



International Science and Technology Institute, Inc.

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SOMALIA:

AN EVALUATION OF THE COASTAL
DEVELOPMENT AGENCY'S FISHERIES' PROGRAM

Prepared for:

U.S. Agency for International Development
Mogadishu, Somalia

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Summary

The terms of reference can be summarized as an assignment to assist the Coastal Development Agency in planning the development of fisheries within its jurisdiction.

While the consultants had expected to just work in the four nomad/fishermen settlements of CDP, they were informed that the Minister of Fisheries had extended CDP's jurisdiction. CDP would now be responsible for fisheries development in the entire region from Brava to Ras Asail. This area includes not just settlement fisheries, but also many traditional ones.

It became apparent that the impediments to fisheries development from Brava to Ras Asail could not be addressed in any meaningful way without first modifying the goals and the organizational structure of CDP. Future resettling was a mandate given to CDP by the Government of Somalia, but was not a task in which USAID or the British Overseas Development Agency (ODA) could provide assistance. On the other hand, CDP was evolving as the project implementation branch of the Ministry of Fisheries, without having a viable fisheries department. As a result, the emphasis of the work shifted from technical problems and solutions, to the reorientation of the Coastal Development Agency and the development of a capable fisheries department.

The consultants spent the last ten days of their time in Somalia in negotiations with representatives from CDP, USAID, and ODA. Real progress was made, and the Coastal Development Agency decided to separate the implementation and the funding of its two tasks:

- 1) resettling secondary-school graduates and civil servants, and providing them with the skills which are required to be fishermen.
- 2) providing services to the existing fishing industry.

The final portion of the consultants' work then consisted of helping CDP plan the required strengthening of its fisheries department, and drawing up a plan of action for the next half year. Both USAID and ODA promised financial and technical support to CDP as a result of its initiatives.

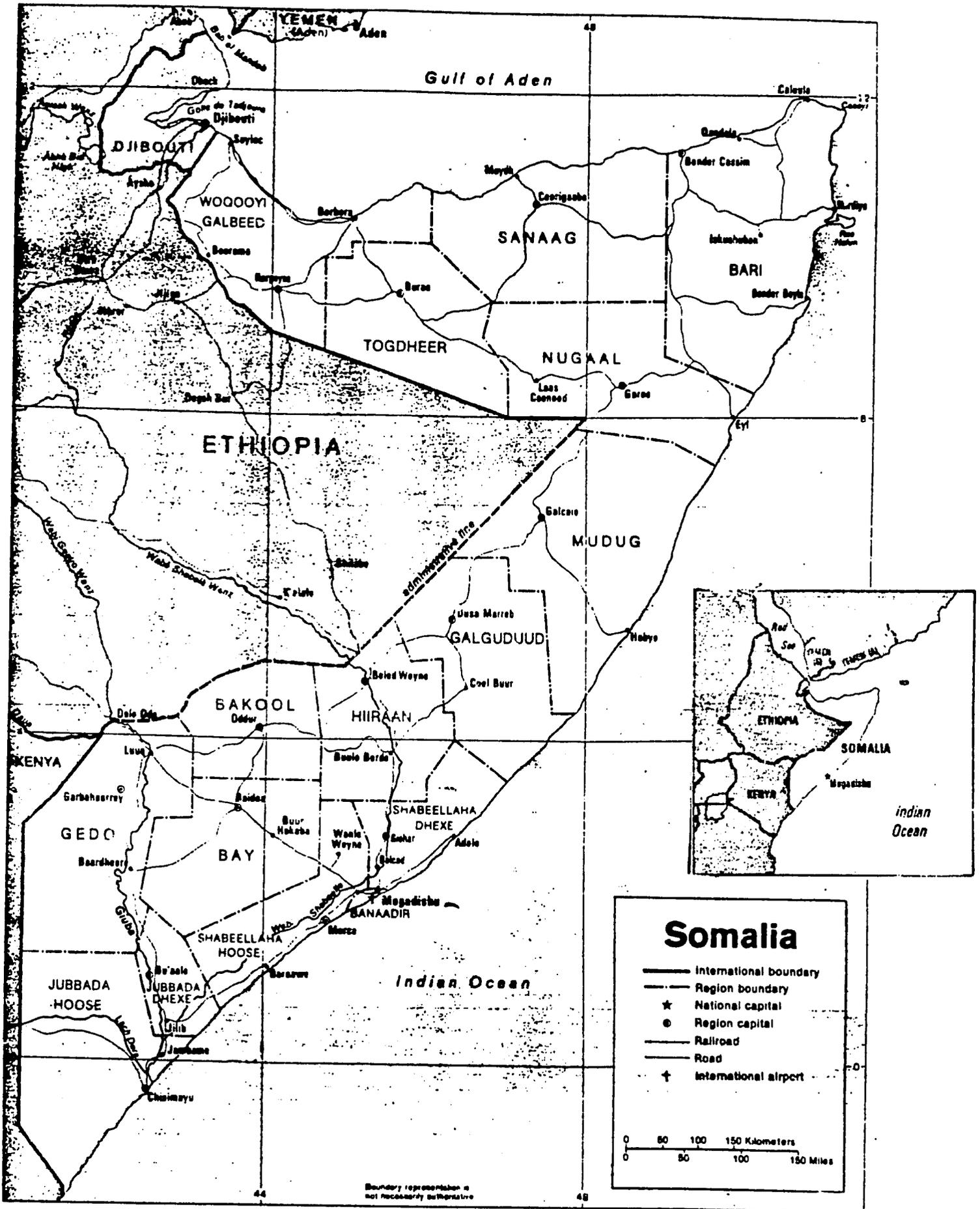


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Abbreviations

CDP	Coastal Development Agency
FAO	Food and Agriculture Organization, United Nations
GRP	GRP Products, name of a Somali/Swedish joint-venture fiberglass boat factory
JICA	Japanese aid organization
ODA	British Overseas Development Agency
NECFISH	North East Coastal Fisheries project, World Bank
Sosh	Somali schilling
SMP	Somali Marine Products, fish factory in Kismayo
USAID	U. S. Agency for International Development

Exchange rates

In January 1985, the Somali Schilling (Sosh) was devalued.

official government exchange: 37 Sosh/ 1 \$US

floating bank rate, May '85 : 83 Sosh/ 1 \$US

1. Program of Work.

1.1. Terms of Reference.

Two commercial fisheries experts shall assist the Coastal Development Agency in planning the development of fisheries in coastal settlements. The scope of the study will not be confined strictly to the Somali coastal fishery, but will also assess the export potential for coastal fishery products.

The master fisherman shall address the following issues:

- What improvements in landing facilities, boatyards, and other infrastructure are needed by fishermen.
- Which improvements can be made in fishing methods, fishing gear types, boat design and construction, and types of motors or sails.
- How can on-board fish spoilage be reduced.
- What needs exist in boat, motor or sail, and fishing gear maintenance.
- What are fishermen's costs and earnings, and how do these affect fishermen's maintenance procedures and their ability to change their way of fishing.
- How do fishermen learn their vocational skills and what are the most appropriate ways to develop this human resource.

The specialist in fish distribution shall address the following issues:

- How much fish is lost due to spoilage and shrinkage between the boat and the consumer, and how can this be reduced.
- What are the social and economic relationships between the fishermen, processors, distributors and consumers, and how do changes affecting one affect the others.
- What are the prices of fish and the level of profit at the various steps in fish processing and distribution.
- Which Somali markets for seafood can most easily be developed.
- What is the export potential of coastal fish.
- What access roads, cold storage facilities, credit institutions and other infrastructure is needed to improve fish marketing.

- What are the levels of technical and managerial skills of fish processors and distributors.
- How do fish processors and distributors learn their vocational skills, and would an extension service be useful to them.

Both consultants shall begin their work with one week in Rome for orientation with FAO and INFOFISH. Both consultants shall work in Somalia for four weeks. Finally, the fish marketing specialist shall spend one week in Paris, in discussion with experts from OECD.

A summary of the final report will be prepared and discussed with the Coastal Development Agency before the two specialists leave Somalia. The detailed final report will be submitted upon completion of the work in Paris, and the consultants' return to the U.S..

1.2. Itineraries.

Itinerary of the fish distribution specialist.

	<u>Arrive</u>	<u>Leave</u>
Wakefield, RI, USA		May 5
Rome	May 6	May 12
Mogadishu	May 13	May 19
Brava, El Ahmed, Merka	May 19	May 22
Mogadishu	May 22	May 22
Adale	May 24	May 26
Mogadishu	May 26	May 27
Kismayo	May 27	May 30
Mogadishu	May 30	June 9
Paris	June 10	June 14
Wakefield	June 14	

Itinerary of the master fisherman was identical until June 9, when he returned to the U.S. directly from Mogadishu.

2. Agency Objectives.

2.1. Coastal Development Agency.

CDP was established in 1975 and given the task of resettling 15,000 refugees from the northern drought, and helping them to earn a living as fishermen. In Brava, El Ahmed, Adale, and Eyl, the settlers were given vocational training and equipped with hundreds of boats and fishing gear, free of charge. When the fishing gear was worn out or lost, it was replaced free of charge.

The settlement fishermen were not well motivated to care for their boats and fishing gear, and most boats ended up being stored on the beach, waiting to be repaired.

To resolve the situation, CDP adopted a policy of privatization in 1983. In November of that year, CDP began the process of selling its fishing boats for 25,000 Sosh each. Of the thirteen Sri Lankan fiberglass, diesel powered, fishing boats sold in Brava, five were sold to settlement fishermen and eight were sold to traditional fishermen.

By the beginning of 1985, most of the boats which were operating or repairable had been sold off. The settlers which had become fishermen, had purchased boats, and CDP's original task had been completed.

The Minister of Fisheries, recognizing CDP's established infrastructure, and its project implementation capabilities, extended CDP's jurisdiction. CDP would now be responsible for fisheries development in the entire region from Brava to Ras Asail, about two thirds of Somali's coastline. This is the area remaining between the World Bank's North East Coast fisheries development project, (a joint venture company called NECFISH), and the Kismayo region development project sponsored by German aid, (a joint venture company called Somali Marine Products).

In the past, the civil service had been a dependable source of employment for secondary school graduates. However, in response to the International Monetary Fund's recommendations, the Government of Somalia is reducing the number of its civil servants. Thus, CDP was given the new task of resettling secondary school graduates and laid-off civil servants, and giving them the means to earn a living as fishermen.

3.2. USAID/Somalia.

In the 1987 Country Development Strategy Statement for Somalia (published in 1985), USAID stated that its previous experience in fisheries development on the north coast had been a failure. Due to the number of other donors who are working in fisheries, and due to USAID's need to restrict its work to a few sectors, USAID/Somalia had decided not to be involved in fisheries development.

One of the areas in which USAID/Somalia is concentrating is the encouragement of privatization and the expansion of small business under the Policy Initiatives and Privatization Project.

Fisheries has been one of the more progressive ministries in this respect. It has granted autonomy in management to several fisheries development projects. Somali Marine Products, GRP Products (a fiberglass boat factory), and NECFISH are all set up as joint ventures between the Government of Somalia and the donor organizations. While the Minister of Fisheries serves as the Chairman of the Board for all three companies, he does not have veto power. Thus the projects are removed from the direct control of any government agency and are run as parastatal companies.

The Coastal Development Agency's sale of its fishing fleet to private individuals drew the interest of USAID, and was seen as part of the general movement towards privatization. Thus, USAID again considered the feasibility of working in the area of fisheries. Specifically, these two consultants were brought in to determine how USAID might assist the development the private sector in near-shore fisheries.

