

**Report of the Study on
Problems and Prospects of Artisanal Fish Trade
in West Africa**

**International Collective in Support of Fishworkers (ICSF)
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CONTENTS

INTRODUCTION

PART 1: REPORT

1. THE IMPORTANCE OF ARTISANAL FISH PROCESSING AND TRADE IN WEST AFRICA
 2. EFFORTS TO PROMOTE INTRA-REGIONAL TRADE IN WEST AFRICA
 3. ARTISANAL FISH PROCESSING AND TRADE IN WEST AFRICA: A BRIEF OVERVIEW
 4. ARTISANAL PROCESSING AND TRADING: AN ANALYSIS OF CONSTRAINTS
 5. RECOMMENDATIONS
 6. CONCLUSIONS
- BIBLIOGRAPHY

PART II: CASE STUDIES

1. CASE STUDY OF THE FISH PROCESSING SECTOR IN JOAL: A DYNAMIC REALITY
Aliou Sall, CREDETIP
2. WOMEN FISH PROCESSORS AND TRADERS IN BENIN
Aliou Sall, CREDETIP
3. NOTES FROM DIAOUBE MARKET, SENEGAL
Lamine Niass, CREDETIP
4. NOTES FROM THE N'ZÉRÉKORÉ MARKET, GUINEA CONAKRY
Mamayawa Sandouno, ADEPEG
5. NOTES FROM THE TUESDAY MARKET, ACCRA, GHANA
David Eli, TESCOG
6. CASE STUDIES OF WOMEN FISH PROCESSORS AND TRADERS
Nalini Nayak, ICSF

ACRONYMS

ADEPEG: *Association pour le Développement de la Pêche en Guinée*

CEAO: *Communauté économique de l'Afrique de l'Ouest*

CECAF: Fishery Committee for Eastern Central Atlantic

CFA franc: *Franc de la Communauté Financière Africaine*

CNCAS: *Caisse Nationale de Crédit Agricole du Sénégal*

CNPS: *Collectif National des Pêcheurs Artisans du Sénégal*

CREDETIP: *Centre de Recherches pour le Développement des Technologies Intermediaires de Pêche*

ECOWAS: Economic Community of West African States

EU: European Union

FAO: Food and Agriculture Organization of the United Nations

GAMFIDA: Gambia Artisanal Marine Fisheries Development Association

GDP: Gross Domestic Product

ICSF: International Collective in Support of Fishworkers

NGOs: Non-Governmental Organizations

TESCOD: Technical Services for Community Development

UEMOA: L'Union Economique et Monétaire Ouest Africaine

WADAF: West African Association for the Development of the Artisanal Fisheries

Introduction

Men and women of coastal and inland communities in the West African region have, for generations, derived their livelihood from fishing and related activities. Fish has been an important part of the diet and the culture of the region, especially in coastal and riverine areas. While part of the fish has been consumed fresh, another part has been processed in diverse ways—salted, dried, fermented and smoked—and traded within and between countries of the region. Such trade continues to be important today, taking place largely at the informal level. While no accurate figures are available, it has been estimated by the Food and Agriculture Organization of the United Nations (FAO) that the number of persons working in the fields of fish processing and marketing in the region is about 1.8 million. Studies covering eight West African countries indicate that women constitute at least 60 per cent of all post-harvest workers (quoted in Diei, 2001).

Trade in processed fish products may take place within the same country, as when fish from coastal regions finds its way into the interior regions. It may also take place across borders. Thus, the Gambian smoked *bonga* finds its way to Ivory Coast, Ghana and Mali, while the Senegalese *kethiakh* finds a market in Guinea and Burkina Faso.

However, while the importance of artisanal fish trade within the West African region cannot be underestimated, there is little information on it and nor is it reflected in statistics, since most such trade is not recorded. Little is known about the quantities traded, the number of people involved and the type of trade they engage in, the trade circuits, the products traded, or the problems processors and traders face in this work. For example, a paper by the Fishery Committee for Eastern Central Atlantic (CECAF, 1992) on *Intra-regional Fish Trade: Characteristics, Problems and Development Prospects*, notes that since much of this trade occurs through the 'informal channel' it is difficult to effectively monitor it and to provide an accurate account of the nature and extent of the trade.

Possibly because of this lack of information about artisanal fish processing and trade within the region and its importance, little systematic effort has been made to deal with the problems of those engaged in it. This is compounded by the fact that in many countries in the region artisanal fish processing is seen as a secondary activity—as an activity that utilizes the 'leftovers' from fishing units and unsold fish; that is carried out with very scarce means and into which entry and exit is free for all; that yields meagre profits, seen as a secondary income for the household; and that provides a 'refuge' for fishermen's wives displaced from marketing activities by their male counterparts. The main importance accorded to this activity is due to social rather than economic criteria, because of the large numbers of women involved. There have been few initiatives to understand and respond to the problems faced by fish processors in processing and marketing their products, especially at the intra-regional level.

It was to obtain a more detailed and differentiated understanding of regional fish trade in artisanally processed fish products and the constraints to it, from the perspective of artisanal fish processors and traders, that a study was undertaken by the International

Collective in Support of Fishworkers (ICSF). The request for the study came from fish processors and traders, as well as from non-governmental organizations (NGOs) working in the region. The study focused on the following countries: Guinea-Conakry, Senegal, Benin, Togo, Ghana, Gambia and Ivory Coast. These countries were selected for three reasons: one, they are either important producers or consumers of fish; two, there are fishworker organizations or NGOs who were keen to collaborate with the study in these countries; and three, there already exist significant trade links between these countries.

Along with an analysis of secondary data relevant to artisanal fish trade in the region, primary data was collected to obtain information on important regional fish markets and trade circuits, on wholesalers and traders engaged in regional trade, and on artisanal fish processors catering to the regional market. Information was collected primarily through individual interviews with women processors and traders in important markets and processing areas, and through meetings with processors and traders in larger groups, at markets and in their villages.

Part I of this report has been organized as follows: Section I seeks to highlight the importance of artisanal fish processing and trading activities in the West African context. Section II summarizes the initiatives that have been taken to promote intra-regional trade in the West African region. Section III provides a brief overview of fish processing and trading activities in the region. In Section IV the problems and constraints that are experienced by women fish processors and cross-border traders in their work are synthesized. And finally, Section V provides recommendations to policy-makers for strengthening artisanal fish processing and trading activities. The report draws heavily from secondary sources, supplementing it with observations and primary level data collected during the course of the study. The second part of the report contains case studies of selected fish processing areas, fish trading circuits and fish markets in selected countries of the West African region. It also includes case studies of some women fish processors and traders from the region.

PART I

This report looks at artisanal fish processing and trading activities in the West African region. A brief economic overview of the region would be useful. According to the Economic Community of West African States (ECOWAS), with a membership of 15 countries including Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo, the average per capita income in the West African region today is lower than it was in the early seventies. About 118 million, or 52 per cent, of West Africa's 210 million inhabitants have an income of less than 1 US dollar per day. The proportion of people living on less than 1 US dollar per day is 88 per cent in Guinea-Bissau, 73 per cent in Mali, 70 per cent in Nigeria, 61 per cent in Burkina Faso and Niger, 26 per cent in Senegal and 26 per cent in Guinea Conakry. The GDP growth rate of the ECOWAS Member States has, as a whole, remained sluggish in recent years. Real Gross Domestic Product (GDP) in ECOWAS countries grew by 2.5 per cent in 1999, down from 3.2 per cent in 1998. This figure is slightly lower than the population growth rate, estimated at 2.7 per cent. Nigeria is the largest economy in the region with 56 per cent of the region's GDP and more than half of the region's total population.

1: THE IMPORTANCE OF ARTISANAL FISH PROCESSING AND TRADE IN WEST AFRICA: Artisanal fish processing and trading have a vital role to play in the West African context, from a social, economic and cultural perspective, for various reasons, as detailed below:

- The major coastal fishery resources in West Africa are concentrated in the north, from Morocco, through Mauritania to Senegal and Guinea Bissau, and in the South, off Namibia and Angola. The major fish consuming countries, on the other hand, are in the Gulf of Guinea area where population densities are higher and marine resources relatively lower. Senegal, for example, is an important supplier of fish and fish products while Nigeria, Côte d'Ivoire, Benin, Ghana and Togo are important markets. In this context, intra-regional trade in artisanally processed fish products can and does play an important role in ensuring a better and more balanced supply of fish throughout the region, with important implications for food security. However, it remains constrained by several factors, including infrastructure-, capital-, technology- and information-linked bottlenecks, as well as tariff and other barriers that hinder the flow of fish and fish products within the region.

It is worth noting that Nigeria, the largest importer of fish in the region, meets most of its import requirements from outside the West African region. In 1996 Nigeria imported an estimated 400,000 tonnes of frozen fish, worth US\$289 million from Netherlands, Norway, United Kingdom, Switzerland, United States of America, Morocco, Canary Island, Mauritania, Senegal and Morocco. The main suppliers within the region were Mauritania (153,000 t) and Senegal (1,372t). In other words, less than 40 per cent of Nigeria's requirements were being imported from within the region.

- Fish continues to be an important source of affordable animal protein in the West African region. Low value pelagic species, constituting approximately 70 per cent of the total catch of the region, are almost entirely consumed within the region and have a special relevance for food security. In some West African countries fish contributes to a significant share of total animal protein intake—as much as 40 to 60 per cent. However, per capita fish availability in Sub-Saharan Africa has declined from 9.4 kg in 1982 to only 6.8 kg in 1994. The decline in per capita availability is a cause for concern since the fall has not been due to the declining relative importance of fish, as similar drops in meat consumption have taken place.

However, if supplies have to be maintained or increased, the structural causes behind the declining supplies will also need to be addressed. The decline is largely attributed to the combined effect of stagnating or declining imports (as several countries in the region go through an economic crisis), high population growth and a smaller share of domestic production retained for local markets, due to greater exports. According to the FAO (2002), between 1990 and 1997 while imports of fish and fishery products into Africa as a whole increased by slightly over 2 per cent, exports increased by 10 per cent, leading to decline in fish available for local consumption (FAO, 2002).

The depletion of fish resources in the region due to poor resource management and overfishing, especially by trawlers, industrial fisheries and by foreign fleets fishing under fisheries access agreements and joint-venture arrangements, is almost certainly a factor which has contributed to this situation. The FAO (2002) report notes that several fisheries in the region have large industrial, often foreign fleets that apply continuous pressure on stocks, contributing to overfishing. In Ghana artisanal fishermen claim that trawlers fishing even in inshore are overfishing the resource, affecting artisanal catches.

- Cold storage and other infrastructure in the region, for trade in fresh and frozen fish, is grossly inadequate, and unlikely to improve in the near future, given the high level of investments required and the need for technological inputs and expertise which may not be locally available. At the same time, efforts to introduce 'cold chains' and the like in the region have faced several problems, as is widely known.

This underlines the importance of enhancing regional trade in artisanally processed fish products, whose relative dependence on sophisticated storage and distribution networks is less. Essuman (1992) points to the manner in which traditional processing techniques reduce wastage, by absorbing underutilized and unpopular species, trawler by-catch which normally would have been thrown away, as well as unsold and excess fish that cannot be stored during the bumper season due to inadequate storage and freezing facilities. Making conditions favourable to practice and enhance this form of trade could lead to significant benefits. At the same time, these products are well suited to the local needs, tastes and cultures.

- Fish processing and trading at the artisanal level provides diversified employment opportunities in fishing communities. It is also well known that in West Africa a majority of processors and traders are women, and supporting such forms of processing and trade could provide economic and social support to them in important ways. It would be well to stress that by supporting the work of women processors and traders within fishing communities, the very sustainability of artisanal fishing communities can be strengthened.

It is also worth noting that in artisanal fishing communities of the region production and distribution have historically been linked and mutually beneficial. While production has been a male activity, adding value to the fish through processing, as well as distribution, has been in the hands of women. Small-scale processing has helped stabilize demand as it provided an important and secure outlet for fishermen during periods of overproduction and cushioned fishermen against excessive price variations.

This mutual support has kept the family and community going, as income from the fishery has been retained within the community. Significantly, women of fishing communities, as processors and traders, have often provided the capital and the investment to support technological change in the fisheries, as has been seen in Ghana and Senegal, for example. It would be quite justified to say that processors and traders have dynamized and influenced production, and provided the investment that was often not forthcoming from formal channels (see case study of Joal, Senegal in next section).

Breaking apart this integration, as is now happening, contributes to the economic inefficiency of artisanal fisheries and threatens its long-term viability as a socially-based production unit. In Senegal, for example, in communities where fish trade has gradually come to be dominated by wholesalers and agents representing export firms, the more lucrative end of the trade has been taken over. High-value species, such as *dorad*, *merou*, *rouget*, *sole*, are now exported directly, through export agents. This has reduced the earning (and investment) capacity of market traders, the women of the community, and has reduced the income coming back to the community. It has also had implications for the status of women traders who have dominated the fresh fish market for high value species and has meant a loss of both status and social power.

Given all this, there is a strong case for supporting artisanal fish processing and trading activities in the West African region.

2: EFFORTS TO PROMOTE INTRA-REGIONAL TRADE IN WEST AFRICA

As mentioned earlier, there is a vibrant cross-border trade in artisanally processed fish products, which takes place largely at the informal level. However, this remains constrained by several issues including tariff and other barriers as well as poor infrastructure, lack of capital, and technology- and information-linked bottlenecks. Research on cross-border trade in other commodity groups indicates the presence of similar obstacles. Research on intra-regional livestock trade between Ghana and Burkina

Faso by Wenner and Mooney (1995) indicates, for example, four problem areas, including prohibitive import duties, bribery and corruption and exchange rate issues. In another study on cross-border trade issues in Ghana (Morris and Dadson, 2000), of the 105 traders interviewed, 24 per cent ranked government inspections, 18 per cent numerous police blocks and 15 per cent extortion by customs officials, as the most important obstacle to cross-border trade.

Some initiatives have been taken at the regional and sub-regional level to harmonize tariff structures to promote intra-regional trade. Efforts by ECOWAS to streamline trade policy and to adopt a common duty and tax schedule in West Africa, date back to the 1970s (Tettey, 1987). The members of ECOWAS are Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo.

However, Member States failed to incorporate these special provisions, preferring to apply their own regulations. Similarly, non-tariff barriers were to have been removed within 4 years from May 1981 under the stipulated common policy. Economic difficulties in the individual member states made it impossible to put this into effect—member States demanded a compensation budget be made available to make up for any losses to customs revenue.

These initiatives got a new impetus after the 1992 revision of the ECOWAS Treaty and have since gained some momentum. The trade liberalization scheme of ECOWAS aimed at a progressive reduction, culminating in the elimination of all tariff and non-tariff barriers against intra-ECOWAS trade. Although, by the agreed implementation schedule, total elimination of all trade barriers was expected to occur by the end of 1999, this in fact did not happen, as at that point in time, only one country, i.e. Benin, was able to operate in compliance with the agreed obligation.

However, the fact of the matter eight years after is that Benin is the only country that applies lower tariffs on goods originating from within the Community. Overall, the level of intra-regional trade is extremely low, accounting for a paltry 11 % of total trade with third countries¹. Goods continue to be subjected to undue control, constituting a serious non-tariff barrier, increasing the cost of transactions and posing a major obstacle to the market integration process. (ECOWAS, 2000)

The efforts of ECOWAS to promote and develop intra-community trade are hindered by the unwillingness of many countries to implement provisions relating to the elimination of tariff and non-tariff barriers to trade and to the functioning of a compensation mechanism. Within the region much is yet to be achieved in terms of standardizing customs documents, harmonizing tariff schedules, exempting unprocessed goods and traditional handicraft products from taxes and duties, eliminating non-tariff barriers to the

¹ It is worth noting though that Hardy (1992) estimated that the share of unrecorded trade in the total trade of the ECOWAS region might be between 20 and 35 percent.

free movement of goods and removing unnecessary border formalities. It is not surprising, therefore, that the share of intra-regional (formal) trade in the ECOWAS region has recorded only marginal growth.

While, in theory, visa and entry permit requirements have been abolished in all ECOWAS Member States, most states still maintain numerous checkpoints, and ECOWAS citizens are subjected to administrative harassment and extortion, as can be observed in the table below (ECOWAS, 2000).

Table: Checkpoints along some West African Highways

Highways	Distance	Checkpoint	Checkpoint posts per 100 Km
Lagos-Abidjan	992 Km	69 Km	7
Cotonou-Niamey	1036 Km	34	3
Lomé-Ouagadougou	989 Km	34	4
Accra-Ouagadougou	972 Km	15	2
Abidjan-Ouagadougou	1122 Km	37	3
Niamey-Ouagadougou	529 Km	20	4

Source: ECOWAS website

In reviewing this situation, the twenty-second ECOWAS summit decided to adopt a double-track approach to integration. Six States, i.e. Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone, took the decision to establish a second monetary zone by 2003. This second zone will then be merged with the CFA zone, the eight-member Francophone grouping discussed in the following paragraphs, to form a single ECOWAS monetary zone in 2004. The community has set 2004 as the target date for a common monetary zone, having failed to meet the previous deadline of 2000.

Efforts to harmonize existing trade policies and regulations have met with more success at the sub-regional level. *L'Union Economique et Monétaire Ouest Africaine* (UEMOA, erstwhile *Communauté économique de l'Afrique de l'Ouest*, CEAO), a eight-member francophone group comprising Benin, Burkina Faso, Cote d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo, established preferential duty on some goods, including fish and fishery products, at the sub-regional level in the 1980s. Prior to 1983, Mauritania and Senegal, two CEAO major fish suppliers, benefited from this special tax concession. However, due to fraudulent practices on the part of producers outside the CEAO who managed to benefit from the system, Ivory Coast abolished its special tax concession in 1984. This non-compliance by Ivory Coast, UEMOA's most important fish importer, diminished the benefits from this measure (FAO/ Globefish, 1994).

Much progress has subsequently been made. UEMOA has a common currency and has already achieved customs union—this came into force on 1 January 2000—with a common external tariff. UEMOA's supplementary bill No. 04/96 instituted a preferential tariff regime applicable to trade within the Union. Approved industrial products as well

as locally produced goods and traditional handicrafts, considered local products, are completely exempt from duties and import taxes. Under this, effective from 1 July 1996, fish products—including those processed using traditional methods—are exempt from all duties and taxes. This is subject to the production of a certificate of origin delivered by the competent national authorities of the exporting countries. However, as artisanal processors and traders often lack information about this, in several cases they have been unable to benefit from these provisions.

It is noteworthy that ECOWAS and UEMOA are working together to harmonize their efforts and programmes towards the establishment of a single and viable monetary zone in West Africa, towards the creation of a common West African market.

3: ARTISANAL FISH PROCESSING AND TRADE IN WEST AFRICA: A BRIEF OVERVIEW

The West African region is perhaps unique in the extent to which trade is such an integral part of the daily lives of so many people. Trade is an arena where women are especially active, be they women from urban or rural areas or women employed in the private or public sector. In this region, women of fishing communities have historically been active in fish processing and trade. Most of them have learned the trade from their mothers, and have taken over the activity once their mothers are too old to carry on this work (See case studies in next section).

In many countries in the region, especially in Ghana, Benin, Togo, Gambia, Guinea Conakry and Senegal, women have been known to dominate on-shore handling, processing and marketing of fish. Overa (1998), who did her research in Ghana, notes, for example, that in the first five decades of this century, long distance fish trade became a female occupation, and a new arena for accumulation of wealth and prestige for women from fishing communities. It became more difficult for men to enter a trade that was increasingly seen as a female occupation and a female hierarchy.

A study of traders undertaken in Guinea Conakry indicated that there are more women than men involved in marketing fisheries products in Guinea. It was found that women are especially active in the retail trade while men may dominate wholesaling activities. The same study indicated that a majority of women traders are between 25 to 60 years and that they are predominantly *soussous* (62 per cent) followed by *peulhs* (9 per cent) and *baga* (4 per cent) (Milimono and Camara, 1996). This appears to be the pattern in other countries as well, with certain ethnic groups dominating fish processing and trade in the region. In Ghana, wholesale trade is in the hands of the *Ewes*, *Fantes* or *Gas*. In inland countries like Mali and Burkina Faso, it is men who dominate both processing and trading activities.

Though widely regarded as a 'traditional', 'static' and 'backward' sector, artisanal fish processing and trading activities are, in fact, characterized by dynamism, vibrancy and of course, competition. It is a sector constantly in change in response to changes in the fishery, in markets and in consumer preferences. Women traders are always on the alert for products and markets that can bring in profits. The sector has maintained its relevance as a sector important both socially and economically, and this is really a tribute to the

creativity, dynamism and struggle for survival of the tens and thousands of processors and traders in the region.

Diversity and scale of operations

There is tremendous diversity in terms of the type and scale of operations undertaken by those in the sector. In the processing sector the diversity may range from the small processor, processing small amounts of fish caught by her family members to the large processor, who may finance the operations of several fishermen and may employ labour to process the fish thus obtained. There is a similar diversity among traders, from the women who retail small amounts of processed fish sitting in the open, to established wholesalers in large markets catering to cross-border trade. It is also worth noting that the type and scale of operations may vary with factors such as the age of the woman, as women past their childbearing age have more mobility. Older village-based processors, for example, may move into retailing and wholesaling roles.

While it is difficult to capture the great diversity among those involved in the sector, the following framework may be useful.

1. Producer-Processor

This would include women processors who are from a fishing family and obtain their supplies from their kith and kin. In rare cases women may even be fishing themselves, but more commonly, it will be the men in the family who fish. They may work on a small-scale as in a family business where the woman processes the fish herself or with family labour. Wives of canoe-owners may work on a larger-scale, handling larger quantities of fish and employing additional labour to process the fish. The processed fish is sold to agents/ wholesalers who visit the location.

2. Producer-Processor-Seller

As above, but where the women also transport the fish and sell it themselves at markets, either as retailers or wholesalers, depending on their scale of operations.

3. Only processor

Women who do not get their supplies from within the family; rather the fish is purchased under various arrangements from other fishermen. Again the scale of operations may differ, ranging from those who process small amounts, to those who own canoes or pre-finance fishing operations, employing labour to process the large quantities of fish thus obtained.

4. Processor-Seller/ trader

In cases where processors sell the fish themselves, in retail or wholesale, either individually or as part of a group.

5. Only trader

In cases where women only sell processed fish. They could be itinerant traders, collecting fish from various processing sites and selling to different markets in the region. They may also be based in a particular market, with a permanent shop, buying from other wholesalers and retailers, and selling in wholesale or retail. Alternatively, women retailers may operate as commission agents for wholesalers and traders, taking a commission on quantities sold.

It needs to be mentioned that these categories can be quite fluid, with wholesalers also dealing in retail trade when the need or opportunity arises.

Processing methods

The principal processing methods are smoking, sun-drying, salting, fermentation, braising² and frying. Fish processed by the artisanal sector using these methods is often referred to as cured fish.

In this region, the most popular method is smoking. It is estimated that nearly 70 per cent of the total fish supply is marketed in smoked or dried form (Essuman, 1992). However, availability of wood for smoking is a severe constraint in several countries, as in the drier regions of northern Senegal.

The tremendous diversity in processing methods needs to be highlighted. Taking smoking as an example, there are several ways of smoking fish depending on the species involved, availability of firewood, the final market, consumer preference etc. Cold smoking involves smoking the fish for a limited period, say 2 to 3 hours. The water content of the final product may be as high as 60 per cent or more and the product must be consumed within a couple of days. This product, therefore, essentially has a local market. Hot smoking, on the other hand, involves smoking the product for a much longer period so that the final product has a shelf life of up to six months. In countries like Gambia, there is a gender division of labour as well, with women preparing cold smoked products for the local market and men preparing the more labour and capital-intensive products for the inland and export markets (Mbenga, 1996).

The final taste of the smoked product is also influenced by the kind of wood used. Besides, in some communities, as in Guinea Conakry, smoked products with several different flavours are prepared, for example, by coating the fish with peanut paste before smoking. Processors similarly have their own ways of ensuring the 'right' colours to the final product, in accordance with consumer preferences. Often, smoking may be used in combination with other methods.

There is a similar diversity in the way fish is fermented, dried or salted. Methods of fermenting fish include salting and drying, salting without drying and drying without salting (Essuman *op cit*). Processes of wet or dry salting may be used, for example. In dry salting salt is applied directly to the fish either in the gills, or, in the case of split fish, on the belly. The exudates from the fish may be retained to facilitate a 'pickling' process or be allowed to drain. In wet salting the fish is immersed in brine for a period ranging from a few hours to a few days. (Essuman, *op cit*).

