

## ENHANCING THE ECONOMIC CONTRIBUTION OF FISHERIES TO WEST AND CENTRAL AFRICAN NATIONS

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### ABSTRACT

The fishery sector plays multiple roles in the national economies of West and Central African countries, including contributions to economic growth, employment, exports and tax revenues. A high proportion of these benefits are generated by the small-scale sector and contribute in various ways to food security and poverty reduction - essential elements of global development strategies as expressed in the Millennium Development Goals (MDGs). The paper argues that because of this diversity of roles a *\_one-size-fits-all\_* national policy will be inappropriate in most countries. There may be a need to set distinct policy goals and strategies for inland and marine fisheries, for example. In most cases, the current and potential role of small-scale fisheries in poverty reduction and food security is poorly recognized the sector consequently neglected in both fisheries and poverty reduction policies.

**Keywords:** Small-scale fisheries – West and Central Africa – Poverty/Vulnerability Reduction – Food Security – Economic Growth – Development Policies - Millennium Development Goals

### INTRODUCTION

The aim of this paper is to:

- Highlight the important role of the fisheries sector, and of small-scale fisheries in particular, in the economic and social development of West and Central Africa.
- Stimulate the commitment of national policy decision-makers and their development partners to include small-scale fisheries in development policies.
- Propose strategies that could increase the contribution of small-scale fisheries to poverty reduction and food security in the region.

### CONNECTING FISHERIES AND POVERTY REDUCTION

The fishery sector plays multiple roles in the national economies of West and Central African countries, some of which are not well documented by national statistical systems.

Nevertheless, these contributions are important for achieving food security and poverty reduction - essential elements of global development strategies as expressed in the Millennium Development Goals (MDGs). This focus on poverty reduction has been reflected in the programmes of multilateral financial institutions, most notably the International Monetary Fund and the World Bank. Since 1999, these organizations have made concessional lending, and subsequently eligibility to the Heavily Indebted Poor Country Initiative, conditional upon countries submitting Poverty Reduction Strategy Papers (PRSPs).

**Table 1. Contribution of fisheries to MDGs in Africa**

GOAL 1	Eradicate extreme poverty and hunger	<ul style="list-style-type: none"> <li>Income to 10 millions poor households through fish capture, processing, trade and allied industries</li> <li>Food security for 200 millions poor, strengthened through affordable, high quality food</li> </ul>
GOAL 2	Achieve universal primary education	<ul style="list-style-type: none"> <li>Indirect benefits through increased income for women and improved health of children</li> </ul>
GOAL 3	Promote gender equality and empower women	<ul style="list-style-type: none"> <li>Women strongly engaged in artisanal processing and trade, gaining income and power</li> </ul>
GOAL 4	Reduce child mortality	<ul style="list-style-type: none"> <li>Fish nutrients (such as fatty acids) improve neural development in the foetus and lower the risk of low birth weight, key factors in child mortality</li> <li>Child nutrition improved through supply of protein and minerals</li> </ul>
GOAL 5	Improve maternal health	<ul style="list-style-type: none"> <li>Improved nutritional status of women</li> </ul>
GOAL 6	Combat HIV/AIDS, malaria and other diseases	<ul style="list-style-type: none"> <li>Fishing communities are among the hardest hit by HIV/AIDS; progress here is vital for combating the pandemic regionally</li> <li>Affordable proteins and micro-nutrients help mitigate the impacts of disease among the poor and are essential for the effective use of drugs</li> <li>Incomes from fisheries enable the poor to obtain further services</li> </ul>
GOAL 7	Ensure environmental sustainability	<ul style="list-style-type: none"> <li>Good fisheries governance, such as through regulated small-scale fisheries, can contribute to sustainable aquatic resource management and provide lessons for water governance</li> </ul>
GOAL 8	Develop a global partnership for development	<ul style="list-style-type: none"> <li>Fish is a leading export commodity helping African nations to improve their trade balance, and offering opportunities for developed countries to promote and adopt good trading practices</li> </ul>

Source: WorldFish Center (2005)

PRSPs - which should evolve from a highly participatory and transparent consultation process - prescribe a combination of macroeconomic and sectoral policies consistent with poverty-reducing outcomes at national level. They are instrumental in strengthening donor coordination around the national policy priorities identified. It is therefore vital that the actual and potential contribution of fisheries to national economies be properly recognized in order that the sector be integrated into these poverty reduction strategies. In November 2005, of the 59 countries which completed either a full or interim PRSP, the majority (30) were from sub-Saharan Africa.

