of 5,395ha involving 1,948 households.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p><F/S> 248ha of forest tree plantation was established. It is maintained under the regular budget of DENR (Department of Environment and Natural Resources). The Social Forestry Program covering 1,430ha was implemented. It is maintained by 1,350 households under the regular budget of DENR.</p> <p>The request for the assistance for implementing the project was submitted to EU in 1997.</p>				

PHL/A 202/94

134	COUNTRY	Philippines	NAME OF STUDY	Central Luzon Development Program		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1995	SECTOR	Integrated Regional Development Plan
	OBJECTIVES OF STUDY	M/P on Regional Integrated Development Project of agriculture, industry, social economic, basic facilities in the 6 provinces of Region III in Luzon island.				
	MAJOR PROPOSED PROJECT(S)	133 priority projects in rural development, agricultural development, urban planning, industry & trade, social service, environmental sector under Regional Project, Special Program, and Rural/Local Program.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training, Seminar		
	DESCRIPTION	<p>The results of this study have been utilized for the formulation of the Provincial Development Plans of the Six Provinces of Central Luzon (1995-1998). Finance: Japan's ODA Loan (Mar.1997 L/A 1,034mil.yen, Subic Bay Freeport Environment Management Project), Japan's ODA Loan (Sep.1998 L/A 14,136mil.yen, Central Luzon Irrigation Project). The proposed projects, such as, Subic Industrial Estate, Hermosa Agro-Industrial Estate, Clark International Aviation Complex, North Luzon Expressway Extension, Cascoan Multi-purpose Projects are under implementation with own fund, private fund, and BOT. Pre-F/S for Holistic Cater Catchment Project, Post Harvest Facilities and Trading Center, Solid Waste Management Improvement Project, Rehabilitation of Candelaria School of Fisheries, Fisheries Development of Uacon Lake.</p>				

PHL/S 116/95

135	COUNTRY	Philippines	NAME OF STUDY	Preparation of Provincial Water Supply, Sewerage and Sanitation Sector Plan		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1995	SECTOR	(Public Utilities in) General
	OBJECTIVES OF STUDY	M/P on water supply, drainage sanitation facilities service in 9 provinces.				
	MAJOR PROPOSED PROJECT(S)	For nine provinces (San Bares, Rizar, Oriental Mindro, Occidental Mindro, Abra, Ilocos Norte, Ilocos Sur, Batangas, Nueva Viscaya) in Luzon, 1. Water supply and drainage service, waste gathering service at urban area; 2. Water supply/sewerage disposal at rural area; 3. Organization of sector project development in respective provinces; and 4. Organization of inhabitants.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training, Seminar		
	DESCRIPTION	<p>The results of the study were utilized in the formulation of Medium Term Public Investment Plan (MTDIP, 1999 - 2004).</p> <p>OECE SAPS, Rural Water Supply Project (III), was conducted in 1997.</p> <p>Finance: Japan's ODA loan (Dec.1999 L/A 951mil.yen, Rural Water Supply and Sanitation Project (V)).</p>				

PHL/S 118/95

136	COUNTRY	Philippines	NAME OF STUDY	Pan-Philippine Highway Improvement Project		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1995	SECTOR	Road
	OBJECTIVES OF STUDY	To conduct a F/S study on the improvement project on Davao ~ Surigao of Mindanao section of Pan-Philippine Highway.				
	MAJOR PROPOSED PROJECT(S)	Pavement restoration; Shoulder improvement; Drainage facilities improvement (side ditch, underground drainage, culvert); Bridge restoration; Slope protection; Flood control.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>Subsequent study: D/D (JICA Development Study, Pan-Philippine Highway Improvement Project, Aug.1995 - Mar.1997).</p> <p>Finance: Japan's ODA Loan (Aug. 1995 L/A 9,551mil.yen, Pan-Philippine Highway Improvement Project (II)) (Mar.1997 L/A 7,683mil.yen, Dec.1999 L/A 7,434mil.yen, Pan-Philippine Highway Improvement Project (Mindanao Section)(I)(II)).</p> <p>Contents: Pavement restoration, Shoulder improvement, Side ditch, Bridge restoration, Slope protection, Flood control.</p> <p>Construction: on-going.</p>				

PHL/S 326/95

137	COUNTRY	Philippines	NAME OF STUDY	Flood and Mudflow Control for Sacobia-Bamban/ Abacan River from Mt.Pinatubo		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1996	SECTOR	River & Erosion Control
	OBJECTIVES OF STUDY	1) To make an urgent proposal and a M/P on flood and mudflow control for Sacobia-Bamban/ Abacan River from Mt. Pinatubo. 2) F/S for priority projects.				
	MAJOR PROPOSED PROJECT(S)	<F/S> 1. Flood/ Mudflow Control Works in Sacobia-Bamban River Basin. 2. Flood/ Mudflow Control Works in Abacan River Basin.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	Counterpart training		
	DESCRIPTION					
	1.Sacobia-Bamban River Basin Finance: Japan's ODA Loan (Mar.1996 L/A 6,911mil.yen, Pinatubo Hazard Urgent Mitigation Project). Contents: Construction Site I (Bamban River Basin Improvement Works), Construction Site II (Sacobia-Bamban River Improvement), Construction Site III (Rehabilitation of Route No.3 Highway and Construction of Mabalacat & Bamban Bridges). Construction: Site I (Jul. 1998 - May 2000), Site II (Nov.1997 - Feb.2000), Site III (Jul.1997 - Aug.1998 (completed)).					

PHL/S 208/96

138	COUNTRY	Philippines	NAME OF STUDY	Pan-Philippine Highway Improvement Project (Mindanao Section)		
	TYPE OF STUDY	D/D	STUDY COMPLETION YEAR	1996	SECTOR	Road
	OBJECTIVES OF STUDY	To undertake a D/D for improvement project of Mindanao section of Pan-Philippine Highway.				
	MAJOR PROPOSED PROJECT(S)	Pavement restoration/improvement; Shoulder improvement; Drainage facilities improvement; Bridge replacement/restoration; Slope protection; Flood control. Imp. period: 1998 - 2003.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	OJT		
	DESCRIPTION					
	Finance: Japan's ODA Loan (Mar.1997 L/A 7,683mil.yen, Dec.1999 L/A 7,434mil.yen, Pan-Philippine Highway Improvement Project (Mindanao Section)(I & II)). Construction: on-going.					

PHL/S 402/96

139	COUNTRY	Thailand	NAME OF STUDY	Water Management System and Monitoring Program in Chao Phraya River Basin		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1989	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	To formulate a master plan for efficient and proper management of water resources through evaluation of potential water resources and water availability for agricultural development.				
	MAJOR PROPOSED PROJECT(S)	1. Water Management Model Project; 2. Communication System Improvement; 3. Monitoring System Improvement; 4. Data Control System Improvement; 5. Irrigation and Drainage System Improvement; 6. Study on Comprehensive River Basin Development; 7. Study on a Crop Diversification Promotion Center.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION					
	<p>Concept of this M/P is utilized for improvement/rehabilitation of each system at Cao Phraya River Basin.</p> <p>(1) Water Management System Project Finance: Japan's grant aid & Thai Government 604 mil. Bahts Implementation Period: 1999-2004</p> <p>(2) Telemetry and Data Communication System Finance: Own fund 220 mil. Bahts Implementation Period: 2000-2002</p> <p>Japan's Technical Cooperation: Project-Type Technical Cooperation (Apr.1990 - Mar.1997, Irrigation Engineering Center Project (II)), Third Country Training Program (1996 - 2000, Irrigation Systems for Sustainable Development).</p>					

THA/A 103/89

140	COUNTRY	Thailand	NAME OF STUDY	Telecommunications Development		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1989	SECTOR	Telecommunication
	OBJECTIVES OF STUDY	To formulate a long term development plan for the period from FY 1993 to FY 2007 in Thailand.				
	MAJOR PROPOSED PROJECT(S)	1. Installation of 4,345,000 new telephone lines in 15 years; 2. Switching systems: 4,491,000 systems, digitization; 3. Transmission systems: digitization, doubled route, fiber optical systems, radio transmission systems; 4. Line development in Metropolitan Area: 8,088,000 cables.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION					
	<p>The following projects have been implemented by TOT (Telephone Organization of Thailand).</p> <p>1. The Rural Long Distance Public Telephone Project (1992-96): by ADB and TOT bond.</p> <p>2. Telephone Service Development Project (1995-98) by TOT fund: 1) Network Expansion; 2) Digitization; 3) Rehabilitation Project.</p> <p>3. Short-term Telephone Expansion Project (1996-98).</p> <p>4. Rural Long Distance Public Telephone Project at Village Level by Japan's ODA loan and TOT fund.</p> <p>5. Personal Digital Cellular Project: installation of switching systems and radio base stations.</p> <p>6. One million Telephone Lines Expansion Project (1998-2002).</p>					

THA/S 105/89

141	COUNTRY	Thailand	NAME OF STUDY	Sebai-Sebok Basin Development Project		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1989	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	Preparation of a basin-wise agricultural development plan and feasibility study of the priority projects.				
	MAJOR PROPOSED PROJECT(S)	<M/P>1.Short-term Plan (1990-96): Medium-size water storage, Pump stations, Medium-size rehabilitation; 2.Medium-term Plan (1996-2006): Medium-size water storage, Small-size water storage, Small river diversion, Pump stations. <F/S> 5 priority projects from the Medium-size water storage project.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	OJT		
	DESCRIPTION					
	Proposed projects are included in the Five-Year Plan of RID (Royal Irrigation Department). Small-size irrigation project is being implemented by RID budget.					

