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COUNTRY CASE STUDY
ON THE FISHERIES INDUSTRIAL SYSTEM
OF ANGOLA

BY

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I N D E X

0.0. INTRODUCTION

ANGOLA is a country with an extension of 1.246.700 Km^2 situated in the West Coast of Africa.
The coast has an extension of approximately 1.200 Km.
Luanda is the capital, situated in the coast at 1/3 of the North Border. This third of coast represents in terms of fish catches only 15% in relation to the rest of the Country. Main catches are located in Southern Provinces - of Benguela and Namibe in which respective main ports of Benguela and Moçamedes more than 80% of the total national are landed.

All the projects developing countries realize normally in order to improve their fishing production, as
A) Organize the fishing industry
B) Rationalize loan systems to make it accessible for small fishermen
C) Aquaculture organization
D) Fishing regulation laws
E) To develope processing and marketing diagrams in accordance with the effort to be done, have not meaning at all in Angola.
The actual situation is absolutely reverse. Before November 11th. 1975, date of Angola's Independence from Portugal, the fishing industry was well organized and also quite well --- developed, mainly in seine fishing (sardine, horse-mackerel, etc) as well as the fish meal industry and shipbuilding and

2./...

shiprepairs.
With the arrival of its independence the Country was envolved in a political chaos, being the administrative big mesh a normal consequence.

This situation was maintained during two years and only in 1978 was achieved some organization in the Fishing Department. At this time some plans were published to put into working order the remaining fishing industry.

Angola had, before the Independence a population of 6 Million. Some calculations indicate that for several reasons some Two Million were included the managing class of the Country. As result of this fact the crumbling of the flourishing --- fishing industry becomes.

At the present time no census are available but some raft estimate gives an approximate population of 9 Million people. Some guess indicates that about 500.000 people per year enter into the Country from boundary Countries, mainly from Zaire. Keep in mind that the European Border's concept is not ---- accepted inland African Countries.

The anomalous situation so far exposed gives a celar idea of the negative direction the Fishing Industry is following, nevertheless the Government's effort to stop the enormous -- inercial degradation of this national industry.
It seems that from one moment to the other catches will --- increase but as later on will be explained no improveness will be achieved in the processing fishing industry by now.

1.0. DESCRIPTION OF THE PRESENT FISHERIES INDUSTRIAL SYSTEMS.

1.1. DIAGRAM I

It is to be observed that the base diagram of the fishing industrial system obtained is characteristic for all the countries in which the Government has a total control in the fisheries industry and marketing.

No tecnology of costs are used and policy prices are under Government direction.

(a) Resource:

As per data shown in table Nr. 1, we can see that in year 1973, (before Independance), the estimated sustainable catch per year was almost reached. Since that year catch has been decreasing until 1985 in which only 63.118 tons were caught. The sustainable yield per year was fixed since twenty years ago by Portuguese Fish Research ---- Bureau, in around 700.000 tons and most recently has been confirmed by U.R.S.S. Sea Investigations.

Mean for 1986 estimation improves catch due to the inminent arrival of the new 32 boats recently built in Spanish Shipyards.

In this table no data on fresh water fisheries nor aquaculture are indicated because this type of fishing do not reaches commercial level in this Country.

4./....

Additional data on foreign fleet is available and not required on Table Nr. 1. Therefore a table follows indicating deliveries in metric tons.

DELIVERIES OF FOREIGN FLEET:

	83	84	85
BENGUELA	15.752	20.810	20.000
NAMIBE	18.788	29.056	36.000
NATIONAL	96.926	121.137	131.550
TOTAL CATCH FOREIGN FLEET	312.370	355.901	357.[illegible]00

By-catch problems do not exist at the level of the national fleet because they are allways short of catch s. By the other hand, by-catches are used among crustacean trawlers of the foreign fleet to pay the compulsory toll to Angola, negociated with the fishing licenses.