3. Description of Near-shore Fishing Industry.

Near-shore is taken to mean vessels up to 15 meters in length which operate within five miles of shore. It is in contrast to the larger off-shore vessels which habitually spend more than a week at sea per fishing trip.

3.1. Fishing

The major fisheries from Brava to Ras Asail are:

Kingfish caught by handline trolling, or occasionally by gillnets. The primary season is March - June, with a less important season during October and November. It is the most desired species for fresh consumption in the Mogadishu area.

Tuna is also caught by handline trolling. It has a minor season from March through June, and a major season in October and November.

Shark is primarily caught with gillnets. Small shark caught near population centers are consumed fresh. Fishermen frequently migrate along the coast, salting and drying shark meat and fins for export.

Lobster is caught primarily by divers, and incidentally by gillnets.

Demersals are fished when the preferred large pelagics have migrated to other areas. They are fished with handlines, and in Kismayo they are beach seined. Some traditional fishtraps, yemas, are still used. Yemas are set in shallow water along the beach, without the use of boats.

The following number of boats are currently active:

Brava

8 Sri Lankan, motorized, owned by traditional fishermen
5 Sri Lankan, motorized, owned by resettled nomads
21 houris, owned by traditional fishermen

El Ahmed

5 Sri Lankan, motorized, owned by traditional fishermen
4 Sri Lankan, motorized, owned by resettled nomads

Merca

11 Sri Lankan, GRP 6.4s and GRP 8.5s, all motorized
45 houris

Jesira

10 motorized fiberglass boats
6 houris

Mogadishu

20 motorized fiberglass boats
60 houris

Adale

26 motorized fiberglass boats
40 houris

Eyl

20 motorized fiberglass boats
1 motorized beddan
8 unmotorized beddan

Traditional fishermen far outnumber those who entered the industry through resettlement programs. None of the houris are fished by resettlement fishermen, since they are comparatively unstable and a high degree of skill is required to paddle them through the surf.

New recruits to the fishing industry usually come from the extended families of fishermen, and begin going to sea at the age of eight to ten. Their vocational training is received entirely on the job.

Houris in Brava carry a crew of two, while those of Merca and Adale are longer (5 meters) and carry a crew of three.

Six of Brava's 21 houris are owned by absentee owners.

The lay system for a Brava houri is:

1/3 of gross stock for the houri

2/3 of gross stock for the crew. These 2/3 are split equally if both crewmen are adults. A boy only gets 1/3 of these 2/3s, or 2/9s of the gross stock.

A Brava houri costs 15 - 20,000 Sosh new, it lasts 6 years, and requires 1,000 Sosh per year in maintenance materials, (caulking, nails, shark oil preservative).

The lay system for a Merca GRP motorized boat is:

gross stock
less boat share (25% of gross stock)

gross crew stock
less actual fuel and food expenses
net crew stock, which is divided into 4 equal parts for owner/operator and 3 crew members.

The 1985 purchase price of a 8.5 meter GRP boat is 1,900,000 Sosh. The depreciation period of these boats is unknown since privatization only started one and a half years ago.

The motorized fiberglass boats could be equiped with outriggers for trolling, or with reels for demersal fishing. This is, however, not done and they currently use one handline per crew member.

Statistics on landings and catch per effort are scarce. A portion of biologist/statistician Stellan Elmer's findings are included in appendix 9.

3.2. Marine Supply.

In the past, the Coastal Development Project supplied most of the fishing gear used in Somalia. CDP distributed fishing gear directly to cooperatives of traditional fishermen, as well as to its own settlement cooperatives. Some settlement fishermen, who received replacement gear for free, "lost" their gear at a high rate and thus also helped to supply surrounding fishermen.

CDP stocks of the more desirable types of fishing gear are almost empty, and little has been distributed or sold during the last two years.

Private businessmen have been reluctant to import and sell fishing gear due to the risk that it will be confiscated. The cooperatives wield a lot of power, and may claim that they have the sole right to distribute fishing gear.

A discouraging precedent was established when private businessmen imported livestock vaccines though the USAID Commodity Import Program. The vaccines were siezed in the port by cooperatives, on the basis that only cooperatives had the right to distribute them. All that USAID was able to do was to get the importers a promise that they would be reimbursed.

Currently, Somali Marine Products in Kismayo has imported fishing gear for its fishermen. According to current practise, SMP would sell the fishing gear to the cooperatives from whom it buys fish, and the cooperatives would resell the fishing gear to their members. Although individual fishermen have expressed a desire to purchase the gear at SMP's prices, the cooperatives have stated that these prices are too high, and have refused to buy the fishing gear. When we visited SMP in late May, it had the gear in its warehouse and was unable to sell it.

3.3. Boatbuilding.

The free distribution of hundreds of imported fiberglass motorized fishing boats during the last ten years has hindered the Somali boatbuilding industry. Many of the traditional boatbuilders have since retired or entered other professions.

GRP products is currently building 8.5 meter fiberglass boats in Mogadishu which are powered with Volvo diesel engines. Like NECFISH and SMP, GRP Products is a donor aid/Government of Somalia joint venture that is operated as if it were a private company. It is run by a board of directors, and the Minister of Fisheries holds the office of Chairman of the Board.

Until December 1984, the Somali schilling was traded at an artificially high value, and Somali fishermen purchased GRP boats. With the devaluation of the Somali Schilling, the Sosh price of fiberglass skyrocketed, and so did the price of GRP boats. The price of a new 8.5 went from 300,000 Sosh to 1,900,00.

Development projects, which require a large number of boats to be built in a short period of time, will continue to purchase GRP boats. Private fishermen, however, have not placed an order since the Sosh devaluation. GRP Products suggested that easy credit terms with a long period for repayment could boost sales. On the other hand, it may not be the lack of private capital which is preventing sales; it may be that the boats are no longer economically viable.

The new economic conditions may revive traditional boatbuilding. A 7.8 meter sailing mashura can be purchased for 300,000 Sosh, and for another 700,000 Sosh, it can be equipped with a Yanmar diesel. In Eyl, a traditional Beddan was recently equipped with an outboard.

While most of the wood must be imported from Kenya, a wooden boat is less expensive than a fiberglass one, and it allows for variations in design to accommodate local conditions.

3.4. Marine Mechanics.

Somalia has a large number of very skilled diesel mechanics. When CDP's mechanics are unavailable to do the job free of charge, fishermen have hired private ones to re-engine boats for 25,000 Sosh.

CDP maintains workshops and mechanics at each of its four original settlements. These facilities are primarily used for minor repairs and for maintenance. The British Overseas Development Agency (ODA) assists CDP by providing a fisheries advisor/marine mechanic. He and an assistant travel to the settlements for the larger repairs, such as re-engining vessels. Major overhauls and re-bores are fielded to private machine shops in Mogadishu.

3.5. Seafood Handling and Transportation.

The system of official fish prices has been discontinued, and fish is now auctioned to retailers. In Mogadishu, this is done on the beach where the fish is landed. In other locations, it is done in cooperative-managed fish markets. Consumers may purchase fish at the auction, but most buy smaller quantities from retailers. The prices offered by the Modern Fish Market in Mogadishu have the effect of establishing price minimums locally.

The auctioneer and the cooperatives are paid by the fisherman at the time of the sale. The auctioneer may take 5% of the value, and the cooperatives take between 1 and 2.5 Sosh/Kg, depending on the location.

Brava fish prices range from 20 Sosh/Kg for less desirable species such as grouper, snapper and sardines, 30 Sosh/Kg for small sharks and tuna, to 40 Sosh/Kg for king mackerel. Lobsters bring 60 Sosh/Kg and a 200 liter barrel of shark oil brings 3,000 Sosh.

Prices in Mogadishu are significantly higher. King mackerel frequently reaches 140 Sosh/Kg.

Brava has two ten-ton cold store which were constructed by JICA, Japanese aid. They are not functioning, but are in generally good condition. These are part of an underutilized FAO-built fish processing and drying complex. Brava produces and excess of dried fish.

El Ahmed has JICA cold stores which are not being used. CDP is considering moving them to Adale.

Merca is a very productive fishing center, surrounded by a large rural population which is interested in buying fish. It does not have an ice plant or cold stores, but these are not necessarily needed since fish could reach the rural population by truck without ice before it spoils.

Jesira is half an hour's drive from Mogadishu. It has a lot of active fishermen, and fish can easily be transported to the capital by truck.

Mogadishu has the JICA-built Modern Fish Market with an 8-ton/day ice-maker, two cold stores and a chill room. One branch market was also constructed by JICA, and there are 9 local markets. JICA supplied four refrigerated trucks to bring in fish from distant collection points and to distribute it among the markets. CDP has one 6-ton/day flake ice maker.

Adale has an unused fish processing complex and an uncomplete cold storage. A private business man, who is also the leader of the Mogadishu fishermen's cooperative, leases the Mogadishu Modern Fish Market trucks, and transports fish on ice from Adale back to the capital. This business was only begun a few months ago, and is the result of a CDP demonstration that fish could successfully be transported from Adale by a flat-bed truck with ice-boxes.

Eyl is extremely remote, and takes three days to reach from Mogadishu by vehicle. Fishing there is based primarily on the dried-fish trade.

The potential European markets for Somali coastal fish are described in Appendices 10 and 11.

4. CDP's Changing Role in Fisheries Development.

4.1. Proposal and Counter-proposal.

After the consultants had visited the region from Kismayo to Adale, and gone out fishing in many of the locations, CDP's General Manager presented them with a request entitled "Special Programme for CDP", (appendix 1). This original request included 250 houses each year for the resettling of civil servants and secondary-school graduates. It also included the construction of cold stores, fish markets, and jetties.

The consultants, in response, presented "Possible Areas of Cooperation between CDP and USAID - a Discussion Paper", (appendix 2). This expressed USAID's inability to support CDP's resettlement efforts. If, on the other hand, CDP separated the implementation and funding for the resettlement task from the fisheries development task, USAID could be interested in providing assistance. The consultants had spoken with representatives of numerous donor organizations in Somalia, and many of them would be willing to assist CDP under these conditions.

The consultants suggested that CDP could provide the following services:

- 1) Fisheries equipment service
- 2) Boat building services
- 3) Mechanical services
- 4) Fish handling and transportation services
- 5) Communication and data collection services
- 6) A credit program for fishermen, boat builders, mechanics, and fish dealers.

The emphasis of all these services would be to provide support to private businesses in the fishing industry, rather than having CDP perform the functions such as boat building and fish transportation itself. The fish handling service could, for example, develop markets for new products such as beche-de-mere, and then show Somali fish-dealers how to enter the market, (appendix 3).

CDP does not currently have the capability to provide these services, and a strengthening of its fisheries department would be required. Specifically, the number of trained and skilled fisheries specialists within the department would have to be increased.

As CDP is currently organized, the administration of the fishing-gear stores fall under the transportation department, and it is very difficult for fishermen to purchase and gear, or for the fisheries department to improve the fishing-gear services. Administrative control of the gear stores and the vessel workshops would have to be transferred to the fisheries department.

Finally, it was common knowledge that fishing gear was going missing, and that receipts from the sale of fishing gear were not returning to the fund for new purchases. Several people had instituted inventory and bookkeeping procedures, and had trained CDP employees in their usage, but these were not being followed. ODA had a small amount of fishing gear coming in, and CDP would have to demonstrate the proper utilization of the previously established inventory and accounting procedures if it wanted to interest USAID in increasing the stock of nets.

Discussions.

The consultants held many discussions with CDP and USAID separately, and also organized a series of formal meetings between the two.

