the Kosrae Government to arrange for an assistance program for this purpose by utilizing Kosrae Development Loans and the FSM development Bank.

5.2 Personnel Plan

5.2.1 Skipjack Fishing Training Vessel

The MRF will be responsible for supervising the operations of the Skip-jack Fishing Training Vessel. This vessel will require a 9-man crew, to include a captain, master fisherman, and 7 fishermen. The captain, master fisherman, and 3 of the fishermen are available from the present MRF staff, so that only 4 additional fishermen need be employed. Since the local labor pool is abundant, we anticipate no problems in recruiting this additional crew.

With regard to funding this recruitment, given the high priority accorded fisheries development in Kosrae, the MRF has thus far been able to obtain virtually the entire budget desired. It will thus be necessary to arrange a budgetary appropriation for this purpose by the expected date of vessel delivery.

Since the MRF already operates a 35 foot FRP vessel, no problems are anticipated with regard to operating skills. With regard to fishing, while skill levels are unavoidably low, the MRF has prior experience in this area too, so that skill requirements should not pose a particular handicap to operations.

5.2.2 Workshop

This facility is to be operated by 5 persons: I supervisory technician plus 4 other technicians. Here too, two of the necessary personnel are already on the staff of MRF, and these staff members have already received training in Japan in outboard engine repairs as well as in FRP rigging and so should be fully able to cope with the Workshop requirements.

The remaining 3 technicians will, therefore, have to be newly recruited. However, since the repair operations at the Workshop do not involve particularly advanced technology, it should be possible for the new members to receive guidance and training from the supervising technician to be furnished by MRF.

Budgetary provisions for these 3 additional staff members must, as in the case of the training vessel, be made by the time of delivery.

5.3 Operating Costs

5.3.1 Skipjack Fishing Training Vessel

We anticipate the following annual operating costs for this vessel:

(1) Fuel Costs:

While operating

per trip: 180 ps x 185 gr.ps x 8 hours x 2 days = 532.8 kg annual: 532.8 kg x 90 days = 47,952 kg Refueling per trip: 180 ps x 185 gr.ps x 0.6 hours = 20 kg annual: 20 kg x 45 trips = 900 kg

nnual: 20 kg x 45 trips = <u>900 kg</u> Total 48,852 kg

48,852 kg \div 0.85 (sp. grav.) = 57,473 ℓ /yr 57,473 ℓ \div 3,785 (U.S. gallons) x \$1.03/gallon = $\frac{\$15,640}{2}$

(2) Labor Costs:

Captain, Master fisherman \$5,200/year x 2 men = \$10,400

Fishermen

 $2,700/year \times 7 men = 18,900$

Total

\$ 29,300

(3) Ice Cost:

Since ice will be made at the MRF's existing plant, no provision is required for this item in the cost estimate.

(4) Gear Cost:

Stick held net, pole, etc.

\$ 3,620

(5) Operating and Miscellaneous Costs:

Insurance, provisions, etc.

3,000

Total Cost for the Skipjack Fishing Training Vessel

\$ 51,560

5.3.2 Workshop

(1) Power Costs:

Daily consumption

 $10 \, \text{locations} \, x \, 1 \, \text{KW} \, x \, 0.1 \, x \, 8 \, \text{hrs} = 8.0 \, \text{KWH/day}$ Outlets |

= 1.6 KWH/day 0.8 KW x 2 hrs Lighting

9.3 KW x 0.2 x 8 hrs = 14.9 KWH/day Machinery

 $= 9.0 \, \text{KWH/day}$ 1.5 KW x 8 hrs x 0.75 Air conditioner

Total 33.5 KWH/day

33.5 KWH x 250 days

At 20 cents per KWH --

 $8,375 \text{ KWH } \times \0.20

\$ 1,670/year

(2) Labor Cost:

Supervisory technician $$5,200/\text{year} \times 1 \text{ man} = $5,200/\text{year}$ Technicians $$3,300/\text{year} \times 4 \text{ men} = $13,200/\text{year}$ Total \$18,400/year

Total Annual Operating Costs for the Workshop \$20,070/year

6.1 Evaluation

While Kosrae's fisheries have not yet left the stage of subsistence operations, from a distributional standpoint, external conditions are conductive to the development of a commercial fishery. If progress can be made in fishery production, an increase in both catches and the volume of market fish can certainly be anticipated. Thus, through the proposed grant of powered fishing vessels suitable to Kosrae waters, the development of commercial fishermen can be encouraged; and, if a base can be established by MRF for a commercial fishery in the State, we feel this would provide a major additional stimulus to fishery development in Kosrae.