THA/A 203B/89

142	COUNTRY	Thailand	NAME OF STUDY	Medium to Long Term Improvement/ Management Plan of Road and Road Transport in Bangkok		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1989	SECTOR	Urban Transportation
	OBJECTIVES OF STUDY	Medium and Long-term road plan (M/P). Area traffic control (ATC) system (F/S). Common utility duct (CUD) system.				
	MAJOR PROPOSED PROJECT(S)	<M/P> Medium/Long-Term Road Plan: 1.Main Roads (Expressways, Ordinary roads); 2.Bus-ways. <F/S>1.Improvement/expansion of the area traffic control (ATC) system: 235 intersections inside the Middle Ring Road and adjacent area; 2.Common utility duct (CUD) Plan inside the Middle Ring Road: 1)Trunk line CUD, 2)Supply line CUD.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	Counterpart training, Seminar		
	DESCRIPTION					
	<p><M/P>This M/P was utilized to formulate the Fourth Development Plan of BMA (Bangkok Metropolitan Administration). Construction of an exclusive road for automobiles is to be implemented with BOT scheme. The introduction of bus-lanes has been implemented.</p> <p><F/S></p> <p>1.ATC First Stage: JICA Development Study D/D, Area Traffic Control Project in Bangkok (Mar.- Oct. 1990), Australian government fund, Installation at 146 intersections was completed (Oct.1995). Second Stage: D/D (for 226 intersections, Jun.1996), Australian government fund.</p> <p>2.CUD Finance: Australian government fund.</p>					

THA/S 209B/89

143

COUNTRY	Thailand	NAME OF STUDY	Provincial Water Supply Projects		
TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1989	SECTOR	Water Supply
OBJECTIVES OF STUDY	1)Preparation of development plans for 7 Provincial Cities Water Supply Projects in Thailand. 2)To conduct F/S in Phuket, Prachatipat, Patum Thani and Su Ngai Golok.				
MAJOR PROPOSED PROJECT(S)	<M/P>Water supply development project for 7 provincial cities (Patum Thani & Prachatipat, Phuket, Sugai Golok, Phang Nga, Takua Pa, Thung Song). <F/S>1.Patum Thani & Prachatipat: Water intake/treatment facilities, distribution reservoirs, distribution/transmission pipelines; 2.Phuket: Pumping station, water supply system, etc.; 3.Sugai Golok: Water treatment plant, etc.				
PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT		
DESCRIPTION	<p>1.Patum Thani & Prachatipat: Review of F/S (Dec.1993 - May 1994, ADB grant aid), D/D (Provincial Waterworks Authority (PWA) budget), BOT, completed in Oct. 1998, Technical assistance from WB (Sep.1997 - 4 months).</p> <p>2.Phuket: Review of F/S (Dec.1993 - May 1994, ADB grant aid), BOT scheme, scheduled to be completed by Oct.2000.</p> <p>3.Sugai Golok: D/D (1994-95, PWA budget), Own fund (103.41mil.Bahts in 1995), completed in Dec.1998.</p> <p>4.Thung Song: D/D (1996, Own fund and PWA budget), Own fund (101.35mil.Bahts in 1998), scheduled to be completed by Mar. 2000.</p>				

THA/S 210B/89

144

COUNTRY	Thailand	NAME OF STUDY	Agricultural Water Development Project on Chantaburi River Basin		
TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1989	SECTOR	(Agriculture in) General
OBJECTIVES OF STUDY	Feasibility study on water resources development plan within the subject river basin and irrigation plan for fruits plantation.				
MAJOR PROPOSED PROJECT(S)	1.Storage Dams: Khlong Ta Liu Dam (rock-fill dam) and Khlong San Sai Dam (homogeneous earth dam); 2.Diversion Weir (water intake 3.5 cu.m/sec.); 3.Water Conveyance Pipeline (L=111.6km, diameter=350-1,600mm); 4.Main Pumping Stations (3 stations, diameter=150, 200, 250mm).				
PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT		
DESCRIPTION	<p>1.Khlong San Sai Dam Subsequent study: D/D (1994). Finance: Own fund (273mil.Bahts). Construction: 1994 -1997 (completed). Effects: Since 1999, agricultural water has been supplied to the farmers from storage dam. Farmer's demand toward agricultural water is apparently high.</p> <p>2.Khlong Ta Liu Dam Subsequent study: D/D, EIA, Review of F/S.</p>				

THA/A 313/89

145	COUNTRY	Thailand	NAME OF STUDY	Purification of Klong Water in Bangkok		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1989	SECTOR	Sewerage
	OBJECTIVES OF STUDY	Urgent Klong Water Purification in Bangkok.				
	MAJOR PROPOSED PROJECT(S)	Introduction of dilution water from the Chao Phraya River by remodeling the existing gates and pumps. Aerated lagoon treatment of Klong Water in two regulating reservoirs to abate water quality deterioration.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>1.Rehabil. of pump station, Dredging of major Klongs, Embankment along Klongs, Instal. of aerator in Klongs, etc. Subsequent study: D/D (1993 - 94, Bangkok Metropolitan Administration (BMA) fund). Finance: Own fund (318mil.Bahts). Construction: 1994 - 1997.</p> <p>2.Construction of Masakan Reservoir and Lama IX Reservoir Lagoon Subsequent study: D/D (1992 - 93, Government budget 15mil.Bahts). Finance: Government budget (318mil.Bahts). Construction: completed in 1997.</p> <p>Effects: 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 strong odor in dry seasons were effectively improved. Use of klong water for living has increased.</p>				

THA/S 322/89

146	COUNTRY	Thailand	NAME OF STUDY	Traffic Operation Plan for Roads		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1990	SECTOR	Road
	OBJECTIVES OF STUDY	To establish effective traffic operation plan and to perform technology transfer.				
	MAJOR PROPOSED PROJECT(S)	1.Introduction of Traffic Census System; 2.Introduction of Traffic Information System; 3.Introduction of Road Inventory System; 4.Technical Guideline and Engineering Specification of Traffic Safety and Traffic Control Devices; 5.Traffic Operation Plan.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>Subsequent study: JICA Development Study, Traffic Operation Plan for Roads (follow-up) (Mar.- Nov.1991). The newly introduced computer networking system enables the implementation of the following proposed projects:1.Introduction of Traffic Census System; 2.Introduction of Traffic Information System; 3.Introduction of Road Inventory System; 4.Technical Guideline and Engineering Specification of Traffic Safety and Traffic Control Devices. The results of this study were utilized for the formulation of the Seventh Five-Year Road Improvement Plan (Oct. 1991 - Sep.1996).</p>				

THA/S 106/90

147	COUNTRY	Thailand	NAME OF STUDY	Upper Central Region Study		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1990	SECTOR	Integrated Regional Development Plan
	OBJECTIVES OF STUDY	Preparation of regional development plan toward the year of 2010.				
	MAJOR PROPOSED PROJECT(S)	1.Integrated Pasak River Basin Development Package (6 projects). 2.Greater Saraburi Industrial Core Development Package (15 projects). 3.Agro-Industrial Linkage Development Package (6 projects). 4.Human Resources Development Package (3 projects).				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	Counterpart training, Seminar		
	DESCRIPTION	<p>The study results are included in the Seventh National Economic and Social Development Plan.</p> <p>1.Integrated Pasak River Basin Development (Pasak Dam Development) F/S study: ('92 - '93, Own fund). Construction:'94 -'02 own fund ('94, 18,500mil.Bahts) (dam completed in '99).</p> <p>2.Greater Saraburi Industrial Core Development (15 projects) 2 projects(Suphan Buri-Talua-Sara Buni Higways/Sara Buri Industrial Estate) were completed with own fund. Klong Sip Kao-Kaeng Khoi Railway Project was implemented by Japan's ODA Loan ('90 L/A 89,158mil.yen).</p> <p>3.Agro-Industrial Linkage Development Package (6 projects) Agri. Cooperative Dev./Agri. Products Distribution Center/Agro-Industrial Park/Secondary Order Center /Agro-tech Center: on-going. Pasak R. Collector Roads Project: completed (local fund).</p> <p>4.Human Resources Development Package (3 projects) Strengthening of Provincial Non-formal Education Center and Audio-Visual System Development are on-going.</p>				

THA/S 107/90

148	COUNTRY	Thailand	NAME OF STUDY	Development of Pattaya Area		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1990	SECTOR	Integrated Regional Development Plan
	OBJECTIVES OF STUDY	Master plan preparation for urban and tourism development.				
	MAJOR PROPOSED PROJECT(S)	1.South Pattaya land reclamation; 2.Tourist port construction; 3.Pattaya beach restoration; 4.Ta-Van pier; 5.Sewerage project; 6.Rainwater drainage project; 7.Water supply project; 8.Solid waste disposal project; 9.Road project.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>1.South Pattaya Land Reclamation, 2.Tourist port construction; 3.Pattaya beach restoration: F/S, D/D, EIA (1993-94, 60.5mil.Bahts), Own fund, a pier for the sightseeing boats was constructed.</p> <p>4.Ta-Van pier; 9.Road project: F/S, D/D (1993-94), Own fund (68.5mil.Bahts, 234.7mil.Bahts), Construction (1994-98, 1995-97).</p> <p>5.Sewerage project: F/S, D/D, Own fund (1997, Environmental fund, 1,799.46mil.Bahts), Construction (1997-99).</p> <p>6.Rainwater drainage project: Own fund (310.7mil.Bahts), Construction (1992-95).</p> <p>7.Water supply project: F/S (1986-87), D/D (1990-91), Own fund (755mil.Bahts), Construction is on-going.</p> <p>8.Solid waste disposal project: M/P, F/S, D/D (1994-95).</p>				

THA/S 108/90

149	COUNTRY	Thailand	NAME OF STUDY	Agricultural Water Resources Development Project of Bang Pakong River Basin		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1990	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	Feasibility Study for water resources development.				
	MAJOR PROPOSED PROJECT(S)	<M/P>Development of water sources and agricultural infrastructure; Phase I (3 sub-basins); II (2 sub-basins); III(8 sub-basins). <F/S>Stage I: 1)Bang Pakong river mouth barrage, 2)Pumping station, 3)Main irrigation canals; Stage II: 1)Klong Si Yat storage dam, 2)Tha Lat head work, 3)Tha Lat irrigation development, 4)Si Yat irrigation development.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION					
	<p>1. Construction of Bang Pakong River Mouth Barrage Subsequent study: JICA Development Study (D/D) (Sep.1992-Nov.1993). Finance: Own fund (132mil.Bahts). Construction: Oct.1996 - Nov.1999 (completed).</p> <p>2. Klong Si Yat (construction of dam and agricultural development) Subsequent study: D/D (1992-1994), EIA (1994-1995). Finance: Own fund (4,016mil.yen). Construction: 1994-2002 (construction of dam: Oct.1996-Dec.1999).</p> <p>3.M/P proposed projects: Thandan, Klong Luang, Huai Srmeang, Klong Nong Kaew, Phaprong, Lanphrayathan, Sinoi-Saiyai, Klong Phrasathung, Klong Banna, Klong Rabom, subsequent studies were conducted/ are being conducted.</p>					