At the time of the first formal CDP/USAID meeting, CDP had decided, in general terms, to reorganize itself according to the consultants' suggestions. Expectations on both sides were that the meeting would be the first of a series, and that its purpose was just to get to know each other. While dropping its request for resettlement houses, CDP was not really sure yet how its list of requests fit into the proposed program of providing services to the fishing industry. USAID expressed an interest in helping CDP to assist the private fishing sector, and introduced the concept that CDP would have to write a proposal which would be competing against other proposals for funding.

"How the CDP list of requests fits into a Program", (appendix 4), was prepared by the ODA fisheries advisor who has worked in CDP for several years, and who was invited by the General Manager to attend all of the meetings. It stated that the construction of regional cold stores, rural fish markets and canning factories was something which required study and further consideration. It was not something which USAID or any other donor group could agree to right immediately.

Several CDP staff-members became enthusiastic about the proposed functions of CDP, and requested that the consultants work with them, even during their Friday day-of-rest, to write the proposal for USAID. Together, a "New Program for CDP", "Proposed Reorganization of CDP", and a "Work Plan for First Year" were written, (appendices 5, 6 & 7). Work on a budget was also started.

4.3. The Result

The second USAID/CDP meeting was held just before the consultants departed. CDP presented a "New Program for CDP", stating that it would provide services for various branches of the private fishing industry. In order to have the capability to provide such services, CDP would:

- a) increase the number of trained and skilled specialists in the fisheries department.
- b) transfer management responsibility of fisheries related infrastructure to the department.
- c) demonstrate the proper utilization of previously established inventory and accounting procedures.
- d) allocate a budget to the fisheries department.
- e) provide a floor of office space to the department.

To be able to accomplish this restructuring, CDP requested financing.

CDP also requested technical assistance in the form of two consultants and submitted terms of reference which were drawn up at their request, (appendix 8).

While a specific budget and specific requests were still needed, USAID agreed to their request in general.

The proposed plan of action would be for USAID to assist CDP financially in its restructuring. A boat-building consultant would determine ways in which traditional boat-building could be assisted, and organize CDP's boat-building service. Then a fish-handling and marketing specialist would assess how effective the restructuring had been, and assist them in seeking further funding if it was justified. The fish-handling specialist would also organize the fish-handling and data collection services. ODA would continue to provide long-term technical assistance, a small amount of fishing gear to test whether the revolving fund will revolve, and a mobil workshop for the mechanical services.

PEOPLE MET

Somalia

Abdikarim Hashi Igal	General Manager, Coastal Development Project (CDP)
Aaden Mohamed Ali	Minister of Fisheries
Ahmed Mohamed Abicar	Director of Fisheries, CDP
Abdi Hassan Jama	Gear Technologist, Ministry of Fisheries
A. Sanders	Fisheries Adviser, CDP
J.F. Arrundale	Managing Director, Somali Marine Products (SMP)
J.R. Christiansen	Master Fishermen, SMP
H. Widman	General Manager, GRP Products
J. Kraft	EEC, Mogadishu
Abdulkadir Mohamed Faroh	Chairman Brava Settlement, CDP
Pierconti	Project Manager, FAO
Abdi Kulmive Hassan	Chairman Elahmed Settlement, CDP
Mohamed Haji Yusuf	Director of Boatbuilding, Ministry of Fisheries
Yusuf Abdulah Nur	Manager, Modern Fish Market
Sufi Ali Sheek	President, Fishermans Cooperative, Merca
Jeylani Sheek Abdi	Accountant, Fishermans Cooperative, Merca
Osman Mohamed Hirase	Commissioner of Cooperative, Adale
Mohamed Ali Mohamed	Chairman of Settlement, Adale
Mohamed Cali Jaamac	Regional Officer, Ministry of Fisheries, Kismayo
Hadi Baamunge Mesuwo	President Fishermans Cooperative, Kismayo
Hassan Hrabin Ahmed	Regional Extension Officer, Kismayo
Shleh Ahmed Yusaf	Chief Accountant, SMP
Lorring Waggoner	Program Economist, US
Mohamed Ali Sherrieh	USAID
G.J. La Bombard	Commodity Import Program, USAID
Gary Nelson	Deputy Director, USAI
Klaus Niemann	Resident Rep., World Bank
J. Kraft	EEC

The numerous fishermen we met with in Brava, El Ahmed, Merca, Mogadishu, Adale, and Kismayo are not listed by name.

PEOPLE MET

Rome

Jan Johnson
J. Fyson

N. Vikanes
B. Bjarnason
Ian Robertson

D. James
J. Nierentz
Helga Josupeit
R. Zeisler
Stig Valand

Fishery Industry Officer, FAO
Senior Fishery Industry Officer,
FAO
Naval architect, FAO
Fishery Industry Officer, FAO
Senior Fishery Industry Officer,
FAO
Fishery Industry Officer, FAO
Fishery Industry Officer, FAO
Fishery Industry Officer, FAO
Project Operations Officer, FAO
Private marketing consultant

Paris

Schmidt
E. Vergara
E. Schneider
H. Lindsey

Head of Fisheries Section, OECD
Commercial Officer, US Embassy
President, Schneider Overseas Foods
President, Marketsource Company

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Coastal Development Project is an independent project formerly responsible to carry out developing only for fishing Settlement.

We are now very glad to inform you that Coastal Development Project has expanded and given a bigger responsibility capacity to carry out Developing the Coastal areas and fishing communities in the following coastal districts such as: Barva, Merka, Mogadishu, Adale, El-Dere, Obbio, Garad, Eil, and Bandar Beila that is the coast zones which will be responsible by C.D.P. .

The future aim of Coastal Development Project is to resettle 250 families in the coastal areas each year, to make them Fishermen and earn their living from the sea, it is a great (Honour) honorable for us to present here for you this special programme.

We anticipate your closer Co-operation with this matter, the new programme which needs to be carried out is as follows.

1-Boats and Fishing Gears:

- a-Purchase of Boats 50 8,5m.
- b-Fishing Gear as indicated the attached sheet.
- c-One Boat for research
- d-One big boat for transportation.

2-Work-Shops,

- a-Work-shop for each Coastal District
- b-one big work-shop in Mogadishu.

3-Constructin

- a-250 houses for resettling
- b-One jetty for each Coastal District
- c-One cold storage for each Coastal District
- d-One big Cold Storage in Mogadishu
- e-Small fishing markets in the rural and Urban areas near Coastal Districts
- f-To establish 13 small fish-markets in Mogadishu.
- g-To build small Fishin-Caning factories for the suitable Coastal Palces.

4-Transportation.

- a-One tractor for pulling Boats for each Coastal District
- b-6 Land-Rovers for Services.
- c-2 Trailors for picking up the boats to the Work-Shop.
- d-Mobile lorry Work-shop for the fishermen.

5-Communication

- a-Powerfull Communications in Coastal Areas.

6-Training Courses abroad

- a-One Diesel engine Mechanics Courses
- b-Fishin Gear Technologist Courses
- c-Fishing Managment Courses
- d-Managment and accouting Courses
- e-Fishing Statistics Courses

7-Three(3) Experts for training Courses in Somalia.

- a-One Master of Fisherman Expert in Somalia
- b-One ~~XXXXXXXX~~ qualified diesel Mechanics Expert in Somalia
- c-One man for the Administration expert in Somalia.

3-Operatin an Maintenance.

- a-To repair our Berliet, Land-Rovers and tarctors see the attached sheet.
- b-To repair our and maintain our permanent Boats.
- e-The Boats which needs a repair are divided in the following categories:

I-Srilankan old Boats	45 Boats
II-Creek Old Boats	10 " "
III-Swedish 3,5m Boats	20 " "
IV-Swedish 6,4m Old Boats	10 " "
<hr/>	
Total Number of Boats	85 Boats

Possible Areas of Cooperation Between CDP and USAID - a Discussion Paper

Martin Vincent and Bruce Babour
Consultants to CDP and USAID
Mogadishu, June 4, 1985

The Coastal Development Project is an independent project, formerly given the task of settling drought victims and providing them with the skills and materials needed to earn a living as fishermen. This task has been completed.

The Minister of Fisheries has given CDP a new role, and expanded its jurisdiction to cover the area from Baraawe up to the North East point of Ras Assail. This area extends far beyond the original four settlements, and includes a large number of traditional fishermen.

The new role of CDP can be divided into two separate tasks:

- 1) settling secondary-school graduates and civil servants, and providing them with the skills which are required to be fishermen.
- 2) providing services to the existing fishing industry.

Although USAID will not be able to assist CDP with the task of settlement, it could be interested in helping CDP provide services for the already existing fishing industry. It is therefore suggested that funding for the two activities be separated, and sought from separate sources.

The provision of services to the existing fishing industry would help CDP in its task of resettling additional families. Once these families had acquired their fishing skills and materials, and once they had become a part of the existing fishing industry, they would benefit from these services in the same way as other members of the existing fishing industry.

CDP could be responsible for the following services:

- 1) Fisheries equipment service
- 2) Boat building services
- 3) Mechanical services
- 4) Fish handling and transportation services
- 5) Communication and data collection services
- 6) A credit program for fishermen, boat builders, mechanics, and fish dealers.

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Functions of the suggested services could be as follows:

1) Fisheries Equipment Service

- To advise CDP and other importers of fishing gear on what materials are needed by Somali fishermen.
- To purchase and sell the fishing equipment which is imported by CDP.
- To show fishermen the ways of assembling fishing gear.
- If the fish handling and transport service discovers markets for species which are not currently being caught, the fisheries equipment service could develop new fishing gear and fishing methods for these species.

2) Boat Building Service

The current fishing industry includes a large number of traditionally built boats. With the rise in the price of GRP boats, these GRP boats are becoming uneconomical to operate. Therefore, the construction of traditional fishing boats, which are less expensive, should be encouraged. CDP could assist traditional Somali boat builders

- in obtaining wood, nails, caulking materials, tools, and other necessities
- by including traditional boats in its future purchases for the settlement program.

3) Mechanical Services

Within the existing fishing industry, there are a number of mechanized boats which CDP has maintained. CDP should continue to provide mechanical services for these boats, through:

- The provision of workshops in each district, and one central workshop in Mogadishu.
- The provision of skilled mechanics.
- The provision of spare parts.

4) Fish Handling and Transportation Services

While the handling and transportation of fish is best left in private hands, CDP could provide continuing services in this areas:

- Demonstration projects, such as CDP has done in Adale, to show the economic viability of transporting fish in ice boxes. This project was very successful, in that businessmen are now

transporting fish from Adale to Mogadishu.

- By providing information on market possibilities, both within Somalia and in other countries.

5) Communication and Data Collection Services

CDP presently uses radio to coordinate its activities in the various regions. In addition, these radios can be used to collect daily information on landings, fish prices, and market opportunities. This information is valuable for fish transportation, marketing, and for future planning. This service should be expanded throughout CDP's jurisdiction.

6) Credit Program

This program could assist fishermen, boat builders, mechanics, and fish dealers in establishing or expanding their businesses.

If CDP wished to provide the services outlined above, and attract funding for them, CDP would have to strengthen the fisheries department and demonstrate management capability. Specific suggestions would be to:

- 1) Increase the number of trained and skilled fisheries specialists within the department.
- 2) Transfer management responsibility of fisheries related infrastructure, (such as fishing gear stores, mechanical workshops), to the fisheries department.
- 3) To demonstrate the proper utilization of the previously established inventory and accounting procedures.

To summarize, CDP's mandate to continue its resettlement program is recognized. It is also recognized that CDP has been given the additional responsibility to assist the already existing fishing industry. These are two separate functions, and funding for each function could come from a separate source. While USAID is unable to assist CDP in its resettlement program, USAID is interested in discussing the possibility of working with CDP to strengthen and assist the existing private fishing industry and establishing private sector support agencies.