The point that needs to be emphasized is that processing is a highly diversified and skilled activity, perfected over time. Each region has grown to specialize in certain ways of processing, in keeping with local tastes, preferences and availability of inputs like salt and firewood.

It also needs to be emphasized that processing methods are constantly evolving and changing in response to market pressures. This is well brought out in the case study on

² Braising, a kind of a slow charring process, whereby the product is placed directly on dried hay, peanut shells or wood chips for some time.

the processing sector in Joal, Senegal in the second part of this report. The study highlights the way in which the tastes and requirements of the Asian (Chinese and Korean) market have influenced the way *yeet* (fermented and dried *cymbium*, a gastropod), a traditional product much appreciated in Senegal, is prepared. *Yeet* is made through a process of anaerobic fermentation. The Asian consumer demand for a hygienic product with a reddish colour has led to the introduction of two new features into the processing techniques. Traditionally, in the first phase the product would be buried for 3 to 4 days in the ground. This practice has been modified and fermentation now takes place in plastic containers. The time for drying the product under the sun has also been increased from three days to almost a month. This long drying period is what helps to give a reddish colour to the product.

In recent years a very interesting system of system of multi-stage processing is also emerging. Sun-dried anchovies from Senegal are exported to Togo by containers on cargo ships. Women processors in Togo often put this product through another stage of processing before marketing it to the final customer. They may soak the anchovy again in seawater, dry it again and then smoke it for sale in the final market. This is in response to the preference for smoked fish in the Togolese market. It needs to be recalled that fuel wood is a scarce commodity in Senegal. This creative system allows processors in different countries to maximize the benefits from this activity.

Circuits

Processed fish has been traded in West Africa for decades. Little information is, however, available about the volumes traded and the routes used. The only information available is from some studies undertaken by Infopêche. Tettey (1992) identified some of the important routes along which processed fish is traded, as below:

1. Smoked sardinella and other cured (dried-salted) marine fish from Senegal to Mali, Guinea, Congo, DR Congo, Ghana, Togo, Benin, Ivory Coast, Zaire, Cameroon, Burkina Faso, Gabon, and Nigeria
2. Smoked bonga from Guinea Bissau to Guinea
3. Smoked sardinella from Abidjan, Ivory Coast to Ouagadougou, Burkina Faso and N'zérékoré in Guinea. The western coastal communities of Sassandra, San-Pedro, Grand Bérébe and Tabou supply the N'zérékoré market via Man, and Abidjan and its surroundings supplying the Ouagadougou market using train transport. The N'zérékoré trade is less organized and has lower volumes.
4. Smoked bonga and skates from Gunjur, Gambia to N'zérékoré, Guinea and Senegal. The trade from Gambia to Guinea is by large 7 to 10-ton mammy trucks. The road route is known to be very bad.
5. Smoked bonga and sardinella from Sierra Leone to Guinea and Liberia
6. Dried shark products from Gambia to Ghana, and more recently smoked shark products to N'zérékoré, Guinea.
7. Cured freshwater fish from Mali to Burkina Faso, Ivory Coast, Niger, Nigeria and Ghana.
8. Smoked sardinella/ anchovy and cured freshwater fish from Ghana to Togo and Benin and smoked freshwater shrimp from Togo and Benin to Ghana.

These routes are illustrated in the map below,
 Bonga Flash Marché, Issue No.1, 1996



Actual cross border flows are, of course, much more complex, as are the types and varieties of products that are traded. These circuits often stretch across thousands of kilometres over roads that are often inaccessible or extremely bad during the rains. The 3,000-km journey from Gunjur, Gambia to N'zérékoré, Guinea Conakry, for example, takes approximately one week (Tettey and Njie, 1992). Traders carrying *kethiakh* from Joal, Senegal to Ouagadougou, Burkina Faso have to travel an even greater distance, often making use of both trucks and trains.

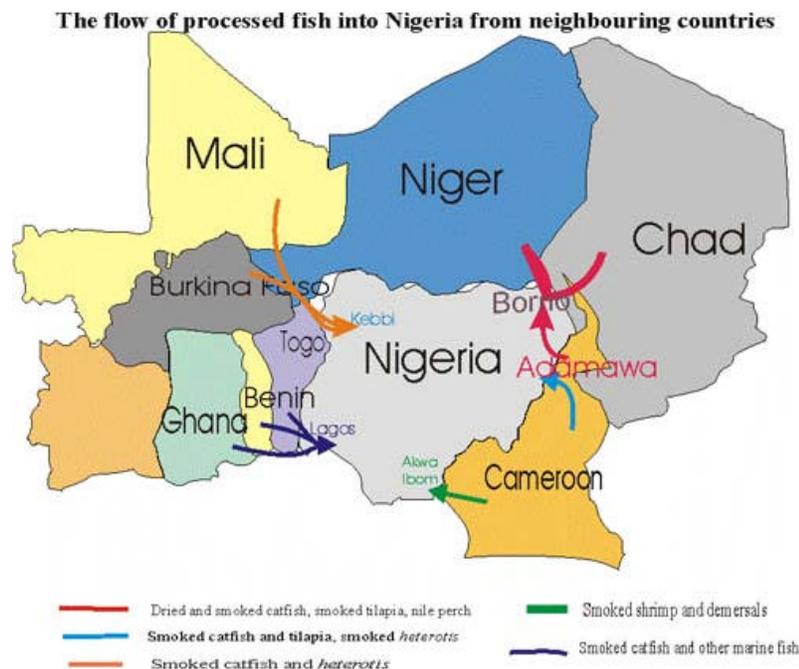
The importance of low-value pelagic species in intra-regional trade is worth noting. It should also be stressed that these routes are highly dynamic and responsive to changing situations. The important market at N'zérékoré in Guinea, for example, has, of late, been difficult to access due to civic unrest in the neighbouring countries of Liberia and Sierra Leone and this has certainly affected trading activity. Similarly, as the quantities of fish available in the Tuesday market have declined, Burkinabé traders now prefer to source their supplies from Senegal.

It is illustrative to look at the flow of processed fish from neighbouring countries into Nigeria, the biggest importer of fish in the West African region with imports of almost 500,000 MT of fish in 1998. It needs to be kept in mind that the bulk of Nigerian imports are from outside the West African region.

Table: The flow of processed fish into Nigeria from neighbouring countries

From Region/ Country	To	Products
North-east of Nigeria, from Niger, Chad, Cameroon side of Lake Chad	Maiduguri and Baga markets in Lake Chad area, Borno state	Dried and smoked catfish, smoked tilapia, Nile perch
East of Nigeria, Cameroon	Wurokobi market in Adamawa state	Smoked catfish and tilapia, smoked <i>heterotis</i>
North-west of Nigeria from Mali and Burkina Faso	Via the Niger river to Yelwa market in Kebbi state	Smoked catfish and <i>heterotis</i>
South-east of Nigeria from Cameroon	Oron market in Akwa Ibom state	Smoked shrimp and demersals
South-west of Nigeria from Ghana, Togo and Benin	Iddo, Oju-Olobun and Oke Arin markets in Lagos state	Smoked catfish and other marine fish

Source: Adepegba, 2001



There are almost no comprehensive estimates of the quantities involved in intra-regional trade. Essuman (1992) mentions that, according to FAO estimates, intra-regional trade in

Africa below the Sahara (excluding South Africa) is about 15 per cent of total fish production, or 150,000 tonnes, valued at about US\$200 million. Most of the processed fish is in smoked or dried form. Other estimates available only provide glimpses of the larger picture. Essuman estimated that about 28,000 tonnes of cured fish finds its way annually from Chad to Nigeria. Tetey (1992) estimated that the volume of cured marine fish which crosses the Ghana-Togo border is between 1500 to 3000 MT per annum, with the bulk of it being smoked sardinella. He further estimated that the smoked sardinella trade between Abidjan and Burkina Faso was 874 MT in 1992 and that the cured fish trade from Gambia to N'zérékoré, Guinea in the same year was in the range of about 150 to 300 MT per year. Abobarin *et al* (1996) noted that dried shark exports from Gambia to Ghana in 1995 were approximately 781 tonnes. A consolidated picture of volumes and values of cured fish trade flows is however not available.

Markets

Processed fish is an important commodity in the region and there are several markets in each country where these can be bought and sold. Of course, while some of these cater only to local demand and supply, others, such as the Tuesday market in Accra, the Chicago market in Abidjan, N'zérékoré market in Guinea Conakry and Diaoube market in Senegal are larger markets attracting traders of several nationalities from across the borders. The following table details some important markets for processed fish in the region.

Country	Important markets for processed fish products
Nigeria	Maiduguri, Baga, Wurokobi, Yelwa, Oron, Iddo, Malendi, Kogi, Lagos
Togo	Asivime, Tabligbo, Atakpamé, Djada, Yagamyet, Hvtokame
Ghana	Tuesday Market (Accra), Denu, Keta, Mankessim, Axim, Bolga, Tamale, Techiman
Cote d'Ivoire	Adjame, Sassandra, Chicago Marché
Burkina Faso	Ouagadougou, Bobo, Dioulasso, Po, Ghana, Diagre, Kompenga
Mali	Medina, Mopti, Dibida
Guinee Bissau	Cacini, Buba, Cacheu, Bubaque
Gambia	Banjul, Serekunda, Birikama, Soma, Basse, Farafenni
Guinee Conakry	Boulinet, Koukoude, Kamsar, N'zérékoré, Bofa, Kankan, Beyla
Senegal	Thiaroye, Kaolack, Touba, Diaoube, Touba Toul
Mauritanie	Nouakchott, Nouadhibou
Benin	Dantokpa, Dogbo, Abomey, Diougou, Bohicon, Paholi, Comé, Azove, Klovekame

Source: Workshop on Problems and Prospects for Developing Artisanal Fish Trade, 30 May to 1 June 2001, Dakar, Senegal

Women fish processors may frequent one or more markets. They are usually required to pay taxes according to the volume of fish they have to sell. This gives them a right to sell in the market. Depending on the size of their trading activities, they may get access to a covered stall, or in the case of smaller traders, they may get access to some open or covered space where they can put up a small table, or even spread their wares on the

ground on sacks or plastic sheets. It needs to be kept in mind that powerful agents or wholesalers may control access to the market informally.

Markets are usually well organized along informal lines. In the Tuesday market in Ghana, for example, there are distinct areas where traders from particular regions or ethnicities can be found. Thus the traders from Benin have their own stalls, as do traders from Keta and other regions from Ghana. Most of the traders are 'regulars' at the market and can be found there on each market day. Local women retailing small amounts of fish are often to be found with their wares spread out on the ground in front of them, or on small tables.

The sale of fish products in many of these markets is often on a periodic, rather than a daily, basis. In general, women have to reach the market on the previous day as activity starts early on the market day. On good days they may be able to sell the entire stock. However, if this is not possible, they are forced to stay on till the next market day, or to make other arrangements with a local trader/ wholesaler to sell their product on a commission or some other basis. Kinship networks are very important for cross-border traders and relatives provide various types of assistance, including a place to stay, storage facilities etc.

It is worth noting that there is quite a variation in the nature of transactions as well. Barter continues to be common. Mbenga (1996) for example, notes that smoked fish is often exchanged for staple grains like *coose* and rice where the customer has no money. The trader could then sell the grain elsewhere to recoup the money. First hand reports indicate that barter is also common in markets like that of N'zérékoré in Guinea Conakry. It is also common for fish traders to purchase products like palm oil on their return journey, and to sell it once they reach home. Fish may then be one of the products they trade in. The effort is always to look for products, trade in which is profitable.

It is also interesting that an important, if limited, market for processed fish products is of Africans living in Europe and America. Small quantities of processed fish products certainly find their way to these markets, and several processors are engaged in processing for these markets. In Guinea Conakry, a system of 'prestation' exists, whereby women processors are provided with fish and are engaged to smoke fish on a commission basis by agents. The products are often destined for overseas markets.

Associations

Women processors and traders may or may not be organized into associations. Fish trading is a fiercely competitive business, and often traders associate only to transport fish, and sometimes to store it. It is more rare for women to associate to sell the fish, to procure supplies etc. These are often fiercely guarded secrets.

In several countries, governments and NGOs have helped women processors organize into cooperatives or economic groupings. This can be found, for example, in Guinea Conakry, Senegal, Gambia, and Benin etc. Credit and other assistance are often channeled through these groupings. However, at a general level, women processors and traders are rarely part of such formal groupings, or are members on paper only.

It is worth mentioning the co-operatives in Guinea Conakry, which were set up during the country's socialist past. Some of these cooperatives of women processors, as in Bonfi and Temanataya, near Conakry, continue to exist today and are quite effective.

Market associations, by product, are common in Ghana, and in important fish markets there is a 'market queen' or *ohemma* for fish (as for other products), an institution that emerged at the turn of the century. Queens are elected by other market women based on their status, their abilities in trade, and on their political talent. These queens play a role in protecting the interests of the traders, in influencing prices, in maintaining internal organization and in external negotiations. They mediate in conflicts between the traders, such as those involving cheating and non-payment, and work with city administrators to manage the markets, in collection of tax etc. They determine who can sell in the market and where. While earlier the market queens would be senior vendors who had some kind of moral standing in the market, today, this is more a political assignment and the queens may be very much in league with the local tax (municipal) collectors.

Women also get together as part of informal savings and credit groups or *tontines* or *susus* (*kafos* in Gambia). These are very common and help women to get access to small capital. Women rarely obtain credit through formal channels, given the complexity of procedures involved, especially for those who are illiterate, the need for collateral etc. Women may also contribute to a market association fund, and this provides some form of support during births, deaths and marriages.

Role of women processors and traders in influencing capture fisheries

Women processors and traders have played an important role in the introduction of new technology into the artisanal sector as creditors, financing canoes, nets, gear and outboard motors. In a context where fishermen have limited access to formal capital, it is often the processing and trading sector which has provided the capital for bring in new technology or for sustaining fishing operations.

The case study of Joal, Senegal, in the second part of this report, provides an interesting example. It details the manner in which Guinean processors encouraged the Nyominka fishermen of Senegal to start fishing for ethmalosa (*bonga*) in the first place. They financed the introduction of nets suitable for fishing ethmalosa, and purchased the entire catch for further processing. They also encouraged the migration of Nyominka fishermen for fishing ethmalosa in Guinea. Overa (1998), in her study of Ghanaian fisheries, also highlighted the role of women processors in financing fishing operations. Similarly, Bortey (1997) reports that fish processors and traders in Ghana extend credit to fishermen to finance operational expenses, and, at times, even procure outboard motors and fishing nets in exchange for assured access to fish catch. He observes that the most reliable funding system that has sustained the local fishing industry is the financial arrangements between fishermen, fish processors and traders.

4. ARTISANAL PROCESSING AND TRADING: AN ANALYSIS OF CONSTRAINTS

This section will discuss some of the problems and constraints faced by fish processors and traders in the region, at various stages of their activities, i.e. in getting access to fish,

in processing the fish, in packaging and transporting it especially across borders, in selling their fish at markets, etc.

Access to fish supplies

Most of the fish for small-scale processing comes from the artisanal sector. However, getting adequate supplies of good quality fish at appropriate prices is becoming more and more difficult, as several of the case studies of women processors and traders in the second part of this report indicates.

Earlier, when fish catches were more abundant, women processors could often get fish on credit, especially from their kith and kin. In fact, in many areas wives or family members of fishermen were seen as having the first right to the fish. Some of these changes are reflected in what Rohoya from Sendou, Senegal has to say:

I started my work with no capital. Although the price of the fish was fixed when I procured it, I paid for it only after it was sold. But now this facility is no longer available. All fish has to be paid for when procured as the fishermen catch less fish these days and there is greater demand, so that fish is sold on a first-come basis against cash payment. In fact I am obliged to go to other landing centres now to procure fish as the landings in Sendou have declined. I go either to Joal or Rufisque and hire transport to bring the fish back. So you see, I always need to have a certain amount of liquid cash with me and this is not always easy. I often make use of the tontine (informal saving and credit group) and thus manage to keep my work going.”

Women processors now try and secure their fish supplies by advancing money to fishermen for their fishing operations. In many areas it is common for fishermen to be financed by several processors. However, as the cost of fishing inputs and operations increases, small processors are no longer able to afford to advance the large sums required.

There has been, at the same time, an increase in the number of export agents, with much higher capacity to advance credit for fishing operations. This is especially the case in Senegal, where export agents are increasingly financing the artisanal capture sector to supply the export market. The best quality fish, of course, goes to the export market. Women processors, with limited cash availability, are unable to compete. They have little option to buying fish against cash payment. This also means that women processors become price-takers, as they are forced to compete and buy at prevailing market rates. Apart from export agents, women processors are increasingly forced to compete for supplies with those selling fresh fish, as availability of ice increases the demand for fresh fish.

As supplies decline, it is possible to come across cases of women processors who have migrated to areas where fish is more readily available, as is the case with Amakakraba from Ghana, now settled in Abidjan, Côte d’Ivoire (see case studies). While they are able to earn a survival income through processing and selling fish, they live the insecure life of migrants, in fear of being removed from their temporary settlements. Ghanaian women

processors have also settled in countries like Gambia, Sierra Leone and Liberia where they dominate certain kinds of processing activities, such as processing (salting and drying) of shark for export back to Ghana.

In countries where supplies are scarce, some women processors use frozen fish supplied by the industrial sector, indicating a greater integration of the industrial capture sector with the traditional processing sector. This can be observed, for example, in Ghana, Benin, Togo and Guinea Conakry. During visits to markets in these countries, it is possible to see small women processors and traders selling smoked frozen fish. It appears though that the market for these is mainly confined to urban areas, and is limited. Women processors also claim that frozen fish costs more to purchase and that price and supplies are often controlled by agents or wholesalers with access to cold stores at ports.

It would appear that, on the whole, there could be a conflict between the artisanal processing sector and industrial fisheries in the region. In a majority of cases, small-scale women processors and traders are dependent for their supplies on the artisanal sector. They, therefore, have a clear interest in maintaining sustainable fish supplies through sustainable management of the fisheries, in ways that protect the interests of the artisanal capture sector. It is often alleged that the indiscriminate growth of industrial vessels fishing in the region, under fisheries access, joint venture or other arrangements, have been responsible for overfishing of resources. These fleets are known to encroach into near shore waters, competing directly with the artisanal fleet. Cases where they have destroyed the nets and gear of artisanal fishermen have also come to light.

Artisanal fishermen, and the processors who derive their supplies from the artisanal fleet, have a strong interest in regulating and curtailing the activities of these fleets. In Ghana women insist that controlling the activities of trawlers would not only improve the state of fish resources, it would also result in increased catches by the artisanal capture sector. This would also support and sustain their processing activities, since supplies would be locally available, and would help sustain fishing communities in the region.

It is worth noting though that, given that processors and traders have played an important role in capture fisheries, in influencing the species targeted and gear used, their role in overfishing of species with high market demand needs to be understood better. Even as processors and traders have an interest in the environmental sustainability of artisanal fisheries, they may advertently or inadvertently play a role in undermining it. This is an issue for further discussion.

Processing activities

Sites

Processing sites are often located close to landing sites, on beaches, as this cuts down on transport costs. In some cases women processors may have their ovens and smoking

sheds within their homesteads. In areas where women fish processors have organized as a group, there may be a common smoking and processing facility in the village.

In countries like Senegal, where much of processing activity takes place on beaches near the landing site, the expansion of coastal activities, especially tourism, is taking a significant toll. Processing sites, considered as unhygienic and unbecoming, are often relocated to make way for tourist resorts (Gueye, 1999). This considerably inconveniences women processors and increases transportation costs. In Senegal these developments have met with strong resistance from organized groups of women processors, as well as the demand for land titles to processing sites.

Hygiene aspects

Processing sites in the region usually lack even basic facilities like running water, sanitation, electricity, ice, storage or refrigeration facilities. This leads to considerable losses due to spoilage of both fresh fish and processed products.

At the same time, certain practices commonly used in processing fish, such as drying of fish directly on the sand, use of unclean fermentation tanks, or reusing of salt and similar practices, are also known to lead to product contamination and spoilage. Lack of proper packaging material and storage, at processing sites and markets, only compounds the problem. Tettey (1987) estimated that between 20 to 40 per cent of fish harvested in the region is wasted through spoilage. To prevent insect infestation, processors are known to use strong insecticides which potentially significant impacts on public health. These are issues that need greater attention. Traditional methods of preventing insect infestation, such as the use of pepper and other spices, also need to be explored.

Quality standards

According to Essuman (1992), government institutions for inspecting fish and fishery products exist in all countries of the region. Countries which produce and export large quantities of cured fish products, such as Senegal and Gambia, have set clear quality standards, which include moisture content, salt level, colour and smell characteristics, microbiological quality, insect infestation, packaging and texture. Fish inspectors are stationed next to processing sites and major markets to certify cured fish products before distribution. It needs to be stressed that official quality certificates tend to report on visual characteristics, and in that sense, are subjective. In countries like Ghana and Togo, quality inspection is mainly of incoming cured fish products at ports of entry. Locally produced cured products are generally not subject to quality inspection. In this context, the extent to which lack of common quality standards within the region impacts on regional trade, needs to be systematically explored.

Essuman notes that while hygiene standards of cured fish products are generally poor, there are few reports of food poisoning due to consumption of such products. Consumers have their own ways of determining the quality of the product, going by the colour, texture and odour of the fish. Abobarin *et. al.* (1996), in the context of salted and dried shark products exported from Gambia to Ghana, note that among the quality

considerations are the absence of browning and discolouration, product hardness, and evidence of adequate salting reflected by whitish salt crystal on the product.

Health of processors

Another dimension raised by women processors is the impact of smoking activities on their health. Women processors often spend long hours and many years smoking fish and many of them complain about the impact of the smoke on their health. The smoke exposes them to risks of asthma and other breathing difficulties. It also affects their eyes. Appropriate alternative smoking technologies have not enjoyed sufficient acceptance to make any significant impact in tackling this important issue.

Packaging

The use of baskets for packaging made from various natural fibres is common to all countries of the region, though the size and type of baskets may vary. Straw mats, bags made of jute and other materials, cardboard and ropes are also used. These are basically materials that are available locally at low cost.

The size of the packages is influenced in large measure by the choice of vehicle for transporting the product. Thus, packages being transported by pick-up vans may be smaller than those transported by trucks (Infopêche, 1996). In several markets traders make use of the services of packers to put together the contents of several smaller baskets into larger baskets suitable for transport.

Given that most processing sites and markets lack adequate storage, and that fish products are often stored in makeshift arrangements or in the open covered with plastic sheets, material used for packaging are often inadequate in protecting the product from spoilage, insect infestation etc., especially in the rains. At the same time, the fact that baskets and other bags used for packaging are difficult to clean after each use, is a cause for product contamination.

Transportation

Road transport

Road transport is the most common. Products are transported in pick-up vans, lorries, private vehicles, public transport and taxis as well as by cycles, motorcycles, donkeys and horse-drawn carts. Women traders may travel with the consignment, like the women smoked fish traders, locally called *maman ninjas*, traveling from Mali to Burkina Faso sitting atop 130-ton 18 wheelers (Morris and Saul, 2000). They may also follow the consignment using public transport or shared taxis.

Often, however, trucks, lorries and other such forms of road transport are not readily available when required and their availability may not coincide with market days, requiring women to spend a lot of time on travel. Smaller women traders, with lower access to capital, face this problem more acutely.

At the same time the conditions of many of the roads is extremely poor, extending delivery time. Certain roads are not accessible, especially during the rains, and

transporters are forced to use circuitous routes. This also raises the cost of transportation significantly.

The role of transporters

Women cross-border traders tend to utilize the services of head loaders and transporters. Transportation by trucks is quite well organized. The owner of the truck usually rents it out to a transporter (*locataire*.) This is the person who actually manages the business. They may also hire *coxeurs*, private agents who solicit customers and help in the loading and unloading.

Women usually pay a lump sum amount to cover transportation as well as payments at borders and at the various check posts along the way. The transporter is the person who handles negotiations and payments at the police, customs and military check posts. As noted by Tettey (1992), in some countries in the region transporters also take on the role of filling various forms to obtain the required permissions (Exchange Control and Customs).

Women traders are, in most cases, not aware of exact break-up of payments that are made at border and check posts. This also increases their dependence on transporters. It is not known if there are arrangements between transporters and officials, but, in any case, transporters are very powerful and, in a sense 'control' these circuits.