(b) Extraction:
With reference to the number of vessels existing in Angola must be considered that even a number of 436 existing boats are given some of them are out of order in number of 162 but 132 are in the hands of particulars compensating the fault of the others. Being its effectiveness 58% in seine and 38% in gillnetting and they are geographically distributed 31% in the Namibe Province and 69% in Luanda, Country's Capital.

Distribution of catch capacity by boats is 78% in the hands of state owned companies, 18% in the hands of private owners and 8% belonging to cooperatives.

The distribution of fishermen emploiment is as follows:

GOVERNMENT	13.762	-	66.5%
PRIVATE OWNERS	805	-	4%
COOPERATIVES	673	-	3%
ARTISANAL AND SMALL INDUSTRIES	5.500	-	26.5%
TOTAL NATIONAL	20.740	-	100%

The totality of the foreign fleet belongs to private owners except the Cuban and Rusian Fleets, belonging both to their Governments.

Actual Angolan Fleet is inherited from Portuguese former Owners no new boats after Independence date have joined the old fleet.

Obviously the maintaining situation of that boats is quite difficult for several reasons.

(c) Structure of the Handling and Processing:

Once more the whole processing industry is stated owned, the capacity of utilization is unbelievable low, due to difficulties in obtaining raw material and spare parts.

6./...

The quality of final products is quite deficient, sanitary controls are unknown and technology -- level is obsolete. With all this statements n.. negative critics are given but realistic situation of a fishing industry in limits of collapse. Only cured fish is in a better situation because no special skill is necessary but even the supply of raffia sacs is most difficult so the capacity of utilization is diminished in accordance with the supply of sacs.

In table Nr. 3 are given data for year 1985 and 1984. As described before no data is available until 1978, but the tendency is normally downwards. Degradation of processing plants is the normative year by year.

Obviously no national factory ships are envolved in this industry. Foreign fleets have some of them.

(d) Marketing and Distribution Net Work:

In table Nr. 5 domestic catch disposition is shown. The whole production is directed to the national market. Only fish meal is totally --- exported, also crude oil.

Actually there is a Contract with the Japanese Fleet to fish tuna, for a total quantity of 20.000 tons per year of which 50% will be landed in Angola.
Japan is fishing mainly skip-jack with ten boats. Spain and France are also fishing tuna with 24 and 22 tuna boats respectively. These two --- Countries do not land tuna in Angola because their contracts do not require to do so, payments are made in foreign currency.

National market is handled by the Government's network, in the coast, people has two main means of self-furnishing fish, one is by fishing it personally, the other is in the black market.

The inner village are supplied by trucks with dryed fish when raffia sacs are obtained. No means to transport fresh or frozen fish to the interior of the Country are available. No refrigerated trucks are included in the state network.

(e) Comsumption:

Angola do not import fish but receive the by-catch of the foreign fleet as stated before. Data of quantities landed by foreign fleet are only available for years 1983-1984 and 1985. At the same time, a raft estimate of the population gives a total population of 9 million people at the end of 1985, that means that the calculation made before of 500.000 people increasing the population from the 4 million of 1975 is more or less realistic. For that reason we can take as more approximate figures the somsumption per capita refered to years 83, 84 and 85.

Angolan people is considered a fish eating people. Portuguese influence is obvious, increased with the climatic conditions of the Country, where in a few hours most fish gets dryed without any specifi problem.

8./....

(f) Industrial Inputs and Services

Very important shipyards existed in Angola before the Independence. The most important one was SOREFAME with locations in Luanda - and Lobito. Today some shipyards are being used for other more sofisticated services, in war boats, even some of them are under the tutelage of different Ministeries than the Fisheries.

In the availabe shipyards, slip ways are damaged being necessaries some repairs in order to become operative again.

No skilled personnel is available to work in the shipyards, mainly shipbrights, electricians, electronic profissionals, mecanics, etc.

Also are heavy problems for regular supplies of wood, ciment, nails, paints, oakum, etc. Also necessary to state the problem to get spare parts for engines.

Being CATERPILLAR the most largelly extended make is very difficult to get spares, for the rest of the engines is almost impossible.

