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Study on the evolution of markets for West African Fish Products : Impact of the GATT agreement; the devaluation of the CFA Franc and the decline of the industrial small pelagic fishery on food security

By

Dr: Ernest O. Tettey

and

Dr. Jean Marin

« Food security and sustainable development » division

« Fisheries and living aquatic resources » unit

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Units and Measures

kg	:	kilogram
km	:	kilometre
lit	:	litre
m	:	metre
mt	:	metric tons

Abbreviations

ACP	Africa, Carribean and Pacific States
ADB	African Development Bank
CAEE	Cellule d'Appui à l'Environnement des Enterprises
CFD	Caisse Française de Développement
CIS	Commonwealth of Independent States
CRODT	Centre de Recherches Océanographiques de Dakar, Thiaroye
DANIDA	Danish International Development Agency
DOPM	Direction de l'Océanographie et des Pêches Maritimes
ECA	United Nations Economic Commission for Africa
ECOWAS	Economic Communitiy of West African States
EIB	European Investment Bank
EEZ	Economic Exclusive Zone
EU	European Union
FAO	United Nations Food and Agriculture Organization
GATT	General Agreement on Tariffs and Trade
GRT	Gross Registered Tonnage
HP	Horsepower
IDAF	Integrated Development of Artisanal Fisheries in West Africa
IFC	International Finance Corporation
INFOPECHE	Regional Fish Marketing and Technical Advisory Service for Africa
ISRA	Institut Sénégalais de Recherches Agricoles
UEMOA	Union Economique et Monitaire Ouest Africaine
UNDP	United Nations Development Programme
VAT	Value Added Tax
WTO	World Trade Organization

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INTRODUCTION

1. Background

Following the break-up of the ex-USSR, a lot of concern has been raised over possible decline in frozen small pelagic supplies to the West African sub-region. The ex-USSR distant-water fishing fleet had been a major source of fish to consumers in the region but experts believed the removal of subsidies and a possible decline in the distance-water fleet would mean a drastic cutback in supplies thereby threatening food security in the region.

The new GATT Agreement which aims at encouraging free trade will also have major repercussions on ACP seafood exporters when it takes full effect. What happens when the tax-free status enjoyed by West African seafood products entering the EU market is either eliminated or similar facilities are extended to non-ACP countries? Even with the current 24% duty imposed on non-ACP products entering the EU, market share of canned tuna on the EU market continue to grow for South East Asian countries, a real concern for West African seafood processors and exporters.

While the initial impact of the devaluation of the franc CFA has been positive for seafood exporters in francophone West African countries, boatowners or canoe operators who depend on imported fishing inputs are going through difficult times. The entire seafood industry is still going through various readjustments and in countries like Senegal where there has been an extremely high demand for demersal species by fresh fish exporters, artisanal fishermen are gradually giving up seining for small pelagics to the more lucrative trawling for demersal fish which fetches more money. West African consumers depend largely on small pelagic fish to meet their nutritional needs and if the production of this commodity is neglected, it will have a serious consequence on food security in the region.

2. Objectives

These recent economic developments including the new GATT Agreement, the devaluation of the Franc CFA and the decline in the ex-USSR small pelagic fleet, are having major impact on fish trade and food security in the West African sub-region, notably in the relatively highly populated Gulf of Guinea states.

Specifically, the study:

- examines how the productive sectors, including the artisanal fishery, the industrial fishery and the processing industries have adapted to these changes in the economic environment.

- identifies the consequences of these developments with regard to production strategy (including career changes, target species, etc)

- identifies the consequences of these developments with regard to volume of catch and catch composition

- examines the evolution in fish supply and demand on the domestic, sub-regional and international markets

- examines the evolution of local fish markets with respect to volume of fish supplies, sources of supply, species composition, price trends

- examines fish trade regulations in the ECOWAS region

- identifies the consequences of recent economic developments on food security, in terms of supply of access to fish products.

- develops strategies at both the national and sub-regional levels, aimed at increasing the contribution of fish to food security, through sustainable development.

SUMMARY OF CONCLUSIONS

Artisanal Fish Production: Prices of fishing materials including canoes, outboard motors and fishing nets showed major increases - some by 100% or more following the devaluation. While prices of demersal fish showed similar increases due to the high demand by fresh fish exporters, prices of small pelagic fish showed only modest growth. Artisanal fishermen, majority of whom target small pelagic species, have therefore been confronted with a host of problems particularly as they replace their old fishing equipment.

To cushion off the impact, a number of Governments have introduced measures aimed at making prices of fishing equipment more affordable. These measures include reducing taxes on some fishing equipment and freezing prices of some fishing inputs like fuel, ice, etc at pre-devaluation levels. These measures have paid results. In countries like Senegal and Côte d'ivoire where there have been government support, the artisanal sector has been revatilized while in others such as Togo where no remedial actions have been taken, artisanal fish production has shown a steady decline.

Industrial Fish Production: While artisanal fishing operators have obtained various forms of support in some countries, government intervention at the industrial level has been lacking. The consequences are that, boatowners are finding it difficult not only to replace their old vessels but also to undertake regular maintenance. These have led to poor performances by the industrial fleets which spend increasing number of days at port for repair work and less days at sea fishing. Even for the small pelagic fishery which have lower margins, the fleets are gradually disappearing particularly in Senegal.

Fish Processing Industry: The impact of the devaluation on seafood processing and exporting companies has generally been positive. Although companies complain of spending a lot of money on imported inputs, seafood export revenues have doubled in many instances making this activity attractive. For Senegal's fresh fish export industry, returns immediately after the devaluation were so good that the number of companies multiplied by almost three. This was followed by a strong demand for fresh fish, sending fresh fish prices up and further resulting in the dwindling of profit margins. The smaller and weaker companies have since folded up and the sector is still readjusting.

Trade Liberalization: West African seafood exporters depend heavily on the EU market. With the exception of frozen cephalopod exports which are to some extent diversified to both the EU and Asian markets, all of the region's fresh fish, frozen shrimp and canned tuna exports virtually end up in the EU market. West African seafood exporters will therefore receive a severe blow as they lose their preferential status on the EU market following the new GATT Agreement. The only way to survive is to make their products competitive by cutting down costs, enhancing productivity and maintaining product quality.

Supply of Small Pelagics: Fish still remains one of the cheapest source of animal protein for West African consumers. Soon after the devaluation, purchasing power of a number of consumers dropped to the extent that, fish purchases were limited to the more affordable small pelagic species such as sardinella, bonga, mackerel and horse mackerel. Share of small pelagics in frozen fish imports has therefore been increasing for a number of countries.

Contrary to fears that the break-up of the ex-USSR distant-water fishing fleet and the removal of fuel subsidies will have a disastrous impact on fish supplies in the region, these vessels are rather playing a major role in making more fish available to West African consumers. A number of these old vessels are still based in the region employing Ukranian officers and Filipino crew and fishing off Mauritania and other fishing zones. These operators, however, lack capital and therefore depend on pre-financing from buyers in the importing countries.

This type of arrangement is becoming more and more popular in importing countries like Ghana and Togo where import duties on products originating from outside the region are too high. The operators therefore find it less attractive to import and rather arrange with the ex-USSR vessel operators to fish for them. The real worry will however emerge when these vessels become too old to operate. Without replacement, there will be a real danger of sustaining fish supplies at current levels and thereby threatening food security in the region.

PART I: SECTORAL REVIEW

1. Côte d'Ivoire

1.1 Overview of the Fish Production Sector

Artisanal Fisheries: The share of artisanal landings in the country's total fish production has increased from 50% in the 1980's to over 60% today. Significant growth has been observed in the marine and lagoon sectors. From a mere 30 mt in 1990, aquaculture production showed a tremendous increase in 1991 exceeding 300 mt. Aquaculture production has since dropped. In 1994, aquaculture production yielded only 116 mt of fish, mainly tilapia and catfish.

About 13 500 fishermen operated in the artisanal marine sector in 1994 landing some 30 017 mt of fish. They employed 1 830 canoes, 53% of which were motorized. The coastline stretches over 510 km, from Assinie in the east to Tabou in the west. The artisanal marine fishery is dominated by foreign operators notably Ghanaians and Senegalese. The main production centres for this sector include Abidjan (with 24% of artisanal marine landings in 1994); Adiaké (22%); Grand Lahou (18%); Sassandra (10%); Jacqueville (6%); San Pedro (6%) and Grand Bassam (5%). Sardinella species, both the *aurita* (round sardinella) and *maderensis* (flat sardinella), have been dominating artisanal marine catch. However, their occurrence has been sensitive to the phenomenon of upwelling.

Table 1.1: Fish Production in Côte d'Ivoire, by Sector, 1985-94 (mt)

SECTOR	1985	1990	1991	1992	1993	1994
Artisanal Fisheries	45 000	34 000	47 881	47 326	40 290	45 621
- Marine & Lagoon	27 000	20 000	26 480	31 922	26 813	30 017
- Inland	18 000	14 000	21 401	15 404	13 477	15 604
Industrial Fisheries	48 095	40 000	34 974	39 713	29 533	28 357
- Sardinella Purse Seiners	39 472	34 870	29 787	34 584	24 690	23 745
- Trawlers	7 771	3 924	4 405	4 639	4 324	4 193
- Shrimpers						
* Shrimp	232	388	189	171	168	176
* Fish	620	818	594	319	351	243
Aquaculture	25	30	327	244	351	116
Total	93 120	74 030	83 182	87 283	70 174	74 094

Source: Direction des Pêches et de l'Aquaculture, Abidjan

Inland fishery has not shown any significant growth since 1980. Lakes Buyo, Kossou and Ayamé constitute the main source of freshwater fish. The country's dams, notably those in Bouaflé and Buyo also make major contribution to the inland catch. There are about 3,700 Inland fishermen, most of them originating from Mali. Some 15,604 mt of fish were landed by the inland fishermen in 1994. The main production centres include Bouaflé (with 23% of

the inland catch in 1994); Buyo (22%); Duékoué (10%); Beomi (8%) and Guiglo (7%). Tilapia constitutes the single most important fish harvested in the inland sector. Catfish, African perch and carp also feature prominently in freshwater landings.

Industrial Sector: In 1994, the industrial fishery was made up of 4 shrimp trawlers, 21 demersal trawlers and 21 sardinella purse seiners. Côte d'Ivoire is no longer a tuna fishing nation after the last tuna fishing company, SIPAR (partly state-owned) went into bankruptcy in 1985. Some tuna vessels are still operating from Abidjan but are mainly under French or Spanish flag. The major species landed by the demersal trawl fleet include bigeye grunt (*brachydeuterus auritus)* (21% of the industrial trawl catch in 1994); croaker (*pseudotolithus senegalensis)* (18%); seabream (*sparidae)* (10%); threadfin *(galeoides decadactylus)* (8%); sole *(cynoglossus canariensis)* (5%). The industrial purse seiners land mainly sardinella.

Industrial Shrimp Fishery: The Ivorian industrial shrimp fishery collapsed in 1980 following the departure of SICRUS, a subsidiary of the American Continental Seafood Ltd. SICRUS was the only operator in the industrial shrimp fishery, running some 6 vessels, each 25 m in length with 130 GRT and 390 HP. One major attribute to the Company's departure was poor catches. The industrial shrimp fishery in Côte d'Ivoire has since been activated. In 1983, SIDAFRI was created, introducing two vessels which were later expanded to four. Two other shrimp companies, PECHAZUR and ASTI, also later joined the industry.

Shrimp catches were good in the 1980's. In 1988, the three companies operating eight vessels between them, (SIDAFRI-4, PECHAZUR-3, ASTI-1), landed 463 mt of shrimp. Industrial shrimp catches started declining the following year and ASTI withdrew its vessel in 1990. The remaining seven vessels landed a mere 188 mt in 1991. Consequently, SIDAFRI also withdrew from this sector leaving only PECHAZUR which has increased its shrimp vessels to four. PECHAZUR's four shrimp trawlers landed 176 mt of shrimp in 1994.

Industrial Trawl Fleet: There are currently some eight fishing companies, together operating 21 industrial trawlers. The companies include, SOPA (4 vessels); AMIPECHE (4); A2G (4); AMOC (3); PECHAZUR (2); IVOIRPECHE (2); ASTI (1) and SAP (1). Industrial trawl catches were good in the early part of the 1980's, averaging more than 7,000 mt of fish per year. Trawl catches have since dropped. In 1988 some 4,130 mt were landed and catches have continued to remain poor.

Industrial Sardinella Fishery: The industrial sardinella fishery is characterized by an old fleet. Of the 21 purse seiners which operated in 1994, 12 were built in the 1960's. This has significantly reduced efficiency. In 1994, the industrial purse seiners landed 23,745 mt of fish as against 34,584 mt in 1991 or 40,414 mt in 1986 (based on similar fleet size). This sector is also made up of eight companies including CIAP (which operated 7 vessels in 1994); ASTI (3); ARCES (3); BLANCHART (3); PECHAZUR (2); LCA-CI (2); AMIPECHE (1) and SIPMAR (1).

1.2 Fish Processing Industry in Côte d'Ivoire

Artisanal Level: Fish smoking is by far the most popular form of preserving fish at the artisanal level. About two-thirds of the total fish supplies, either from domestic production or through imports, are consumed in the smoked form. Salt-drying as well as sun-drying are also practised to a limited extent. In the urban areas, grilling of fresh fish notably tilapia, carp and catfish is very popular.

Industrial Level: Three main seafood processing activities can be identified at the industrial level, namely; i) frozen shrimp; ii) canned tuna (plus frozen tuna loin, an intermediary product for canned tuna) and iii) fishmeal. A total of 42,010 mt of seafood products worth 31.9 billion CFA were exported in 1990 as against 48,298 mt worth 63.3 billion CFA in 1994. Cold storage facilities have further been provided at the port to support the tuna industry as well as frozen fish imports.

Frozen Shrimp: The main frozen shrimp processing companies include PECHAZUR, CODIPECHE and SOPA. PECHAZUR is by far the biggest handling over 80% of the volume exported. It has its own industrial fishing fleet and a modern fish processing plant which meets EU health and sanitary regulations. All the companies obtain their supplies from both the artisanal and industrial sectors. In 1993, they exported 823 mt of frozen fish products comprising 550 mt of shrimp; 214 mt of fish; 54 mt of cephalopod and 5 mt of lobster.

