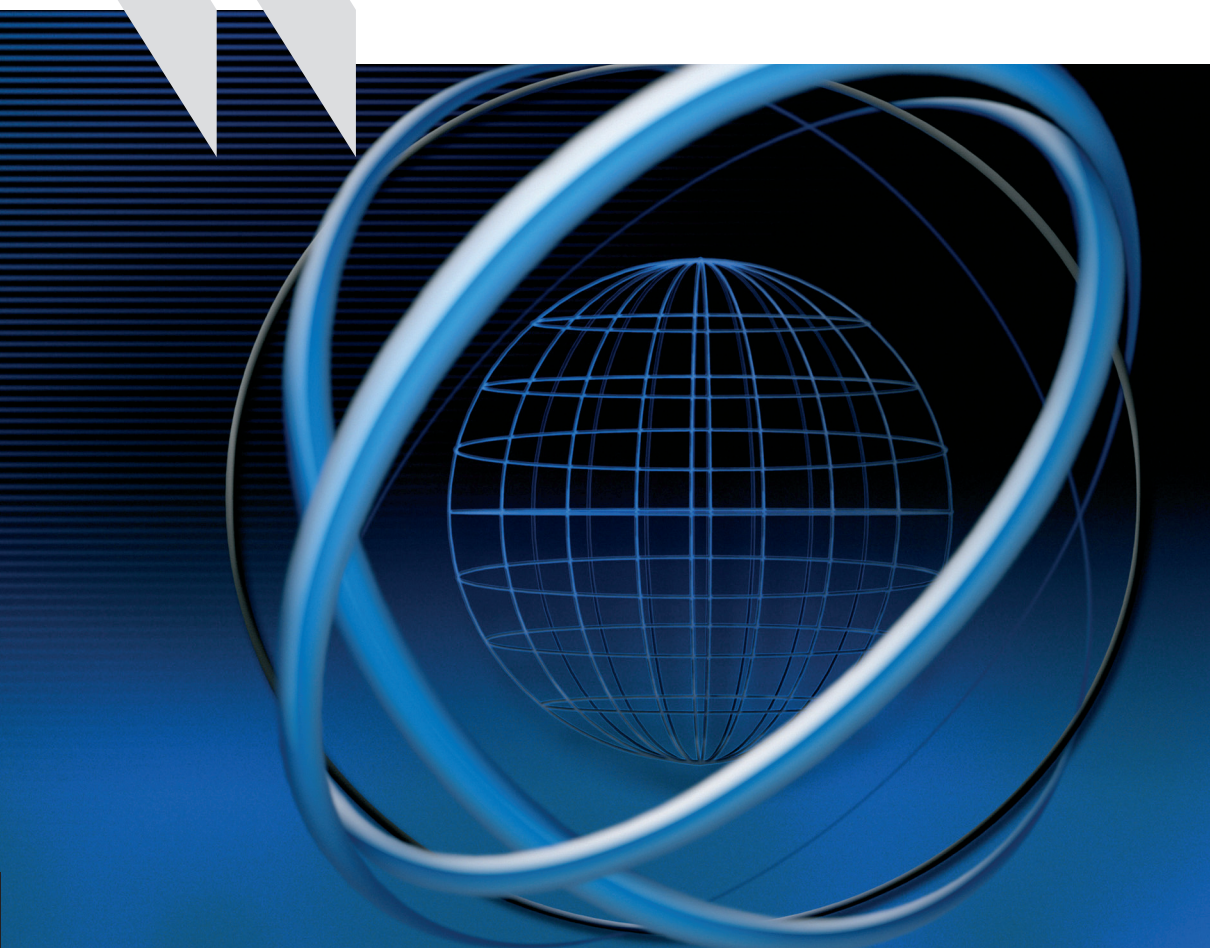
The Development Dimension

Fishing for Coherence in West Africa

POLICY COHERENCE IN THE FISHERIES SECTOR IN SEVEN WEST AFRICAN COUNTRIES



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Policy Coherence in the Fisheries Sector in Seven West African Countries

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Foreword

Fishing activity in West African countries is of paramount importance as a critical source of economic, social, environmental and cultural value for West Africa's growing population of almost 300 million people. Yet today, West African countries are facing the threat of depleted wild fish stocks as the region serves growing global demand while at the same time tries to develop an economically viable fisheries sector at home.

Balancing international, regional and national priorities between the long term sustainable development of natural fisheries resources and immediate economic gains from global market access present regional decision-makers with difficult policy choices. In addition, policy-makers do not sufficiently take into account the spillovers of existing fisheries trade policies and access agreements or joint ventures on other policy areas, for example on coastal management, food security and local livelihoods.

These competing policy interests can result in the mismanagement, degradation, and over-use of fisheries, which can be exacerbated by ongoing illegal fishing. This has serious consequences for human security, local employment and the region's medium and long-term development perspectives.

The OECD has been examining the issue of policy coherence for development in fisheries for several years. In 2006, the OECD Fisheries Policies Division, in partnership with the Sahel and West Africa Club at the OECD and a regional non-governmental organisation ENDA Diapol/REPAO, commissioned a study which takes a developing country perspective on the issue of policy coherence in fisheries. The aim of the study, which is presented in this report, is to apply the OECD policy coherence for development analytical framework to the fisheries situation within a regional African context. The usefulness of this framework is illustrated through an analysis of seven West African

countries which together make up the Sub-regional Fisheries Commission. Key areas for action by international, regional and local partners are suggested in the report, including the need for a multi-stakeholder dialogue on policy coherence as a priority-setting exercise.

Acknowledgements

The report presented in this book has been written by Thomas Binet, a consultant for the OECD Fisheries Policy Division, with contributions from OECD, SWAC and CSRP colleagues. The development of the report was coordinated by Sara Minard, Sahel and West Africa Club, and Papa Gora Ndiaye, ENDA Diapol/REPAO.

The author and coordinators would like to especially thank Carl-Christian Schmidt, Head, and Anthony Cox, Senior Economist of the OECD Fisheries Policies Division, who actively supported the idea to conduct this analysis on the West Africa fisheries sector, and Raili Lahnalampi, Economist and Chief Advisor, OECD Policy Coherence for Development Programme. In addition, we would like to thank Patrick Love of OECD Publications for his valuable assistance with the publication processing. Finally, we would like to thank the OECD Committee for Fisheries which, recognising the potential impacts that OECD Member country policies can have on developing country fisheries, has contributed to place the issue of policy coherence for development at the centre of the global fisheries management debate.

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Executive Summary

The search for coherence in fisheries policies is a priority for West African countries, given the issues around managing depleting fish resources that often result in huge tensions between stakeholders at national and regional levels, either to access the resources or the markets. Fisheries management is an issue of prime importance in this region of almost 300 million people where fisheries can represent up to 15-17% of national GDP and up to 25-30% of export revenues, employs around 7 million, and provides up to 50% of total animal protein intake of the region's population while sustaining local livelihoods for coastal communities.

In view of the major challenges for the future of West African fisheries, Enda Diapol/REPAO (Fishery Policies Network in West Africa), the OECD Fisheries Policy Division and the Sahel and West Africa Club (SWAC/OECD) engaged in a partnership to conduct a joint analysis on policy coherence in fishery development policies in the seven CSRP (Sub-Regional Fisheries Commission) member countries in West Africa. The structure of the analysis was therefore based on an analytic framework developed for the OECD Committee on Fisheries (see Neiland, A. (2006) and OECD, 2006) on the issue of policy coherence in fisheries. In addition, we relied heavily on data from six case studies developed by ENDA Diapol/REPAO and WWF (Cape Verde, Gambia, Guinea, Guinea Bissau, Mauritania and Senegal) entitled "Trade liberalization and sustainable management of fishery resources" as well as on data from Sierra Leone from work done by the United Kingdom's Department for International Development (DFID) on sustainable fisheries management in Sierra Leone.

