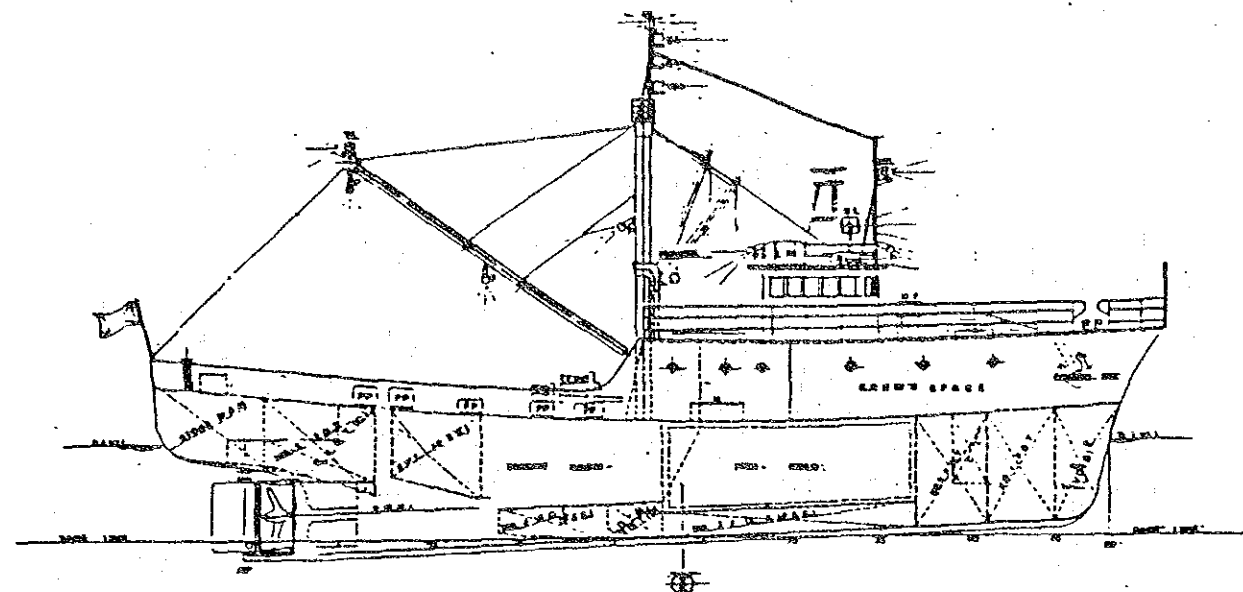
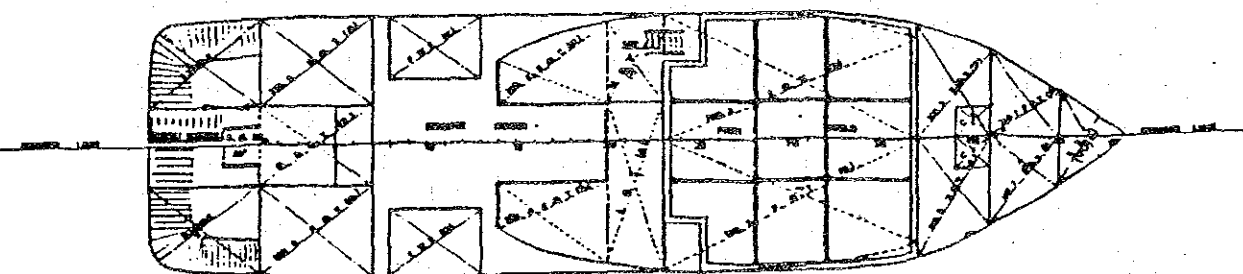
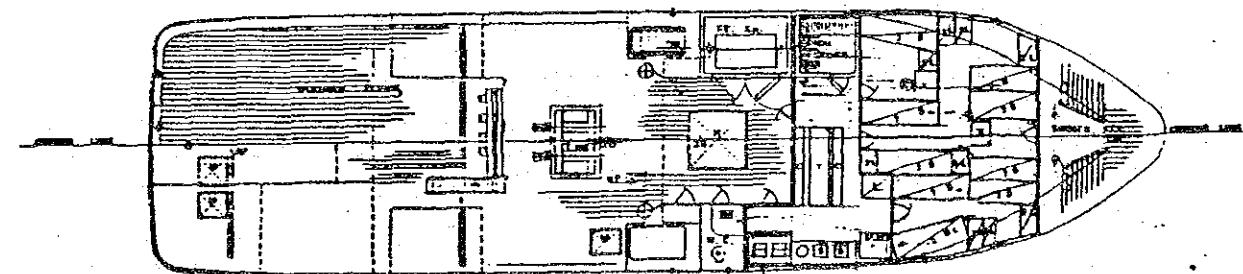
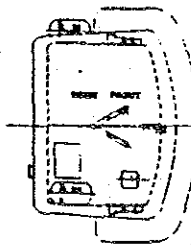
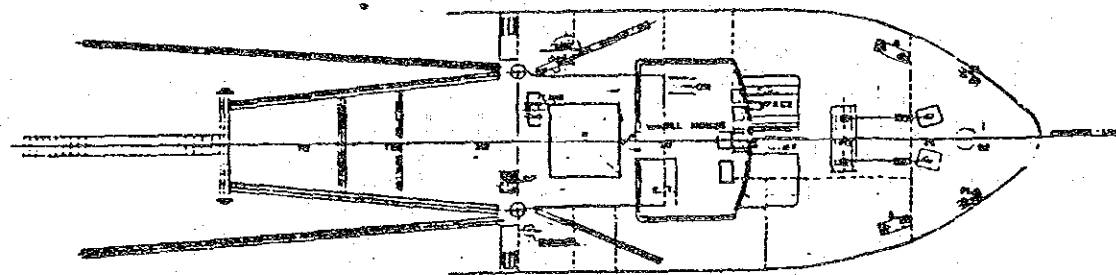


Figure 1 General view



PRINCIPAL PARTICULARS

LENGTH (OVER ALL)	m	28.0
LENGTH (W.C.P.)	m	24.0
BREADTH (MOORED)	m	7.0
DEPTH (MOORED)	m	3.0
DRAFT (DESIGNED)	m	2.5
GROSS TONNAGE	m	150 ^{TONS}
MAIN ENGINE	1 SET DIESEL	
SPEED	m	18 ^{KT}
CAPACITY		
FISH HOLD	m	74 ^{M³}
FUEL OIL	m	84 ^{M³}
FRESH WATER	m	14 ^{M³}
COMPLEMENT	12	



PROJECT	
150 G/T CLASS SHIP	
FISHING VESSEL	
GENERAL ARRANGEMENT	
SCALE	1/100
DATE	
DESIGN NO	
DESIGNED BY	
CHECKED BY	
ISSUED NO	

Figure 2 Prawn trawl fishing boat (General arrangement plan)

GENERAL ARRANGEMENT (s=1/250)

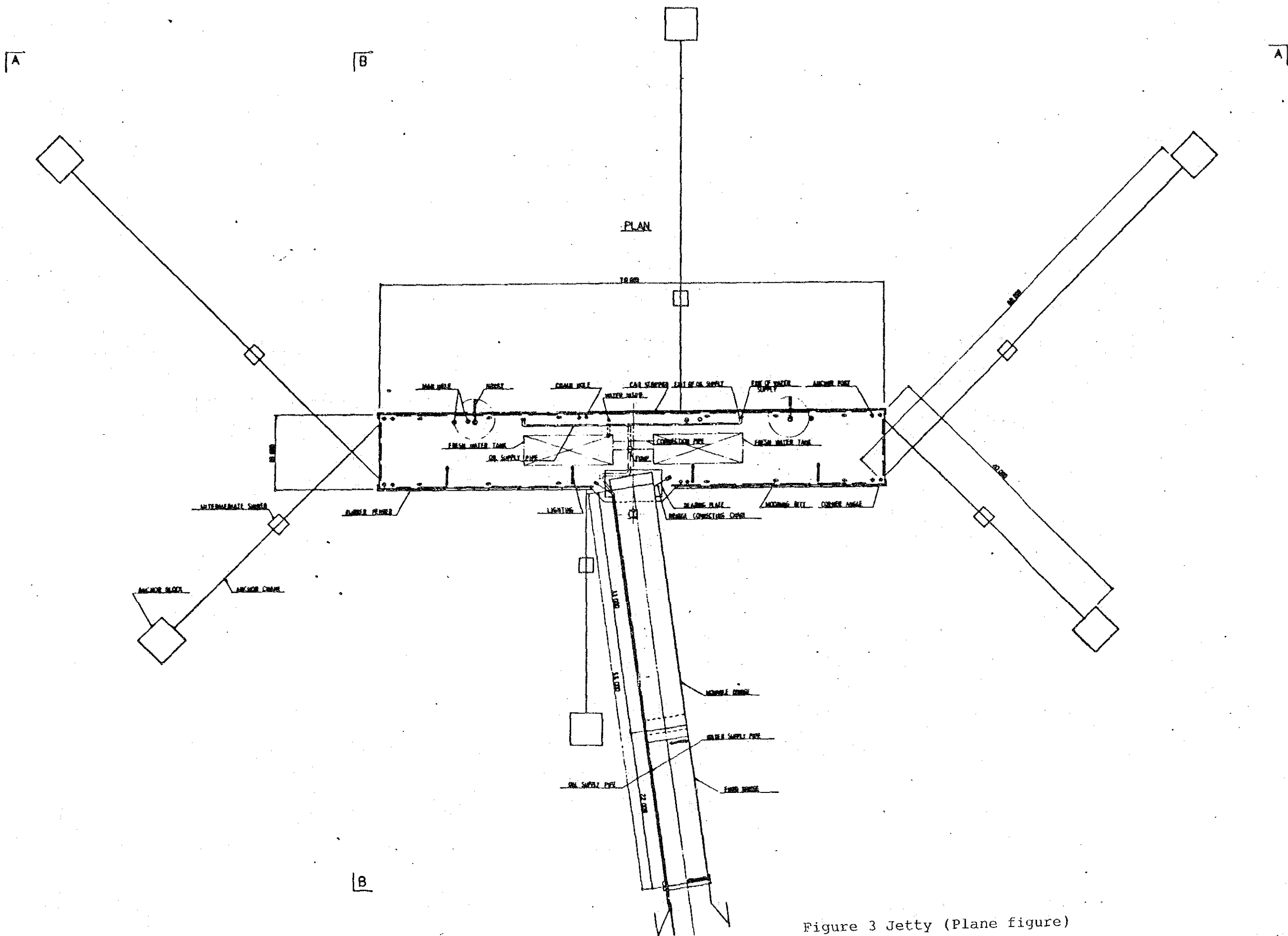


Figure 3 Jetty (Plane figure)

For Tanzania, prawn trawl net(Flat type)