Canned Tuna: There are four tuna processing companies currently operating in Abidjan. They include; i) PFCI (canned tuna); ii) SCODI (canned tuna); iii) CIDCI (canned tuna) and iv) SI3T (frozen tuna loin). These companies import their frozen raw tuna from mainly French and Spanish tuna fleets operating in the Eastern Atlantic as well as the Western Indian ocean. Annual frozen tuna imports have been averaging 70,000 mt over the last few years. A further 60,000 to 80,000 mt are transhipped annually out of Abidjan.

PFCI is owned by Pêche et Froid of France (51%); private French entrepreneurs (15%); Ivorian private entrepreneurs (22%) and Ivorian Government (12%). Prior to 1987, PFCI had a production capacity of 22,000 mt of raw tuna per year. This increased to 35,000 mt in 1988. SCODI is owned by Saupiquet of France (50.4%) and Ivorian enterpreneurs (49.6%). Production capacity was increased from 25,000 mt per year to 40,000 mt in 1989 with a loan from Caisse Français de Devéloppement (CFD).

SI3T is a subsidiary of Saupiquet. It was established in 1990 to produce frozen tuna loins for the export market. SI3T has a production capacity of 15,000 mt of raw tuna per year. CIDCI is a new company which became operational in 1994. It produces canned tuna and has an initial production capacity of 20,000 mt of raw tuna. The tuna processing plants have a combined capacity of 110,000 mt of raw tuna while capacity utilization rate is around 64%.

Fishmeal: The production of fishmeal is undertaken by REAL which utilizes mainly tuna offals obtained from the tuna processors. REAL was established in the 1980's but was producing limited volumes for the local market. Production has expanded in the 1990's and the Company started exporting in 1992. Fishmeal exports reached 3,569 mt in 1994, an increase of over 200% over 1992 exports.

2. Ghana

2.1 Overview of the Fish Production Sector

Artisanal Fisheries: The artisanal or canoe fishery still constitutes the backbone of Ghana's fishing industry, employing over 100,000 fishermen many of whom migrate along the West African coast following the seasonal movement of local fish stocks. The artisanal sector comprises a marine fishery which stretches along a coastline of 536 km and an inland fishery which is centred on the Volta Lake.

Artisanal marine fish production showed a major growth in the 1980's and in the early part of 1990. Artisanal fishermen landed some 159,230 mt of fish in 1985. This grew progressively over the years reaching a peak of 307,931 mt in 1992. This has been followed by poor performances resulting in a catch of 210,659 mt in 1995. One major attribute to the decline in artisanal marine catch has been the withdrawal of fuel subsidy in 1993. The fuel subsidy has been restored but implementation has been slow so impact has not been fully felt.

Table 1.2: Marine Fish Production in Ghana, by Sector, 1985-95 (mt)

	1985	1991	1992	1993	1994	1995
Canoe Fleet	159 230	215 847	307 931	257 237	211 747	210 659
Inshore Fleet	17 980	7 357	10 768	5 230	6 037	6 371
- Purse Seiners	n/a	5 558	9 404	3 747	4 237	4 960
- Trawlers	n/a	1 799	1 364	1 483	1 800	1 411
Industrial Fleet (Ghana EEZ)	21 930	27 892	20 933	18 323	18 966	20 049
- Purse Seiners	n/a	n/a	n/a	0	205	27
- Trawlers	n/a	n/a	n/a	18 323	18 761	20 022
Industrial Fleet (Outside Ghana EEZ)	0	0	0	0	11 001	62 817
Shrimp Fleet	n/a	785	386	1 548	2 442	2 689
- Shrimp	n/a	147	132	100	277	317
- By-catch (Fish)	n/a	638	254	1 448	2 165	2 372
Tuna Fleet	34 410	37 795	30 776	36 856	36 973	33 905
Total	233 550	289 675	370 794	319 194	287 166	336 489

Source: Fisheries Research Unit, Tema

Round sardinella, flat sardinella and anchovy constitute the three most important species harvested by the artisanal fishermen. Of the 210,659 mt of fish produced by artisanal marine fishermen in 1995, the three species together accounted for 144,186 mt or 68%. The country's inland fish production is in the order of 50,000 mt per annum. The major freshwater species harvested include tilapia, African perch and catfish.

Industrial Sector: In 1995, 146 Ghanaian fishing vessels were given licenses to operate in the country. The breakdown of vessel by fishing activity is as follows:

- Trawlers	: 84
- Shrimpers	: 6
- Tuna Vessels	: 40
- Carrier Vessels	: 2
- Vessels authorized to fish outside Ghana's EEZ	: 14
Total	: 146

Industrial Tuna Fleet: The commercial exploitation of tuna in Ghana began in 1960 following exploratory activities by two American companies - Van Camp in 1958 and Starkist in 1959 to assess resource potential. Starkist entered into agreement with the Ghanaian government in 1960 to undertake tuna fishing, transhipment and processing activities. It initially operated one pole and line vessel and two seiners. The development of a national tuna fleet took off in 1974, with a joint venture arrangement between Mankoadze (Ghana), Starkist (USA) and Wakashio (Japan). The new company, Ghana Tuna Development Co. Ltd., operated two pole and line vessels. The national tuna fleet has since expanded from 12 vessels in 1980 to 40 today.

The activities of foreign-flag vessels based in Tema have also been gradually phased out. The last foreign vessels were four Japanese pole and line which operated in the first four months of 1984. During the same year, Starkist transferred its tuna transhipment activities from Tema to Abidjan due largely to the poor security at the Tema fishing harbour. Security arrangements have since improved in Tema and Starkist has relocated its activities there. Industrial tuna production has been fluctuating between 30,000 mt and 40,000 mt per year over the last decade.

Industrial Shrimp Fishery: Ghana's shrimp fishery virtually collapsed in the 1980's following mismanagement and over-exploitation of the stocks. The stocks are yet to fully recover and as a result exploitation at the industrial level has been curtailed. The State Fishing Corporation was the only important operator in Ghana's industrial shrimp fishery in the 1980's. It was joined by Kiku Co. Ltd in 1988 and later, by a couple of companies. Today some six shrimp vessels are licensed to operate in Ghana. Together, they landed some 317 mt of shrimp in 1995, an improvement of 14% over the previous year.

Industrial Trawlers: The industrial trawlers have been contributing 20,000 mt to 30,000 mt of fish annually to the country's fish production. In 1995, 84 industrial trawlers were licensed to fish in the country's territorial waters. Since 1994, there has been a new development in the industrial trawl operations. Licenses are now given to companies to operate vessels outside Ghana's EEZ. This arrangement brought in an additional 11,000 mt of fish in 1994 and 62,816 mt in 1995. It has also brought a controversy and the authorities are reviewing the Fisheries Act to address any concerns raised.

Inshore Fleet: The inshore fleet comprising mainly of sardinella boats used to be very active in the 1980's, catching between 15,000 mt and 25,000 mt of fish annually. The sector has lost its dynamism. Since 1993, the operators have been landing less than 7,000 mt of fish annually. The bulk of the inshore catch are small pelagics, notably, sardinella and chub mackerel.

2.2 Fish Processing Industry in Ghana

Artisanal Level: As in Côte d'Ivoire, and elsewhere in the sub-region, artisanal processing in Ghana mainly involves smoking, salt-drying and sun-drying. In addition, fermentation of fish is rather widespread as demand for fermented fish products continue to grow. Ghana's improved Chorkor fish smoking oven has now become a landmark for artisanal fish operations in the West African sub-region. It permits the smoking of large quantities of small pelagic fish at a time and energy efficient.

Industrial Level: Although Ghana is a major fish producing as well as consuming nation, industrial processing of fish for exports or domestic utilization has not been well developed except for the tuna canning industry. But the situation is bound to change. A couple of fresh and frozen seafood processing plants are being established with the assistance of IFC, DANIDA and other development agencies. An old fishmeal plant has also been reactivated and is expected to go into full production to supply both the export and domestic markets.

Canned Tuna Industry: Two companies have been involved in fish canning operations in Ghana. They are PFC and GAFCO. PFC was established in 1974 by Mankoadze Co. Ltd. and was originally designed to can sardines and mackerel. Starkist, a wholly owned subsidiary of the H.J.Heinz Company purchased 50% of the shares of PFC in 1976 and the plant was converted to the production of tuna. The Company was closed down in December 1987 due to uncompetitive export prices.

In May 1990, PFC took advantage of the Investment Code to expand and rehabilitate existing facilities for the production of tuna loins. In November 1993, the loining operations was put on hold for a major renovation and expansion programme including reactivation of the canning line. The company is now owned 100% by Starkist with new investment of about US$10 million. PFC currently has a production capacity of 37,500 mt of tuna per year (150 mt per day), employing a workforce of 1 600.

GAFCO (ex-Tema Food Complex Corporation or TFCC) was established in 1972 as a state-owned enterprise comprising a flour mill, an oil extraction plant and a fish processing plant designed for canning, smoking, production of fishmeal and cold storage. The Government recently privatised the ex-TFCC under its divestiture programme and it is now known as GAFCO. GAFCO has now expanded and modernized its canning lines (tuna, sardine and mackerel) from 220 mt per year to 12,500 mt. In addition, GAFCO has reactivated its fishmeal plant which has a capacity of 5,000 mt of fishmeal and 2,000 mt of fishoil.

Fresh and Frozen Fish Processing Industry: Although a few small-scale companies have been occasionally exporting limited volumes of fresh fish and live lobster, Ghana apparently does not have the tradition of fresh/frozen seafood exports as in the case of Senegal or other countries in the sub-region. This activity is now developing with the establishment of Divine Seafood Ltd (DSL) and Pako Bay Seafoods Ltd (PBS).

DSL is designed to produce 1,200 mt of processed seafood per annum. The product mix includes; live lobster, frozen lobster tails, frozen shrimp, frozen cuttlefish, fresh tropical fish and other frozen fish products like sole fillets and tuna loins. The is established in Tema. PBS on the other hand, is a modest plant designed to produce only 200 mt of finished products, mainly fresh fish and live lobster. PBS is being built in Apam and the Company will obtain most of its raw fish from the western half of the country.

3. Senegal

3.1 Overview of the Fish Production Sector

Fish production in Senegal has showed a marked improvement in the 1990's. Annual marine landings ranged between 240,000 mt and 280,000 mt during the 1980's. Boosted by improved catches in the artisanal sector, annual marine fish production is today approaching 400,000 mt.

Artisanal Fisheries: Despite the relatively large number of industrial fishing vessels operating in the country, the traditional canoe fishery remains the most productive sector of the fishing industry. This sector continues to play an impressive role. In 1981, artisanal fishermen accounted for 62% of the total marine landings. Today, they are responsible for about 75%.

In 1984, some 50,310 artisanal fishermen operated in the marine sector, employing about 10,000 canoes 67% of which were motorized. They landed 282,412 mt of fish, the bulk of which was sardinella. The main artisanal landing centres include; Saint-Louis, Kayar, Hann, Mbour, Joal, Kafountine and Cap Skirring.

Table 1.3: Marine Fish Production in Senegal, by Sector, 1981-95 (mt)

	1981	1985	1991	1993	1994	1995
Artisanal	148 500	173 400	249 271	266 954	282 412	291 227
Industrial	92 100	106 200	89 041	79 459	82 043	97 139
- Sardinella	18 400	6 000	7 797	3 311	3 506	3 200
- Trawl	51 900	65 400	50 894	38 945	40 635	50 000
- Tuna	21 800	34 800	30 350	37 203	37 902	33 939
Total	240 600	279 600	338 312	346 413	364 455	388 366

Source: CRODT/ISRA, Dakar
DOPM, Dakar

Industrial Sector: The industrial fishery is made up of sardinella purse seiners, trawlers (both demersal and shrimp) and tuna vessels. While the artisanal production has shown a spectacular growth, performance at the industrial level has not shown any improvement. The local industrial fleet is characterized by old vessels and this has affected their performance.

Industrial Sardinella Vessels: The industrial sardinella fleet is gradually disappearing faced with competition from the canoe fishermen who operate at minimum cost. In 1981, there were 14 industrial sardinella purse seiners which landed 18,400 mt of small pelagic fish. The industrial sardinella fleet declined to eight vessels in 1985 producing some 6,000 mt of fish. Today, there are five sardinella vessels landing a little over 3,000 mt of fish per annum. Despite the gloom picture, under EU/Senegal fisheries agreement, the EU has for the first time asked for the inclusion of sardinella vessels to operate in Senegal and approval has been given for 20 vessels.

Industrial Trawl Fleet: The industrial trawl fleet is from time to time renewed or modernized particularly those over 25 years. This has enabled this sector to remain competitive and maintain production at around 50,000 mt per year. The Dakar-based trawl fleet has been averaging 150 vessels per annum over the last few years. In addition, there is an additional foreign trawlers operating in the country under various fisheries agreements.

Industrial Tuna Fleet: Following the liquidation of SOSAP, a state-owned tuna fishing company, a programme to revive the Senegalese tuna fleet through private initiative was started in 1981. Senegalese tuna vessels grew from 1 in 1980 to 5 in 1990 and has since remained so. Through the assistance of IFC, a private Senegalese tuna fishing, SERT, will soon add two 33-metre pole and line vessels to the local fleet.

In addition to the local fleet, there is a sizeable French and Spanish tuna fleets based in Dakar. Tuna landings, by the Dakar-based vessels have improved from 21,800 mt in 1981 to between 30,000 mt and 40,000 mt per annum today. Under the EU fisheries agreement, EU tuna vessels are required to land at least 16,000 mt of tuna to feed the local canneries.

3.2 Fish Processing Industry in Senegal

Artisanal Level: Senegal produces a wide range of artisanal products which include *Guedj* (fermented dried marine fish, notably threadfin, seabream); *Saly* (salted dried fish, notably, tilapia, threadfin, seabream, shark); *Tambadiang* (dried bonga or sardinella); *Ketiakh* (grilled bonga or sardinella); *Yeet* (fermented dried mollusc) and *Metorah* (smoked fish, notably, shark, ray, catfish, sardinella, bonga). Fish smoking is not as common as in the central Gulf of Guinea states like Côte d'Ivoire and Ghana. The main reason is the scarcity of wood.

