

IMPLEMENTING ARRANGEMENT ON THE TECHNICAL COOPERATION  
BETWEEN THE JAPAN INTERNATIONAL COOPERATION AGENCY  
AND THE PHILIPPINE PORTS AUTHORITY FOR THE STUDY ON  
THE DEVELOPMENT PROJECT OF PORT OF IRENE

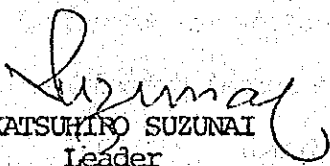
AGREED  
BETWEEN

JAPAN INTERNATIONAL COOPERATION AGENCY


AND

THE PHILIPPINE PORTS AUTHORITY

FEBRUARY 9, 1981

  
KATSUHIKO SUZUNAI  
Leader

Japanese Preliminary Study  
Team  
Deputy Director General  
Fifth District Port Construction  
Bureau  
Ministry of Transport  
Japan

  
MAXIMO S. DUMLAOG JR.  
Assistant Executive Officer  
Philippine Ports Authority  
Republic of the Philippines

by JICA in close collaboration with PPA and other related agencies.

### II. Implementation of the Study

The JICA shall provide technical cooperation to PPA for the implementation of the Study of the Development Project of the Port of Irene.

1. The Study shall be implemented in accordance with the work plan given in detail in the Scope of Work (Appendix 1).
2. The Study shall be conducted in accordance with the study schedule (Appendix 2) formulated on the basis of the Scope of Work.

### III. Dispatch of Japanese Study Team

The JICA shall, at its own expenses, dispatch the Japanese study team, in accordance with the schedule mutually agreed upon by both JICA and PPA.

### IV. Training of Philippine Counterparts

The JICA shall, at its own expenses, receive Philippine Government personnel connected with the Study for technical training in Japan in accordance with the normal procedures under the Colombo Plan Technical Cooperation Scheme.

### V. Responsibilities of the Government of the Philippines

1. The Government of the Philippines in accordance with the Note Verbal exchanged between the Government of the Philippines

and Japan shall be responsible for dealing with claims which may be brought by third parties against the Japanese study team members, and shall hold them harmless in respect of claims on liabilities arising in the course of or otherwise connected with the discharge of their duties in the implementation of the Study, except when such claims on liabilities arise from the gross negligence or wilful misconduct of the above-mentioned individuals. Should any questions arise in connection with the foregoing, both Governments shall immediately consult with each other.

2. PPA shall, at its own expenses, provide the following:
  - a) Counterparts of the Government of the Philippines necessary for the Study.
  - b) Necessary and latest data and information related to the Study.
  - c) Credentials or Identification (ID) cards to the members of the Study team who shall be working in the Philippines for the execution of the Study.
  - d) Suitable office space with copying equipment and secretarial services.
  - e) Appropriate number of vehicles with drivers, and boats with boatmen.
3. PPA shall make the necessary arrangements for the following:
  - a) Secure permission for entry into the necessary study areas.

- b) Suitable accommodations in the vicinity of the study area.
  - c) Availability of medical facilities when needed but medical expenses shall be chargeable to JICA funds allotted for the Study.
4. PPA shall make the necessary arrangements with proper agencies concerned:
- a) To ensure the safety of the study team.
  - b) To make appointments for visiting the appropriate authorities.
  - c) To provide the necessary facilities to the Japanese study teams for the remittances as well as utilization of funds introduced into the Philippines from Japan in connection with the implementation of the Study.
  - d) To exempt the Japanese study team members from taxes, duties, fees and other charges on machinery, equipment and other materials brought into the Philippines for the conduct of the Study.
  - e) To secure clearance for the release of the photography.
  - f) To secure permission for the use of radio communication facilities, including transceivers and electro instruments for the survey.

#### VI. Study Schedule

The Study will be executed in accordance with the attached tentative schedule. (Appendix 2)

#### VII. Report

The Government of Japan through JICA will prepare and submit the reports to the Government of the Philippines.

Appendix 1.

Scope of Work

I. OBJECTIVES

The Study intends to formulate a master plan for the Port of Irene to support the significant growth of Region II, and to cover port activities of the Port up to the year 2000.

It also prepares a short-term development plan of the Port for the period to 1987 including its feasibility study.

II. OUTLINE OF THE STUDY

In order to achieve the objectives mentioned above, the Study consists of two phases.

Phase-1

The Study in phase-1 will cover a master plan for the Port of Irene.

The Inception Report on a program of the Study will be submitted by the Study Team to the Government of the Republic of the Philippines at the first meeting. After discussion between the Government and the Team on it, the Study Team will carry out the Field Surveys.

(1) The Field Surveys

The Field Surveys will include the following items:

- a) To review the available pertinent reports and data, provided by the Government of the Republic of the Philippines.
- b) To review the potentialities and progress of the development projects in Region II.

- c) To review shipping and marine transportation.
- d) To confirm the present status and conditions of the Port of Irene and its adjacent ports.
- e) To review the availability and costs of materials, construction equipment, and skillful laborers for the project.

(2) Technical Investigations for Natural Conditions

The Study Team will carry out Technical Investigations for Natural Conditions, such as boring, soil test, sounding, sediment sampling, moreover wave, tide, current and wind observations when necessary.

(3) The Study for a Master Plan

The studies mentioned above will be summarized in the form of the Provisional report. This report will be reviewed by the concerned government authorities of the Republic of the Philippines. Based on the results of discussion on the Provisional Report, a master plan for the Port of Irene as a guide for the orderly development of the port will be studied. The outline of the study will be submitted in the form of the Interim Report. The substance of the report will be as follows:

- a) To forecast traffic through the port up to the year 2000 for a master plan and rough traffic through the port for a short-term development plan.
- b) To set up the long-term space requirement for port activities, including port related industries, and to work out the best space allocation.

- c) To establish the basic arrangement of the facilities, and to plan the frame work of the port, such as alignment of channels, basins, pier-head lines, and main access to the port area.

#### Phase-2

The Study in Phase-2 will consist of a short-term port development plan aimed at 1987, and its feasibility study.

The results of the Field Surveys, Technical Investigations for Natural Conditions and the Study for a Master Plan in Phase-1 will be considered enough also in Phase-2. The Study in Phase-2 will cover the following items:

- a) To define the short-term development plan, based on the traffic projection and the existing port facilities.
- b) To carry out preliminary design of port facilities for the short-term and to make rough cost estimates, including necessary port equipment, such as cargo-handling equipment, harbor crafts, utility supply in port area, navigation aids, etc.
- c) To carry out the economic analyses of the port on the short-term port development plan.
- d) To review and assess existing tariff structure, rates and the present status of the financial position of the port. Then to carry out the financial analyses of the port on the short-term development plan.
- e) To work out outline of construction method and time schedule on the short-term development plan.

- f) To recommend the desirable port organization.
- g) To study on environmental affairs.

The results of the Study will be submitted in the form of the draft Final Report, which will be discussed in the Republic of the Philippines. Based on the results of discussion, the short-term development plan will be formulated in Japan in the form of the Final Report, which will be submitted to the Government of the Republic of the Philippines through JICA Manila office.

### III. TIME SCHEDULE

The Study is to be completed within eleven months after the commencement of the Field Surveys, which will start in the earlier part of the Japanese fiscal year 1981. The duration of the Field Surveys which are to be carried out by the Government of Japan will be about two months. The Survey Team will cover fields as follows:

- Demand's Forecasting
- Port and Harbour Planning
- Technical Investigations for Natural Conditions
- Design and Execution of Port Facilities
- Port Management and Operation
- Economic Analysis
- Financial Analysis
- Environmental Affairs



IV.

REPORTS

JICA will prepare and submit to the Government of the Republic of the Philippines the following reports in English during the course of the Study.

- 1) Inception Report (30 copies)
- 2) Provisional Report (30 copies)
- 3) Interim Report (30 copies)
- 4) Draft Final Report (30 copies)
- 5) Final Report (60 copies)

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Appendix 2

TENTATIVE SCHEDULE

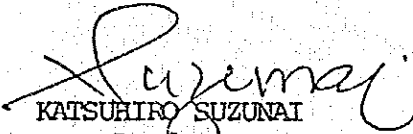
		1981			1982						
		MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.
Phase-1	Preparation in Japan	↔									
	Field Survey	↔	↔								
	Technical Investigations for Natural Conditions	↔	↔								
	Work in Japan (1)			↔							
Phase-2	Presentation of the Interim Report					↔					
	Work in Japan (2)						↔				
	Presentation of the Draft Final Report								↔		
	Work in Japan (3)									↔	
	Presentation of the Final Report										⊙

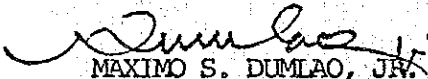
(NOTE) ↔ : Work in the Republic of the Philippines  
 ⊙ : Presentation through JICA Manila Office

RECORD OF DISCUSSION

The undersigned confirm that the contents in the documents attached hereto represent the conclusions of the discussion held between the Japanese preliminary Study Team for the development project of the Port of Irene and the Philippine Ports Authority of the Government of the Republic of the Philippines on February 9, 1981.

Manila, February 9, 1981

  
KATSUHIRO SUZUNAI  
Leader  
Japanese Preliminary Study  
Team  
Deputy Director General  
Fifth District Port Construction  
Bureau  
Ministry of Transport  
Japan

  
MAXIMO S. DUMLAO, JR.  
Assistant Executive Officer  
Philippine Ports Authority  
Republic of the Philippines

## Record of Discussion

### I. GENERAL

#### 1. Security Considerations


During the field investigation, necessary measures for safe implementation of the surveys, will be taken by the government of the Republic of the Philippines in cooperation with local governments.

#### 2. Counterparts

The Government of the Republic of the Philippines will assign eight staff as counterparts as follows:

Coordinator	1
Economist	1
Port Planner	1
Financial Analyst	1
Management/Operations Expert	1
Engineer of Natural Conditions Investigations	2
Engineer of Port Construction	1

#### 3. Basic Data

 In order to complete the study in time, PPA shall negotiate with the agency for the quotation of the photograph, which covers the Port of Irene only, of TOPOGRAPHIC MAPPING PROJECT OF THE CAGAYAN VALLEY conducted by JICA.

#### 4. Provisional Report

 JICA will set the economic basic data in the Provisional Report.

5. Site-Survey in Region 1

JICA will go to the site in the duration of the Field Surveys. PPA will make the necessary arrangements for the site-survey mentioned above.