With recent projections suggesting that over 60 percent of the poor will be in rural areas by 2025, the current focus is aimed at dealing with rural poverty. Yet, while evidence indicates that the fisheries sector can contribute to improved livelihoods and the achievement of food security in many developing countries, the sector has often been neglected in national poverty reduction strategies.

#### **CONTRIBUTION OF SMALL-SCALE FISHERIES TO ECONOMIC GROWTH**

One important way by which the fishery sector contributes to national economies is in terms of **direct and indirect employment**. There are an estimated 10 million fishers in sub-Saharan Africa, 7 million of which are from West and Central Africa. These are mainly fishermen, fish processors and fish traders, but other derived jobs should be added to this figure.

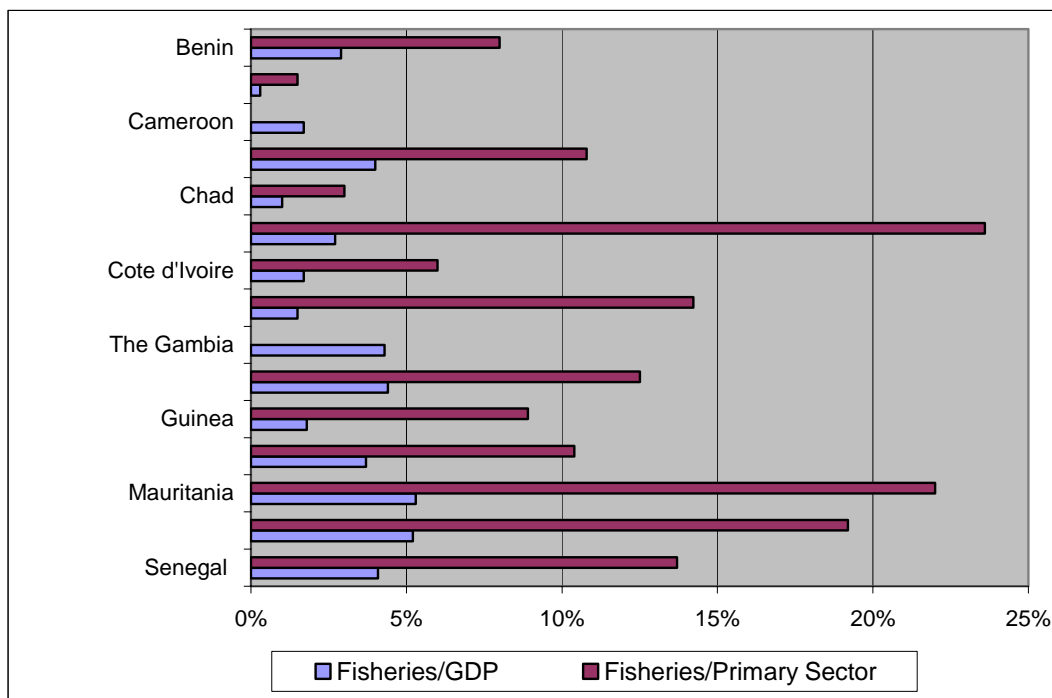
The post-harvest sub-sector provides women with many jobs, playing an essential role in the economic and social development. In Congo, for example, between 80 and 90 percent of the fish traders are women. This has an immense impact on household well-being, particularly the health and education of children.

**Value added** generated by the fisheries sector substantially increases national wealth. However, assessing this contribution in national accounts is generally limited to the primary sector, i.e. the catching or farming of fish through the first sale of fish products.