Head rope length approx. 16.1m

Ground rope length approx. 18.0m

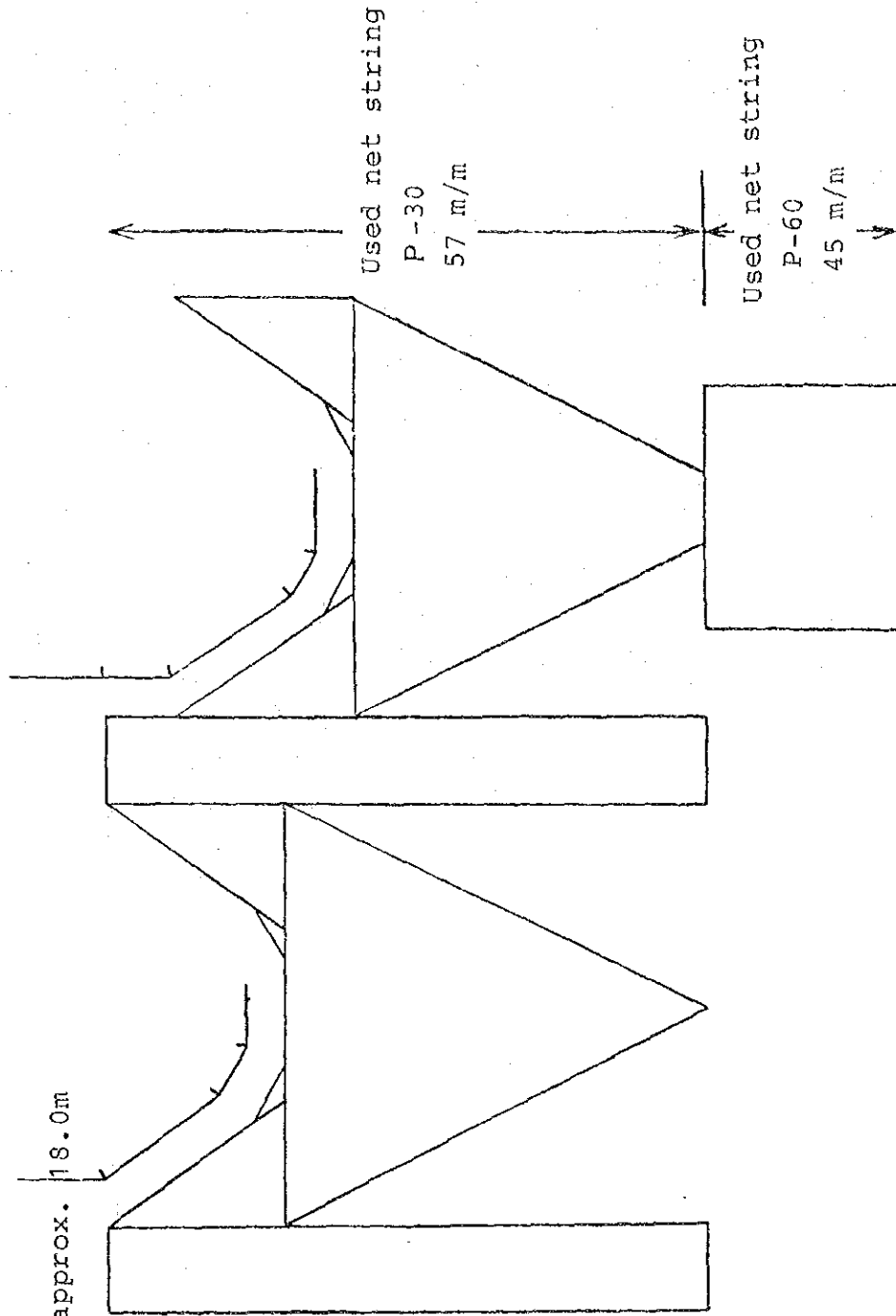
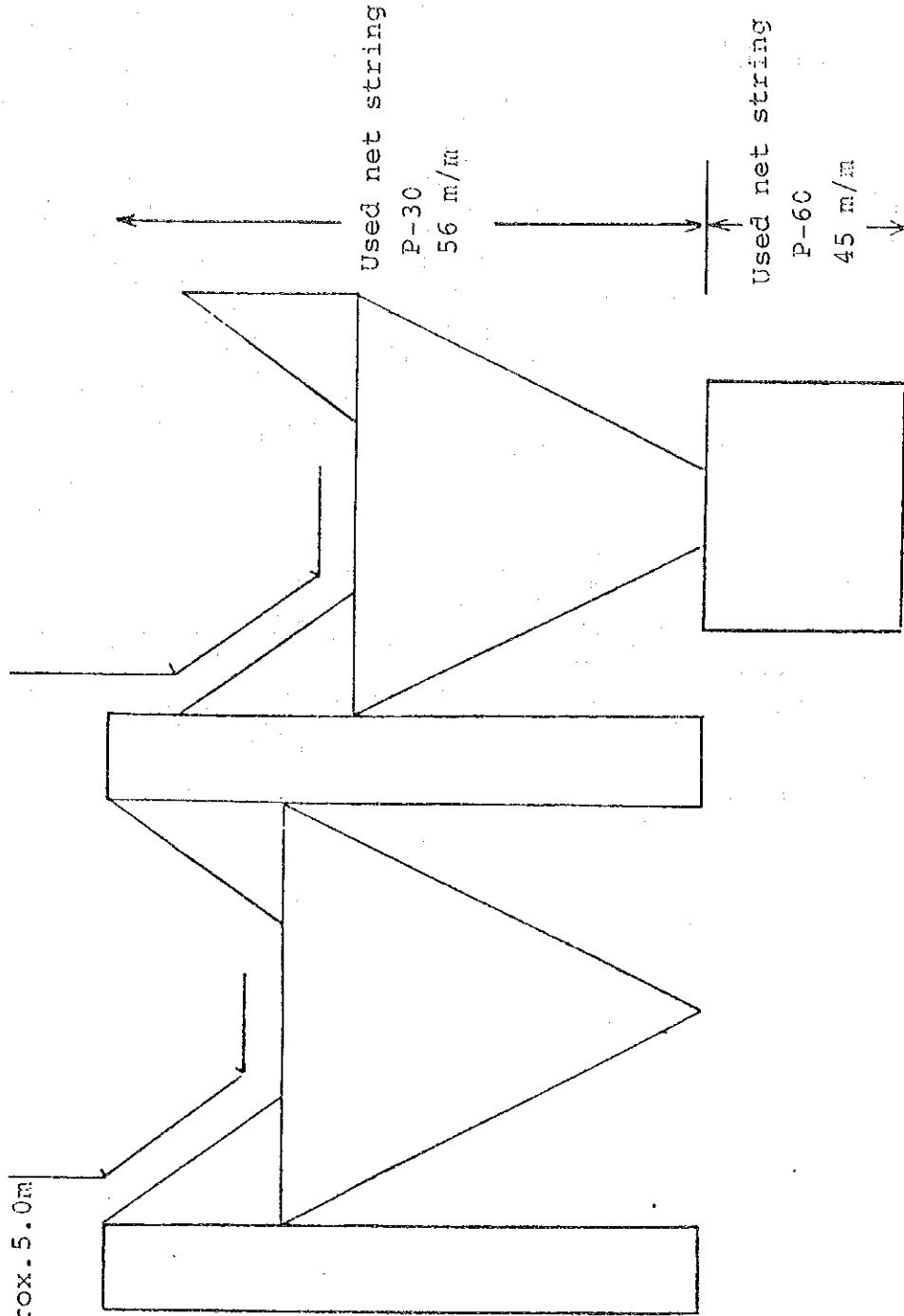


Figure 3 Prawn trawl net

For Tanzania, prawn trawl trinet

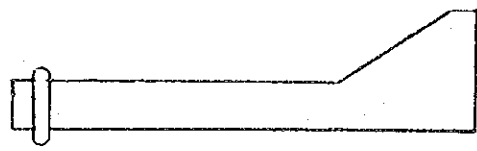
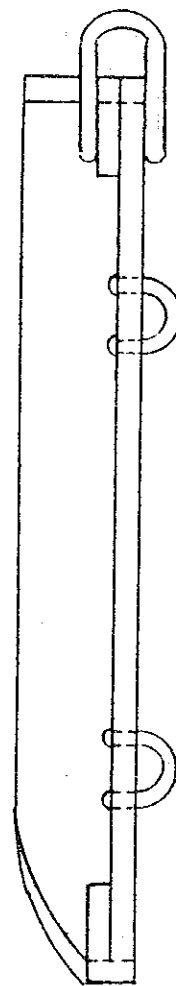
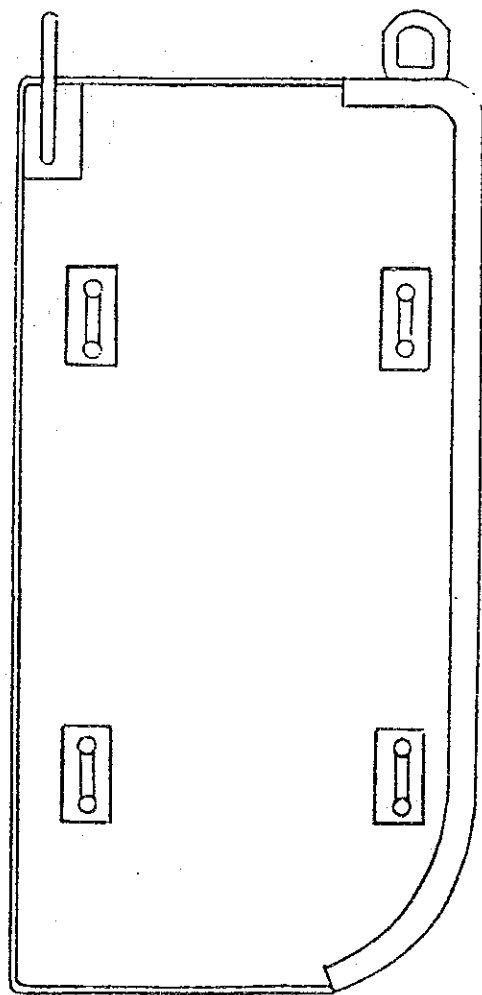
Head rope length approx. 4.0m

Ground rope length approx. 5.0m

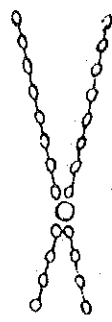


Prawn trawl trinet

For Tanzania, vertical otter board for prawn trawl



Bridle chain

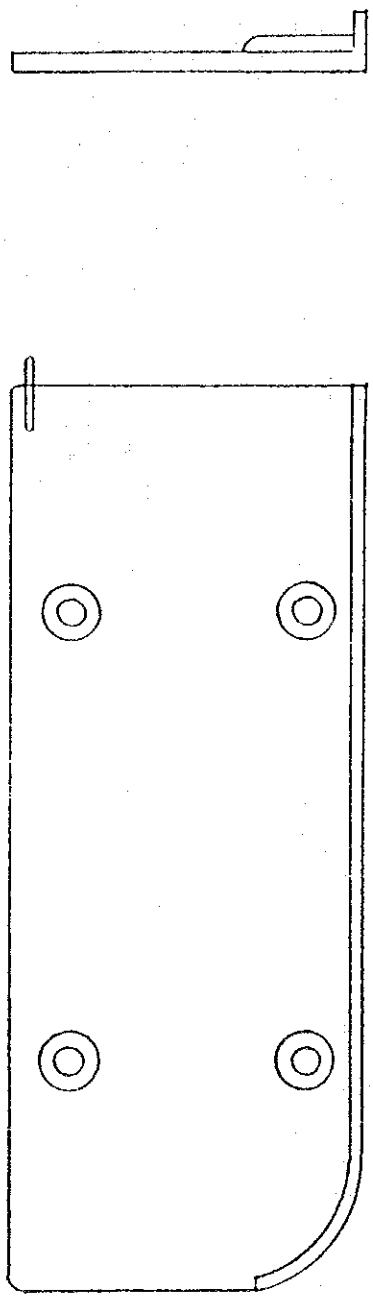


Weight approx. 200kg

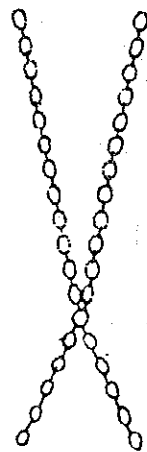
Figure 5 vertical otter board for prawn trawl.