THA/A 204B/90

150	COUNTRY	Thailand	NAME OF STUDY	Sewerage and Drainage Improvement Project for Phuket Municipality		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1990	SECTOR	Sewerage
	OBJECTIVES OF STUDY	1)To develop a comprehensive master plan for sewerage and flood control system for Phuket Municipality; and 2)To provide a feasibility study for proposed master plan of sewerage and flood control system.				
	MAJOR PROPOSED PROJECT(S)	<F/S> 1.Sewerage (target year of 2001): sewer (14.3km in length), pumping station (4 stations). 2.Flood control (urgent plan): 1) East diversion channel; 2)River improvement in the town (dredging, embankment, bridge reconstruction).				
	PRESENT STATUS	Completed	TECHNICAL TRANSFER	Counterpart training, Seminar		
	DESCRIPTION					
	<p>Subsequent study: D/D (Aug.1994 - Apr.1995, PWA (Public Works Authority) budget, 11.3mil.Bahts). Finance: PWA budget (May 1994, 388.45mil.Bahts). Contents: drainage, wastewater sewer treatment plant. Construction: Apr. 1995 - Nov.1996 (completed).</p>					

THA/S 211B/90

151	COUNTRY	Thailand	NAME OF STUDY	Bangkok Solid Waste Management		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1990	SECTOR	Urban Sanitation
	OBJECTIVES OF STUDY	Preparation of a master plan and feasibility study on priority projects. To study feasibility of sanitary landfill and incineration plant.				
	MAJOR PROPOSED PROJECT(S)	<M/P>1-1.Construction of Sanitary Landfill at Ram Intra; 1-2.Construction of Sanitary Landfill in the East Part of Bangkok; 2.Construction of an Incineration Plant; 3.Improvement of Waste Collection System; 4.Improvement of the Institution. <F/S> Above 1-1. and 2. are priority projects.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	OJT		
	DESCRIPTION					
	<p>1.Construction of Sanitary Landfill: All of the sanitary landfill is managed by private entrepreneurs.</p> <p>2.Construction of an Incineration Plant An incineration plant for hospital waste at On Nut was constructed (Oct.1993-Sep.1994). Finance: Own fund (an incineration plant with capacity of 1,000t/day), BOT (an incineration plant with capacity of 1,000t/day).</p>					

THA/S 212B/90

152	COUNTRY	Thailand	NAME OF STUDY	Sukhothai Integrated Agricultural and Rural Infrastructure Development Project		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1990	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	To make a F/S on Integrated Agricultural Development in Thung Sai Yat and Nong Khon Kaen in Sukhothai.				
	MAJOR PROPOSED PROJECT(S)	Integrated agricultural and rural infrastructure development project in Thung Sai Yat and Nong Khon Kaen in Sukhothai Province: 1.Construction of reservoirs/ponds; 2.Irrigation/drainage canal development; 3.Construction/rehabilitation of farm road; 4.Rehabilitation of existing swamps; 5.Village water supply; 6.Rural electrification.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT, Counterpart training, Seminar		
	DESCRIPTION					
	<p>1.Nong Khon Kaen Finance: Own fund (Action Program of Ministry of Agriculture). Construction: dredging of swamps (Mar.-May 1993), dredging of canal (Jan.-Mar.1995).</p> <p>2.Thung Sai Yat Finance: Own fund (Action Program of Ministry of Agriculture). Construction: dredging of canals (Mar.-May 1993, Oct.-Dec.1996), road development (Nov.1992-Jan.1993), digging of wells (Sep.1995-Feb.1996), construction of reservoirs (Aug.-Sep.1995), construction of dike (May 1994), construction of drainage (Oct.-Dec.1996).</p> <p>3.Rural electrification: completed.</p>					

THA/A 314/90

153

COUNTRY	Thailand	NAME OF STUDY	Integrated Rural Development of Salt Affected Land in Northeast Thailand		
TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1991	SECTOR	(Agriculture in) General
OBJECTIVES OF STUDY	Formulation of a Master Plan and economic evaluation of the pilot project.				
MAJOR PROPOSED PROJECT(S)	<M/P> Integrated Agricultural/Rural Development Plan in Phra Yun and 3 surrounding districts: 1.Irrigation facilities, 2.Drainage facilities, 3.Rural development, 4.Rural water supply, 5.Forestry, 6.Social services. <F/S> Development projects at the pilot areas at 15 villages at Phara Yun: 1.Irrigation facilities, 2.Drainage facilities, 3.Rural road, 4.Rural water supply.				
PRESENT STATUS	Delayed or Suspended	TECHNICAL TRANSFER	OJT, Seminar		
DESCRIPTION	A request for the budget for the project implementation has been submitted to the Government of Thailand.				

THA/A 205B/91

154

COUNTRY	Thailand	NAME OF STUDY	Integrated Rural Development Project at Lower North Thailand		
TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1991	SECTOR	(Agriculture in) General
OBJECTIVES OF STUDY	Master plan on integrated rural development project of 4 provinces. Feasibility study of 4 model projects.				
MAJOR PROPOSED PROJECT(S)	For 4 provinces in Lower North Thailand, 1.Irrigated agricultural development: construction of reservoirs and weir heads, promotion of sericulture, cattle raising, inland fishery, etc.; 2.Rural road development: construction/pavement of rural roads; 3.Rural water supply (574 deep wells); 4.Rural infrastructure development: rural youth and agricultural technology training center, etc.				
PRESENT STATUS	Completed	TECHNICAL TRANSFER	Counterpart training, Seminar		
DESCRIPTION	<p>1.Fai Non Kho (Sukhothai Province): Own fund (50.58mil.Bahts), Reservoir construction was completed (Feb.1995 - Dec.1995).</p> <p>2.Fai Sam Lu (Phitsanulote Province): Own fund (23.98mil.Bahts), Reservoir construction was completed (Mar.1995 - Jan.1996).</p> <p>3.Khlong Samo Khon (Kamphaeng Phet Province): Measurement of dam and a part of road rehabilitation are on-going.</p> <p>Japan's Technical Cooperation: Dispatch of JICA Expert (April 1995 -), A short-term JICA Expert (Aug.1997 - 1 month, measurement of farm land, drawing, designing of water canal).</p>				

THA/A 315/91

155	COUNTRY	Thailand	NAME OF STUDY	Traffic Operation Plan for Roads (Follow-Up)		
	TYPE OF STUDY	Other Studies	STUDY COMPLETION YEAR	1991	SECTOR	Road
	OBJECTIVES OF STUDY	1. To formulate the traffic operation plan; 2. To recommend a suitable road improvement plan; and 3. To transfer technology.				
	MAJOR PROPOSED PROJECT(S)	Traffic operation plan and road improvement plan (improvement of lanes and intersections, creation of grade separation, signalization and channelization at intersections, etc.) for DOH (Department of Highways) roads with the area of the Outer Ring Road of Bangkok.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>Finance: Own fund (3,159.26mil.Bahts).</p> <p>Information Collecting System has been realized with the computer network system. Most of the proposed projects were implemented except for the improvement of the U-turn section.</p> <p>Proposed projects have been incorporated into the Seventh Road Improvement Plan (1991 -1996) and implemented as the Traffic Safety Program for National Highways.</p>				

THA/S 605/91

156	COUNTRY	Thailand	NAME OF STUDY	Lam Dom Yai Basin Irrigation Project		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1992	SECTOR	Irrigation, Drainage & Reclamation
	OBJECTIVES OF STUDY	For Lam Dom Yai Basin in Ubon Rathathani and Si Sa Ket Provinces, 1)To formulate an irrigated agricultural development plan; and 2)F/S for the priority areas.				
	MAJOR PROPOSED PROJECT(S)	<p><M/P> 29 new water resource areas, and priority areas were selected.</p> <p><F/S> Water resources development, irrigation/drainage system development, introduction of irrigated agriculture, improvement for agricultural support policy for the priority area.</p>				
	PRESENT STATUS	Promoting	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>This project is included in the National Development Plan and regarded as high priority project. Subsequent study: EIA was conducted.</p>				

THA/A 206B/92

157	COUNTRY	Thailand	NAME OF STUDY	Regional Development Plan for Telecommunication Networks in the Bangkok Metropolitan Area		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1992	SECTOR	Telecommunication
	OBJECTIVES OF STUDY	To formulate a long term development plan for the period from FY 1993 to FY 2007 in the Bangkok metropolitan area in Thailand.				
	MAJOR PROPOSED PROJECT(S)	<M/P>1.Expansion of telecommunication; 2.Upgrade of telecommunication service quality. <F/S>1.Rehabilitation of local cables; 2.Check/consulting; 3.Replacement of public telephone sets; 4.Adjustment of P.D.timing; 5.Promotion of multi-hunting system; 6.Expansion of circuits; 7.Dial consulting services; 8.Expansion of subscriber lines.				
	PRESENT STATUS	Completed	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	<p><M/P>Expansion of three million telephone lines has been implemented with BOT scheme. The result of this study has been utilized as a reference by TOT (Telephone Organization of Thailand) to supervise construction, operation and maintenance by private enterprises. It has also been utilized for the following projects: 1.Rehabilitation Project; 2.Analog Switching Replacement Project; 3.Public Telephone Service Expansion Project; 4.Network Improvement Project; 5.Local Telecommunication Network Development Project; 6.Review Study on Telecommunication Network Development Plan for Bangkok Metropolitan Area.</p> <p><F/S> Finance: ADB, Private sector fund, Own (TOT) fund. Construction: Most of the proposed projects were completed.</p>				