To obtain an accurate estimate of the total value added by a given sector, it is necessary to take into account all activities, including those related to the secondary and tertiary sectors. In the case of fisheries, the secondary sector includes processing activities (drying, salting, smoking, freezing, etc.) and the tertiary includes activities related to trade (of fresh, processed and imported products) and catering.

Recent surveys in SFLP countries show that the value added generated by the fish production sub-sector alone represents on average only 60 to 70 percent of the total value generated by the sector. The rest (30-40%) is derived from the secondary and tertiary sectors.

**Figure 1. Examples of fishery sector’s contribution to GDP**



Source: SFLP national studies carried out in 2005 and available on the SFLP Web site at: <http://www.sflp.org>. Data refer to 2003, except for Benin (1999), Gabon (2001), Burkina Faso, Cape Verde, Congo, Cote d’Ivoire, Guinean and Mauritania (2002).

**Fish exports** help national economies enter into international markets, particularly in high added value segments (crustaceans, cephalopods, etc.). When the trade balance in fishery products is positive, as is the case in Senegal, Mauritania and Gabon, fisheries sector is a net provider of currency to the national economy.

Between 2000 and 2003, the difference between fish imports (US\$ 1.2 billion) and exports (US\$ 3 billion) in Africa gave an average positive balance of US\$ 1.8 billion per year making the continent a net exporter of fish products.

Furthermore, better knowledge on the transboundary trade of fish products among African countries would likely show much greater volumes than those actually recorded in trade statistics. This is especially the case in inland fisheries for which data is generally poor so that their contribution to exports is often underestimated.

**Fishing licenses and fishery-related taxes** are an important source of income for many countries. These taxes typically apply on imported fishing inputs, such as fishing gear, engines and fuel, and on fish exports. On average, taxes represent approximately 5 to 10 percent of the value added from fisheries-related activities in the countries of the region.

As well as contributing to financing the costs of fisheries management, these financial resources can be used to ensure the development of basic social infrastructure and services (schools, health centers, etc.) both inside and outside the fishery sector.

Fishing agreements with the European Union provide 120 million euros per year to eight of West Africa's countries. The biggest share of this income (72%) is directed to Mauritania. A variable component of this contribution is allocated to actions to promote conservation of resources and sustainable development, which are called "targeted actions". In Senegal, the financial contribution received from the fishing agreement represents only 6% of the value of national fish exports but for a very poor country such as Guinea Bissau, this payment represents an essential contribution to the National Treasury.

**Table 2. Financial contribution under EU fishing agreements**

	Financial contribution (million euros)	Targeted actions (%)
Cape Verde	0,7	41%
Cote d'Ivoire	1,1	100%
Gabon	1,3	70%
Guinea	3,4	41%
Guinea Bissau	10,0	6,70%
Mauritania	86,0	5%
Sao Tome & Principe	0,6	40%
Senegal	16,0	18,75%

Source: European Commission (2005)

## CONTRIBUTION OF SMALL-SCALE FISHERIES TO LOCAL ECONOMIES

Both employment and revenue in the fisheries sector have induced multiplier effects in other sectors of the economy - highlighting the sector's importance to national economies as a whole. For example, when the number of fishermen increases or decreases, a "domino effect" is created. Fish processors and traders are obviously affected but so are boat builders, fuel providers, wood sellers and other less financially rewarding, often temporary and unrecorded jobs, which provide a real "safety net" for the poor. These include unloading fish from a canoe, breaking ice blocks, cleaning, packing and transporting fish. In many places, the catering sector is also very dependent on the good health of the fishery sector. Unlike most rural populations, fisherfolk earn cash income on a daily basis. This income is used to purchase goods and services from other sectors of the economy, which makes the fisheries an important engine driving local economic development.

In Cameroon, the National Accounts Office has created an income multiplier indicator, called the *social accounting matrix multiplier*. The results of a simulation show that fisheries activities have a strong multiplier effect on revenue (7.312) and therefore a strong "domino effect" on the rest of the economy. This means that an investment of 1 million CFA F in the fishing sector generates additional revenue of 6.312 million CFA F in the national economy.