Weight in the water approx. 110kg

For Tanzania, vertical otter board for trinet



Bridle chain



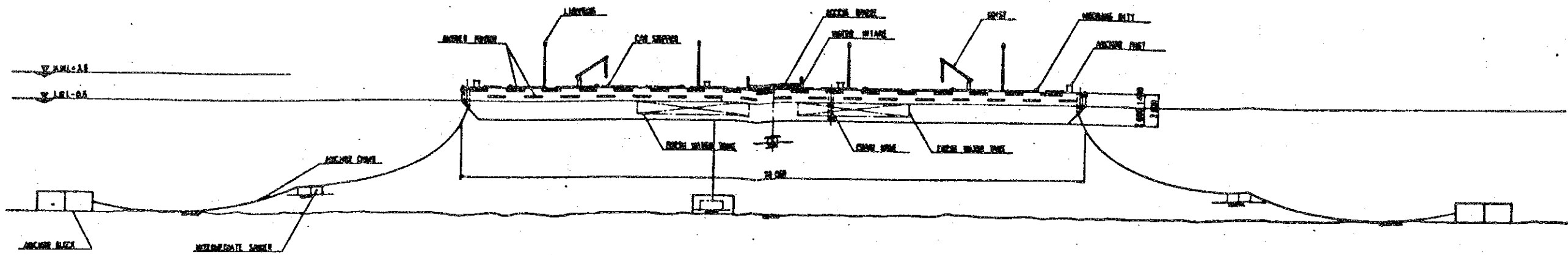
Weight approx. 26kg

Weight in the water approx. 17kg

Figure 6 vertical otter board for trinet

GENERAL ARRANGEMENT (5-1/250)

VIEW A-A



VIEW B-B

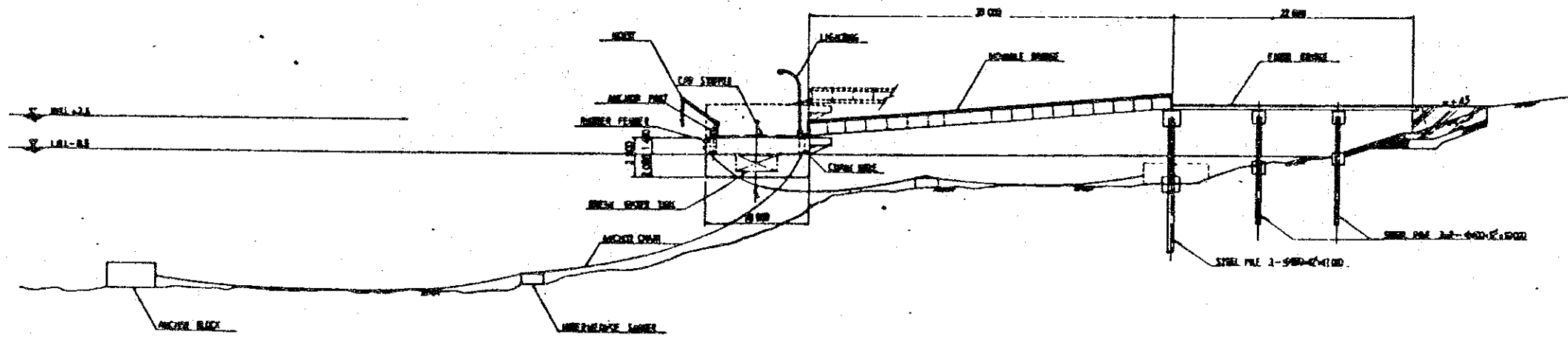
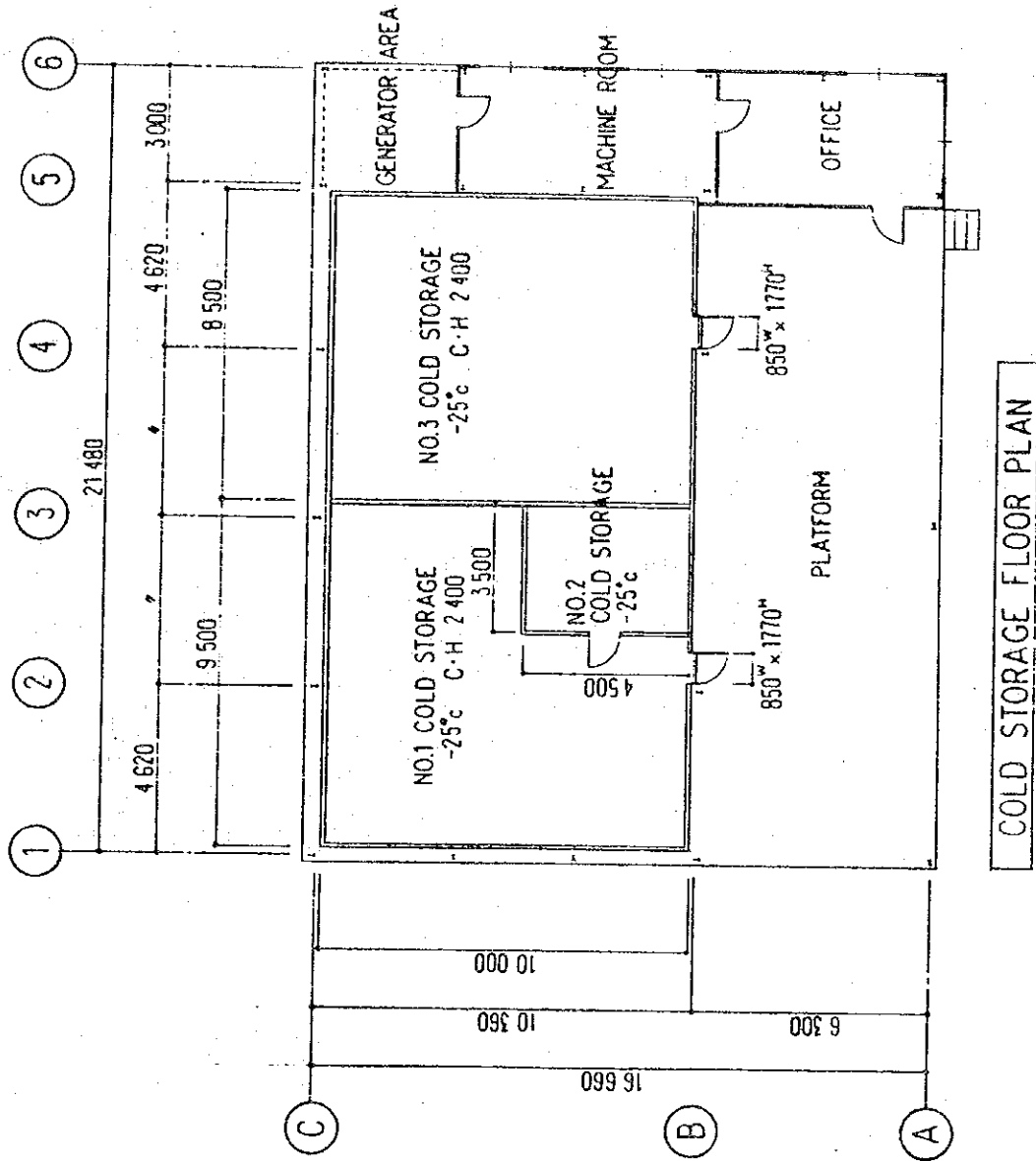
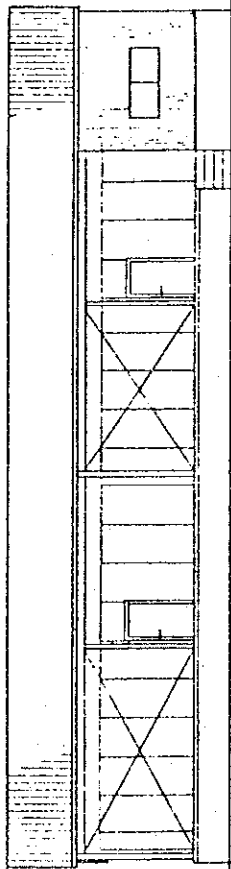


Figure 8 jetty (Side view)

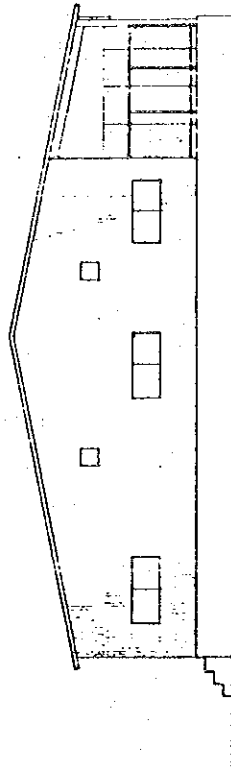


COLD STORAGE FLOOR PLAN

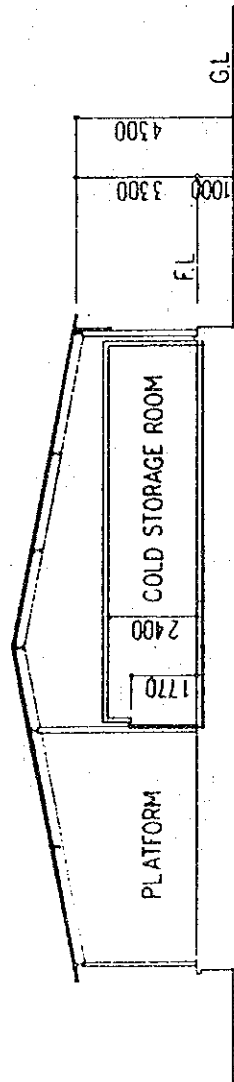
Figure 9 Cold storage (Plane figure)



ELEVATION

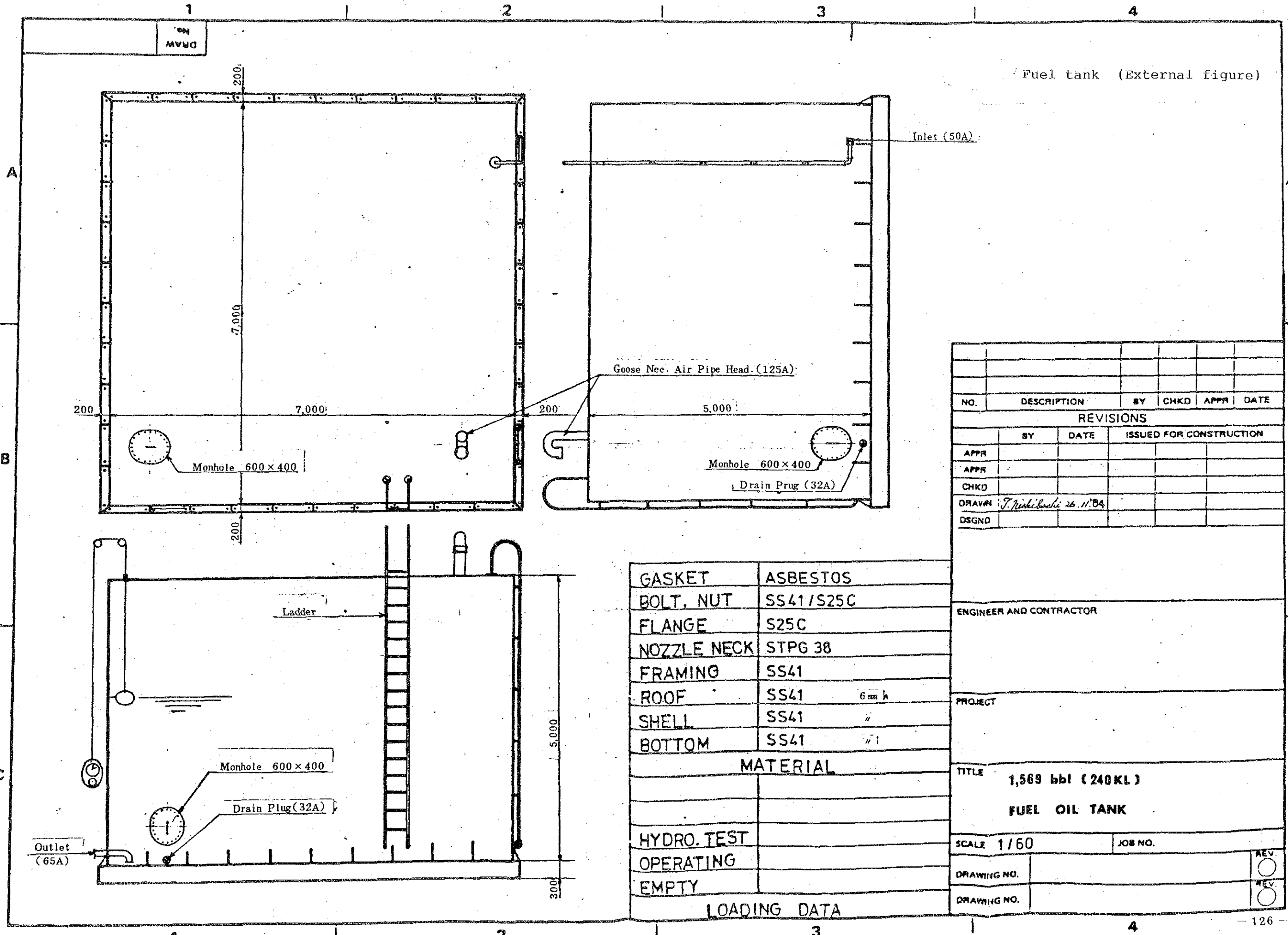


ELEVATION



SECTION

Figure 10 Cold storage (Side view)



