CSA GTM/S 201B/84

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT
1.COUNTRY 2.NAME OF STUDY	Guatemala ect (Archiguate and	1.SITE OR AREA Archiguate and Pantaleon Rivers	1.PRESENT ☐ Completed or in Progress ☐ Promoting STATUS ☐ Completed ☐ Partially Completed ☐ Delayed or Suspended
Pantaleon Rivers)	ect (Archiguate and	2.PROJECT COST M/P 1) 63,200 Local 27,000 Foreign 36,200 Cost Cost 11,500	Implementing Processing Discontinued or Cancelled
3.SECTOR Social Infrastructures,	/River & Erosion	2) 21,800 3) 3.CONTENTS OF MAJOR PROJECT(S)	Because of the low BIRR, the Government of Guatemala assigned lower priority to the proposed project. The Government reviewed the study and applied to Japanese grant aid
4.REFERENCE NO. 5.TYPE OF STUDY 6.COUNTERPART AGENC		[Sediment Control Works] <m p="">The design sediment discharge of 30-year(M/P),10-year (F/S) return period is 1.94 million cu.m(M/P), 710 thousand cu.m(F/S) in the Achiguate river basin and 3.25 million cu.m(M/P), 1,206 thousand cu.m(F/S) in the Panteleon river basin. The sediment control plan is made up of sediment control dams of cobble stone concrete type. It is proposed that three dams for the Achiguate river basin and five dams for the Pantaleon river basin be conducted to fully regulate the design sediment discharge:<f></f>F/S> Sediment control can be accomplished at a limited number of sites by high dams which have the highest sediment regulation</m>	in March 1991, but was not successful. (FY1991 Overseas Survey) The Ministry considers that the proposed project is high in urgency and hopes to obtain financial assistance from Japan. The Ministry expects that the project be implemented in conjunction with the conservation of the upper basin of Archiguate River. (FY1993 Overseas Survey) Application for Grant Aid was made in March 1991, however project
7.OBJECTIVES OF STUDY Formulation of a long- identification of a sh	term flood control plan and	effect. Sediment control is made up of two dams or conclestone concrete type for Achiguate river and one dam of the same type for Pantaleon river [Plood Control Works]-M/PPTo protect the target assets from flood damage, partial river improvement works are employed for the project. For Achiguate river, the flood control works consist of river channel improvement in two stretches for the CA-2 road bridge and the railway bridge and for the urban area in Finca La Trinidad, respectively, and a ring levee around the urban area in Finca La Barrita. For Pantaleon river, river channel improvement will be undertaken for the protection of the CA-2 road bridge and the national railway bridge. The total length of the case of the protection of the case of the rational railway bridge. The total length of the case	loost was far heyond the limit of grant aid of Japanese Government and
8.DATE OF S/W 9.CONSULTANT(S) CTI Engineering Co., L	Apr.1983	rivers, respectively. The ring levee is constructed over 5.0km around Finca La Barrita. Riparian facilities such as revetment, groundeill, etc., will be installed to maintain the function of the proposed improvement works. The design flood discharge are1,200m3/s(M/P), 950m3/s(F/S) for the Achiguate river and 1,150m3/s(M/P),900m3/s(F/S) for Pantaleon river, respectively. <f s="">Folood control can be accomplished by</f>	
		Imp. Period: 19861990	
	12 Feb.1985(20 months)	Conditions and Development Impacts: <m p=""> (30-year return period) The total area inundated due to floods of the Achiquate and the Pantaleon rivers is estimated at about 16,000 ha. Out of the inundated area, the area of 3,271 he including 2,054 houses may be saved from inundation by a flood of less than 30-year return period by implementing the long-term plan. The economic annual benefit under the proposed long-term plan, which will accrue during the period</m>	
Total M/M 99.28 11.ASSOCIATED AND/OR SUBCONTRACTED STU		of economic life of the project, is estimated at US\$ 3,478 thousand, while EIRR is 5.14. <pre></pre> <	2.MAJOR REASONS FOR PRESENT STATUS (M/P) Because the arterial road and railway cross the two rivers, it is crucial to ensure the safety of the bridges through effective flood control measures. (P/S) Owing to the budgetary constraints, it is difficult to allocate government funds to the proposed project which would not have an immediate impact on the productive sectors. Owing to the budgetary constraints and huge project cost, it is difficult to allocate
12.EXPENDITURE Total Contracted	266,215 (¥'000) 239,058	5.TECHNICAL TRANSFER Periodical lecture meeting on the river engineering for the counterparts	3.PRINCIPAL SOURCE OF INFORMATION (i), (2), (3)

PROJECT SUMMARY (Basic Study)

CSA GTM/S 501/86

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDY RESULTS
I.COUNTRY 2.NAME OF STUDY Ground Water Deve	Guatemala elopment Project	1.SITE OR AREA Guatemala City, surrounding Guatemala City valley and adjacent northeastern area	I.PRESENT STATUS In Progress or In Use Delayed Discontinued
3.SECTOR Social Infrastructure	es/Water Resource	Total Cost Local Cost Foreign Cost	(Description) Dec. 1990 E/N of OECF loan (4,711 million yen) Mar. 1991 OECF L/A Mission Dec. 1991 L/A not signed because of the delay in formal approval at the Parliament Jun. 1992 OECF L/A signed Dec. 1993 Construction scheduled to begin Oct. 1995 Construction scheduled to end
4.REFERENCE NO. 5.TYPE OF STUDY 6.COUNTERPART AGEN EMPAGUA (Empresa Muni de Guatemala)	Basic Study NCY icipal de Agua de la Ciudad	- Water distribution facilities 34.2km - Distribution tank 1,260cu.m-2,835cu.m - Power distribution facilities 23,000m - Work shop 23,000m	OECF finance: 1) Construction of 38 deep wells and related facilities 2) Rehabilitation of 22 existing wells (FY 1993 Overseas Survey) The following projects have been implemented so far. 1) Provision of water level meters and conducting regular water check-up tests for 64 wells, or 80% of the total of 80 wells
7.OBJECTIVES OF STUE To obtain water source for Guatemala City	DY ce for portable water supply		owned by EMPAGUA. 2) Excavation of 17 new wells with domestic fund of Q 18 mil, 3) Study of optimal water supply and water supply/ distribution system in the Northern Area with a loan of \$ 1mil. from France. In addition, a part of the World Bank loan for Economic Modernizat Assistance has been used to set up a plan to improve the organizat and practice of EMPAGUA in such areas as management, finance, investment, fare system and staff training. The loan was also used provide or rennovate 40,000 meters for domestic service pipes and procure seven automobiles.
8.DATE OF S/W 9.CONSULTANT(S) Chuo Kaihatsu Interna	Dec.1984	4.CONDITIONS AND DEVELOPMENT IMPACTS - Direct benefit is the qualitative and quantitative improvement of EMPAGUA's service Indirect effects include (i)improved sanitation through clean water supply; (ii) reduced labor burden for women and children heretofore forced to carry water over long distances; and (iii) expanded employment opportunities through project related construction.	
10.STUDY TEAM No.of Members Period Jul. 1985	8 5-Sep.1986(15 months)		
Total M/M 50.11 11.ASSOCIATED AND/C SUBCONTRACTED ST Geological survey an	<u>rudy</u>		2.MAJOR REASONS FOR PRESENT STATUS
12.EXPENDITURE Total Contracte	311,081 (¥ 000)	5.TECHNICAL TRANSFER 1) Counterpart OJT on the analysis of aerophotos, etc. 2) Training in Japan in F/S methodology	3.PRINCIPAL SOURCE OF INFORMATION ①、②、③、④

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Revised Mar. 1995 CSA GTM/S 301/88 III. PRESENT STATUS OF STUDIED PROJECT II. SUMMARY OF STUDY RESULTS I. OUTLINE OF STUDY 1.PRESENT ■ Completed or in Progress □ Promoting 1.COUNTRY 1.SITE OR AREA Guatemala STATUS (Completed 2 NAME OF STUDY Santo Tomas on the Caribbean coast □ Delayed or Suspended Partially Completed Development Project of the Port of Foreign Cost Total Cost Local Cost O Implementing Santo Tomas de Castilla 2.PROJECT COST 30,343 66,683 ☐ Discontinued or Cancelled 97,031 1) () Processing (US\$1,000) 2) (Description) 3) 3.SECTOR (FY1991 Overseas Survey) The report of the study was utilized by the Planning Unit and the Engineering Dept. of EMPORNAC. The project is considered high priority, and will be revived in the future. 3.CONTENTS OF MAJOR PROJECT(S) Transportation/Port Short Term Plan (Target year: 1995) 4.REFERENCE NO. A container terminal (FY 1993 Overseas survey) - Length: 500 m (-11m) - Area: 25 ha The 1989 OECF Loan Appraisal Mission proposed a loan on the 5.TYPE OF STUDY F/S condition that the project scale be reduced. However the Minister of Finance then in the fear of the country's inability of repay did not approve the acceptance of the loan. Handling equipment: 3 gantry cranes, 6 strand carriers, 1 forklift 6.COUNTERPART AGENCY Another loan request of \$4.5 mil. has been made to Central American Another loan request of \$4.5 mil. has been made to Central American Bank of Economic Integration (CABEI) to finance 1)the enlargement of the container terminal, 2)construction of a container yard of 200,000 sq. meters, 3)provinsion of navigation aid facilities. A D/D and an environmental assessment, persequisite for receiving the loan, are scheduled to be conducted with domestic fund during FY 1994 (with budget of Q 2.5 mil. to 3 mil.). The loan is expected to be approved in the early 1995.

Merophile Graduing of inland channel and the grounding of the Port of Santo Tomas Authority 2) A petroleum terminal Length: 270 m (-11m) Access Channel depth: -11m width: 80m 7.OBJECTIVES OF STUDY navigation aid system Formulation of Stage III development plan weenwhile dredging of inland channel and the grounding of the terminal were completed with domestic fund of Q 1.1 hundred mil. bet 12/92 and 7/93. Furthermore the construction of Oil terminal with domestic fund of O 1.5 mil. is considered to be carried out after mid-1995. (FY1994 Domestic Survey) No additional information Dec.1986 .1992~.1994 Imp. Period: 8.DATE OF S/W 7.30 EIRR1) 23.40 FIRR1) 4.FEASIBILITY AND 9 CONSULTANT(S) Feasibility: EIRR2) FIRR2) ITS ASSUMPTIONS Yes/No Overseas Coastal Area Development Institute FIRR3) EIRR3) Yachiyo Engineering Co., Ltd. Conditions and Development Impacts: Development Impacts: Reduction of transport costs by the use of larger vessels
Reduction of transport costs by eliminating the need to use other ports 4)Establishment of efficient management and operation system for the new 10.STUDY TEAM No.of Members 5) Introduction of appropriate maintenance system for cargo landling Period May.1987-Jul.1988 (0 months) equipment. 2.MAJOR REASONS FOR PRESENT STATUS Field Total M/M Japan-The negotiation on the project funding has been stalled because two 23.52 24.33 47.85 other projects on which the E/Ns were already signed have not been processed due to the delay of the congressional approval. 11.ASSOCIATED AND/OR SUBCONTRACTED STUDY 5.TECHNICAL TRANSFER 3 PRINCIPAL SOURCE OF INFORMATION Participation of counterparts in the JICA training program 12.EXPENDITURE 158,211 (Y'000) ①、②、③ Total 150:278 Contracted

和名 サント・トーマス港開発計画

 $\{F/S,D/D\}$

Compiled Mar. 1990

CSA GTM/A 301/88

I, OUTLINE	E OF STUDY	II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT		
I.COUNTRY 2.NAME OF STUDY Monjas Irrigation	Guatemala Project	Jalapa, Monjas (Area 7,100ha, population 14,130, 150km from the capital) 2 PROJECT COST Total Cost Local Cost Foreign Cost	I.PRESENT ☐ Completed or in Progress ☐ Promoting ○ Completed ○ Partially Completed ☐ Delayed or Suspended		
		2.PROJECT COST Total Cost Local Cost Foreign Cost 46,850 18,464 28,386 US\$1=2.5Q 2)	O Implementing O Processing Discontinued or Cancelled (Description)		
3.SECTOR Agriculture/General		3.CONTENTS OF MAJOR PROJECT(S) Irrigation area: 4,800 ha	In view of the high priority of the proposed project, the Government of Guatemala applied for Japanese Grant Aid in March 1989, but it was not successful due to huge project cost of \$46.9 mil.		
4.REFERENCE NO. 5.TYPE OF STUDY	F/S	Reservoir : Main dam: Height 49m Length 1,072m, capacity 2.63MCM Sub dam : Height 31m Head work : Water Intake 4.3cu.m/s	(FY1991 Overses Survey) The ministry assigns high priority to the proposed project and plans to revive the request for Japanese Grant Aid in 1992.		
6.COUNTERPART AGENC Ministerio de Agricultu Alimentacion		Driving canal: 4.0 cu.m/s 9.5km Diversion canal: South 3.28cu. m/sec 8km North 2.23cu.m/sec 15.2km Main canal: 1,526 cu.m/sec 18km Latenal canal: 0.338 cu.m/sec 39km	(PY1993) Overseas Survey) Priority of the project is stil ranked high and is the pot priority project among agricultural gprojects of Guatemalan government. The agency considers that project cost of 70,000 c/ha is almost 3 times as compara to standard project cost of 20,000/ha. 2 JICA experts were sent for 1 month to conduct complementary study and to find out measures to reduce the project cost; The agency is still planning to		
7.OBJECTIVES OF STUDY Formulation of a water utilization plan to prodevelopment in Monjas	resource development and	Regulating pond: 3 units * The cost is estimated in Oct. 1987 prices.	apply grant aid and loan aid for the implementation of the project. (FY1994 Domestic Survey) According to the result of project cost review by JICA experts, the total cost of the project was 63 million US dollar. The government of Guatemala hasn't decided to implement the project. Due to change of laws, environmental assessment study is required before the implementation of the project. The DIRYA has completed the environmental assessment study.		
8.DATE OF S/W	Feb.1987	Imp. Period: Apr.1989-Sep.1995			
9.CONSULTANT(S) Pacific Consultants In Sanyu Consultants Inc.	ternational	4.FEASIBILITY AND Feasibility: EIRR1) 18.50 FIRR1) 6.20 FIRS ASSUMPTIONS Yes EIRR2) FIRR2) FIRR3)	0		
Salya Consultanes The		Conditions and Development Impacts: conditions: Pasture land will be transformed to farms with irrigation facilities, and mostly vegetables will be grown. The cultivated area will be doubled to 11,250ha, and the increase in crop will be 234%.			
10.STUDY TEAM No.of Members	11.	Development Impact: The visible benefit of this project is the increase is agricultural production. The annual profits will be 20,000,0000 when the planned output is realized.	n T		
Period Jul.1987-Jul.1988(13 months)		The following social economic effects may also be expected: Contribution to national development plan, acquisition of foreign currency, stable supply of food, increase in employment opportunities, improved living standards, improved distribution and processing of agricultural products,			
Total M/M	Japan Field	correcting regional differences, tourism and economic stimulus.	2.MAJOR REASONS FOR PRESENT STATUS		
61.01	21.50 39.51				
11.ASSOCIATED AND/OF SUBCONTRACTED STU Survey, geological sur	DY				
Installation of hydrog embankment material	raphy, testing of	5.TECHNICAL TRANSFER	2 POINCIPAL SOLUBCE OF INICODMATION		
12 EXPENDITURE Total Contracted	201,930 (¥'000) 179,719	1.Acceptance of trainees(2) 2.Instruction on geological soil and farm studies. Input of numerical data using computers.	3.PRINCIPAL SOURCE OF INFORMATION ①、②、③		

