

## The bushmeat trade and fishing licence agreements in West Africa

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*While fishing licence agreements can be shown to affect fish supplies in West Africa, the consequent effects for other protein sources are still very uncertain. Evidence from Ghana indicates that there is an interaction between fish supplies and bushmeat species populations, but the nature of this relationship is not well known. It is thus difficult to establish a clear, causal link between fishing licence agreements and bushmeat demand.*

### Policy Conclusions

- Fishing Licence Agreements can have an impact on fish supplies in West Africa, but the consequent relationship with other protein sources is much less clear.
- A link has been established between fish supply and wildlife populations, although whether this is a direct, causal link has not been established.
- The relationship between competing protein sources is poorly known, making it difficult to assess the potential impact of changing availability or price on consumer choice.
- It is not currently possible to establish a causal link between Fishing Licence Agreements and bushmeat demand, let alone for EU Fishing Licence Agreements in particular.
- Claims that EU Fishing Licence Agreements are directly responsible for depletion of bushmeat species populations in West Africa do not appear to be proven.
- What ever the nature of the relationship, there is need for greater coherence in EU policy, as a proactive measure, to ensure that the potential impacts on resources such as bushmeat are taken into account.

### Introduction

*'...the European Union together with South Korea and Japan has exported its excess fishing capacity to West Africa, and indirectly it's fuelling the bushmeat trade, which is devastating the forests...'<sup>1</sup>*

It has been claimed that EU fishery interests are contributing to the extinction threat to several, rare bushmeat species. It was stated that overfishing by EU vessels has so depleted stocks off West Africa that the artisanal sector now has little to catch in the inshore waters of countries such as Senegal and that Similar claims have been made for Ghana, suggesting that both legal and illegal fishing by EU and other vessels in the Gulf of Guinea has reduced domestic fish supply, and thereby, increased demand for bushmeat products. What is the evidence for such a relationship, and what, if any, are its implications?

### Fish in West Africa

Fish is an important source of high quality protein in West Africa and is the subject of a substantial trade, both within and between countries. Smoked and/or dried fish can be transported over considerable distances leading to a transfer of fish from the coast to inland areas<sup>2</sup>. Traditionally, this trade has been carried out by petty traders, predominantly women carrying smoked or dried fish, but with the development of improved infrastructure, frozen fish is now of increasing importance in inland areas. Additional transfer of supply in the region is by migrant fishers who catch and process fish in neighbouring countries for export to their own countries. The

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### Box One: Definitions

**Pelagic fish:** Fish such as sardinella and mackerel that spend most of their life swimming in the water column with little contact with or dependency on the bottom.

**Demersal fish:** Fishes living in close relation with the bottom and depending on it.

**DWF – Distant Water Fleets:** Fishing vessels which operate a substantial distance from their home country.

#### **FLA – Fishing Licence Agreements:**

- Legal agreements which allow vessels of one country to fish in the territorial waters of another country.
- Fishing licence agreements arise out of the United Nations Convention on the Law of the Sea (UNCLOS), Art. 62 of which requires that coastal states assess the allowable catch in their waters, compare that to the catching ability of their own fishing fleet and make any surplus available to distant water fleets through access agreements.
- Following the adoption of an Exclusive Economic Zone (EEZ) of 200 nautical miles by most coastal states, much of the world's fishery resources were brought under the direct control of coastal states, requiring DWF to negotiate access agreements for fishery resources within EEZs.
- Fishing Licence Agreements are trade agreements and payments are not necessarily tied into the development of the fishing sector nor are they necessarily required to be used by the recipient country in a matter compatible with the development or conservation objectives of the donor country. DWF nations have fished the EEZs of West African coastal states for many years, exploiting the rich fishery resources of the region.

highly productive fisheries of north-west and south-west Africa supply substantial volumes of fish to central and west African states through formal and informal channels with small, inexpensive pelagic fishes being the most important source of fish for poor consumers. Small pelagic fishes caught by EU vessels play a key role, contributing 700 000 tonnes to fish supply in Central Africa. West Africa imports substantial quantities of fish from outside the region (for example, only 40% of Nigeria's imports of 400 000 tonnes of frozen fish were supplied from within the region, the rest being imported, notably frozen mackerel and herring from EU and Norway). See **Box One** for fishing definitions.