II. THE FIELD SURVEYS

1. Office

Suitable office space with copying equipment and secretarial services necessary for the field surveys and acceptable for about ten personnel shall be provided by the Government of the Republic of the Philippines for about two months in Manila.

2. Transportation

Two vehicles necessary for the field surveys shall be provided by the Government of the Republic of the Philippines in Manila.

III. TECHNICAL INVESTIGATIONS FOR NATURAL CONDITIONS

1. Accommodations

Accommodations necessary for the technical investigations for natural conditions shall be provided by the Government of the Republic of the Philippines at Port Irene and its vicinity for about 2 months.

2. Transportation

Transportation necessary for the technical investigations for natural conditions shall be provided by the Government of the

Republic of the Philippines as follows:

- i) one micro-bus which accomodates 10 persons or more.
- ii) three jeeps

### 3. Equipment

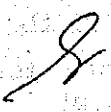
Equipment necessary for the technical investigations for natural conditions shall be provided as follows:

- i) two boats
- ii) one pontoon
- iii) two transits
- iv) four transceivers

## IV. TRAINING PROGRAM

JICA shall receive Philippine Government personnel to transfer technology in formulation of masterplan and feasibility study for the port as follows:

- i) about three personnel who have not been to Japan before.
- ii) for about a month in autumn.
- iii) the subject of training will be left to JICA



4--(4) Memorandum of Agreement

MEMORANDUM OF AGREEMENT

BETWEEN

CIADP & PPA

KNOW ALL MEN BY THESE PRESENTS:

This AGREEMENT entered into and executed this 9th day of February, 1981 by and between:

The PHILIPPINE PORTS AUTHORITY, created by virtue of PD 857, with principal office at B.F. Condominium, Aduana, Intramuros, Manila, represented in this Agreement by its General Manager, E.S. BACLIG, JR., hereinafter referred to as PPA;

- and -

The CAGAYAN INTEGRATED AGRICULTURAL DEVELOPMENT PROJECT, created by virtue of PD 1189, with principal office at the CIADP-Project Office in Tuguegarao, Cagayan represented in this Agreement by its Project Director, ATTY. ALFONSO R. REYNO, JR., hereinafter referred to as CIADP;

W I T N E S S E T H:

WHEREAS, port development is included in the National Infrastructure Program of the government and considered a vital project in the overall Development Program of the Cagayan Integrated Agricultural Development Project;

WHEREAS, a FEASIBILITY STUDY FOR THE DEVELOPMENT PROJECT OF PORT IRENE, hereinafter referred to as the PROJECT, is going to be jointly undertaken by the Study Team of the JAPAN INTERNATIONAL COOPERATION AGENCY, hereinafter referred to as JICA, and the Philippine Ports Authority pursuant to their Agreement;

WHEREAS, the implementation of the PROJECT calls for the cooperation and participation of CIADP, it being created, among others, "to monitor and evaluate the progress and effects of project implementation in the project area and call on the appropriate Ministry,

Bureau, Office, Agency, or other government instrumentality for assistance in the discharge of its duties",

WHEREAS, it is the objective of CIADP to gear the PROJECT towards its developmental thrusts;

WHEREAS, the CIADP and PPA are in a position to undertake the supervision and administration of the PROJECT;

WHEREAS, the two foregoing institutions have mutually expressed interest for the successful and efficient prosecution of the PROJECT;

NOW, THEREFORE, for and in consideration of the above premises, and the mutual covenants hereinafter set forth, the parties hereby agree to the following terms and conditions:

1. The parties shall jointly undertake the PROJECT with JICA.
2. The parties shall extend exhaustive support needed in terms of cooperation, administrative, technical, and coordination requirements of the PROJECT.
3. The CIADP shall provide coordinated support necessary with other line agencies and the private sector in terms of their cooperation and information/data needed.
4. The CIADP shall provide sufficient office space for the JICA Study Team to be located at the CIADP-Project Office in Tuguegarao, Cagayan.
5. The PPA shall provide major technical support to the PROJECT including information/data needed relative to port activities in the Philippines;
6. The PPA and CIADP shall organize a Task Force, an inter-agency working group of CIADP and PPA, whose main function is to carry out actual administration and management of the PROJECT.
7. The Task Force shall be composed of two (2) subdivisions, the Steering Committee or Management Group and the Technical Working Group. The Steering Committee/Management Group shall be responsible for the general administration and supervision of the PROJECT and shall be responsible for policy decision-



making and for operating guidelines. Subsequently, the Technical Working Group shall be responsible for the direct administration and management of the PROJECT.

8. The Task Force's Steering Committee/Management Group shall be composed of the following:

1. Atty. Alfonso R. Reyno, Jr.  
CIADP Project Director  
Chairman
2. Rolando D. Gonzales  
AGM PPA  
Member
3. Atty. Carole Y. Quirolgico  
Chief, CIADP-MLO  
Member

9. The Task Force's Technical Group shall be composed of the following:

1. Project Manager to be assigned by CIADP
2. Project Coordinator to be assigned by CIADP
3. Project Engineers to be assigned by PPA
4. Economists to be assigned by CIADP
5. Researchers to be assigned by CIADP
6. Project Auditor to be assigned by CIADP

10. This AGREEMENT shall take effect upon the execution and signing hereof by both PARTIES and remain in force and in effect until such time that both parties have completed the stipulated obligations on this AGREEMENT. Any change or modification in agreement shall be subject to mutual consent of both parties.

IN WITNESS WHEREOF, the parties have these presents affixed their respective signatures on this 9th day of February 1981.

CAGAYAN INTEGRATED AGRICULTURAL  
DEVELOPMENT PROJECT (CIADP)  
CIADP-Project Office  
Tuguegarao, Cagayan

PHILIPPINE PORTS AUTHORITY  
B.F. Condominium, Aduana  
Intramuros, Manila

By:

By:

ATTY. ALFONSO R. REYNO, JR.  
Project Director

E.S. BACLIG, JR.  
General Manager

W I T N E S S E S

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#### 4-(5) Project Profile

#### PROJECT PROFILE

1. Title and Location: PORT OF IRENE (CASAMBALANGAN), Cagayan

2. Description:

a) Existing Facilities

- 80 l.m. Rock Causeway
- 12 x 36m Approach

b) Proposed Facilities

- Construction of 380 L.M. rock bulkhead
- Reclamation of about 36.2 has. of back-up area
- Construction of 8670 sq.m. R.C. wharf extension
- Construction of 10m x 10m sub-office
- Construction of 9600 sq.m. transit shed and 2800 sq.m. container freight station
- Asphalt surfacing of 102,000 sq.m. area
- Provision of auxiliary works, i.e., roads, warehouses, amenity block, drainage, lighting and fencing.

3. Justification:

The Port of Irene is the alternate site of Aparri Port which is the present base port in the Cagayan Valley. The decision to transfer port activities to the Port of Irene was due to the geographical and technical limitations of the Aparri Port. At present only small vessels can dock in this port because of shallow waters, as foreign vessels have to load and unload at anchorage. Because of this, Aparri Port experience heavily siltation problem which would need heavy capital outlay for maintenance dredging.

On the other hand, the Port of Irene is situated within a cove which makes it well protected from southerly wind. However, it is exposed to northerly winds. Entrance to the cove is wide enough for all vessels.

Majority of the cargoes handled at Aparri Port are logs and lumber and petroleum products. In 1978 no foreign vessels called at Aparri Port. This may have been caused by a longer turn-around

time and double handling due to shipside loading. If this continues, it won't be long before ships would altogether stop calling at the Cagayan Valley area. This alone would cause a great set back in the economy of the region. Before this happens, the alternate site is recommended for improvement to support the development of the Cagayan Valley region.

4. Cost:

The total cost of the project is estimated to be P118,400,000 in local currency and \$7,000,000 in foreign currency.

5. Status:

(Proposed).

4-(6) Questionnaires

QUESTIONNAIRES

January/February, 1981

The Japanese Preliminary Study Team for the Development Project of Port Irene  
Japan International Cooperation Agency

## Questionnaire

Would you Submit us publications or data on the following items?

The Publications shown in appendix p 9~p11 are the ones we have already gotten in Japan.

### I. Social/Economic Data

#### 1. Present Situation and Forecasting

- (1) Annual report/yearbook/statistics on national and regional (especially Region I/II) economy and economic indicators, such as @ GNP, @ consumption, @ population, @ outputs of agriculture, @ mining products @ manufacturing products, @ transportation activities (commodity flow, modal split of passenger and cargo traffic, traffic volumes and number of vehicles and rolling stocks).

We already have "Philippine statistical yearbook (1979)".

We want the national data of the latest three years and the regional (Region I/II) data.

- (2) Materials of latest national/regional (Region I/II) economic development plans/programs

① Investment schedule relating to the industrial development (including energy, water resources, etc.)

② Development programs of transportation facilities (road, railways, ports, airports, etc.)

③ Maps of transportation facilities (some as ②)

We already have "Five-year Philippine Development Plan, 1978 ~1982" and "Long-term Philippine Development Plan up to the year 2000".

We want the materials relating to Region I/II especially, and sectoral development plans, if any.

2. Other Reports/Publications/Maps

- (a) Map of administration areas (up to the most basic administration unit)
- (b) Maps/Marine Charts of Luzon
- (c) Studies/Reports on Ports/Transportation so far carried out
- (d) Port Tariff, Port management system and Port Regulations
- (e) Ports development plan

3. Industrial development Program and its Location proposed (in Region I/II)

No.	Type of Industries	Production Scale MT/y	Year in Operation	Nama of the site
(and please point out on the map)				

II. Data/Information of each port located in Region I/II  
(including the data of Port Irene)

1. Existing port facilities

(1) Maps

- 1) Layout of existing port facilities
- 2) Port plans in future

(2) Latest data of accomodations

- 1) Depth, width and length of channels and basins
- 2) Depth, and construction year of each berth
- 3) Area and other informations about transit sheds, ware-houses and open storage areas.