CSA GTM/S 302/89

3.SECTOR Transportation Air Transportation & Airport AREFERNCE NO. 1. Regreeney Programs 1. Removation of radar systems including installation of ASP/SSR equipment and removation of radar systems including installation of ASP/SSR equipment and removation of rescendary power systems at Santa Elena. 5.TYPE OF STUDY F/S 2. Removation of secondary power systems at Santa Elena. 6.COUNTERPART AGENCY Direction General de Aeronáutica Civil (AGC) 1. Regroesement of craimage and control to terminal buildings 1. Reprovement of arkings and other airport supporting development program, but the Hinistry of Finance turned it down because of the high project cost, and no further development and evaluation apport facilities 1. Reprovement of arkings and other airport supporting at a support of the high project cost, and no further development and evaluation apport facilities 2. Reprovement of arkings and other airport supporting at a support of the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no further development at a control to the high project cost, and no f	I. OUTLINE OF STUDY	II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT
Contents	2.NAME OF STUDY	La Aurora airport in Guatemala city and St.Elena airport in Peten City	STATUS Completed Partially Completed Delayed or Suspended
3.CONTENTS OF MAJOR PROJECT(S) Tensportation & Airport AREHERRINCE NO. 5.TYPE OF STUDY F/S COUNTERPART AGENCY Dirección General de Accondutica Civil (AGDC) Dirección General de Accondutica Civil (AGDC) Dirección General de Accondutica Civil (AGDC) Topovoment of valuation support facilities at La Autora and Santa Elena airports Tenprovement of a valuation support facilities at La Autora and Santa Elena airports Elena airports Topovoment of a Counterpart (Counterpart) E.DATE OF S/W Aug. 1988 Imp. Period: 1.0STUDY TEAM No.of Members 8 Period Jan. 1989-Feb. 1990 (14 months) 3.CONTENTS OF MAJOR PROJECT(S) Improvement of calculation in the proposation of a SR/SSR equipment of destinate achedule of implementation is not yet decided due to political and closurizated and exclusive the proposation of the Cornel and the proposation of the Autora Airport and Elena airports AREHERRINGE NO. 5.TYPE OF STUDY Dirección General de Accondutica Civil (AGDC) COUNTERPART AGENCY Dirección General de Accondutica Civil (AGDC) Topovoment of a viazion autora and expansion of terminal boildings. Improvement of alectrical power supply and other airport supporting facilities Topovoment of a viazion autora and Santa Elena airports ELENATION Aug. 1988 Imp. Period: 1.991-1993 Aug. 1988 Imp. Period: 1.0STUDY TEAM No.of Members 8 Period Jan. 1989-Feb. 1990 (14 months) 3. Top provide better servicos and meet traffic demand by improvement of support and country support and support and country support and country support and su		(US\$1,000) 1) 60,261 37,124 23,137 2) 18,815 6,688 12,127	O Processing Discontinued or Cancelled
AREFURENCE NO. AREFURENCE NO. 5.TYPE OF STUDY F/S 2. Renovation of radar systems including installation of ASR/SSR equipment of the control of radar systems including installation of ASR/SSR equipment for the control of radar systems including installation of ASR/SSR equipment for the control of radar systems including installation of ASR/SSR equipment for the control of radar systems including installation of ASR/SSR equipment for the control of radar systems including installation of ASR/SSR equipment for the control of radar systems including installation of ASR/SSR equipment for the control of radar systems including installation of ASR/SSR equipment for the control of radar systems including visual navaids. Single-research of drainage and other infrastructuress. 2. Improvement of runway, taxiavay and apron. 3. Improvement of runwa		3.CONTENTS OF MAJOR PROJECT(S)	a definite schedule of implementation is not yet decided due to
Short-term Development Short-term Developm	4.REFERENCE NO.	1. Renovation of radar systems including installation of ASR/SSR equipment and renovation of CFR facilities at La Aurora.	The DGAC restudied the proposed project and formulated a new
Tobspectives of STUDY Tobspect Tobspec	6.COUNTERPART AGENCY	(Short-term Development) 1. Improvement of runway, taxiway and apron. 2. Improvement of drainage and other infrastructures. 3. Improvement and expansion of terminal buildings. 4. Improvement of aviation support facilities, including visual navaids. 5. Improvement of electrical power supply and other airport supporting	1) DGAC attempted to request an OECF loam for the short-team development program, but the Ministry of Finance turned it down because of the high project cost, and no further development along this line partly due to the policy change that places more emphasis on social sectors. 3 The GOG made a request for a 1000mil.ven Japanese Grant on the
8.DATE OF S/W Aug. 1988	Improvement and expansion of La Aurora and Sant	Accilities. Note: Cost 1) is for La Aurora Airport and Cost 2) for Santa Elena	renovation of CPR facilities in 1990, but it has not been realized. Although studies were conducted by two Western engineering companies: by Westinghouse in late 1993 and Electronics in Feb. 1994, DGAC has concluded that the project is too large (\$10 mil. to 15 mil.) to be carried out with domestic
9.CONSULTANT(S) Nippon Koei Co., Ltd. 4.FEASIBILITY AND ITS ASSUMPTIONS Conditions and Development Impacts: 1.To improve safety and operational capacity by improvement of runway, taxiway and apron 2.To improve safety and operational efficiency by drainage and other infrastructures improvement infrastructures improvement of terminal buildings No.of Members 8 Period Jan.1989-Feb.1990(14 months) Period Jan.1989-Feb.1990(14 months) No progress.			3) A small portion of the project such as provincion of recording system and VHF telecommunication of the control tower has been
Nippon Koei Co., Ltd. Transition Street S	8.DATE OF S/W Aug. 1988	mp. reno.	No progress.
1. To improve safety and operational capacity by improvement of runway, taxiway and apron 2. To improve safety and operational efficiency by drainage and other infrastructures improvement 3. To provide better services and meet traffic demand by improvement of terminal buildings 4. To prevent a near-miss by the improvement of navigation aid facilities (especially rader) 5. To improve safety and operational efficiency by improvement of electric supply and other airport supporting facilities	<u> </u>	ITS ASSUMPTIONS Yes EIRR2) FIRR2)	
No. of Members 8 Period Jan. 1989-Feb. 1990 (14 months) 3. To provide better services and meet traffic demand by improvement of terminal buildings (especially rader) 5. To improve safety and operational efficiency by improvement of electric supply and other airport supporting facilities		1.To improve safety and operational capacity by improvement of runway, taxiway and apron 2.To improve safety and operational efficiency by drainage and other	
supply and other airport supporting facilities	No.of Members 8	3.To provide better services and meet traffic demand by improvement of terminal buildings 4.To prevent a near-miss by the improvement of navigation aid facilities	
Total M/M Japan Field 2.MAJOR REASONS FOR PRESENT STATUS	Period Jan.1989-Feb.1990(14 months)	supply and other airport supporting facilities	
	Total M/M Japan Fie	d	2.MAJOR REASONS FOR PRESENT STATUS
46.72 27.65 19.07			As described above.
II.ASSOCIATED AND/OR SUBCONTRACTED STUDY			
5.TECHNICAL TRANSFER 3.PRINCIPAL SOURCE OF INFORMATION			2 POINCIPAL SOURCE OF INFORMATION
12.EXPENDITURE Total 180,576 (¥'000) Contracted 169,031 Out during field survey periods, and training of 2 counterpart engineers invited by JICA and JTCA (D, ②, ③)	Total 180,576 (¥'0	OUT during field survey periods, and training of 2 counterpart engineers invited by JICA and JTCA	

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Compiled Mar. 1993 Revised Mar. 1995 CSA GTM/S 101/91 III. PRESENT STATUS OF STUDY RESULTS II. SUMMARY OF STUDY RESULTS I. OUTLINE OF STUDY 1.PRESENT LSITE OR AREA LCOUNTRY Guatemala ■ In Progress or In Use STATUS ☐ Delayed 2.NAME OF STUDY Guatemala Metropolitan Area 937 sq.km ☐ Discontinued Comprehensive Urban Transportation System in Guatemala Metropolitan Area 2.PROJECT COST Description) Total Cost Local Cost Foreign Cost (1993 Overseas Survey) (US\$1,000) 295,600 1) 477,400 Out of the 31 projects proposed in the study to be implemented by 2010, seven were selected, for which a feasibility study has 2) 3.SECTOR been requested to Japan. 3.CONTENTS OF MAJOR PROJECT(S) Transportation/Urban Transportaion The following three out of 14 projects included in the Phase I and II are either completed or under implementation:
 15 street improvement for 6 districts (budget Q600 mil.;
 construction bet. 9/91-4/94) Phase I (Immediate Action Projects) 4.REFERENCE NO. Bus stop development b) Bus lane development c) Effective lane usage Payement marking development el Side walk development
Phase II (Short Term Projects)
East-West corridor development b) Preriferico tramo development improvement of 250 bus stops (budget Q300 mil.; construction 5.TYPE OF STUDY M/P bet. 1/94~12/94! improvement of road signs (budget Q700,000; construction period a; last-mest corridor development B) Fretite (1 a) Apart of (2) Ave. Petapa Improvement d) 15 Ave. Improvement e) A part of intersectio improvement f) Busway (Ciudod Ral to Zona 4) development g) Trafic control system development h) Parking card system development 6 COUNTERPART AGENCY Guatemala Municipality A part (3 km) of the middle ring road, one of the four mid-term projects, is scheduled to start construction from November 1994 with Pedestrian mall development Phase III, IV (Mid Term and Long Term Projects) budget Q700 mil. as public construction by the City of Guatemala. Construction of bridge and road improvement of Ave. Mincapie, amongst the 13 long-team profects, is on-going budget Q20 mil. Regarding the improvement of the traffic control system, a bill is Eastern part of middlering road development b) Intersection improvement Bus way development (Mixco to Centro) d) Bus center Zona 4 improvement Extra-Urban bus terminal f) Bus inspection center construction Trafic control system development h) Traffic safety park development 7.OBJECTIVES OF STUDY submited to change the jurisdiction of traffic control from the To formulate a Master Plan on the comprehensive Police Development to the City. urban transportation system in Guatemala Long term Project a) Outer ring road development b) Northern part of the middle ring road development c) Inner ring road improvement d) CA-9 (South) improvement e) Ca-1 (East) improvement f) 13 Ave. 6A Ave. and 35 Ave, improvement Metropolitan Area. (FY1994 Domestic Survey) No additional information. Boulevard sud improvement h) Bus way (Villa Nueva-Centro) development Bus center zona l development j) Car parking development Nov.1989 8.DATE OF S/W 4.CONDITIONS AND DEVELOPMENT IMPACTS 9 CONSULTANT(S) EIRR for the project of the M/P shows a very high ratio of 45.5% with the benefit of vehicle operating savings cost and passenger time savings Yachivo Engineering Co., Ltd. Central Consultant, Inc. EIRR by major projects is shown Project Outer Ring Road (North) Outer Ring Road (South) 33.4 Middle Ring Road 10.STUDY TEAM East-est Corridor Ave. Hincapie 40.7 Ave. Petapa 11 No.of Members Busway Development Period Jul.1990-Dec.1991(17 months) 2.MAJOR REASONS FOR PRESENT STATUS Field Total M/M Japan 67.00 6.00 73.00 1.ASSOCIATED AND/OR SUBCONTRACTED STUDY 5.TECHNICAL TRANSFER 3.PRINCIPAL SOURCE OF INFORMATION 12.EXPENDITURE On the job traing, counterpart training, and holding a seminar. 390,260 (¥'000) 329,276

和名 首都圈交通網整備計画

Contracted

{M/P,Basic Study,Other}

A SECULIAR S

Revised Dec. 1994 CSA GTM/S 202B/91 III. PRESENT STATUS OF STUDIED PROJECT II. SUMMARY OF STUDY RESULTS LOUTLINE OF STUDY Completed or in Progress Promoting PRESENT LSITE OR AREA 1.COUNTRY Guatemala Guatemala City, Mixco City, Villa Nueva City, Chinautla City, Villa Canales City, Sta. Catarina Pinula City (350 sq.km, population 1,532,000 STATUS Completed 2.NAME OF STUDY O Partially Completed □ Delayed or Suspended Solid Waste Management in Metropolitan 33,663 Local Foreign O Implementing Area of Guatemala City 2.PROJECT COST M/P 1) Cost Cost ☐ Discontinued or Cancelled Processing 7,910 F/S 1) US\$1=05 =26.25yen (Description) 2) (FY 1993 Domestic Survey) 3.SECTOR (FY 1993 Domestic Survey) (M/P) Rooms for heavy machines, storehouse for parts and workers houses have already been set up at the EL Trebol landfill and the scavengers have been living in the newly completed houses. The improvement scheme of the EL Trebol final disposal site has been Public Utilities/Urban Sanitation 3.CONTENTS OF MAJOR PROJECT(S) M/P(target year: 2000, estimated population:2,047,000) started in May, 1993. The situation has been greatly improved since the equipments (4 bulldozers, 2 wheel-loaders, 4 dump-trucks for gravel transportation and 10 dump-trucks for refuse-collection) which 4.REFERENCE NO. Expansion of collection service Improvement on final disposal 5.TYPE OF STUDY M/P+F/S Immediate conversion of the EL Trebol disposal site into a controlled had already been granted, were put in practical use. 2 experts were sent to the site for a month (from November to December, 1993) and gave on-the-spot instructions in land-filling, that contributed to COUNTERPART AGENCY Construction of a new sanitary landfill Institutional development and financial strengthening Public Service Bureau (DSP), Concessions of collection service to private collectors the successful result. Municipal Public Cleaning Department (DLPM) <P/><P/S> All the above equipments arrived in Guatemala City by the end Preventive maintenance and repair program of April, 1993 and a delivery ceremony was held on May 7. The instructions in operation and maintenance of bulldozers and those in operation of truck/wheel loader were given by experts for 10 days and Education and community participation programs Personnel training program Recycling and resource recovery program
Institutional organization of the DSP 2 days respectively. The central vehicle maintenance factory which handles protection and maintenance of vehicles and heavy machines, 7.OBJECTIVES OF STUDY Initiate metropolitan committee in charge of solid waste -To Contribute the development of the systematic area of Guatemala City

area of Guatemala City

management of Che solid waste in the Metropolitan F/S(planned year: 1996, estimated population:1,841,000)

management of collection service in marginal areas(experiments on large of Guatemala City electric circuit and lathe-procession of repair parts has been set up separately from the solid wastes section. Condition of stuff and finance has been much improved. Constant supply of parts, under this area of Guatemala City container collection and equipment management): Zone cocession to private collectors/ increased efficiency in operation/ improvement grant project, is expected to improve operation of the vehicles and machines considerably. -To determine the possibility of the of collection service in isolated areas
Improvement of final disposal sites: EL Trebol landfill(existing) and implementation of some first priority projects (FY1993 Overseas Survey) which must be achieved by 1995 at the latest. a new sanitary landfill in Las Guacamayas Institutional strengthening: Formation of a working group and a Metropolitan Solid Waste Committee/ increase of the SWM's budget/ Present status of each project is as follows. EL Trebol Landfill:Mar. 1993 Japanese Grant E/N 309 millin yen. Nov. 1989 This grant provided necessary equipment for the landfill. 8.DATE OF S/W Guatemala City is preparing four truck slopes, two office buildings and four truck scales by its own budget. a pilot program on sanitary education for residents, etc. 9.CONSULTANT(S) Now, the landfill is collecting garbages from all public area and most domestic area. ES Guayacames Landfill:Land acquisition trouble caused this project CRC Research Institute, Inc. .1991-.1996 Imp. Period: Environmental Technologic Consultants Co., Ltd. to delay.

Privatization of Garbage Collection: The project was once implemented, but it is unsuccessful. Floowing step is not decided now Approval System for Garbage Collection: The City introduced approval system on 239 private garbage trucks. The trucks have annually FIRR () 8.00 FIRR1) 4.FEASIBILITY AND Feasibility: 20.00 FIRR2) FIRR2) ITS ASSUMPTIONS Yes/No FIRR3) EIRR3) periodical inspection and area restriction. Sanitary Education: Video software provided by JICA was useful to Conditions and Development Impacts: 10.STUDY TEAM enlighten adults and pupiles. Almost 250 thousand persons already Planning Conditions: 1) Service is for solid waste excluding hazardous materials
2) Real GDP growth annually: 4% for 1991-95, 3% for 1996-2000
3) Maintain and promote the dual system(government and private) have seen it. No.of Members Metropolitan Garbage Committee:Established. However, unsuccessful Restructuring of Public Cleaning Department: The City established Period Jun. 1990-Sep. 1991 (16 months) of collection for 10 years Advisory Committee. The Department will be restructured in 1995. Maintain and promote resource recycling for 10 years Community support is secured 2.MAJOR REASONS FOR PRESENT STATUS Field Total M/M Japan Development Impacts: Better service by private collectors For the D/D has been completed or in progress. Expansion of area under collection service 24:40 46.48 70.88 Consensus-building among the residents to open a few landfill by demonstrating an improved EL Trebol More Efficient operation and less illegal disposal 11.ASSOCIATED AND/OR 5) Stronger support system among the residents SUBCONTRACTED STUDY TELECTRO S.A. (boring. measuring)
ACEROS AGRICOLAS E INDUSTRIALES S.A. (construction of containers) S.TECHNICAL TRANSFER 3.PRINCIPAL SOURCE OF INFORMATION During F/S period, the counterpart joined the sanitary education for residents through audio-visual aids, which worked very well. 12.EXPENDITURE 286,892 (¥'000) Total 271,975 Contracted

和名 首都屬生活廃棄物処理計画

Compiled Mar. 1993

CSA GTM/A 101/92

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS III. PRESENT ST		ENT STATUS OF STUDY RESULTS
1.COUNTRY	Guatemala	1.SITE OR AREA	1.PRESENT	■ In Progress or In Use
2.NAME OF STUDY Integrated Agricult		Department of Jutiapa	STATUS	☐ Delayed
Integrated Agricult	tural and Rural		I.	☐ Discontinued
Development Project	e in Anciaba	2.PROJECT COST Total Cost Local Cost Foreign Cost	(Description)	
1		(US\$1,000) 1) 61,300	(FY1993 Overseas	
3.SECTOR		2) 26,358	implementation of	or the Grant Aid was made in Sept. 1993 for the Santa Catarina Mita Integrated Rural Development
Agriculture/General	•	3.CONTENTS OF MAJOR PROJECT(3)	agency gave highe	ufar Intergrated Rural Development Project. The per priority for the project of Santa Catarina Mita the project is desinged to utilize existing
4.REFERENCE NO.		Project cost 1) is of total projects	facilities and lo	ow project is desinged to define the desired of the own project cost. The agency is negociating with implementation of Montufar project.
5.TYPE OF STUDY	M/P		(FY1994 Domestic	Survey)
6.COUNTERPART AGENC	Y	In the Master Plan Study, a total of 12 project have been formulated, of which the Santa Cataring Mita Integrated Rural Development Project and The Moutufar Integrated Rural Development Project have been identified as high	No additional	
Ministry of Agriculture	e, Livestock and Food of Agricultural and Food	Notetrar Integrated Rural Development Project have been identified as high- priority project. Santa Catarina Mita Integrated Rural Development Project:		
Planning (USPADA)	- 113446444444 min 1444	The Project consists of irigation plan (rehabilitation and construction of pumping station). rural roads & rural water supply development plan		
7.0BJECTIVES OF STUDY		and other component. Muntufar Integrated Rural Development Project:		
To carry out Master Pla	an Study on the Integrated	The Project consists of irrigation plan (2,400ha) drainage plan (1,065ha), rural road and rural water supply development plan.		
Jutiapa, which is local	Development Project at ted in the south-eastern			
limit of Guatemala				
8.DATE OF S/W	Nov.1991	4.CONDITIONS AND DEVELOPMENT IMPACTS		
9.CONSULTANT(S)	_	The Economic Internal Rate of Return (EIRR) was calculated as 15.7% for		
Pacific Consultants In	ternational	the Santa Catarina Mita Project and 27.8% for the Montufar for Project. Renefits to be expected by the implementation of the Projects are:		
		- Stabilization of farm economy, expansion of exports, improvement in employment		•
		- Participation of local inhibitants in marketing sector, generation of more job opportunity, value-added of agricultural products - Mitigation of water intake work among women and children, improvement		4
10.STUDY TEAM	1	of sanitary environment		
	 10			
110.01 1110	Dec.1992(10 months)			
1 CHOC PALLIFYZ	SCC. ESSE (EO MOMENTE)			
Total M/M	Japan Field		2.MAJOR REAS	ONS FOR PRESENT STATUS
51.60	22.10 29.50			
11.ASSOCIATED AND/OR	R			
SUBCONTRACTED STU	DY			
Soil Analysis				
12 EVDENDERUBE		5.TECHNICAL TRANSFER	3.PRINCIPAL SO	DURCE OF INFORMATION
12.EXPENDITURE Total	155, 890 (¥'000)	The number of counterpart personnel participated in the study was 22 in total the transfer of technology and know-how with emphasis paid on	①、③	
Contracted	176,645	evelopment planning methodology was carried out.		