Fishing gears are buyed by the Government Enterprise ENATIP outside the Country, only little help is obtained inside the Country when needed.

Main problems are the communication between Luanda and main ports of the Southern part of the Country. The guerrilla is intercepting land communications and air transport, for personnel and goods is not sufficient.

The processing sector has also similar problems.

The fish meal plant have the same problems of maintenance and at the same time a very irregular supply of raw material. When the quantity received is too low, do not justify to start the fabrication, for that reason about 1.400 Tm. of fresh fish were wasted during the first six months of 1983.

Relating the canning industries, they have also the same problems but increased with the lack of cans, obsolete instalations and no available maintenance.

In the port of Tombwa, Namibe's Province, is a canning industry called N'GOLA KILWANGE, with two brand new lines of production, one for horse-mackerel and the other for tuna.

The production capacity is of 15.000 tons of horse-mackerel and 5.000 tons of tuna per year, repsectively. The industry is stoped because there is no supply of empty cans. This situation is repeated along the whole Country.

By the other hand, handling facilities do not show real difficulties. Even though no body has taken care of this matter docks are still in good enough condition to avoid any strangle in landings. But having into account the arrival of the new fleet perhaps it would be convenient to give it some attention.

Transport is not only short in terms of quantity but also coarted by the guerrillas actions.

Depots are in quite good structural conditions but with the sanitary problems reported before.

2.0 MAIN CHARACTERISTICS OF THE PREVAILING DEVELOPMENT POLICIES ADDRESSED TO THE FIS

(a) Priorities attached by the government to the -- development of the fisheries industry:

Unfortunatelly I have no access to the information requested in Table Nr. 8 because the only place in which is available is in Luanda. So only after the scheduled trip to Angola I will be able to get it.

By other hand, information much more important -- relating future plans for 1986 and following years is being handled by myself and explains throughly the existing problems and the future goals of the government.

In Angola as I have indicated before imports for the fishing industry, as well as for any other industrial branch, are made for Government Owned Companies --- called A T M or "ABASTECIMENTO TECNICO DE MATERIAIS", or supply of technical materials.
All purchases are made through this channel. They have demostrated to be inoperatives and also a focus of corruption.

Another problem, among many others, is the lack of skilfulness of the personnel is wording in the fishing industry at any level.

In order to give an idea see this table:

EDUCATONIAL
LEVEL OF TECHNICIANS

YEAR 1986	QUANTITY	%
WORKERS	12.253	80
FOREMANS	1.918	13
TECHNICIANS	426	3
MANAGERS	643	4
TOTALS	15.240	100
ANALPHABETS	6.481	43

243 - BASIC - 57%
156 - MEDIUM- 36%
27 -SUPERIOR- 7%

The lack of specialists is being compensated in some way with cooperants from Foreign Countries. The actual number of cooperants is 310 from URSS with 143, Portugal 78, Polonia 27, Spain 5, Cuba 18, Cabo Verde 30, Santo Tomé 5, Italy 3 and Bulgary 1.

Angola's Government has the consciousness of the strong dependence of Foreign Technicians and they are trying very hardly to fight against this -- situation.

Government's Plans for next year include:

1.- Reorganize enterprises ATM (ABASTECIMENTO - TECNICO DE MATERIAIS) and recentralise - imports.

2.- Improve the Program of Personnel's Training.

3.- Concentrate principal attention in the Namibe and Benguela Provinces, because they represent more than 80% of the national fisheries production plans.

4.- At national level, will be given a special regime for the fishing sector to allow them to import materials directly.

The Government Investments for the year 1986 are definitively set-up as follows:

TOTAL NATIONAL INVESTMENT IN THE	(KUANZAS)
FISHING INDUSTRY WILL BE OF......	1.716.205.000

The national currency is the KUANZA.

1 KUANZA Approx. 30 U.S. $

out of this amount the intended distribution is:

- Imported Industrial Equipments--	44.5%
- New Buildings and Fabrics.------	41.0%
- Operational and Planning Sturies	14.5%

The programmed income from fishing licenses is as follows:

14./...