- 4) Type, capacity and manufacturing year of cargo handling equipment
  - 5) Type, capacity and some other major information of port facilities not mentioned above
2. Port tariff
3. Port activities
- (1) Cargo traffic (annual data for recent five years)
    - 1) Cargo traffic by export/import by main routes and by commodity
    - 2) Cargo traffic by inward/outward (domestic) by commodity
    - 3) Cargo traffic by commodity and by berth
    - 4) Cargo traffic between ports and their hinterlands, by mode and by commodity
    - 5) Containerized cargo traffic by export and import and by commodity, if any
  - (2) Ship arrivals (for recent five years)

Number by ship tonnage, by ship types, and by berth
  - (3) Port Congestion (for recent five years)
    - 1) Average waiting time of ships
    - 2) Working/Berthing time of ships
    - 3) Total stay period of ships
    - 4) Rate of berth occupancy of berth
  - (4) Existing and Expected port operating system
  - (5) Activities of located industries
    - 1) Type of industries
    - 2) Production scale
    - 3) Freight data (if possible, according to each commodity)



Note: We already have the following reports:

1978 PPA annual statistical report ... PPA

1980 Inventory of port facilities and services ... PPA

Philippine ports and shipping ... Philippine Ships Agent's  
Association Economic Monitor

III. Data/Information of Port Irene (excluding the data mentioned above)

1. Existing port facilities

(1) Layout and latest data of existing navigational aid facilities,  
communication system and utility facilities

(2) Structure of existing port facilities, communication system and  
utility facilities

2. Natural conditions

LIST OF THE NECESSARY INFORMATION ON THE NATURAL CONDITIONS

1. Meteorological conditions
i) Weather conditions ii) Wind data iii) Another special meteorological phenomenon, such as cyclone
2. Hydrographical conditions
i) Wave data ii) Tidal range and tide level of HHWL, HWL, LWL, LLWL iii) Current speed (longshore current and tydal current) iv) Littoral drift v) Storm tide

3. Geographical conditions
<ul style="list-style-type: none"> <li>i) Topographical map (including hinterland)</li> <li>ii) Records of subsoil investigations</li> <li>iii) Data about earthquakes</li> <li>iv) Coastal topographical map (Variation of coastal topography)</li> <li>v) Grain size distribution of coastal material</li> <li>vi) Coastal topographical map and geological map</li> </ul>
4. River conditions
<ul style="list-style-type: none"> <li>i) Discharge</li> <li>ii) Water level</li> <li>iii) Rate of sediment transport (Volume of dredged soil)</li> <li>iv) Water examination data</li> </ul>
5. Other characteristic items

Note: We already have the following reports:

1) Tropical Cyclones (1975), (1977) ...

...The Climatological Division, Nagads, Pagasa

2) Tide and Current Tables Philippines, 1977 ...

.. Dept. of National Defense, Bureau of Coast and Geodetic Survey

### 3. Surrounding conditions

(1) City Plan or Land Use Plan in the vicinity of Port Irene

(2) Fishery activities and fishery right at Port Irene and its vicinity, if any

(3) Environmental factors to be considered about

4. Data/Information of port administration and port operation

- (1) Organization and function of PMU, and the number of personnels in each section concerning Port Irene
- (2) Annual budget (income and expenditure) for recent five years
- (3) Tariff
- (4) Relating government offices and relating enterprises
- (5) Procedures to use port
- (6) Map of port district, port limits and port area of Port Irene

5. Construction of port facilities

- (1) The method of construction cost estimation in the Philippines
- (2) Materials for construction of port facilities (stones, sand, cement, fuel, etc.)
  - 1) Supplying conditions of materials
  - 2) Cost of materials, and who determines them?
  - 3) Authorized standards of materials
- (3) Labor conditions of port construction
  - 1) Supply and demand condition of construction labors in the vicinity of Port Irene
  - 2) Wages of construction labors in the vicinity of Port Irene, and who determines them?
- (4) Construction machinery
  - 1) Type, capacity and number of working crafts such as dredgers in the Philippines
  - 2) Type, capacity, number and rental cost of construction machinery such as bulldozers in the vicinity of Port Irene

(5) Recent example of the cost to construct port facilities in the vicinity, if any

6. Others

(1) Would you mention about the possibility of containerization in Region I/II, especially at Port Irene?

(2) Would you mention about the role of Port Irene in Region I/II?

(3) Would you submit us any other information for Port Irene?

IV. Shipping

1. The present and expected composition of national merchant fleet by ship size, ship type and ship age

2. Do shipping agents or consigners/consignees have any dissatisfaction with the present cargo transportation system, especially in Region I/II?

3. Shipping routes in the Philippines

V. Roads

1. Existing road facilities

(1) Maps

1) Plan of roads

2) Layout of existing road facilities

(2) Latest data of accommodations

1) Width, length, permissible weight, rate of pavement and construction year of each route

- 2) Sites, capacities, managers and construction year of freight truck terminals
  - 3) Types, capacities and some other major informations of road facilities not mentioned above
  - 4) Time to carry freight by each route
- (3) Freight data  
Types and volume of freight carried by each route
  - (4) List of charges

2. Others

Would you submit us any other informations for roads and truck terminals?

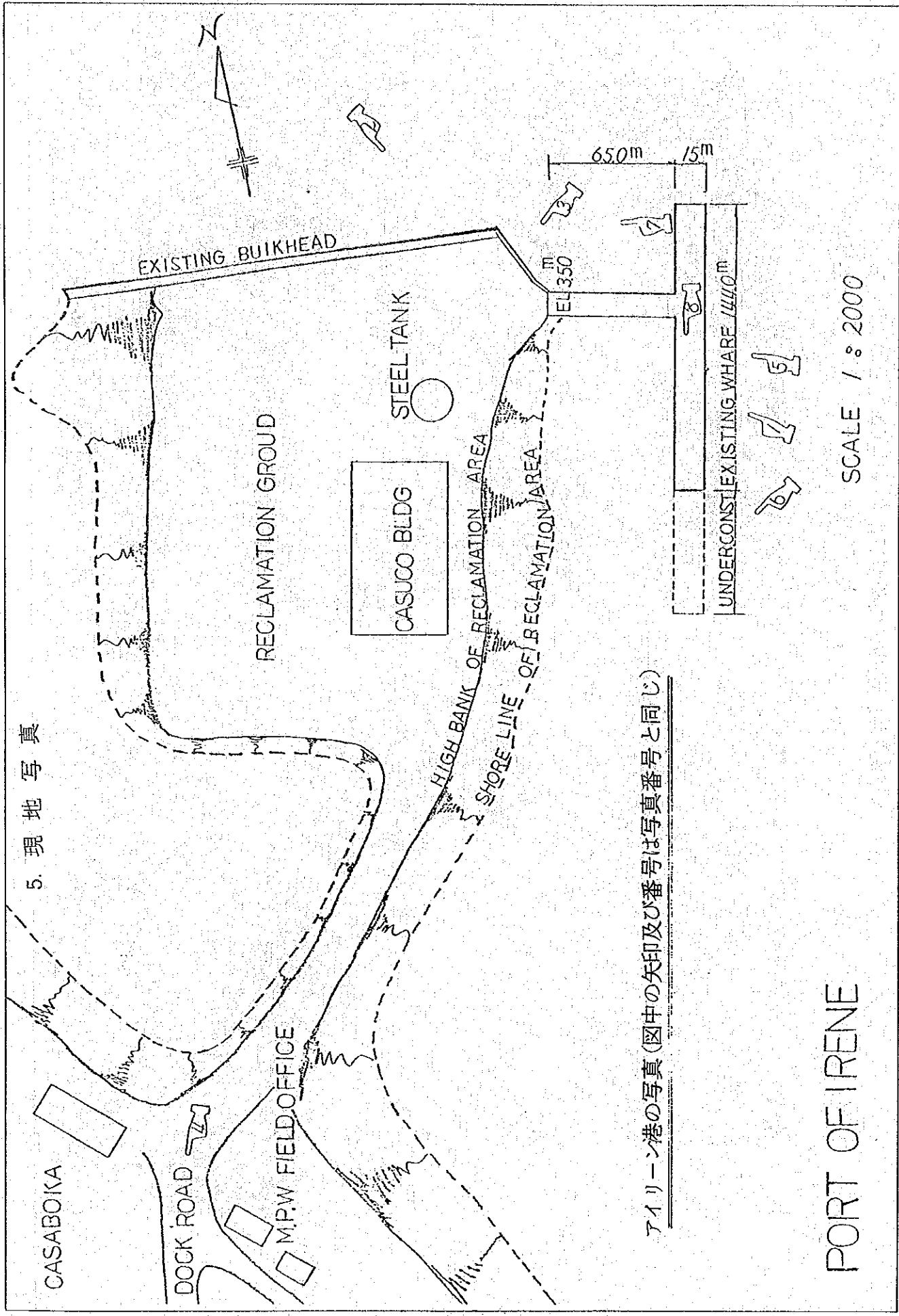
APPENDIX

No.	TITLE	FORM	ORIGINAL OR COPY	SOURCE
1	Inter Island Shipping, Conference Paper (March 1980)	Book	Copy	ESCAP & MARINA
2	Master Plan Study, Port of Manila, Draft Final Report (June 1978)	Book		MPWIC
3	Port Statistics, 18 Base Ports (4th Quarter 1978)	Book		PPA
4	PPA Mid-Year Report 1979, 18 Base Ports	Book	Original	PPA
5	Philippine Ports Authority Annual Report 1978	Book	Original	PPA
6	" " 1979	Brochure	Original	PPA
7	Map of Manila International Port	Map	Copy	PPA
8	Marine Chart (Manila Port)	Map	Copy	
9	Presidential Decree No. 857	Book	Original	PPA
10	Port Tariff	Duplicate	Original	PPA
11	Port Regulations	Newspaper	Original	PPA
12	Financial Highlights & Strategies	Brochure	Original	PPA
13	Manila International Port	Book	Original	PPA
14	Manila Port Project	Duplicate	Copy	PPA
15	Manila Port Project 31 August, 1979	Brochure	Original	PPA
16	PPA Annual Statistical Report 1978	Book	Original	PPA
17	1980 Inventory of Port Facilities and Services	Book	Original	PPA
18	Development Plans (National Ports)	Book	Original	PPA
19	Statistics of Manila Port & Quarterly Report	Brochure	Copy	PPA
20	Report on the Rationalization of the Philippine Inter Island Freight Data Setting to Improve the Shippers' and Passengers' Position (1978)		Copy	Policy and Planning Office, MARINA