The objective of this report entitled "Fishing for Coherence in West Africa: A joint analysis on policy coherence for development in fisheries in the seven CSRP countries in West Africa" for Enda Diapol/REPAO, OECD Fisheries Policy Division and the Sahel and West Africa Club

was to develop an initial comparative analysis based on specific field data to provide a clearer understanding of the stakes related to the issue of fisheries policy coherence and to contribute to the development of a more detailed and cross-sectoral analytic framework for decision makers and producers working in West Africa's fisheries.

The local realities for fishing populations in West Africa include few alternative employment opportunities and overfishing, especially of local species of high commercial value, and demonstrate the complexity of the policy coherence issue in the sector for developing countries. For example, illegal fishing costs the region hundreds of millions of dollars in lost revenue while expanding fisheries trade, access agreements and private joint ventures can be in direct conflict with efforts to promote sustainable fisheries management, etc. In addition, few countries in the region have publicly available lists of fishing licenses/permits which makes monitoring the level of fishing activities difficult. According to recent studies by the University of British Columbia, the fishing activity has tripled since the mid-1970s along the Northwest Atlantic African coast while the demersal catch has remained the same at 2 million tonnes. In 2002 the biomass of demersal stocks in the region has been reduced to a quarter of its level in 1950, thus signaling an alarming trend in overfishing.

The report helps to explain the need for simultaneous national and regional answers to address these challenges to fisheries resources management. In particular the report shows how a deeper sectoral analysis of policies at the regional level can be extremely useful in improving our understanding of the extent of policy inconsistencies within West African fisheries sectors and between development and trade policies.

Chapter 1 is an introduction to the analysis and Chapter 2 provides an overview of the fisheries sectors in CSRP countries (the seven countries that make up the Sub-Regional Fisheries Commission). Chapter 3 introduces the concept of policy coherence as it is employed in the report and its importance both within the OECD and West African contexts. Chapter 4 presents a comparative perspective of policy coherence between fisheries in OECD member countries and those in non-member countries. Its main objective is to highlight the broad characteristics of respectively developed and developing countries which in turn provide an analytical foundation for a more in-depth analysis. Chapter 5 presents the challenges of fisheries policy coherence for development in West Africa. It provides a complement to the more

general analysis in Chapter 4, detailing the challenges for policy coherence as they apply specifically to West African countries in six policy domains: environment, technology, economic aspects, contributions of the fisheries sector, social aspects and governance. Finally, Chapter 6 provides the main results of the comparative analysis and offers some suggestions for areas needing further research and policy dialogue.

The conclusions highlight a number of shared challenges that can be managed with greater coherence if better coordinated at various levels. At the same time, it is clear that natural resource management in general requires a flexible approach that should not be confined within narrow institutional rigidities. In the fisheries sector in West Africa, the prevailing situation should incite regional coalition building. For this region, institutions like ECOWAS or CSRP can be leaders to promote policy coherence. Institutions and political decision-makers will need to demonstrate clear political will with regard to the fisheries sector in the coming years. They must nonetheless maintain a level of autonomy by using an approach based on concentric policy circles. They will need to rely on multi-stakeholder dialogue to better define policy priorities while using an eco-systems based approach to inform their actions.

The stakes are high for West African countries, and yet there is no alternative but to address the challenge of improving policy coherence in a concerted manner in light of the complex political and economic policy environment. Public authorities must first have a clear understanding of their own national fisheries policies in terms of priorities, strategies, objectives and planning while at the same time incorporate regional considerations. The role of the private sector in adhering to the regulatory environment and in building local capacity for value addition is equally of paramount importance. One overarching similarity to the situation found in OECD countries, particularly European Union countries, is that West African countries will also need to better define their national and regional priorities in the light of the key strategic issues for policy coherence mentioned in this report.

We hope this joint report serves as a useful tool for decision-makers as they work together with development partners on regional and national policy analysis with the aim of improving coherence for a dynamic, efficient, sustainable and resilient fisheries sector for West Africans today and in the future.

Normand Lauzon, Director SWAC/OECD
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Moussa Mbaye, Director General, Enda Diapol

Chapter 1. Introduction

The Millennium Development Summit, the Monterrey Consensus in 2002, the Doha Round, the World Summit on Sustainable Development in Johannesburg in 2002 and the other major meetings on development over the last five years have made the policies that mobilise the authorities and other actors concerned with development a key element of international community debates. Drawing up and implementing participative, "coherent" or "coordinated" public policies applied to all levels (from local to international) in order to achieve development goals has become essential to meeting sustainable development objectives in West Africa, especially the Millennium Development Goals. The aim of policy coherence is to *harmonise national and regional development goals in the different fields in order to make the economic systems more efficient*.

In West Africa[1], fishery resources are a key component of the countries' economies. Fisheries represent between 10-30% of State budget revenues in several West African countries. Between 1993 and 1999, fisheries agreements brought in 30% of government revenue in Guinea-Bissau, 15% in Mauritania and 13% in Sao Tome (OECD, 2005). Exports of fish products from Africa to the European Union are worth USD 1.75 billion today and are the leading agricultural export product. Hence the importance of exporting fish products for several West African countries.

Around 10 million people work in the fisheries sector in Africa, including 7 million in West and Central Africa. Fishing has many benefits: it contributes to economic growth, provides a sustainable living for a large part of the population and is one of the main sources of food protein. The fisheries sector, including the emergence of aquaculture, is

[1] Here West Africa includes the ECOWAS countries as well as Mauritania, Chad and Cameroon.

unquestionably one of the main components of the future development of West African countries. However, for years this sector has been threatened by the excessive exploitation of fishery resources. This has had an impact on the state of stocks, but also on the economy of fisheries. Scientists agree that the fishing effort is far too intensive and that West African fisheries are in danger. With this in mind, policy coherence is a key element in the sustainable development of fisheries and aquaculture.

With the aim of implementing fisheries policies that reconcile an increase in revenues, the sustainable management of fishery resources and food security in West Africa, the issue of coherence must be approached from different angles:

- The coherence of sectoral fisheries policies.
- The coherence of fisheries policies with other sectoral policies, including trade, economic development and the environment.
- The coherence of national policies in the fisheries sector: especially policies on safety at sea, human resources. This mainly implies ensuring the coherence of goals pursued and actions implemented in the sector.
- The coherence of fisheries policies with international policies and conventions.

In order to ensure that sectoral fisheries policies are coherent the goals of the different sectors concerned with fisheries must be clearly identified and non-contradictory in their implementation. For example, it is difficult to achieve the goal of reducing the fishing effort while continuing to subsidise the modernisation of production for an increase in productivity. The modernisation of production tools and an increase in productivity have a considerable impact on the fishing effort and therefore on the depletion of fish stocks. In addition, the benefits of these policies for coastal countries are not always obvious.

In many cases, the governments of West African countries explain fishing agreements by the level of financial compensation received. But, at the same time, it is generally acknowledged that better fisheries management in these countries could provide States with even greater financial benefits than those provided by fisheries agreements.

Likewise, in order to promote coherent (efficient and integrated) fisheries policies, it is important to work towards the sectoral coherence

of fisheries policies as well as of other sectoral policies implemented in the fields of trade, health, environment and economic development, as these sectoral policies are complementary and mutually influential.

For West African countries, this quest for coherence is a priority issue in a context in which resources are becoming increasingly rare, creating tensions between actors at the national and regional levels in terms of either access to resources or to markets. For this reason, coordination and dialogue in the implementation of national and regional policies are essential.