- **Tuna Exports as per Japanese Contract.**------------------	40.000.000 Kz.
- Licenses to Foreign Fleet.--	37.012.110 Kz
INCOME TOTAL.......	77.012.110 Kz
Government Invest.	1.716.205.000 Kz
Short Term - TOTAL PAYMENT....	1.793.217.110 Kz

PLANED PURCHASES IN FOREIGN CURRENCY. YEAR 1986

- IMPORTS THROUGH A.T.M. ...	500.000.000.-Kz
- IMPORTS DECENTRALISED.....	970.940.000.-Kz
- LONG TERM PAYMENTS.	120.988.000.-Kz
- SALARIES TO FOREIGN COOPERANTS AND SEAMEN. ...	328.418.000.-Kz
	1.920.346.000.-Kz

More information on the subset will be collected in next trip to Angola.

(b) Financial Assistance and/or Incentives Provided to the Sector:

Because of the political facts, no incentives at all are considered in the normal development of the fisheries in Angola.

However all the fishing industry is channeled through Government Patterns, with vertical -- investments. Nothing goes on without the direct support of the correspondent ministery.

All the information relating Table Nr. 8 will be available only after a trip to Angola where all the information is keeped.

(c) Resource Allocation to the Sector:

Angola is a Country that gives a great attention to their fishing industry so, is constantly making studies and plans for future actions in this field. Therefore the Government is allways awate of the weak points inside its structure. Efforts are being made constantly in order to strenght those points, but the final result do not correspond to the work done. Burocracy, deorganization and lack of professionality do not allow plans to -- arrive until positive results.

(d) Manpower Training and Research.

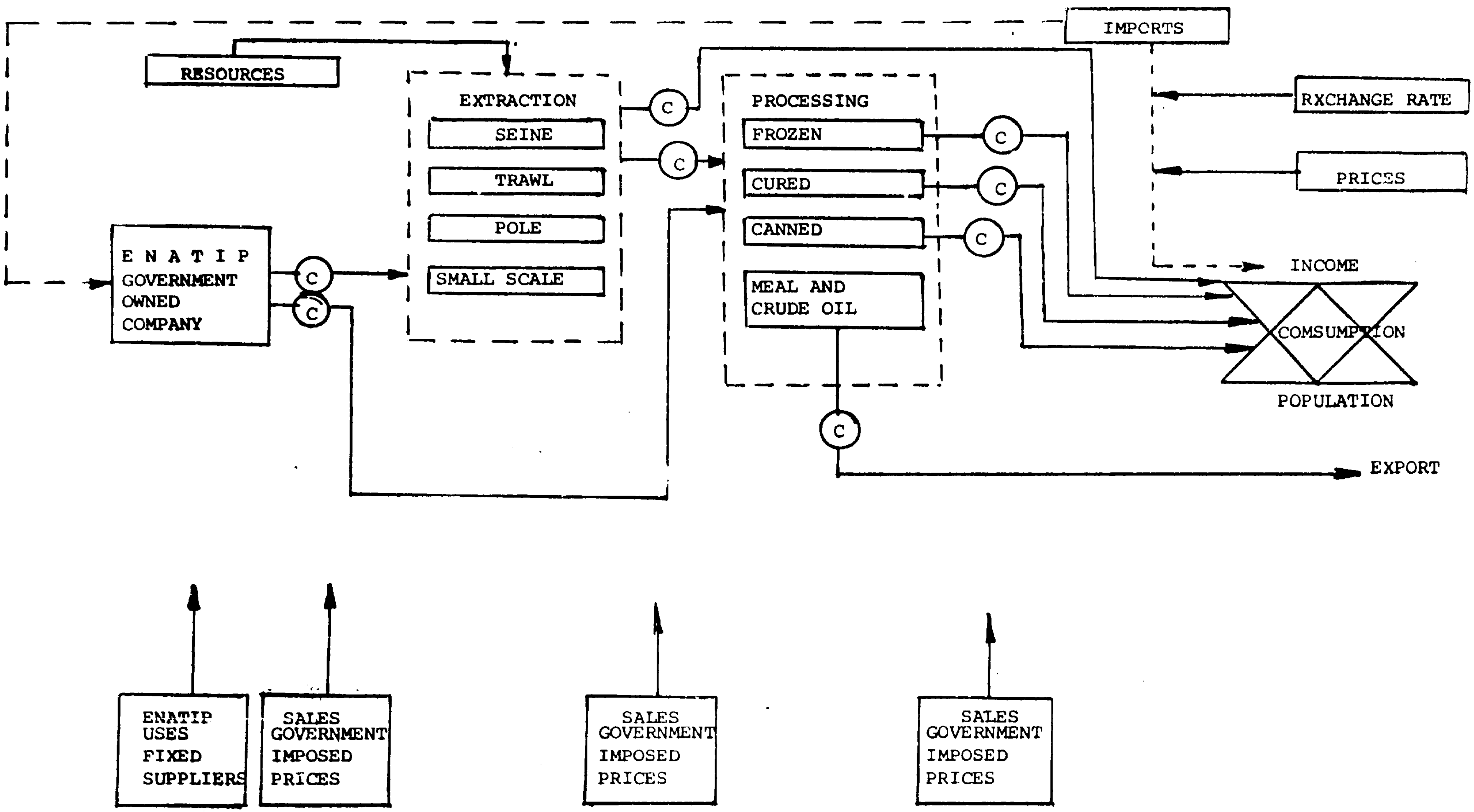
All the comments relative to manpower training have been exposed along the report as well as the difficulties the Angola's Government is finding to manage this problem.
They are quite concerned and looking constantly for the best solution but up to now all their plans have given no result, at least at short term.