No.	TITLE	FORM	ORIGINAL OR COPY	SOURCE
21	Tropical Cyclone (1975), (1977)			The Climatological Division, Nagads Pagasa
22	Tide and Current Tables Philippines, 1977			Dept. of National Defence, Bureau of Coast and Geodetic Survey
23	Presidential Decree No. 704			PPA
24	Priorities and Prospects for Development (1976)		Original	NEDA
25	Central Visayas (Region VII) Five-Year Development Plan, 1978~1982			NEDA
26	Five-Year Philippine Development Plan 1978~1982			NEDA
27	The National and Development Authority May 1980	Brochure	Original	NEDA
28	Long-Term Philippine Development Plan up to the Year 2000 (September 1977)	Book	Original	NEDA
29	Five-Year Philippine Development Plan 1978-1982 (September 1977)	Book	Original	NEDA
30	1979 Philippine Development Report (1980)	Book	Original	NEDA
31	1979 Philippine Statistical Yearbook	Book	Original	NEDA
32	The Philippines Priorities and Prospects for Development, A World Bank Country Economic Report	Book	Original	NEDA
33	NEDA Food Balance Series Number 7 The Philippine Food Balance Sheet 1976	Book	Original	NEDA
34	Presidential Decree No. 857	Book	Original	PPA
35	Annual Report 1979		Original	PPA
36	Annual Statistical Report 1978	Book	Original	PPA

No.	TITLE	FORM	ORIGINAL OR COPY	SOURCE
37	Inventory of Port Facilities and Services 1980	Book	Original	PPA
38	Ports Feasibility Studies and Design Project Volume 1-6	Book	Original	PPA
39	The Gateway to a Historic City		Original	Cebu
40	Dec. 15 from Davao Port "Annual Report 1980"		Original	Davao PMU
41	Philippine Ports and Shipping	Book	Original	P. Ship Agent's Association
42	Industrial Promotion Policies in the Philippines	Book	Original	PIDS
43	Increases Approved by bot for Interisland Shipping Over Basic (PRF-WAR) Rates		Copy	MARINA
44	Shipping Routes		Copy	MARINA
45	Maritime Industry Authority		Original	



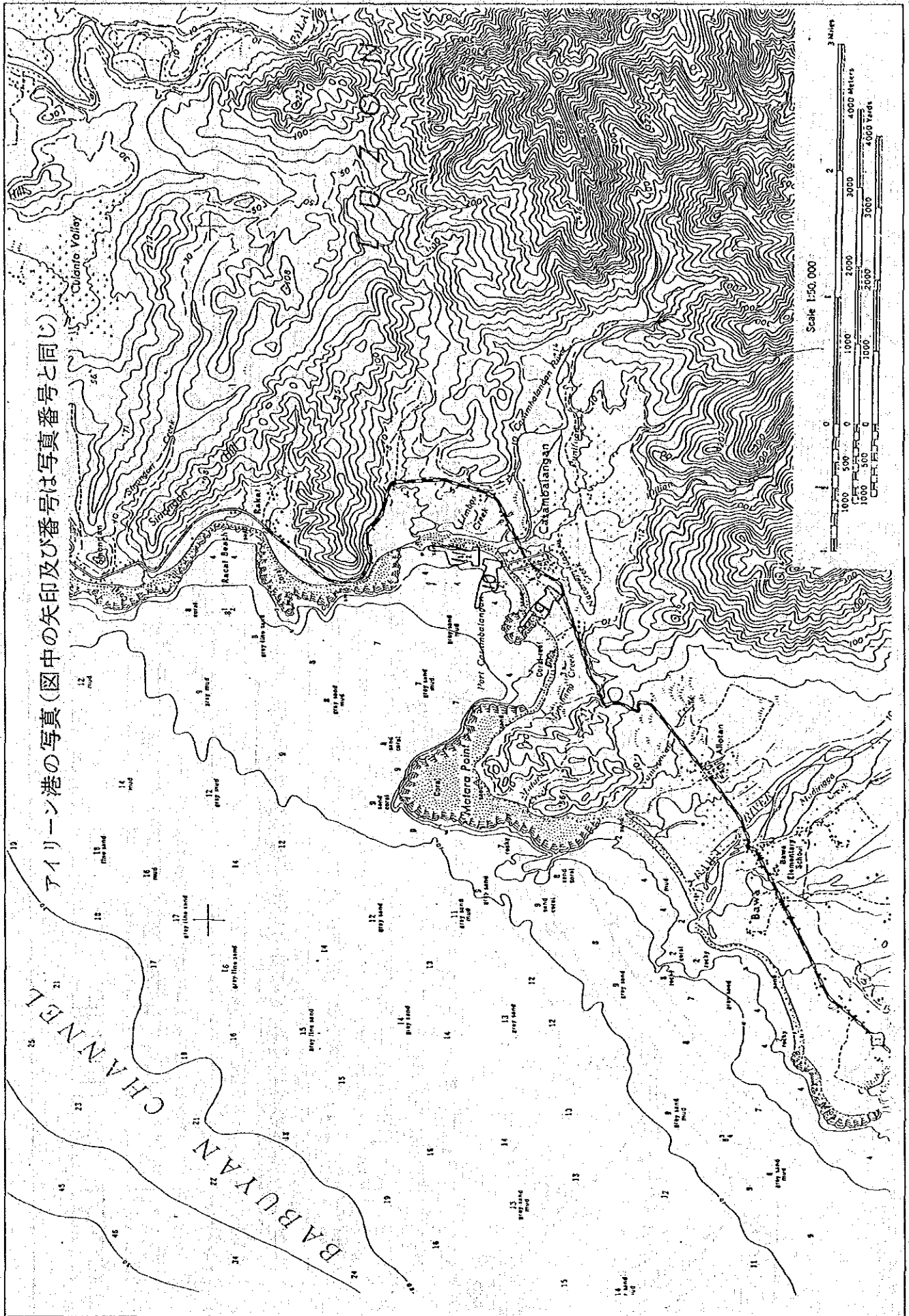


5. 現地写真

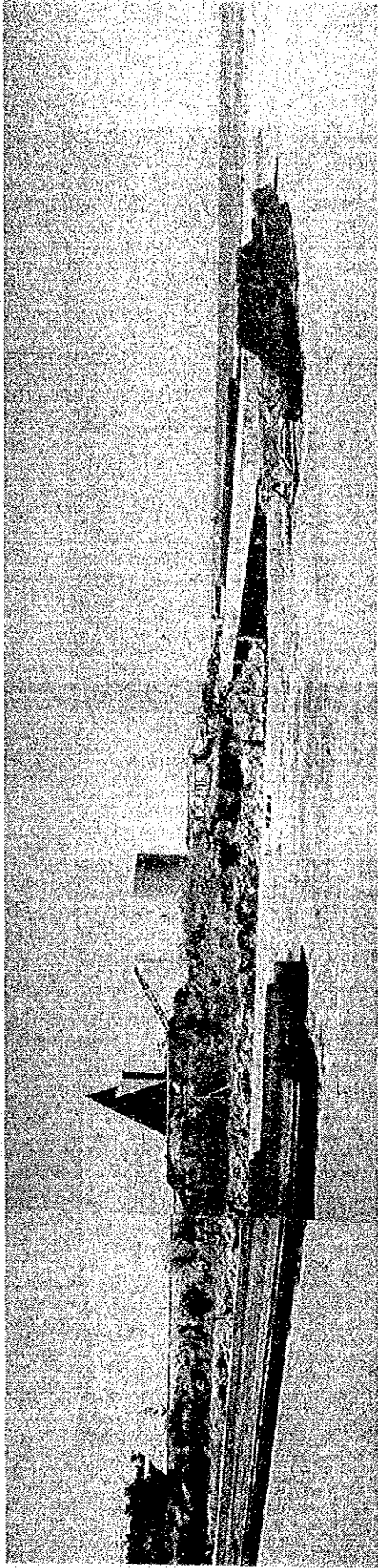
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PORT OF IRENE

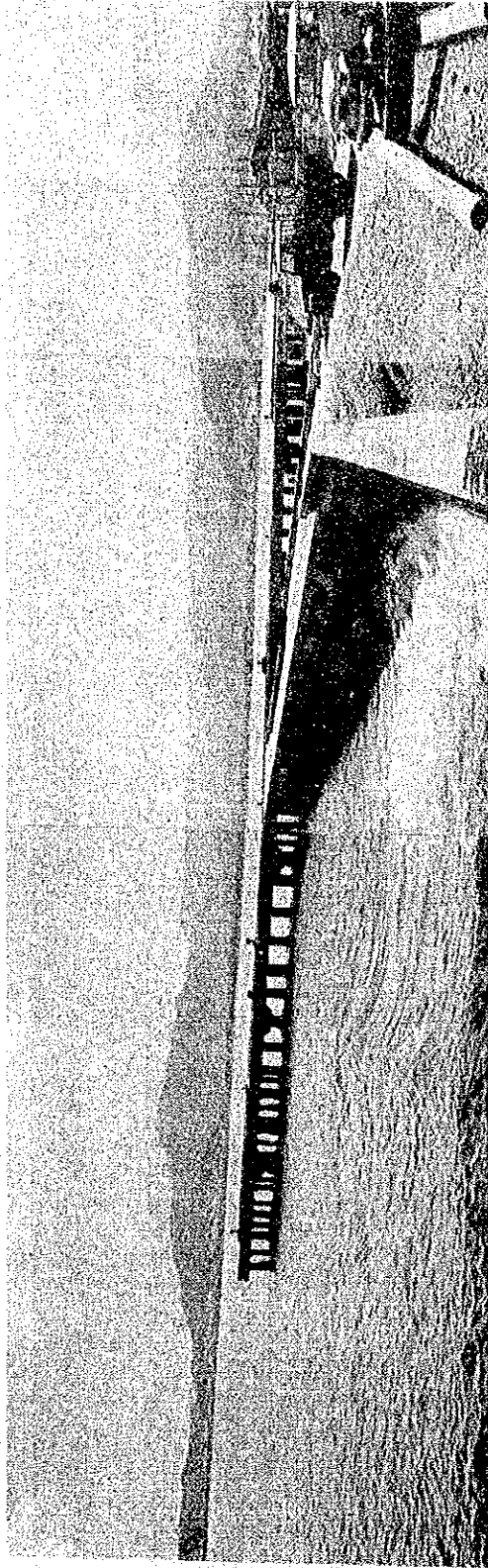
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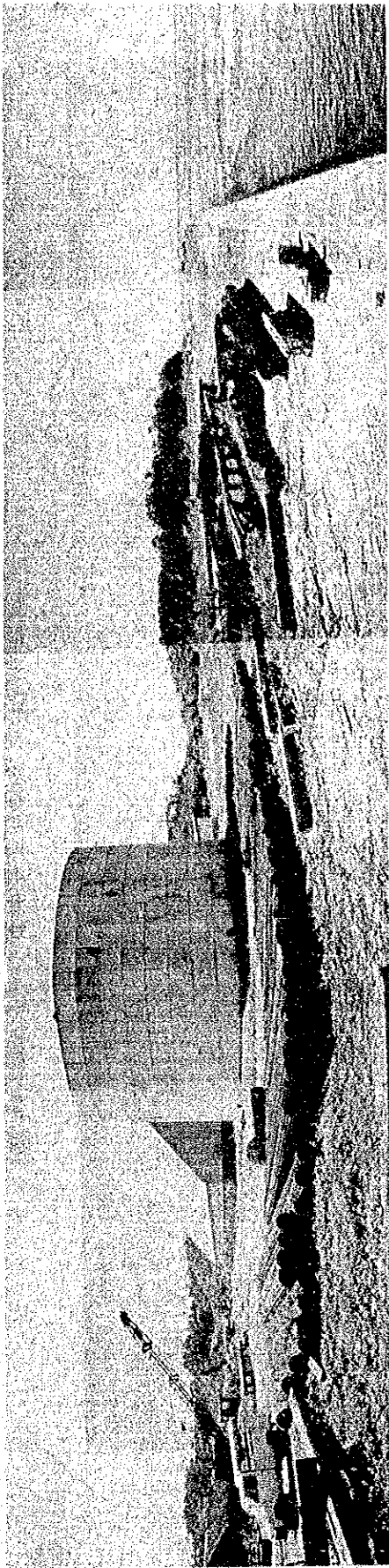
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① 既存棧橋上より背後埠頭用地・保管施設を見た。