### Bushmeat in West Africa

The importance of bushmeat and its role in food security in West Africa is poorly known and tends to be ignored in national statistics. Such data that are available suggest that bushmeat is of great local importance, both as a source of food and as a source of income. For example, data from DFID (2002) and Fa et al. (2003) show that bushmeat is a significant food in equatorial Africa, and that for some countries, bushmeat is the most important source of animal protein compared to domestic meat and fish (See **Box Two**). However, these figures disguise the strong variation in supply and demand within countries and the fact that different markets are served by different sources of supply. Many bushmeat species are over-exploited or their populations are at threat for other reasons, such as habitat loss. Additional pressure on the resources could further endanger some species, or push stable populations into instability.

### Fishing Licence Agreements in West Africa

Examination of the impact of FLA on West African coastal states has tended to concentrate on the effects of over-fishing on fish stocks including reduced fishing opportunities for coastal states' own fishing fleets and changes in fish population structure. The artisanal catching sector is usually reported as being most affected by the activities of DWF (see Failler, 2001 for a review of the impact of EU FLA in West Africa). Since most DWF target higher valued tunas or demersal resources such as snappers, shrimps and cephalopods, direct effects have historically been limited, as these are less in demand in West Africa than the cheaper pelagic fishes, such as sardinella and jack mackerel or imported herring and mackerel. However, a general reduction in demersal fish stocks off West Africa has had an impact on the coastal states' fisheries industries. By

### Box Two: The relative importance of fish and bushmeat in West Africa food supply

Country	Bushmeat supply <sup>1</sup>	Domestic Meat supply <sup>2</sup>	Fish supply <sup>2</sup>
Cameroon	233 963	225 000	125 000
Central African Republic	48 821	96 000	15 000
Congo DR	1 665 972	238 000	298 000
Rep Congo	189 234	45 000	50 000
Equatorial Guinea	12 937	n/a	7 007
Gabon	49 069	55 122	59 405

All data in tonnes per annum. Supply=Total Production + Imports – Exports

<sup>1</sup> Source: Fa et al. 2003

<sup>2</sup> Source: FAOSTAT <http://apps.fao.org/> Taken from food balance and fisheries databases for 2001  
n/a Not available

### Box Three: The relative importance of catches by EU and West African coastal states in FAO Sea Area 34 (Atlantic, Eastern Central) in 2001<sup>1</sup>

Caught by	Tonnes	% of total catch
EU vessels	471 643	12%
W African coastal states' vessels	2 587 841	68%
Total catch by all vessels	3 917 488	100%

All data in tonnes per annum. Supply=Total Production + Imports – Exports

<sup>1</sup> Source: Fa et al. 2003

<sup>2</sup> Source: FAOSTAT <http://apps.fao.org/> Taken from food balance and fisheries databases for 2001 n/a Not available

comparison, pelagic fish stocks appear to be in good shape, although there are signs of overfishing on stocks off Mauritania and Senegal<sup>3</sup>.

It is clear that FLA can have a significant impact on fish supplies, affecting both the quantity of fish available for local consumption and the market destination of landed fish; the main impact being on the supply and price of the higher value fishes which DWF target. However, the greatest proportion of the reported fish catch (68%) off West Africa is by the coastal states themselves (See **Box Three**) and the effect they have on stocks and fish catches, especially by the artisanal sector, is substantial. Data from FAO and from the EU indicate that EU vessels account for 12 % of the total catch off West Africa, which is targeted on the higher value species. However, 'pirate' vessels fishing under flags of convenience are believed to take a substantial quantity of fish which remains largely unrecorded (Greenpeace, 2001). Fishing by pirate vessels in the Gulf of Guinea is rife, although by its nature, impossible to quantify accurately.

#### Fish - bushmeat interactions

The combination of the impact of FLA, overfishing by coastal states' own fleets, increased exports and increasing population have combined to reduce per capita fish supply in West Africa and to reduce availability to the poor by raising prices for many species. This may have been mitigated to some extent by increased production and supply of other animal protein sources in the region, notably poultry, and by switching to vegetable proteins such as beans. What is not clear is to what extent any of these sources is interchangeable for any group of consumers, nor the factors which influence choice on any occasion. The links between fish and bushmeat are poorly known, in part due to inadequate knowledge of bushmeat supply, markets and consumption in most range states. More information is needed on the markets which bushmeat and fish serve, and the factors such as price and supply which determine consumer choice. While there is evidence that FLA do have direct impact on food security, linking this to demand for bushmeat is much more difficult. However, since fish is an important food in many bushmeat areas and is sold in markets alongside bushmeat, it is reasonable to infer that reduced fish supply could have an effect on increasing the demand for bushmeat. See **Box Four**.