The smaller women traders usually pay on a per basket basis. They complain that transporters, in their effort to maximize their profits, tend to overload the trucks, leading to product damage.

Lack of alternative means of transport

There are few good alternatives to road transport. Rail transport is rare. The only routes available are the Dakar-Bamako route and the Abidjan-Ouagadougou route. The Dakar-Bamako route is in poor shape, and accidents and delays are common. A trip from Dakar to Bamako that earlier took one day, now takes two days (Morris and Saul, 2000). Exports of processed fish from Senegal to Burkina Faso are less and less by train because of the amount of time taken, the frequent disappearance of goods, frequent accidents and the deterioration in the product during transport. So the products are sent by truck from Joal to Kayes, by train from Kayes to Bamako and then by lorry for the rest of the trip. The Abidjan-Ouagadougou rail route was privatized in 1994, and apparently is not so important any longer for the transport of fish products.

There is, at the same time, a lack of cargo vessels that would have enabled women traders to ship their products, especially to distant markets, such as from Senegal and Mauritania to countries in the Gulf of Guinea where good markets exist. Canoes are used in the dried shark trade from Gambia to Ghana. However, overloading and stormy sea conditions have led to accidents, product losses and the loss of life (Abobarin *et al* 1996)

River transport is used in several countries for transportation between the coast and inland areas, especially along the Niger river and Lake Volta (Tall, 2001).

High transportation costs

A linked issue is the high cost of transport, which is a major share of total marketing costs. In the case of rail transport between Abidjan and Ouagadougou (a distance of 1,240 km), Tettey (1992) estimated that transport costs constituted about a third of total marketing costs, while customs costs accounted for about 21 per cent, and costs of packaging about 9 per cent. He found that road transport, on the other hand, was more expensive and that transport costs were as much as 40 per cent of marketing costs on the Ghana-Benin route.

Customs and other export formalities

Formalities and procedures for trading through formal channels are time consuming and complex, increasing transaction costs. Given that often traders are illiterate or unfamiliar with procedural issues, it is not surprising that they prefer to avoid formal channels.

There is also a gap between the policies at the regional level, and the implementation at the national level and women traders are often unaware that trade in processed fish products within the UEMOA region is subject to preferential tariff regimes, so that women continue to pay taxes and duties as before.

It is also worth noting that standards and regulations governing fish processing and trade are not uniform across the region. For example, while in Senegal women are required to obtain a certificate of origin and a sanitary certificate, this is not seen as a requirement by women processors and traders in Ghana, Togo and Benin. This, in all probability, is also linked to the fact that Senegal and Gambia are net fish exporters.

Frequent road blocks

Women traders also have to deal with multiple roadblocks within each country in the form of police and other military check posts. This is time-consuming and expensive as payments of an illegal nature have to be made at each of these. Morris and Saul (2000) estimated that payments ranging from US\$1 to 7 are made at each check posts, and that these payments are not usually related to the value or volume of goods. Also, women face losses through breakage, since fish may be mishandled at the check posts.

Markets

Facilities

Facilities in most of the market of the region are inadequate. Even though traders (retailers and wholesalers) are required to pay market taxes, market conditions are usually poor throughout the region. Storage facilities are lacking, water supply and sanitation facilities are inadequate, hygiene is poor, stalls are often not available or are too expensive requiring women to sit out in the open, and security, especially at nights, is inadequate. Even light showers disrupt trading activities and cause losses since shelter is inadequate. This also leads to significant product losses, infestation etc.

Security Concerns

Women traders have always to be on the alert against theft of their goods, both when the goods are being transported, and when they have to be stored at the market. Few markets have security at night, and women have to make their own arrangements, often spending the nights at the markets. Since women also have to carry large amounts of cash on their person to enable them to carry on their activities and make immediate payments as required, this is an additional safety hazard. The banking system is not geared to their requirements and women traders have little option but to carry large amounts of cash on their person.

Currency differences

Ten different currencies are in use in the ECOWAS zone and women traders have to work through moneychangers. Even though women traders have become skilled at working with different currencies and do utilize the services of moneychangers, large fluctuations in currency are more difficult to deal with. The recent drop in the value of the Ghanaian *cedi*, for example, created difficulties for Ghanaian cross-border traders. Trading is much easier within the countries of the CFA franc zone.

Lack of market information

Traders rely on informal networks or personal visits to various markets get information on prices and demand in other markets. This obviously has its limitations and processors and traders are unable to effectively tailor their products to meet demand in other markets, or to find new markets for their products.

Inadequate availability of capital

The activities of women processors and traders are constrained by a lack of access to capital to expand their business at all stages. Availability of credit through formal channels is inadequate and not tailored to the requirements of women processors and traders. Banks are rarely accessible in rural areas, and moreover, cumbersome bank formalities, the need for collateral etc. deter women from approaching these institutions. Most women are part of rotating credit societies (*tontines or kafos*) or market associations that helps provide some capital. However, for larger amounts, most processors and traders have to draw on their kinship network, their mothers etc.

5: RECOMMENDATIONS

The previous sections highlight some of the constraints facing fish processors and traders in the region. It is imperative that governments in the region recognize the economic, social and cultural importance of small-scale and artisanal fish processing and trading—not as peripheral activities but as important in their own right. Given critical concerns about food security in the region, encouraging intra-regional trade in cured fish products could play an extremely vital role, making available fish in remote regions at affordable prices. The following steps to support an expansion of these activities are called for:

Ensure access to fish supplies to small-scale processors:

- Better management of fisheries resources and regulation of destructive fishing practices.
- Strict regulation, monitoring and control of the activities of the domestic and foreign industrial fleet
- Promotion of policies that promote food security and prioritize the access of small-scale fish processors to fish supplies

Improve access to, and conditions at, processing sites

- Ensure hygienic and protected space for processing activities as well as proper facilities at processing sites, especially related to storage and sanitation
- Ensure rights to processing space close to the landing sites
- Continue to invest in developing appropriate processing and smoking technologies that conserve the quality of the product, reduce consumption of fuel wood as well as the impact of smoke on women's health
- Organize training programme that focus on improving product quality and reducing spoilage, using, to the extent possible, traditional knowledge about issues such as ways to prevent insect infestation
- Provide work permits for migrant women processors, to protect their right to livelihood and prevent harassment by local authorities

Improve access to, and conditions at, markets

- Reinvest the money from market taxes to improve market facilities and conditions, especially to provide for adequate and secure storage space, sanitation and covered vending space
- Simplify and demystify procedures for obtaining trading permits, and reduce the costs of each permit
- Improve security at markets

Improve availability of transport

- Improve transport infrastructure, especially the quality of roads and rail links and the availability of cargo vessels. In this context the current initiative by ECOWAS to set up ECOMARINE, a regional coastal shipping line, is noteworthy. The accessibility of such initiatives to small processors and traders in the region must be ensured
- Provide associations of women processors and traders avenues to purchase their own means of transport

Facilitate cross-border trade

- Simplify and harmonize customs documents and tariff schedules;
- Implement at the national level, policies adopted at the regional level (regarding removal of tariff barriers on transport and sale of artisanal, locally produced products) to facilitate the free flow of artisanally processed fish. Publicize these policies through the mass media (radio, TV etc.) and at markets and border check posts to prevent extortion and harassment at borders.
- Reduce the number of checkpoints within each country
- Arrange meetings between personnel manning these check posts and artisanal traders

- Set and harmonize sanitary standards, appropriate to the West African context, to facilitate greater trade
- Work to make the banking system more responsive to the needs of cross-border traders working with different currencies.

Improve access to market information

- Improve access to market information especially prices in other markets and the nature of demand. Use appropriate mass media for this.

Improve access to credit

- Implement credit schemes adapted to the needs of women processors and traders credit

CONCLUSION

This report attempts to bring out several of the constraints that limit the work of small-scale fish processors and traders in the region. In concrete terms this means that countries in the region are unable to maximize the potential social and economic benefits from the sector to tackle problems like unemployment, declining food security and environmental degradation.

It needs to be stressed, however, that the study remains a preliminary effort. As has been repeatedly highlighted, more systematic information is required about several aspects of artisanal cross-border trade in fish and fish products: Detailed information on the following would be called for:

- Reliable estimates of volume and value of artisanal fish trade, detailed mapping of products traded and the circuits used and constraints faced;
- Detailed analysis of supply-side and demand side factors within the region, identifying main suppliers and main markets for various products;
- An analysis of the links between imports and locally caught fish, and the extent to which imported fish impacts on prices of fish caught, processed and marketed locally;
- The effectiveness and limitations of the 'cold chain' system in meeting consumer demand, especially in interior areas;
- The interactions between fish trade and trade in other commodity groups, keeping in mind that it is common for traders to supply fish products in one market and buy another product (like palm oil) to supply back in the home market.

Further research on these aspects is called for if appropriate interventions supporting the artisanal fish processing and trading sector have to be designed and implemented at the national and regional level.

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1. CASE STUDY OF THE FISH PROCESSING SECTOR IN JOAL: A DYNAMIC REALITY

By Aliou Sall

The study focuses on Joal, a fishing village about 110 km from Dakar, for several reasons. First, a significant amount of fish processed artisanally in Senegal comes from Joal. And second, it is an important site from which artisanally processed fish is transported to destinations both within Senegal and to neighbouring countries. It is estimated that approximately 1000 people are involved in the processing activity, the majority being women. The processing techniques used include salting, drying, fermenting and braising. A description of the processing sector in Joal is followed by a discussion on the integration of non-Senegalese processors catering to their domestic market, into the local community.

1. Processing sector in Joal

In Joal fish processing is an important activity, involving a wide range of people. Vying for the pelagic catch of fishermen are wholesalers supplying the domestic fresh fish market, local women processors, usually from within the community, as well as foreigners, mainly Guineans and Burkinabés, processing fish to supply their own markets. This competition is to the advantage of fishermen landing pelagics, normally considered to be of low commercial value.

Pelagics, in fact, enjoy a special place in the Senegalese fishery. People from fishing communities contend that it is the landings of pelagic species like ethmalosa (*bonga*) and sardinella that regulate the prices of high quality fish and of processed fish. In other words, prices are not only a function of costs of production, even though these have been rising steadily because of firewood scarcity and higher transport costs due to the construction of the new landing centre, etc. For example, pelagics sell at low prices during periods of abundant landings. At such times women processors too are forced to sell their processed products at lower prices, for mainly two reasons. For one, they have limited means of storage, and for another, they need to free their drying racks in order to begin processing fresh stocks of the low-priced pelagics available in the market.

The processing activity in Joal

There are two processing sites in Joal. The traditional site is on the beach. Another site, called 'Tann Bi', has come up more recently towards the northeast of the city. Women, using a diversity of techniques, are in the majority in the first site. The following products are made at the site:

(a) *Fermented, salted and dried products*: These include products like *yeet* (fermented, dried *cymbium*), *guedj* (fermented, dried fish) and *tambadiang* (salted, dried whole fish). *Yeet* is prepared from the sea snail called *cymbium* (gastropod). After the flesh is removed from the shell and split into two to four parts, it is fermented and then dried. Preparing *guedj* and *tambadiang* also involves processes of cleaning, salting, fermenting and drying the fish. Species used to prepare *guedj* include mackerel, seabream, threadfin

and catfish. It is mainly women who prepare these products though, when the need arises and especially in times of large production, male labour is employed.

(b) *Braised products like kethiakh*: This is again a technique used mainly by women, though they do employ male labour from rural areas. The women use mainly sardinella (round and flat) and ethmalosa caught by the purse seines and encircling nets. Traditionally, *kethiakh* (braised, salted and dried fish) has been braised on the sand. Except in periods of over-production, women who produce *kethiakh* face stiff competition over fish supplies from wholesalers who supply the local market with fresh sardinella. They also face competition from foreigners who use the same species to make *metorah* (smoked, dried fish) or other smoked products.

(c) *Dried and salted products*: Products include the *yoss*, oysters and shellfish. *Saly* is made from big pieces of larger fish and shark that are well salted and dried. Male labour is employed for evisceration, drying and smoking. It is again women who dominate in the practice of these techniques.

There are several reasons why women occupy such an important role in fish processing and in the production of *kethiakh*, the dominant technique used along this part of the coast. First of all, in Senegal fish processing is traditionally seen as a female activity. It is women who dominate the workforce even in the industrial processing sector. At the same time, development projects dealing with credit supply and infrastructure development have reinforced the role of women as processors, while creating a new category of female processors. Typically, these are younger women who have joined the profession because they like it, which was not the case earlier.

Among the projects that have given an impetus to the processing activity, one can mention state-run projects like PAPEC (*Projet d'appui et de financement aux mareyeurs, pêcheurs, artisans et femmes transformatrices à la Petite Côte*). PAPEC has launched a major credit programme for women organized into Economic Interest Groupings (GIEs).

In 1992 PAPEC facilitated the construction of the landing centre in Joal, and in 1996, it financed the construction of ovens and drying racks at the processing site called Khelcom. Other interventions, such as those of the ILO for constructing drying racks, and of NGOs involved with micro-credit, have all contributed to reinforcing the role of women in processing.

Some major characteristics of the processing activity at the first site can thus be summarized:

- It is women who are in the majority in this site.
- Women tend to control the means of production: ovens, racks, the land required for braising, etc;
- They employ male labour to work for them;
- The profile of women processors is getting younger, encouraged by several development projects;

- Women processors who braise and smoke fish face stiff competition from fresh fish wholesalers and from processors of other nationalities, for access to species such as flat and round sardinella and ethmalosa.

In contrast, the following can be observed at the other site, 'Tann Bi':

- The main techniques used here are smoking and braising and the principal products are *kethiakh* and *metorah*;
- Braising is done on ovens and not on the ground to produce what are called '*kethiakh burkina*' (salted) and '*kethiakh guinée*' (non-salted) for the Burkina and Guinean market respectively;
- Men control the processing activity, employing women as well as other men workers on a daily wage or piecework basis.

The influence of the market on the processing sector

The influence of the market on dynamics in the fish capture sector is well documented. In contrast, the relations between the market and the processing sub-sector have hardly been studied. In Joal the influence of the market on processing techniques is clearly in evidence.

For example, the tastes and requirements of the Asian (Chinese and Korean) market have influenced the way *yeet*—fermented and dried product, from a marine gastropod (*cymbium spp.*)—is made. *Yeet* is a product much appreciated in the Senegalese cuisine, and was, till recently, produced primarily for the Senegalese market. The shell of the gastropod was used for ornamental purposes.

The situation changed with the new demand from the Asian market for *yeet*, both in fresh and processed forms. Greater quantities of *yeet* are now exported fresh to Asian markets. The Asians, primarily the Koreans, are investing more and more in *yeet*. There has been a boom in the *yeet* capture industry all along the 'petite côte' and particularly in Mbour and Joal.

Small refrigeration units have come up in Senegal and Gambia. The product is peeled and boiled before being frozen. The peel, steeped in fat, is dried and sold on the local market. This new product, called *maggi* as a result of its taste and colour similar to the maggi cube, has a good commercial value and is enormously successful. The interest that the *yeet* holds for foreign investors is obvious from the numbers of processing units that have been set up in Senegal. Some are also based in Guinea and these units get a part of their supplies from Joal, a site with which they closely co-operate.

This Asian demand has brought about significant changes in the several areas. For example, there is now competition between women who continue to process for local markets and those that have re-deployed themselves, changing their status from processors to 'collection agents' for the factories. Women who collect for the factories are paid up to 25 CFA per kg in the form of commission. The factories make available

funds to the collectors, allowing the latter to pay ready cash to fishermen for their purchases.

The introduction of new methods, as dictated by the market, has had a significant impact on the social status of women who, traditionally, have been in control of processing as a trade. These changes in status cannot be seen in a linear manner. Seen from one angle, the market has contributed to the social advancement of some women. For example in the case of *yeet*, women who now function as collectors have men working under them in times of scarcity of the product. The advance fund placed at the disposal of these women by the Koreans has given them financial power. As a result, they now have priority over the skins earlier regarded as waste, and which, once processed, becomes what is known as *maggi*.

At the same time even many small-scale processors are catering more to Asian tastes. The Asian consumer demands a hygienic product and appreciates a reddish colour to the product. In order to respond to this dual requirement, women *yeet* processors have introduced two new features into their processing techniques. Traditionally, in the first phase the product would be buried for 3 to 4 days in the ground. This practice has been modified and fermentation now takes place in plastic containers. The time for drying the product under the sun has also been increased from three days to almost a month. This long drying period is what helps to give a reddish colour to the product.

The growing market for *yeet* has impacted on local availability of the processed product and has increased pressure on this resource. The scarcity of the product and the inability of artisanal fishermen to cater to the demand has led to emergence of a specialized system of transshipment of *yeet* from industrial boats to pirogues, even though transshipment is seen as an offence under the fisheries act. There is a whole network of pirogues that are engaged almost exclusively in this activity and which are, therefore, not really fishing at all. The government has had to declare a biological rest period for fishing of this species, to avoid over-exploitation of the resource. The large number of juveniles in the landings also justifies this measure.

The preparation of *kethiakh* has also been influenced by market demand. Traditionally braised on sand, *kethiakh* braised in ovens is preferred for the more distant Burkinabé or Guinean market. This is also because of the nature of distribution channels. *Kethiakh* braised on the sand is not as hygienic, and, therefore, there is a high risk of it rotting during a long trip. To cater to this demand, some local processors are now equipping themselves with ovens at the 'Tann Bi' site in order to make products available to foreign traders.

Guineans have, in fact, introduced two new products to Joal: *metorah* and non-salted *kethiakh*. Few Senegalese people, other than those living in regions where there is a strong influence or presence of the *peulhs*, are familiar with *metorah*. It is not sold in Senegal except in the cities of Kolda and Tamba. The *metorah* produced is exported to Burkina, the Ivory Coast, Guinea, Guinea Bissau, Ghana, Nigeria, Togo and Gambia.

Gambia, where there is a large population of Ghanaians, is an important transit point for *metorah* destined for markets in francophone countries.

Another processed product that has been influenced by the market is *guedj*, a condiment that is highly valued by the Senegalese. It is now increasingly being prepared in different ways to suit the tastes of non-Senegalese consumers. At the request of traders, processors in Joal are now giving a yellowish look to the product meant for export.

The adaptation to the foreign market has also meant a new learning process for workers in that the methods that are now being used for processing, salting and even for packaging are not the same.

Financing processing activities

In the formal sector different lines of credit have been created. The *Caisse Nationale de Crédit Agricole du Sénégal* (CNCAS) is the main financier in the formal sector. Under the PAPEC scheme, credit is made available for certain activities. This scheme, in place since 1990, has allowed women to benefit from working capital ranging from 50,000 to 100,000 CFA per member. Women were required to make a contribution of 10 per cent. Repayment was over 6 months with an interest rate of 14.5 per cent. Following the claims and demands made by women enjoying these credit lines, PAPEC has made a few adjustments. For example, the repayment period has been rescheduled. It is now spread over 9 months as against 6 months earlier provided for. There has also been a reduction in the interest rate to 11.5 per cent.

However, formal credit does not play a prominent role in the fisheries sector or related activities. In general it can be said that women processors working on an individual basis have not really benefited from credit.

The informal credit sector, on the other hand, is extremely dynamic, governed by traditional rules and customs. Female processors use several sources of informal credit. For example, they often take loans from family members or use their family inheritance as capital. They are also part of rotating savings and credit groups (*tontines*). In some cases women also purchase fish on credit.

Women who are organized into GIEs have initiated deposit schemes or a 'common fund'. The fund is maintained in two ways. In some cases each member is required to deposit a fixed part of her own profits in the common fund. In other cases, GIEs market their products as a group and set aside a part of the profit for the common fund. These solidarity funds are extremely useful for members. For example, members can take loans to meet expenses during social functions like baptisms or marriages, or to finance their activities.

Women use several strategies to put aside a common fund. Sometimes membership fees for the GIE are deliberately raised, and the extra money thus generated is set aside to create a solidarity fund. Members can draw loans from this fund whenever required. The fund serves other purposes as well. For example, it enables the women to meet their

repayment obligations on loans taken from formal financial institutions like the CNCAS. In one of the GIEs in Joal, for instance, the monthly contribution of each member to the *tontine* is 1500 CFA. From the money thus collected, a sum of 5000 CFA is put into the common fund set up primarily to enable women not to default on their loan repayments to the CNCAS.

Besides this, other kinds of credit arrangements can be observed as well. Just as wholesalers provide equipment to fishermen, some Burkinabés provide equipment, like ovens, to women processors. The processor repays at the rate of 10 CFA for each kg of smoked sardinella sold. This rate signifies more than a simple repayment of credit. It is also a kind of remuneration for the risk that informal credit providers run. Often, the repayment may not be limited in time and may continue well after the loan has been repaid.

Marginalization of local women processors

Women processors in Joal have to put up with stiff competition, both from fresh fish wholesalers and from processors of other nationalities, like the Burkinabés and Guineans, settled in Joal.

In Joal women processors are, in general, dependent on wholesalers for fish supplies for several reasons. The largest number of wholesalers who are also owners of fishing units can be found in Joal. Their power is further reinforced by the fact that they are either owners of trucks or have the possibility of hiring them. Even women from fishing families that own their own equipment cannot always count on their family units for supplies, since these units may have migrated to the Gambia or the Casamance.

Moreover, a large number of migrant fishermen based in Joal (as from St. Louis) have a contract with wholesalers. This further marginalizes women processors when it comes to fixing the price of fish or the priority they get in accessing it. Another important factor that goes against women processors is that during some periods of the year landings take place at night, or rather between 1.00 and 3.00 am in the morning. For women it is difficult to be out at this time of the night, given their family obligations and other domestic constraints. For wholesalers this provides a good opportunity to keep the fish overnight in iceboxes and sell it the following day at a huge profit.

Women processors also have to contend with competition from processors of other nationalities. The Burkinabés, for example, have succeeded in gaining the loyalty of several fishermen by providing credit. They have also been able to gain access to land for setting up ovens at the new processing site. The growing autonomy of the Burkinabés, linked to their financial power, is something that goes against local women. Locals are very aware that the Burkinabés and Guineans based in Joal are financially much better off than either wholesalers or local processors.

Women processors have evolved various strategies to deal with competition on the beach in order to access fish supplies. In periods of abundance, women processors purchase their supplies individually, on a per basket basis. When landings of pelagics, like

sardinella and ethmalosa, are low—not enough to satisfy the demand both for processing and for fresh fish wholesaling—women processors may decide to make a joint purchase, in bulk, by pooling their working capital. They buy certain species, such as catfish or shark greatly in demand in the Asian market, and then divide it on the basis of each one's contribution. Purchasing in bulk is only possible for operators who have access to substantial working capital. It needs to be noted that buying by the basket or in bulk is not then only a function of the species marketed; it also depends on market conditions.

Women processors in Joal face several problems: non-recovery of dues from traders who default on their payments, competition between women processors leading to a fall in price, lack of storage for products, making it imperative to get rid of the existing stocks as well as difficulties in finding steady and regular clients. These difficulties have prompted local women processors to develop strategies to reduce their costs and risks. For example, a few of them may get together and take turns to go to important markets like Diaoube to sell their products.

Markets

Traders from Joal frequent markets at Diaoube, Kaolack, Thiès and Tamba, as well as in the Sine and Fouta regions. Traders that come to Joal can be divided into two categories: those that supply the export market and those that supply the domestic market. The traders supplying the domestic market come from Tambacounda, Kaolack, Louga, Thiès, Diourbel, and Dakar. The traders from Thiès, Dakar and Kaolack—closer to Joal—come frequently, three to four times a week. Traders from faraway places, such as Tamba and Kolda and from other countries in the sub-region, come less frequently due to the long distances involved and the high cost of transportation. They also tend to stay for longer periods in Joal to collect as much of the product as possible. The mode of payment (cash or credit) as well as the price depends significantly on the quantities landed.

The products in demand locally are salted *kethiakh* prepared in the traditional way on the sand, and other fermented, salted and dried products like *yeet* and *guedj*. *Tambadiang* and *yoss* are in great demand in the rural areas because they are cheap and can be easily preserved. *Kethiakh* has an important local market and is in demand in all parts of Senegal. Only about 10 per cent of the *kethiakh* produced is exported, mainly to Mali, Burkina and Guinea Conakry.