3.0 RELATIVE IMPORTANCE OF THE FISHERIES SECTOR WITH -- RESPECT TO THE TOTAL MANUFACTURING SECTOR, FOOD SECTOR, EXPORT EARNINGS AND EMPLOIMENT.

All the data concerning this point can be available -- only in Angola so, we must wait for the next Report in which all this comments will be included.

LIST OF TABLES AND FIGURES

DIAGRAM I



C Commercialization

Table 1. Size of catch for 1970-1984 and estimated potential (thousands of metric tons)

Year	Fresh water fish, cought by water body: Secify important lakes and other total minor waters	Fresh water fish: total (fresh water)	Marine fish and other products: Specify fish, crustaceans and other: horse mcker.	sard.	white fish	tuna	crust.	total (marine products)	Aquaculture: Specify fish and other	Aquaculture: total (aquaculture)	Grand total (all waters)
1970											
1971	DO NOT EXIST THIS TYPE							599.109	DO NOT EXIST THIS TYPE		
1972	OF FISHING IN THIS COUNTRY							659.550	OF FISHING IN THIS COUNTRY		
1973											
1974			NOT AVAILABLE								
1975			"	"							
1976			"	"							
1977			"	"							
1978			35,15	36,4	21,28	5.13	3.6	101.428			
1979			27.14	33.2	18.00	3.95	2.86	85.024			
1980			23.27	30.2	16.44	3.86	3.5	77.185			
1981			25.48	25.3	13.46	3.80	4.28	72.311	FOREIGN FLEET		
1982			33.66	38.9	20.56	5.15	4.67	102.830	428.000		
1983			24.4	27.3	15.98	4.83	2.40	74.919	312.370		
1984 (or most recent year)			20.88	25.6	11.49	3.70	3.83	62.476	355.901		
1985			20.12	23.9	12.6	3.70	2.86	63.118	357.100		
Mean 1986								139.242	253.100		
Estimated sustainable yields per year								700			