The Kosrae State Government has been conducting a feasibility study on vessel motorization and an industrial fishery. If, by implementing this project, we are able to donate to the MRF small powered fishing boats for distribution to fishermen along with a training vessel to be operated by this Agency, we would expect to contribute to the development of a specialized fishery and to the building of a base for a commercial fishery. This would make it possible to realize the objectives of the Development Plan, which call for an improvement in nutritional levels, based on fish products, food import substitution, the expansion of employment opportunities, and the generation of increased cash income for fishermen.

In our judgment, there would be considerable justification in the Government of Japan extending cooperation to this project in the form of a grant-in-aid.

6.2 Financial Evaluation

6.2.1 Skipjack Fishing Training Vessel

The useful life of this vessel has been set at 15 years.

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The fish catch is assumed to be:

90 trips/year x 1 ton = 90 tons

If we take current prices in Kosrae of 60 ℓ /lb., \$0.60 x 2.204 x 90,000 kg = \$119,016

Analyzing costs vs. benefits, with a discount rate of 9%, the present value of the project at the end of the project period would be \$425,804, and the Internal Rate of Return (IRR) would work out to 67.80%.

If we now do a sensitivity analysis of fish prices, at an international level of \$750/ton, the present value of the project, at a 9% discount rate, shows a deficit of \$26,824 while the IRR falls to 5.70%. At \$1,100/ton, the present value, at 9%, becomes \$249,940 and the IRR 39.82%. We see, then, that the impact of fish prices of profitability is very large indeed.

Fish prices in Kosrae are high by international standards. While this, of course, reflects the strong demand for fish among the local population, it is hardly desirable from a nutritional standpoint. Even at the \$1,100/ton level, which is close to international levels, the training vessel could be expected to show a profit. It is hoped, therefore, that the MRF will work to lower fish prices and expand fish supply.

Cost-Benefit Analysis (Discount Rate: 9%)

Year	Invest- ment	Fuel	Labour	Içe	Fishing Gear	Others	Cost Total	Fish Sales	Income Total	Benefit
0	166, 875	15, 640	29, 300	0	3, 620	3,000	218, 435	99, 000	99, 000	-119, 435
1	0	14, 349	26, 881	0	3, 321	2, 752	47, 303	90, 826	90, 826	43, 523
2	0	13, 164	24, 661	0	3, 047	2, 525	43, 397	83, 326	83, 326	39, 929
3	. 0	12, 077	22, 625	0	2, 795	2, 317	39, 814	76, 446	76, 446	36, 632
4	0	11, 080	20, 757	0	2, 565	2, 125	36, 526	70, 134	70, 134	33, 608
5	0	10, 165	19, 043	0	2, 353	1, 950	33, 510	64, 343	64, 343	30, 833
6	0	9, 326	17, 471	0	2, 158	1, 789	30, 744	59, 031	59, 031	28, 287
7	. 0	8, 556	16, 028	0	1, 980	1, 641	28, 205	54, 156	54, 156	25, 951
8	Ó	7, 849	14, 705	0	1, 817	1, 506	25, 876	49, 685	49, 685	23, 809
9	0	7, 201	13, 491	0	1, 667	1, 381	23, 740	45, 582	45, 582	21, 843
10	0	6, 607	12, 377	0	1, 529	1, 267	21, 780	41,819	41, 819	20, 039
11	0	6, 061	11, 355	0	1, 403	1, 163	19, 981	38, 366	38, 366	18, 385
12	0	5, 561	10, 417	0	1, 287	1, 067	18, 331	35, 198	35, 198	16, 867
13	0	5, 101	9, 557	0	1, 181	979	16, 818	32, 292	32, 292	15, 474
14	0	4, 680	8, 768	0	1, 083	898	15, 429	29, 625	29, 625	14, 196
ΓTL	166, 875	137, 416	257, 434	0	31, 806	26, 358	619, 889	869, 830	869, 830	249, 940

6.2.2 Small FRP Boats

The hull life of the small FRP boats is estimated at 15 years, while the useful life of gear and outboard engines is set at 4 years. At an average of 140 fishing days a year, the operating costs for these vessels would be as follows:

Per boat Fuel 4.8 gallon/trip x $1.35 \times 140 =$ 910/year (1) Labor \$2,700 x 2 persons = \$5,400/year(2) 38/year Ice 4,200 kg x 0.9 ¢/kg (3) Repairs At 5% of original cost of (4) 36/year outboard engine Interest cost .. Assuming the entire capital (5) is borrowed at an annual interest rate of 9% 916/year = \$7,300/yearTotal Annual Costs

The average catch volume is estimated at:

2 persons x 30 kg x 140 days = 8,400 kg/year

Accordingly, at a fish price of \$1.10/kg, the sales revenue from catches becomes:

8,400 kg x \$1.10/kg = \$9,240/year

If we now construct a cost-benefit analysis, using a discount rate of 9%, the Present Value at the end of the project period would be \$4,832, with an IRR of 18.84%. Thus, the project would yield an adequate profit.

We conclude that the benefits to fishermen from commercial fishery operations using small FRP boats would be considerable.

Cost-Benefit Analysis (Discount Rate: 9%)

Year	Invest- ment	Fuel	Labour	Mainte- nance	Ice	Inter- est	Cost Total	Fish Sales	Income Total	Benefit
0	10, 173	910	5, 400	36	38	916	17, 473	9, 240	9, 240	-8,233
. 1	О	835	4, 954	33	35	840	6, 697	8, 477	8, 477	1, 780
2	0	766	4, 545	30	32	771	6, 144	7, 777	7, 777	1, 633
3	0	703	4, 170	28	29	707	5, 637	7, 135	7, 135	1, 498
4	923	645	3, 825	26	27	649	6, 095	6, 546	6, 546	451
5	0	591	3, 510	23	25	595	4, 745	6, 005	6, 005	1, 261
6	0	543	3, 220	21	23	546	4, 353	5, 510	5, 510	1, 157
7	0	498	2, 954	20	21	501	3, 993	5, 055	5, 055	1, 061
8	654	457	2, 710	18	19	460	4, 318	4,637	4,637	320
9	0	419	2, 486	. 17	17	422	3, 361	4, 254	4, 254	893
10	О	384	2, 281	15	16	387	3, 084	3, 903	3,903	819
11	. 0	353	2, 093	14	15	355	2, 829	3, 581	3, 581	752
12	463	324	1, 920	13	14	326	3, 059	3, 285	3, 285	226
13	0	297	1, 761	. 12	12	. 299	2, 381	3, 014	3, 014	633
14	0	272	1, 616	11	. 11	274	2, 185	2, 765	2, 765	581
TTL	12, 213	7, 995	47, 445	316	334	8, 048	76, 352	81, 184	81, 184	4, 832

Section 7 Conclusions and Recommendations

The Kosrae State Government, in order to achieve economic viability in the wake of the termination of trust territory status, has pinned high hopes on its Fisheries Development Program. Based on this program, it expects to be able to phase out the food imports on which the State presently relies so heavily and thereby not only raise levels of self-sufficiency in the food area but also increase employment opportunities.

The Kosrae Government places particular priority in its Fisheries Development Program on a plan to motorize the State's fishing vessels and thereby encourage the development of a commercial fishery whose main fishing grounds would be located outside the reef. The Government also intends to plant the seeds for developing a future industrial fishery to tap the State's rich pelagic resources through experimental skipjack pole-and-line operations.

The Kosrae fishery has thus far been largely a subsistence operation but, with the inroads of a money economy and the increased demand for proteins as well as the improvement of distribution facilities through the donation of refrigeration equipment by Japan, the external conditions are now conducive to the development of a specialized fishery.

If steady improvement can be achieved in fish production, increased catches and larger volume of market fish can be anticipated. Accordingly, through a donation of powered boats appropriate to Kosrae Waters, the population of commercial fishermen can be expanded while the Skipjack Fishing Training Vessel will permit the improvement of fishing technology, thereby improving nutritional levels through the resulting catches and ultimately substituting domestic supply for fish imports. This would help attain the primary objectives of the Kosrae Development Plan and would also fulfill the secondary objective of expanding employment and increasing the cash income of fishermen.

There is every likelihood that the costs of operating the Skipjack Training Vessel and the small FRP boats can be defrayed by their

respective catches, while the cost of operating the Workshop is expected to be appropriated from the MRF budget of the Kosrae State Government.

The benefits to the people of Kosrae from the plan include an increase in fish production through the diffusion of fishing vessels and gear appropriate to Kosrae fishing grounds and a consequent reduction in food imports.