How the C.D.P. list of requests fits into a "Programme" that could be addressed by a strengthened and reorganized Fisheries Department given the mandate to provide Services to fishermen and to stimulate private business involvement in fisheries production, fisheries service industries, fisheries marketing and export of fishery products.

A. FISH HANDLING AND TRANSPORT SERVICES

A consultant to evaluate request for processing/marketing related services outside Mogadishu area (where J.I.C.A. Mission is active). Requested items:-

1. Transport/Collection vessel
2. Regional cold stores
3. Rural Fish Markets
4. Canning factories

B. BOAT AND REPAIR SERVICES

1. District Workshops
2. Mobile Workshop
3. Tractors
4. Engines and spare parts
5. Expert mechanic

C. FISHERIES EQUIPMENT SERVICES

1. Fishing Gear
2. Exploratory Fishing Boat
3. Expert Masterfisherman

D. COMMUNICATION AND DATA SERVICES>

Radios, batteries and chargers

./....

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E. CREDIT FACILITIES

(A Revolving Fund managed by the Somali Development Bank, this C.D.P. Service is to identify, encourage, verify and support applications for funds from the private sector).

1. *****

- 1. Boats
- 2. Fishing Gear
- 3. Markets, Cold Stores, Canning equipment
- 4. Engines, parts
- 5. Vehicles, parts

=====

"SUPPORT TO THE ADMINISTRATION" is required in order that the Fisheries Department may be reorganized and strengthened so as to increase its management capabilities, efficiency and accountability. Support would take the form of:-

- 1. Salary supplements
- 2. Vehicles, fuel and maintenance
- 3. Office Maintenance
- 4. Office furniture and equipment
- 5. Training
- 6. Consultants
- 7. Experts

=====

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- S O M A L I D E M C R A T I C - R E P U B L I C -
COASTAL DEVELOPMENT PROJECT

8/6/85.

With the referece of the paper written together the two Usaid consultants wich was consening the future planing where C.D.P. is going.

Thus our objective is to provide services for the already existing private fishing industry. The way we want to provide the services is asf follows:-

1. C.D.P. is to provide the following services to the already existing private industry.
 - A. Fisheries equipment services
 - B. Boat Building services
 - C. Mechanical services
 - D. Fish Hand ling and transportation services
 - E. Communication and Date Collection services
 - F. A Credit program for fishermen, Boat Builders, Mechanical and Fish Dealers services
2. C.D.P. To strenathen the Fisheries Department, therefore it can provide the services
 - A. by increasing the Number of trained and skilled Fisheries specialists with in the Department.
 - B. by transferring Managemant responsipility of Fisheries related infrastructure (Suchas Fishing) gearstoMes, Mechanical workshops ice plant etc, to the Fisheries Department.
 - C. by Demonstrating the proper utiliation of the previously established inventory and accounting procedures.
 - D. by allocating A Budget to the fisheries Department.
 - E. by providing A floor of offices to the Fisharies Department.

Therefore C.D.P. is requesting afund to get it changed and carry out the above mentioned services.

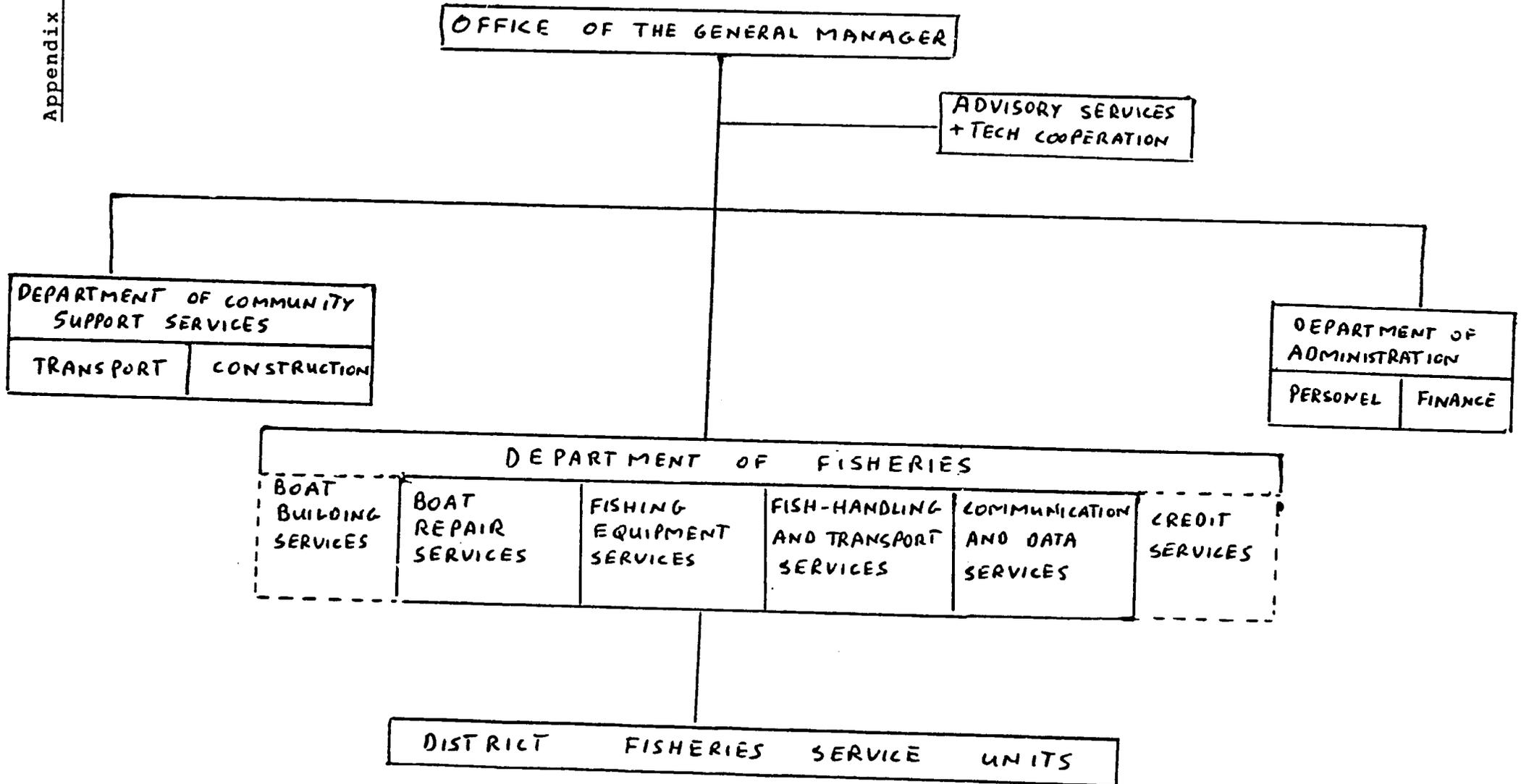
GENERAL MANAGER OF C. D. P.
ABDIKARIN HASHI IGAL



PROPOSED REORGANIZATION OF THE C. D. P.

(JUNE 8, 1985)

Appendix 6.



Boat Building

submit request for consultant study

consultant performs work

Marine Mechanical Service

transfer 2 mechanics into service

Transfer spares store to fisheries department

Train 2 new mechanics for Ali's absence

Ali Yusuf goes to England for training

Request ODA for mobil workshop

Arrival and operation of mobile workshop

set up central workshops and spare store

arrange financing; specify engines, spare parts, tools, and materials

Calender

J J A S O N D J F M A M J J A

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Fish Handling and Transport Service

Transfer assistant to Abdil Nor

Finish off ice plant and stores

submit request for consultant study

consultant performs work

Communication, Data Collection, Planning

Transfer 2 english-speaking fisheries technicians

Establish data collection methods

Said, current head of division, goes to England for 3 years of training

Prepare financing proposal for additional radios

Expansion of data collection from additional areas

draw up credit program proposal in consultation with USAID contract analyst and Somali Development Bank

Calendar

J J A S O N D J F M A M J J A

**

Terms of Reference: Boatbuilding Consultant

Background:

Traditional Somali boat-building has been overlooked since resettlement programs began ten years ago and hundreds of foreign boats were imported. Traditional Somali boats currently outnumber foreign - designed boats by more than 2: 1, and are growing in number as the overall size of the industry grows. Locally built traditional boats are more easily modified in design to fit local needs than mass - produced ones, and offer savings of 50%.

Work to be Performed:

The consultant shall work with CDP in assessing the potential role of traditional Somali boat-building, and planning the development of this sector on Somalia's East coast.

Specifically, the consultant will:

- 1) Document the current status of the sector; the number of boat-builders working, the types of boats being constructed, the materials required, and the costs.
- 2) Determine the future role of traditionally built boats; which fisheries are they most united for, which fisheries are they unsuited for, how do they compare with Sri Lanka and GRP boats in terms of cost, production of fish, and safety.
- 3) What steps should be taken if one wished to increase the production of traditionally built boats.

A draft copy or summary of the final report will be submitted to CDP for discussion before the consultant leaves Somalia. The final copy will be submitted in the U. S.

Schedule:

To ease travel problems, it is suggested that the consultant work during a dry period, such as mid-October to mid-December.

1 week, Kenya, for orientation and to visit wood exporters

7 weeks, Somalia

1 week, U. S., to prepare final version of report.

A total of 9 weeks.

Terms of Reference: Seafood Handling and Transportation Consultant

Background:

The Coastal Development Project is planning to strengthen its fisheries department and establish a seafood handling and transportation service. This service would be aimed at assisting the private sector to develop in this area by providing information and by carrying out demonstration projects.

Work to be Performed:

The consultant shall work with CDP in strengthening its seafood handling and transportation service.

Specifically, the consultant will:

- 1) Document the current system of fish distribution and marketing from Brava to Ras Asail.
- 2) Plan the development of this sector during the next three years; the roles of CDP, the roles of private businessmen.
- 3) Determine what infrastructure and technical assistance is required for this development.
- 4) Work with CDPs section of data collection and planning to coordinate their work
- 5) In general terms, assess CDPs effort to strengthen its fisheries department, its success in assisting the private sector, and assist CDP in planning its efforts during the next year.

A draft copy or summary of the final report will be submitted to CDP for discussion before the consultant leaves Somalia. The final copy will be submitted in the U. S.

Schedule:

1 week, Tropical Products Institute, England and INFOFISH, Rome

7 weeks, Somalia

1 week, U. S. A., to prepare final version of report.

total of 9 weeks.

Landings and Catch per Effort.

source: Biologist/statistician, Stellan Elmer, end of assignment report. February 1985.

Region 1

Ras Chiambone is a small village a few kilometers from the Kenyan border. It forms a fishing cooperative together with Burgao, situated at a small river mouth some 20 km to the north. Apart from fishing for the local consumption, the cooperative contributes with fish to the fish factory in Kisimayo. According to the latest information there are 12 operating motor boats and 13 sailing boats. The people in the villages have a lot of sheep and goats and some camels and cows. During some parts of the year, they grow sorghum in the clearings in the forest. Certain seasons the fishermen put up camps on the islands, fishing for sharks and dry-salting the catch, which is exported directly to Kenya. This is done mainly by the fishermen in Ras Chiambone, Burgao and Kulmis. Gillnets and long-lines are the main gear for this kind of fishing. The fish, which is delivered to Kisimayo is mainly caught with beach seines. During the calm periods trolling for big pelagic fish occurs. The fishermen also dives for spiny lobster. They usually go to the outer islands, but

still not to the most exposed areas along the reef, which is normally found outside the islands. This probably means, that there is a stock of lobster in very exposed areas, rarely exploited, which prevents overfishing. The fishermen use a mask, a wooden stick on which they put some octopus and a small hoop-net. I once joined some fishermen to see how they operated. We went to suitable rocky places with stones and small caves, in which the lobsters hide during day time. We found lobsters from two to about ten metres depth, which is the maximum for the divers. As soon as a diver caught sight of a lobster, he put the bait in front of it and it was amazing how fast the lobster was attracted to the bait. When it came out of its cave, the diver only had to put the net behind the lobster. Within 3/4 of an hour three divers caught about five Kg. The divers seem to operate only when they know that the transport boat is coming, and very few of them store the lobster in cages. Most of the lobster is sold to the SMP fish factory in Kisimayo.