THA/S 214B/92

158	COUNTRY	Thailand	NAME OF STUDY	The Tourism Development of the Hoa-Hin/Cha-Am Beach Area		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1992	SECTOR	(Tourism in) General
	OBJECTIVES OF STUDY	1. To prepare a Tourism Development Master Plan for the Study Area with target year 2006. 2. To carry out feasibility studies on priority projects. 3. To propose a set of institutional arrangements.				
	MAJOR PROPOSED PROJECT(S)	<M/P>1.Cultural/recreational center in Cha-am; 2.Pect Kasem road development; 3.Phetchaburi circulation road improvement; 4.Phetchaburi coastal road improvement; 5.Water supply development in Cha-am and Hua-hin; 6.Sewerage system development in Cha-am; 7.Tourism promotion; 8.Environmental management. <F/S> Above M/P proposed projects 1, 3, and 5.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p><M/P> Proposed projects: 1.Cultural/recreational center in Cha-am; 2.Pect Kasem road development; 4.Phetchaburi coastal road improvement; 7.Tourism promotion: preparing for implementation.</p> <p><F/S> Phetchaburi circulation road improvement (proposed project 3): It has been partially completed with own fund. Water supply and sewerage system development (proposed project 5 and 6): It was completed with own fund.</p>				

THA/S 215B/92

159

COUNTRY	Thailand	NAME OF STUDY	Integrated Agriculture and Water Resources Development Project of the Menam Chumphon Basin		
TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1992	SECTOR	(Agriculture in) General
OBJECTIVES OF STUDY	1) To formulate an integrated agriculture and water resources development plan of the Menam Chumphon basin; and 2) To conduct a feasibility study on selected priority projects.				
MAJOR PROPOSED PROJECT(S)	1.Nong Yai Agricultural Development: Rehabilitation of Nong Yai swamp; Irrigation (1,200ha); Livestock pilot project (cattle and pig); Swamp fisheries. 2.Drainage Improvement of Tha Taphao River System: Improvement of Tha Taphao River and tributaries; Construction of floodways; improvement of canal.				
PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT, Seminar		
DESCRIPTION	<p>1.Nong Yai Agricultural Development Subsequent study: Review study, EIA (1993 - 1995). Construction: Rehabilitation of swamp has already completed by own fund.</p> <p>2.Drainage Improvement of Tha Taphao River System Subsequent study: D/D. Finance: Own fund (768.9mil.Bahts). Construction: 1991 - 1998 (construction of floodway, improvement of drainage facilities, dredging of the Tha Taphao River and tributaries).</p> <p>3.Multi-purpose Dam Construction Subsequent study: Review study, EIA (Own fund).</p>				

THA/A 316/92

160

COUNTRY	Thailand	NAME OF STUDY	Greater Bangkok Truck Terminal		
TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1992	SECTOR	Land Transportation
OBJECTIVES OF STUDY	To construct a public truck terminal in order to alleviate traffic congestion and to modernize physical distribution system in Bangkok.				
MAJOR PROPOSED PROJECT(S)	Construction of public truck terminal with 500 berths. First stage: 350 berths (144 Rai); Second stage: 150 berths (63 Rai). Terminal facilities includes platform, apron, parking administration building, service station, green belt and road.				
PRESENT STATUS	Completed	TECHNICAL TRANSFER	Counterpart training		
DESCRIPTION	<p>Subsequent study: EIA, D/D (Sep.1995, Own fund). Finance: Own fund (1993). Construction:</p> <p>1.Bhuddamanthon (West): Nov.1996 - May 1998 (completed), Cost (921,900,000Bahts). 2.Klong Luang (North): Apr.1997 - Aug.1999 (completed), Cost (1,069,569,123Bahts). 3.Rom Khlao (East): Nov.1996 - Jan.2000 (completed), Cost (1,054,314,000Bahts).</p>				

THA/S 324/92

161	COUNTRY	Thailand	NAME OF STUDY	Regional Development Plan for the Lower Northeast and the Upper East Regions in the Kingdom of Thailand		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1993	SECTOR	Integrated Regional Development Plan
	OBJECTIVES OF STUDY	In order to accelerate economic growth in the target areas (7 provinces in the Lower Northeast and 2 provinces in the Upper East Regions), the following is to be expected; 1.To settle on an integrated regional development plan; 2.To propose institutional scheme to implement plans.				
	MAJOR PROPOSED PROJECT(S)	1.Regional/inter-regional Projects (regional artery, railway, Route No.24, Second Mekong Bridge, local air service network, Phanom Dong Rek water resources dev., Lam Thakong pumped power generation, Pak Man hydropower, etc.); 2.Area Development Project; 3.Special Center Program (rural diversification, rural environmental improvement, etc.); 4.Other Projects.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	Seminar		
	DESCRIPTION					
	<p>The results of this study have been utilized for the 8th National Economic Development Plan (1997 - 2001).</p> <p>1.Regional/inter-regional Projects</p> <p>1)Regional artery: Improvement work of new Indochina gateway road is on-going with own fund; 2)Railway: F/S (1994-95); 3)Route No.24 improvement: Own fund (5,067mil.Bahts), construction (1998-2005); 4)Second Mekong Bridge: D/D (Aug.1996-Sep.1997, ADB); 5)Phanom Dong Rek water resources dev.: F/S, under implementation; 6)Lam Thakong pumped power generation: Japan's ODA Loan (Sep.1994 L/A 18,242mil.yen), under construction (1996-2002); 7)Pak Man hydropower: Own fund and foreign loan (6,600mil.Bahts), completed.</p> <p>3.Special Center Program</p> <p>Mudahah Rural Development: Request for ADB Loan is under preparation.</p>					

THA/S 108/93

162	COUNTRY	Thailand	NAME OF STUDY	Phuket International Airport Development Plan		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1993	SECTOR	Air Transportation & Airport
	OBJECTIVES OF STUDY	To formulate a Master Plan for long-term development of Phuket International Airport for the target year 2010 and to study the feasibility of a short-term development plan for the existing airport to be formulated within the framework of the Master Plan.				
	MAJOR PROPOSED PROJECT(S)	<F/S> Short-term development plan for the target year of 2000: 1.Runway: pavement overlay for structure strengthening; 2.Passenger terminal building: expansion (6,980m2); 3.Road and car park: expansion of 420 parking slots; 4.Utilities: installation of power generation, incinerator, water supply system, telephones; 5. Others: construction of security fence.				
	PRESENT STATUS	Completed	TECHNICAL TRANSFER	OJT, Counterpart training, Workshop		
	DESCRIPTION					
	<p>1.Runway: AAT (Airport Authority of Thailand) budget (100mil.Bahts), construction was completed (Aug.1993 - Mar.1994).</p> <p>2.Passenger terminal building: D/D (1993), AAT budget (294mil.Bahts), under construction (Jan.1997 - Feb.2000).</p> <p>3.Road and car park (200 slots): D/D (1993 -), AAT budget (25mil.Bahts), construction was completed (Sep.1996 - May1997).</p> <p>4.Waste water treatment plant: AAT budget, construction was implemented in 1993.</p> <p>5.Security fence: AAT budget, construction was completed.</p>					

THA/S 208/93

163

COUNTRY	Thailand	NAME OF STUDY	Sewerage Development Project for Lower Chao Phraya River Basin			
TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1993	SECTOR	Sewerage	
OBJECTIVES OF STUDY	To formulate the water pollution control plan and sewerage M/P for the eight municipalities and to conduct the preliminary engineer design of sewerage system for two municipalities for the purpose of adopting the water quality of Cho Phraya River to the national standard.					
MAJOR PROPOSED PROJECT(S)	1. Water Pollution Control Plan (Chai Nat, Sing Buri, Ang Thong, Lop Buri, Ayutthaya, Pathum Thani, Nonthaburi). 2. Sewerage M/P for Eight Municipalities/Areas (Chai Nat, Sing Buri, Lop Buri, Ang Thong, Pa Mok, Sena, Pang Sit Prachatipat, Bang Bua Thong). 3. Preliminary Engineering Design of Sewerage Systems for Rangsit Area and Bang Bua Thong Municipality.					
PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT			
DESCRIPTION	<p>1. Chai Nat: Review study and D/D (1994, PWD (Public Works Department)), PWD budget (1995, 204mil.Bahts), Construction (1995-Mar.1998).</p> <p>2. Sing Buri: Review study (1994, PWD) and D/D (1995, PWD), PWD budget (1997, 280mil.Bahts), Construction (1994-Dec.2000).</p> <p>3. Ang Thong: Review study and D/D (1994-1995, PWD), PWD budget (1995, 180mil.Bahts), Completed in 1995, is in operation.</p> <p>4. Bang Bua Thong: Review study and D/D (PWD).</p> <p>5. Lop Buri: Review study and D/D are to be conducted by PWD.</p> <p>6. Pa Mod, Sena, and Rangsit: preparing for land acquisition.</p>					

THA/S 209/93

164

COUNTRY	Thailand	NAME OF STUDY	Agricultural Development for Peat/Acid Sulfate Soil Areas in Narathiwat Province			
TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1993	SECTOR	(Agriculture in) General	
OBJECTIVES OF STUDY	Establishment of Agricultural Development Method in peat/acid sulfate soil area.					
MAJOR PROPOSED PROJECT(S)	Farm land development (997ha), Construction of drainage canal (9,900m), Rehabilitation of drainage canal (11,910m), Embankment (17,800m), Fish nursery pond (21 ponds) for acid sulfate soil area (3 districts) in Narathiwat Province.					
PRESENT STATUS	Implementing	TECHNICAL TRANSFER	OJT			
DESCRIPTION	Part of the proposed projects, such as soil improvement, oil palm planting, and irrigation system, has been implemented at Bajo District.					