With its existing technical capabilities, the MRF of Kosrae should be fully able to operate both the Skipjack Fishing Training Vessel and the Workshop.

For the above reasons, the Basic Study Team concludes that implementation of the subject project by the MRF will generate major benefits to the State's economy and that there is, accordingly, ample justification in Japan extending cooperation through a grant-in-aid.

In order to gain full benefit from the subject facilities in the years to come and expand fish production still further, an effort should be made to raise technological levels.

The facilities and equipment to be established under this plan can, it is true, be operated within the present technological capabilities of the Kosrae MRF. However, in order to give full play to these facilities, there is a clear need to raise the technical skill levels of both supervisory and operating personnel, including line workers. It is, therefore, desirable to develop a trained technical cadre by utilizing the training programs and programs for the dispatch of technicians offered by Japan and various other countries.

APPENDIX

Appendix I

MINUTES OF DISCUSSIONS

ON

THE SMALL-SCALE FISHERIES DEVELOPMENT PROJECT AND

FISHING HARBOUR PREPARATION PROJECT

In response to the request made by the Government of the Federated States of Micronesia for the Small-Scale Fisheries Development Project and Fishing Harbour Preparation Project (hereinafter referred to as "the Projects"), the Government of Japan decided to conduct a Basic Design Study and the Japan International Cooperation Agency (hereinafter referred to as "JICA") has sent to Micronesia the team headed by Mr. Noboru Oshima, Deputy Director, Fishing Port Planning Div., Fishing Port Department, The Fiserhies Agency, from September 30th to October 23rd, 1985.

The Team has carried out a field survey, held a series of discussions, and exchanged views with the authorities concerned of the Government of the Federated States of Micronesia.

As a result of the study and discussions, both parties have agreed to recommend to their respective Governments to examine the results of the study attached herewith towards the realization of the Project.

Pohnpei, October 18, 1985

Noboru Oshima

TeamLeader

Japanese Study Team

JICA

Masao Nakayama

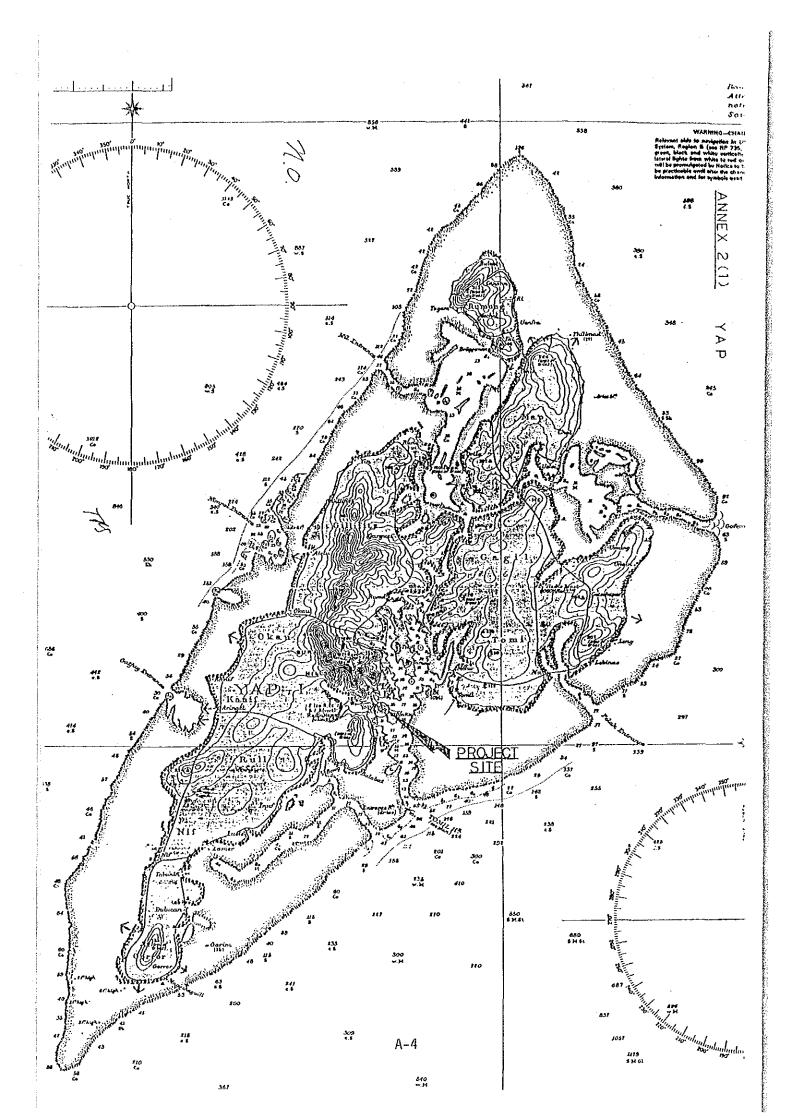
Chief, International Affairs Department of External Affairs Federated States of Micronesia