Based on accounts from traders, it appears that people living in urban areas of Senegal, like Dakar, Thiès and Kaolack, tend to prefer *kethiakh* braised on the sand because of its taste. On the other hand, those staying in faraway areas, such as Tambacounda, prefer *kethiakh* braised in an oven. This is also linked to the fact that *kethiakh* braised in the oven is more hygienic and keeps for a longer time. The final product has a golden colour and the presentation and packaging is very attractive. On the other hand *kethiakh* braised on the sand cannot be kept for too long since infestation tends to set in faster. Therefore, where the product has to travel over long distances, as to Mali, Guinea Conakry and Gambia, *kethiakh* braised in the oven is considered more suitable.

The products are transported to the interior of the country either by trucks, special taxis, or by public transport. Traders often hire vehicles jointly in order to reduce transportation costs, paying according to the quantity of the goods transported.

The products that enter cross-border trade include *kethiakh* (both salted and non-salted forms prepared in ovens), smoked sardinella, especially the type that is smoked in ovens, *metorah*, salted and dried shark meat and shark fin.

Guinea and Mali are Senegal’s principal partners mainly for *kethiakh*. As far as Guinea is concerned, the distribution network is controlled by Guinean wholesalers transporting between 2 to 5 tonnes per trip from Joal. Non-salted *kethiakh* is mainly transported by truck up to the town of Labé from where it is distributed in the middle Guinea region. This product does not keep well beyond a period of 2 months, as it is not salted. The traders arrange to get fresh stock every two months. Non-salted braised *kethiakh* is more expensive to buy—150 CFA per kg as against 70 CFA for salted *kethiakh* braised in the oven. The prices in Guinea range from 150 to 350 CFA for the salted *kethiakh* and 500 CFA per kg for non-salted *kethiakh*. Salted *kethiakh* has a market in N’zérékoré.

In the Malian, Burkinabé and Gambian market there is a preference for braised salted *kethiakh* prepared in ovens. The same holds true for *metorah*.

Destination	Circuit used	Principal markets
Mali	By truck to Tambacounda, and then by train to Bamako	Kayes and Bamako.
Guinea Conakry	1. By truck to Conakry or via Koundara to N’zérékoré 2. By truck or local taxis to Dakar and then by boat from Dakar to Conakry.	Labé and Pia for non-salted <i>kethiakh</i> , and N’zérékoré and Conakry for salted.
Gambia	By truck	Bassé, Sadi, Farafénié and Kaone.
Burkina Faso	By truck till Tambacounda, by train to Bamako and then to Ouagadougou by truck.	Ouagadougou, Bobo, Dioulasso, Kaya and Kedougou

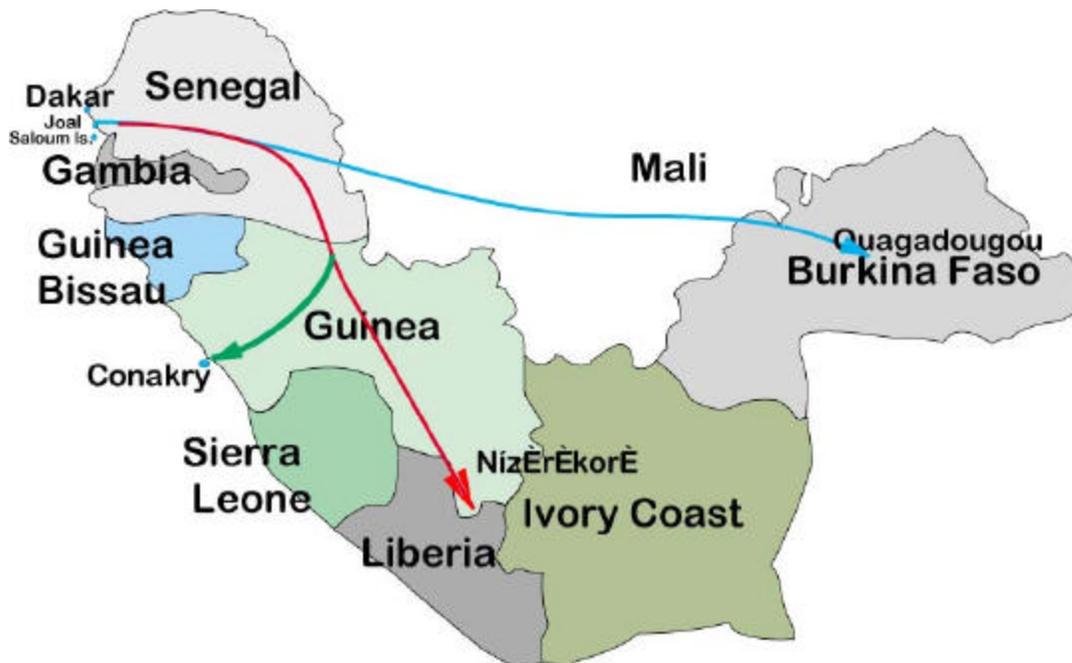
Exporters require both a certificate of origin issued by the department of commerce and a certificate of hygiene (*certificat de salubrité*) issued by the fisheries department. Decree 69-132 stipulates that: “Importing, exporting, transport and marketing or sales of fish products is not permitted except for goods that have been inspected by the competent and licensed authorities”. Traders are, therefore, obliged to obtain these certificates.

The certificate of origin enable traders to benefit from an exemption of customs duties on goods traded within the UEMOA region (West African Economic and Monetary Union).

2. Integration of foreigners in the processing sector in Joal

As mentioned earlier, processors from several nationalities converge in Joal, a major processing centre in Senegal. According to the leader of the Guineans in Joal and their oldest member, Vieux Sylla, considered a pioneer, the first Guineans arrived in Joal in the 1970s. He recalls that the Burkinabés started arriving in the early nineties. Vieux Sylla also recalled that earlier it was shark and not ethmalosa that was the most highly valued species for making *kethiakh* or *metorah*. Vieux Sylla, who is 70 years old, lives currently in Mbour.

Presently, an estimated 52 Burkinabés and 86 Guineans are working to process fish in Joal. The Burkinabés belong to the *mossi* ethnic group while the Guineans are *soussous*. The other ethnic groups that can be seen in Joal are the *mandingues* and, from time to time, the *peulhs*. The latter two groups are traders who come to Joal only to get their supplies. The Guineans and the Burkinabés, unlike other trading groups like the *peulhs* and the Malians, are directly involved in the processing activity, in order to ensure constant supplies for their markets.



The map above illustrates some of the routes used in the *kethiakh* trade.

Factors that have facilitated the settlement of foreigners

The presence of Burkinabé and Guinean processors in the community has led to problems of integration. Paradoxically, however, there are also factors that have facilitated, or encouraged, the settlement of foreigners in the community. In this context the following factors can be mentioned:

(1) *Traditional and commercial links*: There are age-old links between Guinean smokers and the Nyominka fishermen of Senegal who fish for ethmalosa, a species highly valued for smoking. The Nyominkas are natives of the Saloum islands and have a long history of

migration. Based on information from Guineans and from old Nyominka fishermen, it can be said that it is the Guineans who encouraged Nyominkas to start fishing for ethmalosa in the first place. In fact, the *soussous* from Guinea have played an extremely important role in Senegalese artisanal fisheries in general, and that practiced by Nyominka fishermen in particular. This also highlights the vital role of the processing sector in the development of artisanal fisheries.

Ethmalosa as a species (locally called *bonga* in Guinea Conakry) and encircling nets as a technique, are both strongly associated with Nyominka fishermen. According to them, the gears they were earlier using were cast nets (*l'epervier*) and beach seines (*senne de plage*). The catch was sold in Touba Kouta, Sokone and Missirah, and in general, the demand was limited. Later, the *soussous* from Guinea settled on the Saloum islands and introduced nets suitable for fishing ethmalosa. All the catch was purchased by the Guineans on the islands, smoked and exported to Guinea.

It is also significant that it was the Guineans smokers settled on Saloum islands who encouraged the migration of Nyominka fishermen to Guinea. Two factors favoured such migration. For one, there was a big demand for ethmalosa in Guinea, a country where smoking is an important part of the culinary tradition. For another, despite the abundant fish resources (especially of ethmalosa) in Guinea, there were few local fishermen. Traditionally, most of the fishermen in Guinea have been from Sierra Leone.

The contract between Guineans living in countries like Senegal and controlling the market for processed fish, on the one hand, and fishermen on the other, still remains one of the most important elements of the fisheries industry. The presence of a strong demand for ethmalosa, for example, from foreigners settled in Joal, has influenced the fishing calendar of the Nyominkas, and their migratory cycle.

Normally the Nyominkas would return home during the rainy season to cultivate their lands. However, some of them now continue to fish near Joal in order to supply those processing ethmalosa and flat sardinella for foreign markets, since the high prevailing prices enable them to make a good profit. They return to the Saloum islands in the winter instead, and, according to local sources, this decision is more because prices of pelagics are lower at that time rather than to cultivate their land. It is almost as if the fishermen are forced to return home during the winter months because of the high concentration of purse seines with the arrival of migrants in Joal. It is also related to the fact these units land huge quantities of round sardinella, better commercialized locally than ethmalosa.

It needs to be noted that while round sardinella is well appreciated locally, species like ethmalosa and flat sardinella are considered as the last choice of the Senegalese. However, there is a big demand for these species in foreign markets, and as a consequence, they have a higher commercial value. During some periods of the year, the fishermen, especially the Nyominkas, engage in fishing exclusively for ethmalosa. In fact, they prefer this to fishing for the round sardinella, greatly valued in Senegal. This choice, according to the fishermen working for the Burkinabés and Guineans, is quite

simply a function of the price of ethmalosa on the markets. While a basket of ethmalosa can fetch 5000 CFA, a basket of round sardinella may fetch only 2500 CFA.

(2) *Decentralization policies in Senegal*: Decentralization policies in Senegal have also favoured the settlement of foreigners. It has led to the creation of new administrative units, wherein several villages have been given commune status and have become town councils. The commune of Joal-Fadiouth, for example, came into existence in 1996. Decentralization has been accompanied by a cutting back in the role of the Central Government and in the decline of funds from the State. In order to raise revenue to meet operating costs, a large number of mayors engage in land speculation. In addition to the revenue from sale of land, the town council of Joal also raises resources by taxing economic activities. A large number of activities taxed are linked, directly or indirectly, to fishing. While locals protest the declining access to land and the taxes levied on them, foreigners see this as way to integrate into the community. These foreign communities have set up associations as well to better defend their rights.

(3) *Vertical integration between processing and distribution*: The well-organized distribution channels put in place by foreigners, like the Guineans and the Burkinabés based in Joal, is another factor that facilitates their settlement in Joal. In other words, there is a clear vertical integration between processing and distribution, with distribution channels controlled and dominated by the foreigners. The Senegalese, on the other hand, have no control over intra-regional commercial networks.

The foreigners in Joal have well-organized networks that include agents based at transit and distribution points and in the different markets where the product is sold. For example, *kethiakh* meant for the Guinean market is transported up to N'zérékoré, via Koundara and Labé. Agents working for Guinean operators in Joal take care of all necessary formalities at border check posts and transit points, dealings with customs and police officials and with municipal authorities, ensuring that the product arrives intact at N'zérékoré. From the way in which distribution channels are organized it is clear that the market for processed fish products is far from fragmented.

Strategies adopted by foreigners to integrate in the community

Given the precarious and fragile situation of migrants among the coastal communities of West Africa—whether they be fishermen, wholesalers or processors—the Burkinabés and Guineans are constantly preoccupied with securing their own position within the community. They have adopted certain strategies to facilitate their integration. These include the following:

(1) *Informal credit*: Providing informal credit in the form of *credit campagne* is one of the most efficient strategies used by foreigners to win over the loyalty of fishermen and for gradually integrating into the fishing community. Such a strategy, while important, is also necessary in an area like Joal, where there is such acute competition for pelagics from fresh fish sellers and traditional processors, and, in recent years from yet another source—those, like themselves, processing fish for foreign markets in Guinea Conakry

and Burkina Faso. It is all the more necessary given the powerful position of wholesalers in Joal.

A large number of fishermen operating on Senegalese islands enjoy access to the credit given by Guineans based in Joal. These Guineans then employ collection agents to move around the islands to collect the catch. This is then taken to Joal where it is processed, packed and exported to Guinea.

(2) *Setting up associations*: Another strategy adopted by both the Burkinabés and the Guineans has been to set up associations. The Burkinabés have their own association in Joal. This is an offshoot of the association of young Burkinabés in Dakar, set up in 1998, with a university professor as President. The association seeks to defend the professional interests of its members. An executive bureau of 12 members, two of whom act as advisers, administers it. Several office-holders including the president, the secretary for the organization, the secretary for mobilization, the secretary-general for foreign relations, and a general treasurer are responsible for co-ordination and the daily running of the association. The association allows the Burkinabés to maintain a very effective chain of solidarity, organizing social get-togethers from time to time.

In Joal the association plays an eminently political and trade-unionist role on behalf of its members. For example, the association negotiates with local authorities in Joal for access to land necessary for setting up housing units and ovens. The association handles all administrative formalities required to start an activity in Joal. It is also thanks to the association that the Burkinabés have succeeded in bringing down what is called the 'settlement security deposit' at the site. Initially, the commune fixed the deposit at 120,000 CFA. This amount has since been halved to 60,000 CFA.

The Burkinabés and Guineans are also represented within an association in Joal, called the Tripartite Commission, with representatives from Senegal, Burkina Faso and Guinea Conakry. According to its founders it was set up to defend the interests of all players involved in marketing and processing fish in Joal.

(3) *Social integration*: Both the Guineans and the Burkinabés have devised other strategies as well, apart from those already mentioned, with a view to their social integration. For example, they participate in, and make financial contributions to social ceremonies like funerals, baptisms, weddings and religious ceremonies. They also rally around the community each time there is an emergency situation declared by the municipal authorities. In fact, according to one of the deputies to the mayor, when the need arises, foreigners in general, and the Burkinabés in particular, show their solidarity. During the floods in 1999, for instance, there was a tremendous support by the Burkinabés. They also participated in the solidarity chain that was organized by local people. The contribution by the Burkinabés is on a collective or individual basis, either in the form of money or human investment.

Another factor that fosters their integration is the knowledge of the local language, *Wolof*. This is the language that is spoken and understood by a large number of Senegalese.

There is another language, *sérère*, spoken by the natives of Joal. Knowledge of these languages is a considerable asset for foreigners.

Problems with integration

Despite the strategies adopted by foreigners to integrate into the local community, relations are marked by conflict, often manifested in very subtle ways. The attitude of locals towards the foreigners is often one of jealousy and frustration. The conflict is triggered and kept alive by the issue of access to land and to fish supplies for processing. The greater financial capacity of the foreigners, especially of the Burkinabés, gives them greater access to landings to the detriment of local women processors. Earlier many of these women had been able to get their supplies on credit from fishing units.

The shift, in 1993, from the old processing site to what is now called 'Tann Bi', has also been accompanied by an intensification of the struggle between the Burkinabés and the Guineans on the one hand, and the Senegalese on the other. The shift gave the Burkinabés an opportunity to gain access to land for processing in the new site, to construct their ovens and further develop their activities, thus giving them greater authority and power. The context was also favourable for foreigners to sign contracts with fishermen through grant of credit (*credit campagne*), often of substantial amounts.

The manner in which the Burkinabés and the Guineans engage in the fish processing activity differs, both in terms of labour contracts and the ownership of ovens. In general, Guineans hire the ovens from the Senegalese. They also employ local labour to help with cleaning, salting, smoking and packaging of the products for transport. Burkinabés, on the other hand, usually have their own ovens. At the same time the entire process of smoking, which could last between 24 to 72 hrs, is carried out by Burkinabés belonging to the same group. The Burkinabés thus give the impression of greater family solidarity and social cohesion.

Even though both Burkinabés and Guineans are affected by problems of integration, it would appear that the Guineans have succeeded better in their efforts to integrate. A few reasons may explain this:

- The Guineans arrived in Joal 20 years before the Burkinabés and thus have social ties that go back longer in time. According to the people spoken to, the Burkinabés were earlier based in Ivory Coast, but left because of shortage of fish and the numerous taxes they were required to pay.
- At the same time there has been a tradition of collaboration between Guinean processors, notably *soussous*, and Nyominka fishermen. This too has fostered a spirit of co-operation between the two communities.
- There have traditionally been large migratory flows between Senegal and Guinea and there are big migrant communities on either side of the border, well integrated in the host countries. Guinean communities living in Senegal, including in Joal, play an active role in helping their compatriots.
- The Guineans often bring their families to Joal and this means that they are almost obliged to make sure that they integrate fully into local communities. The Burkinabés,

on the other hand, rarely bring their families. The men who migrate give the impression of being young employees working for overseas companies. The Burkinabés tend to return home during winter and this means that they do not really feel the need to rent houses within the community. They are quite happy living in precarious dwellings typical of migrants. The Burkinabés often live not only near the processing sites, but also close to where they have their ovens. This gives a distinct impression that the Burkinabés are living in a 'ghetto'. There are, however, a few exceptions to this. For example, a Burkinabé fish processor has built himself a decent house in Joal. He owns several ovens where quite a few of his compatriots work.

- The Burkinabés are known for their discretion and integrity. They tend to be a very closed community, making it difficult to communicate with them and to get information about their social organization. For example, it is difficult to understand the nature of contracts between the owners of ovens and those who work there.

For all these reasons, the relation between local people and the Burkinabés are marked by a greater degree of conflict.

CONCLUSION

This case study of the important processing centre of Joal in Senegal brings out the dynamic nature of the processing sector in West Africa. It highlights the way the sector is changing as a result of so many factors: the increasing importance of the export market, the increasing importance of the fresh fish market with availability of electricity and ice, the influx of 'foreigners' into the sector, decentralization policies of the Senegalese government, etc. Traditional processors are constantly adapting to these changes in their quest for a decent livelihood. What is clear is the need to understand the factors impinging on the processing sector in different contexts, and to define accordingly the kind of support that needs to be extended. To regard the sector as static and inappropriate in a modern context would be the biggest folly.

Appendix: Processed fish products prepared in Joal

Dried fermented products

Guedj

Guedj is prepared almost all along the coast of Senegal. Both demersal and pelagic species including mackerel, seabream, threadfin, croaker, mullet, catfish, meagre, herrings, skate, rays and shark, caught with passive nets, beach seines and lines, are used for the preparation of *guedj*. Unsold fresh fish is piled in heaps in the open air for 24 hours. During this time some fermentation occurs because of enzymes in the fish viscera as well as bacterial contamination. After washing and eviscerating, the fish is fermented, either by burying in sand overnight or by putting in a basin made of plastic, wood or cement, filled with seawater. The fish is then dried on racks or on straw. The time required for drying depends on the species and varies between two to four days. During the process of drying, the fish is turned over about once every five hours. The women use a locally made preparation called 'Diou' to prevent infestation. Losses suffered by the women due to infestations are so high that some of them are tempted to use DDT, the use of which is strictly controlled by the fisheries administration and the health services. For marketing purposes, the women also smear the fish with an oil-based substance that gives it a reddish colour, conforming to the preferences of Senegalese consumers.

Yeet

Yeet is prepared from *cymbium*, a sea snail (gastropod). After the flesh is removed from the shell, it is split into two to four parts. Traditionally fermentation was done by burying the product for three to four days in sand with a canvas covering, to avoid any exposure to air. In response to demand for a hygienic product, primarily from the Asian market, fermentation now takes place in plastic containers filled with seawater. The fish is then dried on raised platforms. The time for drying the product under the sun has also been increased from about three days to almost a month, to give a reddish colour to the product, as demanded by Asian consumers.

Smoked/ braised products

Kethiakh

Kethiakh is prepared by braising (kind of charring) certain species, including sardinella and ethmalosa, caught primarily with purse seines and encircling nets. The fish is spread out on dried hay, peanut shells or wood chips so they do not stick to each other. They are braised for at least one full day and then the residual ash is brushed off and the fish is allowed to cool. After removing the head, the fish is salted and left to dry for two to three days.

Kethiakh can be prepared in different ways. The braising can take place on the ground, or on an oven. Many Senegalese, especially those living in and around Dakar, closer to the processing sites, prefer *kethiakh* braised on the ground because of its flavour. However, *kethiakh* braised in the oven is more hygienic, has a more attractive look and colour, and keeps for a longer time. Therefore, where the product has to travel far for a longer period of time, *kethiakh* braised in the oven is considered more suitable.

Kethiakh can also be salted or non-salted. In line with the preferences of Senegalese consumers, that meant for the Senegalese market is salted, while that which is exported to other countries such as Guinea Conakry, is unsalted.

Metorah

This product is prepared by smoking demersal and small pelagic species like sardinella, silurids and ethmalosa. Smaller fish is smoked whole for 24 hours. Big fish like shark, including, big-sized sharks, are eviscerated, cut into pieces and then smoked for about 72 hours. The Burkinabés and the Guineans specialize in the preparation of *metorah*. They have been involved in the development of this technique and have greatly influenced it.

Salted/ Dried Products

Tambadiang

This is a technique that requires the least effort. After removing the scales the whole fish is put in seawater for 24 hours and then dried. Small pelagic species like mullets, and also sardinella and ethmalosa are used for the preparation of *tambadiang*, a product easy to preserve.

The sale-seché or saly

Saly is prepared with species like shark, ray and tuna. Contrary to *guedj*, the fish is not kept in brine. After removing the scales, eviscerating and washing, it is heavily salted and then sun-dried. Senegalese women play a dominant role in this activity and employ male labour for the different operations involved—washing, cleaning, turning over the fish while drying and packaging for marketing purposes.

Other products include dried oysters (*yoss*), *pagne* (dried *aras*) as well as fins, dried under the sun.

2. WOMEN FISH PROCESSORS AND TRADERS IN BENIN

By Aliou Sall, CREDETIP

(This brief report is based on information provided by women processors of Nicoue-Condji located 4 km from Grand Popo in Southern Benin, as well as by women processors and traders from other parts of coastal Benin.)



Women processors of Nicoue-Condji mainly depend on Ghanaian fishermen, based in the nearby migrant Ghanaian community of Grand Popo, for their supplies. During periods when fish is in scarce supply, they also get their supplies from nearby Togo or Ghana. In addition, they sometimes purchase fish from the small 'freezers' in neighbourhood stores or from fishmongers in Cotonou. The freezers can be seen as intermediary points guaranteeing good quality fish. They are supplied by cold stores in the harbour area of Cotonou. This would also indicate a slow and steady integration of industrial fisheries (supplying the cold stores) with artisanal processing.

Smoking is the predominant processing technique used here. The type of product processed depends on the season. During the peak fishing season the women process a greater variety of fish including sardinella, mackerel, anchovies, rays, *capitaines* (royal threadfin), etc. During the lean season the main species processed are small sardinella and anchovies.

Women processors sell in various markets. They supply nearby markets of the Northern Mono Region where fish is scarce. They sell mainly anchovies and small sardinella to wholesale traders, mainly men, who control the marketing channels in these markets. The traders are predominantly of the *Adia* or *Adja* and the *Fon* ethnic group.

Some women go to sell their product, on a wholesale basis, to the Dantokpa market in Cotonou. The traders here are generally from the Ouémé region to the east and belong mainly to the *Goun* and *Yoruba* ethnic group. A close examination of the non-commercial relations between the Beninese women and their clients shows similarities with the relationship between fishermen and wholesale fish merchants. In effect, fish traders do their best to win the loyalty of the women who provide them with supplies. Among the most commonly used strategies is offering presents in kind. People from the Mono region may offer cow's cheese to the women, while those from the Ouémé offer gifts of the local beans and bread. It is, however, worth mentioning that women processors from this area have taken a decision not to sell on credit. This practice has been discontinued because of the difficulty in recovering outstanding amounts from traders who live far from Cotonou. The women have, in fact, composed a song denouncing the attitude of the 'bad payers' among the traders. The women start to sing this song as soon as they come across a trader who owes them money. The song is a sort of code, also indicative of the presence of an undesirable person in their midst. Traders from some areas such as Bohicon and Glazoué in Central Benin have a reputation of being more reliable.

The women also sell their products in Togo. It is relatively inexpensive to travel to Togo. At the same time the short distance to be traveled enables the women to complete their journey to and from Togo within the day. Togo is considered a good market as sellers and buyers from both Benin and Ghana converge on its markets. Both the Ghanaians and Beninese perceive the Togolese as having a relatively higher standard of living. In the capital, Lomé and the outlying suburbs, there is a good demand for 'salted-dried and fermented' fish—a product that has a very high commercial value for the Beninese women. Women processors from Benin often return from Togo with agricultural products such as *gaari* and tapioca, which they sell on their return.