In Kulmis there are eight operational motor boats and thirty sailing boats. The conditions are about the same as in Ras Chiambone and Burgao. Beach seining inside the islands, trolling and gillnetting occurs in about the same way.

In Kisimayo 26 motor boats are operational and the same number of sailing boats. These boats deliver most of their catch direct to the fish factory and there is less fishing for sharks. It seems to be more suitable bottoms for lobster further south. The fish factory produces frozen fish and lobster and small amounts of smoked fish. The fish is exported in order to generate hard currency but sometimes it is also sold locally, e.g. to the modern fish market in Mogadishu. The fish caught in the beach seines is dominated by *Siganus* and many different kinds of *Lethrinus*. These are small and medium size of fish. By gillnetting, hand-lining - trolling and long-lining large fish are caught, for example sharks, snappers, *Caranx* and tunas. Not all the fish is however delivered to the fish factory. According to estimations I made among a few fishing boats, average about 30 % of the catch was kept for local consumption. This was

mainly small fish or species not accepted by the collecting boats from the fish factory. Sometimes very small fish and lobster are caught. These must not be accepted by the fish factory, which also apply to female lobster with eggs. Even if the eggs are removed it is easily detected. In 1983 the SMP factory produced totally 560 tons of fish of which about 80 tons were spiny lobster. According to my estimates another 240 tons never reached the factory because it was consumed locally. According to the latest information I could get before I left Somalia, the SMP production for 1984 is about 530 tons. I also made some inquiries in the villages about the production of dry-salted fish and I estimated at least 200 tons fresh weight to be exported to Kenya. Assuming that the local consumption was about the same as previous year the total production of region 1 in 1984 is close to 1000 tons.

Region 2

Brava is a quite large village about 200 km south of Mogadishu. There are nine operational motor boats, six Sri Lankan and three Greek, and thirty huuris. Most of the fish is consumed locally, but a lot of it is dry-salted and exported to Kenya. The main gear are gillnets and hand-lines. In January -84 the total catch was 11 532 Kg, of which 6 955 were taken by six Sri Lankan boats and 4 577 by 12 huuris. During February and March only 5 968 Kg resp: 6 860 were caught totally. However five of the Sri Lankan boats were fishing sharks south of Brava during 45 days. Their catch corresponds to a fresh weight of about 12 tons. In April 9 214 Kg were landed and during the first 25 days of May 5 526 Kg. From there on the sea became more and more rough and fishing stopped during June, July and August. The total catch of this period is thus about 51 tons. If comparison is made with September to December -83 the estimate for the total catch of 1984 will be about 80 tons.

El Ahmed is a small village only 15 km south of Merca. There are nine operational motor boats, most of them Sri Lankan, and only three huuris. Gillnets are the most common gear. The fish is often transported to Merca or Mogadishu. In January six Sri Lankan boats caught 8 590 Kg. In February the catch was 4 489 Kg and in March 9 401 Kg. In March nine boats were operating. During April and May the production was 8 584 resp. 5-488 Kg.

As in Brava there has been no fishing during June, July and August because of rough weather. The total production of El Ahmed from January to August is therefore 36 552 Kg. When compared to the production of the last part of -83 the estimate for the whole of -84 will be about 55 tons.

Merca is situated about 100 km south of Mogadishu and it is a quite large village. There are ten operational fibre-glass boats (6,5 m), which are produced in the GRP factory in Mogadishu. As much as 75 huiris are scattered in the coastal surroundings. The fish production in January was 29 223 Kg. This amount of fish was caught by ten GRP boats and twenty huiris. In February there were 12 GRP boats and 31 huiris, landing 25 750 Kg. During March, April and May 52 710, 84 910 resp. 78 130 Kg were caught. In this period 11 motor boats and 34 huiris were operating. In June the catch was 45 250 Kg and because of the rough weather only 4 145 Kg in July. This makes a total of slightly more than 320 tons from January to July. From August to December -83 256 tons were caught. If assumed the catch will be the same in these months -84 the total will be 576 tons. Most of this fish is consumed in Merca and the adjacent inland villages. Sometimes the fish is transported to Mogadishu.

In Mogadishu there are up to 35 operational GRP boats (6,5 m) but normally much less are operating at the same time. There are also about 30 huiris. Mostly hand-lines are used, for demersal fish during the windy seasons and trolling for big pelagic fish during the calm seasons. Also gillnetting occurs. The way of fishing reminds a lot of that of Merca. In January only 2 855 Kg were caught in Mogadishu but only ten GRP boats per day were fishing. The following month the catch was 9 918 Kg and in March 38 135 Kg. This time, like the following months, average 23 boats were fishing. Both motor boats and huiris land their catches at the same place and it is sometimes difficult to differ between their catches. In April and May the catches were 42 450 Kg and 31 114 Kg. During June as much as 114 065 Kg were caught and in July 67 017 Kg. In these last two months about 26 boats operated per day. In August the production was 34 495 Kg and

in September 40 269 Kg. The total production of Mogadishu for these nine first months amounts 380 318 Kg. If the production of October, November and December keeps to the average of the other nine months, which is plausible, the total production of Mogadishu is somewhat more than 507 tons. There are normally six motor boats fishing in the small village Gesira some 25 km to the south of Mogadishu. According to my information these boats have a somewhat lower catch rate than in Mogadishu and I have estimated their production for -84 to about 100 tons. In Adale about 150 km north of Mogadishu there are several kinds of boats. Between six and eight Sri Lankan boats have been operating during 1984. There are also two Russian boats, four GRP (6,5 m) and three huuris. The two Ministry boats, one GRP (8,5 m) and one Japanese, are also operating in this area. The boats are however operating in different places during different seasons. Sometimes south of Adale and sometimes far north in region 3. When the fishermen go far from Adale and put up their camps, for example in Ilka Uus or El Dere, they go fishing for sharks with gillnets and dry-salt the fish normally. Close to Adale they often use hand-lines and when the season is good they are trolling for big pelagic fish. The total catch from this area was in January 51 270 Kg, in February 57 861 Kg, in March 111 323 Kg and in April 67 840 Kg. During May and June the catches were as high as 393 240 and 229 133 Kg. During the rough weather in July the landings were only 17 652 Kg. The total catch for these months is almost 1000 tons. This high production is mainly from shark fishing along a very long coast line and the very high figures from May and June, probably depends on that the sharks come close to the coast for spawning and feeding. The average for the production for the other five months is probably a good indication for the production of the last months of -84. The estimation of the total production of -84 in the Adale area is therefore 1 250 tons. When added up the total production of region 2 will be 2 568 tons. As mentioned above this figure includes landings far up in region 3. El Dere is situated some 150 km north of Adale.

Region 3

A lot of the production in region 3 is already mentioned under region 2. There are very few motor boats in region 3 and it is doubtful if any of them can operate during this bad fuel situation. The main production comes therefore from the huuris. According to the latest information there are about 15 huuris in the main centre Obbia and the same number in Garacad. As further north the production is concentrated on gillnetting for sharks, which is dry-salted. Handlining and trolling also occur. With an annual production of 20 tons per huuri the landing in Obbia is 300 tons. Depending on problems with transportation the production in other areas is probably very low and an estimate of the production of the northern part of region 3 is 400 tons.

Region 4

From the northern regions it is difficult to get production figures on a monthly basis, not only because of distances and communication problems but also depending on the way of fishing. As most of the fishing is concentrated on production of dry-salted fish, the boats often move to remote parts of the coast far away from the villages and the amount of fish caught is normally not detected until the boats return after several months. The following figures are therefore annual production figures from 83/84. The fishing season normally starts in October and ends in April - May. Gillnets are the main gear but trolling for big pelagic fish during the calm seasons is also important. Region 4 seems to include the richest fishing grounds. There are plenty of big and small pelagics as well as demersal fish.

There are nine Sri Lankan motor boats in Eyl, which are operational and eight beden. The beden are sailing boats described above. The production during 83/84 is 116 tons. This figure is converted to fresh weight from dry weight. Together with the local consumption, which is according to my figures more than 50 tons, the total production of Eyl is about 170 tons. By the end of -84 some more motor boats have probably been put into operation

In Bender Beyla there are four Sri Lankan boats but the main production comes from the 36 beden. In October, November and December the production corresponds to a fresh weight of 150 tons. From January to May the landings were about 450 tons and figures from the fresh fish consumption indicates 50 tons. The total production of Bender Beyla is thus about 650 tons.

In Hordio there are three operational Sri Lankan boats, twelve beden and ten huuris. In the closely situated Ras Hafun the number of operational Sri Lankan boats is four. There are 23 beden and nine huuris. The production 83/84 in Hordio was 714 tons fresh weight and together with the local consumption the estimate is about 750 tons. In Ras Hafun the production was 1164 tons, which together with the fresh fish consumption is estimated to be close to 1 200 tons.

In Bargal, close to the horn of Africa, there are nine Sri Lankan boats, 26 beden and 64 huuris. The total production is, according to recent information, only 350 tons for 83/84.

The total production for region 4 in 83/84 is 3 120 tons.

MARKET SURVEY IN ITALY FOR
SELECTED FRESH FISH SPECIES FROM
SOMALIA

BY

Stig Våland

20th May 1985

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1. INTRODUCTION

The consultant was contracted by FISHTECH INC. to conduct a short market survey of the Italian fresh fish market for SNAPPER, GROUPER, SEA BREAMS, SHARK, OCTOPUS and LIVE SPINY LOBSTER with particular reference to preferred product forms and product sizes, market volume and purchase prices of wholesalers. The method that has been used is partly a desk study of the available literature and statistics, and partly interviews by telephone with the leading fresh fish importers and wholesalers in Italy as well as visits to the central fish market and fish shops in Rome.

2. SNAPPER = LUTJANIDAE (Latin) = LUTIANIDO (Italian)

Snapper is almost completely unknown in the Italian market and cannot be considered a commercial species at the moment.

3. GROUPER = SERRANIDAE (Latin) = CERNIA (Italian)

Grouper, in English, is used as a collective description of the family SERRANIDAE. Out of this group of species EPINEPHELUS SPP. would qualify as the Italian CERNIA. Cernia is a well known species in Italy, and normally seen in the Roman wholesale market and the fish shops in Rome on a regular basis. According to the interviews with importers, the sales of Cernia in Northern Italy are limited, and the species is most popular in Rome, Napoli and the south of Italy.

The landings of groupers in Italy in the last few years have been as follows:

	1980	1981	1982	1983
DUSKY GROUPER (<i>Epinephelus guaza</i>)	1 775	666	390	998
GROUPERS, NEI (<i>Epinephelus spp.</i>)	716	670	-	-
TOTAL	2 491	1 336	390	998

(Figures: in metric tons)

(Source: FAO Yearbook of Fishery Statistics, 1983)

Most of the Italian landings of grouper is probably marketed in fresh state. There are also some imports of grouper, but as these are not listed separately in the import statistics, they are difficult to quantify exactly. One would, however, believe that the total market for grouper in Italy would be of the magnitude of between one or two thousand tons.