Industrial Level: At the industrial level, Senegal has the highest concentration of fish processing companies in West Africa. They currently include; i) 43 fresh and frozen fish processing plants; ii) 2 ice manufacturing companies; iii) 4 cold storage companies; iv) 3 fish canneries and v) a fishmeal plant. Following the new EU Directives on Fish Quality standards, a number of companies have invested substantial amounts of money in upgrading their plants to conform with the new regulation. Others are in the process of complying. During a recent visit by EU inspectors, some ten processing plants were asked to close down since they didn't meet EU standards.

Fresh and Frozen Fish Processing: Following the devaluation of the CFA Franc, fresh fish exporting companies nearly doubled. The expansion was due to two main factors: improvement in export revenues and low capital requirements in this activity. The immediate consequence was the high demand for raw fish and the doubling of prices at the landing sites for a number fish species. The industry is still adjusting to the new realities and as a result, the small companies which are unable to compete are fading away.

The major fresh and frozen fish exporting companies and their turnover in 1995 are as follows; IKAGEL (13.7 billion CFA); SOPASEN (8.7 billion CFA); AFRICAMER (8.3 billion CFA); SENEGAL PECHE (7.8 billion CFA); AMERGER (6.5 billion CFA); SENEPESCA (5.2 billion CFA); AMATH GUEYE (3.5 billion CFA); SOPICA (4.0 billion CFA); CRUSTAGEL (3.0 billion CFA) and PROMEL (2.4 billion CFA). This underlines the importance of the fisheries industry to Senegal's economy.

Fish Canneries: The three fish canneries in Dakar include; PFS, INTERCO and SNCDS. PFS (ex-SAIB) is owned by Pêche et Froid, France. It produces canned tuna with a production capacity of 20,000 mt of raw tuna. INTERCO (ex-SAPAL) used to be owned by Saupiquet (75%) and Senegalese investors (25%). Saupiquet pulled out in the late 1980's to concentrate on its Côte d'Ivoire operations. INTERCO is now owned by Senegalese investors and produces canned tuna. Production capacity is 15,000 mt.

SNCDS has two processing lines - a tuna canning line established in 1968 and a pilchard canning line which became operational in 1995. Ownership is made up of Senegalese (65%) and Pêcheurs de France (35%). The company is associated with CONDAK which produces canned sardinella. SNCDS has a production capacity of 35,000 mt. To remain competitive, SNCDS has since 1990, invested close to 2 billion CFA for restructuring and modernization of the plant. Products and markets are also being diversified.

4. Togo

4.1 Overview of the Fish Production Sector

Artisanal Fisheries: Togo's fishing industry is basically artisanal. With a coastline of only 56 km, the country cannot support any meaningful industrial operation. For the good part of the 1990's, artisanal marine landings were averaging over 10,000 mt per year. During the current decade, artisanal marine catches have so far been poor. In 1992, catches from this sector were as low as 5,526 mt compared to 1985 landings of 10,127 mt.

Table 1.4: Fish Production in Togo, by Sector, 1985-95 (mt)

	1985	1991	1992	1993	1994	1995
Artisanal Marine Fishery	10 127.0	6 312.7	5 526.5	9 978.0	7 079.0	6 811.0
- wasta (beach seine)	n/a	5 028.7	4 474.4	8 478.6	5 559.0	4 974.0
- line	n/a	307.6	326.0	172.7	174.0	491.0
- surface gill net	n/a	976.4	577.7	1 102.2	1 223.0	1 117.0
- bottom gill net	n/a	n/a	148.4	224.5	123.0	229.0
Inland Fishery	3 500.0	4 500.0	4 500.0	4 500.0	4 500.0	4 500.0
Industrial Fishery	184.0	99.2	111.5	430.2	301.0	91.0
Total	13 811.0	10 911.9	11 038.0	14 908.2	11 880.0	11 402.0

Source: Division Halieutique, Direction des Productions Animales, Lomé

There are about 4,500 artisanal fishermen operating in the fisheries sector. The majority of them are Ghanaians. There are about 400 canoes, more than half of which are motorized. Wasta or beach seine is the most important fishing gear in terms of catch, followed by the surface gill net. Of the 6,811 mt of fish landed by artisanal marine fishermen in 1995, wasta accounted for 73% and the surface gill net 16%. The major species landed by the artisanal marine fishermen include; i) sardinella *(sardinella spp)*; ii) anchovy *(engraulis encrasicolis)*; iii) atlantic bonito *(sarda sarda)*.

The inland fishery is centred around Lake Togo, the Aneho lagoon and the Nangbeto dam. Fish production from inland sources is currently estimated at 4,500 per year. The main species harvested are tilapia, catfish and African perch.

Industrial Fishery: The industrial fishery is virtually non-existent in Togo. Industrial fishing took off in the early 1970's with the introduction of two trawlers - Lomé and Hamburg. Industrial landings were then fluctuating between 500 mt and 800 mt per year. The two boats stopped operating in 1978 and industrial catch dropped to 136 mt. Industrial operations picked up again with the introduction of Binah and Zwara by a Togolese-Libyan company, Stalpêche. Landings were very good exceeding 1,800 mt per year in 1981 and 1982. Zwara stopped operating in 1983. Currently, there is only one vessel, Keran, operating in the industrial fishery sector. Keran was presented to Togo by the Japanese government. It is currently in a very bad state.

4.2 Fish Processing Industry in Togo

Despite the 50 km coastline and limited marine resources, Togo has three fresh and frozen fish processing plants, namely CRUSTAFRIC, TOGOCRUS and STPM. These companies were aiming at sourcing raw fish from neighbouring countries while enjoying the liberal investment climate in the country. At present, STPM has been closed down, TOGOCRUS is under restructuring and production has stopped. Only CRUSTAFRIC is operational but has to upgrade its plants to meet EU standards.

CRUSTAFRIC was created in 1990 and started production in 1994. It has the following ownership structure; Italian investor (50%), Swiss investor (40%) and French investor (10%). In 1994, the Company processed nearly 1,000 mt of raw fish for the EU market. Of these, 900 mt were sourced outside Togo, notably from Nigeria, Ghana and Cameroon. Besides the fresh and frozen fish companies, Togo has a couple of small-scale live lobster exporters, namely POLYTRA and SODIAL. In 1994, they respectively exported 6.5 mt and 4.6 mt of live lobsters to the EU market.

PART II: ROLE OF FISH IN NUTRITION

1.0 Per Capita Fish Consumption

Based on IDAF estimates, per capita fish consumption for coastal countries stretching from Mauritania in the north, to Angola in the south, averaged 10.0 kg in 1993, a sharp drop from the 15.0 kg attained in the early 1980's. The main reasons attributed to this decline in fish intake are the decline in imports on one hand and the population growth on the other. Although domestic fish production for a number of countries in the region has significantly improved, this has not kept pace with an annual population growth of over 3% for the region.

While per capita fish consumption for the region as a whole has been less than the global average of 13.0 kg, for some individual West African countries, fish intake has been quite high. In countries like Senegal, Ghana and the Gambia, per capita fish intake surpassed 20.0 kg in 1990. Elsewhere in Côte d'Ivoire and Togo, it has exceeded the global average. Fish intake is expected to remain high in the these countries over the next few years. Domestic fish production continues to improve in Senegal, Ghana and Gambia while frozen fish imports to Côte d'Ivoire and Togo are recovering from the 1994 devaluation shock.

In contrast, fish consumption in such Sahelian countries as Burkina Faso and Niger continue to remain low while in others like Nigeria, Liberia and Sierra Leone, it is deteriorating. Annual per capita fish intake in Burkina Faso and Niger is less than 2.0 kg. Both countries have limited fishery resource potential and depend on inland water bodies notably the river Niger and dams as well as cured fish imports from Mopti, Mali.

In Nigeria, not only has domestic fish production declined relative to catches in the 1980's, frozen fish imports have also dropped substantially. When the oil boom began in the late 1970's, Nigeria frozen fish imports were exceeding 800,000 mt per annum. Today, this has dropped to less than 300,000 mt while the population continues to expand. Elsewhere in Liberia and Sierra Leone, civil war and rebel activities have had negative impact on fish production. Artisanal fishermen in some communities have been displaced and in the case of Liberia, the industrial fishing sector has even been destroyed.

Table 2.1: Fish Consumption and Contribution to Animal Protein Intake, 1990

	PER CAPITA FISH INTAKE (KG/YR)	FISH AS % OF TOTAL PROTEIN	FISH AS % OF ANIMAL PROTEIN
Benin	9.7	5.0	27.8
Burkina Faso	1.8	n/a	n/a
Cape Verde	10.6	7.5	33.7
Côte d'Ivoire	13.8	8.4	36.1
Gambia	20.4	10.9	46.3
Ghana	27.1	21.1	63.9
Guinea	7.1	4.3	31.1
Guinea Bissau	6.0	4.2	18.3
Liberia	12.9	9.5	47.8
Mali	7.6	n/a	n/a
Mauritania	10.6	4.7	10.6
Niger	1.8	n/a	n/a
Nigeria	8.4	5.1	35.3
Senegal	28.0	12.2	72.4
Sierra Leone	12.1	9.8	56.5
Togo	14.4	8.2	45.3

Source: FAO IDAF Project, Cotonou, Benin

2. Contribution of Fish to Animal Protein Intake

For a number of West African countries, protein intake is generally low. Of the limited protein consumed, these countries derive much of their calories from cereals, grains, roots and tubers. Animal protein intake is particularly low. Without doubt, fish is highly nutritive and provides high quality protein. While cereals are poor in lysine and methionine, fish is highly rich in these essential elements. Fish consumption can therefore provide the necessary supplement to our nutritional requirements.

Fish constitutes an important source of animal protein intake in many West African countries. In Senegal and Ghana, about two thirds of the animal protein intake are derived from fish. In other parts of the region, such as Mauritania, Niger, Burkina Faso and Mali, the consumers depend largely on meat to meet their animal protein requirements. With desertification reducing available livestock grazing land, Sahelian consumers would have to increase their dependence on fish in order to their nutritional needs. Efforts are being initiated to make inland water bodies such as dams productive by stocking them with fingerlings.

In countries like Guinea Bissau and Benin, contribution of fish to animal protein intake has been remarkably low, despite being coastal countries. In Guinea Bissau, the fishing industry has not been well developed. At the industrial level, a national fleet has not been properly established. Rather, this sector is exploited largely by foreign vessels which are either expected to land a small percentage of catch for local consumption or pay financial compensation. An increasing number of foreign operators are paying financial compensation decreasing the availability of fish. In Benin, the fishery resource potential is limited and the country is faced with a situation where both domestic production and frozen fish imports have remained low with little prospect of improvement.

PART III: EVOLUTION OF MARKETS FOR FISH AND FISHERY PRODUCTS

Until the mid-1980's, Africa was a net importer of fish and fishery products. With declining, or at best stagnating economies, many African coastal countries gave priority to fish exports to improve their revenues. In 1981, some US$1.1 billion worth of fishery products were imported by African states, against US$0.7 billion worth of exports. The African fish trade deficit disappeared in 1984.

The region registered its first fish trade surplus in 1985 which has since continued to grow. Africa's trade surplus in fishery products grew to US$713 million in 1992 with exports reaching US$1.6 billion. This confirms the growing importance of the fisheries sector in the economies of a number of African countries.

Table 3.1: Value of Fish Trade, 1992 (US$ million)

	Imports	Exports
World	45 451,9	40 275,6
Africa	895,0	1 608,0
- North Africa	145,9	662,9
- West Africa	389,2	515,4
- Central Africa	143,0	24,5
- East Africa	92,7	209,4
- Southern Africa	124,2	195,8

Source: FAO Yearbook of Fishery Statistics, 1992

Much of the fish trade in the region is concentrated in Western and Northern Africa with the resource-rich northern states supplying the relatively densely-populated Gulf of Guinea states further south. The main products traded comprise:

- frozen small pelagics (sardinella, horse mackerel and mackerel) for the African market

- fresh and frozen high value demersal fish including crustaceans and cephalopods for the international market, notably, the European market.

- canned fish with a sizeable volume of canned sardine and pilchards destined for the African market while the bulk of the canned tuna goes to the European market.

- an active cured fish trade exists in West Africa, but much of this informal trade takes place unrecorded.

1. West African Markets for Frozen Small Pelagics

While export of fresh and frozen high value demersal fish from the African region to the European market is gradually gaining prominence, the trade in frozen small pelagics remain by far the most important. The major Western African markets include Nigeria, Côte d'Ivoire, Zaire, Cameroon, Ghana, Togo and Congo. Outside the Western Africa region, Egypt is the other important market absorbing over 100,000 mt annually.

The major outside suppliers of frozen small pelagics to the region include; the Netherlands, the Commonwealth of Independent States (CIS), Norway, UK, Ireland, Iceland and Bulgaria. South Korea is emerging as an important supplier organizing its operations out of Las Palmas. The leading African small pelagic suppliers are Mauritania and Senegal in the north, and Angola, Namibia and South Africa in the south.

Table 3.2: African Frozen Fish Imports, by Major Importing Country, 1981-95 (mt)

	1981	1991	1992	1993	1994	1995
Nigeria	442 000	262 900	278 500	n/a	n/a	n/a
[1]Côte d'Ivoire	110 100	114 613	126 566	130 484	94 299	138 876
Egypt	55 500	87 100	125 700	n/a	n/a	n/a
Zaire	29 000	76 000	74 500	n/a	n/a	n/a
Cameroon	25 700	48 916	48 718	41 560	33 696	30 600
Ghana	28 300	26 576	34 274	36 983	18 827	2 250
Togo	8 300	26 490	27 540	17 930	34 760	36 933
Congo	10 900	20 660	19 628	19 961	17 123	11 847

Source: National Statistics

[1] Frozen fish imports do not include frozen tuna imports which are processed and re-exported

In a number of Western African countries, imports of frozen small pelagics have today increased relative to the 1980's. Yet, this growth in imports has not kept pace with a population increasing at an average rate of 3% per year. This has raised concern over food security in the region.