Women traders also travel to Ghana—to Tema or the Tuesday market in Accra—to get supplies of anchovies and smoked sardinella. Ghanaian fish is comparatively cheaper, also a result of the devaluation of the local currency (the *cedi*). At the same time fish is available almost throughout the year even though there are seasonal variations. Women from Benin have learnt to take advantage of fluctuations in fish prices. When prices in Ghana are low—compared to Togo and Benin—they buy in bulk only to resell when prices are high in Ghana. Beninese women may also buy at a cheaper price in Ghana and sell in Togo where prices are higher.

Women processors and traders from Benin also visit markets in Nigeria, such as Badagri in Lagos state. Women carry smoked anchovies and small sardinella, which they re-smoke once they reach Badagri in keeping with consumer tastes in Nigeria. They also carry smoked shrimp. Their main clients belong to the Yoruba ethnic group. When the price of marine fish is affordable (lower than in Benin) they cash in by buying fresh fish. The products are then processed on the spot with ovens hired from Nigerians, and taken to Benin and sold. This often means that they have to extend their stay by up to 20 days in order to smoke the fish properly. To minimize costs women often work together as a group.

3. NOTES FROM DIAOUBE MARKET, SENEGAL By Lamine Niass, CREDETIP

Located in the Casamance region in southern Senegal, near the border with Guinea Conakry, Diaoube is an important weekly market, held every Wednesday. It is a large market and several products, including fish and agricultural goods, are sold. In February-March products like mangoes, oranges and peanuts are found in plenty in the market. In fact, the fish market itself is not very big. Barter is still common and fish is often exchanged for agricultural produce.

Apart from fish traders from Senegal, traders from Gambia and Guinea Conakry also frequent the fish section. In the fish market, products from Senegal, Guinea Conakry, Guinea Bissau, Sierra Leone (these had reduced due to the war) and Mali, can be found.

However, the frequent conflicts in the region between Senegalese government forces and a liberation movement within Senegal—the *Mouvement des Forces Democratiques de Casamance*—has affected the activity in the market, especially as several travelers have been attacked. The improvement of maritime transport to Dakar has also affected the volume of activity in this market.

About the market

The Diaoube market is located in what was, at one time, a forest area. It was initially planned over a 2-hectare area. However, it appears that due to encroachments by neighbouring households, less than one hectare now remains. Local people apply for a shop in the market, as vendors, and then build their houses there. Owners use the shops as part of their houses, and when there is no market, they sleep there, or even rent it out.

While the market is much older, it came into formal existence in 1972, when it came under the management of the 'community rurale' (local government). This signified a loss of power for the local people, since the management of the market is now with local municipal authorities, headquartered in the town of Kunkane. The residents of Diaoube would prefer an independent municipality for Diaoube.

The market itself is very dirty, especially during the winter months. It has few facilities—there are no facilities for drinking water, electricity or sanitation. Communication facilities are poor and limited to a private telecentre that runs for only two months of the year.

Local traders have been demanding better facilities, electricity, bigger shops and a separate area for product segregation. In fact, in 1997, the local administration collected 5000 CFA from each shop in order to clean the market and improve facilities. A total of 120,000 CFA was collected in this way. However, the money was not used as intended and people are now reluctant to contribute to any initiative to improve market conditions. Traders are required though to pay taxes that go to the municipality.

Organization of the fish market

In Diaoube there is demand both for smoked fish and for dried fish. Most of the smoked fish is purchased by the Guineans while the Senegalese purchase dried fish coming from outside Senegal to sell on the domestic market. The Senegalese appear to like the imported dried fish because it is in filleted form, fermented and with a special flavour.

In the fish market there are different sections for dried and smoked fish. In the *smoked fish section* there are more than 30 shops and about 10 wholesalers, all men. There are also 7 to 8 smaller wholesale shops, owned by men or women from either Guinea or Casamance, and, at any point in time there may be about 10 women and 4 to 5 men who sell in retail. The market is also frequented by 6 to 7 big or medium itinerant wholesalers from Joal who bring *kethiakh* (braised fish). Traders in this section come and go—they are not stable. Many women from neighbouring regions also come to sell fish and wait till their product is sold.

In the *dried fish section* there are five shops or distribution areas, defined by the location of weighing machines. The large wholesalers in the dried fish section are basically local people. They do not process the fish themselves—they only buy it from others and sell it. In some other cases they only rent out their shops (storage facilities) and their weighing machines. Traders pay 1000 CFA per packet for up to one week, for storage. The fish is normally kept outside the shops, well covered, while inside big jars of palm oil are kept.

Large wholesalers handle substantial quantities of fish. It is estimated that about 12 tonnes of dried fish come in on each market day, mainly black carp (inland fish), *todié*, *saka*, *karangue*, barracuda and *machoiron* (catfish). The largest trader, by himself, handles about 8 tonnes of this.

Each trader has his own regular clientele. There are about 12 regular buyers, mainly Guinean men. The number of Senegalese traders is gradually increasing. The dried fish comes from Guinea Bissau (brought by traders from Guinea Conakry in Bissau), Guinea Conakry and Casamance. Earlier traders from Sierra Leone also brought dried fish, but this has reduced during the war situation. It is mainly men who bring these products.

Important routes for fish supplies

- About 7 to 8 tonnes of fish are brought from Guinea Bissau each market day (boat and road, from Kasini, Babadinka, Kation, Bissau). The main species are tilapia, barracuda, and *kurbin* (in dried form). Fish that comes from Bissau passes through a town called Salikenyé on the frontier between Senegal and Bissau, passes by Dabo to reach Diaoube. Another route is Bafata, Kabaja, Kombakara, Dilakumbe (at the border), Salikenyé, Velingara, Kunkane, Diaoube. Yet another route is Pirada, Gabu, Velingara, Diaoube. There is also a route via Gambia for both dried and smoked fish.
- Fish (mainly smoked and dried) also comes from Conakry (island of Katchak, Conakry, Boffa). The route is Missira, Jaladen, Kedougu, Tambacounda, Velingara and Diaoube. In the dry season fish can be transported directly from Guinea Conakry. However, in the wet season, it has to be brought via Guinea Bissau.

- From Casamance, the main species are catfish and barracuda. Traders sell *kethiakh* from Mbour and Joal.
- From Sierra Leone it used to mainly *kurbin*. However, the fish would often spoil by the time it reached because of the distance.
- The route from Mali (for dried and smoked) is via Kayes, Tambacounda, Gulumbu, Velingara and Diaoube.



The map (above) shows some of the routes used to bring processed fish products to the Diaoube market.

Transport

There is a specialization of actors on the circuit. The owners of the vehicles (transporters) are not usually the drivers. In most cases the truck drivers deal with customs and other

formalities. The trader usually pays the driver a lump sum towards such costs. It is, therefore, difficult to arrive at an accurate estimate of customs duties, bribes etc.

Some drivers tend to overload their trucks, and this often damages the product. With the driver there is a 'middleman' who helps the trader make contact with the driver and does the negotiations. It is suspected that this is a very lucrative business. The driver may not know how much the trader has paid, and the trader does not know how much the driver gets. This is the system for those who come from Conakry. However, women from Casamance and other parts of Senegal negotiate directly with the drivers.

For women traders, the need to negotiate with customs officials and undertake other formalities is a barrier that hinders them for transporting the product themselves. It is possible that this situation is advantageous to transporters and officials at check posts, and that there is a kind of nexus between them.

It is, in general, not easy to information about taxes applicable to fish trade. All products have to be 'Senegalized' (*Senegalisation des marchandises*), an import duty locally referred to as 'quittance'. This is collected against a receipt. The agriculture department monitors all inflow of products. Fish traders need to carry a certificate of origin as this helps in gaining exemption of import duties within the UEMOA region. Traders from Gambia and Guinea (not part of UEMOA) do not enjoy this benefit.

Interactions with traders and others at the Diaoube fish market

1. Women traders from the Casamance

Women traders from the Casamance region, from the Moulump islands and from the Saloulou islands in the 'Petite Pointe', frequent the Diaoube market. These women bring mainly smoked catfish (*machoiron*). They also bring smaller amounts of ethmalosa (*bonga*). In the case of Moulump, the product is transported by pirogue to Ziguinchor, a journey of 4 hours. In the case of Saloulou islands women have to take the product first by road and then, like the women from Moulump, by pirogue to Ziguinchor.

From Ziguinchor to Diaoube, a journey of 8 hours, there are no special trucks available to transport the fish. Women wait for 'groundnut trucks' that come from the interior of the country. They prefer to wait for these trucks, rather than go by bus as the bus takes more time. At the same time they are required to change buses 4 to 5 times and the cost of loading and unloading the fish each time, is high.

According to one of the women traders from the *Diola* tribe, Casamance, Senegal, while her brother smoked the fish, she was responsible for selling it. At times, though, she also helped in processing. In addition to catfish, they also process small amounts of rayfish and shrimp (in dried form). She is required to obtain certificates of hygiene and origin at the cost of 200 and 500 CFA respectively, for a carton of more than 100 kg.

7 or 8 women from her area travel together. They each carry about 500 kg of processed fish, packed in cartons of about 200 kg. Women hire the truck collectively to minimize costs. For transport she spends about 2000 CFA for each 100 kg carton and between 3000

to 4000 CFA for each 200 kg carton. `Informal' payments to the military, police etc. have to be made each time a control/ check-post is passed. Usually the truck driver handles these payments, and she and the other women pay a lump sum amount to the driver towards this.

At the Diaoube market she is required to pay taxes. She also has to pay for storage and this costs about 1000 CFA per carton, for up to 7 days. The storage shops are privately owned. Each trip to the market takes her about one week though there are times when she stays on longer in the market to sell the remaining fish.

In the Diaoube market, the women sell in bulk if they find buyers; otherwise they are obliged to sell in retail. The main bulk buyers are male or female traders from Guinea Conakry. Local women usually buy in small quantities of approximately 10 kg.

The women from the Casamance region are not part of any organization. However, they expressed an interest in organizing into groups, in the hope that this would increase their access to credit. They also felt it might help them deal with problems related to the declining availability and decreasing size of fish for processing.

2. Marie Louise Badji, Moulump Island

Marie Louise is from the Moulump Island. Women processors from here may sell their smoked fish products, mainly *bonga* and sardinella, at different places. They may take them to Dakar by boat. They may also go to Mali and Guinea Bissau. In Mali they sell only in wholesale while in Gabu, Guinea Bissau, nearer to them, they also sell in retail. They may also sell in Karang, on the border between Gambia and Senegal. Or they may bring their products to sell in the Diaoube market.

Marie Louise is 41 years old and has studied up to the primary level. After a divorce, she decided to take up her present profession to earn her livelihood. Her ex-husband used to be a fisherman and she learned this work from him. She also sells palm oil and liquor made from sugarcane. Her family members help her in fish processing and she has also hired a person from Guinea Bissau.

Marie Louise has, over time, learned how to maximize her profits. She goes to the market only when she knows that prices are high and she can sell large quantities—between 200 to 500 kg. She comes to the Diaoube market every Wednesday. To sell off her product she normally has to stay the full week. She also goes to markets in Mali—till Tambacounda by bus and then by train—and in Guinea Bissau. Transport is easier during the groundnut harvest season when trucks are easily available. Marie Louise also takes the fish of other women processors to sell and takes a commission on this.

Marie Louise, together with another fisherman, owns a pirogue. Each of them had put in money for this and had also purchased the equipment jointly. They divide the profits between themselves and the employee from Guinea Bissau also gets a share. Marie Louise manages to raise money from her own sources and has not approached formal credit institutions. She deposits her money for safekeeping with a fisherman.

Marie Louise sees declining catches and size of fish as a problem. She is also keen to find more markets in Guinea Conakry and Mali. However, currency differences between countries discourages her from going to other markets, even though at times she is able to take advantage of the fluctuations.

3. Elizabeth Bassene, Casamance

Elizabeth, also from the Casamance, is only 21 years old and has already been in the profession for 2 to 3 years. She has studied up to secondary school and is unmarried with one child. Earlier, she was working on the fields. However, her brother, a fisherman, encouraged her to join the profession to help market the fish he caught, after he had been cheated by a Guinean. Now she smokes and sells the fish her brother catches.

The amount of fish she takes to sell at Diaoube varies—on her first trip she took 450 kg and on the last, 312 kg. Each trip to the market takes her a week. Elizabeth prefers to go to Diaoube rather than to Dakar, because transport is cheaper. She shares transport costs with other wholesalers. However, she is not a part of any co-operative or association and is not aware of the existence of any. According to her, since women on the island live at some distance from each other, it is difficult to form associations.

Elizabeth does not think that fish catches are declining. In fact, she feels that this year there was more fish than in previous years. She thinks that the real challenge is in meeting the demand for better quality fish. She identifies transport as a major problem, except during the peanut season from November to April-May. Elizabeth is now able to understand the fluctuations in the market and take advantage of them; for example, that the Malians come to Diaoube mainly during lean seasons in their own riverine fisheries.

Elizabeth depends on her own network for loans—a loan of 85,000 CFA she took from her mother has been paid back. Her requirements for credit are not high as she processes the fish caught by her brother, and does not need to invest elsewhere. She sells her fish on cash, not credit.

4. Pape Cima Cisse, Diaoube market

Cisse is 30 years old and has studied till the primary level. He is unmarried and lives with his parents. He and his father own a shop in the Diaoube market since 1996, costing 300,000 CFA. Cisse also rents a weighing machine at a monthly rate of 5000 CFA. However, he recovers this sum with ease. He charges 50 CFA for each use of the machine—on the last market day he earned 50,000 CFA from this.

His parents are not from the fishing community though some of his other relatives work in the fisheries. Earlier Cisse was involved with batik printing. He joined the fish trade only about two years ago. He now deals in dried fish and also sells palm oil and lime juice, apart from his batik work. He stays at Kolda (39 km from Diaoube) and is always to be found at his shop in the Diaoube market.

According to him, December to May is the peak season for the dried fish trade—during the rains trade is dull. The species he trades in are: *saka*, *karangue*, *beurre kurbin*, *seud* (barracuda), *kong* (*machoiron*) and *yerbelle*. The fish comes mainly from Guinea Conakry, Guinea Bissau and Casamance (Kafountine). Prices fluctuate widely—the price of *beurre* for example, ranges from 700 to 1000 CFA per kg. There is a demand for better quality products. Of the 12 tonnes that came to the Diaoube market on the last market day, Cisse purchased 8 tonnes. He hires *coolies* to help load and unload, but has no other help. The fish is usually brought in large trucks (*camion remorque*).

There are *coxeurs* or intermediaries operating in the market, whose basic role is to link sellers and buyers. In a sense Cisse operates like a *coxeur*—if there are buyers for a certain product, he encourages processors to supply these products. For each kg he sells, he gets a commission of at least 50 CFA. If buyers are available, the product is sold immediately.

Pape also hires out the shop premises for other purposes. He charges 1000 CFA per week per packet of fish stored and 100 CFA per 20-litre can of oil. He also allows people to sleep in the shop for 300 CFA per night. He is a member of a tontine, to which he contributes between 5,000 to 10,000 CFA per week.

To operate in a market, a person has to be registered as a trader with the Chamber of Commerce—*registre de commerce*. The card costs 10,000 CFA. However, Pape does not have a card nor does he feel the need for one. Hygiene inspectors are present in the market on every market day to check on hygiene certificates and certificates of origin.

Pape realizes that as a 'middleman' he is vulnerable. In order to secure supplies he offers 'incentives' to producers, such as a free place to sleep, or free weighing of their products. He feels, however, that he may have to start getting his own supplies from Guinea, even though there is always a risk involved in handling fish. He enjoys his work and sees it as a way to build links with people of different cultures. Pape is also keen to explore other markets such as Dakar, Thiaroye, Pikine, Dalifort, Touba, Thiès and Kaolack.

According to him, the main problems affecting fish trade are: (i) transport (ii) difficulties at borders (iii) taxes on marketing fish (iv) storage facilities (v) lack of credit (vi) lack of information about other markets (vii) availability of supplies (viii) poor processing techniques (ix) currency differences. He feels that the state has not played a role in developing regional trade.

5. Guinean trader

A Guinean trader, who brings *kethiakh* from Mbour and Joal to sell in Conakry, described some of the costs he incurs in the process. Depending on the season he purchases the product at a price between 100 to 175 CFA per kg. He also has to purchase baskets or cement sacks (approximately about 50 CFA per piece, though cheaper in Diaoube at 25 CFA than in Dakar at 75 CFA) and string. In addition, he has to hire porters to load the products. He is also required to pay local taxes to the municipality in Joal, depending on the quantity purchased. There is also money to be paid to procure certificates of health

and origin. In addition, certain payments need to be made to the police and customs, and if the truck is overloaded, an additional fine has to be paid.

The *kethiakh* may be taken directly to Conakry. However, if the quantity is not enough, they pick up more stocks from Diaoube before proceeding to Guinea. He identified transportation as a big problem since there are only two trucks available on the Guinea-Diaoube route.

4. NOTES FROM THE N'ZÉRÉKORÉ MARKET Mamayawa Sandouno, ADEPEG

The river N'zele or N'Zali starts from the town N'zérékoré. According to an ancient legend a weary, sick hunter drank from the source and was cured. He then founded the town of N'zérékoré where his spirit is still said to roam. The name N'zérékoré is said to be a corruption of the French term N'Zalikole, which some people say means "near my medicine", others "on the banks of the river". N'zérékoré is an important market town attracting traders from Guinea Conakry, Senegal, Mali, Sierra Leone, Liberia and Côte d'Ivoire. It is an important market for agriculture and fish products. However, the recent disturbances in Sierra Leone and Liberia is said to have affected market activity to a considerable extent. There is an airport in N'zérékoré.



The market is said to have been in existence for several decades, developing into a larger one when the trade for banana and oil with Ivory Coast started. In the earlier stages fish was not a product traded here. It was more a product traded at the nearby market of Koba. The importance of fish as a commodity is said to have increased in the late-1980s when refrigerated trucks belonging to fish marketing companies from the coast started bringing frozen fish to sell at the market, in an attempt to popularize fish consumption. Gradually, the quantities of fish, including processed fish, sold on the N'zérékoré market increased, and there is now a weekly market for fish products. Barter was (and continues to be) a common practice.

The market was taken over by the local administration in the 1980s and permanent structures, including shops, were built. These shops are rented out on a quarterly, half-yearly or annual basis.

Both hawkers selling small amounts as well as larger traders are required to pay a tax. However, as no receipts are given, it is not clear whether this is of a formal or informal nature. In addition, agents or 'goondas' have divided the market among themselves, and money is openly extorted from small vendors and larger traders.

Vendors are required to produce certificates of origin and hygiene. The veterinarian service inspects the product and examines the trader's license. This is also a source of exploitation because bribes may be involved. Vendors do not require a professional traders card.

The facilities at the market as well as the level of sanitation, are extremely poor. While water is available, there is no electricity or toilets. There is no secure place to store goods. Security is poor and women are harassed in various ways, particularly by pickpockets and those extorting money in other ways.

Those renting the shops from the authorities, called *n'yatíguí*, are powerful figures. In the fish section there are about 20 *n'yatíguís*. They are well organized and have their own association. They further rent out their shop space to vendors on a per basket rate. The space is provided till all the goods are sold out. It appears that these *n'yatíguís* recover in just a day or two what they pay for the whole year as rent. They also pay the vending tax of the person whose baskets are kept there. Women traders store their baskets in these shops and even sleep there. They also often keep their money for safekeeping with the *n'yatíguí*. The money is taken back at the time of their return. The *n'yatíguís* retain 10 per cent of the amount as charges for keeping the money safely. *N'yatíguís* also provide credit since they have access to so much capital. In general, relations between the women and the *n'yatíguís* appear to be friendly.

Women traders tend to stay in the market for about three weeks to a month on each trip. Cost of stay is high, even though food is cheap in this region. At any point in time there are about 10 women in each shop, each with about 5 baskets of fish of weight varying between 100 to 250 kg. Most of them are Guineans, mainly the *soussous* from the coastal areas. The *malinkés* from the forest region are also present in the market and malinké is the main language spoken here.

The market also attracts traders and products from other countries. A popular Senegalese product at the market is *kethiakh*. This may come to N'zérékoré from the wholesale markets of Conakry or directly via the Casamance region. Guineans do not really have a taste for other fermented products like *yeet* and *guedj*, though this is growing now. The Senegalese traders who visit the market are called Casamancian.

Several types of products may be found in the market including fish powder prepared from bits of fish, a product that is popular in the Kankan region. The population here also like fish smoked without the skin, a product for which there is no special name. Fish powder is also liked in the Malinké region. Smoked rayfish (*pukorrah*), a relatively expensive product, well liked in the forest region for use in soups and sauces, is also found.

The main buyers include local women who buy in small quantities. The practice in the market is more to sell by piece than by weight, since weighing machines are not so common. Barter is still common. There are also women traders who come to buy to take to other weekly markets. Then there are the bigger merchants who come from outside: from Mali, Côte d'Ivoire, Sierra Leone and Liberia. The merchants from Côte d'Ivoire prefer to buy small catfish smoked whole, while the Malians buy the *capitaine*. Traders from Sierra Leone and Liberia take the cheaper, smaller fish. Purchases are usually against ready cash.

The Guinean traders bring their produce by truck. As this is very expensive, traders try and ensure that the trucks are filled to capacity. The usual practice is that one person, part of a group, hires and pays for the truck. This can be a man or a woman. Their task is to coordinate the trip and to keep the rest of the group members informed. He/ she is effectively the 'patron' of the convoy. Those using the truck are required to pay the full cost of transportation till N'zérékoré, even if their goods are offloaded at earlier markets like Guéckédou and Macenta (see map). The rest of the group does not travel with the truck. Cost of transportation is divided among the group members and is often not based on the number of baskets. A lump sum is paid to the driver, who also then handles taxes and other payments along the way. Traders are usually not aware of the nature or amount of payments that are made.

An important concern of women traders is security for themselves, their money and their products. Transport is seen as a big problem, as is the lack of sanitation and proper vending space.

5. COOPERATIVES OF WOMEN FISH PROCESSORS IN GUINEA CONAKRY

Mamayawa Sandouno, ADEPEG

This report describes two women's fish processor cooperative in Guinea Conakry. Many such cooperatives exist all along the coast of Guinea, and several have their roots in the country's socialist past.

The cooperative of Teminataye

This cooperative was formed 14 years ago in response to some of the problems facing women fish processors in the community. The woman who is currently the President, Kadiyade Fotana, was the one who first took the initiative to form the cooperative. Formed with an initial membership of 15 women, the number of members has since expanded to 52. There is a 12-member committee that coordinates the work of the cooperative. If a member of the cooperative dies, her daughter is taken in her place. It needs to be mentioned that there are many women in this village who process fish outside of this cooperative. They process and smoke fish in their individual homesteads.

Before the formation of the cooperative, women processors worked in the open with little protection from the sun, rain and wind. The contribution of 100 GF made by each member enabled the cooperative to seek assistance from the government. A smoking shed was built with the assistance of the government of New Brunswick, Canada. However, the cooperative still lacks proper storage space for the processed fish. The group works together to buy the fish and the fuel wood, and to market the fish. Ten per cent of the profits made are put back into the bank account maintained by the cooperative. Women are also part of *tontine* arrangements that provide them with small amounts of credit.

Smoked fish is supplied both for local and export markets. Women processors are aware that the fish they smoke is for the US market, for Africans settled in the US. However, they are not aware of the circuits used or the other formalities involved. They process the fish under a system locally referred to as 'prestation', in which they are responsible for smoking the fish supplied to them by those in the business of exporting the fish. The responsibility of packing the smoked fish in suitcases supplied by the exporters is also that of the women.

Women from this cooperative also take the smoked fish to sell at the market in N'zérékoré, about 1000-kms away. Fish that has not been properly smoked is sold along the way. They face many problems on the route to N'zérékoré, including the bribes they are required to pay to officials along the way if they are to reach the market in time.

Women members of the cooperative meet every month and decide the price at which they will purchase fish from the fishermen. In that sense they influence the price of fish. The fish is purchased directly—not through middlemen—from the fishermen, either on cash or credit. If on credit, the fishermen are paid the agreed price after the smoked fish is sold. However, according to the women it is now becoming more difficult to access fish on credit. One of the strategies used by them, as processors, is to pre-finance fishing operations to ensure secure access to fish. It is worth mentioning that there are strong

familial links between women processors and the fishermen and this certainly influences the nature of the transactions.