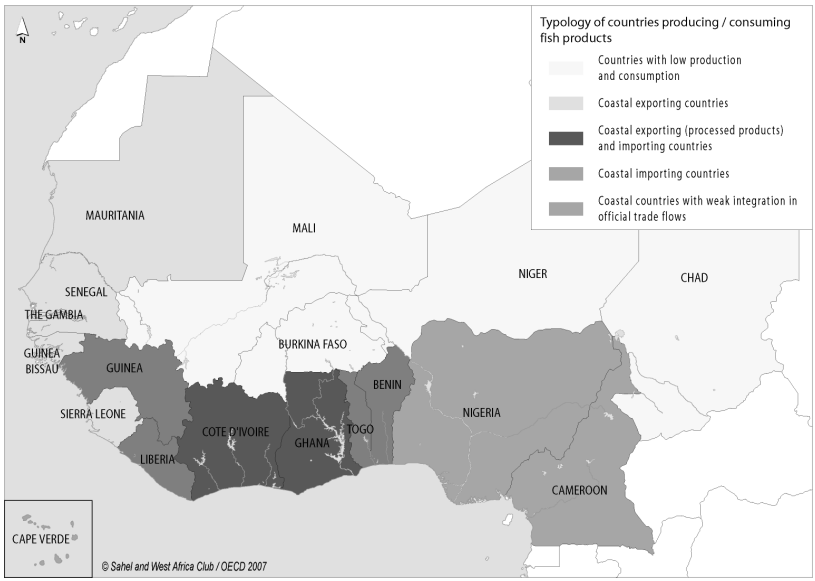
In this sense, regional fisheries organisations such as the Commission Sous Régionale des Pêches (Sub-Regional Fisheries Commission – CSRP) have a key role to play in coordinating and monitoring coherence, especially in the framework of negotiations on fisheries agreements. Their aim is not to negotiate in the place of countries, but to ensure compliance with certain principles by defining minimum conditions for access to fishery resources.

Using the analytical framework developed by the OECD on this subject, the methodology of this analysis, as outlined by Enda Diapol, SWAC and OECD Fisheries Policy Division, is based on case studies (Cape Verde, the Gambia, Guinea, Guinea-Bissau, Mauritania and Senegal) in the fisheries sector and employing the SWAC's regional approach. ENDA Diapol, which has worked with WWF to carry out studies in West Africa on the subject of "trade liberalisation and the sustainable management of fishery resources", provided an initial foundation for analysis with quantitative and qualitative elements on policy coherence or incoherence in the fisheries sector. These studies have shown that the lack of coherence in sectoral policies (especially fisheries, trade and environment) and intra-sectoral and national policies is detrimental to the sustainable and efficient management of the fisheries sectors in West Africa. In this context, the Sahel and West Africa Club (SWAC) and the OECD Fisheries Policy Division decided to worked with ENDA Diapol and the CSRP to help them address one of the priorities in the fisheries sector, policy coherence, by providing not only an analytical framework adapted to the local context, but also an action framework based on the facts and realities in the field in order to improve the coherence of fisheries policies.. The tools provided by these country studies and the SWAC's regional approach has provided a means of linking the OECD's general process of analysing the subject of policy coherence with the specificities of West African fisheries. This document has been prepared for use by local decision-makers as well as

OECD member countries, especially by the OECD Committee on Fisheries, as well as all actors concerned by the sustainable development of fisheries in West Africa.

Chapter 2. Regional review of West African fisheries[2]

Map 1. Typology of West African countries in terms of fishery products

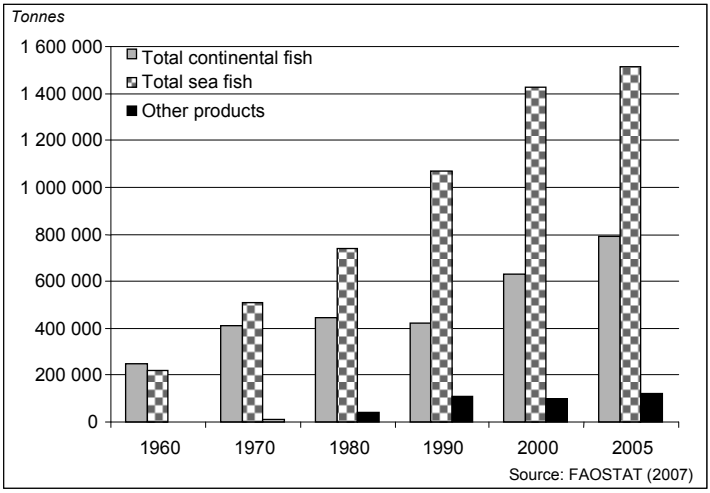


West African marine fisheries have long been connected to international markets. European fleets have fished the West African coasts for several centuries and some have even maintained a continuous presence there since colonisation. However, while the colonial period was marked by the development of the domestic market and of trade with the colonising country, independence was followed by a period of

[2] This part of the report (Regional review of fisheries in West Africa) was inspired by the SWAC/ECOWAS Atlas on Regional Integration in West Africa "Fisheries" chapter written by Karim Dahou under the direction of Laurent Bossard, Deputy Director of the SWAC/OECD: http://www.atlas-ouestafrique.org/

rapid integration into international markets that transformed the sector and led to very high growth in production and exports.

Figure 1. Fisheries production in West Africa



Reaching a maximum of 300 000 tonnes in the early 1960s, fisheries production in ECOWAS countries was estimated at 1 854 000 tonnes in 2000, or 1.4% of the world total. It should be pointed out that: first, marine fisheries production stands at 1 390 000 tonnes, or 1.6% of the world total; second, with Mauritania, this production is closer to 2 million tonnes[3]; third, if China is excluded, marine fisheries production stands at 68 million tonnes, situating West African production at around 3% of the world total; and finally, fourth, this percentage should be considerably increased for demersal fish, which are massively exploited by industrial and small-scale fleets, both national and foreign.

[3] It is essential to include Mauritania in the West African region where fisheries are concerned for many reasons, particularly: the inclusion of this country in the economic partnership agreement between ECOWAS and the European Union; its participation in the sub-regional fisheries commission (CSRP), along with Senegal, the Gambia, Guinea-Bissau, Cape Verde and the Republic of Guinea; and the existence of a well-known climate phenomenon, upwelling, a cold current supporting considerable stocks of small pelagics, from Southern Mauritania to Guinea.

These considerations therefore determine the main challenge for the future of West African fisheries. West African countries must succeed in ensuring the sustainable production of their demersal resources through improved exploitation and management in the context of increasing demand from developed countries.

The West African fisheries sector employs at least 1.5 million small-scale fisher folk, almost 10% of the world total, while several million people depend on activities directly or indirectly linked to fishing (ship owners, wholesale fish merchants, processors, transporters, mechanics, etc.). It is therefore clear that fisheries play a crucial role in West Africa at both the economic and social levels, as well as for food security.

2.1. Coastal countries and continental countries

The history and geography of the region, along with the evolution of the world market, have given rise to diverse structures and objectives in the different countries of the region. In this sense, it would be difficult to apply a uniform approach to all West African fisheries. In this domain spatial localisation, the influence of the climate or the relief, population dynamics, and the particularities of the colonial period and the manner in which integration into the international economy took place can all account for the considerable differences among countries in terms of both the quantity and quality of available resources and the ways in which they are used.

West Africa can be divided into three country groups. First, there is a division between coastal countries and landlocked countries. In terms of production volumes, the differences are already considerable. This is due not only to differences in the relative abundance of resources, but also the fishing methods that are used.

Coastal countries have resources that have long been consumed on the international market, which attracted the interest of European demand – especially during the colonial period – and led to the capitalisation of the sector by local and foreign ship owners. This resulted in remarkable development and innovation, which, instead of instigating a crisis for artisanal fishing or its replacement with industrial fleets, helped to strengthen the sector, especially in countries with a long history of fishing, such as Senegal and Ghana.