Fuel tank (External figure)

NO.	DESCRIPTION	BY	CHKD	APPR	DATE
REVISIONS					
		BY	DATE	ISSUED FOR CONSTRUCTION	
APPR					
APPR					
CHKD					
DRAWN	J. Piskunov 26.11.84				
DSGND					

GASKET	ASBESTOS
BOLT, NUT	SS41/S25C
FLANGE	S25C
NOZZLE NECK	STPG 38
FRAMING	SS41
ROOF	SS41 6 mm h
SHELL	SS41 "
BOTTOM	SS41 "1
MATERIAL	
HYDRO. TEST	
OPERATING	
EMPTY	
LOADING DATA	

ENGINEER AND CONTRACTOR	
PROJECT	
TITLE	
1,569 bbl (240KL)	
FUEL OIL TANK	
SCALE 1/60	JOB NO.
DRAWING NO.	REV. <input type="checkbox"/>
DRAWING NO.	REV. <input type="checkbox"/>

CHAPTER 6 PROJECT IMPLEMENTING ORGANIZATION

CHAPTER 6 PROJECT IMPLEMENTING ORGANIZATION

6-1 Executor

The negotiating body of the Tanzanian side for the Japanese government for this project is the Ministry of Finance. The executing body of the planning and implementation of the development project in the fisheries in Tanzania is the Ministry of Land Natural Resources and Tourism, Fisheries Division. The present project is in charge of the Planning & Marketing Department of the actual TAFICO organization until the completion of furnishing, and it will be transferred to the Fishing Operation Department of the same

The expenses of administration and control of the project will, as a rule, be covered by the income from the sales of prawns and fish effectuated by TAFICO.

The signing body of Tanzania for contracting in relation to the implementation of the project is TAFICO.

6-2 Staff training and assignment

(1) Prawn trawler

At present, TAFICO operates the MAMATAFICO. In this project, the job changing rate of the crew members is quite low. It helped to raise their skill level. As the on-board work is rather the repeating of simple techniques, the skill level of ordinary crew members can be gradually raised when they work continuously. The more important point in training is that for officers; Chief fisherman, navigation officer, and boatswain for the work on the deck; Chief engineer and chief operator for the work of machine.

Since there is no suitable training institution for seamen in Tanzania, there is no way for training but by engaging in the work on-board. As the experts, the captain and the chief engineer, give an on-board training to the Tanzanian counterparts, the training is assured. It is recommendable that the crew members who have the work experience on the MAMATAFICO would embark the new boat.

Comparative list of personnel assignment on prawn trawlers

MAMATAFICO		New boat	
Trainer captain (JICA expert)	x1	Trainer captain	x1
Captain	x1	Captain	x1
Trainer chief engineer (JICA expert)	x1	Trainer chief engineer	x1
Chief engineer	x1	Chief engineer	x1
First mate (Japanese)	x1	Boatswain	x1
Other crew members	x15	Chief operator	x1
		Deck hands	x7
		Fireman	x3
		Steward	x1
Total	20		17

(2) Cold storage

In TAFICO, the cold storages granted from Japan operate. There are Tanzanian freezing mechanics being engaged in those storages. Since the operation and maintenance techniques of the freezer to be furnished this time are basically the same as those of the above mentioned ones, it is recommended to assign the experienced mechanics to the new cold storage so that they give an on-the-job training to the newly recruited employees.

These employees shall be assigned exclusively to the operation of the cold storage in three shifts for the continuous operation.

6-3. GENERAL SCHEDULE

Item	Month	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Japanese Government		EN Authorization	○					Authorization									
Tanzanian Government		Authorization	○														
TAFICO		Consultant contract	○	Approval	○			Contract									
Consultant		Execution design	○	○	○		Tendering	○									
Contractor							Tendering	○									
Construction of double rigger								○	Design	*	Construction	Construction	Delivery	Delivery	Cruising		
Construction of jetty								○	Design	*	Construction	Construction	Transport	Transport	Site work	Site work	Delivery
Construction of cold storage								○	Design	*	Construction	Construction	Transport	Transport	Site work	Trial run & Site work	Delivery
Construction of fuel tank								○	Design	*	Construction	Construction	Transport	Transport	Site work	Site work	Delivery
Acquisition of materials and equipment								○	Design	*	Acquisition	Acquisition			Transport	Transport	Delivery

6-4 Maintenance and administration plan

6-4-1 Double rigger type prawn trawler

(1) Annual operation plan

The annual operation plan of the new boat will be as follows.
The maintenance and administration costs are calculated according to this plan.

Annual operation plan

Days	
Fishing operation days	266
Navigating days	20
Lay days (including dock days)	79
Total	365
<u>Catch</u>	
Prawn (Kg)	127,170
Fish (Kg)	93,960
Total	221,130

(2) Maintenance and administration costs

① Prawn resource royalty

Income from prawn exports 10,809,000T.Shs x 7.5% = 811,000T.Shs

② Material costs

A. Fuel cost

Item		Standard consumption (Kl) per month	Total
Operating days	266	1.6 kl	425.6 kl
Navigating days	20	2.1 kl	42.0 kl
Lay days	54	0.2 kl	10.8 kl
Dock days	25		
Total	365		478.4 kl

Present fuel price 7,500 T.Shs/kl

7,500 T.Shs x 478.4 kl = 3,588,000 T.Shs

Lubricating oil (1% of fuel consumption)

478.4 kl x 0.01 = 4,784 l. consumption per year

7.5 T.Shs x 4,784 l x 3.5 = 125,580 T.Shs

(L.O. prices are three times of F.O prices)

Fuel cost Total 3,713,580 T.Shs

B. Packing material cost

This material costs are for the prawn production. As the fish is frozen in bulk and sold as it is, no cost is necessary.

Inner carton 1 Kg 12 US\$

) 30 US\$ = 5.1 T.Shs/kg

Master carton 1 Kg 18 US\$

127.170 kg (Annual prawn production) x 5.1 T.Shs = 648,567 T.Shs

C. Labor cost

(a) Fixed wages Tanzanians 17

2,000 T.Shs/Month x 12 month = 408,000 T.Shs

Legislated insurance (11.5%) 46,920

Welfare cost 40,000

Total 494,920

(b) Expenses for food

35,000 T.Shs/ Month x 12 month = 420,000T.Shs

(c) Incentive pay

The present incentive pay system for percentage pay of TAFICO is based on the minimum planned catch per an operation day of fish and prawns, 300kg for each, and for catches exceeding this rate, 15 T.Shs for 1kg prawns and 3 T.Shs for 1kg fish are paid as total incentives, which is distributed on the basis of job category rate.

When that is counted on the basis of the catch plan:

Sum of incentive pay for prawns 692,550 T.Shs

Sum of incentive pay for fish 38,880 T.Shs

Total 731,430 T.Shs

D. Costs for repair, insurance and storing

(a) Repairing cost

The repairing cost is calculated according to the table below

(Unit: 1,000 T.Shs)

Aging years	1	2	3	4	5	6	7	8
Repairing fee	350	455	385	700	420	525	455	770
Parts cost				350	210	263	228	385
Total	350	455	385	1,050	630	788	683	1,155

These figures are obtained by referring to the results of the double rigger type trawler, which is actually engaged in the operation for prawns.

(b) Insurance

Insurance for boat body (1.5% of value to be insured)
 $17,346,900 \text{ T.Shs} \times 0.015 = 260,000 \text{ T.Shs}$

Insurance for products (5% of sales of products)
 $= 705,000 \text{ T.Shs}$

Total = 965,000 T.Shs

(c) Storing charges (Products will be stored in the cold storage of TAFICO.)

These are the charges incidental to the products unloading from the boat entrance to the port and the storing in the cold storage to be furnished in the present project.

The charges to be paid were calculated from the actual results of costs of the existing cold storage of TAFICO.

Frozen fish (bulk)

2 T.Shs/kg x 1 month (Storaging period) x 94t = 188,000T.Shs

Prawn (carton)

2 T.Shs/kg x 2 month (Storaging period) x127t = 508,000T.Shs

Total = 696,000T.Shs

E. Section cost

15% of costs of production

F. Administration cost of TAFICO head office

18% of costs of production

G. Depreciation expense

(a) Boat body (unit price of boat) x 8 years (0.250) =
17.607,000 T.shs x 0.250 = 4,402,000 T.shs

(b) Fishing net, fishing gear

The annual costs of the use of trawling net, other board, wire and rope will be estimated on the basis of the budget of the MAMATAFIÇO, 150,000 T.Shs. However, in case of a new boat, the operation rate is higher than that of the MAMATAFIÇO. Taking this into consideration, the costs are estimated as follows:

627.6 T.Shs (Exhaustion per an operation day)x 270 days = 169,200 T.Shs

H. Maintenance and administration cost

(unit 1,000 T.Shs)

Item	1st year	2nd year	3rd year	4th year	5th year	6th year	7th year	8th year
Production costs								
Royalty	811	811	811	811	811	811	811	811
Material costs								
Fuel oil	3,714	3,714	3,714	3,714	3,714	3,714	3,714	3,714
Packing material	649	649	649	649	649	649	649	649
Sub total	4,363	4,363	4,363	4,363	4,363	4,363	4,363	4,363
Labor cost								
Fixed wages	495	495	495	495	495	495	495	495
Food	420	420	420	420	420	420	420	420
Incentive	731	731	731	731	731	731	731	731
Sub total	1,646	1,646	1,646	1,646	1,646	1,646	1,646	1,646
Expense								
Repairing	350	455	385	1,050	630	788	683	1,155
Insurance	965	965	965	965	879	879	879	879
Storage	696	696	696	696	696	696	696	696
Sub total	2,011	2,116	2,046	2,711	2,205	2,363	2,258	2,730

Production cost total	8,831	8,936	8,866	9,531	9,025	9,183	9,078	9,550
Section cost	1,325	1,340	1,330	1,330	1,330	1,330	1,330	1,330
Administration expenses	1,590	1,608	1,596	1,596	1,596	1,596	1,596	1,596
Maintenance and administration cost Total	11,746	11,884	11,792	12,457	11,951	12,109	12,004	12,476

Depreciation								
Boat	4,402	3,301	2,476	1,857	1,393	1,045	783	588
Fishing gears	169	169	169	169	169	169	169	169
Sub total	4,571	3,470	2,645	2,026	1,562	1,214	952	757
Total cost	16,317	15,354	14,437	14,483	13,513	13,323	12,956	13,233

6-4-2 Cold storage

The operation costs of the cold storage are to be, basically, estimated for storing the frozen products from both MAMATAFICO and the new boat.

If there are some opportunities to store frozen products of other companies after the start of operation, they will form a new source of income.

(1) Maintenance and administration cost

① Expenses for emergency electric generator

Fuel oil.....	1,140L/year x 7.5T.Shs	= 8,550 T.Shs
Lubricating oil....	.83L/year x 22.5T.Shs	= 1,887 T.Shs
Total		10,437 T.Shs

② Electric power

Amount of electric power used for freezer

472 KWH/day x 365 days	= 172,280 KWH
172,280 KWH x 1 T.Shs	= 172,280 T.Shs

③ Labor cost of freezer operation staff

2,000 T.Shs/month x 3 persons	= 6,000 T.Shs
	x 12 month = 72,000

Welfare cost		16,000
Total		88,000 T.Shs

④ Repairing cost

From the second year, the following maintenance costs and parts costs will be reckoned.