THA/A 310/93

165

COUNTRY	Thailand	NAME OF STUDY	Bang Pakong Diversion Dam Project			
TYPE OF STUDY	D/D	STUDY COMPLETION YEAR	1993	SECTOR	(Agriculture in) General	
OBJECTIVES OF STUDY	Detailed Design Study on Bang Pakong Diversion Dam Project.					
MAJOR PROPOSED PROJECT(S)	Bang Pakong diversion dam (1 dam), Incidental facilities, A pumping station.					
PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT			
DESCRIPTION	<p>1.Diversion dam and pumping station Finance: Own fund (1,970mil.Bahts). Construction: Oct.1996 - Nov.1999 (completed). Contents: channel, weir, cofferdam, gate, pump, control system, electricity, etc.</p> <p>2.Construction of irrigation channel (which is connected to the pumping station) Finance: Own fund (614mil.Bahts). Construction: Upper stream (Dec.1998 - 600days), Lower stream (1999 - 2years).</p> <p>3.Construction of drainage channel (60km) and embankment (16km) Subsequent study: D/D. Finance: Own fund (100mil.Bahts). Construction: 2000 - 2001.</p>					

THA/A 402/93

166

COUNTRY	Thailand	NAME OF STUDY	Management of Groundwater and Land Subsidence in the Bangkok Metropolitan Area and its Vicinity			
TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1994	SECTOR	Water Resources Development	
OBJECTIVES OF STUDY	Draw up the plan to control the land subsidence and the underground water.					
MAJOR PROPOSED PROJECT(S)	1.Construction of new facilities for observation; 2.Hydrological/geological investigation for all areas of the Chao Phraya River Basin; 3.Investigation for the rational utilization of river water; for Bangkok Metropolitan Area and its vicinity (approx. 5,600km ²).					
PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT			
DESCRIPTION	<p>The results of this study have been utilized for elaboration of the National Development Plan (1998 - 2002). Data on the groundwater level and the subsidence, which are automatically recorded by the observation well constructed by this study, are utilized.</p> <p>1.Details Assessment of Groundwater Resources Subsequent Study: Development Study (1994~2001), Own fund (30 mil. bahts). Finance: Own fund (15 mil. bahts).</p> <p>1-1.Construction of Observation Wells in Lower Chao Phraya 1997~ 22 Observation Wells were drilled. Drilling of 60 Observation Wells remains.</p> <p>2.A Feasibility Assessment of a Pilot Scale Artificial Recharge Trial in Bangkok and its Vicinity Subsequent Study: F/S (1998), Own fund (800,000 bahts). Finance: Own fund (Oct.1998, 800,000 bahts).</p>					

THA/S 110/94

167

COUNTRY	Thailand	NAME OF STUDY	Modernization of Bangkok Port in the Kingdom of Thailand			
TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1994	SECTOR	Port	
OBJECTIVES OF STUDY	Master Plan of Bangkok Port by 2005. Feasibility Study of Bangkok Port by 1997.					
MAJOR PROPOSED PROJECT(S)	<M/P>1.Introduction of the closed terminal system; 2.Expansion of the marshalling yard; 3.Construction of the import CFS and the export CFS. <F/S>1.Introduction of the closed terminal system; 2.Introduction of closing time; 3.Expansion of the marshalling yard at the eastern wharf; 4.Rationalization of the container yard at the western wharf; 5.The import CFS at Area II.					
PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER				
DESCRIPTION	<p>Finance: PAT (Port Authority of Thailand) budget (775mil.Bahts).</p> <p>Contents: construction plan, procurement of container handling equipment, human resources development, restructuring of organization, computerization of the port.</p> <p>Construction: Starting from 1995, the following construction works have already completed.</p> <ol style="list-style-type: none"> 1.Construction of container yard to replace ex-supplementary shed No.11, shed No.11, and shed No.12 2.Construction of Terminal gate No.1 & No.2 3.Construction of a concentrated reefer yard 4.Construction of Terminal No.2 Office Building 5.Construction of Gas station at east quay 6.Construction of repair and maintenance shop for container equipment at west quay 7.Adding one traffic lane to the bridge connecting the east and west quays 					

THA/S 216/94

168

COUNTRY	Thailand	NAME OF STUDY	The Study on the Agricultural Land Rehabilitation and Conservation Project			
TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1995	SECTOR	(Agriculture in) General	
OBJECTIVES OF STUDY	M/P on rehabilitation and conservation of farm land suffered from a disaster in 1988. F/S after selecting priority areas.					
MAJOR PROPOSED PROJECT(S)	1.Drainage improvement project (bank construction); 2.Irrigation development project; 3.Farm land conservation facility service project; 4.Soil/soil stratum improvement project; 5.Social infrastructure improvement project (feeder road improvement); 6.Agriculture support project; for Ban Na San Area in Surat Thani Province and Ransaka Area in Nakhon Si Thammarat Province.					
PRESENT STATUS	Promoting	TECHNICAL TRANSFER	Counterpart training, Seminar			
DESCRIPTION	<p>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.</p>					

THA/A 207/95

169

COUNTRY	Thailand	NAME OF STUDY	Integrated Agriculture and Water Resources Development Project of Huai Mon Nam Suai and Huai Luang River Basin		
TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1996	SECTOR	Irrigation, Drainage & Reclamation
OBJECTIVES OF STUDY	To formulate a M/P, focusing on water resources development in upper stream area and flood prevention in lower stream area for irrigated agriculture in Huai Mon Nam Suai and Huai Luang River Basin.				
MAJOR PROPOSED PROJECT(S)	1.Irrigated area: 1,000ha; 2.Cropping intensity: 100% in rainy season, 40% in dry season, 140% in total; 3.Dam: Earthfill dam (H=26m, L=150m, Storage 12.2MCM); 4.Irrigation canal: 32km; 5.Drainage/river improvement: 23.8km; 6.On-farm development: 1,000ha; 7.Rural infrastructure: 1 set.				
PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	Seminar		
DESCRIPTION					
F/S on Huai Mong Irrigation Project is conducted from 2000 to 2001 by local fund.					

THA/A 102/96

170

COUNTRY	Thailand	NAME OF STUDY	Urban Environmental Improvement Program in Bangkok Metropolitan Area		
TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1996	SECTOR	Environmental Problems
OBJECTIVES OF STUDY	To formulate a M/P on comprehensive urban environmental improvement for promoting the development of urban function in Bangkok Metropolitan Area.				
MAJOR PROPOSED PROJECT(S)	1.Mass Rapid Transit System Development; 2.Sub-center Development; 3.Sewerage and Drainage Development; 4.Transit Facilities and Final Disposal Sites for Solid Waste Management.				
PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	Seminar		
DESCRIPTION					
<p>1.MRTA Initial System Project (Blue Line) Finance: Japan's ODA Loan (Sep.1996 L/A 26,586mil.yen, Sep.1997 L/A 32,659mil.yen, Sep.1998 L/A 23,343mil.yen, MRTA Initial System Project (I),(II),(III)). Construction: on-going.</p> <p>2.Sub-center Development: F/S is to be requested.</p> <p>3.Sewerage Project Subsequent study: OECF SAPROF (Dec.1998 - Apr.1999, Cost: 50mil.yen).</p> <p>4.Solid Waste Management: Implementation with Japan's ODA Loan is under consideration.</p>					

THA/S 110/96

171	COUNTRY	Thailand	NAME OF STUDY	The Western Seaboard Regional Development		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1997	SECTOR	(Development Plan in) General
	OBJECTIVES OF STUDY	Support to elaborate a M/P for 6 provinces in the western seaboard of Sham bay, focusing on 1)Establishment of integrated regional development plan; 2)Dev.of system/organization; 3)An action program of priority projects; and 4) Technology transfer.				
	MAJOR PROPOSED PROJECT(S)	1.Kanchanaburi Tourism Promotion Project; 2.Kanchanaburi Agricultural Intensification Project; 3.Bang Pong Industrial/distribution Project; 4.Samut Songkhram Free Trade Area Project; 5.Petchaburi Science City Project; 6.Bang Saphang Free Trade Area Project; 7.Chumphon Tropical Fruit Project.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	Counterpart training, Seminar		
	DESCRIPTION	<p>Japan's project-type technical cooperation for Chumphon Tropical Fruit Center Project has been requested. Dispatch of JICA experts on tourist development and traffic safety has also been requested. The following projects are now being implemented:</p> <ol style="list-style-type: none"> 1.Hua Hin Airport Expansion is under construction. 2.Mangrove Preservation Program in Samut Songkhram is under operation. 				

THA/S 109/97

172	COUNTRY	Viet Nam	NAME OF STUDY	Transport Development in the Northern Part of Viet Nam		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1994	SECTOR	(Transportation in) General
	OBJECTIVES OF STUDY	Draw up a Master Plan of the transportation system except airport in the northern part of the country until the target year of 2010.				
	MAJOR PROPOSED PROJECT(S)	1.Road: improvement of National Highways No.1, 2, 18, 70, 379 and bridges; 2.Railway: improvement of passenger transportation of Hanoi - Haiphong Line, rolling stocks factory at Thap Cham, transportation for the border area; 3.Port: improvement/development of Haiphong and Cailan Ports; 4.Inland water transportation: imp. of Ninh Binh, Hanoi, Voh River Ports, etc.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	<p>1.Road: (1)Rehabilitation of National Highway No.1 (Hanoi - Vinh): World Bank/ADB. Rehabilitation of bridges in Hanoi - Vinh: Japan's ODA Loan ('94 L/A 3,870mil.yen, '95 L/A 2,859mil.yen, '96 L/A 8,808mil.yen, '97 L/A 2,239mil.yen, '99 L/A 13,170mil.yen). (2)National Highway No.5 Improvement Project: Japan's ODA Loan ('94 L/A 8,782mil.yen, '95 L/A 5,470mil.yen, '96 L/A 6,709mil.yen, '98 L/A 17,742mil.yen), Taiwan fund. (3)National Highway No.10: Japan's ODA Loan ('98 L/A 17,742mil.yen) (4)National Highway No.18: Japan's ODA Loan ('98 L/A 11,863mil.yen), Korean Loan.</p> <p>2.Railway: 1)Transportation for the border area: is on-going with own fund. 2)Rehabilitation of 9 bridges on North-South railway: Japan's ODA Loan ('94 L/A 4,042mil.yen, '95 L/A 54mil.yen, '96 L/A 7,341mil.yen).</p> <p>3.Port: 1)Haiphong Port: Japan's ODA Loan ('94 L/A 3,975mil.yen), under construction. 2)Cai Lan Port: JICA Development Study (F/S, '93-'94), Review study and D/D ('97-'98), Japan's ODA Loan ('96 L/A 10,273mil.yen). Construction: Projects, which are implemented by Japan's ODA loan, are now under construction.</p>				