Catch levels then rapidly rose, increasing from less than 300 000 to almost 2 million tonnes (if we include Mauritania) between 1960 and

2000. Senegal, Mauritania and Ghana alone represent almost three quarters of the effort, with a production level varying between 1.3 and 1.5 million tonnes per year. Comparatively, the production levels of landlocked countries are far lower. In fact, the total production of Mali, Burkina Faso, Niger and Chad is less than 300 000 tonnes. Furthermore, the trade value of the species caught is less than that of marine caught fish. Inland fisheries in Sahelian countries do not therefore present the same issues as in the coastal countries, either in economic terms or as regards food security.

The differences opposing certain fishing "powers" and countries with a shorter tradition, a smaller coastline, less abundant resources, or resources of lower trade value, generally prevail over the elements of comparison within a particular group. A distinction can therefore be made between three regional groups: CSRP coastal countries, other West African coastal countries and inland countries.

2.2. CSRP countries

The sub-regional fisheries commission (CSRP) is an intergovernmental organisation created on March 29, 1985 by means of a convention. The Commission includes seven member States: Cape Verde, the Gambia, Guinea, Guinea-Bissau, Mauritania, Senegal and Sierra Leone. The Commission's headquarters are located in the Republic of Senegal. These countries have long faced the full glare of the international spotlight on fisheries. The reason for this is simple: due to their exceptional climatic and ecological conditions[4], they have abundant resources, especially so-called "noble" species or high trade value species (see Annex 3). However, since the end of World War II, it is the development of the international market for fishery products, strongly centred on these products, that has "drawn" the production of the sector as a whole, including production for the internal market. This has resulted in considerable pressure weighing on the main stocks of demersals, crustaceans and cephalopods.

[4] Upwelling, the presence of canyons that enhance its effect, large continental plateaux with rich rocky habitats, numerous estuaries and mangroves that provide natural refuges and spawning grounds, etc.

Map 2. CSRP countries

In a context of increasing international demand for fish[5], where the globalisation of fisheries activities and the threats they entail are resulting in the emergence of a global opinion on this subject, it is no surprise that they have attracted the attention of the international community. This is why CSRP countries have long been of interest to international non-governmental organisations and institutions, which have assessed or criticised the impact of fisheries agreements on the stocks of resources exported, measured the abundance indices for these stocks and financed a number of projects aimed at influencing the breeding conditions for these resources.

Senegal and Mauritania are by far the leading producers of fishery resources among the members of the CSRP. Senegal is the oldest fishing power in the region. It has a powerful small-scale fleet with several centuries of experience, which has proved its capacities for economic and technological adaptation in recent decades. This fleet's production reaches almost 350 000 tonnes, placing it far ahead of the industrial fleet, whose landings barely exceed 100 000 tonnes. Fishing represents a significant share of the country's GDP and directly or indirectly employs some 600 000 people. It also provides the population with 75% of its animal protein requirements[6]. Furthermore, fishery products are the main export resource in the country and represent, at over USD 250 million, around one third of its external sales. It is thus clear that the structure of fishing in Senegal, as the result of traditional practices, can be characterized by at least three main objectives: providing jobs in a country hard hit by unemployment; food security; and exports or foreign exchange. To this should be added the objective of protecting the environment and the resources exported in a context in which they are

[5] Especially in the three main developed markets – Japan, the United States and the European Union – which alone represent almost three quarters of global trade in fishery products.

[6] With an annual consumption of 27 kg of fish per person, Senegal is one of the biggest consumers in the world.

subject to fishing pressure exceeding – according to all estimates – the level compatible with maximum sustainable yields.

As regards its fisheries policy, **Mauritania** is in a different position to that of Senegal. In particular, it is not subject to comparable food security and employment constraints. In these conditions, it is easy to understand why the debate on exports or licences granted to foreign ship owners does not raise the same level of concern in both countries. In reality, Mauritania, which historically lacks a small-scale fleet and has fewer fishers than Senegal, is primarily interested in maximising the added value of an activity that represents around a quarter of its GDP and half of its exports. Its production exceeds 500 000 tonnes, but almost 95% of this figure is caught by foreign fleets. Mauritania could undoubtedly benefit more from its fishing activities if it contributed more to these catches, but the lack of experience and the need to call upon foreign labour limit the ability of its operators to directly invest in production. Attempts have been made, especially through the creation of joint ownership companies, but these remain limited. On the other hand, there is nothing to prevent this country from increasing landing taxes or investing more in processing and packaging its production. Above all, Mauritania faces the same challenge to protect the resources that are subject to the greatest fishing pressure as its neighbouring countries.

Despite its small size and smaller coastline – only 70 km long –, the **Gambia** enjoys considerable fishery resources that benefit from the flow of fresh water into the Gambia river estuary, which attracts marine species for feeding and reproduction. Although national production remains low, barely exceeding 40 000 tonnes[7], fish remains a basic source of the Gambian diet. With a consumption of 26 kg/year/person, the Gambia is at an equivalent level to Senegal and reaches twice the world average, which, for a developing country, is somewhat exceptional. Furthermore, although the stock of demersals – estimated at 22 000 tonnes, a respectable volume given the length of the coastline – is globally over-exploited, as in most of the neighbouring countries, the Gambia has abundant pelagic resources – between 165 000 and 217 000 tonnes according to estimations and seasons – which are largely under-exploited.

[7] As with most West African countries, an accurate assessment is nevertheless made difficult by the large number of non-landed catches, either because of fisheries agreements and licences officially and publicly granted to foreign ship owners, or because of the illegal distribution of fishing titles by public officials, or because of illegal catches made by industrial or small-scale vessels of foreign origin.

The estimation of stocks and particularly of catches in **Guinea-Bissau** poses problems that are difficult to overcome. Due to the civil, political and military conflicts that have shaken the country for many years, evaluation and assessment efforts have been discontinued and have only succeeded in gathering partial data. Moreover, catches landed in the country only represent a very small part of the fishing effort developed in Guinea-Bissau's exclusive economic zone (EEZ). In addition to official fisheries agreements (with, among others, the European Union, Senegal, China and Côte d'Ivoire), the unofficial distribution of licences has been strongly stimulated by the disintegration of the State, attracting numerous unscrupulous ship owners. Furthermore, Guinea-Bissau lacks the means to measure catches truly made by licensed ships, or to inspect illegal catches. Despite these obvious limitations, the potential of Guinea-Bissau's EEZ is estimated at several thousand tonnes for prawns, between 15,000 and 30,000 tonnes for demersal production and over 100,000 tonnes for small pelagics. The majority of small-scale fishing is carried out by foreign fishers – especially Senegalese – mostly working in the region of the Bijagos Islands. This can be explained by both their equipment and the level of skills accumulated. Although difficult to verify, the scope of activities of numerous vessels, both industrial and small-scale, indicates that the situation prevalent in neighbouring countries, that of over-exploitation of demersal stocks and the availability of small pelagic stocks, also applies to Guinea-Bissau.

Fishing in **Guinea** historically developed under the influence of small-scale foreign fleets, especially Senegalese and Ghanaian. Although indigenous communities have gradually turned to this activity, the Guinean fisheries sector today remains dominated by fishers from Ghana, Senegal, Sierra Leone and Liberia. This mix clearly demonstrates the strategic position of the Guinean fisheries sector, at the crossroads to the Gulf of Guinea and the countries of the Sahelian upwelling. At just above the world average (almost 14 kg/year/person), Guinean fish consumption remains lower than that of the Senegalese, Ghanaians and Gambians, while presenting considerable differences between the coastal regions (20 kg/year/person) and the forest regions (4 kg/year/person). Guinean catch potential is nevertheless high, with stocks of pelagic resources varying between 50 000 and 200 000 tonnes, potential deep-water stocks of between 35 000 and 40 000 tonnes, between 2 000 and 4 000 tonnes of prawns and stocks of cephalopods standing at between 5 000 and 12 000 tonnes. The actual production level, reaching around 120 000 tonnes, is nevertheless difficult to estimate. Although the flight

of resources from Guinean fisheries is probably not as high as in Guinea-Bissau, it is nevertheless considerable, in terms of both volume and value. How else to explain the fact that with a stock of demersals, crustaceans and cephalopods representing about a third of that of Senegal, the contribution of Guinean fish exports is over 100 times smaller than that of Senegalese exports? Through fisheries agreements, the sale of licences, fines and property rental, etc., fisheries have often been the second largest revenue item for the State, after the mining sector.