Table 2.(a) Structure of the fishing sector

Specify type of catch a/	Marine fishing						Fresh water fishing					Aquaculture				
	no. of enter-prises	no. of boats	average age	tonnage total	no. of fisher-men	percent domestic flag	no. of enter-prises	no. of boats	average age	tonnage total	no. of fisher-men	no. of enter-prises	no. of boats	no. of nets	capacity of (yearly) catch	no. of employees
sardines, anchovy mackerel.....		119	22	3.211	1.230	100										
white fish....		202	22	586	1.100	100										
tuna		42	22	1.015	1.050	100										
shrimp		50	22	1.203	753	100										
crab		17	22	80	102	100										
TOTAL	56	436		6.095	4.235											

DO NOT EXIST THIS TYPES OF FISHING AT COMMERCIAL LEVEL

a/ Example: tuna, whitefish, shrimps, sardines, anchovy, etc.

Table 2.(b) Structure of the fishing sector

Year	Speci.: most important special fishing activities according to type of catch a/											
	sardine		shrimp		tuna		white fish		crab			
	no. of boats	capacity	no. of boats	capacity	no. of boats	capacity	no. of boats	capacity	no. of boats	capacity	no. of boats	capacity
1975												
1976	NOT AVAILABLE											
1977												
1978	132	3.630	55	1.458	49	1.176	235	658	23	110		
1979	128	3.520	54	1.400	48	1.150	232	650	22	105		
1980	130	3.580	55	1.305	47	1.108	228	645	22	105		
1981	133	3.602	55	1.305	48	1.150	228	645	22	105		
1982	135	3.630	56	1.360	48	1.150	230	660	23	108		
1983	127	3.450	54	1.275	45	1.050	215	630	21	102		
1984	125	3.420	53	1.265	45	1.050	214	610	20	96		
1985	119	3.211	50	1.203	42	1.015	202	586	17	80		
1984												

a/ Example: tuna, whitefish, shrimps, lobsters, sardines, anchovy

Table 3. Structure of the handling and processing sector (include data for 2 years within the last 10 years)

Product	Type of enterprise a/	Number of enterprises	Number of employees	Production capacity (mt/day)	Capacity utilization (%)	Ownership: Private local (number)	Private foreign (number)	Para statal (number)	Joint venture (number)	TNC (number)	Other (specify) (number)
985 Frozen fish	ON LAND	4	240	480	4,93			4			
Frozen crustaceans	--	-	-	-	-			-			
Canned fish	ON LAND	5	386	137	4,63			5			
Cured fish	" "	16	1.620	164	36,5			16			
Fish meal	" "	7	710	700	1,118			7			
Other											
984 Frozen fish	ON LAND	4	240	480	2,4			4			
Frozen crustaceans	- -	-	-	-	-			-			
Canned fish	ON LAND	5	386	137	1,4			5			
Cured fish	" "	16	1.620	164	29			16			
Fish meal	" "	7	710	700	0,9			7			
Other											

a/ Specify if on land or at sea (factory ship)

Table 4. Industrial inputs and services

Sector components	Available locally yes/no	Number of enterprises involved small	medium	large	Production capacity of enterprises a/ small	medium	large	total
Fishing sector								
- vessel building and	yes		6		small			
small boat building	yes	4			small			
- fishing gears	no							
- fishing nets	no							
- shipyards	yes		10		small			
- maintenance/ repair facilities	yes		10		small			
- ice-making machinery	no							
- others								
Processing sector								
- ice-making machinery	no							
- processing equipment	no							
- packaging equipment	no							
- storage equipment/cold chain	no							
- spare parts	no							
- maintenance/ repair facilities	no							
- others								
Handling facilities								
- docks	yes							
- transport	yes	22 trucks			small			
- depots	yes	NOT AVAILABLE INFORMATION						

a/ Specify in appropriate units

Table 5. Disposition of domestic catch (thousands of metric tons)