VNM/S 101/94

173	COUNTRY	Viet Nam	NAME OF STUDY	Urban Drainage and Wastewater Disposal System in Hanoi City		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1994	SECTOR	River & Erosion Control
	OBJECTIVES OF STUDY	1)Formulation of a Master Plan on drainage and wastewater disposal; and 2)Feasibility Studies on urgent projects of improvement of inferior drainage and prioritized projects.				
	MAJOR PROPOSED PROJECT(S)	<M/P> 1.Drainage Plan: Drainage Plan for To Lich River Basin (77.5km2), Drainage Plan for Nhue River Basin (57.9km2); 2.Rehabilitation of Drainage System: Sewage collecting/treatment facilities (5) plan, Separate sewage treatment facilities (2) plan. <F/S> Drainage Plan for Toric River Basin (2 stages): pump station, regulating reservoir, river rehabilitation, sewerage.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	OJT, Seminar		
	DESCRIPTION					
	<p>1.Hanoi Water Environment Improvement Plan (I) Finance: Japan's ODA Loan (Apr.1995 L/A 6,406mil.yen). Contents: 1)reservoir and pump station, 2)improvement of major rivers and drainage channels, 3)rehabilitation of sewerage, 4)procurement of sewer cleaning machinery and undertaking of cleaning works, 5)construction of pilot waste water treatment plant, 6)environmental improvement of lakes/ponds. Construction:Jul.1998 - Feb.2001.</p> <p>2.Hanoi Water Environment Improvement Plan (II) Finance: Japan's ODA Loan (Mar.1998 L/A 12,165mil.yen). Contents:1)rehabilitation of river and drainage, 2)construction of regulating reservoir and pump station.</p>					

VNM/S 201/94

174	COUNTRY	Viet Nam	NAME OF STUDY	Improvement Project of Drainage System in South Bac Duong Agricultural Area		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1994	SECTOR	Irrigation, Drainage & Reclamation
	OBJECTIVES OF STUDY	Formulation of the drainage plan (M/P) for South Bac Duong area neighboring to the City of Hanoi with an area of approx. 40,000ha and a F/S for priority area.				
	MAJOR PROPOSED PROJECT(S)	1.Improve.of drainage: repair of pump stations and canals for drainage; 2.Improve. of irrigation system: securing of water quantity and repair of canal; 3.Establish. of sustainable agriculture: introduction of intensive and diversified farming system; 4.Improve. of social and environmental circumstances: alleviation of poverty and diseases for South Bac Duong Agricultural Area.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	Seminar		
	DESCRIPTION					
	<p>Subsequent study: B/D (Oct.1997 - Feb.1998, Drainage System Improvement in Tanchi). Finance: Japan's Grant Aid (Jun. 1998 E/N 252mil.yen (1/3), Sep.1998 E/N 1,491mil.yen (2/3), Drainage System Improvement Project in Tanchi, E/N for phase 3/3 is to be signed in FY2000), Own fund (construction of drainage channel). Provision of materials/equipment: completed. Construction: Phase 2/3 1999 - Mar. 2000 (planned to be completed).</p>					

VNM/A 202/94

175	COUNTRY	Viet Nam	NAME OF STUDY	Cai Lan Port Construction Project		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1994	SECTOR	Port
	OBJECTIVES OF STUDY	Feasibility Study for Cai Lan Port (target year of 2000).				
	MAJOR PROPOSED PROJECT(S)	1.Sea route: -11m in depth, 130m in width of the bottom. 2.Berth: 7 berths, 1,461m in extension, from -9m to -13m in depth of water. 3.Shed and open freight storage. 4.Cargo handling facility.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER			
	DESCRIPTION	<p>Subsequent study: Review study and D/D (Nov.1997 - Jul.1998). Finance: Japan's ODA Loan (Mar.1996 L/A 10,273mil.yen, Cai Lan Port Expansion Project). Contents: construction of 4 berths, access channel, equipment. Construction: 1998 - 2001.</p>				

VNM/S 301/94

176	COUNTRY	Viet Nam	NAME OF STUDY	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		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1995	SECTOR	Railway
	OBJECTIVES OF STUDY	To rehabilitate and modernize the Hanoi-Ho Chi Minh Railway Line by the year of 2010.				
	MAJOR PROPOSED PROJECT(S)	1. Rehab./imp. of Hanoi - Ho Chi Minh Line:1)imp. of cargo/passenger services; 2)imp. of tracks, bridges, signals, communication systems; 3)installation of optic cable/ telephone exchangers; 2. Rehab./imp. of Lao Cai - Cai Lan Line: 1)construction of Ha Long - Cai Lan Line; 2)imp. of tourist transport system for Ha Long Port; 3)imp. of Kep - Ha Line; 4)change of width of tracks.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER			
	DESCRIPTION	<p>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: F/S by Netherlands Government (1996). Finance: KfW (8.5 mil. yen, 179mil. yen). Construction: A part of construction work is on-going (completion scheduled in 2001).</p>				

VNM/S 202/95

177	COUNTRY	Viet Nam	NAME OF STUDY	Coastal Shipping Rehabilitation and Development Project		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1996	SECTOR	Marine Transportation & Ships
	OBJECTIVES OF STUDY	To formulate medium/long-term M/P on coastal shipping rehabilitation and development.				
	MAJOR PROPOSED PROJECT(S)	1.Coastal shipping fleet development/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 conservation of marine environment.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	Workshop		
	DESCRIPTION	<p>Human resource development of maritime: Implementation by Japan's project-type cooperation is under consideration.</p> <p>Maritime safety: Japan's ODA Loan to install GMDSS was decided to be procured in FY 2000.</p>				

VNM/S 111/96

178	COUNTRY	Viet Nam	NAME OF STUDY	Dong Nai and Surrounding Basins Water Resources Development		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1996	SECTOR	Water Resources Development
	OBJECTIVES OF STUDY	1) To formulate a M/P on comprehensive water resources development including hydroelectric power generation, irrigation, water supply and flood control in Dong Nai and surrounding basins (target year : 2015). 2) To select projects for F/S.				
	MAJOR PROPOSED PROJECT(S)	1.Rural agricultural development projects; 2.Rural water supply projects; 3.Combined development of Dong Nai No.3 and No.4 hydropower projects; 4.Phan Ri - Phan Thiet irrigation project; 5.Water supply project along National Highway No.51; 6.Action plan for implementation of the Dong Nai water resources development project.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	Counterpart training, Seminar		
	DESCRIPTION	<p>Subsequent study:</p> <p>OECF SAPROF (Jan.-Oct.1997, Water Supply Project along National Highway No.51).</p> <p>JICA Development Study (F/S) (Dec.1998 - Mar.2000, Combined Development Project of Dong Nai No.3 & 4 Hydropower).</p> <p>Finance: Japan's ODA Loan (Mar.1998 L/A 5,771mil.yen, Dong Nai and Ba Ria - Vung Tau Water Supply Project).</p> <p>Contents: construction of water supply facilities (water intake facilities, water treatment facilities, main water pipes, etc.) to supply enough water for daily and industrial use.</p>				

VNM/S 112/96

179	COUNTRY	Viet Nam	NAME OF STUDY	Urban Transportation for Hanoi City		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1996	SECTOR	Urban Transportation
	OBJECTIVES OF STUDY	To formulate a development plan on urban transportation for Hanoi City, with the target year of 2015.				
	MAJOR PROPOSED PROJECT(S)	Site: Hanoi Metropolitan Area (923km ²). <M/P>1.Road development (1,190km) (Imp.period: 1996-2015); 2.Rail development (17.4km) (Imp.period: 2001-2015). <F/S>Xuan La New City Development (592ha) (Imp.period: 2000-2005).				
	PRESENT STATUS	Processing	TECHNICAL TRANSFER	Seminar		
	DESCRIPTION	<p>Subsequent study: OECF SAPROF (Feb.- Jun. 1998).</p> <p>Finance: Japan's ODA Loan (Mar. 1999 L/A 12,510mil.yen, Transport Infrastructure Development Project in Hanoi). *Contents: Improvement of various roads and crossings in Hanoi city.</p>				

VNM/S 211/96

180	COUNTRY	Viet Nam	NAME OF STUDY	Economic Development Policy in terms of Transition toward Market Oriented Economy		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1997	SECTOR	(Development Plan in) General
	OBJECTIVES OF STUDY	To formulate more concrete and strategic proposal to cope with problems resulted from transition from social planned economy to market economy and to elaborate subsequent economic development plan.				
	MAJOR PROPOSED PROJECT(S)	Phase I:1)Macro economic policy; 2)Financial and banking policy; 3)Industrial policy; 4)Agricultural and rural development. Phase II:1)Agricultural and rural development; 2)Participation in AFTA/APEC/WTO and industrial policy; 3)Financial and banking policy; 4)Public enterprises reform.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER			
	DESCRIPTION	Finance: Japan's ODA Loan (Sep. 1999 E/N 20,000mil.yen).				

VNM/S 103/97

181	COUNTRY	Vict Nam	NAME OF STUDY	Water Supply Development for Hanoi City		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1997	SECTOR	Water Supply
	OBJECTIVES OF STUDY	1) Formulation of a M/P on water supply development in and around Hanoi City. 2) F/S for the priority projects.				
	MAJOR PROPOSED PROJECT(S)	<M/P> Development/expansion project of water supply facilities in Hanoi City (target year: 2010). Construction of facilities to develop the capacity by 600,000m3/day. <F/S> Dev. and expansion project of water supply facilities in Cau Giay Thanh Xuo Areas (target year: 2000-03). Const. of facilities (for intake/treatment/distribution) with the capacity of 600,000m3/day.				
	PRESENT STATUS	Promoting	TECHNICAL TRANSFER	Counterpart training, Seminar		
	DESCRIPTION	Preparing for the implementation of the proposed projects.				

VNM/S 209/97

182	COUNTRY	Vict Nam	NAME OF STUDY	Model Rural Development in Nam Dam District, Nghe An Province		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1997	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	M/P on rural development to improve agricultural productivity and the standard of living of local residents in Nam Dam District at Nghe An Province with the area of 30,000 ha and a population of 160,000. F/S on priority projects.				
	MAJOR PROPOSED PROJECT(S)	<M/P>(1999-2010): 1.Irrigation/drainage; 2.Agricultural supporting system; 3.Agro-industry/marketing; 4.Health and sanitation; 5.Education facilities; 6.Rural road; 7.Rural electrification; 8.Rural water supply; 9.Environmental conservation. <F/S>(10 years): Production-related facilities, Life-related facilities, Basic infrastructures, Environmental conservation.				
	PRESENT STATUS	Processing	TECHNICAL TRANSFER			
	DESCRIPTION	Based on the proposals of F/S, Nam Nam Model Agricultural Development Project was formulated which concentrate on 5 communes in south-western part of Nam Dan District. The request for a grant aid assistance for this project was submitted to Japanese government in Aug.1998. 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 in Jan.2000.				