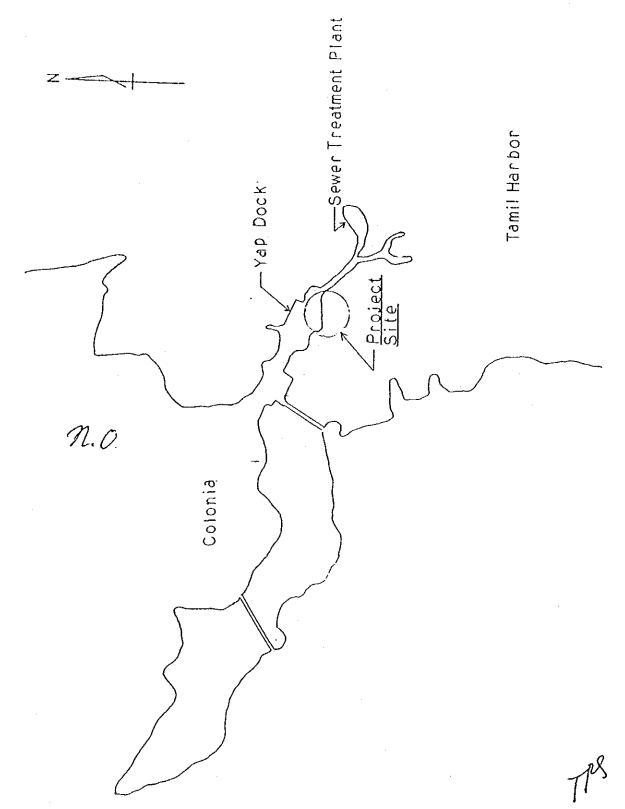
ATTACHMENTS

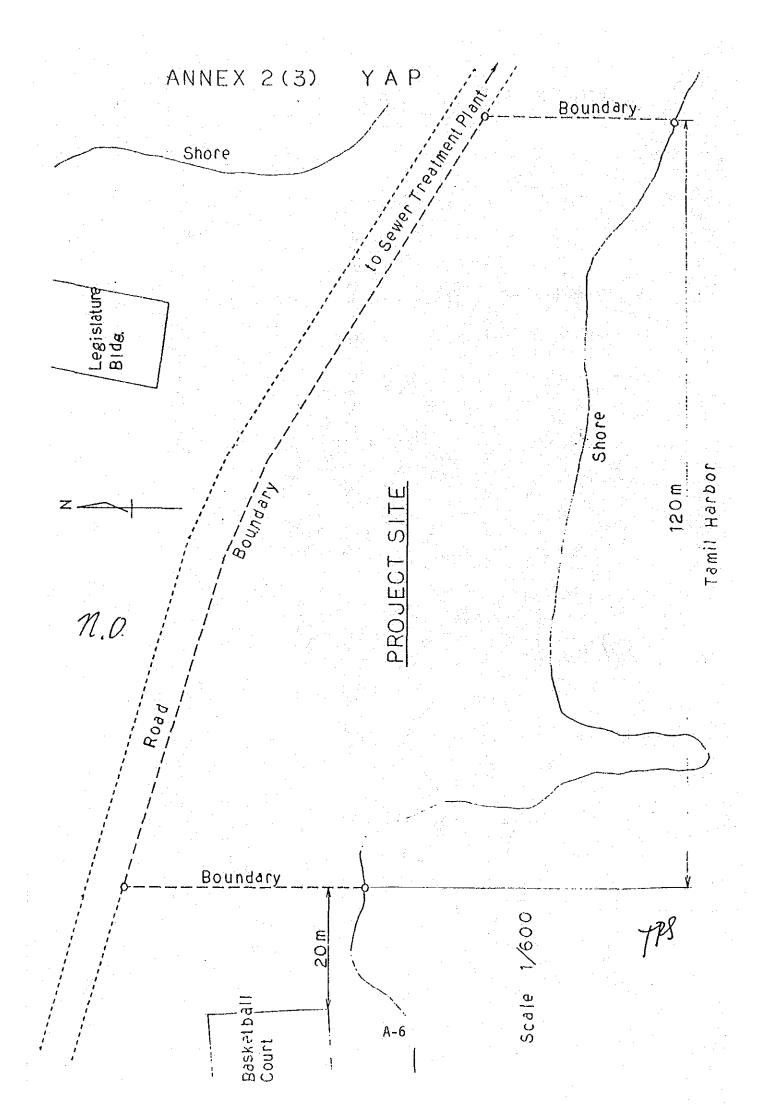
- 1. The objectives of the Projects are:
 - to provide fishing equipment, a boat and facilities for developing small-scale fisheries in Kosrae State, and
 - to construct a fishing port and ancillary facilities and to provide necessary equipment for developing fisheries in Yap State.
- 2. The executing agencies for the Projects will be:
 - Division of Marine Resources, Department of Conservation and Development of Kosrae State, and
 - Yap Fishing Authority of Yap State.
- 3. The above agencies will take necessary measures to administer the respective facilities and the former agency will be responsible for adequate distribution of the equipment purchased under the Project.
- 4. The proposed sites of the Projects in Kosrae and Yap have been acquired by the Governments of Yap and Kosrae (hereinafter referred to as "the Project sites") as attached in Annex-1 and Annex-2 respectively.
- 5. The Japanese Study Team will convey to the Government of Japan the desire of the Government of the Federated States of Micronesia that the former takes necessary measures to cooperate in implementing the Projects and provides necessary facilities and other items as listed in Annex-3 within the scope of Japanese economic cooperation in grant form.
- 6. The Government of the Federated States of Micronesia has understood Japan's Grant Aid system explained by the Team which includes a principle of use of a Japanese consultant firm and Japanese general contractor for implementation of the Projects.
- 7. The Government of the Federated States of Micronesia will take necessary measures as listed in Annex-4 on condition that Grant Assistant by the Government of Japan is extended to the Projects.

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ANNEX 1 KOSRAE AIR STRIP PROJECT SITE BOUNDARY PROJECT SITE N.O. BOUNDARY SFÁ WATER I JANK. EISHERIES COMPLE ROAD TO LELU A-3 SHORE LINE







ANNEX-3

Items required by the Government of the Federated States of Micronesia whose cost will be borne by the Government of Japan:

KOSRAE

Fishing equipment, boat and facilities for the Division of Marine Resources and local fishermen in Kosrae
One pole and line fishing boat