1.1 Ivorian Market for Frozen Fish

Côte d'Ivoire is the main frozen fish market in the sub-region after Nigeria. Besides the over 100,000 mt annual imports of frozen small pelagic and demersal fish, the country takes in at least, an additional 70,000 mt of frozen tuna each year to feed its canneries. Ivorian frozen small pelagic and demersal imports reached a record high of 153,264 mt in 1989 but declined to 138,641 mt in 1990 and 114,613 mt in 1991 following the drop in cocoa and coffee prices, the mainstay of the country's economy.

Frozen fish imports started recovering in 1992 following an improvement in cocoa and coffee prices. Imports dropped once again in 1994 as a result of the devaluation of CFA Franc but have since recovered after adjustments in the sector. One major adjustment has been the acquisition of fishing boats by some of the importing companies to go into direct production. COFRAL, the leading Ivorian fish importer now has 12 vessels working for it through arrangements with other European partners. The vessels are fishing off Mauritania. The large-scale importers are consolidating their position while the smaller ones are being phased out. Frozen fish imports by COFRAL has today reached 40,000 mt per year, about half what it used to import in 1992.

Table 3.3: Ivorian Frozen Fish Imports, by Origin, 1991-95 (mt)

	1991	1992	1993	1994	1995
CIS	15 068	8 674	17 558	36 865	44 719
Mauritania	40 784	60 300	55 570	15 880	36 950
Netherlands	17 762	18 289	18 889	17 964	24 757
Norway	1 449	1 200	2 750	4 225	10 949
Senegal	7 091	7 814	13 700	6 874	9 236
Guinea	12 593	8 563	8 611	2 556	4 034
South Korea	0	0	0	3 217	2 977
Morocco	726	0	270	0	2 324
Guinea Bissau	7 214	8 187	1 240	392	1 008
China	524	946	843	109	849
UK	3 136	6 498	8 433	1 619	407
Spain	1 276	1 268	581	1 132	401
Sierra Leone	644	2 620	1 466	341	0
Gambia	n/a	108	570	0	0
Romania	2 161	300	0	0	0
Other	4 185	1 799	3	3 125	265
Total	114 613	126 566	130 484	94 299	138 876

Source: Direction des Pêches et de l'Aquaculture, Abidjan, Côte d'Ivoire

CIS is now the leading supplier of frozen small pelagics to the Ivorian market. This has been more of a paradox. After the break-up of the ex-USSR fleet fishing in the Eastern Atlantic, there was a general concern i) that prices will go up following withdrawal of the fuel subsidies, ii) that a possible decline in ex-USSR distant-water fishing fleet was envisaged and iii) that much of the catch will be redirected back home, causing a significant decline in the availability of animal protein to West African consumers. Most of these concerns have been justified except that Russia or the Baltic states still remain major suppliers of small pelagics for West African countries.

According to industry sources, a number of the old ex-USSR vessels are still based in Las Palmas. They are operated mainly by Ukrainian officers with Filipino crew. Since they lack working capital, their operations are pre-financed mainly by buyers in the importing countries. Financial packages differ from contract to contract but in general, a buyer can pre-finance the operations of three purse seiners to the tune of US$10,000.

Besides the CIS, the other major frozen small pelagic suppliers to Côte d'Ivoire include the Netherlands, Mauritania, Norway and Senegal. Of the 138,876 mt of frozen fish imported in 1995, the five countries accounted for 126,611 or 91%. The main species include horse mackerel (47% of total frozen fish imports in 1995); mackerel (15%) and sardinella (14%). The remaining 24% were demersal fish notably croaker, threadfin, red carp and seabream.

1.2 Ghanaian Market for Frozen Fish

Frozen fish imports to Ghana was quite substantial in the 1970's and the early part of the 1980's. Due to setbacks in the economy at various times, and Government interventions aimed at redressing the situations, this activity has still not got back to full gear. Frozen fish imports declined drastically from 21,000 mt in 1984 to 1,000 mt the following year as a result of an import restriction imposed to conserve foreign exchange and to promote domestic production. Only the Ghana Procurement Agency, a para- statal, was authorized to bring in imported fish, among other commodities. Frozen fish imports hit an all-time low of 490 mt in 1986.

Trade was liberalized in 1987 with the introduction of the currency auction system. Under this system, any importer could purchase his own hard currency or raise financing to pay for his imports. Frozen fish imports have since increased from 14,120 mt in 1988 to a new high of 36,983 mt in 1993. Due to the continuous fall in the value of the Cedi relative to hard currencies, together with the high import duty of 35%, this activity has become less lucrative as buyers cannot afford excessive fish prices.

An increasing number of importers are therefore giving up importation and becoming producers. They are contracting vessels and registering them in Ghana to fish outside Ghana's EEZ. Others are also pre-financing ex-USSR vessels based in Las Palmas to fish for them. As a consequence, fish imports dropped to 18,827 mt in 1994 and only 2,250 mt in 1995. The major species imported into the country include chub mackerel *(scomber japonicus)*, horse mackerel *(trachurus trachurus)* and sardinella *(sardinella spp)*.

1.3 Togolese Market for Frozen Small Pelagics

Prior to the socio-political crisis 1993, Togo was importing between 20,000 and 30,000 mt of frozen fish per year. Frozen fish imports dropped to 17,930 mt in 1993 following a slowdown in economic activities. This activity has however picked up again, increasing to 34,760 mt in 1994 and 36,933 mt in1995, making Togo one of the leading West African buyers after Nigeria, Cote d'Ivoire and Zaire.

Before the devaluation of the Franc CFA in January 1994, sources of frozen fish supplies were widely varied to include Mauritania, Netherlands, UK, France and Senegal, among others. After the devaluation, purchasing power of the Togolese consumer has declined to the extent that he cannot afford the more expensive Dutch products. In effect, frozen fish originating from the Netherlands attract a duty of 28% in contrast of the 7% demanded on Mauritanian and Senegalese fish. This, together with cheaper packaging and lower transport costs make the African fish less expensive and more affordable. Thus of the 36,933 mt of frozen fish brought into the country in 1995, 99% originated from Mauritania and the remaining 1% from Senegal. Nothing came from the Netherlands nor UK.

Togolese importers tried Namibian horse mackerel and sardinella in the early 1990's but didn't like it because of the low fat content. Fish smokers prefer the fatty fish from Mauritania and Senegal or from the North Sea because it makes the smoked product appealing to the buyer. Hence, there is currently no demand in Togo for Namibian fish.

Table 3.4: Frozen Fish Imports to Togo, by Origin, 1990-95 (mt)

	1990	1991	1992	1993	1994	1995
Mauritania	4 725	6 342	9 268	8 057	25 024	36 730
Netherlands	9 810	7 181	9 312	5 290	6 477	0
UK	172	523	0	0	1 485	0
France	710	2 113	601	494	965	0
Senegal	261	167	0	2 130	0	203
[2]Other	1 714	5 108	5 265	2 130	0	0
Total	20 800	26 490	27 540	17 930	34 760	36 933

Source: Service des Pêches, Lomé / CENETI, Lomé

The frozen fish products imported into Togo are basically made up of mackerel, horse mackerel and sardinella. Of the 36,933 mt of frozen fish imported in 1995, mackerel accounted for 54%, sardinella 25% and horse mackerel 21%. A significant portion of Togolese frozen fish imports are apparently re-exported to Burkina Faso, Niger, Benin and even Ghana. In effect, the free port zone of Lome serves as a transit point for fish buyers particularly in the neighbouring landlocked countries.

[2] Includes Russia (CIS), Namibia

2. West African Cured Fish Trade

In volume terms, cured fish trade in Africa is next in importance only to the frozen small pelagic trade. Except for a few semi-industrial operators engaged in fish smoking, drying and salting, these activities are organized at the artisanal level involving several men and women many of whom cannot read or write. The trade has therefore been very informal and records are hardly kept. As a result, there is very little information available concerning the magnitude and frequency of trade. Some key trading blocs could however be mentioned. They include:

- Ghana/Togo/Benin trade involving smoked sardinella and cured anchovy
- Côte d'Ivoire/Burkina Faso trade involving smoked sardinella
- Gambia/Guinea trade involving smoked bonga and skates

2.1 Ghana/Togo/Benin Smoked Sardinella Trade

This trade is centred on smoked sardinella, smoked anchovy and to a lesser extent, dried anchovy with Ghana serving as the supply source and Togo and Benin being the outlets. Smoked shrimp is also traded but on seasonal basis. During the "lean season" (from November to June), anywhere from 400 to 600 60-kg baskets (24 to 36 mt) of cured marine fish may cross the Ghana-Togo border each week. The only exceptions are when the sardinella stock collapses or when the border is closed. During the "peak season" (from July to October), this quantity can double or even triple, making the trade one of the largest and most active in West Africa. In effect, each year about 3,000 mt of smoked sardinella and anchovy are exported from Ghana to Togo and Benin.

The main supply source in Ghana is the Mamprobi market in Accra, popularly known as the "Tuesday market". As the name implies, this market is animated every Tuesday when sellers from inside and around Accra converge with their cured fish products. They come mainly from Chorkor, Tema, Nyanyano, Teshie, Botianor and Akplabanya. The buyers also include wholesalers from Lomé and Cotonou as well as semi-wholesalers and retailers from Accra and from the interior part of Ghana.

The products are packaged in small baskets, each weighing 3 to 4 kg. After sales, they are re-packaged into 60-kg baskets for transportation to the various destinations. In exceptional cases, extra-large baskets weighing 120 to 160 kg are used. The traders hardly accompany their products except if they procure one or two baskets. Rather, they entrust the goods into the hands of transport operators who handle the customs formalities. The most common vehicle used is the Peugeot pick-up truck which can hold 18 60-kg baskets (12 arranged inside and 6 tied on top the vehicle). The main destinations are the Hutokpamé market in Lomé and the St. Michel market in Cotonou.

2.2 Côte d'Ivoire/Burkina Faso Smoked Sardinella Trade

Côte d'Ivoire is an important sardinella producing country - sharing the central Gulf of Guinea stocks with Ghana, Togo and Benin. Sardinella production has been very erratic (following the phenomenon of upwelling). In a good year, artisanal fishermen can land over 30,000 mt. In addition, between 10,000 and 20,000 mt of frozen sardinella are imported into the country each year to supplement domestic catch. This specie therefore constitutes an important fish commodity particularly for the coastal communities as well as an export commodity to neighbouring countries, specifically, Burkina Faso and Guinea.

Very few Burkinabé traders have been engaged in this activity prior to the devaluation. In 1992, full-time traders who make the Ouagadougou-Abidjan-Ouagadougou trip for supplies were less than ten. There are a few unique features that govern this trade. First, the products are transported by rail, which makes it far cheaper than by road transport. Secondly, the traders engage the services of "transitaires" or forwarding agents who undertake the trade formalities. Thirdly, the Burkinabé importers travel to Abidjan by air, but the bulk purchases and lower transport costs make this activity viable.

Two to three traders usually pool stocks together to enable them accumulate a minimum of 14 mt per trip (minimum requirement for acquiring a train wagon). The products are sold in 60-kg baskets and after sales, are transferred into 150-kg cartons for the journey to Ouagadougou. Each year, over 1,000 mt of smoked sardinella are exported from Côte d'Ivoire to Burkina Faso.

The devaluation of the CFA Franc has had a disastrous effect on this activity. Today, this trade has virtually collapsed as transportation costs for traders and goods alike have doubled, fish prices have substantially gone up and other operating expenses increased. In the meantime, purchasing power of the Burkinabé consumer has declined following the devaluation. As a consequence, they are unable to support the elevated smoked sardinella prices.

2.3 Gambia/Guinea Cured Fish Trade

Cured fish processing and export constitute an important economic activity along the Gambian coast, specifically in the fishing villages of Brufut, Tanji, Sanyang, Gunjur and Kartung. The economic operators involved in this activity are men. They include Guinean cured fish processors concentrated in Gunjur. There are currently about 40 Guinean processors based in Gunjur, each with 2 to 3 assistants. The processors are well organized into an association and delegate some of their members to follow the products to Nzérékoré, the main Guinean market where the smoked products are sold.

The major products traded on the Guinean market include smoked bonga, smoked skates and rays. The smoked bonga are packaged in wooden crates and the smoked skates and rays in bales. They are transported in big 7 to 10-ton trucks. The Gambia-Guinea smoked fish trade is characterized by long and tedious journeys as well as high operating costs. How do the traders survive such a venture?

The Gunjur-based cured fish traders have devised effective strategies to meet these challenges. First, bulk shipments are encouraged to bring down the transport cost per unit volume of product. Secondly, the traders may assign one or two members of the association to follow the products and sell on their behalf in Nzérékoré. Thirdly, the operators manage to eliminate middlemen from the processing level to sales in Nzérékoré. Lastly, the bulk of the smoked fish exported are processed by the operators themselves.

Other important cured fish trading blocs in the sub-region are listed below but not much investigation has been performed. They include:

- Mali/Côte d'Ivoire/Burkina Faso/Niger/Nigeria trade involving cured freshwater fish
- Gambia/Ghana trade involving dried shark products
- Senegal/Central Gulf of Guinea countries salted-dried marine fish trade

Senegal is an important source of salted-dried fish for a number of Gulf of Guinea states. In 1995, Senegal exported 3 970 mt of salted-dried fish to African markets with the major buyers being; Congo (taking in 2,755 mt or 69%); Togo (20%); Ghana (8%) and others (3%).

3. Export Markets for Value Added Products

The export of high value demersal fish is not only gaining prominence, but also more and more African exporters are adding value to their products to optimize their earnings. The export trade can be classified into four main product categories, namely; i) fresh fish; ii) frozen shrimp; iii) frozen cephalopods and iv) canned tuna. Some live lobsters, mainly from Senegal, Mauritania, Cape Verde and Ghana are exported principally to the EU market but this trade is less important in volume terms. Exports of frozen fish to the EU market has not gained much popularity as European consumers prefer top quality fresh fish. Rather, African exporters are trying to develop market niche in Europe for frozen fish fillets such as sole fillets.