Cape Verde is characterised by its narrow continental shelf and the depth of its waters. This explains why of a global potential estimated at between 33 000 and 42 000 tonnes/year, coastal demersals (3 000 – 5 000 tonnes) and pelagics (4 500 – 6 500 tonnes) represent only a small minority, while tuna stocks (between 25 000 and 30 000 tonnes) appear to be relatively high. This stock particularly attracts the interest of foreign fishers, with 112 ships – over 90% of which belong to the European Union – authorised to fish in the EEZ in 2002. One of the major constraints on the operation of foreign vessels nevertheless remains the lack of surveillance of fisheries activities. Barely 10% of the foreign vessels operating in the Cape Verdean EEZ declare the catches they make. Cape Verdean fishing also plays an important role in terms of food security given that annual fish consumption stands at 23 kg/year/person. Finally, it seems that there are considerable possibilities for developing the processing industry, especially for tuna, which nevertheless comes up against problems of meeting European standards.

Sierra Leone has a long tradition of small-scale fishing which explains why it fishes off many coasts along the Gulf of Guinea. Still today, Sierra Leonean fishers are present in most of the neighbouring countries, especially in Guinea. The civil war of the 1990s in fact confirmed the tendency for Sierra Leonean fisheries to operate outside the country. The industrial fleet is made up of several trawlers, including prawn trawlers, owned by nationals or chartered, as well as a foreign fleet established under different joint companies and fishing different stocks (prawns trawlers, trawlers, long-line fishing boats, etc.). There is also a dynamic small-scale sector, counting some 30 000 fishers, who produce 70% of the fish consumed locally. With a fish consumption level of around 12.5 kg/year/person, Sierra Leone is in line with the world average, making fishing an even more important activity in terms of food security given that farming and cattle rearing activities have been hard hit by the conflict. Although its official production level stands at

60 000 tonnes – a figure that is probably under-estimated given the potential and the accumulated experience in terms of fisheries – Sierra Leone under-exploits its catches. The main obstacle is the lack of a port complex in Freetown, which would provide a means of operating landings and exports in an official framework.

2.3. Other coastal countries

Fisheries in **Liberia** present similar characteristics to those in Sierra Leone, but in higher proportions. They have a high potential, which is exploited even less due especially to a longer and more intense civil war. Although Liberia has a wide continental shelf whose sustainable potential was estimated at around 180 000 tonnes before the war, national production does not exceed 15 000 tonnes per year. Furthermore, although fish consumption stands at around 7 kg/year/person, the conflict has devastated farming and livestock rearing to such an extent that fish products nevertheless meet 65% of animal protein requirements.

The fisheries sector in **Côte d'Ivoire** has not developed at the same rate as other primary activities in the country, especially farming. Catches (industrial and small-scale, marine and inland) reach a yearly level of around 75 000 tonnes. The industrial fishing fleet is mostly comprised of trawlers and sardine boats and represents a product of around 30 000 to 40 000 tonnes, largely dominated by pelagics. Côte d'Ivoire counts around 10 000 small-scale fishers scattered along the coastline, for which around 90% are of foreign origin (especially Ghanaian). Small-scale marine fishing represents a production of around 10 000 tonnes, a level far below that of lake fishing (almost 25 000 tonnes[8]). There are also some inland fisheries, but the level of capture is not very high. The existence of relatively strong solvent demand at the regional level – at least until the beginning of the cycle of political violence into which the country entered in early 2000 – explains why Côte d'Ivoire has traditionally compensated for its relatively low production with a high level of imports (around 260 000 tonnes). Thus, national fish consumption remains high, at 17.6 kg/year/person. Furthermore, imports include significant quantities of tuna for canning factories in Abidjan. Indeed, it is worth noting that the geographical situation and the quality of services provided by the Abidjan tuna port

8 The most recent Ivorian fishing statistics date back to 2001.

make it the second largest tuna port in the Atlantic Ocean, with a production volume of 110 000 tonnes (compared to 230 000 tonnes for Victoria in the Seychelles). Exports, which reach a volume of around 100 000 tonnes for a value of almost USD 140 million, represent an important source of revenue for the country.

Ghana has long been one of the main fishing countries in West Africa, with one of the two most experienced and developed small-scale fleets, along with that of Senegal. Small-scale fishing alone is responsible for two thirds of catches, with the rest down to industrial and semi-industrial fishing. Although its production level stands at 450 000 tonnes, the country imports an additional 200 000 tonnes, which – given the relatively low level of its exports, reaching a maximum of 50 000 tonnes – makes it the largest consumer of fish in the sub-region, with a level of 29.7 kg/year/person. The sustainable potential for small pelagic catches is estimated at 180 000 tonnes, while the tuna fleet has considerably increased its capacities over the last 15 years, reaching and exceeding production levels of 80 000 tonnes. Demersals, estimated at around 40 000 tonnes on average, are subject to considerable pressure. Catch volumes have in fact exceeded 50 000 tonnes in recent years, leading to fears of a serious collapse in production. Inland fisheries represent almost 20% of national production.

Fisheries represent not only a major challenge for Ghanaian food security policy, but also a considerable source of external revenue and a key sector for employment. Indeed, fish provides two thirds of Ghanaian animal protein requirements. Additionally, although the volumes exported are considerably lower than those of Mauritania, Senegal or even Côte d'Ivoire, they mainly comprise canned tuna, which has a high added value and which brings the country between USD 80 and USD 100 million per year. Finally, the number of fishers engaged in marine fishing activities is estimated at 150 000, with almost 500 000 related jobs (processors, wholesale fish merchants, etc.). Furthermore, the number of people making a living from fishing activities is estimated at around 1.5 to 2 million people.

Togo and Benin have relatively limited fishery resources. This is explained by the small size of their coasts and continental shelves, their sandy seabeds and the lack of upwelling. The exploitable potential for sea fish in Benin is only 12 000 tonnes per year and around 400 tonnes per year for prawns. Inland fisheries represent around three quarters of production. In Togo, the figure stands at 23 000 tonnes. The majority of catches in both countries are salted and dried. Average annual per capita

fish consumption is identical in both countries, at around 12 kg. The exploitation of inland fisheries seems to be of greater interest to these States than that of their marine fisheries.

Although it is the most populated country and the principal market in the sub-region, **Nigeria** does not have a fishing tradition on the same scale. This explains why, despite having a relatively long coastline, national production stands at 380 000 tonnes and why, in spite of the high level of imports (230 000 tonnes), Nigerian annual per capita fish consumption (5.8 kg) is the lowest of all the West African coastal countries. In particular, Nigeria makes very little use of the considerable tuna stocks in the Gulf of Guinea, unlike Ghana and Côte d'Ivoire. Despite the length of its coasts, the narrow continental shelf limits the stocks of demersals, whose potential is estimated at around 30 000 tonnes. Most of the production is therefore made up of small pelagics, which supply a relatively dynamic small-scale processing sector. Above all, Nigerian fishing represents an important activity in terms of employment, with 500 000 fishers on the coast and 200 000 inland.