(Unit: 1,000 T.Shs)

1st year	2nd year	3rd year	4th year	5th year	6th year	7th year	8th year
0	10	30	50	53	56	59	100

⑤ Insurance premium (1.5% of value to be insured)

$$11,102,000 \text{ T.Shs} \times 0.015 = 167,000 \text{ T.Shs}$$

⑥ Oil for freezer.....365 1/year x 26 T.Shs = 9,490

(2) Maintenance and administration cost

Unit 1,000 T.shs

Item	1stY	2ndY	3rdY	4thY	5thY	6thY	7thY	8thY
Production cost								
Material cost								
Fuel	10	10	10	10	10	10	10	10
Electricity	172	172	172	172	172	172	172	172
Subtotal	182	182	182	182	182	182	182	182
Labor cost								
Fixed wage	88	88	88	88	88	88	88	88
Expenses								
Repairing	-	10	30	50	53	56	59	100
Insurance	167	158	150	143	136	129	122	116
Others	10	10	10	10	10	10	10	10
Subtotal	177	178	190	203	199	195	191	226
Production cost total	447	448	460	473	469	465	461	496
Section cost	67	67	69	69	69	69	69	69
Administration cost	80	81	83	83	83	83	83	83
Total maintenance and administration cost	594	596	612	625	621	617	613	648

Depreciation	1028	916	816	727	648	577	514	458
Total cost	1622	1512	1428	1352	1269	1194	1127	1106

- Note 1 Department cost : 15% of the costs of production
 2 TAFICO's administration cost : 18% of the costs of production
 3 Depreciation expenses are diminishing rate of 20 years.

6-4-3 Jetty

(1) Maintenance and administration

① The jetty requires almost no maintenance on the ordinary use. In the event that the coating of movable bridge is separated by any reason, it is repairable by ordinary work. Also it requires no periodical repair.

② Water supply pump

As there will be installed two pumps, one for spare, when the operating condition is bad, the pump to operate will be changed. An overhaul every year is required, unless there will be no particular trouble.

③ Water tank in jetty

Water quality shall always be controlled by regular checking. Inner cleaning after water drain is required two time a year.

④ Illuminating facilities

Lamps shall be replaced when consumed.

(2) Maintenance and administration costs

26,000 T.Shs/year will be needed for repair of the coating of movable bridge and parts change of water supply pump, piping and lamps and for water tank cleaning.

6-4-4 Fuel oil tank

(1) Maintenance personnel

The maintenance and administration is handled by person assigned to the TAFICO's cold storage and ice plant on 24 hours personnel assignment.

(2) Maintenance

Maintenance plan is as follows:

- | | |
|--------------------|---|
| Daily inspection | <ol style="list-style-type: none">1. Measurement of capacity of fuel oil2. Checking of fuel oil piping3. External checking of fuel oil tank4. Amount of fuel oil consumption |
| Weekly inspection | <ol style="list-style-type: none">1. Fuel oil tank draining |
| Monthly inspection | <ol style="list-style-type: none">1. Fuel oil tank draining2. Cleaning of fuel oil strainer |
| Annual inspection | <ol style="list-style-type: none">1. Repairing of rusted parts of piping and fuel oil tank |

(3) Maintenance and administration costs

Maintenance and administration costs are estimated as follows:

① Painting

One chipping on rusted part and overall outside painting are required every 4 years.

Painting	47,000 T.SH
Chipping	10,000 T.SH
Scaffolding	14,000 T.SH

Total	71,000 T.SH
-------	-------------

② Pipe repairing

Incidental costs are already calculated in the maintenance and administration costs of jetty

6-4-5. Total maintenance and administration cost

Table 10 Total maintenance and administration cost
(Unit: 1000 T. shs)

Item	Total	New boat	Cold storage	Jetty	Fuel oil tank	Materials for FRP boat
Production cost						
Prawn resource royalty	811	811	-	-	-	-
Material cost						
Fuel oil	3,734	3,714	20	-	-	-
Electricity	172	-	172	-	-	-
Packing material	649	649	-	-	-	-
Subtotal	4,555	4,363	192	-	-	-
Labor expenses						
Fixed wages	583	495	88	-	-	-
Food	420	420	-	-	-	-
Incentive	731	731	-	-	-	-
Subtotal	1,734	1,646	88	-	-	-
Expenses						
Repairing	376	350	-	26	-	-
Insurance	1,132	965	167	-	-	-
Storage	696	696	-	-	-	-
Subtotal	2,204	2,011	167	26	-	-
Total production cost	9,304	8,831	447	26	-	-
Section cost	1,392	1,325	67	-	-	-
Administration cost	1,670	1,590	80	-	-	-
Total administration and maintenance cost	12,366	11,746	594	26	-	-

CHAPTER 7 EVALUATION OF BUSINESS

CHAPTER 7 EVALUATION OF BUSINESS

This chapter is to evaluate and examine the effects of the present aid to the business of TAFICO and the Tanzanian economy.

7-1 Examination on TAFICO's management

First, it is necessary to examine whether or not the present project can be performed without exerting the financial pressure upon TAFICO.

The preconditions for the execution of this project are:

The catch planned by this project shall be assured. The quality and maintenance controls shall thoroughly be made. TAFICO will make every effort to improve its management.

The following analysis was made basing on the figures given in the financial statements of TAFICO and by using the accounting method actually used in TAFICO

7-1-1 Prawn trawler

(1) Sales

The new boat will operate mainly for prawns. Prawn products are generally valued depending on their kind and size. However, the selling unit price of products of the MAMATAFICO is here used. The same price is used for frozen fish.

Table 11 Calculation of sales

Kind of fish	Planned catch (kg)	Average price (T. Shs)	Sales (T. Shs)
Prawn	127,170	85/kg	10,809,450
Fish	93,960	35/kg	3,288,600
Total	221,130		14,098,050

(2) Prospect of profit and loss

The estimated profit and loss of the new boat is as follows:

Table 12 Estimated transition of profit and loss of new boat
(Unit:1000 T. shs.)

Item	1st Y	2nd Y	3rd Y	4th Y	5th Y	6th Y	7th Y	8th Y
Sales	14,100	14,100	14,100	14,100	14,100	14,100	14,100	14,100
Production cost	8,831	8,936	8,866	9,531	9,025	9,183	9,078	9,550
Section cost	1,325	1,340	1,330	1,330	1,330	1,330	1,330	1,330
Administration cost	1,590	1,608	1,596	1,596	1,596	1,596	1,596	1,596
P/L before depreciation	2,354	2,216	2,308	1,643	2,149	1,991	2,096	1,624

As indicated above, the expense will never exceed the income.

Although the new boat requires no depreciation because it is granted, the following profit and loss after depreciation is given for information.

	1st Y	2nd Y	3rd Y	4th Y	5th Y	6th Y	7th Y	8th Y
Depreciation cost	4571	3470	2645	2026	1562	1214	952	757
Profit and loss after depreciation	-2217	-1254	-337	-383	587	777	1144	867

7-1-2 Cold storage

(1) Sales

The sales of cold storage consists of a revenue from storing frozen products of MAMATAFICO and the new boat.

(2) The estimated profit and loss of the cold storage is as follows:

Table 13 Transition of profit and loss of cold storage

Unit: 1000 T. shs

Item	1st Y	2nd Y	3rd Y	4th Y	5th Y	6th Y	7th Y	8th Y
Sales	1,382	1,382	1,382	1,382	1,382	1,382	1,382	1,382
Production cost	447	448	460	473	469	465	461	496
Section cost	67	67	69	69	69	69	69	69
Administration cost	80	81	83	83	83	83	83	83
P/L before depreciation	788	786	770	757	761	765	769	734

As indicated above, the expense will never exceed the income.

Although the cold storage requires no depreciation because it is granted, the following profit and loss after depreciation may be teckoned only for information.

Item	1st Y	2nd Y	3rd Y	4th Y	5th Y	6th Y	7th Y	8th Y
Depreciation	1,028	916	816	727	648	577	514	458
Profit and loss after depreciation	-240	-130	-46	30	113	188	255	276

In this project, the business evaluation is made by considering only the storing of products of TAFICO's boats. If in the future the products of other companies are stored, the business will be improved.

7-1-3 Jetty, tank, etc.

(1) Jetty, tank

The jetty and the tank are a part of the consolidation project of the TAFICO Kigamboni fishing base. These facilities require almost no maintenance cost. Therefore, these facilities will bring about only the merits to assure a smooth operation of boats through completion of the base.

(2) Materials, equipments and tools

The present supply of materials, equipments and tools is for the rehabilitation of FRP boats, which have been granted from Japan and actually moored due to the lack of parts and tools. The realization of this aid will increase the TAFICO's boats operation and activate the existing projects of Tanzania.

7-1-4 Cash flow

The cash flow table was made from the profit and loss table of business. (Annex 1-7) This table shows the transition of the revenue from sale and the expenditures for the business, such as production costs, section cost and administration cost.

The business is based on two prawn trawlers, small fishing boats, cold storages and purchasing. This table shows that some cash remains at every year end. It means that no loan will be necessary for operation and self-management will be possible.

Table 14 Transition of cash flow

Unit: 1000 T. shs

Item	84/85	85/86	86/87	87/88
(income)				
Sales	30,105	38,496	46,682	46,682
(Expense)				
Production cost	18,475	23,781	29,168	29,261
Section cost	4,619	4,526	4,374	4,389
Administration cost	5,542	5,620	5,250	5,267
Total expenses	28,636	33,927	38,792	38,917
Net cash	1,469	4,569	7,890	7,765
Accumulated cash	1,469	6,038	13,928	21,693

7-1-5 TAFICO's foreign currency accounts

The foreign currency that can be obtained by the exportation of prawns produced by the TAFICO and the new prawn trawler was calculated. In addition, the foreign currency to which the TAFICO has access through the special authorization by the Tanzanian government in the fiscal year 1983/84 was counted.

Table 15 TAFICO's total revenue in foreign currency

The total revenue in foreign currency by the exportation of prawns produced by both boats is the following:

(Unit: 1000 T. shs)

Name of boat	84/85	85/86	86/87	87/88
MAMATAFICO	570	600	620	620
New boat	-	320	635	635
Total	570	920	1,255	1,255

Among the total revenue of TAFICO in foreign currency, that TAFICO has access to is as follows:

Table 16 Foreign currency available for TAFICO

(Unit: 1000 T. shs)

Item	83/84	84/85	85/86	86/87	87/88
Utilization %		10%	15%	15%	15%
US\$	50,000	57,000	138,000	188,250	188,250
1000 T. shs	850	969	2,346	3,200	3,200
Total					
1000 T. shs	850	1,819	4,165	7,365	10,565

(Note) Exchange rate is 17 T.shs to 1 US\$.

7-2 Assessment of Tanzania's economical aspects

In case of the execution of the present grant aid the study of the effect on Tanzania's economy and society is made here.

(1) Acquisition of foreign currency by means of export of prawn products

As described in table 15, participation of the new boat in operation will double the TAFICO's foreign currency revenue, amounting to 1,255,000 US\$ (86/87).

(2) Supply of fish to the people as protein

As described in table 6 and 11, it will be doubled amounting to approx. 181 tons per year.

(3) Fishery promotion

At present, only TAFICO is performing the industrial fishery. The improvement in TAFICO's business record will help promoting the industrial fishery of this country. As a result, if the Tanzania's government, or a corporation, or an individual sets about the industrial fishery, the increase of the employment opportunity looks very promising.

As stated above, the execution of the present grant aid and efforts to activate further the TAFICO's existing fishing boats and other production sections will stabilize the TAFICO's business operation as well as contribute greatly to the development and promotion of Tanzania's marine fishery.

CHAPTER 8 CONCLUSION AND SUGGESTION

CHAPTER 8 CONCLUSION AND SUGGESTION

(1) Conclusion

TAFICO's prawn trawl fishery project was planned on the basis of the increase of the fish production and the expansion of fish consumption which are the policy of the Tanzanian fishery promotion project, and the increase of foreign currency by means of export promotion. However, due to the insufficient supply of the spare parts caused by the lack of foreign currency in Tanzania, the trawl fishing boats constructed with the country's own capital and the cooperation from foreign countries are not in full operation. Among these boats the MAMATAFICO constructed in 1982 with the grant aid from Japanese government, has shown an exceptionally good record, being the essential support in the TAFICO's business. Under such circumstances in line with the TAFICO's plan, the basic design survey was conducted on a prawn trawl boat as well as a jetty, a cold storage, tanks, and materials and equipments in the Kigamboni base.