3.1 Fresh Fish Exports

The development of fresh fish export trade from West Africa really took off in the early 1990's. The European market is the main outlet and the principal West African exporters include Senegal, Mauritania and to a lesser extent Guinea. Senegalese annual fresh fish exports are a little below 10,000 mt, but gradually growing. The preferred species on the EU market include; grouper *(epinephelus aeneus)*; seabream *(sparidae)*; red mullet *(pseudupeneus prayensis)*; thiof *(serranus aeneus)*; red snapper *(lutjanus spp)*; sole *(cynoglossus spp)*; threadfin *(galeiodes decadactylus)* and John Dory *(zeus faber)*.

The main fresh fish markets for Senegalese products are Italy and France. Fresh fish demand in both countries are good and Italians in particular, pay better prices if the quality is right. The traditional link between France and the francophone West African countries, not to mention a well developed air connections, have favoured the fresh fish trade between these trading blocs.

Table 3.5: Senegalese Fresh Fish Exports, by Destination, 1993-95 (mt)

	1993	1994	1995
Italy	2 593	3 193	2 840
France	2 663	3 256	2 023
Greece	1 412	1 565	1 665
Portugal	279	356	613
Spain	208	165	303
Germany	196	209	215
Belgium	7	134	32
Other	1 541	522	492
Total	8 899	9 400	8 183

Source: DOPM, Dakar, Senegal

The Rungis market is the main fresh fish market in France and a number of fresh fish importers and wholesalers are based there. Consignments from West Africa enter France through Charles de Gaule airport and are taken delivery by transitaires or forwarding/ handling agents. At the port of entry, Veterinary Officers inspect samples within 12 hours of arrival of consignment. A couple of tests are conducted: TVB-N (test to measure the total volatile nitrogen) and TMA (test to measure trimethylamine). Both tests permit the inspectors to assess the freshness of the products. The results have so far been positive for products originating from West Africa.

Mauritania and Guinea are the other important West African fresh fish exporters. Fresh fish exports from Mauritania were virtually non-existent in the 1980's. This activity started to develop in the 1990's. In 1992, Mauritania exported 254 mt of fresh fish to the EU market. This showed an impressive growth to 1,218 mt in 1993 and then to 2,180 mt in 1994. However, development of processing infrastructure has lagged behind. The fresh fish export activity is based in Nouakchott but none of the existing three seafood processing facilities in this city meets EU standards.

A ban was therefore imposed on Mauritanian fresh fish entering the EU market in March 1996 and the operators have been asked to upgrade fresh fish handling and processing plants before the ban can be lifted. A new fish processing plant, Mayo Fish Sarl, is being constructed in Nouakchott initially to focus on fresh fish. The IFC and a local Bank are providing assistance to Mayo Fish. Elsewhere in Guinea, fresh fish exports are in the order of 1,000 mt per year. This industry has potential for growth with regard to resource base. However, the processing infrastructure needs to be developed.

3.2 Frozen Shrimp Exports

EU continues to be the leading shrimp market despite a levelling off of imports during 1992 and 1993 as a result of the economic slowdown. After having recovered from the recession, European demand for shrimp is now growing. The main European markets for shrimp include Spain, France, Denmark, UK, Italy and Belgium (Annex II). Japan and the US are the other important markets for shrimp products.

The main West Africa shrimp producing countries are Senegal, Nigeria, Gambia, Guinea Bissau, Guinea, Sierra Leone, Côte d'Ivoire and Ghana. However, shrimp export trade has been developed only in countries like Senegal, Gambia, Nigeria, Côte d'Ivoire and to a lesser extent, Ghana. There are inadequate processing infrastructure in countries like Sierra Leone, Guinea and Guinea Bissau to support this activity. Most of the Nigerian and Ghanaian shrimp exports are processed at sea, on board shrimp trawlers.

Senegal is by far the most important West African exporter of frozen shrimp. In 1995, the country exported 5 676 mt of crustaceans, the bulk being frozen shrimp. Of these, the French and Spanish markets together absorbed 4 942 mt or 87%. Other important outlets for Senegal's crustaceans include Italy, Portugal and Belgium. Over a dozen Senegalese companies are engaged in shrimp processing and exports.

Table 3.6: Senegalese Exports of [3]Crustaceans, by Destination, 1992-95 (mt)

	1992	1993	1994	1995
France	n/a	2 343	1 980	2 484
Spain	n/a	1 776	2 047	2 458
Italy	n/a	368	292	270
Portugal	n/a	10	16	193
Belgium	n/a	140	165	134
Greece	n/a	50	2	53
Netherlands	n/a	11	58	40
Germany	n/a	39	27	15
Other	n/a	146	45	29
Total	3 925	4 883	4 632	5 676

Source: DOPM, Dakar, Senegal

Ivorian frozen shrimp processing and exports are dominated by PECHAZUR. Prior to 1991, PECHAZUR together with AWAMER were undertaking this activity. AWAMER ceased frozen shrimp exports in 1992 largely due to problems associated with raw material supply. France remains the main market for Côte d'Ivoire's shrimp exports. Belgium and Spain are also major buyers of this commodity. In 1993, France took in more than two thirds of the Ivorian frozen shrimp exports.

Table 3.7: Ivorian Frozen Shrimp Exports, by Destination, 1991-94 (mt)

	1991	1992	1993	1994
France	472.4	282.6	383.1	n/a
Belgium	31.5	122.6	88.0	n/a
Spain	53.0	130.7	78.3	n/a
Other	0	36.6	0.5	n/a
Total	556.9	572.5	549.9	779.9

Source: Direction des Pêches et de l'Aquaculture, Abidjan

3.3 Frozen Cephalopod Exports

The EU and Japan constitute the main markets for cephalopod products. While European importers bring in mostly squid, octopus tops the list of cephalopod species imported to Japan. The main West African exporters of cephalopods include Mauritania, Senegal, Gambia and Ghana (Annexes II & III). West African cephalopod exports are limited to two species - octopus and cuttlefish.

The cuttlefish export trade from West African countries has been relatively modest but has been sustained. The main European cuttlefish markets are Spain, Italy and France. Of the 71,000 mt of cuttlefish imported into the European market in 1993, Spain accounted for 34,000 mt or 48% (Annex II). Per capita cephalopod intake in Spain averages 4.0 kg, the highest in the EU.

[3] Crustaceans include shrimp and lobster

Cephalopod products are also popular among Italian consumers with per capita intake getting close to 3.0 kg. Although loligo squid is the preferred species on the Italian market, cuttlefish is also highly appreciated. Italy accounted for 37% of the total volume of cuttlefish imported into the EU market in 1993. France is the other important European market for cephalopod. As in other Mediterranean countries, loligo squid is the preferred species on the French market. Still, cuttlefish accounts for about 40% of cephalopod consumption in France.

3.4 Canned Tuna Exports

The main West African canned tuna producers and exporters are Côte d'Ivoire, Senegal and Ghana. While volume of canned tuna exports from the francophone countries have shown very little change over the last few years , export revenue has substantially improved following the devaluation of the CFA Franc. Due to problems with raw tuna supplies, particularly for the Senegalese canneries, capacity utilization has been generally low.

For the most part of the 1980's, Côte d'Ivoire used to be the second most important canned tuna exporter in the world, after Thailand. Philippine has since taken up the second place with Indonesia closing up (Table 3.8). In addition to the relatively low operational costs in the South East Asian countries, their Governments further provide heavy subsidies to the canning industry making their products cheap and often dumping them on the American and European markets. Despite the 24% import duty surcharged on South East Asian products entering the EU market, their products compete very well with those from ACP countries which so far enjoy duty-free status on the EU market. The question being raised now is how competitive will West African canned tuna be under the new GATT Agreement which seeks to globalize trade and harmonize duties.

Table 3.8: World Canned Tuna Exports, by Exporting Country, 1990-93
(1 000 of standard cases - 48/6.5 ounces)

	1990	1991	1992	1993
Thailand	26 340	30 843	27 529	29 223
Philippines	4 944	4 853	5 220	6 067
Côte d'Ivoire	4 421	5 368	4 432	5 636
Indonesia	2 098	4 642	2 150	2 818
Senegal	1 815	2 055	1 816	2 363
Other	4 802	6 718	6 189	9 929
Total	44 420	54 479	47 336	56 036

Source: EUROSTAT

Côte d'Ivoire exports virtually all its canned tuna to the EU market with France being by far the most important buyer. Of the 43 727 mt of canned tuna exported in 1993, the French market absorbed 39 128 mt or 89%. French tuna giants - Pêche et Froid and Saupiquet respectively have majority share holdings in the two leading Ivorian canneries, PFCI and SCODI. The French market, without doubt, will remain the priority. Other important European importers of Ivorian canned tuna include Germany, Belgium and the Netherlands. UK lost much of its market share in 1993.

Table 3.9: Ivorian Canned Tuna Exports, by Destination, 1991-94 (mt)

	1991	1992	1993	1994
France	36 207	29 840	39 128	n/a
Germany	2 122	1 365	1 666	n/a
Belgium	2 413	1 389	1 586	n/a
Netherlands	258	424	1 111	n/a
Denmark	0	55	144	n/a
UK	1 508	2 619	92	n/a
Total	42 508	35 693	43 727	38 466

Source: Direction des Pêches et de l'Aquaculture, Abidjan

Of late, Senegal's canned tuna industry has been hardly hit by raw tuna supply problems. This has partly contributed to the withdrawal of Saupiquet's operations in Senegal. As a remedial measure, the Government is now demanding EU tuna fleets fishing in the area under the EU/Senegal fisheries agreement, to land at least 16,000 t to support the industry. This has revitalized the industry to some extent as canned tuna exports are now averaging 20 000 t per year, a substantial improvement over the 15 000 t recorded in 1992. Senegal's canned tuna are also traded on the EU market with France taking in the bulk.

Table 3.10: Senegalese Canned Tuna Exports, by Destination, 1992-95 (mt)

	1992	1993	1994	1995
France	n/a	17 845	15 343	15 713
Italy	n/a	985	763	1 458
Belgium	n/a	1 534	1 499	1 320
UK	n/a	168	20	848
Denmark	n/a	0	0	160
Germany	n/a	1 706	397	0
Other	n/a	32	363	972
Total	15 043	22 270	18 385	20 471

Source: DOPM, Dakar, Senegal

Ghana's canned tuna industry comprises PFC and GAFCO. Both canneries have been reorganized and undergone extensive rehabilitation. Currently, only PFC is exporting while GAFCO is undertaking trial production. PFC exports the bulk of its canned tuna to the EU market, notably to UK and France. PFC's share of Africa's market is also growing. In the second half of 1995, the Company traded 12% of its canned tuna on the African market. This grew to 29% in the first half of 1996. The bulk of PFC's frozen tuna loin exports, on the other hand, goes to USA to feed Starkist's plant in Puerto Rico.

Table 3.11: Exports of Canned Tuna and Frozen Tuna Loin, by PFC, Ghana, 1995-96 (Cases)

	MAY - DEC. 1995		JAN. - APR. 1996	
	Cases	%	Cases	%
CANNED TUNA				
Heinz UK	384 487	63	391 363	25
France	112 720	19	351 047	22
Other EU	37 780	6	373 782	24
Africa	72 962	12	452 515	29
Total	607 949	100	1 568 707	100
FROZEN LOIN				
Idal	45 027	78	25 802	42
Heinz USA	12 480	22	35 488	58
Total	57 507	100	61 290	100

Source: PFC, Tema, Ghana

4. Fish Trade Regulations

4.1 Regional Institutions and Fish Trade

Lack of harmonization in existing fish trade policies and regulations among African States continue to hamper expansion in intra-regional trade in fish and fishery products. Efforts are being made by a number of regional and sub-regional bodies in identifying a common trade policy but so far very little has been achieved.

ECOWAS: Efforts made by ECOWAS to streamline fish trade policy in West Africa date back to the 1970's. A common duty and tax schedule was worked out in May 1979 but Member States failed to incorporate these special provisions, preferring to apply their own regulations. Under the stipulated common policy, non-tariff barriers were to have been removed within 4 years from May 1981. Economic pressures in the individual Member States made it impossible to put the new policy into effect.

Member States, fearful of the effects of this measure on customs revenue, demanded that a compensation budget should be made available to make up for any losses that would be incurred. A new compensation plan was adopted in November 1986 and officials are trying to come up with a compensation budget.

UEMOA: At the sub-regional level, however, some strides have been made. [4]UEMOA (ex-CEAO), a seven-member Francophone economic grouping in West Africa, has established preferential duty on some commodity trade including fish and fishery products. Prior to 1983, Mauritania and Senegal, the two major UEMOA fish supplying countries derived tremendous benefits from this special tax concession.

[4] UEMOA member countries include; Benin, Burkina Faso, Côte d'Ivoire, Mali, Mauritania, Niger and Senegal. Togo has an observer status

However due to fraudulent practices on the part of suppliers outside UEMOA who managed to benefit from the system, Côte d'Ivoire reviewed and suspended its special tax concession on fish imports in 1984. Although the exemption from payment of customs duties within the economic grouping is still in vigour, the non-compliance by Côte d'Ivoire, UEMOA's most important fish importer, has greatly diminished its impact. Import duties for fish products entering UEMOA member countries are provided in Annex IV.

4.2 Customs Duties pertaining to Frozen Fish Imports

Today, frozen fish entering Côte d'Ivoire attract the following taxes:

- import duty	: 20.00 CFA/kg
- port taxes	: 3.00 CFA/kg
- municipal tax	: 1.95 CFA/kg
- veterinary charges	: 1.05 CFA/kg
Total	: 26.00 CFA/kg

Mauritania has been able to adjust to the disappearance of this competitive advantage and still accounts for a major part of frozen fish supplies to the Ivorian market. Of the 138,879 mt of frozen fish imported to Côte d'Ivoire in 1995, Mauritania accounted for 36,950 mt or 27%. Senegalese suppliers have not well adjusted and still feel the impact. This tax schedule apparently pertains only to frozen fish. Frozen tuna (which are either transhipped from Abidjan or are imported to feed the local canneries) are tax exempt. This measure is designed to encourage local production of canned tuna.