② アイリリーン港沖合より棧橋及び湾奥を見た。



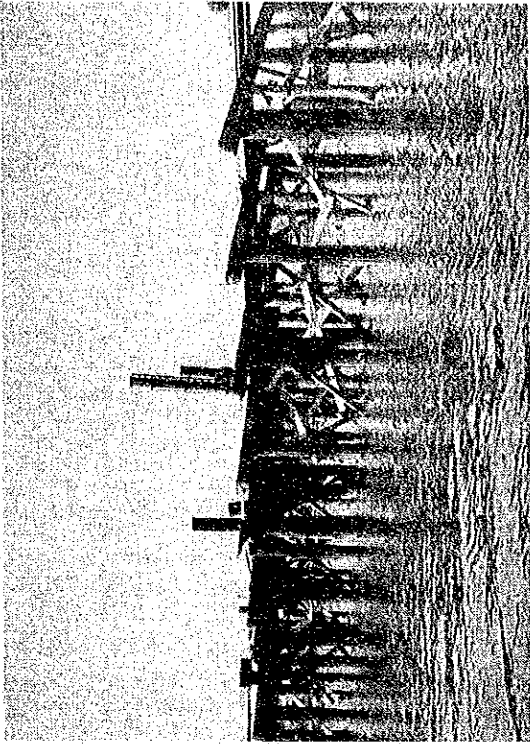
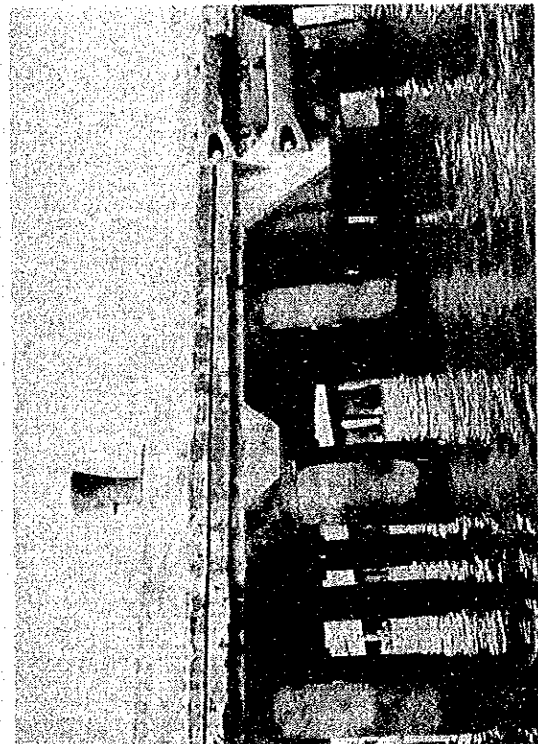
③ 埋立護岸より埠頭用地を見た。



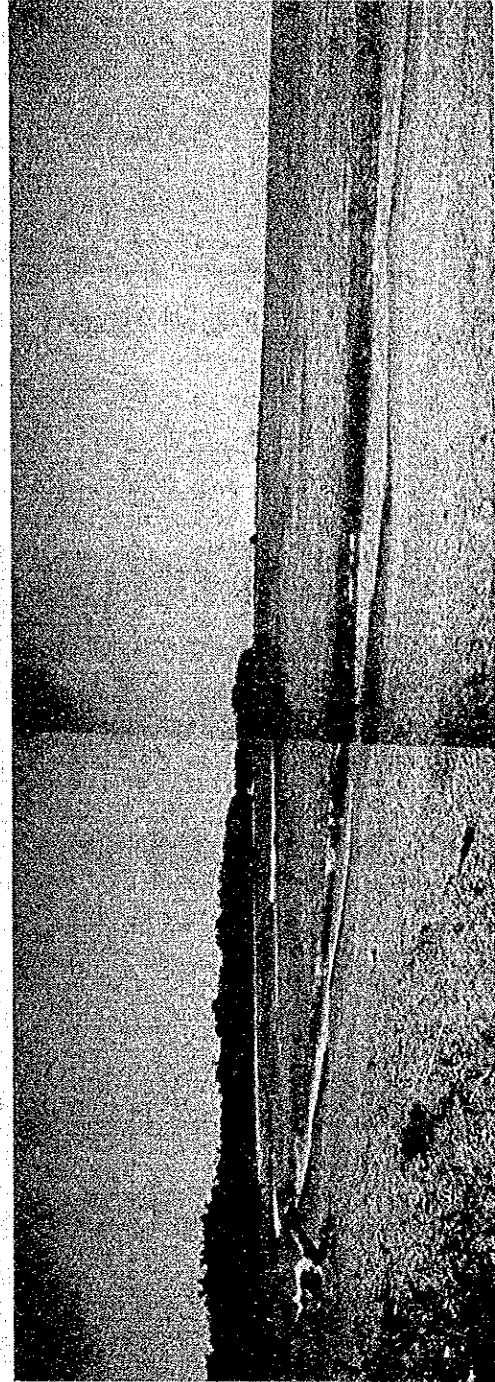
④ 埠頭用地より国道3号線への連絡道路を見た。



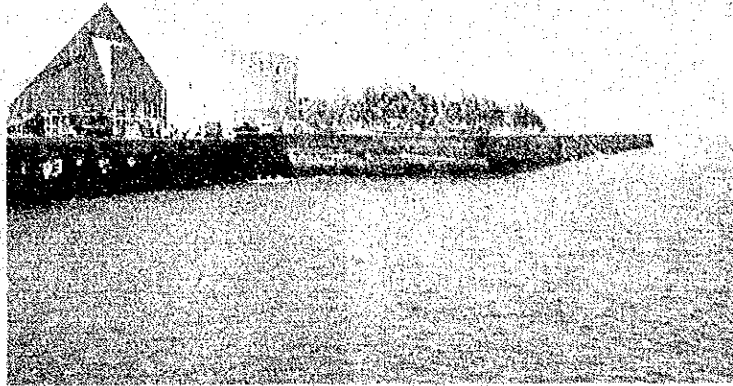
⑤ 国道3号線よりアイリーン港を見た。



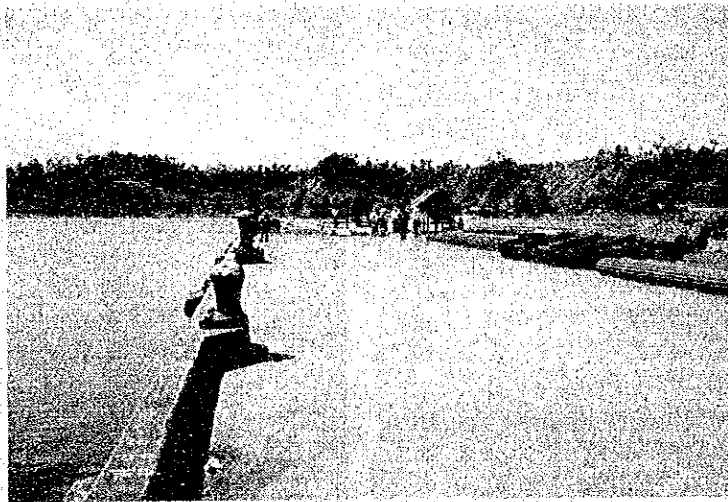
⑤ ⑥ ㊦ 既存棧橋及び建設途中の棧橋を見た。(棧橋構造)