VNM/A 219/97

183	COUNTRY	Viet Nam	NAME OF STUDY	The Marine Resources Survey		
	TYPE OF STUDY	Basic Study	STUDY COMPLETION YEAR	1997	SECTOR	Fishery
	OBJECTIVES OF STUDY	To undertake survey on marine resources (quantity and area of distribution of offshore large-sized fish) at Exclusive Economic Zone and on land survey to grasp the actual situation and resources of coastal fishery; and to elaborate a guideline for appropriate fishery.				
	MAJOR PROPOSED PROJECT(S)	1.Guideline for fishery resources management. 2.Recommended policy for promoting of fishery; 1)Test fishing in offshore area by semi-commercial fleet; 2)Compilation of fisheries statistics; 3)Continuation/expansion of scientific survey; 4)Review of fisheries regulations; 5)Fishermen's organization; 6)Technological improvement; 7)Market expansion; 8)Infrastructure dev., etc.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	The results of this study is highly evaluated.				

VNM/A 503/97

184	COUNTRY	Egypt	NAME OF STUDY	Rehabilitation and Improvement of Delivery Water System on Bahr Yusef Canal		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1992	SECTOR	Irrigation, Drainage & Reclamation
	OBJECTIVES OF STUDY	To evaluate the feasibility of the rehabilitation and improvement of delivery water system on Bahr Yusef canal in order to improve the overall efficiency of water use thus contribution optimum crop production in the area.				
	MAJOR PROPOSED PROJECT(S)	1.Rehabilitation of Bahr Yusef canal; 2.Replacement of barrage/regulator; 3.Rehab. of intake facilities; 4.Rehab. of branch canals; 5.Irrigation pump stations; 6.Drainage pump stations; 7.O/M system and training; 8.End irrigation facilities. <Priority projects>1.Lahoun regulator; 2.Giza intake facility; 3.Hassan Wasef intake facility; 4.Construction materials/equipment.				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT, Counterpart training, Seminar		
	DESCRIPTION	<p>1.Lahoun regulator, Giza intake facility, Hassan Wasef intake facility Subsequent study: D/D by Japan's grant aid (Jan.1995 E/N 94mil.yen). Finance: Japan's grant aid (I:May1995 E/N 963mil.yen, II:May 1995 E/N 1,424mil.yen). Construction: completed.</p> <p>2.Mazora barrage: B/D (Mar.-Aug.1998, JICA), D/D by Japan's grant aid (Jan.1999 E/N 87mil.yen). 3.Sakoula and Mansyattoereguhab barrages: Request for Japan's grant aid has been submitted. 4.Rehabilitation of Bahr Yusef canal: Japan's grant aid is expected. 5.Japan's technical cooperation: acceptance of trainees (Dec.1995, one trainee, technical training; Nov.1997, 3 trainees, irrigation facility planning/design/control), dispatch of experts (Jun.1996-Jun.1999 irrigation water distribution plan, irrigation technology; Oct.1999 - Sep. 2002 irrigation water distribution plan).</p>				

EGY/A 307/92

185	COUNTRY	Egypt	NAME OF STUDY	Transportation System and National Road Transportation Masterplan		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1993	SECTOR	Land Transportation
	OBJECTIVES OF STUDY	To analyze the transportation system in the country. To prepare a master plan for the improvement of the national road network and road transportation system.				
	MAJOR PROPOSED PROJECT(S)	1.Road development for land utilization/development (35routes); 2.Road development for maintaining the service level (60routes); 3.Highway network (2routes); 4.Bus/taxi terminal improvement (551terminals); 5.Truck terminal construction (3 terminals); 6.Nile bridge construction (19 bridges); 7.Railway grade crossing improvement (40crossings).				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Seminar		
	DESCRIPTION	<p>The results of this study have been utilized for the formulation of the 5-year Development Plan.</p> <p>1.Road development for land utilization/dev.: under implementation with own fund (1994 -).</p> <p>2.Road development for maintaining the service level: under implementation with own fund (1994 -).</p> <p>3.Highway network (Cairo - Alexandria, Cairo - Damietta): Own fund</p> <p>4.Bus/taxi terminal improvement: It is to be implemented by local government.</p> <p>5.Truck terminal construction: It is included in the National Freight Transport Improvement Plan.</p> <p>6.Nile bridge construction: under implementation with own fund (1994 -).</p> <p>7.Railway grade crossing improvement: under examination by Egypt National Railways and the Roads & Bridges Authority.</p>				

EGY/S 109/93

186	COUNTRY	Egypt	NAME OF STUDY	The Urgent Plan of the Suez Bay Coastal Area Development		
	TYPE OF STUDY	D/D	STUDY COMPLETION YEAR	1993	SECTOR	Port
	OBJECTIVES OF STUDY	Review of a Master Plan made on 1986, and Preparing of Detailed Design Report, International Tendering Document for the Infrastructures.				
	MAJOR PROPOSED PROJECT(S)	<p><Construction>1. Ataqia I.E. and Adabiya I.F.Z.; 2. Water treatment facilities; 3. Waste water treatment facilities; 4. Dredging/reclamation/wharf; 5. Grain silo terminal; 6. Bulk cargo terminal; 7. railway; 8. Buildings in central areas; 9. Ataqia I.E. coastal area; 10. Coastal road; 11. Storm water drainage. <Procurement>1. Grainage unloaders; 2. Tugboats; 3. Radar system.</p>				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>1. Ataqia Industrial Estate and Industrial Free Zone: Own fund (100mil.E.P.); Construction is to be completed by Jun. 1998.</p> <p>2. Water treatment facilities: is to be implemented in 5-year development plan (1997-2002), Own fund (99mil.E.P.).</p> <p>3. Waste water treatment facilities: is to be implemented in 5-year development plan (1997-2002), Own fund (86.5mil.E.P.).</p> <p>4. Reclamation: Reclamation of El Khore and Suez Cornice was completed.</p> <p>5. Road: Ling road connecting to the Suez - Cairo Expressway is under construction.</p>				

EGY/S 401/93

187	COUNTRY	Egypt	NAME OF STUDY	Farmland Environmental Improvement Project		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1995	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	Drainage improvement at Omoum low land (approx.180,000ha) in northwestern part of Nile Delta to improve living environment at rural area.				
	MAJOR PROPOSED PROJECT(S)	<M/P>Drainage area (180,710ha), Major products (wheat, versecem, vegetable, corn, cotton, paddy), Drainage pump stations (8), Drainage canal (10.6km), Culvert drainage (74,630ha). <F/S>Drainage area (26,600ha), Major products (wheat, versecem, vegetable, corn, cotton), Drainage pump stations (1), Drainage canal (10.6km), Culvert drainage (22,440ha).				
	PRESENT STATUS	Partially Completed	TECHNICAL TRANSFER	OJT, Counterpart training, Seminar		
	DESCRIPTION	<p>Completed projects:</p> <ol style="list-style-type: none"> 1.Excavation of Haris main drain (by World Bank). 2.Periodic maintenance for branch drains network in El Nahda drainage center. 3.Installation of 4 pumps at Haris pump station for emergency. 4.El Max pump station (by Islamic Bank). 5.Catchment development (by NDPI): Haris catchment 1&2: 8,200 fed, Haris catchment 6: 7,000 fed, El Saaida catchment 1&2: 11,900 fed, Abd el Hady catchment: 8,500 fed, El Omoum catchment: 4,965 fed. 6.Excavation of Omoum drain by using pumps. 				

EGY/A 202/95

188	COUNTRY	Jordan	NAME OF STUDY	Brackish Groundwater Desalination		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1995	SECTOR	Water Resources Development
	OBJECTIVES OF STUDY	Elaboration of water resources development strategy on blackish ground water desalination.				
	MAJOR PROPOSED PROJECT(S)	The construction of desalination treatment plant (5million m3/year) and the construction of trunk line to send water at Kafraïn area, southern part of Jordan Valley.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	<p>Due to the scarcity of water available in Jordan, the proposed project is considered as first priority project in the coming five years Emergency Plan.</p> <p>This survey was practically used in:</p> <ol style="list-style-type: none"> 1. Water resources development project and capital investment project in Jordan (1997-2011). 2. Evaluation of water demand/supply. <p>Finance: A request for a Japan's grant aid (7,000 mil. yen) was submitted in 1999.</p> <p>*Contents: Construction of desalination plant and trunk line.</p>				

JOR/S 103/95

189

COUNTRY	Jordan	NAME OF STUDY	Improvement Plan of the Aqaba		
TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1995	SECTOR	Port
OBJECTIVES OF STUDY	M/P on Aqaba Port (2010) Short-term Improvement Plan (2000).				
MAJOR PROPOSED PROJECT(S)	1.Deepening work and extension/expansion of conveyer at Grain wharf. 2.Extension of wharf and improvement ark at Container Port. 3.Construction of new bridge and deepening/extension work existing wharf at industry area.				
PRESENT STATUS	Implementing	TECHNICAL TRANSFER	Counterpart training		
DESCRIPTION					
<p>1.Deepening work and extension/expansion of conveyor at Grain wharf Construction: Wharf No.1: Fenders were put up to increase the depth to 11m which enables ships of 70,000DWT to discharge comfortably. Wharf No.4: Deepening was done to increase to 12.5m in order to enable ships of 53,000DWT to discharge safely.</p> <p>2. Extension of wharf and yard improvement work at Container Port Finance: Efforts are undertaken to ensure fund.</p> <p>3.Construction of new bridge and deepening /extension work of existing wharf at industry area New Industrial Jetty/Wsd2: Under construction from 1998 by private fund (European Investment Bank Loan, 60 mil. \$) until 2000. Extension of Industrial Berth: D/D was implemented.</p>					