2.4. Inland fisheries

In **Mali**, fisheries production varies according to the level of the two major rivers that cross the country: **the Senegal and the Niger**. It reaches an average of almost 100 000 tonnes per year. Although Malian fish consumption is relatively low (8 kg/year/person), fishing represents a high-employment activity, either directly for fishers themselves (73 000) or indirectly for the half a million people concerned by fishing (processors, net sellers, wholesalers, middlemen, etc.). Fish caught is either sold on urban markets – especially in Bamako –, exported in small quantities to Burkina Faso and Côte d'Ivoire (1 000 tonnes), or consumed by fishing families, as is still the case for the majority.

Fishing activities in **Burkina Faso** are carried out in reservoirs (which represent 73% of waters) and rivers. Burkinabe fish production stands at the relatively low level of 8 500 tonnes, while national annual per capita consumption is only 1.8 kg. Most fishers are in fact migrants from Mali, Nigeria, Ghana, Togo and Niger. Given that catch potential is estimated at nearly 20 000 tonnes per year, there seem to be considerable possibilities for increasing production.

Niger is characterised by a low level of fish consumption (0.7 kg/year/person) due to the fact that three quarters of an already small production (around 20 000 tonnes) are exported (smoked, dried, salted or fresh) to the neighbouring countries, especially Nigeria. Fishery products nevertheless play an important role in covering protein requirements for fishing families.

The volume of catches in **Chad** is estimated at around 100 000 tonnes per year, two thirds of which come from the two main rivers that cross the country – the Logon and the Chari – and the remaining third from Lake Chad. Like other West African countries, Chad presents questionable fishing statistics that cannot be used to precisely measure the share of this sector in GDP, estimated at between 3 and 10%, depending on the source. It is, however, quite likely that over 300 000 people are making a living from Chadian fishing. Fishers alone are estimated at 176 000. Despite being in the minority (almost 17 000), professional fishers catch a substantial share of the product. They are mostly foreign fishers from Niger, Mali, Ghana and Benin. This explains why half of Chadian production is exported to neighbouring countries and why annual per capita consumption barely reaches 6.9 kg.

Chapter 3. General approach to the concept of policy coherence[9]

3.1. General definition of "policy coherence"

"Ensuring policy coherence means making certain policies are coordinated, complementary and non-contradictory." Weston and Pierre-Antoine (2003)

According to Forster and Stokke (1999), coherent policies can be defined as policies whose objectives, within any given policy framework, are internally consistent and attuned to objectives pursued within other frameworks in the system – as a minimum these objectives should not be conflicting; where strategies and mechanisms are attuned to the objectives, they should, as a minimum not conflict with the objectives or the intentions and motives upon which these are based; and when the outcome corresponds to the intentions and objectives, it should, as a minimum not conflict with these.

Robert Picciotto (2004), former Director General of the World Bank Operations Evaluation Department, put forward a definition during the committee on international development organised by the commission on Africa and policy coherence for development. In his view, policy coherence above all consists in causing no harm, while ensuring that the achievement of international development goals is not undermined by policies that are primarily linked to other goals. Secondly, policy coherence aims at seeking potential synergies and win-win scenarios, where policies can enable development goals to progress while ensuring other goals are achieved.

9 This chapter is based on previous work on the topic of policy coherence within the OECD: Neiland (2006), OECD (2002a), OECD (2002b), OECD (2006).

For Hoebink (2001), in terms of thoughts or views, logic and coherence are synonymous with the lack of internal contradiction. The term "policy coherence" describes the lack of contradictory effects on the goals or expected results of policies. This can be interpreted in two ways: in the strict sense, the fact that the goals of a policy implemented in a particular field are not undermined or thwarted by actions or activities in this field; in the broad sense, the fact that the goals of a policy implemented in a particular field are not undermined or thwarted by actions or activities by public authorities in this field or in other fields of public action.

3.2. Policy coherence for development

The concept of policy coherence has mainly been used in the context of sustainable development, development cooperation and aid, and poverty reduction policies. The donor community, particularly through the OECD Development Assistance Committee (DAC), has played an essential role in promoting this concept and in drawing up guidelines as to its applicability in assessing donor performance. The DAC's main objective is ensuring that donors' policies across a broad range of fields at best strengthen, but at least do not undermine, poverty reduction efforts (Weston and Pierre-Antoine, 2003).

3.3. International aspects of the policy coherence issue

The issue of policy coherence is at the centre of a number of international debates. At the conclusion of the Uruguay Round (1994), it was agreed that the WTO would cooperate with the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD) to ensure greater coherence when drawing up world economic policy. This aim was reiterated in Doha (2001). In Monterrey (2002), the consensus document stressed that it was essential that the United Nations, the World Bank, the IMF and the WTO "address issues of coherence, coordination and cooperation" in the international monetary, financial and trading systems in support of development, while recognising the need "to continue to improve our domestic policy coherence through the continued engagement of our ministries of development, finance, trade and foreign affairs, as well as our central banks" (para. 52, 69, 70).

In Europe, the treaties of Maastricht (1992) and Amsterdam (1997) first set out under international law the need for coherence between development policies and other policies: "The Community shall take account of the objectives [of its development policy] in the policies that it implements which are likely to affect developing countries." (Article 178 of the Treaty of Amsterdam). While this article only applies to the Community and not to Member States (which are nevertheless required to serve the interests of the Community under article 10), but it is an important point of reference.

Many developed countries are implementing or drawing up policies and procedures aimed at improving policy coherence; Canada, Finland, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States have been active in this field. A number of developing countries have focused on Poverty Reduction Strategy Papers (PRSPs), while others have opted for different mechanisms, *e.g.* the World Bank's Comprehensive Development Framework (CDF), the United Nations Common Country Assessment and the United Nations Development Assistance Framework (CCA/UNDAF), or a sectoral approach.

As regards the African continent, the concept of policy coherence for development was also examined during an expert committee of the Economic Commission for Africa in Addis Ababa in 2003. The role of mutual accountability and policy coherence was reiterated. In this sense, the New Partnership for Africa's Development (NEPAD) establishes itself as a very important development initiative because it was started by African leaders themselves and stems from the intention of African countries to set their own development agendas and to ensure the coherence of policies implemented. The NEPAD "Fish for all" Summit held in Abuja, Nigeria, on 25 August 2005, was the first event held by African heads of State on fisheries and aquaculture with the aim to draw attract attention to the vital role played by this sector in Africa. The Summit called upon "the international community to provide the financial and technical support that is required to implement sustainable African fisheries, including aquaculture, through aligned and harmonized partnership arrangements and in pursuance of NEPAD's vision and principles for action"[10].

[10] www.fishforall.org (http://www.fishforall.org/ffa-summit/C_Eg/Abuja%20Declaration%20(English).doc).

3.4. General sources of policy incoherence

The main sources of policy incoherence are divided into four broad categories, as indicated in the box below. Many political decisions have an impact on action in support of development and play an important role. There is general agreement that political will is in fact the most decisive factor in policy coherence (see Moore and Putzel (1999) for a general overview of the policy and development issue). This applies to both developed and developing countries (which may compromise partnerships between countries). Information on the impact of development policies on other policies, and knowledge of these impacts, is essential. However, it is difficult to analyse and assess the causes and effects at play in the complex development processes, and this difficulty is an obstacle to the development of appropriate strategies (Dunn, 2002). Decision-making is reliant on information and the ability to use it; moreover, at the national level, it also depends on the distribution of power between ministries and on the level of participation in the overall process (do all ministries have the same weight when it comes to decision-making?). Co-ordination is therefore essential, but it may require the creation of a supra-ministerial level of organisation or institutional strengthening (Eurostep, etc.).

Box 1. The four main sources of policy incoherence

1. The choice and orientation of policies.
2. The lack of information and knowledge.
3. The inadequacy of the decision-making process.
4. The lack of policy coordination.

Source: Neiland (2006).