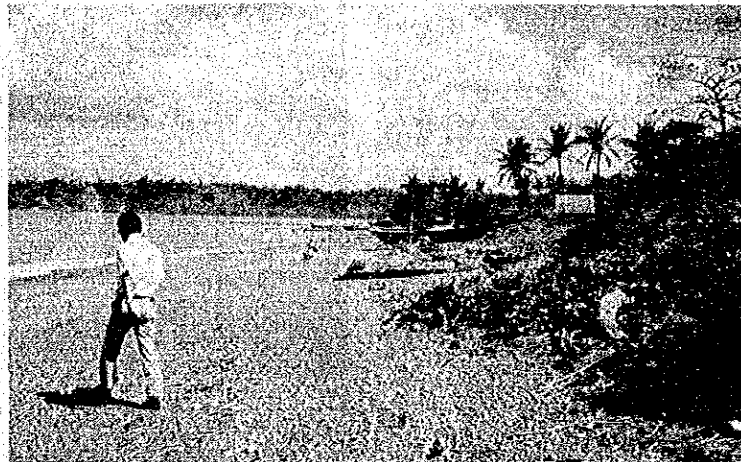
⑩ ㊦ 湾奥海岸線よりアイリーン港既存施設を見た。



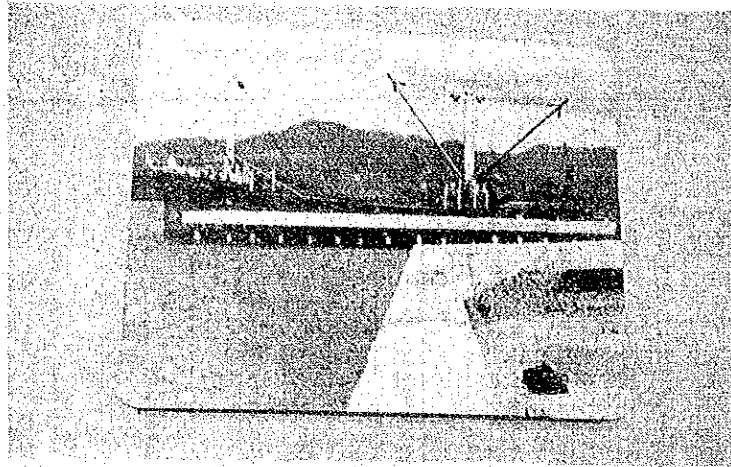
⑦ 既設栈橋より埋立護岸を見た。



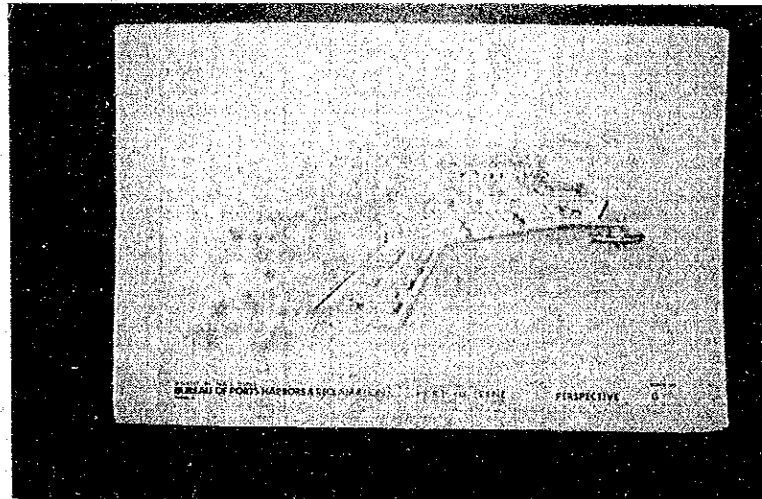
⑧ 既設栈橋上部工を見た。



⑩ 湾奥漁民集落を見た。



栈橋利用状況(木材の荷役作業中)



アイリーン港計画絵図

6. 収集資料リスト

No	資料名	入手先又は発行元	備考
1	Hydrographical Map of Irene Port (4葉)	MPW Regional Office	アイリーン港の深淺図
2	Hydrographical Map of Aparri Port (3葉)	"	アパリ港の深淺図
3	Hydrographical Map of San Vincente Port (3葉)	"	サンビンセント港の深淺図
4	Cross-section & Map of Existing Port Facilities (14葉)	MPW	アイリーン港施設の設計図面, 設計条件, 平面図等
5	Guideline of Agricultural Pilot Center in Cagayan Integrated Agricultural Development Project	CIADP	CIADP 農業開発の概要
6	Project Feasibility Study on Port of Irene	"	アイリーン港開発の CIADP での位置づけ
7	Data & Informations of Port Irene	MPW Regional Office	アイリーン港の自然条件, 建設機材, 単価等
8	Tropical Cyclone Summaries from 1948 to 1978	PAGASA	
9	Rang-ay ti Cagayan	CIADP	CIADP 紹介の新聞記事
10	Tide and Current Tables, Philippines, 1981	BCGS	
11	地形図 (1/25万, カガヤン西北部)	"	道路のルートが示されている。
12	Topographic Mapping Project of the Cagayan Valley	IECA	JICA Mapping Project の紹介パンフレット
13	Development Plan, Port of Casabalangan	PPA	図面
14	Significant Earthquake in Philippines		フィリピンでの地震記録
15	Maritime Industry Authority	MARINA	MARINA の紹介パンフレット
16	Presidential Decree No. 474	"	MARINA 設立文
17	Functions of the Bureau of Coast and Geodetic Survey	BCGS	BCGS の業務概要
18	Organization Chart of BCGS	"	
19	Philippines Road Feasibility Studies III	MPH	国道3号線整備計画調査報告書のコピー
20	Aparri Anchorage and Part of Cagayan River	PCGS	海図 No. 4260
21	Economic Report on the Philippines (Volume I - II)	ADB	
22	Memorandum of Agreement between CIADP & PPA	CIADP	I/A 間ともなう CIADP・PPA 間の協定書 (案)



番号	資料の名称	形態	版型	ページ数	オリジナル コピーの別	部数	収集先名称又は発行機関
23	Port Irene Project Proposal		A-4		コピー	1	CIADP
24	CAGAYAN VALLEY (REGION II) FIVE YEAR DEVELOPMENT PLAN, 1978 - 1982	Book	A-4		オリジナル	1	NEDA
25	SHOWING MAJOR INDUSTRIES IN THE REGION	MAP	A-3		オリジナル	1	NEDA
26	PRIMARY ROAD NETWORK	MAP	A-3		オリジナル	1	NEDA
27	GUIDE LINE OF AGRICULTURAL PILOT CENTER IN CAGAYAN INTEGRATED AGRICULTURAL DEVELOPMENT PROJ.	Book	A-4		コピー	1	CIADP . AP
28	REPUBLIC OF THE PHILIPPINES, SITUATION PAPER AND COUNTRY PROGRAM FOR 1981 - 1983	Book	A-4		コピー	1	ADB
29	PHILIPPINE DOMESTIC FLEET	Paper	B-5		コピー	2	MARINA
30	PHILIPPINE REGISTERED-OVERSEAS FLEET	Paper	B-5		コピー	2	MARINA
31	Preliminary Results of the 1980 Census of Population	Paper	A-4		コピー	1	NEDA
32	SCHEDULE OF HARBOR FEES	Paper	A-4		コピー	1	PPA
33	GENERAL PORT REGULATIONS OF THIS PHILIPPINE PORTS AUTHORITY	Newspaper			オリジナル	3 1	PPA
34	CUSTOMS ADMINISTRATIVE ORDER NO. 14 - 76	Paper	A-4		コピー	1	PPA
35	PPA ADMINISTRATIVE ORDER NO. 06 - 79	Paper	A-4		コピー	1	PPA
36	PPA ADMINISTRATIVE ORDER NO. 14 - 79	Paper	A-4		コピー	1	PPA
37	PPA ADMINISTRATIVE ORDER NO. 02 - 80	Paper	A-4		コピー	1	PPA
38	PPA ADMINISTRATIVE ORDER NO. 08 - 79	Paper	A-4		コピー	1	PPA

番号	資料の名称	形態	版型	ページ数	オリジナル コピーの別	部数	収束先名称又は発行機関
39	PRESIDENTIAL DECREE NO. 857	Book	B-5		オリジナル	1	PPA
40	PORT PERFORMANCE ASSESSMENT	Book	A-4		オリジナル	1	PPA
41	PROJECT PROFILE	Paper	A-4		コピー	1	PPA
42	FIVE-YEAR INFRASTRUCTURE DEVELOPMENT PROGRAM	Paper	B-4		コピー	1	MPW
43	PMU - Aparri	MAP			コピー	1	PPA
44	DATA/INFORMATION FOR PPA-PMU APARRI	Paper	A-4		オリジナル	1	PPA
45	DATA/INFORMATION OF EACH PORT LOCATED IN REGION I/II	Paper	A-4		オリジナル	1	PPA
46	LIST OF SHIPPERS Port of Aparri/Irene	Paper	A-4		オリジナル	1	PPA
47	LIST OF SHIPPING AGENCIES	Paper	A-4		オリジナル	1	PPA
48	PLANTILLA OF PERSONNEL (1979 - 80)	Paper	B-5		オリジナル	1	PPA
49	PLANTILLA OF PERSONNEL (1978 - 79)	Paper	B-5		オリジナル	1	PPA
50	PPA ADMINISTRATIVE ORDER NO. 16-78	Paper	A-4		コピー	1	PPA
51	DECLARING AND DEFINING THE PORT DISTRICT OF IRENE	Paper	A-4		コピー	2	PPA
52	AGRICULTURAL OUTPUT (REGION II)	Paper	A-4		コピー	1	NEDA
53	AGRICULTURAL CONSUMPTION (REGION II)	Paper	A-4		コピー	1	NEDA
54	FISHERY ACTIVITIES	Paper	A-4		コピー	1	BFAR
55	PROPOSED/ON-GOING FISHERY ACTIVITIES PORT IRENE AND VICINITY	Paper	A-4		コピー	2	BFAR
56	CAGAYAN SUGAR CORPORATION	Paper	B-5		コピー	1	NEDA

番号	資料の名称	形態	版型	ページ数	オリジナルコピーの部数	部数	収集先名称又は発行機関
57	MAGAT DAM A. P2. 9-13 PROJECT OF THE NATIONAL IRRIGATION ADMINISTRATION	Paper	A-5		コピー	1	NEDA
58	CIADP BRIEFING GUIDE	Paper	A-5		コピー	1	NEDA
59	CHICO RIVER IRRIGATION PROJECT	Paper			コピー	1	NEDA
60	COMMODITY FLOW	Paper	A-4		コピー	1	NEDA
61	MINERAL RESOURCES	Paper	A-4		コピー	1	NEDA
62	WOOD INDUSTRIES OF REGION II	Paper	B-5		コピー	1	NEDA
63	POPULATION BY REGION, CY 1977 - 1979	Paper	B-5		オリジナル	1	NEDA
64	Gross Domestic Product, by Region, CY 1977 - 79	Paper	B-5		オリジナル	1	NEDA
65	THE DIMENSION OF THE ROADS	MAP			コピー	1	MPH
66	MAP OF CAGAYAN VALLEY REGION SHOWING MUNICIPAL BOUNDARIES	MAP			コピー	1	NEDA
67	ROAD FEASIBILITY STUDIES III	Book			コピー	1	MPH
*	以上は、アイリーン港整備計画事前調査団が収集したもの、						