Year	Fresh water fish							Marine fish, crustaceans and molluscas							Aquaculture	
	Total catch (mt)	Fresh	Frozen	Cured	Canned	Fish meal	Others	Total catch (mt)	Fresh	Frozen	Cured	Canned	Fish meal	Others	Total catch (mt)	Specify main products
1974																
1975																
1976																
1977																
1978								101.4	48.5	9.36	22.8	1.95	2.86			
1979								85.0	37.2	8.25	20.4	1.78	2.67			
1980								77.1	34.1	5.47	19.3	1.65	2.53			
1981								72.3	26.2	6.82	21.4	1.62	2.49			
1982								102.8	48.7	9.41	23.6	1.95	2.93			
1983								74.9	27.3	6.51	21.0	1.53	2.85			
1984								62.4	25.1	4.16	17.4	0.70	2.31			
1985								63.1	11.7	8.63	21.8	2.31	2.86			
1984																

Table 6. Export of fish and fish products 1975-1984 (thousand of metric tons)

Type of products	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	Important export markets
Direct human consumption												
- frozen fish											1	JAPAN
- frozen crustaceans, molluscs												
- cured products												
- others (specify)												
Indirect human consumption												
- fish meal				2,86	2,67	2,54	2,49	2,93	2,85	2,31	2,86	C.E.E.
- crude oil												
- semi-refined oil												
- others (specify)												
Non-food consumption												
- specify												
Export as percentage of total catch												
- fish (TUNA)											25	JAPAN
- crustaceans, molluscs												
- fish meal and oil				00	100	100	100	100	100	100	100	C.E.E.
- others												

Table 7. Consumption of fish and fish products 1975-1984 (thousands of metric tons)

Year	Human consumption									Non-human consumption			
	Fresh fish		Frozen fish		Cured fish		Canned fish		Consumption	Fish Meal		Fish Oil	
	fish	crustaceans/	domestic	imports	domestic	imports	domestic	imports	per capita	domestically	imports	Domestically	imports
1975				by-catch Foreign Fleet									
1976													
1977													
1978	48.537		9.368		22.84		1.95		10.71	2.86		NOT AVAILABLE	
1979	37.212		8.153		20.418		1.786		11.27	2.67		"	"
1980	34.188		5.472		19.373		1.655		9.33	2.54		"	"
1981	26.233		6.822		21.430		1.622		8.01	2.49		"	"
1982	48.785		9.41		23,640		1.950		11.17	2.93		"	"
1983	27.324		6.519	96.926	21.015		1.536		19.16	2.85		"	"
1984	25.136		4.169	121.137	17.421		.703		19.83	2.31		"	"
1985	11.729		8.636	131,550	21.846		2.317		19.56	2.86		"	"

1984

Table 8. Government resource allocation to the FIS, 1979-1985 (in millions of $US)

Sectors	1979		1980		1981		1982		1983		1984		1985	
	$US	%	$US	%	$US	%	$US	%	$US	%	$US	%	$US	%
TOTAL (govnt. budget)														
Fishing (total)														
- extraction														
- resource management														
Agriculture (total)														
Manufacturing (total)														
- fishing														
- processing														
Manpower training (total)														
- fisheries sector														
Research (total)														
- fisheries sector														
Rank of priority attached to the fisheries sector														

DATA AVAILABLE ONLY AFTER TRIP TO ANGOLA

Table 9. Importance of the fisheries industry - economic indicators

Indicators	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
1. GDP(total)										
(in million $US)										
- fisheries sector										
- extraction										
- processing										
rank of importance a/										
percentage share										
2. Agriculture(total)										
(in million $US)										
- fisheries sector										
rank of importance a/										
percentage share										
3. Manufacturing VA(total)										
(in million $US)										
- fish processing										
rank of importance a/										
percentage share										
4. Export earnings(total)										
(in millon $US)										
- fisheries sector										
(sale of fishing rights)										
rank of importance a/										
percentage share										
5. Employment(total)										
- fishing sector										
- extraction										
- processing										
- distribution										
rank of importance a/										
percentage share										

DATA AVAILABLE ONLY AFTER TRIP TO ANGOLA

a/ Rank of importance compared to other components of the totals.