CSA HND/A 301/78

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT	
1.COUNTRY 2.NAME OF STUDY Agricultural Develocholuteca River Ba		1.SITE OR AREA CHOLUTECA plan, southern part of Honduras 2.PROJECT COST 1) 88,020 31,580 56,440 (US\$1,000) 2) 63,910	1.PRESENT	
3.SECTOR Agriculture/General 4.REFERENCE NO. 5.TYPE OF STUDY 6.COUNTERPART AGENCE Ministry of Natural Re 7.OBJECTIVES OF STUDY	F/S Y Sources	3) 3.CONTENTS OF MAJOR PROJECT(S) 1.San Fernando Dam: concrete gravity dam, Height of dam 93.5m 2.Irrigation Area(net): 16,000 ha(new 14,370ha, existing pumping 1,630ha) 3.Irrigation Facilities: Intake weir 1 place Trrigation Canal 158km(Main 26.3km, Branch 46.5km) Drainage Canal 144km(Main 121.9km, Secondary 22.5km) Farm Road 122km 4.Power Station: Installed capacity 14HW Annual Power Generation 58.4GWh The project cost 1) is for the entire project and 2) for the 1st Stage(the dam and irrigation development of 12,400ha).	(Description) The feasibility study was updated by JICA in 1984. Detailed Design was completed by OECF E/S loan. (L/A Aug.1985) The Government of Honduras applied in Mar.1987 for an OECF loan to implement the project, but did not get the approval. (PY1991 Overseas Survey) Official and unofficial requests for an OECF loan have been made repeatedly but with no avail. (FY1993 Overseas Survey) Six(6) yearsafter completion of the F/S, complementary study mainly review of previous F/S on dam and reservoir construction was conducted in 1984. D/D was also conducted during the period from December, 1985 to August. 1988 by means of OECF loan aid with an amount of US\$1.651 billion, signed L/A on August. 1985. Major components of this D/D were consisted of complementary study for detail designand preparation of the tender documents. In March, 1987, the Government made a loan application for Japan, however, due to	
8.DATE OF S/W 9.CONSULTANT(S) Nippon Koei Co., Ltd.	Mar.1977	Imp. Period: Jun. 1978~Dec. 1983 4.FEASIBILITY AND Feasibility: EIRR1) 12.20 FIRR1) ITS ASSUMPTIONS Yes EIRR3) FIRR3)	the Government made a foam application to be a house the huge project costs, it was not accepted. (FY1994 Overseas Survey) After that, the World Bank, which was prmoting the economical structural adjustment for Honduras, had reviewed various developmet projects of this country. As the result, in connection with this project, the World Bank recommended to review on following points: - 1) Improvement of the quality of river water, 2) Tosolvethe problems caused by piling earth and sand at the future dam site due to destroy of the forest, 3) Environmental assessment, and 4) Re-estimation of the project costs. In 1992, OBCF conducted SAPROF and concluded that there would be no serious negative environmental impacts. The implementation of the	
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Conditions and Development Impacts: Conditions: Agricultural benefits are estimated as the difference of net income from crop production between with-project and without-project conditions. Electric power benefits are estimated by the cost of thermal power plants. Output of Major Crops Without Project With Project (1,000 tons) Sugarcane 800 800 Rice, Maize, Sorghum 3.8 33.2 Cotton 1.5 15.3 Melons and Vegetables 3.1 23.4 Total Net Value (US\$1000) 4,680 13,950 Development Impacts: Increased crop production, growth of agricultural	Project is being discussed by Honduras Government and World Bank, however, still no conclusion came out and the project is suspended.	
Total M/M 11.ASSOCIATED AND/OF SUBCONTRACTED STU	the state of the s	exports, fishing in the reservoir, bourism development, rural electrification, flood control in the downstream, etc. *EIRR 1) above is for the entire project, and 2) for the 1st Stage.	2.MAJOR REASONS FOR PRESENT STATUS Honduras is currently implementing its Structural Adjustment Program. OECF is rethinking the appropriateness of financing a project requiring large capital.	
12.EXPENDITURE Total Contracted	139, 496 (¥'000)	5.TECHNICAL TRANSFER	3.PRINCIPAL SOURCE OF INFORMATION ①、②、③、④	

CSA HND/S 301/79

					DO.	III DDE	SENT STATUS OF STUDIED DROUGCT
I. OUTLIN	E OF STUDY	II. SUMMA	RY OF STU	DY RESUL	12	III. PKE	SENT STATUS OF STUDIED PROJECT
1.COUNTRY	Honduras	1.SITE OR AREA				1.PRESENT STATUS	☐ Completed or in Progress ☐ Promoting ☐ Completed
2.NAME OF STUDY New Tegucigalpa A:	rport Development	Valle	de Talanga, 60	km north of Capil	cal City	0171703	O Partially Completed Delayed or Suspended
Mew regucigatpa A.	Ilboic pererobmene	2.PROJECT COST	Total			·	O Implementing
· 		(US\$1,000)	1) 66 2)	,002 29,	042	,	O Processing Discontinued or Cancelled
		(US\$1=200Yen)	3)			(Description)	
3.SECTOR		3.CONTENTS OF MAJOR PRO	DJECT(S)			The Govern decided to w	ment of Honduras applied for yen credit, but subsequently ithdraw the application.
Transportation/Air Tr	ansportaion & Airport	Facilities to be develor - Runway	ed Size/qua	ntity m x 45m		(FY1991 Overs	seas Survey)
4.REFERENCE NO.		- Apron - Passenger Terminal	69,100	sq.m		The government of action has	ment still has a strong desire for the new airport, but s been taken.
5.TYPE OF STUDY	F/S	- Airport lighting and radio navaids		total system		(FY1993 Overs	seas Survey) he request for an OECF loan was approved, the object of
6.COUNTERPART AGENC		- Utilities (power, telephones	water supply/sew	erage)	Total system	spending of t	the loan was re-examined as the result of the change of the government, and the loan was applied to other
Directorate General of Communications, Public		- Access road	45km x	75m		public invest	ment. A research financed by Spain was conducted between
		ļ.				sited than Ta	alanga. To date, the other site has still been the most didate for the airport, and proposal are submitted from
7.OBJECTIVES OF STUD	Υ					each of a Br appraisal of	itish and a American engineering companies, and under the Chamber of Commerce and Industry, SECOPT and
To select suitable sit replace the existing a						Tegucigalpa	
handicapped by aircrai						(PY1994 Dome: Anglo-Amer	ican contractors consortium named Lehrer McGovern Bovis
						Airport on t	ct from Blivian government to construct New Tegucigalpa he built-operate-transfer basis, the 3-year contract struction of a 3,500m-long runway and other facilities in
	10-1-1099	Imp Period: Jul.1981-	Dec 1005			the contract	amount of US\$120 million.
8.DATE OF S/W	Oct.1977	imp. Teriod.		(RI) 13.80	FIRR1)	-	
9.CONSULTANT(S) Japan Airport Consulta			SIUILLEY, I	(R2)	FIRR2)		
Japan Airport Consults	ants, inc.	TIOTISCOIN TOTAL	EIR	(R3)	FIRR3)	1	
		Conditions and Developm	ent Impacts:	2) Two-phage on	netruction with		
		Dhace I designed to accom	modate 1995 tra	ffic demand of	1.324 M passengers		
10.STUDY TEAM		and 30,050 tons of cargo, tons of cargo for year 20 because it is difficult	to expand the e	xisting airport.			
	_ 13	Expected Effects: 1)Incre	ased capacity tourism income: 3	o service overi Dîncrease în ai	lowing passenger rport tariff		
	Jul.1979(20 months)	revenue from foreign airc runway usability; 6)Impro	ved aircraft or	in aviation fu eration safety;	el; 5)Improved 7)Increase in		
Tellod Dec.1377	0 d1:15/5 (20 monens)	employment opportunities.					
Total M/M	Japan Field		100			2.MAJOR RI	EASONS FOR PRESENT STATUS
70.50	48.83 21.67						
11.ASSOCIATED AND/O		1					
SUBCONTRACTED STU							
						-	
		5.TECHNICAL TRANSFE				3 DDINCIDA	L SOURCE OF INFORMATION
12,EXPENDITURE Total		Trainee invited to Japan Seminar.	: One official	participated in	UICA'S Aerodrome	1	BOOKE OF IN ORMATION
Contracted						①、②、③	

PROJECT SUMMARY (Basic Study)

CSA HND/A 501/83

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDY RESULTS	
I.COUNTRY 2.NAME OF STUDY Inventario foresta	Honduras 1 del distrito	An area of 2,000 sq.km in Mosquitia District, Gracias A Dios Province	1.PRESENT STATUS	■ In Progress or In Use □ Delayed □ Discontinued
forestal de La Mos	squitia	(US\$1,000) Total Cost Local Cost Foreign Cost 1) 2)	topographic maps	of this study such as the aerial photographs, the s, forest type maps, etc. are used by the authorities
3.SECTOR Forestry/Forestry & Fo	rest Conservation	3.CONTENTS OF MAJOR PROJECT(S)	In recent y cooperation pro	ears the government of Germany implemented a technical ject using this forest management plan.
		In order to utilize Caribbean pines in the subject area, a forest management plan was proposed containing following components:	(1991 Overseas No additional	Survey) information.
4.REFERENCE NO.	Pagia Study	management plan was proposed containing lottowing components. -Countermeasures against forest fires -Improvement of forest road network	(FY1993 Oversea	s Survey) of the Grant Aid for the implementation of sawlumber
5.TYPE OF STUDY	Basic Study	-Improvement of forest road hetwork -To enlarge natural regeneration and re-afforestation -To increase the timber production		of the Grant Aid for the implementation of savounder e in 1983 however the application was not approved. Suction project near Nicaragua border was intended in
6.COUNTERPART AGENC Forest Development Cor Honduras 7.OBJECTIVES OF STUDY	poration of the Republic of	-10 Inclease the classes broadcraw.	1986 but it was 1989, the gover of Forest manag F/S for Proyect	not implemented. At the donor contretede near in imment of Germany showed the interest in implementation mement and Reserve protection project of Rio Platano. o de manejo y Protection de la Reserva de la Biosfera o has been completed and the agency is now negociating W (Financing Agency of Germany) for the implementation
To provide the fundame to systematize the for	ental data and information est management for the economic development in		(PV1994 Domesti	
: : :				
8.DATE OF S/W	Sep.1980	A CONTRACTOR AND DESIGN OR MENT IMPACTS	1	
9.CONSULTANT(S)		4.CONDITIONS AND DEVELOPMENT IMPACTS		
Japan Forest Technical	Association	In this area, there is not any road leading to any other areas, therefore the transportation is limited to sea transport. On the other hand, this area has been developed by the capitals from Nicaragua since 1975. The implementation of this forest management plan would result in the forest protection and sustainable yield management so that local society and economy in this area would be improved in spite of the transport		
		constraints.		
10.STUDY TEAM				
	21]	,
Period Dec 1980-	Mar.1983(28 months)			
T 1 M/M	Janan Field		2.MAJOR REA	SONS FOR PRESENT STATUS
Total M/M 97.00	Japan Field 46.00 51.00			
11.ASSOCIATED AND/O			1 1 1	
SUBCONTRACTED STU				·
		5.TECHNICAL TRANSFER	3.PRINCIPAL	SOURCE OF INFORMATION
12.EXPENDITURE Total	296,353 (¥'000) 264,673		0. 2. 3	
Contracted	2021010	. ■ Province to the control of the province of the province of the control of the province of		

PROJECT SUMMARY (Basic Study)

CSA HND/A 502/83

I. OUTLINE	OF STUDY	II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDY RESULTS
1.COUNTRY 2.NAME OF STUDY	Honduras	1.SITE OR AREA	1.PRESENT ■ In Progress or In Use STATUS □ Delayed
Fisheries Resources	S Survey	2.PROJECT COST (US\$1,000) Total Cost Local Cost Foreign Cost	(Description) (FY 1991 Overseas Survey) The findings of the study have been utilized by the PAO-assisted
3.SECTOR		2)	study of coastal fisheries and other studies of marine biology and
Fisheries/Fisheries		3.CONTENTS OF MAJOR PROJECT(S) - Fishing port is necessary between Tela and La Ceiba.	coastal fishermen. The Ministry of Natural Resources is requesting Japanese assistance for similar studies in other areas.
4.REFERENCE NO.		· ·	(FY1993 Overseas Survey)
5.TYPE OF STUDY	Basic Study	 It is necessary to improve the distribution system. Under the proper condition of distribution, fishing base, etc., bottom gillnet, shark long line, trawl fishing are 	Among recommendations of the study, improvement of long line fishery of shark was not implemented because of low economic value of
6.COUNTERPART AGENC Bureau of Rehabilitation Resources; Fishery Sect Agency	on, Ministry of Natural	etc., bottom gillnet, shark long line, trawl lishing are useful for marine resource development.	shark, Fish harbour improvement and commercialization of products are implemented at several locations of Atlantic sea cost utilizing JICA Mini Project at Trujillo as a model project. The agency is planning to initiate small scale fishery development project at La Mosquitia, province of Gracias a Dios, however lack of social infrastructure such as road and communiation system cause difficulty for the implementation of the project.
7.OBJECTIVES OF STUDY			[FY1994 Domestic Survey] The government has succeeded in acquiring a project loan from IBRD in the amount of UD\$150 million for the rehabilitation of Lima International Airport runway. Airport engineering consultants are being selected for design and construction supervision.
8.DATE OF S/W	Sep.1980		4
9.CONSULTANT(S)		4.CONDITIONS AND DEVELOPMENT IMPACTS	,
	.	The amount of fish consumption is extremely small, therefore it is important to expand the demand of marine products.	
	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
10.STUDY TEAM			
No.of Members			
I .	Mar. 1983 (20 months)		
Total MAA	Janan Field		2.MAJOR REASONS FOR PRESENT STATUS
Total M/M	Japan Field		
11.ASSOCIATED AND/OR SUBCONTRACTED STUI			
		5.TECHNICAL TRANSFER	3.PRINCIPAL SOURCE OF INFORMATION
12 EXPENDITURE Total Contracted	166,926 (¥'000)		0. 0. 0
Communica			

(M/P,Basic S

CSA HND/A 302/84

I. OUTLINE OF STUDY	II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT	
1.COUNTRY Honduras 2.NAME OF STUDY Choluteca River Basin Agricultural Development Project (Updating Study)	1.SITE OR AREA CHOLUTECA plain, southern part of Honduras (Investigated Area 36,000ha,population 22,600person) 2.DECALCT COST Total Cost Local Cost Foreign Cost	1.PRESENT ☐ Completed or in Progress ☐ Promoting STATUS ☐ Completed ☐ Partially Completed ☐ Delayed or Suspended ☐ Implementing	
	2.PROJECT COST Total Cost Local Cost Foreign Cost	O Processing Discontinued or Cancelled (Description)	
3.SECTOR Agriculture/General 4.REFERENCE NO.	3.CONTENTS OF MAJOR PROJECT(S) 1. San Pernando Dam:Concrete gravity, dam height 100m, crest length 320m 2. Irrigation Area:20,600ha(Western Area 16,000ha, East-A Area 4,600ha)	Detailed Design was completed by the OECF E/S loan. L/A: August 2nd,1985, 1.651 billion yen Period: Dec.1985 - May 1988 Consultant: Nippon Koei Co.,Ltd. [FY1991 Overseas Survey]	
5.TYPE OF STUDY F/S 6.COUNTERPART AGENCY	1 intake weir(concrete type, weir height 4.8m, crest length 140m) Main canals 30.6km(Western Area 23.6km, East-A Area 7.0km) Branch canals 75.5km(Western Area 45.2km, East-A Area 30.3km) Secondary canals 33.6km(Western Area only) Main Drainage canals 113.0km(W.Area 90.5km, EA Area 22.5km)	Official and unofficial requests for an OECF loan have been made repeatedly but to no avail. (FY1993 Overseas Survey)	
Ministry of Natural Resources 7.OBJECTIVES OF STUDY	Secondary drainage canals 27.0km(Western Area only) 4. Power Plant:Installed Cap. 18.2MW, Annual Output 53.6GWh 'The project cost 1) above is for the entire project, and 2) for the 1st Stage(Dam & Power plant and irrigation dev. of Western Area) 'The implementation period below pertains to the 1st Stage of the project.	After D/D was conducted, Loan application was made in March 1987. However the project cost is so huge that the project was not implemented. Recommendactions for water quality improvement of the river, sedimentation and forest destruction of dam site, environment assessment and rreview of project cost were made by The World Bank which conducts Economic Structure Adjustment Programme. Response to the recommendations of the World Bank, SAPRO study was conducted by	
Update of feasibility study made in 1977 in Choluteca Area		OECF, however the implementation of the project is not yet initiated (FY1994 Domestic Survey) Refer to the Project Summarysheet (CSA HND/A 301/78) which is an initial F/S study of this project.	
8.DATE OF S/W Jun.1984	Imp. Period: Mar. 1985-Apr. 1991	_	
9.CONSULTANT(S) Nippon Koei Co., Ltd.	4.FEASIBILITY AND Feasibility: EIRR1) 14.20 FIRR1) 13.1 FIRR2) 11.7 FIRR2) 11.7		
IO.STUDY TEAM	Conditions and Development Impacts: Conditions: Agricultural benefits are estimated as the difference of net income between the with-projection and the without projection condition. The benefit of power generation is estimated for the average generating capacity in dry season, by the value of thermal power of 0.1311Lem/KWh. With-project Cutputs of Major Crops:1st Stage 2nd Stage Total(1000t) Sugarcane 856 856		
No.of Members 15 Period Aug.1984-Mar.1985(8 months)	Cotton 16.9 8.0 24.9 Paddy 20.2 11.5 31.7 Maize 9.0 10.4 19.4 Melons/Vegetables 66.4 - 66.4 Total Net Income(1000 Lempiras): 38.191 11,327 49.518		
Total high	dd agricultural exports, rural electrification, downstream flood control, employment creation (e.g.2.7 million from agricultural dev.), etc.	2.MAJOR REASONS FOR PRESENT STATUS Honduras is currently implementing its Structural Adjustment	
11.ASSOCIATED AND/OR SUBCONTRACTED STUDY		Program. OECF is rethinking the appropriateness of financing a project requiring large capital. Honduras government is now examining its implementation of the project because the project cost is huge and Structural Adjustment Program is currently implemented.	
	5.TECHNICAL TRANSFER	3.PRINCIPAL SOURCE OF INFORMATION	
Total 51,164 (¥) Contracted 44,855	Technology transfer to counterpart in the course of the study.	①, ②, ③, ④	