In Togo, following the declaration of Lomé as a free port zone, customs duties in the form of "taxe général sur affaires" (TGA) was slashed from 20% to the following rates:

- frozen & cured fish originating from UEMOA member state	: 0%
- frozen & cured fish originating from ECOWAS member state	: 5%
- frozen & cured fish originating from outside ECOWAS	: 10%

In addition, a value added tax (VAT) is also imposed as follows:

- frozen and cured fish from UEMOA state	: 7%
- frozen and cured fish from non UEMOA state	: 18%

In effect, frozen small pelagic fish originating from Mauritania, a UEMOA member state, attracts only a VAT of 7% while similar products originating from the Netherlands attract a total tax of 28% (TGA 10% plus VAT 18%). With the decline in purchasing power of the Togolese consumer following the devaluation, Dutch fish has become so expensive that it is now beyond the means of the average consumer. As a consequence, about 99% of Togo's frozen fish imports in 1995 originated from Mauritania and the remaining one percent from Senegal.

In Ghana, customs duties for frozen fish originating from within or outside ECOWAS are in the order of 35%. With the continuous depreciation in the value of the local currency, Cedi, imported fish has become very expensive lately and consumers are finding it difficult to support the elevated prices. In 1993, 36,983 mt of frozen fish were imported into the country. This dropped to 18,827 mt in 1994 and only 2,250 mt in 1995.

Industry sources indicate that if nothing is done about the situation, frozen fish imports will collapse and have an adverse effect on food security in Ghana. Currently, all the importers have virtually ceased operating. Rather, those with adequate capital either pre-finance fishing operations in Mauritania using ex-USSR vessels or charter vessels to fish outside Ghana's EEZ. In both instances, the landings are considered as local production and therefore enjoy tax exempt status.

PART IV: IMPACT OF RECENT ECONOMIC DEVELOPMENTS

1. Impact of the GATT/WTO Agreement

The long term objective of the GATT Agreement is to encourage free trade by eliminating market distortions. To achieve this, the Agreement seeks to reduce the main causes of these distortions, which include:

- trade protectionism (such as import quotas, etc)
- export subvention
- internal support accorded to certain sectors of the economy

Lomé Convention: Under the ACP-EU Lomé Convention, exports of fish and fishery products originating from ACP countries enjoy tax-exempt status on the EU market while similar products from non-ACP countries are imposed 24% duty. This was contained in the Lomé IV Convention, signed in December 1989 and will remain valid for ten years. The second financial protocol covering the period 1995 to 1999 was recently signed in Mauritius.

The Final Act of the Uruguay Round will not take immediate effect but rather be gradually applied over a ten year period. When the Act takes full effect, the competitive advantage of the ACP countries over non-ACP countries will be phased out. West African countries therefore have to initiate strategies aimed at making their products competitive when the preferential trade status is withdrawn.

The fishery commodity trade in sub-Sahara Africa which are expected to be severely affected by the Free Trade Act include i) canned tuna; ii) frozen shrimp, iii)fresh tropical fish and to a lesser extent, iv) frozen cephalopods. With regard to canned tuna, all of the Ivorian exports have been going to the EU market over the last few years while Senegal also exports the vast majority of its products to this market (Table 4.1). It is only Ghana which shows little signs of diversification, but even here 88% went to the EU market between May and December, 1995.

Table 4.1: EU Market Share of West African Major Fishery Commodity Exports 1993-95

1. Canned Tuna

	1993			1994			1995		
	Total Exports (t)	Exports to EU (t)	% EU	Total Exports (t)	Exports to EU (t)	% EU	Total Exports (t)	Exports to EU (t)	% EU
Côte d'Ivoire	43 727	43 727	**100**	38 466	38 466	**100**	n/a	n/a	**n/a**
Senegal	22 270	22 238	**100**	18 385	18 041	**98**	20 471	19 618	**96**
[5]Ghana	n/a	n/a	**n/a**	n/a	n/a	**n/a**	607 949 cases	534 987 cases	**88**

Source: National Statistics

2. Frozen Shrimp

	1993			1994			1995		
	Total Exports (t)	Exports to EU (t)	% EU	Total Exports (t)	Exports to EU (t)	% EU	Total Exports (t)	Exports to EU (t)	% EU
Côte d'Ivoire	549.9	549.7	**100**	779.9	779.5	**100**	n/a	n/a	**n/a**
[6]Senegal	4 480.2	4 350.6	**97**	4 570	4 569	**100**	5 621	5 597	**99**

Source: National Statistics

3. Frozen Cephalopod

	1993			1994			1995		
	Total Exports (t)	Exports to EU (t)	% EU	Total Exports (t)	Exports to EU (t)	% EU	Total Exports (t)	Exports to EU (t)	% EU
[7]Senegal	11 224	6 367	**57**	14 863	10 164	**68**	13 185	9 962	**76**
[8]Mauritania	58 104	22 904	**39**	38 676	9 076	**23**	23 782	9 412	**40**

Source: National Statistics

4. Fresh Fish

	1993			1994			1995		
	Total Exports (t)	Exports to EU (t)	% EU	Total Exports (t)	Exports to EU (t)	% EU	Total Exports (t)	Exports to EU (t)	% EU
Senegal	8 899	7 504	**84**	9 400	9 085	**97**	8 183	7 864	**96**
Mauritania	1 218	1 218	**100**	2 180	2 180	**100**	n/a	n/a	**n/a**

Source: National Statistics

[5] Canned tuna exports cover the period May to December 1995
[6] Includes lobster
[7] Comprises frozen cephalopods and molluscs
[8] Frozen cephalopod exports in 1995 cover January to August

Frozen shrimp and fresh tropical fish exports from West Africa follow similar pattern. Côte d'Ivoire has been exporting all its frozen shrimp to the EU market while the overwhelming percentage of Senegal's products end up there (Table 4.1).Concerning fresh fish trade, Mauritania has been exporting all its products to the EU market, notably, France and Italy. In 1993, Senegal exported 84% of its fresh fish to the EU market. This has since increased to 97% in 1994 and 96% in 1995.

Frozen cephalopod is the only major West African fishery commodity which is having market diversification outside the EU to include Asian countries, notably, Japan. Although the EU market still receives the majority of Senegal's frozen cephalopod and molluscs exports, traditionally, Mauritania's frozen cephalopod exports go to the Japanese market, often via Las Palmas.

The dependence on the EU market by West African seafood exporters is immense. First, there is the close proximity factor which makes transportation costs relatively cheaper. Secondly, the cultural ties, in particular, between France and the francophone West African countries which favour trade - joint ventures, common language, tie of the CFA to the FF, etc. But more important, trade between EU and West African states has been favoured by the tax-exempt status ACP countries enjoy. Therefore when this preferential status is eventually withdrawn, West African seafood industry would have to make necessary adjustments to make their products competitive.

Besides the harmonisation of customs duties, trade protectionism and export subsidies will also have to disappear. In Senegal, prior to the devaluation, seafood exporters were enjoying an export subsidy of 3.6% of export revenue. This was removed soon after the devaluation. In Côte d'Ivoire, seafood exporters benefit from a 10% export subsidy. The West African seafood industry will have to come up with innovative ideas in order to survive the proposed changes.

To ensure competitive products, the industry will have to improve productivity, reduce costs and above all, maintain high product quality. A detailed study on the "Competitiveness of the Canned Tuna and Frozen Shrimp Industries" is required to among other things, compare cost structures in the South East Asian seafood industry, identify key areas where reforms are necessary and propose strategies to both the industry and Government.

Initiatives: Aware of the need to streamline operations and maintain high product quality, the industry has already taken some initiatives. Fresh and frozen fish processing companies in a number of West African countries have made additional investments to upgrade their plants to meet EU standards but also improve efficiency. Others are still in the process of rehabilitation.

In the canned tuna industry, a lot of structural changes have occurred since the late 1980's. In Senegal, SNCDS has invested an additional 2 billion CFA to restructure the Company and modernize its plant. The restructuring programme also include diversifying markets and products. SNCDS has surveyed demand in the African market for canned pilchards and sardinella and initial results are encouraging. The Company has therefore established an affiliate, CONDAK, to concentrate on the production of canned small pelagics for the African market.

Senegalese canned tuna operators faced acute shortage of raw tuna supply and that precipitated the departure of Saupiquet, which has ceased its operations in Senegal to reinforced activities in Côte d'Ivoire. The Ivorian canned tuna industry is also being restructured. Both PFCI and SCODI have spent substantial amounts to modernize and expand production capacities of the plants. PFCI expanded its production capacity from 22,000 t to 35,000 t in the late 1980's. Similarly, SCODI expanded its operations from a capacity of 25,000 t to 40,000 t around the same time.

In Ghana, PFC was acquired in 1993 by Starkist, a subsidiary of Heinz which now owns 100% of the shares. Starkist has since invested an additional US$10 million to make the plant operate more efficiently and improve product quality. The ex-TFCC has also been privatized and it is now called GAFCO. This company has also spent substantial amount of money to upgrade and expand its tuna canning lines. Since the privatization, productivity has gone up and product quality has also improved. The West African seafood industry will need more than these to come to par with their South East Asian counterparts who are benefiting immensely from state support.

2. Impact of the Devaluation of CFA Franc

The devaluation of the CFA Franc came into effect in January 1994 with the primary objective of promoting exports from the francophone zone while at the same time, discouraging imports. Prior to introducing this measure, the CFA Franc currency was over-valued making exports from the francophone countries too expensive and unattractive. Impact of the devaluation has been mixed for the fishing industry. While fish exports are now bringing in more cash, the catching and processing sectors which depend on imported inputs are facing some harsh consequences.

2.1 Artisanal Sector

Prices of Fishing Materials: For many West African countries, the artisanal sector serves as the backbone of the fishing industry - providing the bulk of the catch. Therefore, immediately after the devaluation, a number of Governments had to intervene in this sector to cushion off the effects through the provision of subsidies. Prices of fishing materials including canoes, outboard motors and fishing nets have gone up, some by 100% or even more. This have had serious repercussions on artisanal fishing operation. The impact will be fully felt when the operators decide to replace their old equipment.

While some fishing material prices increased by 100% and even over, others were curtailed within reasonable limits. In Côte d'Ivoire for example, the prices of fuel and ice were frozen at pre-devaluation levels. In Senegal, outboard motors enjoyed a subsidy of 48% soon after the devaluation, fuel 68% and fishing nets 8%. These measures have helped to sustain development efforts in the artisanal fisheries sectors of both countries.

In contrast, Togolese authorities are yet to support the artisanal fishery sector after the devaluation. Rather, UNICOOPEMA, a cooperative union which brings together various groups in the sector and supply them with fishing materials, have had its subvention of 3% slashed. In addition, UNICOOPEMA has to pay value added tax of 7% on equipment originating from UEMOA member states or 18% on equipment from outside. Artisanal fishermen are thus having various operational problems and this is reflected in the poor catches.

Table 4.2: Impact of the Devaluation on Fishing Material Prices

	COTE D'IVOIRE			SENEGAL			TOGO		
	Prices Before	Prices After (Sept '94)	%	Prices Before	Prices After (Sept '94)	%	Prices Before	Prices After (Sept '94)	%
Wooden Canoe									
* 15m - 18 m	n/a	n/a	n/a	1 850 000	2 400 000	30	900 000	1 450 000	60
* 14m - 12m	850 000	1 300 000	53	1 400 000	1 800 000	28	600 000	1 000 000	66
* 8 m - 10m	n/a	n/a	n/a	1 000 000	1 350 000	35	400 000	700 000	75
Outboard Motor									
* 40 HP	1 200 000	2 400 000	100	650 000	950 000	46	675 000	1 200 000	56
* 25 HP	850 000	1 150 000	35	400 000	550 000	38	400 000	750 000	88
* 15 HP	750 000	910 000	21	300 000	450 000	50	n/a	n/a	n/a
Fishing Net									
* 100 yards	35 000	56 000	60	52 000	105 000	103	32 000	57 000	78
* Hooks (box)	1 500	2 500	70	700	1 200	71	n/a	n/a	n/a
Fuel (litre)	208	208	0	172	265	54	160	200	25
Ice Block (25kg)	12 000	12 000	0	11 250	15 000	33	8 750	10 000	14

Source: FAO IDAF Project, Cotonou, Benin

Imports of Frozen Small Pelagic Fish: Despite the initial shock of the devaluation on frozen fish imports, this activity has recovered once again in a number of Francophone countries notably, in Côte d'Ivoire and Togo. Fish still remains one of the cheapest source of animal protein in the region therefore imports are likely to grow. For urban communities far from the coast or inland water bodies, their dependence on frozen fish imports is even much greater. These products are distributed up-country where they are thawed and smoked.

A number of Governments have therefore introduced measures to protect frozen fish prices from getting out of control following the devaluation. In Côte d'Ivoire, prior to the devaluation a duty of 30% of the CIF value was levied on all frozen fish imports. Today, this has been reduced to 20 CFA/kg which translates to about 12%, to make the commodity more affordable. Thus, despite the 100% devaluation of the CFA, frozen fish prices have gone up by 45% in Côte d'Ivoire and about 60% in Togo.

Table 4.3: Prices of Imported Frozen Fish, Before and After the CFA Devaluation

	COTE D'IVOIRE			TOGO		
	Before (CFA/carton)	After (CFA/carton)	%	Before (CFA/carton)	After (CFA/carton)	%
Horse Mackerel (30-kg carton)	7 700	11 200	45	6 500	10 400	60
Mackerel (30-kg carton)	8 400	12 200	45	6 800	10 800	60
Sardinella (30-kg carton)	6 000	8 700	45	4 500	7 500	65

Source: FAO IDAF Project, Cotonou, Benin

Increased Sardinella Consumption: Another interesting development following the devaluation is the increasing utilization of sardinella. The purchasing power of the average consumer has sharply declined since this event. Now a number of consumers can afford only the low priced sardinella. As a consequence, the share of sardinella in frozen fish imports has significantly increased in a number of the central Gulf of Guinea states. In Togo, sardinella accounted for 12% of the frozen fish imports in 1994. This increased to 24% in 1995. Consumers are eating more and more sardinella.

Cured Fish Trade: Cured fish traders in the West African sub-region have made the necessary adjustments to survive the devaluation of the CFA currency. For most of the trading blocs, overhead costs are low and the operators do not depend on imported items. They have therefore managed to curtail operating costs and their products in the end continue to be affordable.

For the Côte d'Ivoire/Burkina Faso trade, this has not been the case. As mentioned earlier on, the Burkinabé traders travel to Abidjan by air for supplies. Following the devaluation, air fare has doubled. Besides, the traders transport their goods by train and engage forwarding/ handling companies to undertake the trade formalities. All these charges have virtually doubled. As a consequence, this trade has now become less attractive due to the high operating expenditure and has become dormant.