**District government revenues** are produced by levying taxes on fisheries-related activities, notably at the landing site and marketing stages. These taxes are paid by the wholesalers, the retailers and the processors, and are variously called, “added value taxes”, “trading licenses”, “commercial taxes”, “municipal taxes”, “and packaging taxes”. Further, for small water bodies (rivers, small lakes, etc.), the local authorities, rather than the central state, collect revenue from a fishing license, thus supplying them with supplementary income. There are also taxes levied informally at the production level, which in most cases correspond to user rights for access to a fishery or for the use of a given fishing gear.

## **CONTRIBUTION OF SMALL-SCALE FISHERIES TO FOOD SECURITY**

Fish products contribute to food security both directly - by providing animal protein and nutrients - and indirectly, by providing a source of income to fisherfolk and the state.

While fish consumption per capita in Africa is less than half the global average (7.8 kilos vs. 16.3 kilos in 2001) this figure has to be seen in the context of the generally lower total protein consumption in the diets of the African population. Fish provides 18.6% of animal protein in Africa – above the global average of 15.9%. In the case of Mali, a landlocked country benefiting from important inland fisheries, average fish consumption is higher than meat, 5.4 kg vs. 4.7 kg per capita in 2001.

In countries such as Congo, Côte d’Ivoire, Gabon and Ghana, fish provide almost 50 percent of animal protein needs. It is often more accessible than meat or poultry for the underprivileged populations, particularly those close to fishing areas.

From a nutritional perspective, fish products are an important source of nutrients (protein and poly-unsaturated fatty acids), vitamins (A, B and D), minerals (calcium, phosphorus and iron) and oligo-elements (iodine).

Many countries rely on the incomes from fish exports to generate the hard currency they desperately need to import food staples for their population. When exports mainly concern high-value fish, this does not necessarily threaten the supply of lower-value fish on local markets. In Senegal, for example, only 15 percent of cheap small pelagic catches are exported (mainly to other African countries) compared to 80, 100 and 95 percent of demersal, cephalopod and shrimp catches, respectively; revenues from fish exports have generally exceeded the value of cereal imports (annual average of 275 millions US\$ and 217 millions US\$ respectively between 1995 and 2003).

## **IMPLICATIONS OF THE DIFFERENT CONTRIBUTIONS OF FISHERIES FOR POLICY FORMULATION**

Expressed in terms of objectives, the level of each of these different contributions cannot be maximized at the same time. Fisheries governance must make “hard choices” or compromises. A policy that seeks to grant access to fisheries resources to the maximum number of poor people as an occupational “safety net” will not be compatible with an objective of maximizing the present and future economic value of that resource. Promoting exports of fish will likely limit its supply on domestic markets. Moreover, the capacity of national governments to manage their fisheries is presently limited. In the absence of appropriate investment in this area, the resource base may be depleted in the future jeopardizing the overall social and economic benefits produced by the sector to the country.