One pole and line : Small FRP boats Outboard engines Fishing gear Workshop

Necessary equipment for the above Others

YAP

Fishing port, ancillary facilities and necessary equipment for the fishing boats of Yap Fishing Authority and local fishermen in Yap.

Wharf
Slipway
Workshop
Equipment for the above
Cold Storage
Refrigerator
Ice making machine
Ice storage
Others

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ANNEX-4

Following arrangements will be required to be taken by the Governments of the Federated States of Micronesia and the States of Kosrae and Yap:

- 1. To carry out site preparation such as clearing, filling, leveling and removing of shipwrecks and debris prior to commencement of construction works.
- To provide facilities for distribution of electricity, water supply, fuel supply, drainage, telephone lines and other incidental facilities to the proposed sites.
- 3. To ensure prompt unloading, tax exemption, customs clearance at ports of disembarkation in Micronesia and prompt internal transportation therein of the products under the grant.
- 4. To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in Micronesia with respect to the supply of the products and services under the verified contracts.
- 5. To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into Micronesia and stay therein for the performance of their work.
- 6. To maintain and use properly and effectively the facilities constructed and equipment purchased under the grant.
- 7. To bear all the expenses other than those to be borne by the grant, necessary for construction of the facilities as well as for local transportation and the installation of the equipment.
- 8. To furnish general furniture for the facilities.
- 9. If and when the products, purchased by the grant from the Government of Japan, are sold or leased to fishermen, the Government of Kosrae and Yap agree to the principles that any funds received from the sale or lease of equipment or the use of facilities shall be used for the purpose of fishing development and maintenance of the equipment purchased by the Grant from the Government of Japan, and copies of the annual financial audits of the Governments of Kosrae and Yap will be provided to the Government of Japan.