CSA HND/A 303/85

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT
1.COUNTRY 2.NAME OF STUDY Aguan Valley Agricu Project (Saba-Olano	Honduras altural Development chito Area)	1.SITE OR AREA Yoco, Aguan Central Valley(Saba-Oranchito) 188,000 people, 200km from capital, 23,000ha 2.PROJECT COST (US\$1,000) US\$1=2Lps. in 1984 2)	I.PRESENT STATUS Completed or in Progress Completed Partially Completed Delayed or Suspended Implementing Processing Discontinued or Cancelled
of the development plan	rasibility Study is to and economic feasibility s which include: rigation, drainage and road d consolidation of	3) 3.CONTENTS OF MAJOR PROJECT(S) For the purpose of the promotion of agrarian reform programs, the increase of agricultural production for export, the generation of new job opportunities, the rationalized distribution of population and etc, the Lower Aguan Project has been carried out since 1971 at the Aguan Valley located in the north part of the Handuras. Considering the importance of the continuous development of the Valley, the agricultural development project for the Middle Aguan was planed as shown below: Land Reclamation: 9,100ha (two crops 1,600ha, double crops 4,800ha, Citrus and others 2,700ha) Irrigation Facilities (Maximum water requirement 4.1 m3/s) Head works: 4 Siphon : River crossing 1, other 41 Pumping Station : 2(capacity 2.1 m3/s, 0.4 m3/s) Irrigation canal : Main 73.7 km, secondary 81.0 km Related Structures: 213 Drainage Facilities (Proposed discharge 15.2 m3/s) Drainage Canal : 64.6km Drop Works : 90 Transportation Facilities Hain Parm Road : 82.0km	After the completion of F/S, the economic situation of the country worsened, foreign debts accumulated. The other project (Choluteca River Basin Agricultural Development) was suspended after the D/D, and there has been no progress regarding this project. (FY1993 Overseas Survey) Since the study was conducted, no effort for financing of the project implementation has been made. Reasons why the project is cancelled are, (1) huge project cost, (2) no financial arrangement is planned, (3) allocation of government budget is getting difficult due to the Structural Adjustment Programme, Moreover situation of the project site has been changed and beneficiary farmers of the project site sold their farm land to Standard Fruit Corporation. (FY1994 Domestic Survey) No information.
8.DATE OF S/W 9.CONSULTANT(S) Pacific Consultants Int	Nov.1983 ernational	Imp. Period: 4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: EIRR1) 13.00 FIRR1) EIRR2) FIRR2) EIRR3) FIRR3) Conditions and Development Impacts: [Conditions]	
10.STUDY TEAM No.of Members 1 Period Feb.1984-J	9 un.1985(17 months)	1. Inflation: not considered 2. Exchange Rate: Lps. 1 = 120 Yen 3. Project Life: up to 2024 (40 years after commencement of the construction) 4. Others: The benefit from road improvement was not considered [Development Impacts] 1. Introduction of two crops and double crops 2. Decrease of flood disaster 3. Diversification of crops	
Total M/M 76.30 II.ASSOCIATED AND/OR SUBCONTRACTED STUE Geological Survey	· ·	4. Improvement of agricultural productivity 5. Increase of farmers income	2.MAJOR REASONS FOR PRESENT STATUS Implementation of the project is suspended due to (1) huge project cost, difficulty in financial arrangement due to the Structural Adjustment Programme and (2) lower priority than the Choluteca River Basin Agril. Development Project.
12 EXPENDITURE Total Contracted	271,812 (¥'000) 241,257	5.TECHNICAL TRANSFER 1.Acceptance of trainees 2.Provision of machinery (boring machine) and instruction on its use. 3.Cooperation in field studies and reports	3.PRINCIPAL SOURCE OF INFORMATION ①、②、③

PROJECT SUMMARY (Basic Study)

CSA HND/S 501/89

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDY RESULTS	
1.COUNTRY 2.NAME OF STUDY Groundwater Develop	Honduras pment Project in	1.SITE OR AREA Comayagua Basin (Municiparity Comayagua	. & La Paz)	1.PRESENT STATUS	■ In Progress or In Use □ Delayed □ Discontinued
Comayagua		· · · · · · · · · · · · · · · · · · ·	Cost Local Cost Foreign Cost 4,939 4,359 10,580 2,047 4,506 7,541	and the basic	t of Honduras requested Japanese grant aid in Nov.1989, design study was conducted in Mar.1990.
3.SECTOR Social Infrastructures Development 4.REFERENCE NO. 5.TYPE OF STUDY	Basic Study	3.CONTENTS OF MAJOR PROJECT(S) The Final Report recommended that the stages, and by the end of the second st 1996, 60 units of the type 1 and 22 uni constructd as the rural water supply sy	ages, of which the target year is ts of the type 3 should be	Flac- June 1990; July 1990; Dec. 1990; Co	as Survey) million yen -excavation (53 units) ement of water supply system E/N D/D otracts with the constructors mpleted
6.COUNTERPART AGENC Ministry of Public Hea	lth			Pla July 1991: Nov. 1991: co	million yen 1-excavation (36 units) (cement of water supply system E/N nutracts with the constructors cheduled to be completed
7.OBJECTIVES OF STUDY Groundwater Potential Rural Water Supply				Phase III: 52 V Dec. 1993: E/	velopment Project in Comayagua O mil. yen Mell excavation(200 unit) Placement of water supply system
8.DATE OF S/W 9.CONSULTANT(S) Nippon Koei Co., Ltd.	Nov.1987	4.CONDITIONS AND DEVELOPMENT IM The project has a character of *Basic seconomically, and it is expected that contribution to socio-economic development and sanitary conditions in the study at	Human Needs and is feasible the project would make a significant ent and the improvement of health	based on the E wells by Japan 205 mil.Yen un	ic Survey) ruction is subdivided into 2 stages. The first stage 2/N(520 mil.Yen) reached in Dec. 1993 is to construct 20 ese Side. The second stage is to be implemented with der the E/N reached in Jul.1994;30 wells are to be Honduras Side under the supervision by Japanese wells are to be constructed by Honduras Side only.
10.STUDY TEAM No.of Members 8 Period Feb. 1988-0	3 Oct.1989(21 months)				
Total M/M 44.76	Japan Field 17.59 27.17			2.MAJOR REA	ASONS FOR PRESENT STATUS
11.ASSOCIATED AND/OR SUBCONTRACTED STU Test Well Drilling & Po	DY			2 DOMESTO AT	SOURCE OF INFORMATION
12.EXPENDITURE Total Contracted	206,708 (¥'000)	OJT for counterparts during the site s gtudy, management of well-boring and a	tudy (1988-89) about routine site inalytical works.	①、②、③	SOURCE OF INFORMATION

CSA HND/A 304/90

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT		
I.COUNTRY 2.NAME OF STUDY Rehabilitation of Irrigation Improve Comayagua Valley	Honduras Coyolar Dam and ment Project in	I.SITE OR AREA Flores Irrigation District and its adjacent area of about 3600 ha 2.PROJECT COST Total Cost Local Cost Foreign Cost 51,617 29,878 21,739	1.PRESENT		
3.SECTOR Agriculture/Irrigation, 4.REFERENCE NO. 5.TYPE OF STUDY 6.COUNTERPART AGENC Ministry of Natural Re Directorate of Water R Plan 7.OBJECTIVES OF STUDY Establishment of Coyol	F/S Sources, General esourcescement of existing	(US\$1,000) 2) 3) 3.CONTENTS OF MAJOR PROJECT(S) - Rehabilitation Plan of Coyolar Dam - Reinforcement of existing plan - Construction of new spillway - Rehabilitation of Maintenance Road - Improvement of Flores Irrigation System - Diversion Weix - Irrigation Canal Main 12.55 Km Secondary 27.70 Km - Inspection Road 40.2 Km	(Description) The Government of Hondurus strongly requested Japanese Grant Aid for rehabilitation of Coyolar Dam. The possibility of implementation of the Project is being studied in the Ministry of Foreign Affair in Japan (FY1993 Overseas Survey) Application for Grant Aid was made in Dec. 1991. However the project cost was far beyond the limit of grat aid of the government of Japan and the application was not approved. The government of Handuras has agreed with Kwait Fund for loan financing of Dam Rehabilitation and Irrigation project. The total amount is 29.09 million US\$ (16.45 for Dam Rehabilitation, 8.46 for irrigation and 4.18 for micellaneous). The agency has also guaranteed government budget allocation of 11.55 million Lempira for the project. Tender call for contractor was completed in Dec. 1993 and definition of contractor is now under examniation of Kwait Fund. The construction is planned to be initiated form June 1994. There are two minormodifications concerning Dam rehabilitation. One is modificator of dam widening 1:1 (Previously it was 1.00:0.09) and other is odification of concrete quality for widening of dam. (FY1994 Domestic Survey) No additional information.		
8,DATE OF S/W 9,CONSULTANT(S) Pacific Consultants In	Apr.1989	Imp. Period: 1991~.1998 4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: EIRRI) 15.71 FIRRI) 15.0 EIRR2) 15.71 FIRRI) 15.0 FIRRI) 15.0			
10.STUDY TEAM No.of Members	9 Mar.1990(15.5 months)	Conditions and Development Impacts: Conditions: - The storage capacity recovers from 9 million qubic-meters to 12.6 million qubic-meters. - Irrigation efficiency is improved by the reform of irrigation facilities on the flowless area. - A part of pasture land 790ha is changed over to cultivated land. - Irrigation areas are to icresse from 830ha to 1,260 ha. Development Impacts: - Increase of agricultural production			
Total M/M 50.22 ILASSOCIATED AND/OF SUBCONTRACTED STU Boring/Cross and Level	DY Survey of Canal/Echo	- Evasion from assumed collapse of the Dam	2.MAJOR REASONS FOR PRESENT STATUS		
sounding of Reservoir 12.EXPENDITURE Total Contracted	209,325 (¥'000)	5.TECHNICAL TRANSFER JICA Counterpart Training	3.PRINCIPAL SOURCE OF INFORMATION ①、②、③		

CSA HND/S 102/92

Compiled Nov.1993 Revised Mar.1995

I. OUTLINI	E OF STUDY	II. S	SUMMARY OF STUDY	RESULTS	III. PRES	SENT STATUS OF STUDY RESULTS
I.COUNTRY 2.NAME OF STUDY Rural Telecommunic	Honduras ations Network	1.SITE OR AREA	areas scattering around the wh	ole contry of Honduras	1.PRESENT STATUS	☐ In Progress or In Use ☐ Delayed ■ Discontinued
Project		(US\$1,000)	Total Cost Loc 1) 65,359 2)	cal Cost Foreign Cost	Study on Telec	Japan's Technical Assistance to conduct Feasibiliby communications Network Expansion Project ions of this study report, the request titled above
3.SECTOR Communications & Br	roadcasting/Telecommunicatio			stephone penetration	cities and the surrounding are	Introduction of digital exchanges in major local installation of rural telecommunications network in eas was submitted to Ministry of Planning by HONDUTEL consideration in the Ministry.
4.REFERENCE NO. 5.TYPE OF STUDY	M/P	Iratio per 100 inhab	itants in the subject areas from lephone lines until the year 20	U T'TA CO T'OO DA	Network Expans	ions of this study report, the application titled above
6.COUNTERPART AGENC	Y	1) New telephone exc 2) Optical Fiber Cal 3) Digital Multi Acc	hange stations ble Transmission System ess System	12 Stations 12 Sections 7 Systems ,670 Pair x Kms	which is not s social benefit.	installation of rural telecommunications network, to profitable but important from the point of view of , was submitted to Ministry of Planning by HONDITEL and sideration in the Ministry.
(HONDUTEL) Development	: Division	4) Subscriber lines Phase-i (1997-2000) 1) New telephone exc 2) Optical Piber Cal 3) Digital Multi Acc	hange stations ble Transmission System	6 Stations 6 Sections 6 Systems	nianning dense	as Survey) I project had been revised thoroughly by the technical tment of HONDUTSL by October 1993. Of the revised plan is to provide 7227 lines for
year 2002 for a rural	Y plan covering until the telecommunications network tephone service to 223 rura		14	,850 Pair x Kms	17 prefectures four regions(Simplemented as Northeast: wn	(212 districts). The project divides the country into outheast, Northwest, Midwest and North) and is four sub-projects. Ider imprementation (ECU 2.9 mil. Grant from EC and ECU 2.059 mil. domestic fund) schedule to provide 1511 lines to three prefectures(49 listricts) sub-projects, requests for grants or long-team soft
8.DATE OF S/W	Apr.91	4 CONDETIONS AND	D DEVELOPMENT IMPACTS		loans have bee organizations.	en made to Japan, Mexico, Canada, and international
9.CONSULTANT(S) NTT International Cor	poration	Conditions: Telephone demand in models. The principles for follows: - The existing and	non-survey areas was estimated designing the rural telecommuni for planned facilities in the e	cations network are as xisting national possible.	started provid	tic Survey) t was discontinued because the American firm, AT&T, ling the exchanges to main towns and villages holding a he change for international call.
10.STUDY TEAM		-The network should plansThe system should charging	be designed in harmony with the befree from foreseen problems,	he existing expansion especially those on		
No.of Members Period Dec.91-No	7 v.92(11 months)	Development Impact 1. Promotion of tr market-economy	ansformation from self-supports type agriculature by introducin	ng agriculuture to g the market information		
Total M/M	Janan Field	2. Generation of s	urplus agriculutural products by			ASONS FOR PRESENT STATUS
33.98 11.ASSOCIATED AND/O SUBCONTRACTED STU	12.99 20.9 R	3. Enhancement and or banking org 4. Improvement of	establishment of a physical dranizations for settlement of the the administrative job efficency erchange between local and cent wans of communication for villa	istribution mechanism and ensactions. y and activation of iral government.	telecommunicat economic devel telecommunicar great efforts HONDUTEL canno because of te	of Honduras has given high priority to developing a ions network because it is indispensable for social and iopment. The state-owned enterprise responsible for ions services in Honduras (HONDUTE) also has made to expand telephone services in rural areas. However, or afford to set up telephone services in rural areas chnical and financial defficulties. As the economy in and on primary products, development of primary
12.EXPENDITURE	T	5.TECHNICAL TRA	the state of the s			SOURCE OF INFORMATION
Total Contracted	139,083 (¥'00) 1 123,069	" the study periods	in Japan was conducted to a HO of Work in Japan-1 and 2, respe during the period of Work in I	ctively. A seminar on	① 、③	

CSA HND/S 214/93

I. OUTLINE	OF STUDY	II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDIED PROJECT		
1.COUNTRY	Honduras	1.SITE OR AREA		1.PRESENT	■ Completed or in Progress ☐ Promoting		
2.NAME OF STUDY		Hondurås		STATUS	O Completed		
Improvment of the	Ports in the Republic		and D. C.	_ .	O Partially Completed Delayed or Suspended		
of Honduras		Z.PROJECT COST	cal Foreign ost Cost		☐ Implementing ☐ Discontinued or Cancelled		
		(US\$1,000) 27 (US\$1,000) F/S 1) 49,063	22,083 26,9	80	Processing Discontinued or Cancelled		
3.SECTOR	<u> </u>	2)		(Description)			
Transportation/Port		3)			ment plan proposed by this study has three steps as		
A DECEDENCE NO		3.CONTENTS OF MAJOR PROJECT(S) 1.Poxts Development and Management Strat	egy,		ovement of ports and harbors. The improvement works of		
4.REFERENCE NO. 5.TYPE OF STUDY	M/P+F/S	2.Development plan for Port of Cortes. 3.Management plan for Port of Cortes.		civil facilit	ies and loading/discharging facilities which should be ne daily maintenance, and the improvement of management		
6.COUNTERPART AGENC		4.Urgent Implovement plan for all ports.		of port have	been completed or processing with the responsibility of		
Empresa Nacional Portva				2)Short term	development plan for Port of Cortes targeting the year		
	· · · · · · · · · · · · · · · · · · ·			of 2000. The feasibili	ty from both technical and economical aspects were		
				3)Long term o	They are expected to be promoted and processed. Revelopment plan for port of Cortes targeting the year of		
7.0BJECTIVES OF STUDY	· ·			2010.			
1.Port Development and 2.M/P, F/S for port of							
3. Urgent Improvement I							
8.DATE OF S/W	Jul.1992			1			
9.CONSULTANT(S)	_						
Overseas Coastal Area! Nippon Koei Co., Ltd.	Development Institute	Imp. Period:					
MIPPON NOSI CO., IICA.			RRI) 22.73 FIRRI) 23	09			
		ITS ASSUMPTIONS Veg /No EII	RR2) FIRR2)				
	<u> </u>	Ell	RR3) FIRR3)	_			
10.STUDY TEAM	J	Conditions and Development Impacts:	andian manh with 276 of the terri				
No.of Members 1	.2	Condition : The port of cortes is the le cargo throughout of the coufry.	eacing port with 178 of the total				
Period Jan.1993-M	(ar.1994(15 months)	The Investment in the modern installation competitive and lucrative port.	n will make the port of Cortes				
Total M/M	Japan Field			2.MAJOR RE	BASONS FOR PRESENT STATUS		
55.50	24.30 31.20						
11.ASSOCIATED AND/OR							
SUBCONTRACTED STUL	DY.						
Natural condition surv	rey						
		5.TECHNICAL TRANSFER		2 DO INICIDAT	L SOURCE OF INFORMATION		
12.EXPENDITURE	272,110 (¥'000)	Invited counterpart to Japan for fraini	ng.		L'SOURCE OF INFORMATION		
Contracted	259,212			(