Fresh Fish ex-Canoe Prices: Artisanal landings have benefited from price hikes but at varying degrees. Enjoying a stronger demand, prices of high value fish notably seabream, grouper, sole, red mullet, shrimp, lobster, cephalopods, etc have surged higher than prices of small pelagic fish like sardinella, bonga, horse mackerel and mackerel. Price increases of demersal fish immediately after the devaluation averaged over 45% while small pelagic prices showed only a modest growth.

Table 4.4: Impact of the Devaluation on Fresh Fish ex-Canoe Prices, Dakar (CFA/kg)

	Before Devaluation (Early January 1994)	After Devaluation (Late March 1994)	% Change
Demersal Fish			
Grouper	1 000 - 1 300	1 500 - 2 000	52
Thiof	950 - 1 200	1 300 - 1 800	44
Seabream	900 - 1 000	1 200 - 1 500	42
Sole	900 - 1 000	1 250 - 1 600	50
Cuttlefish	350 - 500	750 - 1 000	106
Pelagic Fish			
Bonga	100 - 150	100 - 150	0
Sardinella	100 - 150	100 - 180	12
Horse Mackerel	120 - 200	120 - 250	16
Mackerel	150 - 300	150 - 350	11

Today, prices of high value demersal fish have more than doubled compared to the pre-devaluation levels. This is due to the high demand by fresh fish exporters. In effect, a direct consequence of the devaluation in this sector is the gradual shift from sardinella purse seining to more lucrative demersal trawling or line fishing. Should this continue, the cheaper small pelagic fish will become less and less available for local consumption and will threaten food security in the region.

2.2 Industrial Sector

Industrial Fishing: At the industrial level, fish processors whose products are targeted towards international markets have fared much better than the vessel operators. Following the devaluation, export prices have doubled in CFA terms. Therefore processors can still depend on imported inputs and make respectable gains. In contrast, the vessel operators sell their catch in local currencies while they pay for fishing equipment and gear in hard currency. Many vessel owners are therefore finding it difficult to provide regular vessel maintenance for their fleets.

The consequence is that, the vessels are spending fewer days at sea and their operations are becoming less and less efficient, cutting back on profitability. In Senegal, the industrial sardinella fleet is apparently disappearing faced with unattractive sardinella prices but mounting operating expenditure. In 1981, there were 14 sardinella purse seiners producing around 18,000 mt. Today, only five remain together producing just 3,000 mt.

Industrial Processing:. In the short-term, the CFA devaluation met its objective of revitalizing the region's processing and export industries. But it is a different question whether this boost has been sustained. In 1993, Côte d'Ivoire exported 43,727 mt of canned tuna worth 26.3 billion CFA. In 1994, Ivorian canned tuna exports declined in volume to 38,466 mt but brought in a whopping 63.3 billion CFA as a result of the devaluation. Similar improvements in seafood export revenues were observed in the Francophone countries.

As a consequence, one of the immediate impact in Senegal was the springing up of fresh fish exporting companies. Within just a year of the devaluation, Senegalese fresh fish exporters had nearly doubled. Then came the realities. Demand for fresh fish was so high that, fresh fish ex-canoe prices doubled for many high value demersal species. Inventories held by companies prior to the devaluation were used up and they had to import new stocks using hard currency. These developments drove many of the newly created small-scale companies out of business. The situation is now stabilizing and the major processors and exporters are consolidating their positions and in fact, reaping substantial benefits from the devaluation.

3. Impact of the Decline in ex-USSR Small Pelagic Fleet

Following the break-up of the former USSR, which was then one of the leading suppliers of frozen fish to the West African region, a lot of concern was raised as to how fish supplies to the region can be sustained? In particular, experts expressed concern over:

- a possible overall decline in distant-water fishing by the ex-USSR fleet
- redirecting catch back to the CIS countries
- fish price increases as a result of the removal of fuel and other subsidies

The ex-USSR fleet in general, comprised a lot of old vessels built in the 1960's. Following the break-up of the Union and the removal of subsidies, a number of these vessels still remained in the region fishing off Mauritania and other zones. However, the operators, most of them Ukranians with their Filipino crew, lack working capital and therefore depend on pre-financing from buyers in importing countries.

A number of West African countries are depending more and more on this arrangement to obtain fish supplies. In Côte d'Ivoire, CIS fleets have become the leading supply source since the devaluation. Of the 138,876 mt of frozen fish imported into Côte d'Ivoire in 1995, CIS accounted for 44,719 mt or 32%. In Togo and Ghana, similar arrangements do exit. However, the products enter Togo as imports from Mauritania while in effect, an important part represent catch from ex-USSR or FRANSOV vessels.

In Ghana, due to the high customs duties, fish imports are being discouraged. Rather, the Ghanaian traders charter or pre-finance the ex-USSR vessels to fish for them and land the catch in Ghana as domestic production, enjoying tax-exempt status. The traders take advantage of a clause in the Fisheries Act which permit authorizing vessels to fish outside Ghana's EEZ. Through this arrangement, an additional 11,000 mt of fish were landed in 1994 increasing to 62,817 mt in 1995.

Thus contrary to fears that the break-up of the ex-USSR fleet and the removal of fuel subsidy will have a disastrous impact on fish supplies in the region, these vessels are rather playing major a role in making more fish available to West African consumers. The real worry will emerge in a few years time when the fleets will be too old to operate. Without replacement, there will a real danger of sustaining fish supplies at current levels in the region.

PART V. STRATEGIES AIMED AT INCREASING CONTRIBUTION OF FISH TO FOOD SECURITY

1. Strategies at the National Level

1.1 Côte d'Ivoire

Modernizing Industrial Fleets: The Ivorian fishing industry is characterized by an old fleet, particularly the sardinella purse seiners, most of them built of wood. Over one half of the sardinella boats were built in the 1960's, in other words, averaging 30 years. Their performance is therefore poor. The industrial trawl fleet similarly comprises old vessels most of which would have to be replaced in the next few years to enable the industry remain competitive. Vessel owners are finding the existing rates of interest from local Commercial Banks which are averaging 18% quite high.

A number of International Financial Institutions such as the IFC (International Finance Corporation), the ADB (African Development Bank) and the EIB (European Investment Bank) have established various Facilities to assist in the mobilization of funds at interesting rates of 12% or even lower for the private sector. The vessel owners should therefore pursue these options to mobilize funds to replce their old vessels.

The IFC, together with the ADB and UNDP, operate the Africa Project Development Facility which prepares project documents and mobilizes funds usually for projects with investment costs between US$0.25 and US$7.0 million. The IFC further executes the Africa Enterprise Fund (AEF) with has similar objectives. With regard to the ADB, it has a unit, the Private Sector Development Unit which also prepares project documents and mobilizes funds from the Bank at concessionary rates. The EIB, through the Centre for the Development of Industry (CDI), also provides financing for the private sector and promotes partnership between African and their European counterparts.

Promotion of Aquaculture: Prior to the devaluation, cultured fish particularly lagoon catfish was too expensive therefore had only a moderate demand. After the devaluation, prices have closed up with other fish products boosting demand. Retail prices (CFA/kg) of selected fish products before and after the devaluation are provided below:

	Before	After
Imported Frozen Mackerel	300	750
Cultured Tilapia	500	750
Cultured Catfish	1 000	1 200

Fish culture products are today competitive on the Ivorian market and therefore this activity should be promoted. Tilapia farming has already received a lot of attention in the areas of research and extension to small-scale farmers. There is a potential to expand lagoon catfish farming particularly in the Jacqueville area where the necessary infrastructure does exist. Aquaculture promoters and developers should be looking into ways of depending less and less on imported feed but rather substituting with locally produced ones.

1.2 Ghana

Reduction in Import Duties: While Mauritanian or Senegalese frozen small pelagics attract 12% import duties in Côte d'Ivoire and 7% in Togo, in Ghana, a rate of 35% applies. This, together with the continuous depreciation in the value of the Cedi has made the importation of frozen fish unattractive. This activity is therefore collapsing and to make up for the short supplies, the traders are chartering vessels to fish outside Ghana's EEZ, an arrangement which might be changed when the review of the Fisheries Act is completed. When this happens, there will be a major deficit in fish supplies which will have an adverse effect on per capita fish intake.

To remedy the situation, the authorities should review import duties pertaining to frozen fish with a view of reducing it. Fish today remains an important source of protein in Ghana accounting for nearly two thirds of the animal protein consumed. Imported fish has made significant contribution to this. To sustain fish intake at current levels, the authorities should introduce measures to facilitate frozen fish imports.

1.3 Senegal

Modernizing Industrial Fleets: Like in other parts of the sub-region; the industrial fishing sector is performing poorly particularly after the devaluation of the CFA Franc. There has been a general neglect on the part of vessel owners in providing regular maintenance services. In Senegal, old vessels are hardly replaced and the few ones which enter are trawlers and shrimpers. The local sardinella purse seiners are gradually disappearing while EU plans to introduce 20 sardinella boats recognizing the importance of this fishery.

There is therefore the need to revitalize Senegal's industrial fisheries and the solution is the ability to mobilize funds at concessionary rates like those offered by the IFC, ADB and the EIB. In replacing the industrial fleet for a country like Senegal which has a high concentration of fish processing plants, preference should be given to ice-keeping trawlers instead of the freezer-trawlers. This strategy will make more fresh fish available to the processing sector and encourage the production of value added products, creating more jobs and optimizing export revenue.

Promotion of National Tuna Fleet: Capacity utilization rate for Senegal's canned tuna industry has been very low. Production capacities or annual raw tuna needs for the three canneries are as follows:

- SNCDS	: 35,000 mt
- PFS	: 20,000 mt
- INTERCO	: 15,000 mt
Total	: 70,000 mt

Capacity utilization in 1992 was a mere 40% and in 1993 55%, still low. Most of the French and Spanish vessels which operate in the Eastern Atlantic and the Western Indian ocean tranship the bulk of their catch in ports other than Dakar. Therefore the local canneries have little access to tuna caught by foreign-flagged vessels.

A strategy is to develop its own national tuna fleet. This option was given attention a few years back but has not been effectively implemented. Tuna purse seiners are very expensive and interest payments alone would make them burdensome for Senegalese investors. Rather, they can go in for pole and line vessels which are more affordable. This has been the strategy in establishing a national tuna fleet for Ghana and it has worked out very well. Today, Ghana's tuna fleet numbers around 40, about 36 or so are pole and line vessels. Pole and line fishing is proved to be feasible in Senegal. The country has an abundant stock of small pelagic fish which can be used as baits and the right to fish in neighbouring countries including Mauritania and Cape Verde will permit the operators to fish year round.

1.4 Togo

Support to Artisanal Fisheries Sector: With a coastline of only 56 km, Togo's industrial fisheries sector is not likely to play any major role in the country's fish supplies. Rather, consumers will have to rely on the artisanal sector as well as imports. While a number of Francophone countries such as Senegal and Côte d'Ivoire have introduced measures to support this sector following the devaluation of the CFA Franc, Togolese authorities are yet to act and the inaction is already taking its toll. Artisanal marine fish production in Togo fell from 9,978 mt in 1993 to 7,079 mt in 1994 and 6,811 mt in 1995.

In Côte d'Ivoire, measures introduced to buffer the effects in this sector included freezing fuel prices at pre-devaluation levels, as well as freezing the price of ice and port charges. In Senegal, outboard motors enjoyed a subsidy of 48% soon after devaluation, fuel 68% and fishing nets 8%. To boost activities in the artisanal fisheries sector and reverse the declining trend in artisanal catch, the authorities should introduce similar measures - reducing taxes on fuel, on outboard motors and on fishing nets.

Reduce Import Duties on Frozen Fish: As already pointed out, the main sources of fish for the Togolese consumer are artisanal production and imports. If fish is to continue to play its major role in nourishing the Togolese population, then not only should artisanal production improve, frozen fish imports should also be streamlined. Following the devaluation, the average consumer has lost purchasing power so can spend only a limited amount of money on fish. With the current tax structure of 28% import duty on frozen fish originating from outside UEMOA member states, Dutch frozen small pelagics have become too expensive.

In 1990, Netherlands provided 47% of the 20,800 mt of frozen fish which entered the country. In 1994, the year of the devaluation, Dutch share of frozen fish imports dropped to 19% and Dutch fish totally disappeared in 1995. Togo obtained 99% of its frozen fish imports from Mauritania in 1995 which presents some danger. What happens when the old ex-USSR vessels which supply the bulk start breaking down and are not replaced? What happens when there is a policy change in Mauritania discouraging this operation. It is therefore imperative that Togo diversifies its supply sources to include Netherlands and other countries outside the UEMOA zone. This will only be possible if import duties on frozen fish originating from these countries are reduced.

2. Strategies at the Sub-Regional Level

Fisheries Management: At the sub-regional level, efforts should be made to introduce better management practices particularly for shared stocks such as ocean pelagics like tuna or small pelagics like sardinella. This would ensure sustainable catches, improve fishing effort and add to the competitiveness of West Africa's fishing industry. Regional cooperation should go further to include the exchange of research findings and encouraging fisheries agreements among ECOWAS member states.

The Sub-Regional Fisheries Commission comprising Mauritania, Senegal, Cape Verde, Gambia, Guinea Bissau and Guinea has already made some progress in this regard. Fisheries agreement has been worked out permitting a vessel from one member state to fish in another, of course paying a fishing fee. Efforts are also being made to put in place a Monitoring, Control and Surveillance (MCS) system to cover member countries. These arrangements should be extended to cover the central Gulf of Guinea states, from Sierra Leone to Nigeria.

Investment Promotion: One major obstacle facing vessel owners in particular is how to mobilize funds to modernize or replace their aging fleets, at attractive rates below the 18 - 20% existing in the Francophone countries to rates of 40% and over in countries like Ghana. Some private entrepreneurs in seafood processing are similarly looking for such facilities to establish new plants, expand existing ones or restructure factories to make them competitive. As indicated in the report, facilities do exist which assist in project preparation and mobilization of funds at concessionary rates. They even go beyond securing financing to

include providing technical assistance in processing technology, marketing advisory services or management skills. However, a number of operators are not fully aware of these facilities. If even they have had exposure, they have not fully exploited these facilities to their advantage. As a follow-up to this study, ECA in collaboration with CDI or ADB or UNIDO, can organize a regional investors' forum for these operators. CDI, ADB and UNIDO have budget allocations for such activities. It should bring together vessel owners and industrial seafood processors with representatives from these facilities to expose their potential areas of intervention and conditions required for obtaining financing or technical assistance.