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TPS

Appendix I

SURVEY TEAM MEMBERS

A GROUP

1. Mr. Noboru OSHIMA

Team Leader
Deputy Director,
Fishing Port Planning Division,
Fishing Port Department,
Fisheries Agency,
Ministry of Agriculture, Forestry
and Fishereis

2. Mr. Minami NAGAI

Project Coordinator Planning Division, Grant Aid Planning and Survey Department, Japan International Cooperation Agency (JICA)

3. Mr. Kuniaki TAKAHASHI

Plannner, Fisheries Development Fisheries Engineering Co., Ltd.

B GROUP

1. Mr. Toshiya OGASAWARA

Facilities Designer Fisheries Engineering Co., Ltd.

2. Mr. Shigeki ISHIKAWA

Civil Engineer Fisheries Engineering Co., Ltd.

C GROUP

1. Mr. Hiroshi KONISHI

Fishing Boat Planner International Division, Oceanic Fisheries Department, Fisheries Agency, MAFF

2. Mr. Takafumi TOSHIHARA

Fishing Gear Engineer Fisheries Engineering Co., Ltd.

3. Mr. Akio YAMADA

Fishing Boat Designer Fisheries Engineering Co., Ltd.

Appendix III

SURVEY ITINERARY

D	ay	Date	Itinerary &	Description
A.B	С		A Group: Mr. Oshima Mr. Nagai Mr. Takahashi B Group: Mr. Ogasawara Mr. Ishikawa	C Group: Mr. Konishi Mr. Toshihara Mr. Yamada
7		Sept.30(Mon.)	Tokyo <u>CO-562</u> → Guam	
2		Oct. 1 (Tue.)	Discussion with Japanese Consulate Guam CO-562 Ponape	
3	·	Oct. 2 (Wed.)	Discussion with FSM Government	
4		Oct. 3 (Thu.)	Discussion with DEA and Marine Resources	
5	1	Oct. 4 (Fri.)	Ponape <u>CO-557</u> Guam Discussion wi	Tokyo $\frac{\text{CO-}562}{\text{Fund}}$ Guam thin the Team
6	2	Oct. 5 (Sat.)	Guam CO-550 Yap Visit to the Site	Discussion within the Group
7	3	Oct. 6 (Sun.)	Studying information	Guam <u>CO-520</u> → Ponape
8	4	Oct. 7 (Mon.)	Discussion with Yap Governor and YFA	Discussion with FSM Government
9	5	Oct. 8 (Tue.)	Field survey; Discussion with YFA and Public Works	Ponape 512 Kosrae Discussion with Kosrae Government
10	6	Oct. 9 (Wed.)	Discussion with Yap Fishing Activity; Sound survey	Discussion with Kosrae Marine Resources

Da	ay	Date	Itinerary &	Description		
11	7	Oct. 10 (Thu.)	Discussion within the Groups; Preparing data and information	Study of Kosrae fishing activity; Discussion with Marine Resources		
12	8	Oct. 11 (Fri.)	Discussion with Yap Government; Site survey	Discussion with Kosrae Government Kosrae <u>511</u> Ponape		
13	9	Oct. 12 (Sat.)	Yap <u>CO-553</u> Guam	Discussion within the Group		
14	10	Oct. 13 (Sun.)	Guam <u>CO-520</u> → Ponape	Discussion within the Group		
15	11	Oct. 14 (Mon.)	Discussion wit Preparing draf			
16	12	Oct. 15 (Tue.)	Discussion with Kosrae Governor			
17	13	Oct. 16 (Wed.)	Discussion on the minutes with FSM Government			
18	14	Oct. 17 (Thu.)	Discussion on the minu	tes with FSM Government		
			A group C Group	B Group		
19	15	Oct. 18 (Fri.)	Conclusion of Minutes of discussion Ponape CO-557 Guam Report of survey results to Japanese Consulate	Study of construction condition (Ponape)		
20	16	Oct. 19 (Sat.)	Guam CO-6563 Tokyo	Study of construction condition (Ponape)		
21		Oct. 20 (Sun.)		Ponape <u>CO-557</u> Guam		