**Table 3. Examples of the fishery sector's contribution to the national economy**

	Employment	GDP	Fish trade	Fish supply	Taxes
<b>Congo</b>	6.8% of the labour force is engaged in fisheries. 80% to 90% of fish traders are women	The contribution of the sector to GDP is 2.75%. Its share in the primary sector reaches 23.6%	37% of the national fish supply is provided by imports	With an average per capita consumption of 25 kg/year, fish provides 46% of animal protein	Taxes are mainly collected from fishing licences. Their contribution is marginal
<b>Ghana</b>	The livelihood of one in ten Ghanaians depends on fisheries. 300,000 people depend on Lake Volta fisheries	The sector contributes to 4.5% of GDP; The small scale sector alone contributes 3.4% of GDP	Exports amounted to 95m US\$ in 2002, representing 4.74% of total export earnings	Fish consumption per capita was 27.2 kg in 2003. 45% of animal protein comes from fish products	Fishing licences and market tolls, which represent less than 5% of local revenue
<b>Mali</b>	Provide 285,000 jobs, out of which 70,000 are fishermen. They represent 7,2% of national labour force	Fisheries related activities contribute 4 to 5 % of GDP	Official exports are marginal. However, 15-20% of the fish traded in Mopti in the Niger Central Delta is exported to other countries in the region	Fish consumption is estimated at 5.4 kg per capita per year, compared to 4.7 kg of meat	Taxes on added value represent about 10% of the total value
<b>Mauritania</b>	Small-scale fisheries represent only 10% of fish production, but provide 80% of the jobs	The fisheries sector accounts for 4-5 % of GDP, and 22% of the primary sector	Fish exports represent 70% of total exports. Half of it comes from small-scale fisheries	Average fish consumption is 4.3 kg/year but varies regionally – it is 17.1 kg/yr in Nouadhibou and 9.2 kg/yr in Nouakchott	From 2000 to 2004, fisheries contributed to 41% of budgetary revenues, mainly through EU fishing agreements (34%)
<b>Sao Tome and Principe</b>	Between 1999 and 2002, the number of fishermen increased from 3,310 to 5,296 (+60%)	Fisheries contributes to 5.2% of GDP and 19% of the primary sector	International fish trade is insignificant	Fish consumption is as high as 28kg/capita/year. Well above the world average of 15.9 kg	The main source of revenue is the EU fishing agreement providing 600,000 euros/year
<b>Senegal</b>	600,000 people are employed in the sector, i.e. 17% of the national labour force	Fisheries contributes to 4.1% of GDP and 13.7% of the primary sector	Fisheries are the leading export sector representing in value 37% of total exports	Fish consumption is estimated at 30.8 kg per capita in 2003. Fish provides 44% of animal protein	25% of the value added goes to the State. In Joal, a fishing commune, the sector provides 27.5% of the budget revenue

Source: 15 national studies carried out in 2005 with the support of SFLP and available on the Web site at: <http://www.sflp.org>

The growth and export-raising potential of the fisheries sector can be important for national policy strategies. Indeed, for African countries rich in fish resources, they represent a potential advantage over agriculture and livestock-based products for raising export revenues and increasing economic growth. If the price of an agricultural commodity goes up, other countries will respond by increasing

their supplies leading to a price adjustment which can be dramatic, as shown in the cases of coffee and cocoa. For fish, similar responses will not happen because of the limited nature of the resource. Moreover, the demand for fish in European and other developed countries' markets is likely to be quite inelastic since health conscious consumers are aware of the benefits of healthy and fish-based diets.

However, the issue of how these resources should be used in the best possible way is not straightforward. From a policy point of view, there may be very different scenarios. In the case of a country where livelihoods and consumer interests are limited, the policy challenge is that of sustainable fisheries management and export promotion. In other countries, the scope for wealth maximization needs to be balanced against the livelihoods and consumer interests in the fisheries sector. If the government decides to promote sales of a higher share of the fish catch in international markets, there will be spill over effects on local fishermen and domestic consumers. For a given fish production, higher exports will put upwards pressure on local fish prices which is likely to benefit fishermen while harming domestic consumers.

In many West and Central African countries, a high proportion of the economic benefits from fisheries are generated by the small-scale sector. Policies encouraging industrialization and export promotion can undermine these benefits and the increased revenues from the industrial sector may not always compensate for those losses.

### **POLICY DIRECTIONS TO INCREASE THE CONTRIBUTION OF FISHERIES TO POVERTY REDUCTION AND ECONOMIC GROWTH**

The sustainable harvest of fish stocks has ecologically-determined upper limits. Within those limits, there is scope for increasing the contribution that fisheries make to poverty reduction and economic growth. In some cases, current contributions to poverty reduction are less than they could be, because the resources are already overexploited and harvests are reduced. Often, too much capital and labour is invested in resource extraction, relative to the value of the output. In these cases, improved fisheries management can enhance the contribution of the resources to poverty reduction. There are also cases where current contributions to the different elements of poverty reduction are very high but may have to be decreased. For example, current levels of exports may exceed the capacity of the resource to sustain the necessary levels of catch.

With these caveats and constraints in mind, there remains a key requirement for policies that encourage appropriate fishery sector development for poverty reduction.