\* 以下の資料は(財)国際海運研究センターが収集したものである。

番号	資料の名称	形態	版数	ページ数	オリジナル コピーの別	部数	収集先名称又は発行機関
P.1	Philippines Staff Appraisal Report Third Port Project (April 1980)	Book	A4	98	コピー	1	The World Bank
2	Inter Island Shipping, Conference Paper (March 1980)	Book	A4			1	ESCAP & Maritime Industry Authority of the Philippines (MARINA)
3	Master Plan Study Port of Manila Draft Final Report Vol. I, Vol. II, Annexes, (June 1978)	Book	A4			1	Dept. of Public Works, Transportation Communications (DPFC)
4	Port Statistics 18. Base Ports (4th Quarter 1978)	Book	A4	186		1	Philippine Ports Authority (PPA)
5	フィリピン国港湾荷役・保守設備拡充事業調査報告書 (昭和54年10月)						フィリピン第8次借款審査 ミッション
6	運輸関係プロジェクトの総合検討調査, フィリピン(昭和53年3月)		A4	137 161	コピー	1	(財)国際開発センター
7	海外情報収集調査アジアC班報告書(昭和54年2月)		B5	3-8	コピー	1	(財)海外運輸コンサルタント
8	フィリピンARCレポート総集(昭和53年7月)	Book	B5			1	(財)世界経済情報サービス(フェイス)
9	フィリピンの港湾について(原稿)(昭和55年10月)	内部資料	A4			1	(財)国際海運開発研究センター(OCDI)
10	フィリピン共和国港湾荷役・保守設備拡充事業調査報告書(昭和54年10月)	専門家 レポート	A4			1	海外経済協力基金(OECF)
11	Maritime Industry Bulletin Vol.1, No.1 (1976)		A4		コピー	1	在日フィリピン大使館
12	Escap Project SP-01 Regional Shipping Network, Final Report (1979)		A4	107	コピー	1	UN, ESCAP
13	JETRO貿易市場シリーズNo.161 フィリピン(1977)	Book	A4	94		1	日本貿易振興会(ジェトロ)
14	フィリピン事情(昭和53年12月)	Book			コピー	1	在日フィリピン大使館

番号	資料の名称	形態	版型	ページ数	オンライン コピーの別	部数	収集先名称又は発行機関
1	DRAFT REPORT ON THE FIELD SURVEY MISSION IN MANILA AND JAKARTA 2 JUNE - 11 JUNE 1980	Duplicate	A4	43	C	1	
2	PPA MID-YEAR REPORT 1979 18 BASE PORT	Book		185	O	1	Philippine Ports Authority
3	APPRAISAL OF THE MANILA PORT PROJECT IN THE REPUBLIC OF THE PHILIPPINES	Brochure	A4	93	O	1	Asian Development Bank
4	Philippine ports authority annual report 1978	Book	A4	25	O	1	Philippine Ports Authority
5	PHILIPPINE PORTS AUTHORITY ANNUAL REPORT 1979	Brochure	A4	29	O	1	Philippine Ports Authority
6	Map of Manila International Port	Map	A4	1	C	2	
7	Marine Chart (Manila Port)	Map	B4	1	C	3	
8	Presidential Decree No. 857	Book	B5	24	O	1	Philippine Ports Authority
9	Port Tariff	Duplicate	A4	7	O	1	Philippine Ports Authority
10	Port Regulations	Newspaper	A4	1	O	1	Philippine Ports Authority
11	FINANCIAL HIGHLIGHTS & STRATEGIES	Brochure	A4	30	O	1	Philippine Ports Authority
12	MANILA INTERNATIONAL PORT	Book	A4	7	O	1	Philippine Ports Authority
13	MANILA PORT PROJECT	Duplicate	A4	18	C	1	Philippine Ports Authority
14	MANILA PORT PROJECT 31 August 1979	Brochure	A4	26	O	1	Asian Development Bank
15	PPA ANNUAL STATISTICAL REPORT 1978	Book	A4	160	O	1	Philippine Ports Authority
16	1980 Inventory of Port Facilities and Services	Book	A4	282	O	1	Philippine Ports Authority
17	DEVELOPMENT PLANS (NATIONAL PORTS)	Book	A4	110	O	1	Philippine Ports Authority
18	Statistics of Manila Port & Quaterly Report	Brochure	A4	38	C	1	Philippine Ports Authority

NA : Natural Condition  
 L : Law  
 DE : Development Economics

番号	資料の名称	形態	版型	ページ数	オリジナル コピーの 数	部数	収集先名称又は発行機関
15	経済施設調査報告書(個別経済協力基礎調査)フィリピン 昭和55年3月		A4	133	コピー	1	(財)国際開発センター
16	Report on the Rationalization of the Philippine Interisland Freight Rate Setting to Improve the Shipper's and Passenger's Position (1978 ?)		A4	40	コピー	1	Policy and Planning Office, MARINA
17	Philippines Guidebook 日本語版			159			在日比大使館
NA-18	Tropical Cyclones (For 1975), (1977)						The Climatological Division, Nagads, Pagasa
NA-19	Tide and Current Tables Philippines, 1977		B5				Dept. of National Defense, Bureau of Coast and Geodetic Sur.
L-20	Presidential Decree No. 704						
DE-21	Priorities and Prospects for Development - (1976)			573	あり	1	NEDA, WB
DE-22	Central Visayas (Region VII) Five-Year Development Plan, 1978 - 1982		A4				NEDA
DE-23	Five-year Philippine Development Plan 1978 - 1982						NEDA

番号	資料の名称	形態	版型	ページ数	オリジナル コピーの別	部数	収集先名称又は発行機関
	Asian Development Bank Annual Report 1979	Book	A4	149	オリジナル	1	ADB
	Asian Development Bank Technical Assistance Activities	Book	A5	50	"	1	"
	Key Indicators of Developing Member Countries of ADB (October 1980)	"	B4	225	"	1	"
	Trends in Developing Asia (April 1980 Number 11)	"	A4	52	"	1	"
	Training Facilities for Development Bankers	"	B5	132	"	1	"
	Agricultural Development Strategies in Asia	"	B5	128	"	1	"
	South Pacific Agriculture Choices and Constraints	"	B5	120	"	1	"
	Bank Operations in the Fisheries Section Occasional Papers (Number 7 April 1977)	"	B5	66	"	1	"
	Appropriate Technology and its Application in the Activities of the Asian Development Bank	"	B5	43	"	1	"
	Occasional Papers (Number 11 January 1978) Economic and Financial Appraisal of Bank - Assisted Projects	"	B5	43	"	1	"

番号	資料の名称	形態	版	冊	ページ数	オリジナル コピーの別	部数	取集先名称又は発行機関
	Occasional Papers (Number 12, November 1978)	Book	B5		46	オリジナル	1	ADB
	Environment Protection and Development Financing by the Asian Development Bank							
	Questions and Answers (April 1980)	Book	A5		61	"	1	"
	The National and Development Authority May 1980				15	"	1	NEDA
	Long-Term Philippine Development Plan up to the Year 2000 (September 1977)	Book	A4		142	"	1	"
	Five-year Philippine Development Plan 1978 - 1982 (September 1977)	Book	A4		443	"	1	"
	1979 Philippine Development Report (1980)	Book	A4		252	"	1	"
	1979 Philippine Statistical Yearbook	Book	A4		702	"	1	"
	The Philippines Priorities and Projects for Development, A World Bank Country Economic Report	Book	B5		573	"	1	"
	NEDA Food Balance Series Number 7	Book	B5		54	"	1	"
	The Philippine Food Balance Sheet 1976							
	Presidential Decree No. 857	Book	B5		24	"	1	PPA
	Annual Report 1979		A4		34	"	1	"
	Annual Statistical Report 1978	Book	A4		160	"	1	"
	Inventory of Port Facilities and Services 1980	Book	A4		282	"	1	"



番号	資料の名称	形態	版型	ページ数	オリジナル コピーの別	部数	販売名称又は発行機関
	Ports Feasibility Studies and Design Project Volume 1 - 6	Book	B4		オリジナル	6	PPA
	The Gateway to a Historic City			6	"	1	Cebu
	Dec 15 from Davao Port "Annual Report 1980"		A4	25	"	1	Davao PMU
	Philippine Ports and Shipping	Book	A6	246	"	1	P. Ship Agent's Association
	Industrial Promotion Policies in the Philippines	Book	A5	441	"	1	PIPS
	Economic Report on the Philippines 1			96	コピー	1	ADB
	" 2			176		1	
	Increases Approved by bot for Interisland				コピー	1	MARINE
	Shipping Over Basic (PEP-WAR) Rates			7		1	
	Shipping Routes			28	コピー	1	"
	Maritime Industry Authority		A4		オリジナル	1	

P. Ship Agent's Association

## 7. 主要面接者リスト

### 1. 日本人関係者

- A. Embassy of Japan  
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- C. PPA
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- D. CIADP (Manila Office)
1. Miss Carole Quiroligico Representative
  2. Mr. Jose Wilfredo Baliao Senior Architect.

- E. MARINA
1. Mr. Edgardo Magno Director, Planning Dept.