In the beginning, Tanzania requested two double rigger prawn trawl fishing boats, As a result of the basic survey, from view point of prawn resource two new boats can operate without damaging M.S.Y. However, there are some problems about servicing, maintenance and personnel in case of two new boats (three boats including the MAMATAFICO). Consequently, one boat was provided this time.

As a result of the field survey, the prawn resource along the Tanzanian coast was estimated at approx. 1,800 tons, and the M.S.Y. approx. 730 tons. Since the annual catch of the MAMATAFICO is 168 tons, there is no problem regarding the resource with the engagement of a new trawl boat in operation. The crew members of the MAMATAFICO stick to the job and the operation is going smoothly under the guidance of the experts sent from Japan. On the other hand, 10 tons/day ice making machine constructed with the grant aid from Japanese government is operated well

by the Tanzanian engineers. Taking all these points into consideration there will be seemingly no personnel and technical problems on the TAFICO's operation of the presently requested prawn trawl fishing boat and cold storage. In the present survey the business analysis of TAFICO, the executing department of the project, was performed. With the engagement of the MAMATAFICO in the operation in the fiscal 1983/84, for the first time the profit of 77,000 T.Shs. (the loss of 5,801,000 T.Shs. in the profit and loss after the depreciation) was reckoned up as current profit before reckoning the TAFICO's administration expenses. With the engagement of the new boat in the operation the profit of 7,890,000 T.Shs. will be expected in the profit and loss before the depreciation of the fiscal 1986/87. For this reason, TAFICO will be financially stable.

TAFICO's production means were weak compared to the non-production means in the past. TAFICO's business conditions have been improving since the MAMATAFICO started the operation in 1982 and the separation of the boatbuilding section, the most unprofitable, from TAFICO was determined. There will be no problem in administration and practice providing a prawn trawler is added, the Kigamboni fishing base belonging to TAFICO has increased, and 15% of the total export of prawn produced by TAFICO is transferred to the TAFICO's foreign currency accounts so that the spare parts, etc. are purchased directly.

The prawns are international commodities. This project will increase the foreign currency revenue by doubling the products and exports of prawn and will decrease the number of moored boats due to the insufficient spare parts, which is the biggest problem of TAFICO. More fish caught along with prawns will increase the supply of animal protein to the Tanzanian people. As described above, it is obvious that this project contributes greatly not only to TAFICO but to Tanzania's fishery. The grant aid from the Japanese government is extremely significant. Therefore, it is to be desired that this project should be carried out as early as possible.

(2) Suggestion

In order to execute this plan with efficiency, Japan requests the following considerations from the Tanzania government and TAFICO.

- 1) At present only the MAMATAFICO is operating for prawns.

For this reason, there has been no operation record in the two best prawn fishing grounds on the coast of Tanzania at the same time, northern fishing ground of Bagamoyo and southern fishing ground of Rufiji.

Since the operation of the two boats in the same period will tell which of these two fishing grounds is better it is easy to heighten the operational efficiency. Therefore, it is advisable that TAFICO should establish the system which heightens the operational efficiency of the two boats by keeping touch with them to control them, grasp the fishing conditions and direct the operation.

- 2) It is necessary to control the fishing boats, a cold storage, an ice machine, a jetty, tanks belonging to TAFICO and to establish the total administration system including repair, parts control, shipment of the products, sales as well as to train the personnel for management in its early stages.

- 3) It is quite understandable that TAFICO wants to have its own slipway and workshop, but there are problems in practice in terms of cost and techniques. It is more practical to request Port Authority in Dar es Salaam or a naval dockyard to make big repairs and to execute small repairs by TAFICO itself.

- 4) It is a big problem that 8 boats out of 16 are now on anchor. In order to stabilize the TAFICO's operation the consolidation of production means is urgently needed. It is necessary to secure the parts and equipments through the repartition of foreign currency and budgetary measure in order to return those ships to the operation.

- 5) It is desirable that the quick steps should be taken by preparing the inventory of fixed assets and articles in demand as well as by controlling the amount of consumption and the total stock of materials, equipments, spare parts, etc.

- 6) It is essential to study measures and carry them out to conduce water to the Kigamboni fishing base, lay oil pipe lines as well as to transport the products, materials and equipments in case of the suspension of ferryboat services.

DOCUMENTS ANNEXES

Attached list 1-1

In response to the request made by the Government of the United Republic of Tanzania for the fishery development project (hereinafter referred to as "the Project"), the Government of Japan has sent through the Japan International Cooperation Agency (hereinafter referred to as "JICA"), a Team headed by Mr. Noriharu Nakamura to conduct a basic design study for 21 days from August 15, 1984. The team carried out a field survey, had a series of discussions and exchanged views with the authorities concerned.

As the result of the study and discussions, both parties have agreed to recommend to their Governments to examine the results of the survey attached hereto towards the realisation of the Project.



MORIHARU NAKAMURA

TEAM LEADER

THE JAPANESE SURVEY TEAM



R. A. MROPE

GENERAL MANAGER

TANZANIA FISHERIES CORPORATION

MINUTES

1. The Objectives of the Project are to supply animal protein for people, to obtain foreign currencies and to increase opportunities of employment through the exploitation of shrimp and fish resources.
2. The Project site is RAS MKNABI which is allocated to the Tanzania Fisheries Corporation (hereinafter referred to as "TAFICO") for the fishing base by the Government of the United Republic of Tanzania, as shown in Annex I.
3. The Ministry of Lands, Natural Resources and Tourism is responsible for the administration of the Project, and the TAFICO is the executing agency of the Project.
4. The Japanese Survey Team will convey to the Government of Japan the desire of the Government of The United Republic of Tanzania that the former takes necessary measures to cooperate in implementing the Project and the latter with the items listed in Annex II within the scope of Japanese economic cooperation in grant aid assistance.
5. The Government of the United Republic of Tanzania will take the necessary measures listed in Annex III on condition that the grant aid assistance by the Government of Japan is extended to the Project.
6. Both sides confirmed that the Japanese Survey Team explained the Japanese Grant Aid Programme and Tanzanian side understood it.

ndc.

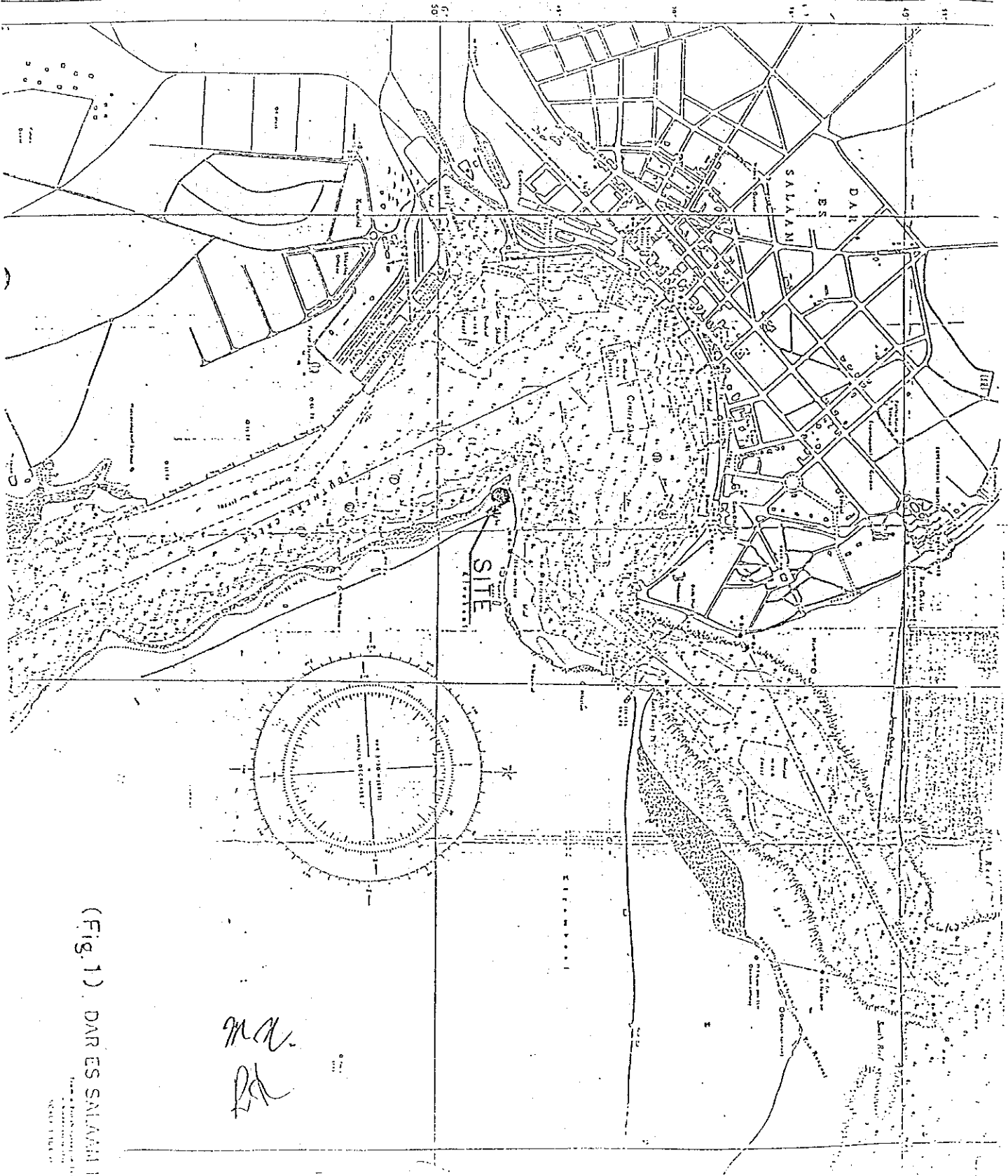
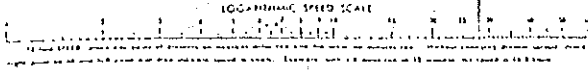
RA

ANNEX I

Location of the Site (Fig 1.)

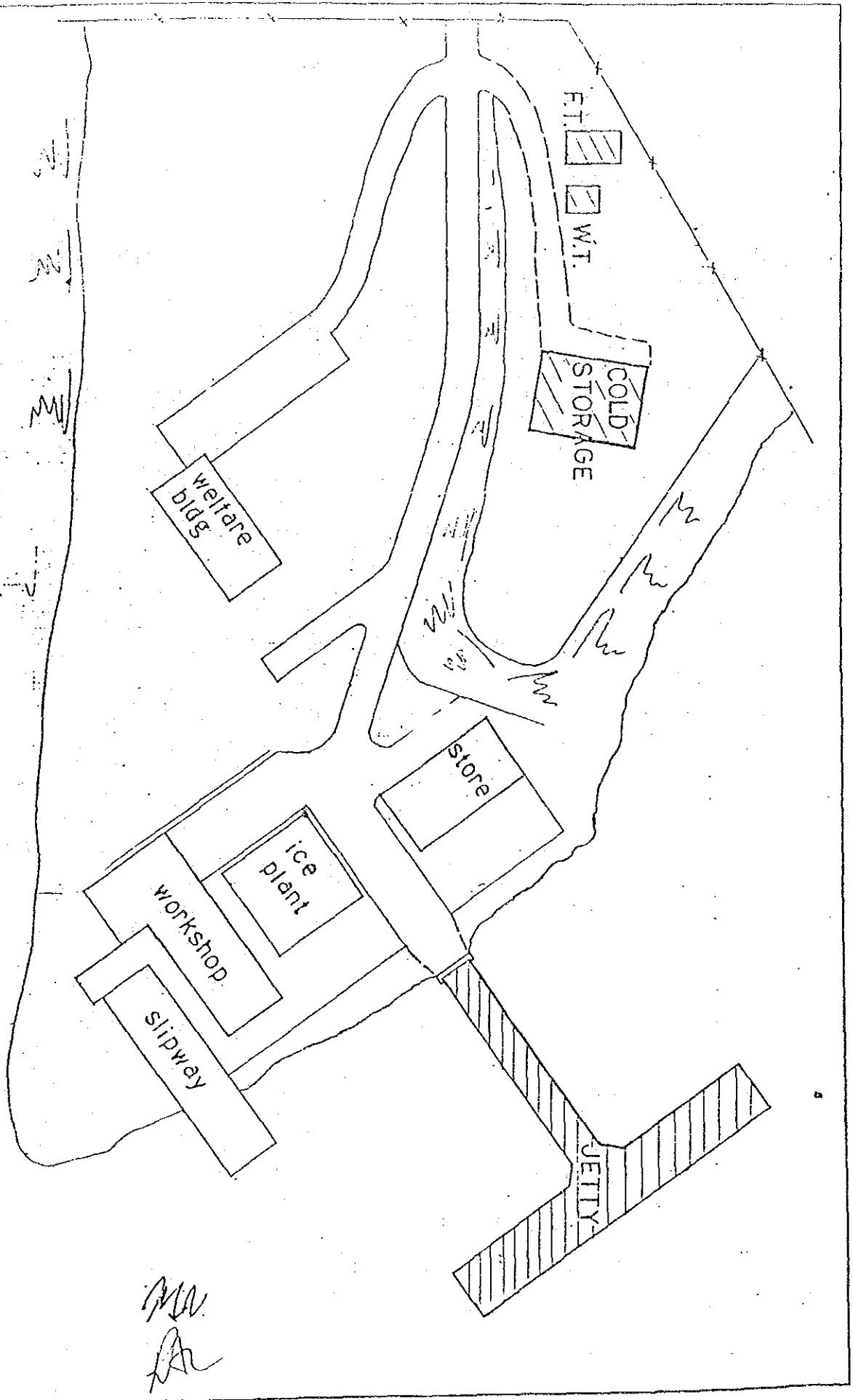
Provisional Layout Plan of New Facilities (Fig 2.)