Harmonization of Tariff Structures: To promote regional cooperation among ECOWAS member states, it is imperative that tariff structures are harmonized. Today, high tariff barriers existing in member countries make it difficult to promote intra-regional trade. Mauritanian or Senegalese frozen small pelagics attract import duties of 35% when entering Ghana, making this trade unattractive today.

The high taxes in effect, have not facilitated the easy flow of goods across borders. For the region to achieve self sufficiency in fish, tariff structures should not only be harmonized but also reduced so that countries with surplus catch can easily redirect some to fish deficit nations.

Enhancing Competitiveness of Seafood Processing Industry: Despite the tax-exempt status ACP products enjoy on the EU market, this has not prevented South East Asian countries which are imposed 24% duty, to expand their market shares. This is particularly true for canned tuna exports where Côte d'Ivoire has lost its second position to Philippine with Indonesia catching up. The question being asked is what then is going to happen when the Free Trade Act becomes fully operational?

In addition to the relatively low operational costs in the South East Asian countries, their Governments further provide heavy subsidies to the canning industry making their products cheap. West African seafood processing industry would have to restructure their activities with the aim of minimizing cost and improving productivity in order to remain competitive. They should work closely with Government to create an enabling environment for improving production efficiency.

Detailed comparative studies should be undertaken for the canned tuna and frozen shrimp processing activities in West Africa and in selected South East Asian countries to identify cost structures in both regions as well as existing Government support. This would provide the basis for formulating production strategies for our industries to remain competitive in the post-Free Trade era.

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Fishery Resource Potential and Catch in West Africa

1. Estimates of Marine Resource Potential (mt)

	PELAGICS	DEMERSAL	TOTAL
Benin	10 000	3 000	13 000
Cape Verde	42 000	4 000	46 000
Côte d'Ivoire	51 000	11 500	62 500
Gambia	165 000	19 000	184 000
Ghana	250 000	41 500	291 500
Guinea	100 000	114 000	214 000
Guinea Bissau	180 000	65 000	245 000
Liberia	35 000	9 000	44 000
Mauritania	510 000	134 000	644 000
Nigeria	80 000	40 000	120 000
Senegal	258 000	110 000	368 000
Sierra Leone	135 000	45 000	180 000
Togo	12 000	1 000	13 000

Source: FAO IDAF Project, Cotonou, Benin

2. [9]Fish Production in West Africa

	1990	1991	1992	1993	1994
Benin	38 234	35 083	35 500	36 250	37 000
Burkina Faso	7 015	7 012	7 508	7 000	8 000
Cape Verde	7 162	7 556	6 752	7 188	5 896
Côte d'Ivoire	104 376	85 112	87 283	70 174	74 094
Gambia	17 862	23 743	22 718	20 479	22 318
Ghana	392 777	366 329	426 448	375 162	336 269
Guinea	36 200	38 800	38 300	40 000	44 000
Guinea Bissau	5 400	5 000	5 200	5 350	5 250
Liberia	6 463	9 620	8 891	7 782	7 721
Mali	70 548	68 780	68 507	64 352	62 950
Mauritania	80 530	86 660	93 900	100 353	85 000
Niger	3 362	3 150	2 054	2 172	2 200
Nigeria	316 328	267 216	318 384	255 499	282 089
Senegal	297 878	319 695	370 253	377 676	388 042
Sierra Leone	51 960	62 145	62 548	63 047	63 898
Togo	15 800	12 524	10 899	17 114	13 202

Source: FAO Yearbook of Fishery Statistics

[9] Includes both marine and inland sectors

EU Market for Selected Fish Products

1. European Shrimp Market

1.1 EU Imports of Raw Shrimp, by Country, 1991-94 (mt)

	1991	1992	1993	1994
Spain	82 009	82 581	73 618	108 000
France	46 224	50 579	46 141	51 672
[10]Denmark	46 062	41 202	40 106	50 602
UK	23 327	21 185	20 140	27 916
Italy	24 902	28 045	24 202	21 309
Belgium/Luxemburg	12 233	13 722	12 326	16 131
Sweden	11 644	12 215	12 807	13 560
Germany	11 114	11 181	7 744	13 000
Norway	12 519	18 213	26 485	12 124
Netherlands	10 251	17 421	10 170	11 640
Portugal	10 055	11 403	5 165	10 613
Ireland	1 885	1 614	n/a	n/a

1.2 EU Imports of [11]Prepared/Preserved Shrimp, by Country, 1991-94 (mt)

	1991	1992	1993	1994
UK	28 837	32 828	32 003	29 594
Germany	n/a	n/a	5 859	12 123
Denmark	15 968	19 283	14 445	n/a
France	9 410	15 204	3 707	9 145
Sweden	6 544	7 203	6 857	8 302
Italy	5 368	5 744	4 882	4 708
Norway	1 182	2 236	1 481	1 814
Belgium/Luxemburg	5 336	6 884	1 029	1 459
Netherlands	10 346	6 460	4 807	634
Spain	n/a	n/a	300	504
Portugal	n/a	n/a	9	115

[10] Most of the shrimp imports to Denmark originate from Greenland and the Faroe Island. The bulk are processed and re-exported

[11] Prepared/Preserved shrimp include those in the cooked and canned forms

EU Market for Selected Fish Products

2. European Cuttlefish Market

2.1 EU Cuttlefish Imports, by Importing Country, 1988-93 (1000 mt)

	1988	1989	1990	1991	1992	1993
Spain	25.0	31.0	29.0	28.0	32.0	34.0
Italy	24.0	27.0	33.0	27.0	26.0	26.0
France	5.4	5.6	6.5	4.8	4.3	3.6
Other	2.6	4.4	4.5	7.2	5.7	7.4
Total	57.0	68.0	73.0	67.0	68.0	71.0

2.1 EU Cuttlefish Imports, by Origin, 1988-93 (1000 mt)

	1988	1989	1990	1991	1992	1993
India	9	13	14	10	15	15
Thailand	10	12	13	11	12	9
Morocco	6	6	8	5	5	5
Tunisia	3	4	3	3	3	5
Senegal	2	3	2	5	4	3
Mauritania	2	2	2	3	3	3
Other	25	28	31	30	26	31
Total	57.0	68.0	73.0	67.0	68.0	71.0

EU Market for Selected Fish Products

3. European Canned Tuna Market

3.1 EU Canned Tuna Imports, by Importing Country, 1989-93
(1 000 of standard cases - 48/6.5 ounce cans)

	1989	1990	1991	1992	1993
France	5 064	6 488	7 471	7 947	8 841
UK	6 951	5 767	7 307	7 901	8 398
Germany	3 639	4 516	5 242	5 042	4 188
Italy	1 145	1 469	2 514	3 524	3 656
Netherlands	833	945	1 032	2 021	2 007
Belgium/Luxembourg	895	1 507	1 102	1 584	1 431
Spain	153	79	313	691	1 131
Denmark	380	408	470	575	453
Portugal	8	20	272	221	206
Greece	224	259	296	357	197
Ireland	n/a	154	161	133	1 110
Sub-Total (EU12)	19 292	21 612	26 180	29 996	31 618
Other Western Europe	2 470	2 225	2 679	2 620	2 901
Total	21 762	23 837	28 859	32 616	34 519

Source: Foodnews
EUROSTAT

Japanese Market for Frozen Cephalopods

1. Japanese Octopus Imports, by Origin, 1990-95 (1000 mt)

	1990	1991	1992	1993	1994	1995
Morocco	32.9	50.4	47.8	55.3	41.6	49.1
Mauritania	19.5	20.0	32.2	30.9	26.1	25.9
Spain	19.5	28.1	30.8	36.4	26.1	14.4
Thailand	6.6	6.2	5.9	4.4	4.7	4.0
Gambia	10.4	6.2	4.8	3.1	4.5	1.3
South Korea	0.1	0.4	0.3	0.3	0.3	0.3
Others	2.5	1.8	1.0	0.7	2.5	2.9
Total	91.5	113.3	122.8	131.1	105.8	97.9

2. Japanese Cuttlefish Imports, by Origin, 1989-94 (1000 mt)

	1989	1990	1991	1992	1993	1994
Thailand	18.3	15.0	15.6	16.4	16.7	17.7
Morocco	9.2	7.9	5.1	5.0	16.4	8.0
Mauritania	4.0	5.1	4.1	4.2	4.3	3.5
Spain	6.0	6.7	2.7	2.5	2.8	3.1
Ghana	2.0	2.1	2.4	1.7	1.6	2.5
Others	27.8	24.3	21.8	18.6	12.2	25.9
Total	67.3	61.1	51.7	48.4	54.0	60.7

Preferential Customs Duties Applicable in UEMOA Member States for Fish and Fishery Products (% of CIF value)

Country	Type of Tax	Origin of Product	Frozen Fish	Cured Fish
Benin	* Customs Duty	- UEMOA Member State	0	0
		- Non-UEMOA Member State	5	5
	* VAT	- UEMOA / Non-UEMOA	18	18
Burkina Faso	* Customs Duty	- UEMOA Member State	0	0
		- Non-UEMOA Member State	5	5
	* Misc. + Fiscal Tax	- UEMOA / Non-UEMOA	39	39
Côte d'Ivoire	* Customs Duty	- UEMOA	20 CFA/kg	0
		- Non-UEMOA	20 CFA/kg	0
	* Miscellaneous Tax	- UEMOA / Non-UEMOA	6 CFA/kg	6CFA
Mali	* Customs Duty	- UEMOA	0	0
		- Non-UEMOA	5	5
	* Misc. + Fiscal Tax	- UEMOA / Non-UEMOA	48	48
Mauritania	* Customs Duty	- UEMOA	0	0
		- Non-UEMOA	10	[12]12
	* Misc. + Fiscal Tax	- UEMOA / Non-UEMOA	40	40
Niger	* Customs Duty	- UEMOA	0	0
		- Non-UEMOA	10	[11] 12
	* Misc. + Fiscal Tax	- UEMOA / Non-UEMOA	30	30
Senegal	* Customs Duty	- UEMOA	0	0
		- Non-UEMOA	15	15
	* VAT	- UEMOA / Non-UEMOA	20	20

[12] Cured freshwater fish originating from Non-UEMOA states is tax exempt. Cured marine fish is taxed 12%
[11]

List of Persons Met

Côte d'Ivoire:

Mr. Diabaté Ibrahim	Directeur Administratif, PECHAZUR
Dr. Diei Yvette	Vétérinaire-Inspecteur, Laboratoire Centrale d'Hygiene Alimentaire
Dr. Diomandé Labla	Chef, Laboratoire Centrale d'Hygiene Alimentaire
Mr. Doumbia M.	Directeur-Adjoint, Direction des Pêches et de l'Aquaculture
Dr. Fanny Amadou	Directeur, Direction des Pêches et de l'Aquaculture
Mr. Hamidad	Directeur Général, COFRAL
Dr. Koffi Luc	Directeur Général, Direction Général des Resources Animales
Dr. Koffi-Koumi M.	Chef, Service de l'Inspection et du Controle Sanitaires Vétérinaires du Port d'Abidjan
Mr. Kouakou Koffi	Directeur Commercial, AIF
Dr. Tall Amadou	Directeur, INFOPECHE
	Directeur Général, PFCI

Ghana

Mrs Anang, Emelia	Deputy Director, Fisheries Research Unit
Mr. Dada, Bamidele	Assistant Director General, FAO Regional Office
Mrs. Diji, Celestine	Managing Director, Divine Seafood Limited
Mr. Koranteng, K	Assistant Director, Fisheries Research Unit
Dr. Kwei, Eric	Managing Director, Pioneer Food Cannery
Mr. Mantey Mensah	Deputy Director, Fisheries Department
Mr. Morgado. Ted	General Manager, Pioneer Food Cannery
Mr. Ossinga, Etienne	Regional Fisheries Officer, FAO Regional Office
Mr. Wesley, James	Senior Manager, Loin Development & Operations
Dr. West, W. Q-B.	Senior Regional Fisheries Officer, FAO Regional Office
	Managing Director, Enyidado Company
	Vice President, Starkist, USA

Senegal

Mr. Cissé M.	Chef, Bureau de l'Etude et de la Credit, DOPM
Mr. Correa Alioune	Secrétaire Général, CONDAK
Mr. Coulibaly D.	Secrétaire Général Permanent, GAIPES
Cheikh Fall	Directeur Général, INTERPORT
Mr. Jacquot Jean-Claude	Administrateur, AFRCAMER
Mr. Mbodj Mahawa	Chargé de Programme, FAO
Mr. Ndiaye Babacar	Directeur Général, SNCDS
Mr. Roberts, Ken	Expert Associé, Projet FAO sur la législation des pêches
Dr. Thiam Moustapha	Directeur Adjoint, DOPM
El Hadj Tamberou M.	Président Directeur Général SENEPECHE

List of Persons Met
(Cont'd)

Togo

Mr. Adadé Doe-Bruce	Directeur, SODIAL
Mr. Aguiar Charles	Directeur, CAMODO
Mr. Amégavie Kobla	Consultant, ex-Directeur des Pêches
Mr. Badohu Yira	Directeur, TOGO-FOOD
Dr. Batalé Makote	Chef, Division des Pêches
Dr. Denké, A. M.	Directeur, Direction de l'Elevage et des Pêches
Mr. Gbadoe-Sognigbi	Président-Directeur Général, UBA
Mr. Hounsinou Mike	Directeur, STOC
Mr. Hunlede Kissimbo	Directeur, UNICOOPEMA
Mr. Inglese Jacques	Directeur Général, CRUSTAFRIC
Mr. De Medeiros	Chargé de Programme, FAO
Mr. Sedzro K.	Responsable, Bureau des Statistiques, Division des Pêches
Mrs. Sodatonou	Directrice, CAMODO
	Répresentant, FAO