JOR/S 201/95

190

COUNTRY	Jordan	NAME OF STUDY	Improvement of Water Supply System for the Zarga District		
TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1996	SECTOR	Water Supply
OBJECTIVES OF STUDY	1) To formulate a basic plan on improvement of water supply system for the Zarga District. 2) F/S for rehabilitation/development of the facilities.				
MAJOR PROPOSED PROJECT(S)	1.Utilization of abandoned wells (Setting up of Zoning, Improvement of Pumping Station and conveyance Pipe, Improvement of Distribution Pipe, Leakage Detection). 2.Leakage Detection.				
PRESENT STATUS	Promoting	TECHNICAL TRANSFER	Counterpart training		
DESCRIPTION					
<p>Finance: Request for Japan's grant aid (2,500mil.yen) was submitted in Sep. 1999. Dispatch of Expert: A JICA expert for leakage detection was dispatched to WAJ in Apr. 1999.</p>					

JOR/S 311/96

191	COUNTRY	Oman	NAME OF STUDY	Port Development for Northern Oman		
	TYPE OF STUDY	M/P	STUDY COMPLETION YEAR	1990	SECTOR	Port
	OBJECTIVES OF STUDY	Feasibility study of the port development for northern Oman.				
	MAJOR PROPOSED PROJECT(S)	1. Short-term Development Plan of Qaboos Port: Reclamation for a new berth and container yard, Modernization of operation system. 2. Short-term Development Plan of the new port in northern Oman: Construction of Sohar Port.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	<p>1. Development of Qaboos Port Subsequent Study: F/S 1990-1991, D/D 1990-1991 by own fund. Finance: Own fund. Construction: 1991 - 1996 (completed).</p> <p>2. Expansion of Port of Sohar Subsequent Study: M/P assessment (1996), D/D (1998), Proposed project site has been changed. Finance: Loan from EXIM Bank of Japan (10 Mar. 1999 L/A US\$250mil.). Japan's technical cooperation: Dispatch of three short-term JICA experts (1995 -1996). Dispatch of two long-term JICA experts (1997 -2000).</p>				

OMN/S 101/90

192	COUNTRY	Oman	NAME OF STUDY	Road Development Project in the Sultanate of Oman		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1994	SECTOR	Road
	OBJECTIVES OF STUDY	Formulation of management plan of main bridges by conducting F/S on two-level crossings and underground crosswalks of Batina Highway on northern beach for smooth traffic and safety in Oman.				
	MAJOR PROPOSED PROJECT(S)	1. To select the location of two-level crossing at eight rotaries and twelve underground crosswalks along Batina Highway, and to set the preference for these items. 2. The loading test and other inspections for bridges. 3. Recommendation for maintenance/administration to repair the bridges.				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	<p>1. Construction of roundabout (rotaries) Subsequent Study: JICA Development Study (D/D) (Dec. 1995-Mar. 1997).</p> <p>2. Rehabilitation of Bridges Subsequent Study: JICA Development Study (D/D) (Dec. 1995-Mar. 1997). Finance: Own fund. Construction: Rehabilitation work has been implemented occasionally.</p>				

OMN/S 301/94

193	COUNTRY	Oman	NAME OF STUDY	Road Development Project		
	TYPE OF STUDY	D/D	STUDY COMPLETION YEAR	1996	SECTOR	Road
	OBJECTIVES OF STUDY	To undertake a D/D for the construction of flyovers and underpasses of the National Highway route 1 in Batinah-Coast Area.				
	MAJOR PROPOSED PROJECT(S)	Grade Separation of the roundabouts along the National Highway No.1 1. Construction of 8 flyovers over the roundabouts 2. Construction of 12 pedestrian underpasses				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER			
	DESCRIPTION	<p>1. Construction of roundabout (rotaries) Higher priority is given to the project. It is being prepared for the implementation.</p> <p>2. Rehabilitation of bridges Finance: Own fund. Construction: Rehabilitation work has been implemented occasionally.</p>				

OMN/S 405/96

194	COUNTRY	Palestine	NAME OF STUDY	Sewerage Development Plan in the Area of Khan Yunis		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1997	SECTOR	Sewerage
	OBJECTIVES OF STUDY	M/P for sewerage development to improve sanitary environment in Khan Yunis at Gaza and F/S for selected priority projects.				
	MAJOR PROPOSED PROJECT(S)	F/S: 1. Sewerage facility 2. Sanitation facility 3. Drainage facility				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	Counterpart training		
	DESCRIPTION	<p>Subsequent Study: B/D (JICA, 1999-2000). Finance: Japan's grant aid (Mar. 1999 E/N 283 mil. yen), Provision of materials/equipment.</p>				

PLE/S 211/97

195	COUNTRY	Turkey	NAME OF STUDY	Adatepe Irrigation Project		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1989	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	The objectives of the Study are to formulate a plan of optimum irrigation project in Adatepe Area for increasing agricultural products and promoting agriculture and to verify technical, economic and financial feasibility of the project.				
	MAJOR PROPOSED PROJECT(S)	1. Irrigation area: 38,438ha (gravity irrigation 31,218ha, pumped irrigation 7,220ha) 2. Dam: Adatepe dam 3. Main Canal: 76km 4. Tunnel: 280m 5. Pump station: 8 sites				
	PRESENT STATUS	Implementing	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	<p>The project has come to implementation as an agricultural project to the area of southeast Anatolia which is relatively underdeveloped.</p> <p>1. Irrigation Facilities (38,439ha) Finance: The project is to be financed by the Turkish Government.</p> <p>2. Adatepe Dam Finance: Own fund. Construction: 1994 - 2000.</p>				

TUR/A 301/89

196	COUNTRY	Turkey	NAME OF STUDY	Demersal Fisheries Resource Survey		
	TYPE OF STUDY	Basic Study	STUDY COMPLETION YEAR	1993	SECTOR	Fishery
	OBJECTIVES OF STUDY	Evaluation of demersal fisheries resources around the territorial waters in the Republic of Turkey.				
	MAJOR PROPOSED PROJECT(S)	1. Collection of fisheries data and establishment of management organization and system. 2. Expansion and strengthening of fisheries administration and research institutions. 3. Rational utilization of marine resources. 4. Promotion of propagation and aquaculture.				
	PRESENT STATUS	In Progress or In Use	TECHNICAL TRANSFER	OJT, Counterpart training, Seminar		
	DESCRIPTION	<p>Situation of Utilization:</p> <p>1. The Study Report was translated into Turkish, and distributed to the related institutions.</p> <p>2. Another meeting was held with the WB Resident Mission in accordance with the recommendations of the Study Report.</p> <p>3. The Study Report is referred to yearly circular which regulates the fishing in the Republic of Turkey.</p> <p>Japan's Technical Cooperation: Project-type Technical Cooperation (Apr.1997-Mar.2002).</p>				

TUR/A 504/93

197	COUNTRY	Turkey	NAME OF STUDY	Flood Control, Forecasting and Warning System for Seyhan River		
	TYPE OF STUDY	F/S	STUDY COMPLETION YEAR	1994	SECTOR	Urban Sanitation
	OBJECTIVES OF STUDY	Proposal of river basin management model with dam operation in real time as a tool for effective flood control and flood warning system.				
	MAJOR PROPOSED PROJECT(S)	1. Hydrological meteorology 2. Information collecting system 3. Information processing system 4. Dam operating system 5. Control Center 6. Information transmission system				
	PRESENT STATUS	Delayed or Suspended	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION					
	Reasons for delay: The emergence of flood has decreased due to the water control, flood control, and construction of Catalan Dam which had been conducted after the completion of the study. Concrete action has not yet been taken because of the difficulty in ensuring the fund source.					

TUR/S 301/94

198	COUNTRY	Turkey	NAME OF STUDY	Kuchuk Menderes River Basin Irrigation Project		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1996	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	M/P on Kuchuk Menderes Basin Irrigation Development Basic Plan. F/S on Irrigation System Plan.				
	MAJOR PROPOSED PROJECT(S)	1. Irrigation with groundwater and surface water by introducing water consumption economize system. 2. Introduction of advanced agriculture system. 3. Establishment of efficient administration and maintenance system of facilities.				
	PRESENT STATUS	Promoting	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION					
	Finance: Request for Japan's ODA loan has been submitted. Construction of Beydag Dam (as a precondition of realizing the proposed projects) Finance: Own fund. Construction: 1993 - 2001.					

TUR/A 201/96

199	COUNTRY	Turkey	NAME OF STUDY	Maintenance and Rehabilitation of Highway Bridges		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1996	SECTOR	Road
	OBJECTIVES OF STUDY	To formulate a maintenance and rehabilitation plan of highway bridges and to make a manual on maintenance/repair/inspection/evaluation of the bridges.				
	MAJOR PROPOSED PROJECT(S)	1. 4 Bridges Repair: Improvement, Repair, Reconstruction. 2. 2 Bridges Repair: Repair for Alkali Aggregate Reaction. 3. 4 Bridges Repair: Improvement, Repair.				
	PRESENT STATUS	Promoting	TECHNICAL TRANSFER	OJT		
	DESCRIPTION	The rehabilitation of deteriorated bridges will be implemented with the government budget. Some actions have been taken for realizing the proposed projects for 5 bridges (Akcaay, Gelincik, Candu Hasanpasa, Babadat, Selyeri).				

TUR/S 215/96

200	COUNTRY	Turkey	NAME OF STUDY	National Small-Scale Irrigation and Rural Development Project		
	TYPE OF STUDY	M/P+F/S	STUDY COMPLETION YEAR	1997	SECTOR	(Agriculture in) General
	OBJECTIVES OF STUDY	M/P and F/S on small-scale irrigation and agricultural development in rural area of Turkey excepting for the south eastern area.				
	MAJOR PROPOSED PROJECT(S)	F/S: 1. Dam irrigation: 2 projects. 2. Groundwater Irrigation: 3 projects. 3. Weir irrigation: 3 projects. 4. Soil conservation: 1 project. 5. Land consolidation: 1 project.				
	PRESENT STATUS	Promoting	TECHNICAL TRANSFER	OJT, Counterpart training		
	DESCRIPTION	Turkish side asked informally of Japan's ODA loan to the Embassy of Japan.				

TUR/A 220/97