

FISH TRADE IN AFRICA – ITS CHARACTERISTICS, ROLE AND IMPORTANCE

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Introduction

This chapter focuses on Africa and illustrates some of the ways in which fish trade affects development – with positive, negative and sometimes unclear outcomes. Although Africa is a minor player in global fish trade (Africa accounts for around five percent of global fish production and global fish trade), fisheries trade nonetheless has important local development impacts. Whilst some of those impacts are clear, others are under-reported and poorly understood.

An overview of fish trade in Africa including aspects not evident in official data is given, together with selected case studies that illustrate different dimensions of African fish trade. The conclusions focus on important development considerations for the sector.

Africa's fish trade – according to statistics

The official data indicate that Africa has been a net exporter of fish by value since 1985 (FAO 2009) since when the value of both exports and imports has grown in equal measure. Béné and Lawton's (2008) analysis of sub-Saharan Africa's

fish trade shows a net annual surplus in 1995–2001 hovering around USD 800 million or 2.5 percent of sub-Saharan Africa's trade surplus in merchandise exports (roughly USD 30 billion in 2006, World Bank 2007).

Yet, there is another side to this story. In volume terms, sub-Saharan Africa is a net importer. In short, Africa imports low value fish and exports high value fish. Béné and Lawton show an annual negative balance of roughly 600,000 tonnes (1996–2001). Delgado *et al.* (2003) projected an increase in sub-Saharan African imports of low value food fish, suggesting that the volume of imports would double between 1997 and 2020 (“most likely” projection). Nonetheless, there has been a marked decline in per capita fish consumption in sub-Saharan Africa since 1980s, reflecting stagnant or declining production, population growth and the upward trend in real prices of both domestic and imported fish.

Most of the recorded export trade is marine fish, including significant shrimp, tuna and sardine. Thus, 12 African countries have fish exports worth more than USD 1 billion (FAO data for 2006) and all but one of these exports mainly marine fish (the exception being Uganda, with its

exports of Nile perch fillets from Lake Victoria). Exported fish is caught by industrial and artisanal fleets. In Senegal, for instance, where seafood accounts for 37 percent of merchandise exports (FAO, 2006) the artisanal sector is an important source of export products. Likewise, much of Lake Victoria's Nile perch is caught by the small-scale sector. Nevertheless, the industrial fleets are also important (e.g. in the small pelagic fisheries of north-west Africa and in much of Africa's shrimp and tuna fisheries).

In Africa, aquaculture is not yet a significant source of source of fish production or exports (with the notable exception of Egypt, where it represents more than 60 percent of national fisheries production – Egyptian Aquaculture Taskforce 2007). Imports of low value food fish include tinned pelagics and low value frozen fish.

Twelve countries account for 90 percent of the value of all African fish exports: Morocco, Namibia, South Africa, Senegal, Mauritius, the Seychelles, Tanzania, Madagascar, Tunisia, Uganda, Mauritania, and Côte d'Ivoire. The official data indicate that in value terms, the largest African importers are: Nigeria, Côte d'Ivoire, Mauritius, Egypt, South Africa and Ghana – together representing 66 percent of total African fish imports (FAO data for 2006).

Important elements not apparent from the official data on fish trade

Informal cross-border trade

Intra-regional trade in fish is very important

in some parts of Africa – much of it “informal cross-border trade” (ICBT). It involves both marine and freshwater fisheries, including for example the Zambia-DRC¹ rift valley corridor (DRC production to supply the Copper Belt); marine fish from Ghana supplying the important Nigerian market; Mali's productive inland delta of the River Niger, with exports to neighbouring countries; and Mozambique, with a complex pattern of ICBT in fish (both imports and exports). Whilst the importance of this trade is increasingly recognised, there is still scant information on its volume, because in large part it escapes official trade records.

An interesting and important aspect is that these marketing chains can be very long and very resilient (e.g. in the face of insecurity or poor infrastructure) and, as a consequence, very important in inland and remote areas and often quite critical to food security. They sometimes reflect historic regional trading routes and the greater accessibility of cross-border markets, than domestic markets, where present day infrastructure may be heavily concentrated in coastal areas or in particular regions. Thus, a number of studies of ICBT conducted in the late 90s yielded the following observations:

- An isolated market in Niassa province in Mozambique offered dried/salted fish of different kinds and provenance, coming from as far away as Beira (1,100 km) and Metangula in Malawi (580 km); this diversity “...all supplied through informal channels, is a testimony to the dynamism of these networks” (Whiteside 1998, p. 17).

- Prawns (sent by refrigerated truck) were the

1. Democratic Republic of Congo (“Congo-Kinshasa”).

most important item of unrecorded trade in a study of informal exports from Mozambique to Swaziland; surprisingly fish was the fourth most important informal import into Mozambique from Zimbabwe (black mackerel originating from Namibia); and seafood (mostly fish) was the second most important export, after vegetables, from Mozambique to Tanzania (Macamo 1998).