M.
R



M.A.
P.A.

(Fig. 1) DAR ES SALAAM III



REMARKS : ZEBRA ZONE TO BE BORN BY THE GOVERNMENT OF JAPAN

S 1:1000

(Fig.2) PROVISIONAL LAYOUT PLAN OF NEW FACILITIES

MA
RA

ANNEX II

Items are requested in order of priority by the Government of the United Republic of Tanzania and the cost of which will be borne by the Government of Japan within the limitation of the budget of the Government of Japan and the scheme of Japanese Grant Aid Assistance.

1. Double rigged trawler,
2. Jetty with fuel and freshwater storage tanks,
3. Cold storage with emergency generator,
4. Spare parts for urgent repairs for existing boats granted by the Government of Japan,
5. Materials for Payaos.

MA
KA

ANNEX III

Items to be undertaken by the Government of the United Republic of Tanzania are as follows:

1. To provide data and information necessary for the design and survey of the Project,
2. To secure a suitable land for the construction of a Jetty and a cold storage,
3. To clear and level the Project site prior to construction,
4. To provide the necessary paved roads to access the cold storage and the abutment of the Jetty,
5. To ensure prompt unloading and customs clearance for the Project in the United Republic of Tanzania,
6. To exempt the Japanese Nationals concerned from custom duties, internal taxes and the supply of the products and services for the Project from fiscal levies in the United Republic of Tanzania,
7. To provide the necessary permissions, licences and other authorizations necessary for carrying out the Project,
8. To bear all expenses necessary for the execution of the Project other than those to be borne by the Japanese Grant Aid Assistance,
9. To provide necessary street lights and wiring to lead to the cold storage and Jetty,
10. To provide city water supply pipings to connect the fresh water storage tank,
11. To maintain and use the facilities, equipment and materials properly with due diligence.

/SH.

RA
RA

Attached list 1-2 Member list

Responsible for	Name	Position
General direction	Noriharu NAKAMURA	Chief Fisherboat Inspector, Fisherboat Section, Oceanic Fisheries Department, Fisheries Agency, Ministry of Agriculture, Forestry and Fisheries
Project, control	Hiroaki OKUBO	Japan International Cooperation Agency (JICA)
Fishery development project (general)	Kazuo NAKATA	Nichiro Gyogyo Kaisha, Ltd.
Hull design, freezing and cold storaging installations	Tsuyoshi KANNO	Nichiro Gyogyo Kaisha, Ltd.
Jetty	Tokio YAKUWA	Nichiro Gyogyo Kaisha, Ltd.
Management analysis	Mamoru TANAKA	Nichiro Gyogyo Kaisha, Ltd.

Appendix 1-3 SCHEDULE OF BASIC STUDY

Date	Work
Aug. 15 1984	Departure from Japan to Tanzania
18	Arrival at Dar es Salaam, Tanzania
19	Study team meeting
20	Meeting with JICA Dar es Salaam office Courtesy call to Ministry of Finance, Ministry of Lands, Natural Resources and Tourism, Fisheries Direction, and Japanese Embassy
21	<ul style="list-style-type: none"> 0 Meeting with TAFICO people on the present condition of TAFICO and the contents of the request of this time 0 Field survey of the objectives of the aids in in 1980 and 1982 0 Field survey on Kigamboni fishing base (afternoon) It is constructed by TAFICO and is the planned site of the present project
22	0 Survey on Kigamboni fishing base (topographical survey, soil survey and water depth survey)
23	<ul style="list-style-type: none"> 0 Survey on Kigamboni fishing base 0 Field survey of the MAMATAFICO 0 Business analysis of TAFICO
24	<ul style="list-style-type: none"> 0 Discussion on the contents of the request in TAFICO office 0 Field survey on Kigamboni fishing base 0 Business analysis of TAFICO
25	<ul style="list-style-type: none"> 0 Field survey on Kigamboni fishing base 0 Business analysis of TAFICO
26	0 Meeting in study team
27	<ul style="list-style-type: none"> 0 Discussion with TAFICO people 0 Business analysis of TAFICO 0 Field survey on Kigamboni fishing base
28	<ul style="list-style-type: none"> 0 Signature of MINUTES 0 Field survey on Kigamboni fishing base 0 Business analysis of TAFICO

29	O Visit to concerned offices and people for reporting the results of study and for courtesy call
30	O Government officials among team members left Dar es Salaam to Japan
31	O Members from Consultant continued the survey
Sep. 1	O 4 members from Consultant completed the survey and departed from Dar es Salaam
4	O Arrival to Japan

Office or company	Position	Name
Minsitry of Lands, Natural Resources and Turism	Minister	Mr. PAUL BOMANI
	Assistant to Vice-Minister	Mr. MATERN Y. C. LUMBANG
Ministry of Finance	Councilor	Mr. KLBUNA
	In charge of affairs with JAPAN	Mr. MBUENA
Fisheries Direction	Director	Mr. LIBABA
TAFICO	General Director	Mr. R. A. MROPE
"		Mr. T. MHANGA
"		Mr. ANDREW B.C. KILLANGO
"		Mr. NOE KIMARO
"		Mr. S. PIMA
"		Mrs. SHIJA
"		Mr. PONDE
Port Authority		CAPTAIN J.F.C. LINDSAY
Local Consultant		Mr. MOHAMED RAFIK MECHJI

Appendix 1-5 BALANCE SHEET OF TAFICO (1983/1984)

The balance sheet of TAFICO excluding the boatyard section as of June 30, 1984 is as follows:

Unit: 1000 T.Shs

Item	Total	Fishery section	Administration section
Kind of assets			
Fixed assets	85,538	65,930	19,608
Net current assets	5,734	-40,806	46,540
Total	91,272	25,124	66,148
Fixed capital			
Loans from government	161,931	73,077	88,854
Long term loans	4,500	4,500	-
Capital reserve	394	394	-
Cumulative loss	-75,553	-52,847	-22,706
Total	91,272	25,124	66,148

(Items of fixed assets)

Fishery section	Vessels accounts	26,664
	Vehicles accounts	16,317
	Provisional accounts of Kigamboni fishing base construction	14,188
	Investment for fishery company	8,761
	Total	65,930

Administration section	Provisional accounts of Pasiiani boatyard construction	11,092
	Vehicle accounts and others	8,516
Total		19,608

(Items of loans from government)

Fishing section	Aid from Finland	28,465
	Aid from U.K.	3,200
	Ist Aid from Japan	16,200
	IIInd Aid from Japan	24,045
	Pangani fish purchasing section	1,167
Total		73,077

Administration	Balance at end of June, 1981	42,938
	Kigamboni fishing base	15,000
	Pasiiani boatyard	5,000
	Fishery company	9,000
	Rehabilitation of fishing boats	6,000
	Ohter	10,916
Total		88,854

In the fiscal years 1983/1984, TAFICO promotes strongly the Pasiiani boatyard construction project which for working with steel boats as well as engages in the fishery project and boat construction job. In other way, it continued the first term construction work of the Kigamboni base which lacks jetty, slipway, fishing net house, workshop, etc.

Appendix 1-6 TRANSITION OF TAPICO'S BALANCE SHEET (1980 - 1984)

The transition of the balance sheet of the fishery section is as follows:

Unit: 1000 T.Shs

Item	1980	1981	1982	1983	1984
Kind of fund					
Fixed assets	25,737	33,412	29,516	44,035	65,930
Net current assets	-22,905	-24,312	-29,635	-23,173	-40,806
Total	2,832	9,100	-119	20,862	25,124
Fixed capital					
Loans from government	28,631	44,847	44,847	68,892	73,077
Long term loan	1,166	1,166	1,166	4,500	4,500
Capital reserve	394	394	394	394	394
Cumulative loss	-27,359	-37,307	-46,526	-52,924	-52,847
Total	2,832	9,100	-119	20,862	25,124

Attached list 1-7 Summary of TAFICO's profit and loss by department (fiscal 1984/85-87/88)

Unit : 1000T. Sh s

Item	84/85	85/86	86/87	87/88	
MAMATAFICO	12,770	13,420	13,865	13,865	Sales
Small boats	12,750	12,750	12,750	12,750	
Other business	4,585	4,585	4,585	4,585	
New boat	—	7,050	14,100	14,100	
Cold storage	—	691	1,382	1,382	
Total	30,105	38,496	46,682	46,682	
MAMATAFICO	7,373	7,945	8,503	8,572	Production cost
Small boats	7,712	7,806	7,891	7,973	
Other business	3,390	3,390	3,390	3,390	
New boat	—	4,416	8,936	8,866	
Cold storage	—	224	448	460	
Total	18,475	23,781	29,168	29,261	
MAMATAFICO	1,843	1,589	1,275	1,286	Departmental cost
Small boats	1,928	1,561	1,184	1,196	
Other business	848	679	508	508	
New boat	—	663	1,340	1,330	
Cold storage	—	34	67	69	
Total	4,619	4,526	4,374	4,389	
MAMATAFICO	2,212	1,986	1,531	1,543	Administration cost
Small boats	2,313	1,952	1,420	1,435	
Other business	1,017	847	610	610	
New boat	—	795	1,608	1,596	
Cold storage	—	40	81	83	
Total	5,542	5,620	5,250	5,267	
MAMATAFICO	1,342	1,900	2,556	2,464	Profit and loss before Dep.
Small boats	797	1,431	2,255	2,146	
Other business	▲ 670	▲ 331	77	77	
New boat	—	1,176	2,216	2,308	
Cold storage	—	393	786	770	
Total	1,469	4,589	7,890	7,765	
MAMATAFICO	1,184	1,055	942	843	Depreciation cost
Small boats	1,045	955	878	808	
Other business	2,365	1,996	1,676	1,399	
New boat	—	2,286	3,470	2,645	
Cold storage	—	514	918	816	
Total	4,594	6,806	7,882	6,511	
MAMATAFICO	158	845	1,614	1,621	Profit and loss after Dep.
Small boats	▲ 248	476	1,377	1,338	
Other business	▲ 3,035	▲ 2,327	▲ 1,599	▲ 1,322	
New boat	—	▲ 1,110	▲ 1,254	▲ 337	
Cold storage	—	▲ 121	▲ 130	▲ 46	
Total	▲ 3,125	▲ 2,237	▲ 18	1,254	

(note 1) Taking it for granted that the present new boat and cold storage will start operating in the latter half of 1985/86, their profit and loss are added up including the existent boats and other business.