#### **Identifying the role that the fisheries sector can play in poverty reduction, food security and economic growth**

The fishery sector is dynamic and reactive to its local, national and international environment. The policy formulation process should build on the various existing roles that the fishery sector plays in the national economy. One useful concept to guide policy formulation is to ask the question: Given the size and value of the resource (potential or actual) how can the fishery sector provide the greatest contribution to national poverty reduction?

In most countries, a "one-size-fits-all" national policy will be inappropriate because different fisheries play, or could play, different roles in poverty reduction and food security. There may be a need to set distinct policy goals and strategies for inland and marine fisheries, for example. In this respect, the decentralized governance system represents an opportunity to put such a policy into practice.

**Table 4. Examples of how resource characteristics and national context may influence pro-poor fisheries policy directions**

<b>Resource characteristics and national context</b>	<b>Policy orientation for maximizing contribution to poverty reduction</b>	<b>Trade-offs</b>
Large, productive, high value, low local demand	Maximizing the rentable value of the resource and generating income from fishery agreements	Loss of value added components; large investment in fisheries assessment and enforcement needed
Large, productive, low value, high local demand	Managing the fishery for its contributions to employment, local multipliers and domestic nutritional demand	Low sectoral economic efficiency (high labour input costs relative to financial output), total rentable value of resource remains low
Limited resources of low value	Fishery can act as a safety net, to provide supplementary seasonal or emergency incomes to the poor	The fishery provides little net contribution to poverty reduction beyond sustaining the livelihoods of those who access the resources; total rentable value negligible

Regional Economic Commissions such as ECOWAS<sup>1</sup>, UEMOA<sup>2</sup> and CEMAC<sup>3</sup>, and the fisheries commissions, like SRFC<sup>4</sup> and COREP<sup>5</sup>, can also be active in promoting regional strategic goals for the fishery sector.

**Ensure a fair representation of the fisheries sector in poverty reduction strategies** at the macro- (national), meso- (departmental/district/regional) and micro- (local) levels.

Once policies to enhance the contributions to poverty reduction have been identified, it is important to ensure that the fishery sector is represented in poverty reduction policies.

In most cases, the current and potential role of small-scale fisheries in poverty reduction and food security is poorly recognized in the region. Following national studies carried out with SFLP methodological support, several actions can be considered to increase awareness of the role of the small scale-sector in poverty reduction:

- to improve the national accounts, in particular, integrating the secondary (processing) and tertiary sectors (marketing and catering);
- to carry out livelihoods studies and sectoral value chain analysis to identify the distribution of benefits and multiplier effects in terms of employment and revenue;
- to develop appropriate methods and operational tools to better assess the pro-poor income distribution and growth potential of the sector;
- to better target the fishing dependent communities in household surveys aiming at poverty assessment.

<sup>1</sup> Economic Community of West African States

<sup>2</sup> Union Economique et Monétaire Ouest Africaine

<sup>3</sup> Communauté Économique et Monétaire de l'Afrique Centrale

<sup>4</sup> Sub-Regional Fisheries Commission

<sup>5</sup> Comité régional des pêches du Golfe de Guinée



These actions may require strengthening of the collaborative ties between the ministries responsible for fisheries, the PRSP and finance, local/decentralized governments, development partners, and NGOs and other members of civil society.

In many West and Central African countries, SFLP studies have highlighted that the small-scale sector provides the larger share of the fishery sector's contribution to poverty reduction. Specific actions to enhance the sub-sector's contributions could include:

- establishing a national Task Force for poverty alleviation in fisheries;
- strengthening the organizational capacities and participation of fishing communities in the policy formulation and implementation processes;
- assisting small-scale producers to access both national and international markets;
- addressing factors that make small-scale fisherfolk vulnerable and currently reduce their capacity to contribute to poverty reduction and participate in resource management and fisheries policy making (*see Policy Brief N°1 in this series*).

In essence, the key policy message is that the contributions of fisheries to poverty reduction are often undervalued and that many of the benefits are derived from the small-scale sector, often neglected in both fisheries and poverty reduction policies.

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