- Dried fish was a major item of ICBT from Uganda to neighbouring countries (Coote *et al.* 2000), dried salted Nile Perch was traded from Tanzania to Rwanda and Democratic Republic of Congo, and fresh Nile Perch is informally exported by Ugandan and Tanzanian fishers to processors in Kisumu (on Kenya's Lake Victoria shores) (Coote *et al.* 2000).

The role of women in fish trade

Although fishing itself is dominated by men (women in Africa are nonetheless involved in certain types of fishing activity), women play an extremely important and often dominant role in much of Africa's domestic and intra-regional fish trade (e.g. Ghana's famous "fish mammies", see Ames and Bennett 1995). Continent-wide, they are involved in fish retailing, but in many places their role is much more influential, effectively setting prices and controlling trade by advancing credit, operating informal exclusive cartels and expertly navigating a network of fishers, buyers, service-providers and officialdom. These roles are particularly evident in West and Central Africa.

Important local markets with strong upward pressure on prices

The incidence of intra-regional trade is just one manifestation of the importance of local markets in Africa. Whilst a superficial appraisal might suggest that African fish traders would target international markets, the continent itself has robust and growing markets, which are often more accessible (geographically and institutionally) and more remunerative – particularly where fish is sourced in inland areas and for those who lack the financial capital, knowledge and networks needed to access extra-regional markets. In many of Africa's most populous regions (largely coastal, riparian and lacustrine areas) there is a long tradition of fish consumption, where historically fish has represented an affordable, "divisible" source of animal protein, which could be eaten fresh or in a traditional processed form (smoked or dried). In Ghana and DRC, FAO data indicate that fish provides 45 percent of available animal protein, largely from the marine fishery in the former but in DRC from its large freshwater resources. As capture fisheries plateau (and in some cases decline) and whilst fish farming is still poorly developed in Africa, there is strong upward pressure on fish prices. Moreover, with population growth and urbanisation, this market is growing and accessible and over the long term experiencing income growth. Current income levels in Africa combined with the dietary role of fish suggest that this is still a "luxury good" in much of Africa (i.e. demand will increase with income growth).

Case study

One case study is presented, the Nile Perch study, which illustrates the development trade-offs and ambiguity of Lake Victoria's export fishery. The discussion above points to the importance of

markets within Africa – and the conclusions that follow point up some of the implications this has for the focus of fisheries development efforts in Africa.

TRADING FISH OR LIVELIHOODS IN DEVELOPING COUNTRIES – THE NILE PERCH CASE

Cambria Finegold

Although the international fish trade brings macro-economic benefits to many poor countries, the micro-level impact is often more ambiguous. The events following the controversial introduction of Nile perch into Lake Victoria are illustrative of this. Nile perch was introduced in the 1950s along with four exotic tilapia species in response to the near-collapse of the Lake Victoria fishery (Geheb *et al.* 2007).

In the 1980s, Nile perch production boomed. Employment in fisheries and support sectors soared, and in Tanzania, the Nile perch was nicknamed “Saviour” following dramatic improvements in communities’ socio-economic status. The bulk of early Nile perch catches were consumed locally or processed artisanally (smoked, fried or salted) and traded locally and regionally.¹ Frozen fillets were first exported from Kenya in 1987, however, and by 1996 purchases by fillet factories accounted for approximately 75 per cent of Nile perch catches (Gibbon 1997).

The net benefits of the Nile perch production boom and export oriented fish processing have been hotly debated. Species diversity has declined dramatically, largely due to predation by Nile perch (Geheb, 1997), and about 300 species are believed to be extinct (Bokea and Ikiara, 2000). The massive increase in fishing capacity and effort following the Nile perch boom has also led to over-fishing in some areas, and an overall decline in catches, raising concerns about the sustainability of the fishery. While the boom has generated significant employment in fishing, the shift to factory-based processing displaced many who had been engaged in artisanal processing and marketing (Abila and Jansen 1997).

The food security impact continues to be the subject of much debate, with critics pointing to high levels of poverty, food insecurity, and malnutrition around the lakeshore (Bokea and Ikiara, 2000), and declines in per capita fish consumption since the early 1990s (Abila and Jansen,

1. This increased local consumption of Nile perch is largely attributable to the effects of the introduction of this top predator on stocks of locally preferred species such as *Haplochromis (furu)*, *Clarius (mumi)*, and indigenous *Tilapia*, whose availability declined precipitously

1997). It is unclear, however, to what extent these problems are attributable to the Nile perch fishery. Geheb *et al.* (2007) find “no evidence to suggest that [malnutrition] has a direct link with Nile perch export”, arguing that employment in the fishery could be expected to improve food security by bringing greater purchasing power to fishing communities, and that malnutrition is better explained by the fact that income is controlled by the men, while responsibility for feeding their families lies with the women. They also point out that malnutrition and poverty are hardly exceptional for East Africa, and that rates of malnutrition around the lake are actually lower than in the surrounding agricultural hinterland.² The argument that the export orientation of the fishery is to blame for malnutrition

is further discredited by the fact that nutritional status of fishing communities declined dramatically during the export bans of the late 1990s, as incomes crashed and women could no longer purchase the staple foods with which they had fed their families.