(note 2) The annual repairing cost for the jetty 26,000T.shs, was not included in the above mentioned profit and loss.

Unit : 1,000T.Shs

Attached list 1-8 List of TAFICO's profit and loss (fiscal 1984/85)

Item	Total	Small fishing boats										Other business						
		H. TAFICO	TOTAL	THHAHUI	M. DELIET	K. KUCHI	TASI	SIANGARAH	CHUNGO	PANGANI	TOTAL	Fish	Shell	Ice	Others			
Sales		38t 833		140t 825	140t 825	40t 825	40t 825	40t 825	50t 825	50t 825	50t 825	50t 825	50t 825	60t 820				
Fish	20,415	3,080	12,750	3,500	3,500	1,000	1,000	1,000	1,250	1,250	1,250	1,250	1,200	1,200	1,188	2,197		
Prawn	9,690	9,690																
Total	30,105	12,770	12,750	3,500	3,500	1,000	1,000	1,000	1,250	1,250	1,250	1,250	1,200	1,188	2,197			
Purchasing	1,220													620				
Royalty	727	727																
Total	1,947	727												620				
Fuel	6,803	3,467	3,150	882	894	189	189	189	332	332	332	332	186	119	67			
Ice water	1,870	0	1,228	337	337	96	96	96	120	120	120	120	644	32		612		
Material	761	581											180		80	100		
Total	9,434	4,048	4,378	1,219	1,231	285	285	285	452	452	452	452	1,010	151	147	712		
Fixed wage	2,080	437	865	196	201	83	83	83	98	98	98	98	778	77	254	447		
Food	744	420	324	67	67	38	38	38	38	38	38	38						
Incentive	1,408	680	705	215	158	66	66	66	67	67	67	67	17	17				
Total	4,232	1,543	1,894	478	426	187	187	195	203	188	217	188	795	94	254	447		
Repairing	1,456	348	803	207	371	42	42	42	47	47	47	47	305	30		275		
Insurance	1,406	707	639	175	175	50	50	50	63	63	63	63	60	60				
Storaging																		
Total	2,862	1,053	1,442	382	540	92	92	92	110	110	110	110	365	90		275		
T. production cost	18,475	7,373	7,712	2,079	2,203	504	504	572	765	750	779	750	3,390	935	1,021	1,434		
Gross profit	11,630	5,397	5,038	1,421	1,297	430	430	428	485	500	471	471	1,195	265	167	763		
Departmental cost	4,619	1,843	1,928	520	551	141	141	143	191	188	194	188	848	234	259	359		
Administration cost	5,542	2,212	2,313	624	661	169	169	172	229	225	233	225	1,017	281	306	430		
P/L before Dep.	1,469	1,342	797	277	85	126	113	113	65	87	44	44	▲370	▲250	▲394	▲26		
Depreciation	1,754	1,034	720	105	301	40	40	40	78	78	78	78						
Fishing net and gear	475	150	325	100	100	25	25	25	25	25	25	25						
Others	2,365																	
Total	4,594	1,184	1,045	205	401	65	65	65	103	103	103	103	2,365			349	2,016	
P/L after Dep.	▲ 3,125	158	▲ 248	72	▲ 316	61	48	48	▲ 38	▲ 10	▲ 59	▲ 303	▲ 250	▲ 394	▲ 375	▲ 2,016		

(note 1)=Prawn 114 tons, unit price 85,000T.Shs/ton

Attached list 1-9 Estimate of TAFICO's profit and loss (fiscal 1985/86) Unit : 1,000T.Shs

Item	M. TAFICO		Small fishing boats						Other business					
	Total	TUMAINI	M. DRELEK	K. KUCHI	TASI	SIHANGAR	NICHUNGU	PANGANI	TOTAL	Fish	Shell	Ice	Others	
Sales	Fish	92t @35	140t @25	40t @25	40t @25	40t @25	50t @25	50t @25	50t @25	60t @20				
	Prawn	3,220	3,500	3,500	1,000	1,000	1,250	1,250	1,250	1,200	1,188	2,197		
Proportional cost	Total	10,200	12,750							4,585				
	Purchasing	30,750	3,500	3,500	1,000	1,000	1,250	1,250	1,250	4,585	1,200	1,188	2,197	
Material cost	Royalty	705								1,220	600	620		
	Total	1,985								1,220	600	620		
Labor cost	Fuel	6,872	882	894	189	189	332	332	332	186	119	67		
	Ice water	1,870	337	337	96	96	120	120	120	644	32	512		
Expenses	Material	792	612							186	80	100		
	Total	9,534	4,148	1,231	285	285	452	452	452	1,010	151	147	712	
I. production cost	Fixed wage	2,095	437	880	200	200	100	100	100	778	77	254	447	
	Food	744	420	324	67	67	38	38	38					
Departmental cost	Incentive	1,438	718	703	213	158	64	64	68	17	17			
	Total	4,277	1,575	1,907	480	425	192	192	206	795	94	254	447	
Administration cost	Repairing	1,607	418	884	224	407	47	47	53	305	30	275		
	Insurance	1,406	707	639	179	175	50	50	63	60	60			
P/L before Dep.	Storasing	332												
	Total	3,345	1,457	1,523	399	582	97	97	116	365	90	275		
Depreciation cost	Gross profit	9,141	7,949	7,806	2,098	2,238	574	574	774	3,390	935	1,021	1,434	
	Departmental cost	11,614	5,475	4,944	1,402	1,262	426	426	476	1,195	265	167	763	
P/L after Dep.	Administration cost	3,829	1,589	1,561	419	447	115	115	155	679	187	205	287	
	Total	4,765	1,986	1,952	523	559	144	144	194	847	234	255	358	
Others	P/L before Dep.	3,000	1,900	1,431	460	256	167	167	127	▲331	▲156	▲293	118	
	Fishing boat	1,535	905	630	92	264	35	35	68					
Total	Fishing net and gear	475	150	325	100	100	25	25	25					
	Others	1,900												
P/L after Dep.	Total	4,006	1,059	955	192	364	60	60	93	1,996		307	1,689	
	P/L after Dep.	▲1,009	845	476	268	▲108	107	107	34	▲2,327	▲156	▲293	▲1,689	

(note 1) = Prawn 120 tons, unit price 85,000T.Shs/ton

Unit : 1,000T.Shs

Attached list 1-10 Estimate of TAFICO's profit and loss (fiscal 1986/87)

Item	Total	Small fishing boats										Other business			
		M. TAFICO	TUMAINI	H. DELEP	K. KOCHI	TASI	SHANGARNUCHUNU	PANGANI	TOTAL	Fish	Shell	Ice	Others		
Sales		95t @35	140t @25	140t @25	40t @25	40t @25	50t @25	50t @25	50t @25	60t @20					
	20,600	3,325	3,500	3,500	1,000	1,000	1,250	1,250	1,250	4,585	1,200	1,188	2,197		
	10,540*	10,540													
Total	31,200	13,865	3,500	3,500	1,000	1,000	1,250	1,250	4,585	1,200	1,188	2,197			
Proportional cost	1,220								1,220	600	620				
Royalty	791	791													
Total	2,011	791							1,220	600	620				
Material cost		3,569	882	894	189	189	332	332	186	119	67				
	6,905	3,569	882	894	189	189	332	332	186	119	67				
	1,870	0	337	337	96	96	120	120	644	32		612			
	812	632							180	80	100				
Total	9,587	4,201	1,219	1,231	285	285	452	452	1,010	151	147	712			
Labor cost		467	200	200	90	90	100	100	778	77	254	447			
	2,125	467	200	200	90	90	100	100	778	77	254	447			
	744	420	67	67	38	38	38	38							
	1,406	740	213	158	64	64	68	68	17	17					
Total	4,335	1,633	480	425	192	192	206	206	795	94	254	447			
Expenses		485	241	444	52	52	60	60	305	30		275			
	1,759	485	241	444	52	52	60	60	305	30		275			
	1,406	707	175	175	50	50	63	63	60	60					
	686	686													
Total	3,851	1,878	410	619	102	102	123	123	365	90		275			
T. production cost		8,503	2,115	2,275	579	579	781	781	3,390	935	1,021	1,434			
	19,784	8,503	2,115	2,275	579	579	781	781	3,390	935	1,021	1,434			
Gross profit	11,416	5,362	1,385	1,225	421	421	469	469	1,195	265	167	763			
Departmental cost		1,275	318	341	87	87	117	117	508	140	153	215			
	2,967	1,275	318	341	87	87	117	117	508	140	153	215			
Administration cost		1,531	380	409	104	104	141	141	610	168	184	258			
	3,501	1,531	380	409	104	104	141	141	610	168	184	258			
P/L before Dep.	4,888	2,556	687	475	230	230	211	211	77	▲43	▲170	290			
Depreciation cost		792	81	230	31	31	60	60							
	1,345	792	81	230	31	31	60	60							
Fishing net and gear	475	150	100	100	25	25	25	25							
Others	1,676								1,676			270	1,406		
Total	3,496	942	181	330	56	56	85	85	1,676			270	1,406		
P/L after Dep.	1,392	1,614	506	145	174	174	126	126	▲1,599	▲43	▲170	20	▲1,406		

(note 1)=Prawn 124 tons, unit price 85,000T.Shs/ton

Attached list 1-11 Estimate of TAFICO's profit and loss (fiscal 1987/88)

Unit : 1,000T.Shs

Item	Total	Small fishing boats						Other business					
		M. TAFICO	TUMALINI	H. DELER	K. KUCHI	TASI	SIANGARANUCHUNGJ PANGARAI	TOTAL	Fish	Shell	Ice	Others	
Sales		95t @35	140t @25	140t @25	40t @25	40t @25	50t @25	50t @25	50t @25	60t @20			
Fish	20,630	3,325	3,500	3,500	1,000	1,000	1,250	1,250	1,250	1,200	1,188	2,197	
Prawn	10,540	10,540											
Total	31,200	13,865	12,750	3,500	1,000	1,000	1,250	1,250	1,250	4,585	1,188	2,197	
Purchasing	1,220									1,220	600		
Royalty	791	791											
Total	2,011	791											
Fuel	6,905	3,569	3,150	882	894	189	332	332	332	186	119	67	
Ice water	1,870	0	1,220	337	337	96	120	120	120	644	32	612	
Material	812	632								180	80	100	
Total	9,587	4,201	4,370	1,219	1,231	285	452	452	452	1,010	151	147	712
Fixed wage	2,125	467	880	200	200	90	100	100	100	778	77	254	447
Food	744	420	324	67	67	38	38	38	38				
Incentive	1,463	740	700	211	157	64	68	68	68	17			
Total	4,332	1,633	1,904	478	424	192	206	206	206	795	94	254	447
Repairing	1,913	554	1,054	238	481	57	67	67	67	305	30	275	
Insurance	1,406	707	639	175	175	50	50	50	50	60			
Storaging	686	686											
Total	4,005	1,947	1,693	433	650	107	107	130	130	365	90	275	
T. production cost	19,935	8,572	7,973	2,130	2,311	584	788	788	788	3,390	935	1,434	
Gross profit	11,265	5,293	4,777	1,370	1,189	416	416	462	462	1,195	265	763	
Departmental cost	2,990	1,286	1,190	319	347	88	88	118	118	508	140	153	215
Administration cost	3,588	1,543	1,435	383	416	105	105	142	142	610	168	184	258
P/L before Dep.	4,687	2,404	2,146	668	428	223	223	202	202	77	▲43	▲170	290
Depreciation	1,170	693	483	71	202	27	27	52	52				
Fishing boat cost	475	150	325	100	100	25	25	25	25				
Fishing net and gear													
Others	1,309												
Total	3,050	843	808	171	302	52	52	77	77	1,399		238	1,161
P/L after Dep.	1,037	1,621	1,338	497	124	171	171	125	125	▲43	▲170	52	▲1,161

(note 1)=Prawn 124 ton, unit price 85,000T.Shs/ton

JICA