Preferred product sizes are 1-2 kg and 2-3 kg. Preferred product form is whole fish. One importer preferred fish smaller than 1.5 kg to be fresh and gutted, head-on, and fish larger than 1.5 kg to be gutted and frozen.

Grouper is not quoted in the fish market in Milano. Inquiries in the fish market in Rome gave the price as Lit. 20 000/kg from wholesaler to retailer at the moment, but one should be aware that prices fluctuate according to supply and demand. On this basis prices of Lit. 10 - 15 000/kg to importer should be obtainable. All the

importers that were contacted were extremely reluctant to give any price quotations before they had seen the fish.

4. SEA BREAMS = PAGELLUS SPP. (Latin) = PAGELLO (Italian)

Pagello is a known and appreciated species all over Italy. Unfortunately, neither landings nor imported quantities are listed separately in Italian statistics. Landings of porgies, sea breams, etc. in the last few years have been:

	1980	1981	1982	1983
PORGIES, SEA BREAMS, NEI (Sparidae)	4 478	1 213	851	1 376

(Quantities: in metric tons)

(Source: FAO Yearbook of Fishery Statistics, 1983)

Pagello is also imported into Italy in fresh state, but the quantities are uncertain. Most of the Italian landings are undoubtedly sold fresh. On this basis, one would believe that the total market for fresh pagello in Italy is of the magnitude of perhaps two thousand tons.

Price quotations for pagello on the wholesale market in Milano from wholesaler to retailer for 1984 and 1985 are given in Appendix 1. From the table, it can be seen that the prices range from Lit. 15 000 to over Lit. 20 000/ kg. On this basis, prices from Lit. 10 - 15 000/kg to importer should be obtainable.

Preferred sizes are 300 - 700 g per fish with about 400 g per fish as the ideal size. The fish should be whole and not gutted.

5. SHARK = SQUALIFORMES (Latin) = SQUALO (Italian)

The names of shark and dogfish refer to a great number of different families and species of the order of Squaliformes. Italy is the largest European market for sharks and a large number of species are known and popular.

Landings of sharks in Italy in the last few years have been as follows:

	1980	1981	1982	1983
SMOOTH HOUND	2 531	2 399	3 462	4 459
= PALOMBO (Italian)				
(Mustelus spp.)				
SHARKS, RAYS, SKATES, Etc.	589	168	194	218
TOTAL	3 120	2 567	3 656	4 677

(Quantities: in metric tons)

(Source: FAO Yearbook of Fishery Statistics, 1983)

Imports of fresh and chilled shark 1981-1983

	1981		1982		1983	
	Q	V	Q	V	Q	V
DOGFISH						
= SPINAROLI e GATTUCCI	-	-	-	-	583	3 294
(Italian)						
OTHER SHARK	-	-	-	-	476	2 140
TOTAL SHARK	1 282	5 237	964	4 772	1 059	5 430

(Q = quantity in metric tons)

(V = value in millions of Lit.)

(Source: Statistica Mensile del Commercio con l'Estero Istituto Centrale di Statistica).

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It should be noted from the figures that the average value of fresh and chilled shark imports is around Lit. 5 000/kg. It should also be noted that in 1982 and 1983 more than 98 percent of the fresh and chilled shark imported into Italy came from neighbouring France. These two facts taken together might indicate that air freight of shark from Somali might not be such an attractive proposition.

The only shark species quoted in Milano is frozen PORBEAGLE = SMERIGLIO (Italian) = LAMNA NASUS (Latin). Prices from wholesaler to retailer in 1984 and 1985 mostly fluctuate between Lit. 7 000/8 000 per kg (See Appendix 1).

As for preferred sizes and product forms, it is difficult to pronounce oneself until one knows which specific species of shark that are available from Somalia. Most of the proper sharks seen on the wholesale market in Rome are sold whole. Dogfish is often seen in skinned, headed and gutted state.

Imports of frozen sharks 1981-83 vary between four and seven thousand tons annually.

When considering importing fresh or chilled sharks one should be aware that Italy has very strict import regulations concerning mercury content, and inspection routines to match. In practice this means that a consignment of fresh fish can well be held up in custom clearance for several days while one awaits the results of the laboratory analyses. The possibilities for such procedures are particularly great for large species like sharks and tuna, especially when they originate from outside of the EEC.

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6. TUNA = THUNNIDAE (Latin) + TONNO (Italian)

The English term of tuna (and the Italian term of tonno) refers to a large number of species, mainly from the Thunnus and Euthynnus families. Tuna is known and appreciated in Italy, mainly in canned but also in fresh state.

Landings of tuna in Italy during the last few years have been as follows:

	1980	1981	1982	1983
ATLANTIC BONITO (Sarda sarda)	1 180	1 096	1 102	1 806
NORTHERN BLUEFIN TUNA (Thunnus thynnus)	1 772	1 441	2 394	2 498
FRIGATE AND BULLET TUNAS (Auxis thazard, Auxis rochet)	1 376	1 193	1 299	1 494
TOTAL	4 328	4 795	4 795	5 798

(Quantities: in metric tons)

(Source: FAO Yearbook of Fishery Statistics, 1983)

Imports of frozen tuna into Italy are between fifty and a hundred thousand tons annually. These quantities are almost exclusively destined for further processing into canned tuna.

Imports of fresh and chilled tuna during the last few years have been as follows:

1981		1982		1983	
Q	V	Q	V	Q	V
181	515	189	495	768	2 146

(Q = Quantity in tons)

(V = Value in millions of Lit.)

(Source: Statistica Mensile del Commercio con l'Estero
Istituto Central di Statistica)

More than 98 percent of the fresh and chilled tuna imports originate in neighbouring France. As can be seen from the table, the average value of the imports are slightly less than Lit. 3 000/kg. The preferred product form for fresh tuna is gutted and gilled. As for preferred product sizes one would have to know which species would be available from Somalia, but for the fresh fish markets the fish apparently should be very large (15 to 25 kg). Fresh tuna is quoted on the market in Milan (see Appendix 1). Quotations in 1984 were mostly between four and seven thousand Lire per kg, wholesaler to retailer. This tallies fairly well with average value of imports (see Table). When contemplating to import fresh or chilled tuna, one should be aware of the regulations concerning mercury content (see preceding paragraph).

7. OCTOPUS = OCTOPUS SPP. (Latin) = POLPO (Italian)

Octopus is a known and appreciated species in Italy. Landings in Italy during the last few years have been as follows:

	1980	1981	1982	1983
COMMON OCTOPUS (<i>Octopus vulgaris</i>)	9 404	9 285	8 983	9 568
HORNED AND MUSKY OCTOPUSES (<i>Eledone</i> spp.)	2 070	2 032	2 586	4 310
TOTAL	11 474	11 317	11 569	13 878

(Quantities: in metric tons)

(Source: FAO Yearbook of Fishery Statistics, 1983)

Imports of frozen octopus 1981-83 range from ten to fourteen thousand tons. There is no record of any imports of fresh octopus, or, indeed, of any other fresh cephalopods apart from smaller quantities of squid (Loligo) from France (less than 100 tons annually).

Fresh octopus is quoted on the market in Milano (see Appendix 1). In 1984/85 prices from wholesaler to retailer range mostly from three to six thousand Lit. per kg. Preferred sizes for octopus in fresh state would be less than 300 grammes. Preferred product forms for these sizes would be whole, not gutted. Prices indicated in conversation with importers were around Lit. 3 000 per kg, which tallies well with the quoted market prices. Several importers did, however, express their concern on whether these prices would make it worthwhile to airfreight octopus from Somalia.

8. SPINY LOBSTER = PALINURUS SPP. (Latin) = ARAGOSTA (Italian)

Spiny lobster is a known and appreciated species in Italy.

Landings in Italy during the last few years have been as follows:

	1980	1981	1982	1983
PANULIRID SPINY LOBSTER (Panulirus spp.)	685	150	20	-
PALINURID SPINY LOBSTER (Palinurus spp.)	731	878	584	568
TOTAL	1 416	1 028	604	568

(Quantities: in metric tons)

(Source: FAO Yearbook of Fishery Statistics, 1983)

Imports of spiny lobster into Italy during the last few years have been as follows:

	1981		1982		1983	
	Q	V	Q	V	Q	V
Total	150	1 813	240	250	172	2 505
From Somalia	16	178	100	765	67	536

(Q = Quantity in metric tons)

(V = Value in millions of Lit.)

(Source: Statistica Mensile del Commercio con l'Estero Istituto Centrale di Statistica).

As can be seen from the Table, the average value of spiny lobster imports is somewhat above ten thousand Lit. per kg and somewhat below ten thousand Lit. per kg from spiny lobsters from Somalia. The table position does not indicate whether the product is fresh or frozen, but most likely it comprises both categories. Fresh domestic spiny lobster is quoted on the market in Milano (see Appendix 1). For 1984 and 1985 the quotations have been very sporadic, but what there is indicates a price from wholesaler to retailer of Lit. 45 - 50 000/kg. Preferred sizes of live spiny lobsters are between 500 g and 1 kg.

9. CONCLUSIONS !

Based on the above, it would seem that the best opportunities to establish fresh fish exports by air from Somalia to Italy would be in groupers, sea breams and spiny lobsters. Snapper is practically unknown in Italy. For shark and tuna one can see problems with the combination of not-so-high prices and the regulations concerning

mercury content, unless some high prices species or size groups can be identified within these larger groups of species. As for octopus, it looks like obtainable prices in Italy would be too low to justify air freight shipment.

APPENDIX 1

PRICES FOR FRESH FISH IN MILANO, WHOLESALER TO RETAILER. PRICES IN 1000 LIT. PER KG.
SOURCE = LISTINI DE PREZZI.