CSA HND/S 213/93

I. OUTLINE OF STUDY		II. SUN	MARY OF	STUDY	RESULTS	3		III. PRE	SENT STA	ATUS OF ST	UDIED	PROJECT	·
I.COUNTRY	Honduras	1.SITE OR AREA						1.PRESENT	☐ Comple	eted or in Progress	Prom	oting	
2.NAME OF STUDY		North-western area	of Sula Valley	(717km2)				STATUS	O Com	•		. 4 0 4 .	,
Erosion and Sedime		<u></u>	M/P I)	Local	For	reign			_	ially Completed	∐ Delay	ed or Suspende	9
Sula, Cortes	. Choloma, Ban reulo	2.PROJECT COST (US\$1,000)	2)	Cost	Cox	st			O Proc		Disco	ntinued or Can	celled
·		(US\$1,000)	F/S 1) 77,9		29,474 35,930		3,474 5,736	(Description)					
3.SECTOR]	2) 92,6					Among the mas	ter plan of the fessibi	the Choloma rive	er, followi	ng urgent pla	ın was
Social Infrastructures Control	s/River & Erosion	3.CONTENTS OF MAJO						Urgent Plan o Total cost	of the Cholom : US\$22,890	na River : X 1,000			
4.REFERENCE NO.		The Master plan for the design scale of	50 year flood a	and sediment and recorded	control was maximum sec	formulated intentional files of the state of	with er	F/C	: US\$14,197 X	x 1,000	lbm river	nent 3.4km et	۔ ا
5.TYPE OF STUDY	M/P+F/S	in 1974 respectively 1)Choloma River -River improvement		ent 15.6km	etc			-Check dam 1	2nos., consol	lidation dam 2nos is requesting t	s., trainir he JICA's	ng levee ino. grant aid to	the
6.COUNTERPART AGENC		-Check dam 10nos,	Consolidation d	dam 17nos.,	training lev			Government of	Japan for i	implementation of	the above	e urgent plan	i.
Ministry of Communicat Transportation(SECOPT)	tions, Public Works and	-River improvement -Check dam 23nos.	. 7 Kbm Diverci	ion channel dam 7nos.,	2.6km, emban training lev	nkment 19.7km vee 4.0km cha	etc nnel						
		works 3 places.						l .					
7.OBJECTIVES OF STUDY						•							
To formulate a master sediment control and c	plan of flood Control and conduct a feasibility study				•		Ì	l					
		·								•			
8.DATE OF S/W	Dec.1991	1					.					•	
9.CONSULTANT(S)		1				e.							
Pacific Consultants In	the state of the s	Imp. Daried						1					
Kokusai Kougyo Co., Lt	ta.	Imp. Period: 4.FEASIBILITY AND	Reseibilian I	EIRR1)	15.30	FIRR1)		1					
and the second		ITS ASSUMPTIONS	Feasibility: Yes/No	EIRR2)	13.00	FIRR2)							
		Condition		EIRR3)		FIRR3)		1					
10.STUDY TEAM		Conditions and Dev	wased on the max	ket price o	f June, 1993). }.			٠.	٠			
	13	2)Project implements	ation is assueme ssumed to be 50	ed between :) years.	1996 and 200	os. ·			•				-
Period Aug 1992-	Jan.1994(18 months)	4)Development impact (1) Safety will be	ts are as follo e insured for so	OWS:	onomic activ	ity due to t	he						
Total M/M	Japan Field	(2) The transportat	iment control.	most impor	tent nationa.	l road will l	be	2.MAJOR RI	EASONS FOR	R PRESENT STAT	rus		
80.23	Japan Field 15.90 64.33					1			load and mad	liment disaster i	ncluding a	bout 10,000	dead
11.ASSOCIATED AND/O		1						Incoming trace T	eanded in Ch	noloma river basi has the big po	in during t	ine nurricane	"PIEI"
SUBCONTRACTED STU	лу												
3) Installation of hyd	2)River Material Survey Prological observation						1 1 2	1				· · · · · · · · · · · · · · · · · · ·	
equipment 4)Geological	l and Enviromental Surveys	5.TECHNICAL TRA	NSFER			and the state of		3.PRINCIPAL	L SOURCE O	F INFORMATIO	N		
12 EXPENDITURE Total	368,522 (¥'000)	On-the-job-training overseas training i	to the counter n Japan to the	rpart staff. 2 counterpa	art staff.			(i), (2)					
Contracted	d 334,150			<u> </u>				SECOPT, SECP	LAN(Ministry of	f Planification coordin	ation and Bud	get)	

agration in the process of the contraction of the c

Compiled Mar. 1990 Revised Mar. 1995 CSA JAM/A 301/85 III. PRESENT STATUS OF STUDIED PROJECT II. SUMMARY OF STUDY RESULTS I. OUTLINE OF STUDY ☐ Completed or in Progress ☐ Promoting I.PRESENT 1 SITE OR AREA **LCOUNTRY** Jamaica STATUS Black River Lower Morass Area(situated in the western part of Jamaica () Completed 2 NAME OF STUDY near the southern cost in the Parish of St. Elizabeth O Partially Completed Delayed or Suspended Agricultural Development Project on the Local Cost Foreign Cost Total Cost Black River Lower Morass O Implementing 2.PROJECT COST 54,300 17,800 36,500 Discontinued or Cancelled O Processing (US\$1,000) 900 10,800 11,700 2) 5,600 5,600 (Description) 3) 3.SECTOR It was subject to establish a holding company who would be 3.CONTENTS OF MAJOR PROJECT(S) responsible for construction of civil engineering works, development and operation of the pilot farm, land lease and management as well a Agriculture/General Major Investment for the Project 1. Major Investment for the Project
a. Irrigation Area: 3,080 ha
B. Major Facilities: (1) Diversion Weir: 1place, (2) Irrigation Pump
St: 1 place with 4 units of 120kW 700mm diameter, (3) Drainage Pump St.:
4 places with 15 units of 100-125MP 800mm diameter, (4) Irrigation Canal:
main 35.2km & secondary 31.6km, (5) Drainage Canal: main 41.3 km,
secondary 154.0km & catch drain 17.0km, (6) Farm Road:main 35.2km &
secondary 83.4km, (7) Flood Protection Dike: 29.0km, (8) Others: Office & recruitment, training, selection and settlement of farmers. Mowever, due to some reasons such as rather expensive cost per unit area, etc., some agency (National Investment Bank) refused to establish the holding company, as of November, 1985. Proposed 4.REFERENCE NO. 5.TYPE OF STUDY F/S membership of the Board of Directors to be appointed by the Government was, Permanent Secretary of the Ministry of Agriculture or his nominee, Commissioner of Land, a representative from the Ministry 6.COUNTERPART AGENCY of Finance, a representative from the Jamaica National Investment Ministry of Agriculture, Department of Planning Quarters, Ground water level observation wells & Environment conservation Bank, a representative from the National Water Commission, and two and Policy other nominees. II. Post Harvest Facility: 5 drying & storage stations and 1 rice mill (FY1992 Overseas Survey) III. Social Infrastructure: Upgrading/construction of Housing, Schools, Health center Road, Water supply and Community center Implementation period will be 6 years which consists of Phase-I of 3 years including detailed design and Phase-II of 3 years. Waiting for the answer 7 OBJECTIVES OF STUDY Government has changed its agricultural development policy from - to formulate the project and verify its food production to export oriented agriculture following the changeof technical and economic feasibility Dec.1983 Imp. Period: 8.DATE OF S/W 13.30 FIRRI) 4.FEASIBILITY AND Feasibility: 9.CONSULTANT(S) 14.10 FIRR2) EIRR2) ITS ASSUMPTIONS Nippon Koei Co., Ltd. Yes EIRR3) 15.60 FIRR3) Taiyo Consultants Co., Ltd. Conditions and Development Impacts: 1. Agricultural benefit was estimated as the net incremental benefit derived from difference of net crop production between with project and without project conditions.

2. Project area consists of mineral soil area (780ha) and peat soil area (2300ha) where different agricultural development plan is adopted.

3. Net annual profit will be expected from twice of paddy in a year on both mineral and peat soil areas and soya bean on mineral soil area in case of with project condition, while it would be born from sugar cane (310ha), rain-fed paddy (100ha) and upland crops 960ha) in mineral soil area only, in case of without project condition.

4. The Project cost for economic evaluation does not include costs for procurement and installation of post harvest facility (2 of above), and construction or upgrading of socail infrastructure (3 of above), so the second production of the second production of the second project cost of the second project o without project conditions. 10.STUDY TEAM No.of Members Period Feb. 1984-Jun. 1985 (17 months) 2.MAJOR REASONS FOR PRESENT STATUS Total M/M Japan 1.55 11.14 LASSOCIATED AND/OR SUBCONTRACTED STUDY. adjacent project area would be expected in case 1 which was recommended **5.TECHNICAL TRANSFER** 3.PRINCIPAL SOURCE OF INFORMATION To undertake on-the-job training and transfer the technology to the Jamaican counterpart personnel in the course of the study. 2.EXPENDITURE 239, 697 (¥'000)

44. ブラックリバーローアモラス農業開発計画

Contracted

217,840

Deposition allowed the contractions of the contraction of the contract

PROJECT SUMMART (F)S

III. PRESENT STATUS OF STUDIED PROJECT II. SUMMARY OF STUDY RESULTS I. OUTLINE OF STUDY ■ Completed or in Progress □ Promoting 1.PRESENT LSITE OR AREA L.COUNTRY Jamaica STATUS O Completed 22km far from Kingstone in the west (the surveyed area: 274 sq.km, population 130,000) 2.NAME OF STUDY Partially Completed ☐ Delayed or Suspended Modernization and Expansion of the Rio Foreign Cost Total Cost Local Cost O Implementing Cobre Irrigation scheme 2.PROJECT COST 34,100 64,290 30,190 Discontinued or Cancelled 1) O Processing (US\$1,000) 2) US\$1=5.5J\$ in 1986 (Description) 3) 3.SECTOR Progress 3. CONTENTS OF MAJOR PROJECT(S) This project is given a high priority in the 'Food and Agriculture Policies/Production Five-Year-Plan(1983/84-1987/88)' of the government. Based on the F/S report, the project has been carried outpartly sparing local funds and partly with financial support of the Agriculture/General The project area is situated in the eastern part of Jamaica near the outhern coast in the parish of St. Catherine.
Rio Cobre Irrigation System: 12,990ha(completed in 1874) 4.REFERENCE NO. St. Dorothy Irrigation System: 2,340ha(completed in 1963) The main concepts of the project are: to modernize and expand the present irrigation system by reconstructing However, those funds are quite limited and cover only the small portion of the project. 5.TYPE OF STUDY F/S to modernize and expand the present irrigation system by reconstruction and improving existing infrastructures.

to introduce diversified cropping patterns including non-traditional crops into the annual rotation of cropping.

to increase and stabilize yields and production of crops by means of 6.COUNTERPART AGENCY (RY1992 Overseas Survey) Ministry of Agriculture Waiting for the answer. - to increase and stabilize yields and production of crops by means or sound management of irrigation and drainage.

- to achieve successful small scale farmer enhancement through appropriate training and agricultural support services.

- to promote the leveling up of living standards and more equitable distribution of income to the people. (PY1994 Domextic Survey) No additional information 7.OBJECTIVES OF STUDY The main civil works are: 1)rehabilitation of headworks, 2)rehabilitation of canals, 3)reservoirs 4) land consolidation, 5) road construction. .1988~.1991 Dec. 1985 8,DATE OF S/W Imp. Period: FIRR1) 15.80 EIRR1) 4.FEASIBILITY AND Feasibility: 9.CONSULTANT(S) EIRR2) FIRR2) ITS ASSUMPTIONS Taiyo Consultants Co., Ltd. EIRR3) FIRR3) Nippon Koei Co., Ltd. Conditions and Development Impacts: Kokusai Kougyo Co., Ltd. The project implementation:

1) The construction schedule is drawn up in such a way as to make capital investment productive as soon as possible.

2) The major civil works and on-farm development works are rationally integrated in due to consideration of the agricultural development 10.STUDY TEAM programme particularly paddy land development.

3) Rehabilitation and improvement works for the head works and main canal will be carried out without cutting off the existing water supply to the No.of Members downstream irrigated area and municipal water supply to Spanish Town.

4) The time required for construction of the project would be about 4 years including detailed design and contract award. Development Impacts: Period Jan. 1986-Jun. 1987 (18 months) Development impacts:
1) Poreign exchange saving: approximately US\$17.5 million per annual of foreign exchange will be saved by substituting for imported commodities;
2) Demonstration effects: Farmers in other areas become familiar with 2.MAJOR REASONS FOR PRESENT STATUS Total M/M Japan [2]Demonstration effects: Farmers in other areas become mainliar with modern irrigation and drainage practices; 3]Increased employment opportunities: It is expected that the present unemplyment in and around the project area will be reduced by implementation of the project; 4)Secondary benefit: The socio infrastructure and local trasportation system will be improved. Shortage of the funds due to deterioration of the economic 88.32 32.33 11.ASSOCIATED AND/OR SUBCONTRACTED STUDY Geological survey Analysis of samples 5.TECHNICAL TRANSFER 276,497 (¥'000) (1) Acceptance of one trainee on in-service training in Japan. 3.PRINCIPAL SOURCE OF INFORMATION 12.EXPENDITURE Total 251,952 Contracted

和名リオ・コブレ農業開発計画

CSA JAM/A 302/87

CSA MEX/S 601/77

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDY RESULTS
1.COUNTRY 2.NAME OF STUDY Mexico City Suburt	an Railways	1.SITE OR AREA Suburban railways of Mexico City; 5 lines with total extension of 77km	I.PRESENT STATUS ☐ In Progress or In Use ☐ Delayed ☐ Discontinued
Construction Proje	ect	2.PROJECT COST Total Cost Local Cost Foreign Cost	(Description) This study was to review, from the technical and economic standpoints, the basic plan for new suburban railway lines which was being prepared by the Mexican Government as part of the overall urban being prepared by the Mexican Government as part of the overall urban to undertake a pre-
3.SECTOR Transportation/Railway	J	3.CONTENTS OF MAJOR PROJECT(S) Alternatives: A B	transport improvement policy for Mexico City, and to undertake a pre- feasibility study of the construction plan. Based on the results of this study, Mexican Government came to the conclusion that the estimated costs of construction would be too large for the already financially-strapped National Railways to bear.
4.REFERENCE NO. 5.TYPE OF STUDY	Other	Civil engineering Works(stations) 9,022 7,821 Electric engineering Works (power transmission) 2,221 1,395 Signal and telecommunication equipment	and decided on the alternative of subway construction which was being promoted by the Federal District Government. In other words, the proposals of this study were not adopted for implementation, but served as one of the bases for the important
6.COUNTERPART AGENC Secretaria de Comunica		Rolling Stock (318 - 369 cars) 6,107 4,952 Rolling Stock bases 1,327 1,296 {in million pesos}	policy decision by the Mexican Government. (FY 1991 Overseas Survey) No Additional Information.
7.OBJECTIVES OF STUDY Review of the Mexican new railway lines, and construction works	Government's basic plan for	Note: The costs of Alternative A correspond to the figures for 1) and Alternative B for 2) above.	
8.DATE OF S/W	Aug.1977	4.CONDITIONS AND DEVELOPMENT IMPACTS	4
9.CONSULTANT(S) Japan Railway Technica	al Service	It is assumed that the construction cost for grade separation be paid by the government fund, and moreover, that the cost be excluded from the construction costs to be covered by fare revenues.	
		Railways will contribute to the amelioration of air pollution caused by the exhaust from motorized traffic in the metropolitan area.	
	12 Mar.1978(7 months)		
Total M/M	Japan Field		2.MAJOR REASONS FOR PRESENT STATUS
20.70	10.70 10.00		Because of the huge construction costs necessary for new suburban railway lines, the Mexican Government chose the alternative of subways.
SUBCONTRACTED STU			
12.EXPENDITURE		5.TECHNICAL TRANSFER	3.PRINCIPAL SOURCE OF INFORMATION
Total Contracted	50,856 (¥'000) 38,688	Some counterparts participated in the JICA training program.	① ②

The appropriate and the supprise programme and the supprise of the supprise of

Compiled Mar. 1990 Revised Mar. 1995 CSA MEX/S 602/79 III. PRESENT STATUS OF STUDY RESULTS IL SUMMARY OF STUDY RESULTS I. OUTLINE OF STUDY 1.PRESENT ■ In Progress or In Use LSITE OR AREA 1.COUNTRY Mexico **STATUS** □ Delayed 2.NAME OF STUDY Suburbs of Mexico City ☐ Discontinued Suburban Railways Project (follow-up) 2.PROJECT COST (Description) Local Cost Foreign Cost Total Cost 1) Section between Mexico City and Queretaro (244km) (US\$1,000) 1) Construction works started. 1982 - 86 Due to the decline of oil prices. 2) construction works were virtually sus-3.SECTOR pended. 3.CONTENTS OF MAJOR PROJECT(S) Transportation/Railway (FY1991 Overseas Survey) eb. 1992 About 80% of the construction works completed. As part of the railway modernization policy, the Mexican Government is planning the electrification of the entire railway system. The Government requested Japanese technical cooperation concerning feasibility studies or Scheduled to be operated on commercial basis. 1993 4.REFERENCE NO. Section between Mexico City and Irapuato (95km) Suspended until the section between Mexico City and Queretaro begin requested Japanese technical cooperation concerning leadshifty studies two of the high priority sections selected for electrification: Namely, the section between Mexico City and Queretaro (244km) and the section between Mexico City and Irapuato (95km). In response to the request, the Japanese Government sent a team of 5.TYPE OF STUDY Other operation. 6.COUNTERPART AGENCY (PY1994 Domestic Survey)<Note>
The result of this study was also used in the study of *Project of electrification of line from Mexico to Irapuato*(CSA MEX/S 603/81). experts to assist the undertaking of the feasibility studies. The process Secretaria de Comunicaciones y Transportes experts to assist the undertaking of the feasibility studies. The process are the following:

1. This study took the following into account.

(1) Several sypes of electrification are widely applied in the world.