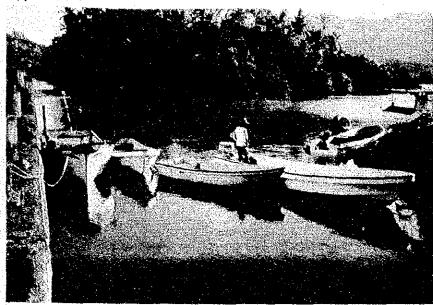
Day		Date	Itinerary & Description				
22		Oct. 21 (Mon.)		Study of construction machinery and material			
23		Oct. 22 (Tue.)		Study of construction machinery and material			
24		Oct. 23 (Wed.)		Guam <u>CO-561</u> Tokyo			

DISCUSSANTS

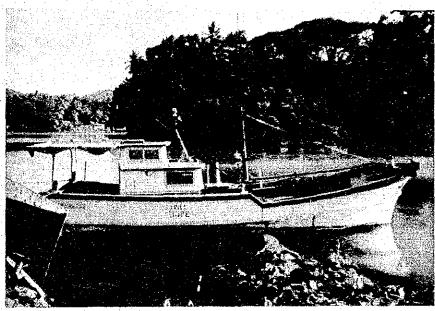
NAME	ORGANIZATION	TITLE
	FSM GOVERNMENT	
Mr. ASTERIO TAKESY	Department of External Affairs (DEA)	Deputy Secretary
Mr. DAVID NEVITT	Office of the Attorney General (OAG)	Attorney General
Mr. JAHN SOHL	Office of Planning & Statistics	Director
Ms. PATRICIA CROYLE	OPS	Architect
Mr. MICHAEL GAWEL	Department of Resources & Development	Chief, Marine Resources
Mr. TADAO SIGRAH	DEA	Deputy Chief, Asian Affairs
Mr. BERNARD THOULOG	DEA	Foreign Service Officer
Mr. JAMES A. MOVICK	DEA	Deputy Chief, Multilateral Affairs
Mr. MIKE A. McCOY	Micronesian Maritime Authority	Executive Director
Mr. LALLY BERTONCINI	ОТС	Chief, Div. of Law

NAME	ORGANIZATION	TITLE
YAP	STATE GOVERNMENT	
The Hon. JOHN A. MANGEFEL		Governor
The Hon. HILARY TACHELIOL		Lt. Governor
The Hon. PETRUS TUN		Special Consultant to Governor
Mr. SAM FALANRUW	Department of Resources & Development	Director
Mr. CLEMENT MULALAP	Office of the Attorney General	Deputy Attorney General
Mr. "REB" REBEULUCH	Yap Fishing Authority	Asst. Manager
Mr. BRIAN FARLEY		Special Asst. to Governor
Mr. MIKE RODY	Office of Planning, Budget and Statistics	Acting Director
KOSRA	E STATE GOVERNMENT	
The Hon. YOSHIO P. GEORGE		Governor
The Hon. MOSES T. MACKWELUNG		Lt. Governor
Mr. GERSON JACKSON	Department of Conservation & Development	Director
Mr. AREN PALIK	Department of Planning & Statistics	Chief
Mr. MICHAEL WHITE	Div. of Marine Resources	Chief

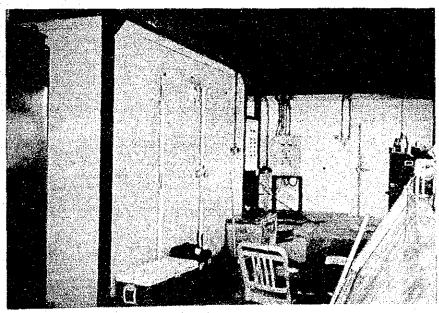
Appendix V



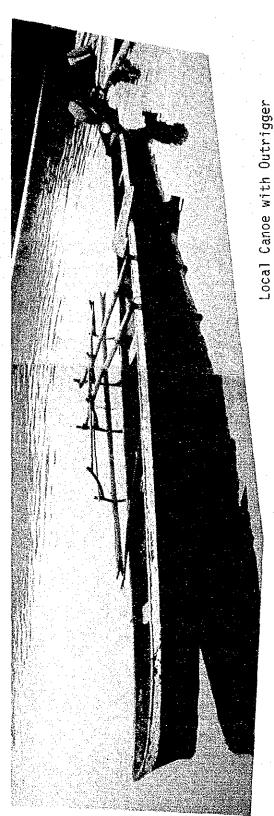
Dept. of Marine Resource's Fishing Fleet



Dept. of Marine Resource's 35 Feet Fishing Boat



Existing Refrigeration Facilities donated by Japanese Government





Proposed Site for Workshop & Office of Dept. of Marine Resources