10 #12.		1984										1985							
		16/1	20/2	19/3	9/4	21/5	20/6	21/7	24/8	21/9	19/10	23/11	14/12	4/1	7/2	15/2	8/3	29/3	19/4
	SCOMBRI = MACKEREL = Scomber spp																		
	FRESH DOMESTIC	MIN 3.-	2.-	2.-	3.-	4.-	-	5.-	2.5	4.5	2.-	2.5	3.-	-	2.5	3.-	2.5	-	
		MAX 4.-	2.5	3.-	3.5	5.-	-	6.5	5.2	5.-	3.5	5.-	3.5	-	3.-	3.5	3.-	-	
	FRESH FOREIGN	MIN 2.-	-	1.-	2.-	-	-	3.-	2.5	-	2.-	2.-	2.-	-	2.5	2.5	1.8	3.8	
		MAX 4.-	2.3	2.5	2.8	-	3.-	4.5	3.-	3.-	2.5	2.9	2.5	4.-	3.2	4.5	2.5	4.5	
	SCAMPI INTERI = NORWAY LOBSTER = Nephrops Norvegicus																		
	FRESH DOMESTIC	MIN 27.-	-	-	15.-	22.-	15.-	11.-	15.-	-	-	11.-	11.-	-	20.-	-	-	20.-	20.-
		MAX 30.-	20.-	30.-	20.-	25.-	22.-	30.-	27.-	27.-	23.-	32.-	29.-	33.-	30.-	35.-	30.-	29.-	30.-
	FRESH FOREIGN	MIN 14.-	-	-	-	-	-	10.-	-	10.5	11.-	-	12.-	12.5	13.-	12.2	13.-	14.5	14.-
		MAX 14.-	-	-	13.-	-	-	11.-	10.5	12.-	13.5	13.7	15.-	13.5	14.6	13.5	16.5	15.5	
	MAZZANCOLLE = LARGE PRAWN = Penaeus spp																		
	FRESH DOMESTIC	MIN 13.-	12.5	-	-	13.-	-	12.-	-	-	-	-	-	-	14.5	13.-	13.-	12.-	-
		MAX 13.-	10.-	12.-	15.-	14.-	12.-	12.5	14.-	14.-	13.-	14.-	14.-	-	15.-	14.-	14.-	15.-	-
	CALAMARO = SQUID = Loliginidae, Ommastrephidae																		
	FRESH DOMESTIC	MIN 12.5	-	12.-	14.-	15.-	-	13.-	8.5	-	-	9.-	-	10.-	12.-	13.-	14.-	15.-	14.-
		MAX 12.5	13.-	14.-	15.-	16.-	17.-	17.-	13.-	10.-	10.-	11.-	15.-	12.-	14.-	16.-	14.5	16.-	15.-
	FROZEN FOREIGN	MIN 4.5	5.-	4.5	4.5	4.-	6.5	4.5	4.5	4.8	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
		MAX 7.8	7.5	9.-	8.-	4.5	7.-	7.-	7.-	7.-	8.-	7.-	8.-	8.8	8.8	8.8	8.8	8.8	8.-
	POLPO E POLPETTO = OCTOPUS = Octopus spp																		
	FRESH DOMESTIC	MIN 3.-	4.-	3.8	4.-	3.-	4.-	3.-	-	5.-	5.5	4.5	-	6.5	4.5	4.-	5.-	4.5	4.5
		MAX 4.5	5.-	4.3	4.5	3.5	5.5	5.-	3.-	5.5	6.-	6.5	9.-	8.-	5.5	6.-	7.-	5.-	5.5
	SEPIA E SEPIONE = CUTTLEFISH = Sepia spp																		
	FRESH DOMESTIC	MIN 5.-	-	-	5.-	3.-	3.5	-	7.5	7.-	5.-	4.-	4.5	7.-	5.5	7.-	5.-	-	4.8
		MAX 6.-	-	5.-	6.-	4.-	5.5	7.-	8.8	8.-	6.-	5.5	5.-	8.-	7.-	8.-	7.-	7.-	6.-
	PIGURE =																		
	FRESH DOMESTIC	MIN 2.5	4.-	4.-	4.5	-	5.-	3.4	4.5	5.-	4.-	3.7	4.-	5.-	5.-	5.-	4.-	4.5	5.-
		MAX 4.5	5.-	4.5	5.-	2.-	5.5	6.-	6.-	5.5	5.5	5.5	4.5	8.-	5.5	5.5	5.-	5.-	6.-
	FROZEN FOREIGN	MIN 3.-	3.-	3.-	-	4.5	4.-	3.5	3.5	4.-	3.-	4.-	3.5	4.5	3.5	3.5	3.5	3.5	3.5
		MAX 3.-	4.-	4.-	-	5.-	4.5	4.5	4.5	5.5	4.5	5.5	4.5	6.-	6.-	6.-	6.-	6.-	6.-
	SMERIGLIO = PORBEAGLE = Lamna nasus																		
	FROZEN FOREIGN	MIN 5.-	-	-	-	-	-	-	-	7.2	7.5	-	-	-	7.5	7.8	7.5	7.5	
		MAX -	7.-	7.-	7.-	-	7.-	7.3	7.5	7.5	8.-	8.-	8.-	7.5	8.-	8.-	9.-	4.5	
	RAZZA = RAY = Dasyatidae																		
	FRESH DOMESTIC	MIN 3.-	3.-	2.-	3.5	-	2.5	-	3.-	3.-	2.5	3.-	3.-	-	3.-	3.-	2.5	5.-	
		MAX 3.2	4.5	3.-	4.5	-	-	4.-	4.-	3.5	4.5	3.5	3.5	-	4.-	4.-	5.-	5.5	
	BARBONO =																		
	FRESH DOMESTIC	MIN 4.5	4.5	-	4.5	-	7.1	-	-	6.-	4.-	-	4.5	-	5.-	5.5	2.-	5.-	
		MAX 5.-	5.-	-	5.-	-	12.-	-	-	6.-	5.-	5.-	-	6.-	6.5	4.-	6.-		

APPENDIX 1

PRICES FOR FRESH FISH IN MILANO, WHOLESALER TO RETAILER • PRICES IN 1000 LIT PER KG
SOURCE = LISTINI DI PREZZI

10/13

1984
16/1 20/2 19/3 9/4 21/5 20/6 21/7 24/8 21/9 19/10 23/11 14/12 1985
1/1 7/2 15/2 3/3 29/3 14/4

ANQUILLO - EUROPEAN EEL = *Anguilla Anguilla*
FRESH DOMESTIC

MIN	8,5	4,5	10,5	7,-	10,-	9,-	-	-	-	-	-	9,5	10,-	10,-	-	-	-	-
MAX	13,-	13,-	13,-	13,-	14,5	11,5	-	-	-	10,0	-	12,-	14,-	13,5	-	-	-	-

SALMONE = SALMON = *Salmo Salar*
FRESH FOREIGN

MIN	11,5	11,-	-	-	13,-	13,5	13,-	14,2	12,5	14,-	14,-	16,-	14,-	14,5	13,5	14,5	17,5	
MAX	-	11,-	11,5	11,-	-	13,-	13,5	13,-	14,2	12,5	14,-	14,-	16,-	14,-	14,5	13,5	14,5	17,5

BRANZINI =
(Large and med.) FRESH DOMESTIC

MIN	25,-	15,-	16,-	-	13,-	-	-	-	-	-	-	17,-	16,5	20,-	15,5	16,-	-
MAX	35,5	20,-	19,-	24,-	23,-	13,-	22,-	-	-	27,-	-	20,-	21,-	22,-	24,-	19,-	13,-

(Large and med.) FRESH FOREIGN

MIN	15,-	-	-	20,-	13,-	23,-	-	20,-	16,-	16,-	16,-	23,-	15,-	20,-	12,5	19,-	-
MAX	25,-	-	-	28,-	22,-	25,5	25,-	25,-	20,-	13,-	20,-	23,5	18,-	25,-	15,-	23,-	30,-

MERLUZZA = HAKE = *Merluccius spp*
FRESH DOMESTIC

MIN	6,-	9,-	5,-	8,-	6,-	7,-	10,-	-	-	8,-	12,-	8,-	9,-	9,-	10,-	10,5	3,-	3,-
MAX	10,-	11,-	8,-	12,-	11,-	12,-	11,-	10,-	8,-	11,-	14,-	9,-	12,-	11,-	12,-	12,-	14,-	13,5

ORATTO = GILT HEAD BRENN = *Sparus Aurata*
(Large and med.) FRESH DOMESTIC

MIN	-	-	-	-	-	-	-	-	-	-	-	25,-	-	23,-	-	-	28,-
MAX	-	-	-	33,-	-	-	22,-	-	22,-	22,-	26,-	-	24,-	-	-	35,-	33,-

(Large and med.) FRESH FOREIGN

MIN	17,-	-	-	-	-	-	-	-	18,-	19,-	-	25,5	-	-	23,5	23,-	-
MAX	17,5	24,-	-	23,-	-	-	22,-	26,-	19,-	20,-	20,-	25,-	22,-	27,-	17,-	32,-	31,-

SAN PIETRO = JOHN DORY = *Zeus Faber*
FRESH DOMESTIC

MIN	10,-	10,-	8,-	9,-	-	9,-	-	10,-	-	9,5	10,-	11,-	11,-	9,-	-	12,5	14,-	
MAX	11,5	11,-	10,-	10,-	11,-	-	-	11,5	-	11,-	11,-	11,-	13,-	13,-	11,-	11,-	13,-	15,-

SOGLIOLA = COMMON SOLE = *Solea Vulgaris*
(Large and med.) FRESH DOMESTIC

MIN	14,-	14,5	-	15,-	-	-	15,5	-	16,-	-	-	14,-	-	10,-	16,-	-	16,5	-
MAX	16,-	16,-	-	18,-	-	-	16,5	17,-	16,5	16,-	13,-	16,-	-	14,-	18,-	17,-	17,-	18,-

(Large and med.) FRESH FOREIGN

MIN	-	-	-	15,-	-	-	-	9,5	3,-	7,5	4,-	-	10,-	9,5	8,-	8,-	13,3
MAX	-	13,-	10,-	18,-	-	10,-	10,-	10,5	10,-	9,-	11,7	10,-	15,-	13,-	10,-	10,-	18

APPENDIX I

PRICES, FOR FRESH FISH IN MILANO, WHOLESALER TO RETAILER • PRICES IN 1000 LIT. PER KG.

(1)

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TRICLIA = SURHULLET, RED HULLET = *Mullus barbatus*

FRESH DOMESTIC

	1984														1985			
	16/1	20/2	19/3	9/4	21/5	20/6	21/7	24/8	21/9	19/10	23/11	14/12	4/1	7/2	15/2	8/3	29/3	19/4
MIN	8-	10-	11-	9-	-	-	-	7-	12-	8-	7-	8-	16-	12-	14-	9.5	13-	14-
MAX	10-	13.5	12-	12-	-	-	15-	8-	13-	10-	9-	13-	18-	16-	18-	12-	14-	17.5

PAZELLO = SEA BREEM = *Pagellus spp*

FRESH DOMESTIC

MIN	3-	10-	-	-	-	-	-	-	8-	-	-	15-	-	15-	-	23-
MAX	4-	11-	10-	-	-	10-	-	10-	-	-	19-	-	16-	-	27-	

FRESH FOREIGN

MIN	4.7	-	-	9.5	-	-	-	16.5	16-	-	20-	-	18-	-
MAX	4.3	18-	10-	18-	17.5	13-	17-	17-	20-	-	21-	18-	23-	17.5

PESCATRICE = MONKFISH = *Lophius Piscatorius*

(Headless)

FRESH DOMESTIC

MIN	13-	-	10-	-	11.5	10.5	12.5	12-	8-	-	12-	-	10.5	11-	10.5	12-	12-
MAX	13.5	13-	13-	12-	13-	12-	12-	13-	12.5	12-	12.5	-	11.5	11.5	12-	15-	13.5

FRESH FOREIGN

MIN	12-	-	10-	-	10-	10.5	11-	11-	10.5	13-	13-	11-	10-	11.5	10.8	13-	
MAX	13-	10-	10-	10.5	12-	-	11.5	11-	12-	11.5	13.5	14-	12-	10.5	13.5	11.5	13.5

SERICLIO = PORBEAGLE = *Lamna nasus*

FROZEN FOREIGN

MIN	5-	-	-	-	-	-	7.2	7.5	-	7-	-	7.5	7.8	7.5	7.5	
MAX	7-	7-	7-	-	7-	7.3	7.5	7.5	8-	8-	8-	7.5	8-	8-	9-	9.5

SCORFANO = SCORPION FISH = *Scorpaena spp*

FRESH DOMESTIC

MIN	9.5	4-	-	8-	-	-	11-	-	10-	8-	-	-	10-	-
MAX	11-	13-	13-	10-	10-	15-	11-	12-	9-	8.5	-	12-	12-	-

SPADA = SWORDFISH = *Xiphias gladius*

FRESH DOMESTIC

MIN	14-	-	10-	-	10-	11.6	11-	9-	11-	10-	-	-	10-	14-	
MAX	16-	-	13-	10-	14-	12-	13.75	12.5	11-	13.5	11-	-	14-	13-	15-

FROZEN FOREIGN

MIN	7.5	-	-	-	-	8-	8-	-	-	8-	8-	8.5	8-	8.5	8-		
MAX	7.5	7.5	7.5	-	7.5	8.2	8.2	8.2	8.5	8.5	8.5	8.5	8-	8.5	8.5	8-	10-

TONNO = TUNA = *Thunnidae*

FRESH DOMESTIC

MIN	4.5	-	6.5	6.5	4.5	-	3.6	4-	4-	12-	-	-	-	-
MAX	5-	-	7-	7-	-	7-	4.5	5-	5-	13-	-	-	-	-

Leading fresh fish importers in Italy

Europesca SpA
Via Sammartini 71
20125 Milano
tel: 683 033/683 046
telex: 36304

Marimpex SpA
Via Cesare Battisti 1
01040 Albusciago di Sumirago (Milano)
tel.: 0331/909900