At times, women processors also purchase frozen fish from the industrial sector to process. However as the taste of frozen, smoked fish is not locally appreciated, they often mix it with the fresh, smoked fish to sell. Local women also find it difficult to get access to frozen fish as this is controlled by women issued with licenses for the purchase of frozen fish supplies. Women who get these licenses tend to be powerful and well-connected traders. They are not usually from the fishing community. They are well-organized and are in a position to pressurize the government to respond to their demands, including their demands for better equipment.

The cooperative of Bonfi

Bonfi is a small village where only about 30 families reside. Many of those who fish here come from neighbouring villages.

The Bonfi cooperative has 43 women. It was formed in the early 1970s under the influence of the dominant communist ideology of that time. According to the President of the group, as students they were exposed to a lot of discussion on collective work. There was a lot of resistance to this ideology among the older generation. In this village the fishermen were the first to organize. The leader of the fishermen's group, Dema Mara, supported the efforts of the young women smokers to establish a cooperative. He, in fact, provided the land on which the smoking shed was later built. The land had been encroached upon and they all worked together to remove the encroachments.

The young women started the cooperative using money borrowed from their mothers. They received a lot of support from a woman within the Revolutionary Committee. The women met regularly, creating the committee that developed the site for smoking in 1980. Initially there were about 350 women who were part of the cooperative. However, as women realized that there would be no direct benefits (such as regular state salaries) from being part of the cooperative, many of them who were not fish processors by profession, left.

With support from the Revolutionary Committee two ovens were constructed. The women in the group were taught better methods of smoking. Each member contributed 25 GF for the purchase of equipment owned collectively. The smoking shed was built later with the support of the NGO, ADEPEG. However, the shed is not big enough for their requirements, and a temporary shed has been put up in the adjacent area, on the beach.

The cooperative has received regular support from the government. Around 1984, with the support of the FAO, women processors and masons were taken to Ghana to learn about improved methods of smoking. On returning, they adopted many of these techniques, such as the Chorkor smoker. This enabled a more efficient use of wood for smoking and a reduction in smoke from the smoking process, with potentially beneficial impacts on women's health.

In the 'second regime' (the post-socialist period) they registered as a cooperative under the new laws. Their cooperative, COFUS (*Cooperatives des Fumeuses de Poisson de Bonfi*), was officially registered in 1991.

The women use a wide range of smoking methods and their products have differing shelf lives. They also use different spices (such as peanuts) to flavour the fish to cater to diverse markets. Each member in the group has a specified role. The group maintains detailed records of the products marketed by them. It is a group that is well-known for its skills and buyers come to purchase directly from them. They also smoke fish for buyers/merchants who bring the fresh fish, under the 'prestation' system.

The group processes small amounts of frozen fish caught by the industrial sector. The lack of capital prevents them from purchasing larger quantities of frozen fish, as bulk purchasing is required for this. The cost of frozen fish also works out more. For example, while a given amount of fish bought from the artisanal sector may cost only GF 30,000 (less than US\$2), a similar amount caught by the industrial sector could cost more than double 80,000 GF (about US\$5).

The fishermen here recall that in the 1950s there were abundant resources of fish (*you could see them with your naked eyes from the shore....*). According to government rules, all fish catches had to be handed over to the government depot on the nearby island. Fishermen were paid for their work at the end of the month. As there were industrial boats fishing at the time, there was no conflict.

However, with the advent of the 'second regime' in 1984, foreign vessels have been allowed to fish. This has also led to the problem of pollution resulting from the practice of dumping by-catch into the sea. According to the fishermen here, while in present times they are free to sell their fish as they want, there is no security at sea. Fish resources have declined forcing them to increase the length of their fishing operations from a few hours to a few days (2 to 3) at sea. They now need to carry ice-boxes and food on their boats, unlike in earlier times. The fishermen in this area use environmentally-friendly gear such as gillnets and hook-and-line. Gears such as ring seines are forbidden. In general, consumers in Guinea prefer fish caught by the artisanal sector to fish caught by the industrial sector.

A committee to manage the landing centre was formed two years ago, called CDD or the Committee for the Development of the Landing Centre, with the support of ADEPEG. This is a national level organization, modelled along the lines of a similar organization in Senegal, with a presence in every port. This committee brings together fishermen unions and collectives of women fishworkers. It manages a fund raised from hiring out the cold storage, charging for security etc. The Bonfi committee has ten members, two of whom are women. The 'Chef de Port', a traditional leader, is also part of this committee.

5. NOTES FROM THE TUESDAY MARKET, ACCRA, GHANA.

David Eli, TESCO

This market gets its name from the day it operates. Activity starts from Monday evenings, as the big fish market day is Tuesday. However, small vendors selling several types of goods, like vegetables and spices, are to be found in this market place on other days as well.

Although this is a market for different goods, local fish vendors claim that it was they who started the market years ago. It was when the 31st December Women's Movement began in 1982 that this market began to be recognized as an official market. It was then that the vendors elected a Market Queen who now has the power to decide which vendors will enter the market. Earlier, the market queens would be senior vendors who had some kind of moral standing in the market. Today, it is more a political assignment and queens are considered to be in league with local tax (municipal) collectors.

The present market is a temporary one, well demarcated with a boundary wall measuring 58 x 62 meters. The facilities inside include a few sheds covering some 950 square meters of the market space and an empty ground where vendors can set up their own kiosks or just reserve space to heap and sell their goods. While a few of the bigger traders have stalls, the smaller traders usually sit in the open with their wares piled up or laid out before them on pieces of sack or plastic.

On Tuesdays the market spills over on to the school grounds nearby and on to the two approach roads that lead to the market. Vendors sit along the roads and vehicular traffic may be blocked off up to a distance of about half a kilometre. The approach roads are lined with trucks or vans that have either brought fish to sell or are waiting to carry back the fish bought by traders at the market. A large space under a tree is the packing area. Vendors selling palm baskets and all other kinds of recycled paper and rope for packaging can be found in the vicinity.

About half a kilometre away is the newly-constructed Tuesday market, on the site of the original market. It has not yet been occupied. It covers a fairly large area and has covered stalls, toilets and storage areas that are available for rent. On the southern side of this market, at some distance, is the seashore. This too is an enclosed market but, as everywhere else, this may not guarantee that all the vendors will be found inside the market.

Among the local vendors of processed fish, all women, different ethnic groups—*Gas*, *Fantis*, *Ewes*—can be found. The *Gas* in this market have the upper hand, with the Market Queen being a *Ga*. Any vendor seeking to sell fish in or around the market has to get the permission of the Queen, and, in all probability, present her with a gift. The Queen may not even agree to speak to a person seeking an appointment, unless given a gift. The Queen has men working for her who go around collecting the tax of 2000 *cedis*³

³ 7000 *cedi* = 1 U.S.\$

a day for a shed and 1000 *cedis* per head load. One or more vendors may occupy a shed. Wholesalers are mainly *Ewes*, *Fantes* or *Gas*.

Vendors in the market have to pay an annual license fee of 10,000 *cedis*. In addition they pay tax on fish brought into the market to sell, on a per basket basis: 3000 *cedis* each for the bigger baskets of 35 kg, and 500 *cedis* each for the small baskets.

Several categories of people can be found in the fish market:

1. Ghanaian women from outside Accra, who both process and sell fish

Women processors from outside Accra come to sell their product. There are about 30 such women who come from the Volta region. Rita, for example, has been in the business for 22 years. She has a secondary school education. She comes from Keta, 205 km from Accra. Other than the Tuesday market, she sells her fish in two other markets in Accra, and sometimes also in the market at Lomé. On days when she is not selling fish, she goes to the landing areas to purchase fish. She has learned to gauge prices at different landing areas by the fish that comes to the market. Most often she gets the fish smoked in the area where she purchases it. She hires facilities and labour, and often the people working for her in each area are the same.

In Keta there are warehouses for storing fish that can be rented at a cost of about 3000 *cedis* a basket for up to six months. Her experience has taught her where and when certain types of fish products are demanded through the year, and she makes her marketing decisions accordingly. All her product is transported by truck. She does not accompany the truck. She pays the driver on a per sack or basket basis. Depending on demand, she sells both in bulk and in retail. On days when much of her fish is left unsold, she is forced to remain in the market until it is sold. This could take from two to four days. However, the women of the Volta region are quite united. They often make arrangements between themselves to sell the unsold fish so that all of them do not have to remain in the market. At night, as the market is locked, they are not allowed to stay. Thefts are common as their goods cannot be locked—they can only cover them tie them.

These women have an association of their own called FIPAG (Fish Processors Association of Ghana). Headquartered in Accra, this association is about five years old. It is supposed to have a membership of about 10,000 but does not seem to be very active. Rita is the secretary of this association.

2. Women from Northern Ghana, who come to buy fish

Women from the Northern parts of Ghana come to the market to obtain supplies to sell in their region.

3. Local women, living in and around Accra, who come to retail fish

Many local women from nearby villages like Chorkor can be found in the market. Women usually sit in the open, with their wares spread on sacks/ plastic sheets on the ground. They usually sell small amounts of fish in retail. While many of them process and sell fish caught by artisanal boats, some women can also be seen selling frozen, smoked fish. This is fish caught by the industrial sector that can be purchased from the cold stores at the Tema harbour. Local people, in general, prefer the taste of fresh,

smoked fish and the fact that frozen, smoked fish has developed a market in Ghana reflects a scarcity of fish caught locally.

4. Women who come from other countries to buy fish

Women coming from Benin and Togo have an association, *Association des femmes du poisson du Bénin au Togo*, literally the Association of Fisherwomen who use the Benin-Togo circuit. From July to November women from Benin bring smoked horse mackerel and sardines to the Tuesday Market. From January to July they bring smoked shrimp. They carry back smoked anchovies and sardinella. In contrast, the women from Togo do not market shrimp, given the limited resources of shrimp in Togo.

In Benin the lean period for fishing is November and December. However, women remain active even during this period as they store a part of the product smoked during the peak season to sell during the lean season. This enables them, on the one hand, to regulate the price of smoked fish through the year, and, on the other, to avoid a period of unemployment. This is true for women marketing both fish and shrimp. Smoked shrimp is often sold on credit. It appears that part of the smoked shrimp is re-exported from Ghana to Europe. The taxes paid at the border for shrimp are higher than those paid on fish.

The women from Benin in the Tuesday market are basically traders while the Togolese women are also processors. As the Beninese have higher costs to cover—they have to purchase the processed product and travel a longer distance—they are not too pleased to see women from Togo at the market.

According to women from Benin, compared to other markets the Tuesday market offers facilities, like toilets, for women. There is greater security for women as the market is closed and locked at night. On the other hand, in places like Lomé, there is no market reserved for fish.

However, women fish traders from Benin and Togo face several other problems. Women usually hire a car for their goods and pay on a per basket basis. They do not accompany the goods themselves—instead they take the bus. As drivers also have to bribe the ‘men in uniform’, they try to make the highest profit from the trip. The tendency is to load a car with a 30-basket capacity with 50 or even 60 baskets. This may damage the product.

In addition to the Beninese and the Togolese, there may also be women from Burkina Faso, and sometimes from Nigeria and Ivory Coast at the market. Fish traders from Burkina buy smoked anchovies from the Ghanaians. However, given the declining supplies of fish in Ghana, the Burkinabés come less frequently now. The Nigerian women bring with them a species called *badagaye*.

5. Traders who only sell the fish of other processors

There are some traders, with rights to vending space, who only sell the fish of other processors and take a commission per basket or sack that is sold.

7. CASE STUDIES OF WOMEN FISH PROCESSORS AND TRADERS

Nalini Nayak

Fish, especially processed fish—smoked, fermented and smoked, dried, or salted and dried—is an important part of the diet and culture of West African people. Artisanal fish processors, women and men, play an important role in sustaining the way of life of people in the region. Given the distribution of fish resources in the region—abundant where the population is sparse and less abundant in areas which are densely populated—fish processors and traders contribute in vital ways to food security by reaching protein-rich fish products to the remotest corners of the region.

Women in the region are active in fish processing and trading and are extremely hard working and dynamic. There is, of course, a great diversity among them. They may be very young or very old. They may be either small or big operators. They may procure fish for processing at their home locations or travel far to get it cheaper. They may advance money to the fishermen to ensure their access to the fish or just buy with cash each day. They may process both at their home locations and in distant locations. They may work individually or in groups. They may await the buyers at their processing sites or take their processed fish to close or distant markets, sometimes even to other countries. They may specialize in a certain kind of processing technique and even limit themselves to a specific species, like the women of Gunjur in the Gambia who work only with catfish, or they may do a little of everything.

Most of these women have taken up the trade of their mothers. Some of them have completed primary school like Amede and Hannah while others never went to school at all. Others, like Pierette, played truant from school but learnt other trades like tailoring and eventually took to processing fish like their mothers because it was more lucrative.

Therefore, when we speak about these women, they cover a wide canvas. Unfortunately, however, they receive very little or no acknowledgement or support, despite the fact that they face similar problems in the entire western region of Africa.

All these women are proud of their work and the fact that it helps them feed their families and educate their children. Some, like Fatou Gaye and Florence, claim that it is they who keep the fishermen working by giving them advances and that it is because of their enterprising abilities that so many others are able to get work and make a living.

But all of them realize that the times are changing as the price of fish increases. Some blame the government for increasing the price of fuel while others say it is because the devaluation has led to a big rise in the cost of fishing inputs. Still others talk about overfishing and the diminishing resource base, which forces them to migrate, like Mammy and Florence, the Ghanaians now in Abidjan and the Gambia respectively. Many others, like Hannah, feel it is unfair that the fishermen do not give them fish on credit any longer.

They all speak about the problems of not having sufficient capital and storage space at the processing sites and at the markets. Those who engage in cross-border trade, like Pierette, speak of the problems they have with avaricious policemen and customs officials, and of the harassment at the borders.

Many of them complain of back and knee pain. Some, like Amede, speak about the loss of eyesight due to the smoke, while others, like Kadijata, complain of asthma.

It is interesting to take a closer look at each of these women, from processing centres marked on the map below, to understand how they manage to survive despite all the odds.



***(i) ROHOYA DIOUF,
SENDOU, SENEGAL***

The little fishing community of Sendou is about 30 km from Dakar, along the Petit Côte. Since it lies off the main road it is quite isolated, and hence communication with the village is not that easy. There are about 400 fishing families living in the village and Rohoya, now around 50 years of age, has been in this community since her birth. Her father was a fisherman and a farmer and her mother processed fish. In fact because of its rather isolated location, most of the fish landed in the village is processed.

Rohoya has not been to school at all. The eldest daughter of her mother, she stayed home in order to look after the younger children and to prepare food. She also took food to her father at the farm, a few km from the village. She was married when she was 20 years old and has had nine children of which only five are alive. All the four children that died were delivered at her home. Of the other five, only three were born in the hospital. The nearest hospital is in the town of Rufisque, about 10 km from Sendou. There is a resident nurse in Sendou who helps in deliveries if the pregnant woman is unable to reach the hospital in time.

Rohoya married a fisherman from the same village who later took to ferrying people on his boat. After her second delivery she started to sell fish in the village and sometimes in Rufisque. Initially she sold the fresh fish caught by her father's gillnet. Gradually she began to buy from other fishermen who landed fish with their ring seines and started drying, fermenting and smoking the fish. She continues to farm in the post-rain months though she grows much less now, since more of her time is spent on fish processing.

Rohoya explains, "I started my work with no capital. Although the price of the fish was fixed when I procured it, I paid for it only after it was sold. But now this facility is no longer available. All fish has to be paid for when procured as the fishermen catch less fish these days and there is greater demand, so that fish is sold on a first-come basis against cash payment. In fact I am obliged to go to other landing centres now to procure fish as the landings in Sendou have declined. I go either to Joal or Rufisque and hire transport to bring the fish back. So you see, I always need to have a certain amount of liquid cash with me and this is not always easy. I often make use of the *tontine* (informal saving and credit group) and thus manage to keep my work going."

Initially Rohoya worked alone with some help from her children. As her operations increased in size, she began to hire labour—women who came to the village from the interior in search of work during the agriculturally lean season. These women have been coming to Sendou ever since she can remember, generally between April and July. They come in a group and hire a house in the village. In fact, according to her, the women of Sendou are as dependent on these migrant women for their labour, as the latter are on them for work. Generally, migrant men assist with transporting the fish from the landing site to the processing area. For a case of around 20 kg they are paid 100 CFA⁴. For cleaning a case of fish and preparing it for fermenting or drying, the women are paid 250 CFA. Even the water for washing and cleaning the fish has to be bought at 50 CFA a bucket. In addition it costs 20 CFA to transport this to the site.

Fortunately, the processing site is not very far from the shore or the village. However, they face other kinds of problems. Says Rohoya, "On two occasions there were attempts to evacuate us from the site. People who wanted to develop a tourist village in the area offered money to the village chief. But when we women heard about it, we organized to prevent this. That is how we managed to keep control of the site. Unfortunately, this area does not come under any particular local government, and hence no authorities take responsibility to develop the place. One of our big problems is the stray animals that enter the area and nibble at our products. We have to be constantly on guard. We have been trying to get the area fenced but have not succeeded in doing so as yet."

Over the years Rohoya says there have been some changes in her method of working, as a result of what she learnt from being a member of the women's cell of the CNPS⁵. Sendou was always famous for its dried anchovies, but traditionally these were dried on the sand. For the past 8-10 years they have begun to use racks to dry the anchovies, to

⁴ 700 CFA = 1 U.S.\$

⁵ CNPS, *Collective National de Pêcheurs du Senegal*, (an independent fishworkers organization created in 1988)

cater to the specifications of buyers from as far away as Ghana and Nigeria. Women in her village have also improved their smoking techniques. Earlier she just smoked the fish over a heap of grass, but now she has built a smoker like the others in the village. This method requires more fuel, but the finished product also fetches a higher price. There have also been changes in the method of fermenting catfish. While earlier she only fermented it, she now smokes and even dries it, in response to the demand.

She learnt many of these things through discussions and exchange visits to other areas through the CNPS. One of her most interesting experiences was her visit to Gambia where she was surprised to see how organized the women were. She has also learnt the importance of saving money. The local CNPS women's group has around 46 members. They meet once a month to collect their savings and give loans to those women who need it most.

Through the CNPS they have also made direct contact with women merchants from as far away as Nigeria. Nigerian women placed an order for a container of different varieties of processed fish, mainly anchovies. The entire group worked together to get this container filled and shipped to Nigeria. This was a massive operation but, thanks to one of the leaders of the group who is a trusted organizer, it was possible. Ever since then they have received visits and orders from women of different countries, including Benin, Togo and Ghana. After the buyer pays an advance, they hire a container when the season starts. Within two weeks the container is filled and shipped. They face minimal risks since they are assured of getting their money according to prices fixed before hand. They neither have to wait for the merchants to come to buy their products, nor do they do not have to bother about storage.

Earlier, before such orders came, there were several occasions—mainly during bulk landings—when she had been forced to take her fish to Rufisque and sell it very cheap. This was always a distress sale and occurred primarily because she lacked the capital for keeping the fish till prices rose, as well as adequate storage facilities.

Rohoya is the first of three wives. She says her husband was a considerate man and cared well for all his wives and children. He always contributed the greater share to household expenses, while she took care of the food. It was he who constructed the house and took care of the other major expenses. After his death 10 years ago, she could no longer afford to pay for her children's education. All her sons, except the eldest one who is mentally handicapped, are fishermen while her daughters are all married. She is happy to have her work so that she is not dependent on her children. She would like to continue work for as long as she can.

(ii) FATOU GAYE
JOAL, SENEGAL

'I am proud to be a fish processor. I have supported not only my own family on this income. I have helped many others too. It is true the fish is declining these days, but we

are fortunate here in Joal that the catches are still good, ' says Fatou Gaye. A very calm and elegant woman, Fatou lives in Joal, a fishing community about 75 km from Dakar.

Fatou, now 48 years old, is a mother of two children, both married. Her husband was a fisherman in Mbour, the neighbouring fishing community. As a newly-wed couple they lived near Dakar, where he worked as an engine operator on a trawler. Since the long fishing trips kept her husband away for long periods, after the birth of their first child they moved back to Joal. Back in her family home, she decided to get involved in the only trade she knew—fish processing. She had never been to school nor had she been directly involved in the trade. As a girl she had assisted her mother in looking after her seven siblings and in running the house. However, she was confident that she would be able to earn a good living.

“When we returned to Joal, all we had was the last salary of my husband, our child and some belongings. A few days after we arrived I went to the shore and bought one basket of sardinella, which was very cheap, and smoked it. I managed to sell it locally at a small profit, enough to buy the rations for the day. This gave me confidence. My husband did odd jobs on the shore and helped with engine repair. All the money he earned, he saved, as he wanted to buy his own pirogue one day. This is how life started for us and every day it got better.”

A year later her husband was able to buy a second-hand pirogue and net. She began to take all his fish and to sell the good varieties fresh to merchants on the shore. The rest she would take to her little site to ferment and smoke. By this time she had acquired all that was necessary—some washing basins, a space of her own in the crowded smoking areas on the Joal beach and working capital to keep going. She did not need much else because she got the fish from her husband on credit, though the price was fixed at procurement. She reimbursed him after she had sold her smoked fish. She recalls that life was really tough those days, as she also had to prepare the food for the crew that went fishing with her husband. Her children were still young and although her mother helped, she had to carry one of them on her back all the time, as they needed to be fed. It was only in the third year that she began to hire labour on a regular basis to help her with the work, as she began to smoke more fish.

About 15 years ago, when out board motors became more popular in Joal, she began advancing money to another fisherman—between 20,000 to 50,000 CFA each trip—to get assured access to the fish he landed. What she did not want she would sell fresh, and then take the rest to the landing site. She would settle the account with him the following day, before he went fishing, before giving him another advance.

Things went well for the family and her husband even bought a second pirogue with a motor. She began to advance money to a second fisherman to ensure supplies. Then, about 10 years ago, in the early 1990s, the Commune informed them that the processing site would be shifted, as the existing one was crowded and unhygienic. This caused a big hue and cry among the processors since the proposed site was at a distance of about 3 km from the existing site, and it was hard to get there. However, the commune remained

firm, assuring the women that eventually a new landing centre would be built closer to the proposed processing area. The women agreed to move with great reluctance. In retrospect, however, she feels it was a good move. Initially it cost them a lot more money to transport fish to the new site. It had to be carried in little horse-drawn carts and they were not sure how much of it got stolen along the way.

Fatou then gradually began financing more fishermen since, to keep her operations going, she needed to enlarge her business. Fishermen's need for financing also increased simultaneously, as they began using more powerful motors and going longer distances. Some of the fishermen would return after two or three days. In order to be sure to have fish every day, she ended up financing eight pirogues.

Gradually though the system of pre-financing changed. Fishermen began taking advances from different processors for different trips, so that each fisherman would be fishing for three or four processors but for only one on each particular trip. This happened because the fishermen's requirements for finance increased, and it was not possible for a single processor to advance such large amounts. At the same time processors too preferred to finance several fishermen rather than just one, as there is so much uncertainty in fishing.

As her operations grew, Fatou also hired more labour to help with the work. She now has several people working for her—there are about five who work to ferment fish and three to wash and clean the fish, for salting. There are more than ten who transport the fish from the landing centre to the processing site. They are all paid on piece-rate basis except the old watchman who is paid generously. She pays CFA 350 for cleaning a case of fish for fermenting, and 250 a case for salting. Transportation costs work out to CFA 1000 for 10 cases brought by horse-drawn carts.

Over the years Fatou has come to specialize in fermented *yeet*⁶ and catfish (*guedj*⁷). Her buyers have come from Mali and Burkina Faso—men who come to buy the *guedj* to pack and take away. There have also been Burkinabé men who undertook their own processing in the village and Fatou learnt from them how to process in specific ways liked by them. Gradually the Ghanaians too started coming. Their main demand was for salted shark and catfish. They gave an advance and then came to collect the finished product when informed that the order was ready, against full payment. Fatou says she has never been cheated this way since the Ghanaians need the fish and she does not give anything on credit.

Now, however, there are whole settlements of Burkinabés and Guineans that have taken up smoking and fermenting themselves in Joal. Whereas the former are only men, the latter come with their families. This has increased demand for fish for processing and pushed up prices. According to Fatou, local processors have tried to object to this but have received no support at all from the commune. Even though there is an organization of fishermen in the community, no action has been taken.