(2) Electrification is considered not a simple aggrigation but a 'united system' integrating the related factors.

2. This study compared the following types

- Types of electric generations; a. AT type, b. direct type

- Types of aerial line; a. multiful type, b. arranged-T type

This study investigated electric characters of each type, and tried to clear the relation between signal systems and each type.

3. At last the study suggested gov. of Mexico the following issue be very important. A type of electrification, being the most suitable to the whole situation of the nation, should be selected from many types. 7.OBJECTIVES OF STUDY Technical advice and guidance on the physical planning and the operation and management for the trunk line electrification plan of the Mexican National Railway 8.DATE OF S/W 4.CONDITIONS AND DEVELOPMENT IMPACTS 9.CONSULTANT(S) [Condition and Impact] The amount of freight transportation in this section is expected to increase year by year along with Mexico's economic grouth.

Then this electrification is expected to make possible to speed up the Japan Railway Technical Service So a technical transfer impact of this electrification is estimated very high. 10.STUDY TEAM No.of Members Period Jun. 1979-Aug. 1979 (2 months) 2 MAJOR REASONS FOR PRESENT STATUS Field Total M/M Japan Financial problems. 11.ASSOCIATED AND/OR SUBCONTRACTED STUDY 3.PRINCIPAL SOURCE OF INFORMATION 5.TECHNICAL TRANSFER 12.EXPENDITURE 1, 2 7,326 (¥'000) Total

Contracted 和名 近郊鉄道計画(アフターケア)

{M/P,Basic Study,Other}

Compiled Mar. 1986 Revised Mar. 1995 CSA MEX/S 603/81 III. PRESENT STATUS OF STUDY RESULTS II. SUMMARY OF STUDY RESULTS L OUTLINE OF STUDY 1.PRESENT LSITE OR AREA 1.COUNTRY ■ In Progress or In Use Mexico **STATUS** ☐ Delayed 2.NAME OF STUDY Section between Mexican city and Irapuato (351.2km) ☐ Discontinued Provecto de electrificacion de la linea de Mexico a Irapuato 2.PROJECT COST Local Cost Foreign Cost (Description) Total Cost The recommendations of this study were used by the Mexican (US\$1,000) 1) Government for preparing tender documents and evaluating the bids.
This project was financed by several institutes oriented by 2) 3.SECTOR The progress of construction works is as follows: 3.CONTENTS OF MAJOR PROJECT(S) Transportation/Railway 1) Section between Mexico City and Queretaro (244km)
1981 Construction works started. For each technical field composing the electrification of the railway, 1982 - 86 Due to the decline of oil prices, 4.REFERENCE NO. various systems are adopted in the world, these systems may have construction works were virtually sus-pended. various systems are adopted in the world. These systems may have respective merits and demerits. Since the electrification is not a simple cumulation of those technologies but a composite system organizing each 5.TYPE OF STUDY Other (FY1991 Overseas Survey) cumulation or those technologies but a composite system organizing each regarding technologies. It has been recommended to the Mexican Government that it is the most important subject to select the most appropriate system for Mexico among AT feeding, direct feeding, railway track feeding and the other systems from the point of view of that in comparison of Feb. 1992 About 80%k of the construction works is completed. 6.COUNTERPART AGENCY (FY1993 Overseas survey) Secretaria de Comunicaciones y Transportes It is scheduled to be implemented and operated on commercia. electrical characteristies sach as of feeding and/or of collection of current, and to make clear the relationship between feeding system and signaling facilities correspondencing facilities. The recommendation is 2) Section between Mexico City and Irapuato (95km) consisted of following items : Suspended until the section between Mexico City and Queretaro 1) To draw the operation (driving) plans, 7.OBJECTIVES OF STUDY begin operation. (2) Introduction of locomotives, (3) Design of Railway Lines, Technical advice and guidance on technical (FY1994 Domestic Survey) (3) Design of Railway Enlow, (4) Arrangements of suppliment system of electricity, (5) Arrangements of signaling facilities a Signaling system for double track b.CTC for whole section standards and specification for detailed study or No additional information. electrification of the section between Mexican City and Irapuato, as part of the trunk line electrification plan of the Mexican National c.New establishment of ATC for whole section, Railway (6) Arrangements of corresponding system, and (7) Arrangements of inspection/repairment systems for rolling stocks. .1980 8.DATE OF S/W 4.CONDITIONS AND DEVELOPMENT IMPACTS 9 CONSULTANT(S) Japan Railway Technical Service 10.STUDY TEAM

No of Members Period May. 1980-Mar. 1981 (10 months) 2.MAJOR REASONS FOR PRESENT STATUS Field Total M/M Japan (FY1993 Overseas Survey) 18.50 14.37 The main reason is devaluation and inflation in the past years. 32.87 11.ASSOCIATED AND/OR SUBCONTRACTED STUDY 3.PRINCIPAL SOURCE OF INFORMATION 5.TECHNICAL TRANSFER 12.EXPENDITURE On-the-job training for Mexican counterparts through joint work. 111, 252 (¥'000) (I), (2) Total 87,967 Contracted

和名 幹線鉄道電化計画

CSA MEX/S 604/82

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESI	ENT STATUS OF STUDY RESULTS
1.COUNTRY 2.NAME OF STUDY Development Plan o	Mexico f Industrial Ports	I.SITE OR AREA	1.PRESENT STATUS	■ In Progress or In Use □ Delayed □ Discontinued
		2.PROJECT COST Total Cost Local Cost Foreign Cost (US\$1,000) 1) 2)	follows:	of development in the selected ports has been as
3.SECTOR	<u>,</u>		use	lti-purpose berth (No.1 Berth) completed for
Development Plan/Integ Development Plan	rated Regional	3.CONTENTS OF MAJOR PROJECT(S) The Japanese expert team provided technical advice and guidance on the	1990 May Con	2 Berth completed for use struction of No.3 Berth to started d to be completed in 1992. (Infrastructural
4.REFERENCE NO.		port development necessary for coastal industrial growth, covering such areas as planning of physical facilities(including cargo facilities at	đe	velopment to be financed by own funds, and cessary equipment by World Bank.
5 TYPE OF STUDY	Other	multi-purpose wharves), cargo handling operations, and alternatives of physical development.	i e	
6.COUNTERPART AGENC Comision Nacional Coord	dinadora del Disarollo,	-Plan and design of basic port facilities of major portsHow to develop and manage industrial ports.	No.3 Berth	has Fort heral cargo berth completed for use h (muti-purpose) will be constructed depandent increase of cargo throughput.
Secretaria de Presiden	te, (SCT)		3) Oschon Port Development	is suspended.
7.OBJECTIVES OF STUDY			4) Salina Cruz	Port
Technical advice on al development for coasta	l aspects of port l industrial growth		The const	truction of the breakwater was completed, but ent of the port is suspended. However, the of oil-exporting port facilities have been
			(FY1994 Domestic No additional	Survey) information.
8.DATE OF S/W	.0			
9.CONSULTANT(S)		4.CONDITIONS AND DEVELOPMENT IMPACTS		
Overseas Coastal Area		Establishment of port managing body which will be responsible for port development and management.		
				·
10.STUDY TEAM				
No.of Members	-			
1	Mar.1982(20 months)			
relied dar. 1900 i	ELL . 1302 (20 Mollotto)			
Total M/M	Ianan Field		2.MAJOR REAS	SONS FOR PRESENT STATUS
10(2) (4)/(4)	Japan Field		Reasons for 3)	problems in land acquisition
11.ASSOCIATED AND/OF SUBCONTRACTED STU	1			
		5.TECHNICAL TRANSPER	3 PRINCIPAL S	OURCE OF INFORMATION
12.EXPENDITURE Total Contracted	50,192 (¥'000)	On-the-job training was provided to Mexican counterparts concerning planning, design, investigation, management, man-power training and other areas necessary for port development. This technical transfer contributed	0 0	

anakanaka da an an kanasang da manga panggan ang kahasanaka da da kanasa a kanasang mangan bangga bangga banasa bangga da an sa jad

Revised Mar. 1995 CSA MEX/S 301/83 III. PRESENT STATUS OF STUDIED PROJECT II. SUMMARY OF STUDY RESULTS I. OUTLINE OF STUDY ☐ Completed or in Progress ☐ Promoting I.PRESENT LSITE OR AREA LCOUNTRY Mexico A line linking major cities between Apaseo el Grande and Francisco del Rincon (167km) STATUS O Completed 2 NAME OF STUDY O Partially Completed Delayed or Suspended Guanajuato New Railway Development Total Cost Local Cost Foreign Cost Project O Implementing 2.PROJECT COST 237,000 149,000 386,000 1) Discontinued or Cancelled O Processing (US\$1,000) 2) (US\$1=111.95pesos) (Description) 3) The implementation of the proposed project was suspended in October 1983, when the then Governor of Guanajuato was replaced together with 3.SECTOR 3.CONTENTS OF MAJOR PROJECT(S) Transportation/Railway his technical staff. (100 million pesos) Civil engineering works Because the construction of highways and the electrification of 4 REFERENCE NO. Electric engineering works national railways are currently under way, the present Government of Rolling stock bases and workshops 34 12 131 Guanajuato State is unlikely to reconsider the project. Therefore, the project is judged as cancelled. 5.TYPE OF STUDY F/S Land acquisition (compensation) Rolling stock 6.COUNTERPART AGENCY (FY1991 Overseas Survey) After the election in 1991, the opposition party took the political power. As a result, the personnel who knows the background of this Gobierno del Estado de Guanajuato project left the state government. (FY1994 Domestic Survey) No information. 7.0BJECTIVES OF STUDY Construction of a new railway line for passenger transport in the Bajio Industial Corridor in Guanajuato State. 8.DATE OF S/W Dec.1982 Imp. Period: Jan.1984-Jun.1999 EIRR1) FIRRI) 4.FEASIBILITY AND 9.CONSULTANT(S) Feasibility: EIRR2) FIRR2) ITS ASSUMPTIONS Yes/No Japan Railway Technical Service EIRR3) FIRR3) Conditions and Development Impacts: Assumptions: - Paxtial opening of the line in 1990 - Opening of the entire line in 1995 - Completion of double tracking in 2000 **10.STUDY TEAM** Expected development impacts: Balanced development of new residential cities and new industrial parks in the Bajio Industrial Corridor of 12 No.of Members Guanajuato State. Period Mar. 1983-Nov. 1984(8 months) Field 2.MAJOR REASONS FOR PRESENT STATUS Total M/M Japan Departure of the Governer of Guanajuato State Financial difficulty in Mexico 28.31 46.80 75.11 Policy change LASSOCIATED AND/OR SUBCONTRACTED STUDY 5.TECHNICAL TRANSFER 3.PRINCIPAL SOURCE OF INFORMATION One counterpart participated in the JICA training program. On-the-job 12.EXPENDITURE training for undertaking feasibility studies. 149,529 (¥'000) Total ①, ② 140,700 Contracted

和名グアナファト州高速鉄道開発計画

Compiled Mar. 1986

CSA MEX/S 302/83

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT
1.COUNTRY 2.NAME OF STUDY Development Project Port of Tuxpan	Mexico t of the Industrial	1.SITE OR AREA Tuxpan, Veracruz State 2.PROJECT COST Total Cost Local Cost Foreign Cost 196,000 426,000	I.PRESENT STATUS Completed Partially Completed Implementing Processing Delayed or Suspended Implementing Discontinued or Cancelled
3.SECTOR Transportation/Port 4.REFERENCE NO. 5.TYPE OF STUDY 6.COUNTERPART AGENC Comision Nacional Coorsecretaria de Comunica	dinadora de Puertos,	(US\$1,000) (US\$1=250Yen) 3) 3.CONTENTS OF MAJOR PROJECT(S) As a part of industrial port development plan, Tuxpan Port Project was studied. (1) Industrial Port 15 berths (3,0550n) (2) Commercial Port Container berth Bulk cargo berth 2 berths General cargo berth 1 berth	(Description) The project was suspended after the completion of the F/S. The project was identified as part of the industrial port development plan by the Mexican Government. The Tuxpan Port was considered as one of the development projects to support and expedite the petroleum development plan in Chicontepec Basin. Because petroleum-producing strata in the Basin were found to be very deep, the petroleum development was suspended in 1982. In response to the onset of severe economic crisis in 1982, the President De la Madri announced in January 1983 that the industrial port development would be limited to the Altamira Port and the Lazaro Cardenas Port. This policy has been continued by the President Sarinas who took power in December 1988. Under the circumstances, the development of the Tuxpan Port as an industrial port is currently suspended.
7.OBJECTIVES OF STUDY Formulation of a maste formulation of a short the execution of a fea	r plan through 2000, the -term development plan, and		(FY1991 Overseas Survey) The development of the Tuxpan Industrial Fort must be susponded presently, as far as the transportation problems (railway and roads) can not be solved. (FY1992 Overseas Survey) No additional information. (FY1994 Domestic Survey) No additional information.
8.DATE OF S/W 9.CONSULTANT(S) Overseas Coastal Area	May.1982 Development Institute	Imp. Period: Apr.1984~Dec.1986	
1.0.0.	10	Conditions and Development Impacts: [Assumptions] - Industrial, commercial and fishery port functions are taken into consideration. Industrial and commercial cargo fore-casts for 1988 are 20.54 million tons and 1.2 million tons, respectively Industries consist of iron and steel, machinery, automobile, shipbuilding, petrochemical, petroleum refining, food processing, paper and pulp, and fish processing. The area of about 3,000 ha is considered necessary for industrial location.	
Period Jul. 1982-1 Total M/M 78.33 II.ASSOCIATED AND/OF SUBCONTRACTED STU		The population of the new tenter is estimated to be 200,000	2.MAJOR REASONS FOR PRESENT STATUS The national financial and economic crisis in 1982 - 1983 suspended petroleum development in Chicontepec Basin, and the policy changed over the industrial port development.
12.EXPENDITURE Total Contracted	173,817 (¥'000) 169,244	5.TECHNICAL TRANSFER On-the-job training was provided to counterparts through joint work of data collection and analysis and report writing.	3.PRINCIPAL SOURCE OF INFORMATION ①、②

CSA MEX/S 303/85

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT
1.COUNTRY 2.NAME OF STUDY Development Projec Manzanillo	Mexico t of the Port of	1.SITE OR AREA Manzanillo, Colima State 2.PROJECT COST Total Cost Local Cost Foreign Cost 10,000 (US\$1,000) (US\$1,000) (US\$1=192pesos=240yen) 2)	I.PRESENT STATUS Completed or in Progress ☐ Promoting Completed ☐ Partially Completed ☐ Delayed or Suspended ☐ Implementing ☐ Processing ☐ Discontinued or Cancelled (Description)
3.SECTOR Transportation/Port 4.REFERENCE NO. 5.TYPE OF STUDY 6.COUNTERPART AGENC Comision Nacional Coor Secretaria de Comunica 7.OBJECTIVES OF STUDY Formulation of a maste formulation of a short the execution of a fee	dinadora de Puertos, ciones y Transportes Y er plan through 2000, the c-term development plan, and	3) 3.CONTENTS OF MAJOR PROJECT(S) Manzanillo Port will be developed as a hub port in Mexico. Facilities Dredging Quaywall (-12m) Railway Road Storage Nater and electricity supply facilities 3. Scale or capacity 1,170,000 cum 900 m (agri-bulk berths 2 berths container berth 1 berth) 1,500 m 7,500 m 15,000 sgm 1 system	The project is now under implementation as shown below: 1986
8.DATE OF S/W 9.CONSULTANT(S) Overseas Coastal Area	Jun.1984 Development Institute	Imp. Period: Jan. 1985~Dec. 1989 4.FEASIBILITY AND ITS ASSUMPTIONS Conditions and Development Impacts: [Assumptions] Cargo throughout projected for 1990 and 2000 are 2.3 and 3.08 million to the conditions of the conditions o	(PY1994 Domestic Survey) No additional information.
1.0.01	8 Oct.1985(13 months)	Cargo throughout projected for 1999 and 2000 are 2.3 and 3.0 millions tons, respectively. The existing facilities including those under construction are to be utilized efficiently. [Development Impacts] The proposed port development will stimulate the growth of production and population in Manzanillo. The Manzanillo area will become one of the major bases of physical distribution in Mexico. This will contribute to dampen a further expansion of Mexico City.	ANALION DE ACOMO FOR PRESENT STATUS
Total M/M 59.54 11.ASSOCIATED AND/O SUBCONTRACTED STU		5.TECHNICAL TRANSFER One of the counterparts participated in the JICA training program on	2.MAJOR REASONS FOR PRESENT STATUS This is the most important port along the Pacific coast. 3.PRINCIPAL SOURCE OF INFORMATION
i2.EXPENDITURE Total Contracte	153,736 (¥'000 d 147,906		0, 0