3.5. Improving policy coherence

Different organisations have suggested solutions to the problem of policy incoherence. In particular, the OECD (2002a) published a summary entitled "Improving policy coherence and integration for sustainable development: A checklist", based on the results of case studies carried out in five member countries. Five criteria were identified as the basic aspects that must be taken into account in the assessment of institutional and decision-making practices in support of sustainable development, as indicated in the box below. These criteria address

priorities often established in the field of development. The concept of the ecosystem approach to management is found at the heart of these criteria due to the acknowledgment of interaction between actors, their knowledge and their participation in decision-making.

Box 2. The five reference criteria for improving policy coherence and integration for sustainable development

1. Is there a common approach to sustainable development?
2. Is there a clear commitment and direction?
3. Are the conditions met for driving the integration of sustainable development?
4. Are the actors concerned encouraged to take part in decision-making?
5. Is the management of knowledge diversity and of the scientific contribution satisfactory?

Source: OECD (2002a).

3.6. The issue of policy coherence in the sector at four levels

The first level can be found within a given sectoral policy, where the objectives of policy initiatives enter into conflict. An example of this would be a policy aimed at dealing with the problem of the over-exploitation of stocks while another policy aims at developing subsidies to increase fleet capacity, or more broadly speaking the fishing effort. For some countries, this incoherence is mainly due to the fact that certain groups of actors take advantage of a weak fisheries management system and influence the decisions made. For other countries, incoherence in fact stems from institutional compromises between two differing groups of actors, such as small-scale and industrial fishers, for example. In many developing, but also developed countries, this kind of internal incoherence has resulted in serious management problems (overcapacity), thus exerting considerable pressure on fishery resources and causing growing demand for more aid and subsidies. For developing countries in particular, this incoherence has reduced the comparative advantages of small-scale fleets in favour of industrial fleets, resulting in income loss from the resource and supplemental costs for fisheries management.

The second level of incoherence relates to a policy in a particular sector that is obstructed or neutralised by a political intervention in another sector of activity. This is seen more in industrialised countries[11]. For most countries, the fisheries sector represents only a fraction of GDP, and the other competing sectors are given priority (such as oil and gas, which can represent up to 50% of exports, compared to 5 to 6% for fisheries and aquaculture products). In many developing countries, the fisheries sector may also be neglected in favour of other sectors because planning and thus expectations are often ambiguous and contradictory. Furthermore, the sector has few spokespeople at the governmental level, making it difficult to protect its interests, especially those of the small-scale fisheries sub-sector.

The third level relates to policies at the international level. This scale concerns the position of national policies in the international context. This point has been the subject of numerous studies and analyses by researchers and policy-makers interested in development issues. Indeed, although fisheries production and its by-products are considered industrial products by the WTO, many developing countries come up against trade barriers s, or more specifically non-tariff barriers, imposed by industrialised countries.

The fourth and final level involves international treaties or agreements. These take the form of guidelines, recommendations or objectives that are often drawn up based on the characteristics of fisheries in developed countries. The terms of these treaties are not always adapted to the fisheries sectors in developing countries. It is thus very difficult for these countries to comply with these terms as they often lack an effective management framework for fisheries and aquaculture. For example, the FAO's 1993 compliance agreement, which preceded the implementation of the Code of Conduct for Responsible Fisheries, promotes increased accountability for fishing vessels in the high seas. This is made possible by the on-board installation of Vessel Monitoring Systems (VMS). It is not clear that the implementation of such a measure for vessels registered in a developing country is achievable, especially in terms of the associated costs. In the same sense, measures drawn up with this agreement are very difficult to control and monitor for the authorities in charge of fisheries management in developing countries' Economic Empowerment Zones (EEZs). Indeed, these authorities simply

[11] Similar scenarios can be found in Mauritania for oil or other non-renewable natural resources.

do not have the means necessary for the effective control and monitoring of all fisheries activities. These challenges are at the heart of the problem of illegal, unreported or unregulated fishing.

Chapter 4. Fisheries policy coherence for development: The contrast between developed countries and developing/West African countries[12]

This chapter presents a comparative perspective of policy coherence between fisheries in OECD member countries (developed countries) and those in non-member countries (developing countries). Its main objective is to highlight their broad respective characteristics. This approach was adopted with three purposes:

- Providing a general overview of the characteristics and role of fisheries in developed and developing countries.
- Working towards better identifying differences and similarities.
- Recording the challenges to policy coherence as they apply to different fisheries systems and to the distinctions between member countries and non-member countries and to their respective conditions.

As previously pointed out, it is difficult to define and analyse policy coherence due to the complexity and the dynamic nature of the modalities of public action. This is clearly an aspect that would merit additional research and development studies, but the comparative analysis presented here is a useful starting point. It should also be noted that although fisheries are the central subject of this comparison, the analysis inevitably leads to an examination of both sectoral issues (relating to fisheries themselves) and non-sectoral issues (concerning the environment, technology, economic and social aspects like trade and governance). In order to provide an additional reference on non-sectoral issues, Annex 2 presents a summary table covering the main characteristics of the international frameworks for action that serve to guide countries' activities in these five broad domains.

[12] This chapter has been adapted from the study by Arthur Neiland (Neiland, 2006): *Fishing for Coherence: Fisheries and Development Policies*, OECD. This report has provided the analytical framework used for our analysis of policy coherence in the West African fisheries sector.

In the following sub-sections, fisheries in OECD member and non-member countries are compared in each of the action areas, and the consequences and challenges that result in terms of policy coherence are listed and explained.

Furthermore, at the end of this section, we have added a table summarising the different tendencies of policy coherence from a comparative perspective between OECD member and non-member countries. We have added a third column to this table on the characteristics of fisheries in West African countries described in Chapter 2 of the analysis. Sharing certain resemblances with the characteristics of OECD non-member countries, West African countries nevertheless exhibit specificities and trends that are examined in greater depth in Chapter 5.

Annex 1 recaps this detailed comparison between fisheries in OECD member and non-member countries. In addition to the following table, annex 1 presents the specific challenges of policy coherence for both OECD member and non-member countries. Chapter 5 will thus provide a complement to this first table, detailing the challenges for policy coherence as they apply specifically to West African countries.

Table 1. Comparison between OECD, non-member countries and West Africa countries

Field of public action	Key element	OECD member countries	OECD non-member countries	West African countries
1. Environment	1.1 Aquatic ecosystems	Temperate and productive. Good scientific knowledge. High inter-sectoral interaction and concern for negative effects.	Tropical and of variable productivity. Less scientific knowledge. Less interaction.	Generally fairly good scientific knowledge of the area but lack of useable series of data. Species replacement for certain threatened areas and ecosystems. Upwelling zone with generally high productivity, but nevertheless variable. Little interaction between sectors and little concern for potential negative effects. Fairly widespread over-exploitation of commercial stocks, especially demersals. Stock levels critical in Senegal, Guinea and the Gambia.
	1.2 Fishery resources	Fully exploited or over-exploited.	Under-exploited or moderately exploited or depleted.	
2. Technology	2.1 Types of fisheries	Industrial fishing, deep-sea and inshore fishing, some of which coastal.	Combination of different kinds of fishing (industrial to small-scale).	Combination of different kinds of fishing. Countries all have marked contrasts between small-scale and industrial fishing and national and foreign fleets in terms of productivity. Free access to resources for small-scale fishing, effort unknown for industrial fishing.
	2.2 Fishing fleets	8 million GT; decked vessels; overall fleet size decreasing.	12 million GT; combination of vessels; overall fleet size increasing.	
3. Economic aspects	3.1 Production volume	24 million tonnes (falling); but rising aquaculture production.	62 million tonnes (rising); aquaculture: falling.	High production, exports far higher than imports and high dependence on the European market for most countries. Tax barriers hinder the movement of products in the regional unions. Very under-developed aquaculture.
	3.2 Production value	In 2000, the value at first sale of fisheries production stood at USD 80 billion.		
	3.3 Trade	Main destination for trade in fish (80%).	Main source of fish exports. Lucrative source of currency.	