Pedol Mario e Figli SpA
Via Dogana, 2
Milano

tel: 02/807391

Ittimport
Via Plava 4
22053 Lecco
tel: 0341/363053

Tiozzo Aldo SpA
S. Polo. 841
30125 Venezia

tel: 041/936533
telex: 410601

Further information on importers is available from;
Associazione Nazionale Trasformatori
Importatori Esportatori Prodotti Ittici
Corso Venezia 47
20121 Milano

Information on exporting to Italy is available from:

Ufficio Commerciale del Portogallo (ICEP)
P.le de Agostini 3
20146 Milano

tel: 02/470659
telex: 321280

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Companies contacted and the species they are interested in:

Company	Species
Europesca SpA Via Sammartini 71 20125 Milano	Cernia Pagello Tonno
Tiozzo Aldo SpA S. Polo. 841 31215 Venezia	Cernia Pagello Polpo Tonno Aragosta
Pedol Mario e Figli Via Dogana, 2 Milano	Cernia Pagello Aragosta
Marimpex S.p.A. Via Cesare Battisti, 1 01040 Albusciago di Sumirago (Milan)	none
Bolli Bruno Mercati Generali Via Ostiense ROMA	Cernia Pagello Tonno Aragosta
Orsini Alvaro Mercati Generali Via Ostiense Roma	Cernia Pagello Tonno Aragosta

APPENDIX II

Source: Analyse de exportations par avion de poisson au depart de certains pays africains. FAO. Project PNUD/OACI/RAF/74/021. translated by Martin Vincent.

Notes on the French market for the imported fish and shrimp.

1. Fish

France imports about 800 tons of warm water fish annually.

This trade is in the hands of a few wholesalers/importers who work out of Paris and the French Riviera, but small quantities are also imported via Bordeaux and Lyon. In general, the importers trade with the wholesalers, who, in turn, distribute the products to the retailers.

Because of the established trade between France and its former colonies in west Africa, and also because of the relationship between the airlines UTA and Air Afrique and the preferential tariffs offered for air transport between those countries and France, practically all the refrigerated fish imported by air comes from west Africa. Due to that advantage, the competition from other countries, for example the countries of the Mediterranean basin, is not very important.

These imports by air compete with the sale of similar species captured locally, but the latter constitutes only a small percentage of the French consumption of fresh fish. A fairly high standard of living, compared to the other European countries, a tradition of haute cuisine, and a preference for fresh fish, have resulted in a strong demand for many species of high value even though the number of species acceptable in France remains less than the number which are imported into Spain and Italy. The demand is elastic, both in relation to income and to price. The distribution is currently localized in the centers of importation. Due to the price advantages over foreign competitors, the African countries can expect to raise their exports through advertising and open new markets in regions which are currently not served.

2. Shrimp

France is by far the largest European market for imported fresh and frozen shrimp. These imports are in the order of 1500 tons per year, with 100 tons of fresh shrimp being imported during the months of September and October.

The demand is mainly for frozen shrimp, tails or whole, cooked or not. The few large importers are situated in Paris and supply the wholesalers at the Rungis fish market, as well as other wholesalers and distributors across France. One company in particular, Amerger, has considerable interests in the shrimp

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fisheries of the former colonies in west Africa; it imports and distributes the greatest part of the production through its associated companies.

The large trade in frozen shrimp between west Africa and France owes its development to the ATAF tariffs which are extremely advantageous for Paris, Lyon, Nice, Bordeaux and Marseille. The following table, based on data supplied by UTA, shows that growth:

Exports by air of frozen shrimp via UTA and Air Afrique to France

<u>From</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	
Abidjan	64	136	145	240	300	186	
Cotonou	294	399	869	900	625	658	
Dakar	40	209	367	400	565	525	
Lome	n.d.	n.d.	n.d.	102	95	55	
Total	398	744	1381	1642	1585	1424	

n.d. - no data

Source: UTA, Marketing Division

In the past, a large part of the imported shrimp called frozen were sold as "fresh shrimp", after their rise in temperature during air transport. In some case, the product arrived at its destination in a thawed state, which rendered it inappropriate for a new freezing or long storage. It appears that existing French law will, in the future, be applied more rigorously. Thus shrimp frozen during any stage of production shall be sold as frozen shrimp. The impact on air transportation of the new rigor in law enforcement is not yet known. It is expected that precautions will be taken to keep the shrimp frozen during transport, and that the shrimp will be marketed as frozen.

It is probable that under those conditions, the imports by air of frozen shrimp will decrease and that the demand will be met by local fish, perhaps with a little fresh shrimp which has been imported by air.

Importations by air originate only in west Africa; shipments from other regions are sent by sea.

It is difficult to estimate the possibility of growth in this sector. Although the relative proportions of fresh and frozen shrimp may change, it is probable that annual imports in the order of 1,500 tons will increase steadily. Large increases are improbable, given that the market is currently well supplied by the importers, unless prices can be brought down to be competitive with frozen product, or unless the reinforcement of "fresh" labeling increases the demand for fresh airfreighted shrimp.

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Notes on the Spanish market for importations of fish and shrimp.

1. Fish

Spain currently imports between 1,00 and 1,500 tons of semi-tropical fish by air each year, and this quantity is slowly increasing.

The importations are handled by a dozen large importers/wholesalers located principally in Madrid and Barcelona. They distribute the fish to other wholesalers, who in turn resell to retailers. In Spain, very little of the imported fish passes through open markets and is practically all sold before arriving by plane. The retail market encompasses fish stores, hotels, and restaurants.

Current air-freight imports originate in Mediterranean countries where surface transportation is difficult, such as Greece and Tunisia. However, the largest portion comes from Casablanca, the Canary Islands, and the former Spanish Sahara. The rest of the fresh fish trade is intra-European and is transported by surface.

Generally, no other regions of the world are involved in the air-freight of fish to Spain, except for a short period each summer when additional supplies come from Argentina.

The fresh fish captured in Spanish waters has always been directed towards the large population centers of Spain. Spain has always maintained one of the largest fishing fleets of Europe, with high-sea boats, and the frozen fish produced by this fleet fulfills the largest part of the demand.

Currently, fresh fish is more expensive than frozen or dried fish due to the higher production costs and the scarcer supply. As a result, the demand is elastic with respect to both income and supply.

The quantities being sold are small enough that weather or sea condition are sufficient to greatly affect available supply.

It is thus the combination of the price levels and this type of supply fluctuations which determine the level of imports and whether the additional cost of air-freight can be covered.

On the other hand, a portion of the clientele for fresh fish does not hesitate at paying high prices for high quality fresh fish.

In effect, the recent recession, during which real income has diminished and during which prices have risen, has resulted in an overall decrease in fresh fish sales. It is hoped that with a strengthening of the economy, this trend will reverse itself. The importers do not believe that they can raise their current level of importations, which currently run from 25 to 30 tons a week, due to the problem of prices. An expansion of the market can be accomplished through a substantial reduction of prices.

Even in light of this situation, it is probable that additional marketing efforts at all levels could raise the total market for fresh fish, and with it, the demand for air-freighted fresh fish.

For west African countries to secure this market, they would have to compete with countries which are a lot closer to Spain. This result could be obtained if the confidence of the importers were maintained through regular shipments of high quality product, as well as through a policy of offering highly competitive prices.

Shrimp

It is estimated that 80 tons of shrimp are air-freighted annually into Spain, the largest part of which is fresh.

The importers are located in the large commercial centers of Madrid, Barcelona, Coruna and Vigo, and they supply the wholesaler/distributors. Recent imports come through Madrid by chartered planes and originate in north Africa. Insufficient temperature control and black spots are occasional problems with these shipments.

The demand is for whole shrimp, fresh or frozen. Very few of the frozen shrimp shipments are made by air, due to the supply coming from national vessels and the sufficient surface transportation. Fresh shrimp demands a higher price, and local shortages provide and opportunity for air shipments from neighboring countries. It is improbable that small quantities, such as 1/2 ton, transported by airlines, can support the high freight costs, as compared with charter airfreight of small quantities.

It is hardly likely that African exporters can acquire a part of the current or future markets, due to the high transportation costs.

Notes on the Italian market for imported fish and shrimp

1. Fish

It is estimated that 750 to 1,000 tons of air-freighted fresh fish are imported into Italy annually.

The importers are located in Milan, the most important center of consumption, and the large market for imported fish. There are only five importers of air-freighted fish. The shipments are received in Rome or Milan. In the first case, they are distributed locally, and in the second they are distributed around Milan, but the national market is seldom satisfied.

Most regions of Italy receive their fresh fish from the local ports, and it is only in the industrial zone of the north, where the highest population density is found, that imported fish is consumed. Imported fish is thus a direct substitute for the local production normally available on the Italian coast. Even though a limited market for high-quality expensive fish exists, the acceptable prices for fresh fish in these industrial regions are generally less than they are in other parts of the country.

The air-freight imports originate in other European countries, such as Portugal and Morocco. On the other hand, during the summer months, 4 to 5 tons per week are imported from Argentina. The Italian market accepts a greater variety of species than other European markets.

The importers estimate that they can sell a much greater quantity than they are currently importing, but the Italian recession has affected the market in respect to price levels and the variety of species.

Countries of west Africa have virtually no part of the current market, due to their distance from the market and their higher costs of transportation, as well as a lack of marketing, publicity, and, finally, demand.

2. Shrimp

As in Spain, the importations of air-freighted shrimp in Italy are on the order of 80 tons per year, fresh and frozen, whole and unshelled. The principal importers are located in Milan and they supply wholesalers and distributors in the entire country. Most shipments originate in the far east and they consist of frozen unpeeled product. The demand for whole shrimp is generally met by Italian production. Nevertheless, the level of imports is relatively large, about 2,500 tons per year, and the demand is based on low-priced product. Current air-freight imports, whether fresh or frozen, are destined for the high-priced markets. Growth in this market is possible, along with an increase in revenues.

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Notes on the German market for imported fish and shrimp

1. Fish

There is practically no German market for semi-tropical fish. A small quantity of frozen product arrives via surface-freight, and is sold to hotels, restaurants, and the community of immigrant workers living in the south of Germany.

Hamburg is the center of German fish consumption, followed by a distance with Munich. The greatest possibility of developing a German market for semi-tropical fish rests in the promotion of sales to immigrant workers of southern European origin. However, their level of income and standard of living are low, and the demand would probably be for low-cost frozen species of southern Europe.

2. Shrimp

The quantities imported by air-freight are negligible. The total market of warm-water shrimp is estimated at 800 tons per year, frozen and transported by surface.

A small quantity, between 10 and 20 tons a year is imported from Ghana.

The primary demand is for unshelled cold-water shrimp. There is no demand for fresh warm-water shrimp, and the demand for frozen warm-water shrimp is satisfied through surface transportation. It is possible that small quantities of warm-water shrimp could be transported by air, on demand.