CSA MEX/S 304/87

I. OUTLINE OF STUDY	II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT
1.COUNTRY Mexico 2.NAME OF STUDY Repair Dockyard in Lazaro Cardenas	1.SITE OR AREA Industrial City of Lazaro Cardenas which is centrally located in the Pacific coast 2.PROJECT COST Total Cost Local Cost Foreign Cost 101,700 49,000 52,700	PRESENT Completed or in Progress Promoting
3.SECTOR Transportation/Marine Transportation & Ship 4.REFERENCE NO. 5.TYPE OF STUDY F/S 6.COUNTERPART AGENCY Banco Mexicano SOMEX 7.OBJECTIVES OF STUDY Feasibility analysis of a repair dockyard and technical transfer to Mexican counterparts	(US\$1,000) (US\$=150yen) 2) 3)	(Description) SOMEX initially expected to select one of its 117 subsidiary enterprises for operation and management of the proposed dockyard. However, privatization of those enterprises was completed in October 1988. Along with the election of the new President in December 1988, top management of SOMEX was also replaced, necessitating the suspension of the proposed project. (FY1991 Overseas Survey) Futhermore, the privatization of the SOMEX itself was determined in 1992 and the necessary procedure is being taken including personnel transfer. The project is now judged cancelled.
8.DATE OF S/W Sep.1986 9.CONSULTANT(S) Overseas Ships Building Cooperation Center	Imp. Period: Jan. 1990-Dec., 1996 4.FEASIBILITY AND Feasibility: EIRR1) 11.00 FIRR1) 9.90 ITS ASSUMPTIONS Yes/No EIRR2) FIRR2)	0
10.STUDY TEAM No.of Members 9 Period Mar.1987-Mar.1988 (13 months)	Conditions and Development Impacts: Assumptions: Assumptions:	
40,67 26.13 15 ILASSOCIATED AND/OR SUBCONTRACTED STUDY	basis. About 1400 job opportunities can be created.	2.MAJOR REASONS FOR PRESENT STATUS
12.EXPENDITURE	5.TECHNICAL TRANSFER On-the-job training for counterparts about thechinique of P/S.	3.PRINCIPAL SOURCE OF INFORMATION ①②

CSA MEX/S 605/88

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS		III. PRESENT STATUS OF STUDY RESULTS		
I.COUNTRY 2.NAME OF STUDY Air Pollution Control Federal District	Mexico ol Plan in the	I.SITE OR AREA Mexico City Met 2.PROJECT COST	ropolitan Area	1.PRESENT STATUS	■ In Progress or In Use □ Delayed □ Discontinued	
		(US\$1,000) 1) 2)	ost Local Cost Foreign Cost	porated int	s and recommendations of the study were incor- to the Integrated Air Pollution Control Program detal District announced in September 1989.	
3.SECTOR Administration/Environmen	ntal Problems	3.CONTENTS OF MAJOR PROJECT(S)		January 198 automobile	lution control campaign was launched in 9, introducing such measures as compulsory inspection, restrictions on the use of private , promotion of pollution- preventive devices	
4.REFERENCE NO. 5.TYPE OF STUDY 6.COUNTERPART AGENCY	Other	The study did not identify specific promeasures for air pollution control which either implementing or plans to implemer effects of these measures. On the basis the following recommendations. 1) Introduction of the secondary air so	the Mexican Government has been t, and evaluated the expected of the findings, the study made	and additiv 3) Based on the feasibility Fixed Sourc (Dec. 1989	res, and institution building. e findings of the study, a JICA-financed study (Air Pollution Control Measures for es of Emission???) is now being undertaken - Sept. 1991).	
Departamento del Distrit General de Reordenacion	o Federal, Direction	2) Further desulphurization of gasolim 3) Improvement of rules and regulations Environmental Law 4) Strengthening of the air pollution 5) Institution building and manpower t 6) Strengthening of surveillance over	in accordance with the monitoring network	4) In Mar.1991, some oil refineries in the midtown area were closed. The heavy polluted refineries were regulated. 5) The plant for low-sulphur heavy oil and the plant for gasolin and light oil has been operated since 1991 by co-financing of OECF, Import & Export Bank and the World Bank.		
7.OBJECTIVES OF STUDY Recommendation of measur control	res for air pollution	of strengthening of surveinance over		* Contents of (1) Desulfuriza (2) Desulfuriza (FY1994 Domest	Information. OECF Loan. Ition of heavy oil thion of diesel oil ic Survey)	
8.DATE OF S/W 9.CONSULTANT(S)	Jul.1986	4.CONDITIONS AND DEVELOPMENT IM	PACTS	No additiona	l information.	
Pacific Consultants Into Research, Analysis and		On-going and planned measures for air foliows: 1) Thermal power generation: change of natural gas, and increased smoke elization	fuels from heavy oil to	·		
IO.STUDY TEAM No.of Members 15 Period Feb. 1987-De		2) Pactories: change of fuels from hear increased use of low-sulphur fuels, low-Nox burners 3) Motorized vehicles: introduction of tertiary catalytic devices, strengt standards and the automobile inspec	and increased use of clear gasoline and hening of the emission			
Total M/M	Japan Field			2.MAJOR REA	SONS FOR PRESENT STATUS	
72.61 11.ASSOCIATED AND/OR SUBCONTRACTED STUD - Chassis dynamo test - Traffic volume estimates	32.47 40.14			than those on regard, it is measures in or	res on factory emission, which is easier to implement automobiles, are relatively weak in Mexico. In this considered necessary to identify specific and realistic der to ensure the technical aspects of 'the improvement regulations' as mentioned in the recommendation 3).	
12.EXPENDITURE		5.TECHNICAL TRANSFER		3.PRINCIPAL	SOURCE OF INFORMATION	
Total Contracted	448,778 (¥'000) 239,000	On-the-job training on measuring and pollution, factory exhaust gas and so o control was held for some 200 participa	n. 2) A seminar on air pollution	①, ②, ④		

CSA MEX/S 305/90

CONTINUENCO SOSTO			
I. OUTLINE	OF STUDY	II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT
LCOUNTRY	Mexico	LSITE OR AREA	1.PRESENT Completed or in Progress Promoting
2.NAME OF STUDY Improvement of the	Pacific Coast Ports	Port of Salina cruz, Larzaro cardenas, Manzanillo, Mazatran, Guaymas and Engenada 2.PROJECT COST	St Implementing Delayer of Suspended
3.SECTOR Transportation/Port 4.REFERENCE NO. 5.TYPE OF STUDY	F/S	3) 3.CONTENTS OF MAJOR PROJECT(S) [Lazaro cardenas] Pavement etc.: 49050 s.m C.F.S.: 1 nos Gate: 1 nos Utilitis: 1 nos Gantry Crane: 1 nos Utilities: 1 nos	(Description) - Container Terminals are scheduled to start operation in summer 1992 in the port of Manzanillo and Larzaro Cardenas. Manzanillo: construction of a new container terminal. Larzaro Cardenas: addition of a gantry crane. - For the realization of efficient cargo handling systems, some measures such as privatization are taken based on this study. (FY1991 Overseas Survey) - The World Bank committed 45 million dollar loan in order
6.COUNTERPART AGENCY Puertos Mexicanos	<u> </u>	Transfer Crane : 1 nos Gantry Crane : 2 nos Others : 1 nos Transfer Crane : 4 nos Others : 1 nos	to implement the improvement plan of each port. (Total amount of investment: 50 million dollars.) The project implementation (equipment procurement & port improvement) is scheduled to start in 1991 and to end in 1994. As far as the urgent improvement plan is concerned, the concret plan is under preparation by the Mexican side. As far as short-term efficiency improvement plan is
7.OBJECTIVES OF STUDY 1. Urgent Improvement P 2. Long-term developmen 3. Feasibility study of	t policy of each port		concerend, a detailed plan is under preparation. (PY1992 Overseas Survey) 1993.3 The target year of starting operation (both ports) (PY1993 Overseas Survey) - Manzanillo Port Dec. 90-Jan. 93 Equipment Procurement (US& 5.52 million) 89 - 94 Infrostructure Development (US\$ 10.65 million)
8.DATE OF S/W	Oct.1988	Imp. Period: Mar:1989-Jun:1990	Spanish Govn't, the World Bank and Mexican Goven't provided 0.06 financial resources.
9.CONSULTANT(S) Overseas Coastal Area D Nippon Koei Co., Ltd.	evelopment Institute	TIS ASSUMPTIONS Feasibility: EIRR2 13.75 FIRR2	6.22 - Lazaro Cardenas Port Dec. 9 -Feb. 94 Equipment Procurement (US\$ 8.18 million) Spanish Govn't and the World Bank provided financial resources. (PY1994 Domestic Survey) No additional information.
10.STUDY TEAM		productivity and shortage of cargo handling facilities/equipment. 2. The forecast of an increase of the containerized cargo volume in the objective port.	e
No.of Members 1	1 5 ul.1990(17 months)	Development Impacts: 1. The future cargo volume could be treated based on the pivotal 2 por 2. The project could create the new employment in the objective port at is expected to make the ripple effect to the other industry.	ts, nd
Total M/M 75.33	Japan Field 25.24 50.09		2.MAJOR REASONS FOR PRESENT STATUS In Mexico, improvement of the efficiency of the port and maritime i considered important for the promotion of export.
II.ASSOCIATED AND/OR SUBCONTRACTED STUD O/D analysis of the Pa	<u>Y</u>		CONSIDER AMPORTANCE TO COMPANY TO
12.EXPENDITURE Total Contracted	261,520 (¥'000) 252,593	5.TECHNICAL TRANSFER The method of port planning detail design and the ways of economic an finacial analysis are transferred.	3.PRINCIPAL SOURCE OF INFORMATION ①、②

{F/S,D/D

Compiled Mar.1995 Revised

CSA NIC/S 306/93

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT
1.COUNTRY	Nicaragua	1.SITE OR AREA	1.PRESENT ■ Completed or in Progress □ Promoting
2.NAME OF STUDY Water Supply Proje		the area of the southern side of Lake Managua (about 880km2)	STATUS Completed Partially Completed Delayed or Suspended
		2.PROJECT COST Total Cost Local Cost Foreign Cost 40,000 2) 61,000	☐ Implementing ☐ Processing ☐ Discontinued or Cancelled
3.SECTOR	1	3) 33,000	(Description) The basic design study of the grant aid project aimed to develop a
Social Infrastructures Development	s/Water Resource	3.CONTENTS OF MAJOR PROJECT(S) 1) Development of a new groundwater source in North Ticuantepe in the Eastern sub-area and installation of the facilities for water conveyance	new groundwater source in North Ticuantepe and to install the facilities for water conveyance to Altamira water distribution pond started in July 1994.
4.REFERENCE NO.		to the existing water distribution pond in Altamira.	
5.TYPE OF STUDY 6.COUNTERPART AGENC	F/S	2)Development of residual groundwater sources in the Eastern sub-basin and installation of the facilities for water conveyance to the existing water distribution pond in Americas no.4.	
INAA INTER	-	3)Groundwater development in the area adjacent to the east of the Study Area and installation of the facilities for water congeyance to Managua City	
7.OBJECTIVES OF STUDY to evaluate the ground basin and to make a co development	Y dwater potential of Managua oncrete plan for groundwater		
8.DATE OF S/W	.0	Imp. Period: .1993~.1996 .1995~.1999 .1997~.2000	4.
9.CONSULTANT(S) Kokusai Kougyo Co., Li	td.	4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: EIRR1) FIRR1) 4.00 EIRR2) EIRR2) EIRR3) FIRR3)	
		Conditions and Development Impacts: 1) to make possibble to improve water supply circumstances of the Righest Zone remarkably lacking in domestic water. 2) to make possible to increase the water use amount from 1701 to 2001 par day per head.	
10.STUDY TEAM		Taxy per nead. 3)to make possible to do away with overpumping of groundwater in the Central sub-basin.	
1,0,0,	10		
Period Dec.1991-	Sep.1993(22 months)		
Total M/M	Japan Field		2.MAJOR REASONS FOR PRESENT STATUS
61.03	19.63 41.4 0		
11.ASSOCIATED AND/O SUBCONTRACTED STU			
		5.TECHNICAL TRANSFER	
12.EXPENDITURE	T	techniques for groundwater development and groundwater management	3.PRINCIPAL SOURCE OF INFORMATION
Total Contracted	284,760 (¥'000) 3 272,730		•

和名 マナグア市上水道整備計画調査

PROJECT SUMMARY (Basic Study)

CSA PAN/S 501/81

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDY RESULTS		
1.COUNTRY 2.NAME OF STUDY Topographic Mappine Caribbean Coastal	Panama g Project of the	1.SITE OR AREA Northwest region along the Caribbean coast(8,000 sq.m)	1.PRESENT In Progress or In Use STATUS □ Delayed □ Discontinued		
3.SECTOR Social Infrastructures		2.PROJECT COST (US\$1,000) 1) 2) 3.CONTENTS OF MAJOR PROJECT(\$) National base maps (scale:1/50,000, 12 plates)	(Description) (FY1991 Overseas Survey) The result of the study is utilized especially in electricity, communication, broadcasting and social infrastructure. The map will be utilized for the future development planning. (FY1994 Domestic Survey)		
4.REFERENCE NO. 5.TYPE OF STUDY 6.COUNTERPART AGENCE Instituto Geografico N		National pase maps (Scale:1/30,000, 12 places)	No information.		
7.OBJECTIVES OF STUDY Preparation of basic in	nformation for development				
8.DATE OF S/W	Jun.1978	A COMPANIONS AND DESIGN OF MEASURE WERE CITED			
9.CONSULTANT(S) International Engineer	ing Consultants Association	4.CONDITIONS AND DEVELOPMENT IMPACTS Haps will be used as the basis for planning hydropower generation, and road and railway construction.			
] 20 May.1980(17 months)				
Total M/M	Japan Field		2.MAJOR REASONS FOR PRESENT STATUS		
11.ASSOCIATED AND/OR SUBCONTRACTED STU					
12.EXPENDITURE Total	442,096 (¥'000)	5.TECHNICAL TRANSFER OUT and lectures on aerophotography and cartography	3.PRINCIPAL SOURCE OF INFORMATION ①, ②		
Contracted					

PROJECT SUMMARY (Basic Study)

CSA PAN/A 501/83

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRESENT STATUS OF STUDY RESULTS		
1.COUNTRY 2.NAME OF STUDY Fisheries Resources	Panama Survey of the	offshore of Caribea	within 200 nautical miles, n Sea of Republic of Panam	deeper than 100m, in the	1.PRESENT STATUS	■ In Progress or In Use □ Delayed □ Discontinued	
Atlantic Coast		(US\$1,000)	Total Cost 1) 2)	Local Cost Foreign Cost	(Description)	Survey)	
3.SECTOR Fisheries/Fisheries	4	2 CONFERENCE OF MA TOD BROTECTES			This study drew international attention to the fisheries resources of the Atlantic Ocean. Three groups of private firms including Japanese firms are interested in investing in the fishery. The result of the study is fully utilized.		
4.REFERENCE NO. 5.TYPE OF STUDY	Basic Study	The main objection resources distribute distribute the national control of the co	n of this study is to make ion in Carrebean sea area. ion's large and middle scal	up basic datas of fisheries The study is considered to e fisheries.	-		
6.COUNTERPART AGENCY Bureau of Marine Resource Commerce and Industry	4	-Survey of fishery Ocean [1981,82,83] -Improvement of fis		f the Atlantic			
7.OBJECTIVES OF STUDY Basic Sorvey of nation's	s fisheries resources						
8.DATE OF S/W 9.CONSULTANT(S) Universal Fisheries Inc	Nov.1981			S limited to shrimp fishing in			
		-Development of Pi -Comprehensive and Pacific Ocean side for tu	long-term development plan	is necessary including the			
No.of Members 3 Period	1						
Total M/M	Japan Field				2.MAJOR REASO	ONS FOR PRESENT STATUS	
11.ASSOCIATED AND/OR SUBCONTRACTED STUD	Y			(FY 1993 Domectic Survey)			
12.EXPENDITURE Total Contracted	516,500 (¥'000) 463,837	5.TECHNICAL TRA	ANSFER		3.PRINCIPAL SO	URCE OF INFORMATION	

CSA PAN/S 302/84

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS			III. PRE	III. PRESENT STATUS OF STUDIED PROJECT			
I.COUNTRY	Panama	1.SITE OR AREA					1.PRESENT	☐ Completed or in Progress	Promoting
2.NAME OF STUDY			Danama Metro	politan Area			STATUS	O Completed	
Urban Transport P.	 roject in the Panama		ranama necro			Transita Const		O Partially Completed	Delayed or Suspended
Metropolitan Area		2.PROJECT COST	1)	Total Cost 77,577	Local Cost 36,907	Foreign Cost 41,570		○ Implementing ○ Processing	Discontinued or Cancelled
		(US\$1,000)	2)	135,390	70,940	64,450			
a crawon		l :	3)	4,720	2,446	2,274	(Description)	desire study on now road Co	onstruction was completed in
3.SECTOR Transportation/Urban	Transportation	3.CONTENTS OF MAJOR	R PROJECT(S)					finance. The priority of the has been postponed indefin	
		1) Construction of Co - Corredor Norte		and arterial	roads connecti	ing thereto.	political de	estabilization.	•
4.REFERENCE NO.		- Via El Paical Exte	xtension				(FY1991 Over: Financial	use segmented to	Japan, the World Bank and the
5.TYPE OF STUDY	F/S	- Via Cerro Ancon E: - Via san Miguelito	Oeste				IDA. However,	, it was not succeeded becau-	se of the invasion of Panama uncial assistance is planned
6.COUNTERPART AGEN		 Existing Road Imp: - Via Espana 					to be reques	ited to Banco Prirad con our	as Concesionadas
Ministry of Public Wo	TVO	- Via Bolivar, Sna - Via Cerro Ancon	Miguelito Inte	ersection				seas Survey) of the final design plans, the	he government of Panama does
		- Via El Paical 3) Bus Center Project	s (four bus	centers)				of the final design plans, or bugh disposable finance for t herefore, there are negotiati er international loans or a	
7.OBJECTIVES OF STUD		4) Bus Maintenance Co	encer Project				1	er international loans or a estic Survey)	MAINTECTACTIC Grancs.
A Feasibility study f selected through the	or the priority projects						No addition	onal information.	
Dozoota chroagh the	Anna and Ann		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				1		
			4						
	T. 1000	 	1002 2 - 1000	·····	<u> </u>		-{		
8.DATE OF S/W	Mar.1983	mp. renou.	1987~Jun.1990		26.40 FTR	R1)	┪		
9.CONSULTANT(S)		4.FEASIBILITY AND ITS ASSUMPTIONS	Feasibility:	EIRR1) EIRR2)		R2)			
Yachiyo Engineering C	o., Ltd.	119 VOOCMILITONS	Yes/No	EIRR3)	FIR	R3)	1		
	*.	Conditions and Deve	lopment Impa	icts:	1	nackage is			•
		1) The evaluation of highly significant for When this "package"	rom an econom	ic standpoint	into new road	construction .			
		When this "package" projects and existing an IRR of 31.4% and	is opened at g road improv	rement project	s, however, the	e former shows	S		•
10.STUDY TEAM		of improvement proje	cts.	(PIDI	n of his centi	er operation			
No.of Members	11	will be 10.6% and th	e generation	of fund to pe	s ara a ros her o	inium liferesc			
Period May.1983	-Jan.1985(20 months)	Commercial base w	management is	difficult. Fl	[RR calculated But the const:	for the bus			
		bus maintenance cent				he improvement	2 MATOR P	EASONS FOR PRESENT STA	TUS
Total M/M	Japan Field								were created by the invasion.
84.94	13.84 71.10	4					- High prio	rity	
11.ASSOCIATED AND/C	the state of the s					-	(FY1992 Ove	rseas Survey) in obtaining funds.	
SUBCONTRACTED ST - Topographic and ge	ological survey.		<u></u>		· ·				
- Air photograph and (Sub-Contract with 1	mapping	5.TECHNICAL TRAN	NSFER		1.				
12.EXPENDITURE		1) OJT : Seminar on	ban transm	ort in Panama	City	five	3.PRINCIPA	AL SOURCE OF INFORMATION	JN
Total	741,557 (¥'000	/ Icounterparts.	and the first of the second	4.0	TIC LIERGS LOI		(I), (2)		
Contracte	d 295,841	3) Use of local con	Surcants : So	av agrach				<u> </u>	