The overall picture appears mixed, therefore, with largely negative effects on species diversity and employment in artisanal processing and trade, positive effects on current account balance, government revenue, and employment in fishing, and nutritional impacts which at best have not managed to significantly raise the nutritional status of fishing communities above regional averages, and at worst are at least partly to blame for continued malnutrition along the lakeshore.

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2. Malnutrition measured by stunting in children under five. Rates of malnutrition on the Kenyan section of the lakeshore were also lower than the national average, though this was not true for the Tanzanian and Ugandan sections.

Conclusions – implications for fisheries development efforts in Africa

Fish supply – overall growth in imports and aquaculture but not in capture fisheries

Capture fisheries production has mostly levelled out and in some cases declined. Future growth in African fisheries supply is unlikely to come from capture fisheries to any significant extent. Africa is likely to see growth in imports, increasing interest in aquaculture (already evident in many countries) and efforts to reduce post-harvest losses where these are high.

Local markets – accessibility, informality, profitability and scale

Domestic and intra-regional markets are extremely important and growing in Africa. Imports and aquaculture are likely to target accessible urban (often coastal) markets, but suppliers of locally sourced fish (be it in fresh or traditionally processed forms, such as smoked and dried products) will still find local markets profitable. For Africa's many small-scale producers and traders, these are the markets that are most easily accessed, with less onerous standards, requirements and institutional arrangements than extra-regional markets. Whilst the latter may appear to offer higher prices, the costs in accessing those markets, including the infrastructure (cold chain and handling) needs, are likely to be significant.

Improve handling – reduce losses, regulate where strictly necessary, focus on real needs

Africa's fisheries draw considerable comment for their apparently high losses, although there is significant uncertainty as to their true scale (INFOSA 2007). However, where this contributes to a significant loss of export revenues and/or food of high nutritional value for local populations, those losses are indeed a cause for concern. Initiatives to improve handling, however, must take a critical look at what the real needs are: those in the high value extra-regional export market chain are, for instance, quite different to those needed for traditionally processed products important in local trade. Careful risk assessment and market analysis is needed before making significant investments in, for instance, cold chain infrastructure in relatively remote areas. Similarly, care must be taken to design regulatory interventions that facilitate trade (including those that safeguard product standards) and do not act as an impediment. Some recent proposals relating to uniform cross-border standards and regulation in African trading areas, could act as significant deterrent to local trade unless carefully designed to reflect the diversity in that trade and the needs of local markets.

Example interventions to facilitate the development of intra-regional and domestic trade

The implied focus on intra-Africa trade has a number of implications for development interventions.

- Recognise the growth in demand in local urban markets, including growing markets for fresh and frozen fish, whilst not neglecting needs in other areas, where traditional products still play an important role in livelihoods and food security. Careful participatory needs assessment and market analysis is needed to identify appropriate investments.

- Small-scale producers and traders, whilst not necessarily interested in co-operative enterprise, may still benefit from collective action in a number of marketing arena (e.g. access to transport, micro-finance, training, information, negotiation with large-scale buyers). Developing capacity to organise, focusing on the real needs of this largely informal sector, is an important building block in strengthening intra-regional trade. Women are important players in much of this trade and their needs and role should not be overlooked.

- Give careful consideration to micro-finance needs (including savings, as well as credit) and appropriate delivery mechanisms, borrowing from the now considerable experience in other sectors; financing has historically played a particularly critical role in fisheries and how its spoils are shared.² The needs and opportunities are constantly changing, however, reflecting the overall dynamism in this sector, including its informal elements.

- Market information is another important element in trade facilitation, but also requires very careful design if it is to be useful and sustainable³, Market information needs relate not only to relative prices in different markets, but also to improved information on preferred products and handling (dried, salted, or smoked fish, packaging, preferred fish size, type of cut/split for large processed fish, effective methods and materials for insulating fresh fish on ice, relevant regulations, and so on).

- Regulate only where strictly necessary, keep procedures simple and practicable, and publicise relevant information widely to reduce capacity for rent-seeking.

2. Artisanal fishers are often poor with uncertain, erratic and seasonal incomes, but have capital purchase needs (in the form of boats and gear) and day-to-day consumption needs. This has often led to an important role for traders in providing credit, which has significantly affected the terms of trade between the two parties.

3. Whilst this comment is true of any market information system, it is worth noting with fish that per unit (weight) prices are likely to differ depending on quality, time of day and size of fish, so that bald information without explanation or attention to this detail could be quite misleading.

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