⁶ Fermented and dried *cymbium*

⁷ Fermented, dried fish

At the earlier site, they had paid CFA150 per rack per month to the Commune. Now, at the new site, they pay CFA750 a month in all and can have as many racks as they like. Access to the new site is easier after the construction of the road, and now that it has been fenced, they are protected from the menace of stray animals. However, there are few other facilities. They are required to pay for water and this adds up to a substantial expense on a weekly basis. The site has no storage facilities, which means that the women have to sell the smoked fish immediately and that they cannot wait for the prices to go up. There are no toilet facilities at the site and for this women are forced to go home or to the houses of relative nearer the site. Fatou mentions that very often she remains the whole day without using the toilet and she is sure this is the cause of her fatigue now. She also has joint pain.

Her working hours can be very long depending on when the boats she has financed arrive. It is comfortable when two boats arrive in a day but sometimes there are three and even four arriving on the same day. On such days she has to be at the site till late at night.

Fatou has not been to school and therefore keeps only a mental note of all her monetary transactions. For the last couple of years she has the assistance of a worker who knows how to read and write, and he helps her to keep some of the accounts regarding work payments. However, she continues to keep an account of all advances, purchases and sales herself. Till a few years ago, she also generally kept all her money as liquid cash, or alternatively she put it into the local *tontine*. About five years ago, however, both her husband's boats were damaged in a storm, and she had to invest in a new boat and motor. Her son, who has completed his secondary school and has decided to be a fisherman, now operates this boat. Fatou hopes to save enough money to buy a second pirogue of her own so that she can be assured of fish supplies. Her husband, who no longer fishes, also has a second wife and so she does not expect too much from him.

A few years ago Fatou started smoking fish for export to Belgium. This was part of a project initiated by a Belgian woman and a Senegalese woman from Joal living in Belgium. They put up a little factory in Joal on land given by the Commune. The relatives of the Senegalese woman manage the factory, and smoke fish there. Fatou suspects that some aid money is involved, and that, in order to avoid scandal, smoked fish from a few other women in Joal is also procured, to make it appear as if others are also involved. This fish is exported to Belgium after they are paid their due, and profits from the sale are appropriated. Fatou smokes mainly catfish and some *yeet* for this woman for about three to four months a year.

Fatou now saves her money in a bank on the advice of her cousin, an active member of the local women's cell of the CNPS. Fatou herself has never had time to participate in meetings and group activity, as she has been so busy with her work. Her big disappointment has been her son-in-law. She had financed his travel Italy for him to work there. However, after about two years, they heard no more of him and her daughter has been virtually deserted. So besides meeting all domestic expenses, and building her own house, Fatou has financed the entire fishing operations of her son and has and put her

son-in-law on his feet. She now says she has very little capital left but hopes that, if god wills, it will gradually come back.

Fatou says she is now tired of such hard work. However she cannot think of just sitting at home even though the fish is certainly less now while the competition and the running capital that is required, is more. She feels that since she is well-established and things are running systematically, she cannot just pull out. There are a number of workers, part of the enterprise, who depend on her, and she cannot pull out unilaterally. She hopes that her daughter will gradually take over, as her child grows a little older.

**(iii) FATOU TOURAY
GUNJUR, GAMBIA**

In several fishing communities in the Gambia it is common to find long and well-protected sheds with smokers, and, in some areas, drying racks. This infrastructure was constructed in the late 1980s and early 1990s with funds from the European Union (EU). The work was undertaken by the Department of Fisheries but was actually executed by GAMFIDA, the Gambia Artisanal Marine Fisheries Development Association, an NGO initiated by active fishermen leaders.

Gunjur is a fish-landing site about three km away from the village of Gunjur. Hundreds of women can be seen waiting on the shore for the pirogues. It is the women who unload the pirogues and carry the fish on their heads either to trucks that carry away the fresh fish or to processing sites a few hundred yards away. It is not always easy to decipher the roles various women play on the shore—be they big or small merchants, processors, or labourers.

One of them, Fatou Touray, had finished procuring her supplies, and the women who worked with her had carried these off to the processing site. Jovial and relaxed despite the work waiting for her, she was ready to talk about herself.

Fatou is a member of the local women's self-help group called the Gunjur Fish Processors Nyodama Co-operative Society. The 48 members in this group smoke only catfish. According to her, her group is the only one in the Gambia, which lightly cooks the fish before smoking it. After cooking, the skin is brushed off, and the fish is then smoked for 24 hours. The fish they smoke is considered to be of very good quality.

Fish processing is all 50-year old Fatou has known since her childhood. Although the landing site was two and a half km away from her house, she used to come there even as a child to help her mother. She also helped to run the house. Gradually she took to processing fish herself after she got married. Starting with a capital of only 12 *dalasis*⁸, her operations have since grown. She now manages her operations with the assistance of her daughter and three other women she employs. Like other processors of her age, she manages the overall operations. She takes the fish to sell in the Zerokonda market, about 30 km away, on a daily basis.

⁸ 14 *dalasis* in 1 U.S.\$

Catfish is landed throughout the year in Gunjur and, in order to assure her supplies, she advances money— around 400 *dalasis* per fisherman—to about 11 fishermen. Other women, organized separately, handle the landings of sardinella.

The price of the fish is fixed according to its size—the large ones are two for 10 *dalasis* and the smaller ones are six for 10 *dalasis*. She pays the fisherman once the fish is sold, after deducting the advance that has already been paid. She also gives the advance for the next trip.

Smoking catfish is only a one-day job and there are fresh supplies to be taken to the market every day. However, selling fish in the market is not easy. The Zerokonda market is very crowded and permanent vendors occupy all the stalls. Fresh fish and processed fish vendors do not have any area allotted to them and have to occupy whatever space is available. Women, like Fatou, who bring their fish to the market, rarely sit there and sell it themselves. They tend to hire other women to sell for them on a per-basket basis. Sometimes Fatou takes 5 to 8 baskets to sell in the Kaniffing market, where too she hires women to sell the fish. The market police constantly harasses these women vendors, forcing them to be constantly on the move. With each move, the fish gets damaged. Fatou pays the women vendors 10 per cent of the profit.

According to Fatou they have made a representation to the Kaniffing Municipal Council asking for vending space at the market. However, so far they have received no favourable reply. She thinks that they will finally be allotted space when the proposed market, to be constructed with World Bank funds, is completed.

Fatou explains, “A one-way trip to the market, depending on the transport I get, takes around three hours. The fare is 20 *dalasis* per head. In addition I have to pay 5 *dalasis* for every basket of fish that I load. I have to go every day to the market as I have no storage facility to keep the smoked fish. Moreover, I am forced to take all the catfish caught by fishermen to whom I have advanced money. When fish is plentiful I have no option but to smoke it immediately, because there is no ice to conserve it. Thus there are always some losses, either because I have to sell cheap as there is no storage or because of spoilage during bulk landings. The fishermen raise prices when fish is scarce but do not bring them down even in times of bulk landings. It is always us women who actually bear the losses—we are generally at their mercy”.

Fatou says the number of boats in Gunjur is increasing. As there are also migrant fishermen fishing here, the catches are growing.

The women have been using *banda* ovens—constructed with help from the Government through GAMFIDA—for the past about 11 years. For a few years prior to that they had been using the Chorkor ovens, and before that the traditional oven—a big hole in the ground. Fatou learnt the new method of smoking from her sister Seko Touray who had been sent for training by the fisheries department in 1986. The women of her group use the new smokers that are located in a permanently covered shed. Each time they use the

smokers they are required to contribute 10 *dalasis* to the common fund of the group. Fatou buys the wood in bulk and stocks it. She also has to pay for the water that she uses. Women's groups who smoke only sardinella use other kinds of smokers.

Fatou's husband is a fisherman. They have 6 children, all of whom were born in hospital. Only two of her children went to school and studied up to the high school while the others did not go to school at all. They have been helping with the work and one of the daughters has always helped cook the food and carry it to the processing site. According to Fatou: "We need many hands for the work so not all can go to school. Moreover, there are not many jobs for those who go to school so it is better to live by the fishing."

They have their own house and a little land around it, where they also grow some vegetables. Their main work, however, is related to the fisheries.

Fatou consider it very fortunate that they have their own women's group as a means of solidarity. However, they do little else as a group beside meeting every month and pooling their contributions of 10 *dalasis* in the common fund, to be used when someone is in need.

**(iv) FLORENCE EWUSA
GHANA TOWN, GAMBIA**

"They call me *mama timiling* because I am the biggest processor of ray. I buy all the ray catches from the fishermen and all the buyers come to me as I am very well known," says Florence.

It is easy to jump to the conclusion that she is boasting. But when Florence continues to talk about herself and her mission, it becomes clear that she is a very hard working and simple woman who has developed into a big fish mammy because of the trust she has been able to create. She does not exude the normal aura of a mammy as she is very open, friendly and aware of the fact that she has been cheated several times in her business.

"I was sent here to Ghana town in Gambia by my Church as I am both a deacon and a midwife. I was sent here to help the Ghanaian community that had fled to Gambia in the mid-sixties after the political unrest following the toppling of Nkrumah's regime. Gambia was the only country that officially accepted these political refugees and provided them with support. But that does not mean that we are naturalized here. Even those born here are still considered migrants and are required to renew their permits each year and to pay for work permits as well."

She came here 14 years ago with her two children and began to minister to the community belonging to her church, the Musame Disco Christo Church. She also worked as a midwife, helped with deliveries and the general health needs of the people. However, she could not make a living from the small contributions that people gave her. Rather than sitting and waiting for the money to come to her, she decided to take up some work of her own. Being close to the shore, it was natural for her to take up the trade of her

mother, a fish processor. Both her father and grandfather were fishermen from the Cape Coast in Ghana, and she had always helped them in their work.

Florence explained that this came to her very naturally. Although when she started she smoked sardinella, she soon got into the shark and ray business. She spoke of her experiences when she started:

“There was this Senegalese fisherman, Dudu Fye. He too was a migrant fisherman working here. When he needed money for a bigger net, he asked me for help. In exchange, he promised me all the fish catch. He even promised to catch any specific fish that I wanted. So I gave him a big sum of money—200,000 *dalasis*—and I started to get the fish he caught. It was wonderful because with this big net that they call a ring seine, he caught a lot of ray and shark, and you see how we salt and dry the shark and ray. This is good money in Ghana. But he soon moved to the Casamance, got married there and I did not have access to his fish anymore. He still owes me a lot of money. I have been there several times to get the money back from him but he always gives me excuses. Actually I have not complained to the authorities about it because through him all the other migrant Senegalese fishermen who use this wonderful net come to me. In fact I have advanced money to most of them, 54 of them now. To each of them I have given around 100,000 *dalasis* and so I get the entire ray and the shark they catch. So although I know that Dudu Faye cheated me, I am in a way indebted to him for introducing me to these fishermen. They are very skilful and clever. Their fishing trips last from anywhere between three days and two weeks.”

Florence is bitter when she speaks about the wealth that Dudu Faye has amassed, including the big house and land he owns both in Gambia and in Senegal. On the other hand, she has remained with moderate means, a very small house and no luxuries. She has also been cheated several times by the merchants who come from Ghana to buy in bulk.

“I work so hard. Now I have my own pirogue that my son works on. Of the 54 boats that I finance, 7 of them operate from Tanji. The rest may land at other places but I have no trouble with them. My son or other middlemen that I pay, follow the boats so we still get all the fish. I pay a percentage of the amount of fish that they bring back. So my money is rolling all the time and I never have much cash in my hands. If only I can get back the money for the two containers of fish that a Ghanaian merchant took from me, I would be rich too. Though I have gone back to Ghana several times to ask for the money, I have not got it back.”

Florence says it would be wonderful if payment for sending fish to Ghana could be assured. While she would actually like to take the fish to Ghana herself, there is too much of paper work involved in procuring certificates from the sanitary and health authorities, etc. There are also problems getting export and import licenses for shipping by container. She does not have the time and know how for all this. It is also difficult for them to seek assistance since they are still considered as migrants.

**(v) KADIJATA
BAKAU, GAMBIA**

At 72 Kadijata is very agile and full of humour. She claims to be the oldest processor in Bakau. In the Bakau Fish Processors Association, created in 1977, there are 76 women and 4 men. She is a founder member of this association.

Says Kadijata: “When I was young I cooked for the family and did not go to school. As a young girl I worked as a maid in a hotel for 10 years and then for 12 years in a hospital doing the laundry. After that, for a few years I worked as a cook with Radio Gambia. I finally decided I would be my own boss and turned to fish processing. For 16 years I smoked fish outside my house here in the Bakau town. Nobody in my family had done this job before but many Sere⁹ women in this locality smoked fish around their houses and I felt encouraged by them. I also wanted to have money more often than just a salary once a month. I used my last salary to buy the fish as the fishermen want ready cash and ever since then this has been my livelihood.”

“At first I sold the fish fresh in the local market. Later I began to smoke it. It took me time to learn to do the fish right and initially I did not earn much money. I learned gradually and I began selling the fish at the big market in Bakau and sometimes even in Banjul. The Municipality constantly harassed us for smoking the fish near our houses and so I organized the women into a group and demanded a separate place to smoke our fish. Then the old Ousman¹⁰ came and told us that we should register a society, which we did, and we became members of GAMFIDA. When the Japan Project came we got this smoking area and the sheds on the beach. We are 76 women and 4 men who smoke fish in Bakau and we have to do all the work ourselves. We cannot employ others since the smoking area is very restricted and no large operations can be undertaken. Some of us even sell fresh fish. Our good money comes when we get orders for smoked fish from people in the US. This happens very often. We receive an advance when the order is placed and the balance is paid on delivery.”

Kadijata likes her work despite her asthma. She knows she to continue working till she dies, as she does not have any children. She was married but as she had no children, her husband took another wife. She has spent all her earnings on educating her nieces and nephews, and she hopes they will care for her later.

**(vi) FATOU SENE
BONFI, GUINEA**

Fatou Sene is the President of the COFUB (*Co-operatives de Fumeuse du Poissons du Bonfi*). At present there are 43 women processors who are members of this co-operative. The co-op was started in 1980 encouraged by the left-oriented men in the community, who had earlier created their own co-operative in the 1970s. The co-op movement had, at that time, taken root in several parts in Guinea. Bonfi itself was a rather small coastal

⁹ A tribe found in the regions of Senegal, Gambia and the western part of Mali

¹⁰ Ousman Bogang, an activist fisherman, first president of GAMFEDA

community with a lucrative fishery. The founder of the men's co-operative, Dema Mara, encouraged the women to collectivize their processing activities and offered part of his own land for this. Supported by an active woman member of the Revolutionary committee, the women decided to organize themselves.

Fatou explains, "During our school days we heard a lot about the need to collectivize in order to strengthen the economy of our country. We, therefore, borrowed money from our mothers and created a small fund. We also elected a committee from among ourselves. When Mr. Mara offered us the plot of land, we decided to take it. However, because the land had already been encroached upon, we had to put up a fight. In the initial years there were about 350 women who were part of the co-operative. However, when they realized that there would be no direct benefits from being part of co-operative, many of them who were not fish processors by profession, left."

In the early years, two ovens were constructed with support from the Revolutionary Committee, and the women in the group were trained in improved methods of smoking. Each member contributed 25000 GF for the purchase of equipment. The smoking shed was built later with the support of the NGO, ADEPEG. However, the shed is not big enough, and a temporary shed has been put up in an adjacent area, on the beach.

The co-operative received regular support from the government. In 1984, with the support of the FAO, women processors and masons went to Ghana to learn about smoking techniques. Later, they adopted many of them, such as the Chorkor smoker for small fish. However, for the larger fish they prefer the Banda oven. After the collapse of the Sekou Touré regime, they registered as a co-operative under the new laws in 1991.

Fatou speaks of the working of the co-operative. "We have advanced money to two fishermen who give us most of their catch at the prevailing rate. We buy our fish collectively and smoke it on the ovens owned by the Co-operative. We have a stock of wood for this. Sometimes we work in shifts. After the fish is sold, the profit is divided. One part goes to the bank, one part is kept in cash to advance to the fishermen and one part goes towards the labour of the women."

The women use a wide range of smoking methods and their products have differing shelf lives. They also use different agents and spices, such as peanuts, to flavour the fish to cater to diverse markets. Each member of the group has a specified role. They maintain detailed records of the products marketed by them. Their group is well-known and buyers purchase directly from them. They also smoke fish for buyers/ merchants who bring fresh fish, a system called 'prestation'.

While they also process some amount of frozen fish caught by the industrial sector, this works out more expensive—the cost of frozen fish could be more than twice the cost of fish caught by the artisanal sector. At the same time, more capital is required since frozen fish has to be purchased in bulk.

Says Fatou: “Although I give a lot of my time to the co-operative, I also have my own business that I manage, and my own oven. I have presently financed about 500,000 GF to four fishermen. I smoke many kinds of fish from the small sardinella to the big catfish and barracuda. Since 1987, I have a group of four women who work for me on a profit-sharing basis. My daughters also help me and two of them are working more permanently with me now. But it is me who generally buys and sells the fish.”

Fatou’s parents were both involved in the fishery. Her father, an active fisherman, was of Senegalese origin, while her mother, a fish processor, was from Mauria in Guinea. Her mother processed the fish close to the home and the 11 children grew up helping her. Only three of Fatou’s siblings completed school while the others dropped out earlier. Fatou herself studied only till the second grade of secondary school. Two of her brothers are fishermen and two of her sisters are fish processors.

Fatou got married at 20 years of age, and her husband is a medical doctor. She has 10 living children. All her children have completed school while three of them have even completed their professional studies.

Fatou buys most of her fresh fish in Bonfi and sometimes from Boulbinie. She travels far to sell her smoked fish. For the N’zérékoré market she smokes a special variety of small fish called *cadimoni*. She usually hires a car or uses shared transport to go to Kindia, Maferenya or Forecaria markets, a run of about two hours, to sell fish. Most of the time she sells it on a wholesale basis, unless her daughters accompany her to retail the fish. She sometimes pays a tax at the markets but this is not very systematic and, according to her, there are several ways to evade it. In the lean season when the fish is expensive, she sells it fresh, on a retail basis, in distant markets.

Fatou has attended several seminars and workshops and stresses that she understands the importance of conserving the fishery. She is aware that her government has given licenses to several foreign fishing vessels that are now depleting their resources and polluting the waters. “We have to protect our resources because this is the only source of our livelihood. We have to work with our men for this but most of the time it is us women that are more active than them”, says Fatou.

In Bonfi a committee to manage the landing centre— CDD or the Committee for the Development of the Landing Centre—was formed in 1998, with the support of ADEPEG. CDD is a national organization with a presence in every port. At the local level it brings together fishermen unions and associations of women fishworkers. A fund, to be managed by the committee, is created. Income for the fund comes from hiring out cold storage facilities, charging for security services etc. In Bonfi there are 10 members in the committee, two of whom are women. The ‘Chef de Port’, a traditional leader, is also part of this committee.

(vii) ZASI HOUSSA

GANVIE LAKE SETTLEMENT, BENIN

Zasi Houssa is a fish processor in the village of Ganvie situated on Lake Nokoue, about 20 km away from Cotonou in Benin. This is a rather large village built on stilts, standing in the middle of the lake. The story goes that in the mid-18th century, a local tribal chief (Tofinu tribe) from the central region of Benin heard of the powerful Fon king from the northern region who, after capturing nearby tribes, was sending them away to distant lands as slaves. In order to escape, the chief decided to settle in the middle of the lake as a religious custom banned the warriors of the Fon kingdom from venturing into water. The people have lived here, in their houses on stilts, ever since then. The community has grown considerably in size. The later generation have been born here and have lived in these surroundings, with the men doing the fishing and the women vending the fish fresh or processing it for sale at a later date.

Zasi is 56 years old. She is a member of a women's group called *Afoueguigbeto* (meaning, our legs are important for our existence), registered in 1990 at the initiative of a local NGO called ID Pêche. She is proud to be a member of this group. According to her there are two such groups of 16 women each in her organization, though there are several such organizations of women in Ganvie—in Ganvie 1 Division there are around 20 such groups, with around 233 members. All these groups are part of FEMATLAB, *Federation des Femmes Mareyeures et transformatrices des Poisson du Benin* or the Federation of Women Fish Traders and Processors of Benin.

The members of her group contribute 2000 CFA per month as membership fee when they meet. They also contribute to a savings fund and, in her group, after they had saved 10,000 CFA, they used it to start their work. In 1995, after they received a grant from the FAO programme to construct a new smoker, they worked together to prepare the landfill so that the smokers could be constructed. ID Pêche gave them the training and also helped them organize their operations. They now work as a group for at least three days in the week, to purchase fish and wood, and to clean, smoke and sell the fish. For the rest of the time they work on an individual basis. The group is well-organized and they have never had any real problems working together.

They maintain a register to record attendance and contributions. At the end of each operation, after the fish is sold and the costs recovered, the profit is divided. Their capital has grown in this process and they have been able to increase the size of their operations. The only problem is that they lack any means of storage and are forced to sell the product to the first buyers.

Zasi feels that they have benefited from working in a group because, with the division of labour, they are able to achieve more. They also find it easier to find buyers as a group. Moreover, they are able to smoke fish on an independent basis, along with other members of the family. It is even possible to use the smokers belonging to the group, when they are not in use.

Zasi explains that all she has ever known has been the water and the fish. Her mother used to smoke fish inside the room in which they lived and the smell of fish and smoke was always there. Even as a child she would go with her mother in their little canoe to bring fish to smoke. Her father and brothers went fishing and sometimes, she too would go with her brothers to cast a net. She never went to school as that was never considered a priority, though there was a primary school in the village. As a young girl she would go to the market to sell the fish with her mother and often her mother would leave her there to see that all the fish was sold. Later she would row herself back in the canoe or get a ride in someone else's canoe.

After marriage she lived in her husband's home. Here too, as in her house, there was a smoker and it was natural for her to continue her fish processing work. She often gave advances to the fishermen—up to CFA 200,000— for putting up fish aggregating devices. Traditionally made using coconut fronds, the fishermen require the permission of the chief to construct these. At one time she had advanced money to three fishermen, and she had access to their catch. She would sell the better varieties fresh at the St. Michele's market in Cotonou, and smoke the rest.

One of the most sought after products from this lake area is smoked shrimp. The main buyers for both fresh and smoked varieties of fish, according to her, are the Togolese. While she retails the fresh fish at the market, she normally sells the smoked fish, on a per-basket basis, to the merchants that come to the house. The prices are generally fixed and there is an unwritten law in the village that they sell only for ready cash and not on credit.

The people in the village do not really trust the 'land people' as they constantly live with the fear that they can be evicted. Thus the spirit of solidarity among them is very strong. Though the government has made several attempts to rehabilitate them on land, they have refused.

Zasi does not notice that the surroundings in the lake are extremely unhygienic. According to her there is a natural cycle at work and, when it rains, the lake clears up. She thinks it is very normal that they defecate into the lake and considers nothing in her daily life to be a problem. Everything is readily available within the village. There are those who supply the water from a bore-well and those who supply the firewood for smoking. There are all kinds of things sold in the floating market. They have their own little home on stilts built several years ago and so far it has stood very well, though the hay on the roof has to be replaced every two years, depending on the rains.

The only thing that Zasi feels sad about is that she has been blessed with only two children, though she would have liked to have many more. She also looks after five of her other nieces and nephews. Her daughter is uneducated and is now married. Her son studied up to secondary school and now goes fishing as her husband is too old.

Zasi feels that things are getting more difficult. There is less fish available and the costs of fishing inputs have gone up considerably after the devaluation of the CFA. In fact she

has stopped advancing money to the fishermen for the past three years, as they require large amounts that she is unable to afford. There are other problems as well: the high cost of firewood and the fact that there is no electricity in the village. Using generators works out to be very expensive. This is one of the reasons why their children cannot study at night and, therefore, cannot do well in school.

Zasi also believes that they can achieve much now that they are organized. She hopes that more groups of women get access to the new smokers. Her group has come into contact with women processors from other parts of Benin. They have also received women from several other countries in their village. They feel part of the larger world. She is very enthusiastic now about the fish fair in Dakar and hopes to find new buyers for their smoked lake fish.