CSA PAN/S 301/84

I. OUTLINE OF STUDY	II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT		
1.COUNTRY Panama 2.NAME OF STUDY Short-wave Broadcast Station F	(US\$1,000) 1) 2)	I.PRESENT ☐ Completed or in Progress ☐ Promoting STATUS ☐ Completed ☐ Partially Completed ☐ Delayed or Suspended ☐ Implementing ☐ Processing ☐ Discontinued or Cancelled (Description)		
3.SECTOR Communications & Broadcasting/Broad 4.REFERENCE NO. 5.TYPE OF STUDY F/S 6.COUNTERPART AGENCY Ministry of Interior and Justice	3) 3.CONTENTS OF MAJOR PROJECT(S) Necessary experimental equipment and facilities are proposed to undert the following services. 1)Domestic broadcasting (short-wave) 2)International broadcasting (short-wave) 3)International broadcast relay	(FY1991 Overseas Survey)		
7.OBJECTIVES OF STUDY Construction planning for the experiment wave broadcasting 8.DATE OF S/W Nov. 1983 9.CONSULTANT(S)	Imp. Period: 4.FEASIBILITY AND Feasibility: EIRR1) FIRR1) FIRP2)			
10.STUDY TEAM No.of Members Period Jun. 1984-Jan. 1985 (7 m	Conditions and Development Impacts: 1) There are about 50 AM or FM stations operating in Panama, but because of the difficult terrains, the coverage of these stations are inadequate. The short-wave station will improve the situation. 2) Panama can participate in the international broadcasting network. 3) Panama will become one of the regional relay centers connecting South and North America.			
Total M/M Japan 11.ASSOCIATED AND/OR SUBCONTRACTED STUDY	Field	2.MAJOR REASONS FOR PRESENT STATUS		
12.EXPENDITURE 5 Total 5 Contracted	5.TECHNICAL TRANSFER 3 , 132 (¥'000)	3.PRINCIPAL SOURCE OF INFORMATION ①②		

PROJECT SUMMARY (Basic Study)

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CSA PAN/A 502/84

III. PRESENT STATUS OF STUDY RESULTS II. SUMMARY OF STUDY RESULTS I. OUTLINE OF STUDY I.PRESENT In Progress or In Use LSITE OR AREA 1.COUNTRY Panama STATUS ☐ Delayed 2.NAME OF STUDY An area of 1,534 sq.km of Donoso district in Colon state of Panama ☐ Discontinued Inventario forestal del distrito de 2.PROJECT COST Donoso (Description) Local Cost Foreign Cost Total Cost (US\$1,000) 1) (PY1991 Overseas Survey) Technology and methods which were transferred to Panama during the study are utilized in the formulation of guidelines for forest 2) 3.SECTOR resources development. 3.CONTENTS OF MAJOR PROJECT(S) Forestry/Forestry & Forest Conservation FY1994 Domestic Survey) Guideline for forestry development plan in undeveloped area in Donoso Guideline for forestry development plan in undeveloped area in didistrict in Colon state was prepared containing the following components: 1. Introduction of forest planning system 2. Promotion of forest products industry 3. Enforcement of land use planning No information. 4.REFERENCE NO. 5.TYPE OF STUDY Basic Study Enrichment of forest experimentation and study 6.COUNTERPART AGENCY National Direction of Renewable Natural Resources 7.OBJECTIVES OF STUDY To contribute to the socio-economic development of the study area and Republic of Panama 8.DATE OF S/W Sep.1982 4 CONDITIONS AND DEVELOPMENT IMPACTS 9.CONSULTANT(S) Development of roads for regional development are indispensable Development of roads for regional development are indispensable immediately, starting from the pacific coastal road because there are no roads from other areas and there are no roads in objective area. Forest is diminishing by shifting cultivation, but it is possible to utilize forest appropriately and to conserve it by introduction of land Japan Forest Technical Association use plan and forest planning system. **10.STUDY TEAM** No.of Members Period Dec. 1982-Mar. 1985 (28 months) 2.MAJOR REASONS FOR PRESENT STATUS Field Total M/M Japan 58.00 137.00 79.00 11.ASSOCIATED AND/OR SUBCONTRACTED STUDY Aerial Photography 3.PRINCIPAL SOURCE OF INFORMATION 5.TECHNICAL TRANSFER 12.EXPENDITURE Trainee acceptance 325,490 (¥'000) Total CJT of forest survey Guidance for how to analyze topography - Method of data processing 295,242 Contracted

[M/P,Basic Study,Other]

CSA PAN/S 303/87

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT	
1.COUNTRY 2.NAME OF STUDY Corredor Sur Devel Panama Metropolita	Panama opment Project in the	1.SITE OR AREA Area along the Bay at the southern Panama metropolitan area 2.PROJECT COST	1.PRESENT STATUS Completed Partially Completed Partially Completed Implementing Processing Delayed or Suspended Discontinued or Cancelled	
4.REFERENCE NO. 5.TYPE OF STUDY 6.COUNTERPART AGENCE Ministry of Public Work 7.OBJECTIVES OF STUDY F/S study of South Lin	ks	3) 3.CONTENTS OF MAJOR PROJECT(S) Corredor Sur I Expansion into 6 lanes, new construction: about 10km Corredor Sur II New construction of 6 lanes and 4 lanes: about 12km Major access road Expansion into 6 lanes, new construction: about 13km Extension of Corredor Sur Expansion into 4 lanes: about 2km	(Description) The preparation for loan application was under way in late 1989, but the application has been postponed indefinitely due to the political destabilization. (PY1991 Overseas Survey) Ministry of Public Works is planning to request budget for Fondo de Preinversion. (FY1992 Overseas Survey) There are no final design plans. There are attempts to obtain funds for both construction and final design plans of the project either by international loans or administrative grants. (FY1994 Domestic Survey) No additional information.	
8.DATE OF S/W 9.CONSULTANT(S) Yachiyo Engineering Co	Feb.1987	Imp. Period: .19881999 4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: EIRR1) 30.00 FIRR1) EIRR2) FIRR2) EIRR3)		
110.01 /11110	11 Each 1999/20 months	Conditions and Development Impacts: 1) As the results of cost/benefit analysis, EIRR for the project is estimated at 30.4% considering vehicle operating cost savings and passenger time savings. From and economic standpoint, the implimentation of the project as a whole is well justiffied with a high EIRR. The project will fulfill its purpose as an additional ban arterial road to increase smooth traffic flow in the east-west direction of the Metropolitan Area and to assist in mitigating the traffic congestion in that area.		
Total M/M 60.63 11.ASSOCIATED AND/O SUBCONTRACTED STU Traffic Survey, geolog		2) In addition to the above 1), expecting - Saving transportation energy - Creation of employment demand - Impact large scale urban and xoadside development - Restraint disorderly sprawlling 5.TECHNICAL TRANSFER	2.MAJOR REASONS FOR PRESENT STATUS - Political and economic instability were created by the invasion of Panama by the United States Delay of Diseno Final - Low priority (PY1992 Overseas Survey) - The absence of final design plans.	
12.EXPENDITURE Total Contracted	278,876 (¥'000) 3 259,501	1) OJT: Caluculation by the use of personal computer, 2) Accepted trainees: Three (3), 3) Report: Joint works for preparation of English reports in Panama, 4) Use of local consultant: Topographic survey, geological and soil survey, and 5) Prevision an instruction of equipment	3.PRINCIPAL SOURCE OF INFORMATION ①、②	

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT		
	Panama	1.SITE OR AREA	I.PRESENT Completed or in Progress Promoting		
2.NAME OF STUDY Rehabilitation Plan	and Container	Port of Cristobal and Surrounding Area	STATUS Completed Partially Completed Delayed or Suspended		
Renabilitation Plan Terminal Operation Cristobal		2.PROJECT COST M/P 1) Local Foreign Cost Cost (US\$1,000) 110,827 21,096 89,731	○ Implementing ○ Processing □ Discontinued or Cancelled		
A RECTION		2) 330,925	(Description)		
3.SECTOR Transportation/Port		3) 3.CONTENTS OF MAJOR PROJECT(S)	Government of Panama is very interested in receiving financial aid from Japan for the implementation of the project. Necessary arrangements are currently being made.		
4.REFERENCE NO.		Master Plan(2010) Project 1: New Container Teminals(Telfers Island) Short Term(2000): Container Berth(d=13.0m,I=300m), Area 10.5ha,			
5.TYPE OF STUDY 6.COUNTERPART AGENCY	M/P+F/S	Short Term(2000): Container Crane 2, Transfer Crane 7 Long Term(2010): Container Crane 2, Transfer Crane 7 Container Crane 4, Transfer Crane 41.0ha, Container Crane 4, Transfer Crane 14			
National Port Authority		Project 2 : Modernization of Existing Container Terminal Short Term(2000) : Expansion 1.8ha, Transfer Crane 1, (additional) Long Term(2010) : Expansion 3.3ha, Transfer Crane 4, (additional)			
for the period up to the	of the short term me port of Cristobal for	Project 3: Modernization of Exisiting Piers and Mole Area Short Term(2000): Pier No.7:Demolition of Quey Shed 7,900m2, Mole:Pavement for Open Storage Area 5,000m2 Long Term(2010): Pier No.8:Reform to Passenger Teminal, Mole:Pavement for Open Storage Area etc. 20,660m2 Project 4: Access Road Short Term(2000): Access to Boliver, Jighway(2 lanes) 2.3km Long Term(2010): Bypass Route to R16(4 lanes) 3.0km			
8.DATE OF S/W	Dec.1991		·		
9.CONSULTANT(S)			·		
Overseas Coastal Area I Pacific Consultants In		Imp. Period: .19942000 .20012010			
		4.FEASIBILITY AND TOTAL PROPERTY OF THE PROPER			
10.STUDY TEAM		Conditions and Development Impacts:			
1 (1010) Monteons -	0	RIRR - In the "without case", no investment is made for the new container terminal at Telfers Island. Excess portion of potential cargo will be			
Period		lost. - Benefit is measured by increase of employee earnings, tax revemue and decrease in container dwelling time in the yard.			
Total M/M	Japan Field	FIRR - Present tariff rate will be maintained.	2.MAJOR REASONS FOR PRESENT STATUS		
67.40 11.ASSOCIATED AND/OR SUBCONTRACTED STUI O/D survey, Bathymetri Geotechnical survey,	<u> YC</u>	Economic Development -This project contributes to industrial development and improvement of the employment condition to a great extent, as a social infrastructure supporting transit trade in the free zone.			
Topographic survey		5.TECHNICAL TRANSFER	3.PRINCIPAL SOURCE OF INFORMATION		
12.EXPENDITURE Total Contracted	275,065 (¥'000 266,997	Training on planning and technical aspects in Panama Counterpart training in Japan	0		

CSA PAN/S 308/93

I. OUTLINE OF STUDY		II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT	
1.COUNTRY 2.NAME OF STUDY Improvement of Pana	ama-Colon Highway	1.SITE OR AREA Area between Panama and Colon 2.PROJECT COST 1	1.PRESENT STATUS	
3.SECTOR Transportation/Road 4.REFERENCE NO. 5.TYPE OF STUDY 6.COUNTERPART AGENCE	F/S	2) 264,120 101,324 162,796 3) 3.CONTENTS OF MAJOR PROJECT(S) 1.Construction of a full access controlled 4-line highway with design speed of 110km/h in Alcavde Diaz Section(20.2km). 2.Construction of a full access controlled 4-line highway with design speed of 110km/h in Sabanitas Section(26.2km).	(Description) Since the final report was officially presented to the Panama Government in June '94, the project shall be in procedure concretely for securing fund on this project, detailed design execution including Japanese government aid.	
Ministry of Public work 7.OBJECTIVES OF STUDY To formulate a Masterp development between Part To carry out a Feasibi projects of the Mastern	lan for arterial road nama and Colon lity Study on selected			
8.DATE OF S/W 9.CONSULTANT(S) Yachiyo Engineering Co	Sep.1992	Imp. Period: .1995~.1999 .1995~.2004 4.FEASIBILITY AND ITS ASSUMPTIONS Feasibility: EIRR1) 41.00 FIRR1) 7.8 EIRR2) 31.10 FIRR2) FIRR3)	5	
10.STUDY TEAM No.of Members] 13 Mar.1994(16 months)	Conditions and Development Impacts: 1. Vehicle operating cost saving 2. Reduction of traffic accident 3. Impact for regional development in Colon 4. Creation of job opportunity by Highway construction 5. To secure an alternative route of Panama Canal		
Total M/M 59.18	Japan Field 24.96 34.22		2.MAJOR REASONS FOR PRESENT STATUS 1) Just immediately after presentation of the final report	
11.ASSOCIATED AND/OR SUBCONTRACTED STU	R DY	5.TECHNICAL TRANSFER	2) Waiting the new government policy starting in Sept. 94	
12.EXPENDITURE Total Contracted	320,726 (¥'000) 305,043	The study showed the environment impact study example.	3.PRINCIPAL SOURCE OF INFORMATION ①	

CSA PAN/S 307/93

I. OUTLINE OF STUDY	II. SUMMARY OF STUDY RESULTS	III. PRESENT STATUS OF STUDIED PROJECT
1.COUNTRY Panama 2.NAME OF STUDY Study of Alternatives to the Panama	I.SITE OR AREA Canal Zone	1.PRESENT ☐ Completed or in Progress ☐ Promoting STATUS ☐ Completed ☐ Partially Completed ☐ Delayed or Suspended
Canal	2.PROJECT COST Total Cost Local Cost Foreign Cost 5,400,000 CuS\$1,000 2)	○ Implementing ○ Processing □ Discontinued or Cancelled
3.SECTOR Transportation/Marine Transportation & Ships	3) 3.CONTENTS OF MAJOR PROJECT(S) Economic and Impacts Study (A) - To construct the third locks at both entrances capable of handling ships	(Description) By the Final Report of the commission (Sept 1993), existing canal will be available until 2020 and the improved canal by this project will be available after 2020. The project shall be completed by 2020.
4.REFERENCE NO. 5.TYPE OF STUDY F/S 6.COUNTERPART AGENCY	of a design of 150,000 DMT. - To prepare approach channels from the third locks to the present Canal. To widen the Gaillard Cut. Fraincering and Cost Estimate Study (B)	The canal will be transferred from USA to the Republic of Panama in December 31, 1999. This project has been suspended and the Commission was closed after completing the study.
Commission for the Study of Alternatives to the Panama Canal	Most feasible alternative reported by the Commission is as follows: - construction with one lane lock for 150,000DWT ship parallel to the existing locks: - two lane canal except one lane on Culebra Cut - The alternative project shall be constructed by the year 2020.	
7.OBJECTIVES OF STUDY Economic analysis and impact analysis on the alternatives prescreened by the Cam. Study of canal alternatives on egineering and cost estimate for screenings.	- Sea level canals are estimated not feasible.	
8.DATE OF S/W Jul. 1991	Imp. Period: .2005~.2020	
9.CONSULTANT(S) Mitsubishi Research Institute Yachiyo Engineering Co., Ltd.	4.FEASIBILITY AND Feasibility: EIRR1) 85.00 FIRR1) 15.86 ITS ASSUMPTIONS YES/NO EIRR2) FIRR2) FIRR3)	
	Conditions and Development Impacts: A: Additional investigation will be required in the areas of impacts on the	
10.STUDY TEAM	environment and of natural conditions and toll scructure. The feasibility study have to be updated to take into account the world trade picture at the time of implementation.	
No.of Members 30 Period Jul.1991-Aug.1994(38 months)	No comments on the project proprietor and resource of fund. Progressive impacts will be expected on the world marine transportation and also on the Republic of Panama.	
Total M/M Japan Fie		2.MAJOR REASONS FOR PRESENT STATUS
119.75 91.99 27.	<u>/6</u>	
II.ASSOCIATED AND/OR SUBCONTRACTED STUDY		
N/A	5.TECHNICAL TRANSFER	3.PRINCIPAL SOURCE OF INFORMATION
12.EXPENDITURE	not included in this study	0