#### EU policy, bushmeat and FLA

The Treaty of the European Union requires that the EU, and thus its Member States, do not adopt contradictory policies

### Box Four: The case of Ghana

Brashares *et. al.* (2004) proposed a link between fish supply and bushmeat species biomass at a national scale by showing that years of poor fish supply were correlated with relatively large declines in abundance of bushmeat species.

These authors also found support for this link at local scales: bushmeat and fish availability were closely related in 14 local markets in eastern, southern and northern Ghana from 1999-2003. In each of the markets surveyed, bushmeat volume and sales were greatest in months when availability of pelagic fishes was poor.

These results provide support for the notion that increased demand for bushmeat in West Africa is linked to reduced fish stocks in the Gulf of Guinea, but they shed no light on who is to blame for overfishing.

Catch data and a study of the fisheries post-harvest sector suggest that supplies of the key small pelagic fishes in Ghana are holding up, aided by a liberalisation of imports. FAOSTAT data for 2001 indicate that total fish supply was 551 000 tonnes, of which 186 000 tonnes came from imports, 325 000 tonnes came from Ghana's own pelagic fish catch and 23 000 tonnes from the demersal fish catch (such as sea bream, groupers and Dentex spp).

These figures compare well with those from 1991. However, growth of Ghana's human population by 50% since 1990 (15 to 23 million) has meant a general decline over time of per capita fish supply. Ghana has no current FLA, having instead a limited number of joint ventures supplying export markets.

No catch by EU vessels from Ghanaian waters has been recorded since 1990. In contrast, the Ghanaian industrial fleet is substantial, competes with the artisanal fleet for fishery resources and has been linked to decreased demersal fish stocks. Pirate fleets fish actively in the Gulf of Guinea, but their influence on fish stocks is nearly impossible to measure.

Further clouding the picture, recent variations in pelagic fish stocks available to the Ghanaian fleet have been linked by some observers to environmental changes in the Gulf of Guinea, rather than overfishing.

including policies towards third countries. This is now incorporated into the Common Fisheries Policy in COM (2003) 637 which introduces "Partnership Agreements" for fishing in third country waters to replace FLA. In the words of Fisheries Commissioner Franz Fischler, new generation 'Partnership Agreements' will seek to 'ensure coherence on sustainable development both in and beyond the Union'. MEPs have recently sought to ensure that any new FLA should not only be shown to be cost effective for the EU, but that they should also not conflict with the EU's development objectives, nor should they have a negative effect on sustainability. The Commission recognises that:

*'The specific objective of the European Development Policy is to foster Developing Countries Capacities to exploit their own marine resources, to increase local value added and to obtain the fairest prices for access rights to their EEZ by foreign fleets'*

*'Other European Policies like Research, Trade, Environment, contribute also their own objectives to the overall objectives of sustainable fisheries'*

There are still apparent contradictions, with the Fisheries Committee of the European Parliament requesting more funding to be made available for FLA and new opportunities to be sought, contrasting with a more cautious approach from the Development Committee which seeks to ensure greater coherence between the EU's development policies and the external aspects of the Common Fisheries Policy. MEPs have advocated a precautionary approach to FLA, noting that they should ensure the contribution to social and economic development in developing countries.

Removal of EU DWF from West African waters might not result in a net decrease in fishing effort as the fishing opportunities could be taken up by other DWF (under UNCLOS) or by increasing capacity from the coastal states' own fleets. Information from EU DG Fisheries indicates that where EU vessels have lost access to waters of a coastal state, no reduction in fishing efforts has taken place, and that the fishing opportunities may be taken up by vessels whose regulation and monitoring are more difficult than those of EU vessels. Under current conditions of high market demand for fish in the EU and the Far East and improved access to developed country markets, catches by coastal states may increasingly be directed to exports. Increased supply of fish to low income consumers in bushmeat areas would be by no means assured, even if all fishing by foreign fishing vessels were to cease.

### Endnotes

<sup>1</sup> see <http://news.bbc.co.uk/1/hi/sci/tech/2944796.stm> for the BBC article.

<sup>2</sup> see International Collective in Support of Fishworkers 2002 for a review.

<sup>3</sup> A range of documents describing the issues and arguments in more detail can be found on the websites of WWF-UK (<http://www.wwf.org.uk>) and the International Collective in Support of Fishworkers (ICSF <http://www.icsf.net>).

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Documents relating to FLA can be downloaded from the EU DG Fisheries website: [http://europa.eu.int/comm/fisheries/doc\\_et\\_publ/pub\\_en.htm](http://europa.eu.int/comm/fisheries/doc_et_publ/pub_en.htm)

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