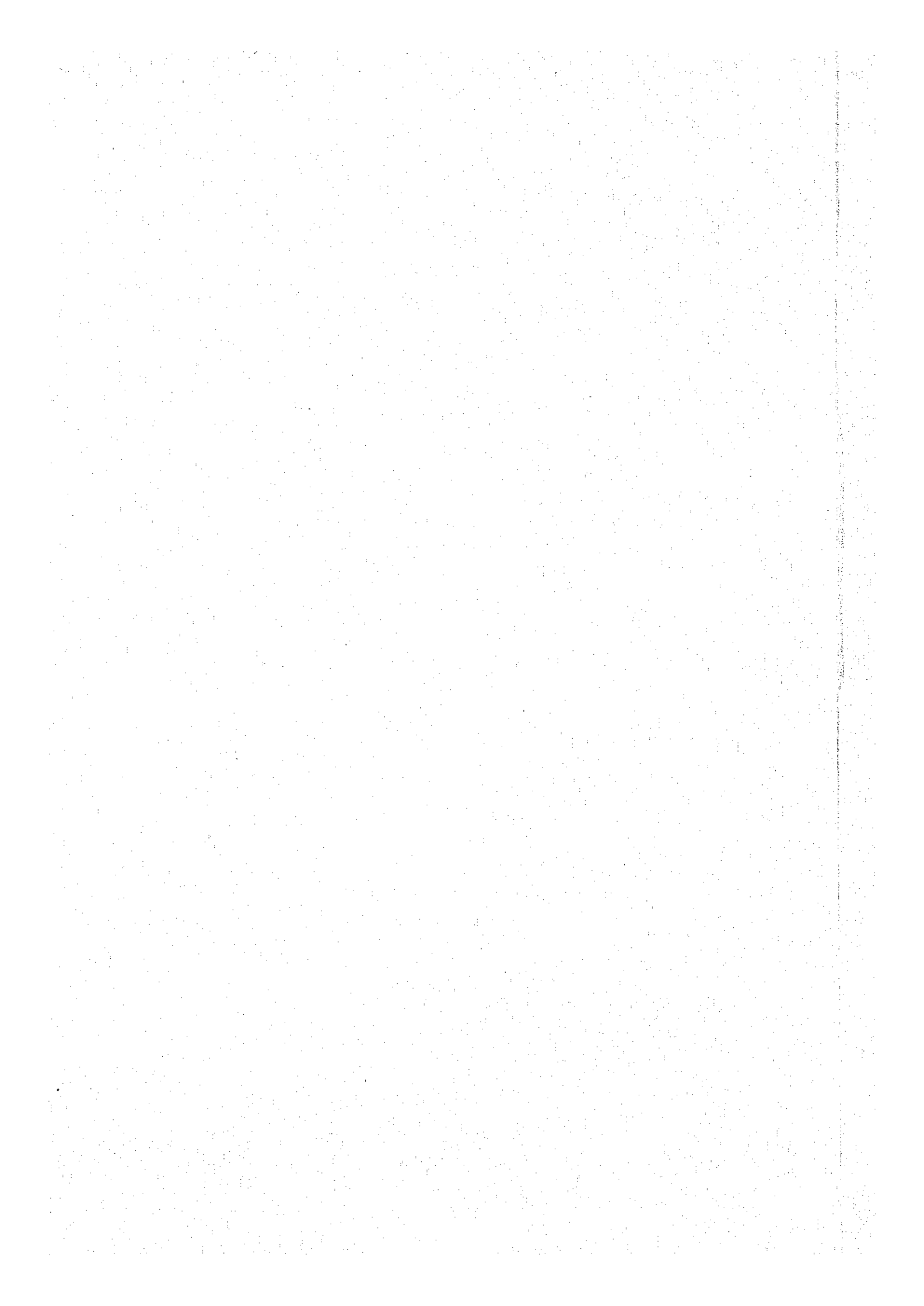
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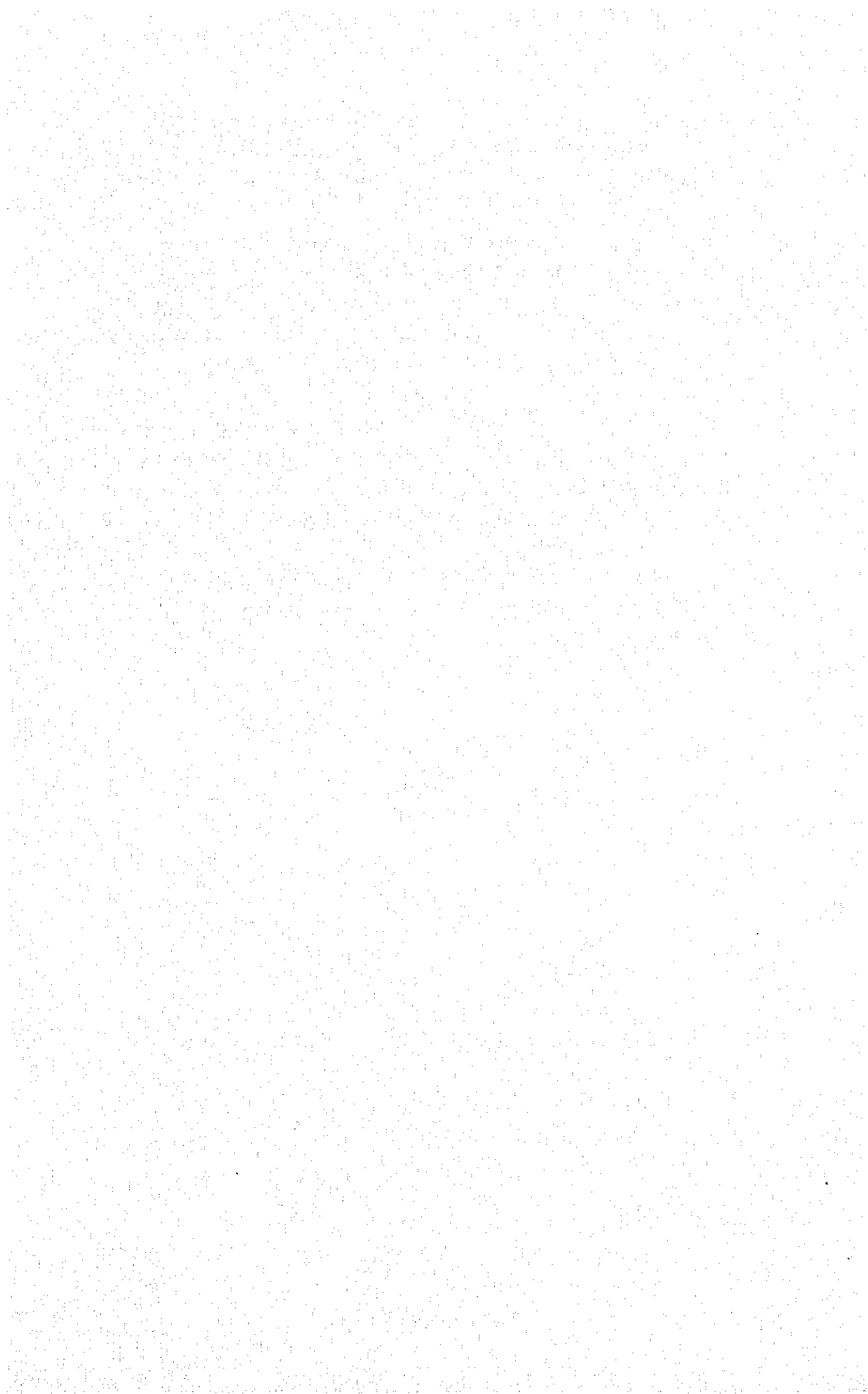
- A. MPW
1. Mr. Jose L. Feril Suprring O.E-II
  2. Mrs. Trinidad M. Mendoza Dept. District Engineer
  3. Mr. Federico F. Rosario Regional Officer #2
  4. Mr. Nestor O. Marallag P.R.O.
  5. Miss Sherley G. Suls District Officer
- B. CIADP
1. Mrs. Gloria S. Araullo Chief, Planning
  2. Mr. Fortunato G. Udarbe Project Coordinator
  3. Mr. Paramon D. Furigay Planning Officer
  4. Mr. Edilberto P. Allauigan Public Information Officer

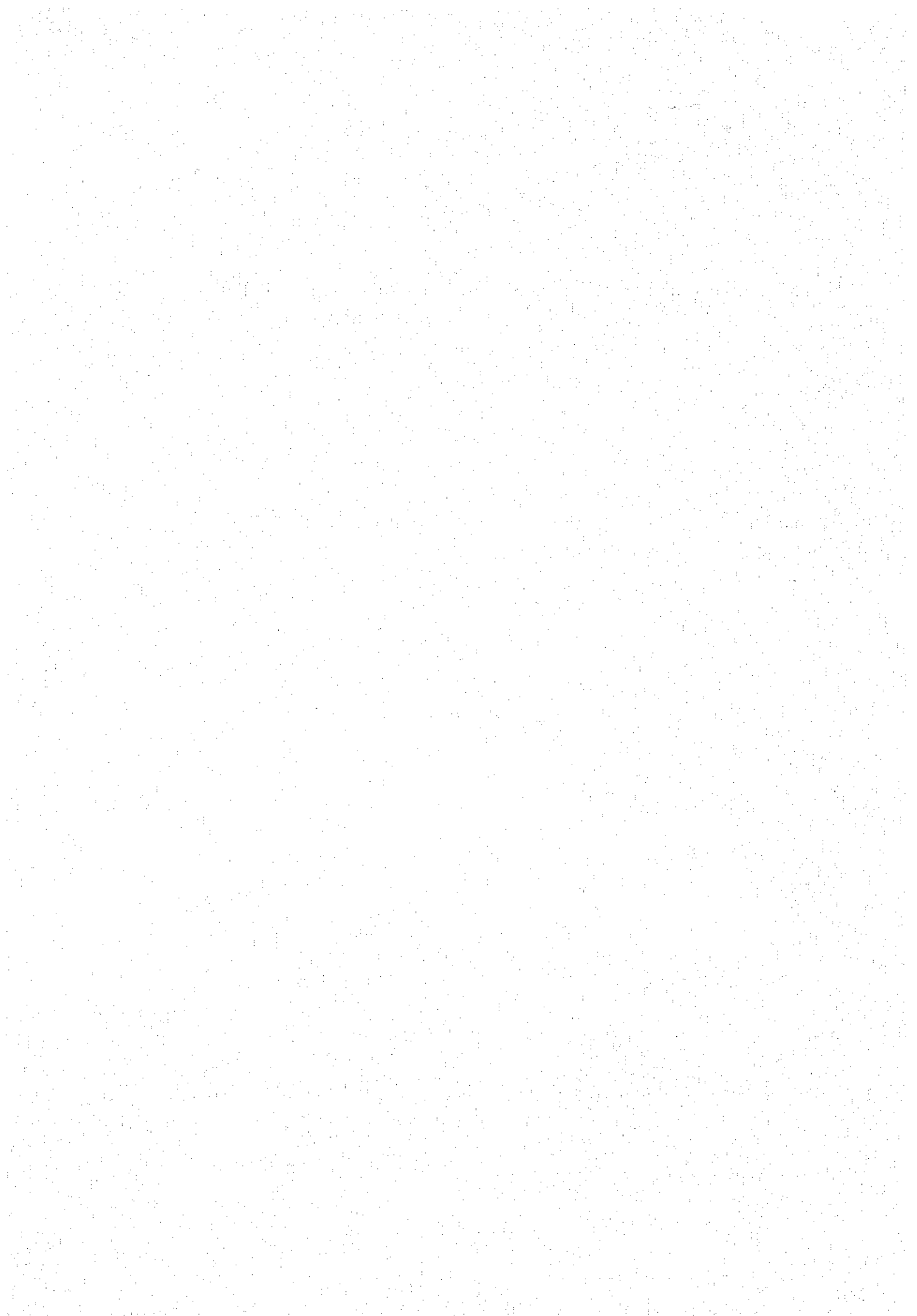
- C. PMU (Aparri)
1. Mr. Silverio D. Mangaoang, Jr. Acting Port Manager

- D. Bureau of Forest Development (BFD)
1. Mr. Erlenefa A. Gundan

- E. NEDA (Region II)
1. Mr. Constancio M. Ancheta      Exec. Director
  2. Mr. Rex T. Tobias                Chief, Programs Div.
- F. Bureau of Fisheries & Aquatic Resources
1. Mr. Primitivo O. Clave        Regional Director
- G. Ministry of Public Highway (MPH)
1. Mr. Elpidio C. Mandac        Regional Officer
- H. Ministry of Agriculture (MA)
1. Mr. Teofilo C. Ferraris        Officer (Soils)
  2. Mr. Ernesto T. Pere            Officer (Livestock)
  3. Mr. Floriano E. Mozuela       Officer (Extension)
- I. National Census Statistic Office (NCSO)
1. Mr. Felipe M. Feril            Administrative Officer







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