***(viii) PIERETTE ANNANI AGOE
GRAND POPO, BENIN***

Pierette is a woman from the Fon tribe. Her father was a fisherman and her mother—originally from the central region of Benin who grew up in Agoe, a marine fishing community in the western region of Benin—was a fish processor. Pierette has not been to school. Although her mother had made several attempts to send her to school, she had always run away. She had preferred to spend her time either at the shore or at home, where the fish was cleaned and smoked. At 14, at the initiative of her mother, she had joined a tailoring course in a technical school. She had successfully completed the two-year course successfully and got her diploma. After that her mother had bought her a sewing machine and had set up a little boutique for her in the village. She worked as a tailor for about four years. Though there was work, she did not earn as much money as she could if she had worked to smoke fish. So when she turned 20, she decided to close the boutique and work as a fish processor.

Pierette began to buy and sell fish independently, using her mother's smoker. At 23, after she got married and moved into her husband's home, she continued to operate in the same way. Later she constructed a traditional smoker of her own.

She is the only wife of her husband, a fisherman. She takes all his catch, and either sells it fresh to buyers on the beach, or processes it. She buys fish from several other fishermen as well. Earlier she used to advance them money, but she stopped doing so after the costs of fishing inputs soared due to the devaluation of the CFA. In fact, the fishermen now prefer to spend their time repairing their nets and engines rather than purchasing them afresh. Instead of financing their operations, she takes on other tasks such as purchasing food for them or buying them some alcohol, to ensure access to the fish they catch.

Pierette explains: "When the landings at Agoe are poor I go to other beaches to procure fish. I even go to the port at Lomé. However, there have been times when the fish at Lomé has been very expensive, and I have had to return empty-handed. I have no way of knowing fish prices at different beaches. Moreover, I also need to calculate all overheads, including costs of transport and the taxes paid at the border, to make the purchase

profitable. This is indeed a risky job. I make a bigger profit when I take some of my smoked fish to sell in Lomé and return with fresh fish to smoke. This, however, is a very tiring job and it often means that I have to stay overnight at the port, something I do not like. The travel time, to and fro, is two hours. Sometimes though we are kept waiting for a long time at the border since they want to check everything that we are carrying and we may even be required to open our packed baskets.

At the Lomé market I have to pay a tax of around 1000 CFA to sell my fish there and 100 CFA to enter the port. I normally sell in bulk because my main purpose is to buy fresh fish to take back to the village and I need be at the landing centre when the fishermen return in the afternoon. Of course, it is most profitable when we go as a group to purchase the fish and the costs of transport are divided between us. Like us, however, there are other women who come from other areas to purchase fish. Competition is increasing as is the cost of fish”.

Things for women processors in her village changed for the better eight years ago after they decided to organize as a group and become members of FEMATRAB. It was the NGO ID Pêche that helped them organize and since then their group has been meeting every month to receive training and for discussions. The members put their savings into a common fund from which they take loans. ID Pêche has also helped raise contributions for this fund. However, the most important support received by their group has been the new Chorkor smoker that was constructed with FAO support in 1996. Ever since then they have been using the smoker as a group and are even paying to use it individually.

The new smoker has really made things easier for them. As compared to the traditional smoker, they are able to smoke a much larger quantity of fish for the same amount of time, energy and money invested. They are also sure of getting a better quality product as they do not have to turn the fish as with the traditional smoker. In this process of turning the fish, they had often burnt themselves and even damaged the fish, which meant that the fish sold for less. They are also able to save on firewood. Moreover, for the 24 hours that the fish is being smoked, they do not have to watch over it closely. This also means that they can take on other work simultaneously, such as buying or selling fish.

Now that the group is there, she is sure of an income even if she is not well enough to handle the entire process herself. Working on her own would mean she alone is responsible for all the operations. But now, as a group member, she is responsible for only one of the tasks—normally she handles fish purchase though this could change.

Moreover, working as part of a group makes it possible for her to send her four children—three daughters and a son—to school as they are not required at home to help her. She realizes that they will have to seek their future outside the fisheries as life is getting more and more difficult. Fish catches are declining and there is much more competition in the sector. Moreover, there is no job security. She hopes that her children do not have to have to put up with all these problems. She feels that things were different when she started out as a fish processor after dropping her tailoring work. At that time

there was better money in processing. As times have changed it is better if the children seek jobs in industry or government.

Pierette realizes that fishing by big trawlers so close to the shore has led to depletion of resources. According to her, the trawlers not only catch juveniles and damage the seabed, they also destroy the nets of artisanal fishermen. So far no action has been taken against this. However, they are now beginning to discuss these issues and the need for better fisheries management in meetings of the Federation, where the men come as well. She thinks it important that the government steps in to control the situation.

According to Pierette there are now 1209 women processors divided into 126 working groups in FEMATRA. In 1997 women processors came together with the fishermen to form an umbrella organization called UNIPA—*Union des Femmes et Transformatrice de la Pêche Artisanales*. There are totally 4016 women and 892 fishermen who are part of this organization. They have undertaken many programmes through the organization and hope that they will soon be eligible for aid from the government.

**(ix) AMEDE KORKOR DELMELDA
KATANGA, LOME**

About a kilometre from the Lomé port is the Katanga beach. A large number of make-shift shelters and temporary huts have come up here, along a row of Chorkor smokers. A large number of women processors can be found working here.

Amede does not look like a regular fish processor. She is dressed well in more modern clothes. Introducing herself as the vice-president of the women's group, she proudly opens the door of the storage area that she had constructed two years back. There are three large rooms in which are stored smoked anchovies. The rest of the stock had already been sold a week ago. She mentions that though other women too have storage sheds, she is the only one who has built this more permanent structure, using her own money.

Amede's mother was a fish processor and her father was a carpenter, who constructed boats. They lived in Kpenu, a suburb of Lomé, about 8 km from the port. There were several women that processed fish in this suburb, and from early on Amede would help her mother in cleaning the fish. She would even carry it to the market in the mornings, running home after that to have her bath and rush off to school. After completing her junior school she could not afford to study further. Though she continued to help her mother with the fish, she started a small business of her own, selling oranges. When she had collected enough money she began to buy cloth from the wholesale market and to sell it in retail.

It was while selling cloth at the newly-constructed port at Lomé that she got attracted to the work of fish processing. She started off buying and selling fresh fish. Later she began to process the fish for sale. There were a large number of women, including her mother, who smoked the fish outside the port and Amede started her work adjacent to where her

mother smoked her fish. After the work was over they had to arrange to transport the smoked fish to their house, 8 km away. This was no easy task.

About 12 years ago, the port authorities decided to shift the processing site to make way for an expansion of the port. When the women processors got word of this about 350 of them decided to organize themselves into a group. They were encouraged by one of their companions who had been to Cape Verde for a training programme. Although in the fresh fish business, she told them that it was important for them to demand an alternate processing site to process their fish.

The women registered a group called FETRAPO—*Femme Transformatrice du Poisson* and approached the Ministry of Women's Affairs. Subsequently they were allotted this space in Katanga. During this process they also made contact with the Fisheries Department and the then Director of Fisheries gave them information about improved smoking techniques. As part of the West African Regional Programme he arranged for a few of them to go to Ghana to see the Chorkor smoker. A mason was also sent to learn the method of construction, and he, under the supervision of a Ghanaian mason, constructed the smokers in Katunga on his return.

At first six smokers were constructed. These were allotted to the executive members of the group on an experimental basis. Although the finished product from these smokers was superior to the product from the traditional smokers, the smokers soon developed cracks because cement blocks rather than bricks had been used on the premise that this may be a cheaper and faster way as laterite was expensive and difficult to obtain. In the second phase, the Department of Fisheries, with the support of the FAO, constructed 60 smokers using bricks. In this phase the 160 women who benefited also contributed to the cost of construction, since by then, they were convinced of the advantages of the new smoker. In fact several women also built their own smokers. The women now own the smokers and work on an individual basis.

Amede buys her fish against cash payments. Credit is no longer possible since the fishermen are always in need of cash to buy fuel and other inputs. Earlier Amede used to finance fishermen up to a sum of 30,000 CFA each to ensure access to fish supplies. However, fishermen now demand between 70,000 to 100,000 CFA as the price of inputs has gone up after the devaluation, and this she cannot afford.

Thus, she now has to buy against cash, except during bumper harvests when some of the fishermen she knows give her fish on credit. However, she has to pay back the amount with interest. Some women on the beach are moneylenders. They advance big sums of money to fishermen and control the entire catch. Later they sell the fish in bulk to other women. She often gets her fish from them. She generally buys the cheapest fish available—anchovies and sardinella. She also buys tuna when it is cheap and smokes it. When the fish is a bit spoilt, she ferments it.

She pays male labour to transport the fish from the port to the smoking area. She and her sister work together and her two children as well as her sister's children also help after

school hours. In the good season they hire women to work for them. These women, from the Volta region and other neighbouring areas, come in search of work. Each year the women who come are different and they go back after the three-month season is over. Sometimes they bring their children and hire a house for the season. Apart from food, they are paid 20,000 CFA and three pieces of cloth at the end of the three months.

Amede stores all the fish she processes and sells it directly to buyers, mainly from the central region, that come to purchase it from her. Sometimes, the women who work for her may take it to sell as well. However, she is kept very busy just buying and processing the fish. She often sells her fish on credit and the buyers usually pay back when they come for fresh stocks. However, in her experience, one can never be sure whether they will return since they are regular only for the first five or six times, and then they disappear never to be seen again. She has seen this happen several times and she is always prepared for it. According to her the biggest problem is the smoke and she feels that this has affected her eyes.

Amede's husband, a graphic printer working in a press, is very co-operative. She is his only wife. Because they have both worked hard they have been able to educate their children. Her eldest daughter is now doing her internship after completing her medical studies in Russia last year, with the help of a scholarship. One of her friends had advised her about the scholarship, and she had persevered till she got it. Her second child, a son, is doing electronics. He had actually stopped school after the secondary level as there was no money to pay for further education and had started working as an apprentice. It was then that one of his uncles agreed to support him for university. Her other son has completed a catering course and works in a restaurant.

They live in a rented house about 4 km from the processing site and she walks both ways. She has to prepare breakfast and dinner, as they all eat out at noon.

Their women's group has been functioning well all these years. They have a savings and credit scheme but are able to borrow only small amounts. Amede has not put any money in the bank. Her only savings are what she saves every month through the group as she is always in need of liquid cash to buy fish and meet the daily expenses of the household. At the moment she needs money to repair the roof of her shed that had collapsed in the last storm. She will have to do this before the rains come or she will be unable to store her fish.

Their group had requested the FAO for funds to construct permanent sheds but they have not yet received a positive response. The group had also made a request to the government to allow boats bringing fish from the Tema harbour in Ghana. Earlier, such boats had been permitted, and for women processors it had meant access to cheap fish. However, the government had disallowed this for fear that arms could be smuggled in this way.

**(x) HANNAH PATRICIA AWBAN
KORMANTISE, GHANA**

Hannah is a fish processor from the village of Kormantise near Saltpoint, about 18 km from Cape Coast in western Ghana. Kormantise, her mother's birthplace, has grown over the years and there are now about 1500 families living in the two sections of the village. Her mother processed fish and her father worked both as a fisherman and carpenter on a part-time basis. Later, as the fish began to diminish, he stopped fishing and worked only as a carpenter. Hannah has three sisters and two brothers. All of them studied only up to the primary level. She herself though had completed three years of secondary school, working to find the money to pay her way through. As she could not go further, she joined her mother in fish processing. Both her older brother and sister also went into the fisheries—her brother became a fisherman and her sister a fish processor.

Hannah later got married to a man working as an accountant in the Transport Corporation in Takaradi, the neighbouring town. However, after he found himself a second wife, Hannah returned to her parent's home with her three children. She earned her living through fish processing. Her husband died five years ago due to asthma and although she is only 49 years old she does not want to marry again. She says she is too busy with her work and social activities. However, she does find it difficult to support her children's education. Her daughter, now 20, is in the Cape Coast Polytechnique and she finds it difficult to pay for her fees, hostel charges etc. "But somehow, God helps me and I am able to find the money day by day", she says.

Hannah's son, after recently completing his training as an electrician, found a job in the Electricity Corporation in Accra. She thinks he can look after himself now. Unfortunately, her third child, a son, died two years ago at the young age of 17. She thinks it was due to a malarial fever that kept coming and going for about two months. He had been admitted in hospital several times for treatment and then suddenly he died. This was really a terrible shock and she finds it difficult to come to terms with it. Hannah is now alone, living in the house left for her by her father. She stays with the families of her brother and sister.

According to Hannah the fishing season starts in August and goes on till December. However, last year the fishing season was very bad and they hope it will be better this year. Hannah works as part of a small group of 8 women, one of whom is her sister. Four members of the group have put in money to build up a working capital. Hannah herself has put in 1,000,000 *cedi*¹¹ (approximately US\$150) and the others have put in about 500,000 *cedi* each. There are also four younger women in the group. The group has worked together for the past 8 years or more. While the older women take turns to do the purchasing and the sales, the younger women transport the fish from the beach to the site, a short distance. They also clean the fish. All the members then take turns to smoke the fish, since it is difficult to put up with the smoke for long periods.

¹¹ 7000 *cedi* = 1 U.S.\$

Hannah explains: “Earlier our group had two traditional smokers. Now we have four Chorkor smokers with around 40 trays, located in a shed. We got no help to construct these ovens. About six years ago a woman from an NGO introduced us to these smokers. After visiting the village of Chorkor, we got some masons and carpenters to construct the ovens for us. Subsequently we learnt to construct them ourselves as the masons asked for too much money. But we are still dependent on the carpenters for the trays.”

The only assistance the group has received is from the Agriculture Development Bank in Cape Coast. About six years ago, when the fishermen refused to sell them fish on credit any longer and their capital was insufficient, the group decided to approach the bank for assistance, and it was Hannah who took the lead. The bank manager agreed to support them provided they registered themselves as a group. Hannah then discussed this with the others and they decided to register. They voted for a president and secretary and Hannah was chosen as the secretary. At first there were 40 members in the group and each of them paid a membership fee of 1000 *cedis*. The sum of 20 million *cedis* given by the bank at an annual interest of 35 per cent, was then divided equally among the members. While each received a very small amount in the process, it was enough for a start. The group agreed to pay back the loan after selling their anchovies in the lean season. Hannah took on the responsibility of collecting the repayments, and, in the first year there was only one member who did not pay back. The other members had to pay for her. The group has been taking money regularly from the bank for the past five years and repayment has been good. However, the last fishing season was so bad that four women could not pay back. Again the group had to make good but the hope is that these women will make their repayments in the coming season or leave the group.

Hannah feels that the interest that the bank takes is really too high. She has also approached the Co-operative of Credit Unions, an NGO, for assistance. She has been told that according to the rules of the Union, to be eligible for a loan the group must first save money for six months. Even though this procedure is so cumbersome, the group may finally conform since this will help them get loans at lower rates of interest. Hannah says that the only other organization that helps women is the 31st December Women’s movement, but her village is not included in the selected areas in which this organization works.

According to Hannah they generally sell their fish in the Mankessim market, approximately a run of two and a half hours from her village. Sometimes they sell at the Techiman market. This trip takes them three days—leaving on a Wednesday and returning on Friday. Three to four women usually hire a truck together and pay about 20,000 *cedi* per basket. The women follow the next day by shared transport. The journey to Techiman is long and tiring—they leave at 8 or 9 pm and reach the market the following morning at dawn. Another market they visit occasionally is the Agbogbloshie (Tuesday) market in Accra. Here they usually sell in wholesale to other women who then retail it. They are paid back when they return to the market the following week.

However, since last year they have stopped giving fish on credit as they cannot afford it. In her group, the members take turns to go to the market to sell and the profits are later shared. There is generally no cheating or suspicion because everybody is aware of the selling price of fish. In case of problem they all sit together and sort it out. The group has worked well for the last 12 years. Says Hannah: “We are very strict with the younger ones that join. If they do not respect the elders and the rules of the group, they can be sacked. However so far this has not really happened. We did throw out two young girls at one stage. However, we took them back after their parents came and made amends. You see, we are a very respected group in the village and people know we will take no nonsense”.

The group purchases fish at their own beach. When there are no catches they find it very difficult. The women no longer get fish on credit, as before. Many women advance money to the fishermen to be sure to have some fish. Hannah herself has advanced money to three fishermen but as the same fishermen have also taken money from other women, she does not get all the fish they catch.

Hannah explains that it is the Queen mother who actually fixes the price of the fresh fish. The Queen is an experienced woman who comes from a family with several fishermen. She is, therefore, aware of what is a good price both for the fishermen and for the women. Once she fixes the price, all the fish sells at that particular price. The price changes depending on the catches, as decided by the Queen. The Queen also settles cases of conflict between the women and the fishermen.

The best period is when there are bumper harvests of anchovies. The women then buy in bulk and smoke the fish continuously day and night. The fish is then packed in big sheets of brown paper and left for 6-8 months. It is sold during the lean season when fish prices are higher, and this is their main source of profit. Hannah sometimes ferments the fish she get cheap and not very fresh. However, in some periods there is no fish and now she increasingly tries to work in her kitchen garden to grow some corn and vegetables for sale. She feels that they need to learn some other trade to be able to earn money through the year.

Hannah recalls that on the only occasion, two years ago, when she took the fish to sell outside the country to Togo, she incurred a big loss. At that time three of them had loaded a truck together. At the Togo border they had to change into a Togolese vehicle. They went to the big market near the port in Lomé as well as other markets close by. They tried to sell the fish but found that the rate in Togo was much lower. Finally they had to sell their fish at a loss. According to Hannah, if she had known the price of fish in Togo beforehand, she would never have gone.

Says Hannah: “We either bought the fresh fish at a much higher price or paid too much for travel since we had no experience. The unloading and the loading also cost us a lot of money. Moreover there were a lot of river fish at that time and market prices were low. We should have gone during the lean season but there was nobody to give us any reliable information. We spent almost three weeks on this entire expedition and it will take me

time to pick up the courage to do it again. But my companion has gone back again this year. I am waiting to see if she has better luck this time.”

A few years ago Hannah created another group in the other part of the village. There are 50 members in that group. Thus all the women processors in her community are now organized. Hannah says that while she does all this voluntarily, the women do not always appreciate it. Though they are very co-operative in the group and there are no major problems, she feels she does not get the appreciation she deserves. The group does not always contribute to her travel expenses when she goes on the business of the group. The only contribution is when she runs out of fish and a few of them, when requested, may give her a couple of smoked fish for her food for that day. According to Hanna, “It is not only that they do not contribute, but some of them also envy me thinking that I am some big person and therefore I am sometimes discouraged”.

As a group they meet every week on Tuesday, a fishing holiday. For those who do not have a valid reason for being absent, a fine of 1000 *cedis* is levied. The fine is 500 *cedis* for late-comers. The fund collected by the group in this manner is used for welfare activities, to help group members when they are ill or have some other problem.

Hannah remarks that she is now known and is invited to several meetings, both in Accra and in Benin, through the West African Regional Programme. She feels that this has been a wonderful experience as she has met women processors from other countries and has been able to learn much more about the problems within the fisheries sector. She regrets that she cannot speak French as she is keen to communicate with the Senegalese—the ones with the fish—and to establish trade links with them.

However, she realizes that this may not be easy as they ask for half the money in advance and the rest on delivery. This requires a lot of capital. She finds it easier to talk with the Nigerian women who come to meetings, but they do not have fish. However, she now has a processor friend—Gloria from Nigeria—and feels part of a bigger family. She is serious about learning French in order to communicate with the Senegalese. She tried explaining the problems they face during a WARP programme, and to seek assistance. However, as they do not have an office in Ghana, this is difficult. Says Hannah: “WARP got to know me through the Agriculture Bank because our group is dynamic and reliable. However, though they are an organization working to help small fishworkers, so far they have not been able to provide any assistance.”

“But I think things will gradually change. I have great faith in God. I do a lot of things through our Church, the Methodist church, and I think we can build good solidarity links this way. Moreover I am now in contact with TESCOD¹² and, with their help, I am really looking forward to going to the Fish Fair in Dakar. I cannot wait to get there even if my French has not improved. Once I am there I can see what fish they have and I can either buy some or give an order. I have been saving money for this but unfortunately, there was a huge storm a couple of weeks ago and the roofing of my shed blew off. I have to use all my money to repair this before the rain comes next month. Anyway, I am sure God will

¹² An NGO based in Accra, Technical Services for Community Development

help me. I want all our women to benefit from the fair so that we can have a little more money for our needs next year.”

(xi) AMAKAKRABA

ZIMBABWE SETTLEMENT, ABIDJAN

There is quite a big community of Ghanaian women living in the settlement of Zimbabwe near the port of Abidjan. Most of them are from Mori, a little fishing village in the western region of Ghana, though there are some women from other parts of Ghana too. They are here because fish is more readily available. Most of them are all divorced and are trying to make their own living.

Chatting with a group of women beside their empty smokers in this settlement is Amakakraba, popularly called Mammy. Mammy, around 60 years old, is a highly respected member of the community. The women propose her to talk about their life in this settlement. However, in true Ghanaian style, they all chip in and talk about their lives as migrant women fish processors.

Mammy explains that she hails from Mori, where she lived there with her husband and four children. However, about 20 years ago her husband, a fisherman, left her and she had to fend for herself. She thinks that this was because catches were declining and as her husband could not earn any money, he began to be rough with her. She found it very difficult after he had left especially since the children were still young. She needed to make enough money to feed and educate them and since catches in Mori were declining, she decided to migrate.

Says Mammy: “I had heard about a place across the border where a few other women from Mori had gone some years ago. So I collected some money, and when my sister was returning, I accompanied her with my youngest child. It was all new to me but because my sister protected me and gave me shelter, I was able to start my life here.”

Mammy explains that she soon started buying fish from local artisanal fishermen, mainly sardines, to smoke. She had to pay for the fish in cash and although she had some money of her own, her sister also helped her with some working capital. Initially she used her sister’s smoker. Later she was able to construct three of her own smokers and now she owns six. But this has not been easy as the land does not belong to them and they are often driven away by the police and mercenary landowners. All the women in the settlement are still using the open smokers made of tin drums. As against clay smokers, these are easier to dismantle during police crackdowns. Each drum costs 3,000 CFA and about five drums are required to make a smoker.

Most of the dwellings in this ‘slum’ are owned by Burkinabés. They live here with their families and rent out rooms or whole dwellings to Ghanaian women. The Burkinabé men smoke fish while their women either work at home or do other business. The Burkinabé women do not smoke fish and this amuses the Ghanaian women no end. There is little communication between these communities because they do not speak the same

language. The Ghanaian women do not speak either French or the local language though their children have begun learning French in the schools. The Ghanaian women, however, prefer that their children grow up in Mori in their own culture, and in cases where their families are willing to help, they leave their children there. Most of the women go home once a year during the three months of the lean season. Three years ago when Mammy went back to Mori, she had remained there for two full years as her daughter needed help with her children. However, as she could not earn enough money there, she came back to Zimbabwe.

There seems to be more fish in Abidjan and for at least three months of the year Mammy has to hire other local women to help her with the work. During bumper landings they even take the fish back to Ghana by truck, and this brings them good money. They hire specialized truck drivers for the purpose. However, transport costs and other payments (bribes) along the way, prove very expensive.

When the landings are small Mammy takes the fish to the Hadjema market herself. At other times there are male wholesalers from the Treshville market who come to buy the fish. For the last four years catches have begun to decline even in Abidjan and the women are forced to buy frozen fish from the big ships at the port. Mammy herself, however, has never bought frozen fish, as she does not think it smokes well.

Mammy explains that in this area the approximately 30 women that process fish have created a solidarity group called 'Unity is Strength'. The group has tried making representations to local authorities, requesting for working permits. The cost of each permit is 20,000 CFA a year and this they cannot afford as they have so many other expenses. Apart from food expenses and rent and water charges, they also have to pay for the firewood they purchase from the Burkinabés in bulk. At the same time they also need to send money home each month with whoever goes back.

Mammy and the other women say that they are now on the lookout for regions with more fish. They have heard about the Gambia from Mammy's grandmother, who had gone there several years ago and had returned with a lot of money. She had also brought back smoked and dry fish by ship to Tema. They would like to do the same but lack the ticket money to go that far.

According to Mammy though her life is very hard, she has grown to accept it. There is nobody they can turn to for help as they are always considered illegal workers in the country. There is a lot of violence in their neighbourhood as it is near the port, and it is difficult for them to move around freely. Their surroundings are extremely unhygienic although they do have access to piped water, which they pay for. She hopes for help from somebody, especially help to buy a ticket to the Gambia to get more fish!