	3.4 Consumption	Considerable supply. High consumption (one component among others of the diet).	Smaller supply. Lower consumption.	Supply limited by exports, consumption variable according to countries and regions. The promotion of products plays a role in food security. Share of fishing in GDP highly variable, but generally >1% of GDP.
	3.5 GDP	<1% for most countries.	>1% for certain countries (considerable contribution to agricultural GDP).	
4. Social aspects	4.1 Employment and means of existence	1.6 million people employed (declining).	33 million people; vital means of existence for the poor in many regions.	High social value for fishing. Local promotion of products plays a role in terms of employment. Protein supplied by fish highly variable according to country and region.
	4.2 Nutrition	Variable according to the country. Fish is one component of a varied diet.	Fish important as only protein supply in many countries, especially for the poor.	
5. Governance	5.1 Forces for change	• Fisheries policies and management evolving, growing acknowledgement of the concept of sustainable development. • Increasing interaction with other sectors (maritime transport, urbanisation, tourism). • Emergence of the ecosystem approach. • Importance of conflict management. • Need for a cross-disciplinary approach to fisheries management with multiple goals.		
	5.2 Management	Dominance of technical measures for fish stocks management, but growing acknowledgement of economic and social dimensions and possible new approaches.	Need to clarify links between fisheries management and development. High social value; difficulty implementing management systems.	Policies generally turned outwards. Lack of coherence between sectoral policies and national policies. Potential conflicts between fisheries and other sectors of activity (tourism, maritime transport, etc.).
	5.3 New requirements	• Emergence of new approaches to fisheries management in the world. • Increased and extended actor participation (but need for more official support). • Serious differences between developed and developing countries (and also West African countries). • Growing effects of globalisation that must be taken into account in management policy. • Need to step up management and monitoring methods in the world in general.		

Source: Adapted from Neiland (2006).

4.1. Environment

As regards the first field of public action, the environment, two key elements have been identified for the comparison between fisheries in OECD member and non-member countries: (1.1.) Aquatic ecosystems; and (1.2.) Fishery resources. Most of the fisheries of OECD member countries are situated in temperate, productive ecosystems. There is a good deal of interaction with other sectors and a high level of scientific knowledge about these ecosystems. However, the resources of these fisheries (stocks) are either fully exploited or over-exploited.

Fisheries in non-member countries, on the other hand, are mainly situated in tropical ecosystems with variable productivity; interaction with other sectors is very limited and there is generally less scientific knowledge. But above all, unlike OECD countries' fisheries, these fisheries are either under-exploited to moderately exploited, or fully exploited to depleted.

Within international action frameworks, several key elements are involved in the general debate on the environment (Annex 2): first, the central role given to resource conservation in sustainable development; second, international treaties on the protection of the marine environment; third, global agreements on biodiversity conservation; and fourth, the Code of Conduct for Responsible Fisheries (CCRF), which stresses the importance of conserving resources. So what are the global consequences and priorities for the coherence of international fisheries policies from an environmental perspective?

In the first place, given the fundamental differences between fisheries ecosystems in OECD countries and those outside the OECD zone (characteristics, knowledge and sectoral interaction), management policies must be adapted and carefully drawn up in order to take specificities into account. At the global level, pre-established models cannot be used for policy-making and management.

Next, the different characteristics of the state of fishery resources in OECD and non-OECD countries may be synonymous with opportunities or threats, to varying degrees, depending on the region of the world. Fishery resources will be sought by countries with a "fisheries deficit" and, depending on the management system in force, countries with a "fisheries surplus" will perhaps be in a position to take advantage of this demand.

Finally, preserving natural fisheries resources, conserving biodiversity and maintaining environmental integrity through appropriate management are the fundamental principles of international policy based on the concept of sustainable development.

4.2. Technology

As regards the second field of public action, technology, two key elements have been identified for the comparison between fisheries in OECD member and non-member countries: (2.1.) Types of fisheries; and (2.2.) Fishing fleets. In OECD member countries, fishing is mainly carried out on an industrial scale (high capital and technology intensive, low labour intensive), with major companies in some countries responsible for not only catches, but also for processing and marketing. The fishing fleet of all OECD countries represents 8 million gross tonnes, mainly in the form of decked vessels, but the overall size of the fleet is falling.

In non-member countries, fisheries combine industrial, semi-industrial and small-scale exploitation. The fishing fleet in these countries totals 12 million gross tonnes, with most vessels concentrated in Asia (40% of decked vessels). The overall size of the fleet in non-member countries is increasing and, with 6 million gross tonnes, China boasts the largest fleet in the world.

With regard to international action frameworks, it is particularly important to take into account the characteristics of the technologies used in terms of exploiting and developing the resource (Annex 2). The United Nations Convention on the Law of the Sea (UNCLOS) thus gives coastal States the objective of encouraging optimal exploitation of the biological resources in their exclusive economic zones; these States are required to take account of factors such as the kind of fishing technology used. Second, the Code of Conduct for Responsible Fisheries (CCRF) advocates that fisheries policies and development plans should pay careful attention to the allocation of stocks to the different fleets. Third, the United Nations recommends that fisheries management agreements between States should take into account fishing rights and inspection efforts in order to enable industrial and small-scale fleets to coexist. Fourth, the International Convention for the Safety of Life at Sea (SOLAS Convention) provides recourse in case of collisions, damage or disputes. So what are the global consequences and priorities for the

coherence of international fisheries policies from a technological perspective?

Two important points should be highlighted. First, even if the technological characteristics of fisheries in OECD member and non-member countries are clearly different, it is important that, if they are similar within an international or national fishery, appropriate means of public action and management should be set up to deal with allocating resources and interaction between fleets. It is particularly important to avoid any risk of disputes between industrial and small-scale fleets.

Second, it is important to take into account the wide range of economic and social benefits obtained in different forms by industrial and small-scale fishing techniques. Thus, while industrial fleets may be a source of economic benefits for the integrated economies of OECD countries, small-scale fleets, on the other hand, often provide the only forms of livelihood and food security for poor rural communities in non-OECD countries. Thus, fisheries policies and management must take into account the role these different forms of fisheries play in the livelihoods of the populations.

4.3. Economic aspects

In relation to economic aspects, the third field of public action, five elements have been identified as criteria for comparing OECD member and non-member countries: (3.1.) Production volume; (3.2.) Production value; (3.3.) Trade; (3.4.) Consumption; and (3.5.) Gross domestic product. OECD countries' fisheries have a total annual production of 24 million tonnes (2000). However, temperate regions continue to record an overall decline in fisheries production, while aquaculture production is increasing. OECD countries are the main importers of fish (80% of world trade), especially the EU, Japan and the United States. The supply and consumption of fish have increased in recent years in OECD countries; fish remains one source of food protein among others and certain fish are luxury products. With certain notable exceptions, such as Iceland, fisheries provide a marginal share of GDP in OECD countries.

For OECD non-member countries, total annual fisheries production is well over 62 million tonnes and is generally increasing. Aquaculture is also on the increase in these countries. Non-OECD countries are the main source of world fish exports: fish is an important export product and provides a lucrative source of foreign currency. Thailand and China

are the biggest exporters. In OECD non-member countries, supply and consumption have generally increased, but they remain lower than in member countries; however, in these countries fish is a major source of protein. In many non-OECD countries, fisheries are a key component of the economy (>1% of GDP). The total value (at first sale) of fish traded globally is over USD 80 billion.

As regards international action frameworks, economic policies and their impacts play a very important role and constitute a field that is undergoing some major changes and fuelling permanent debate (Annex 2). On the one hand, over the last 50 years, international financial organisations have been closely linked to the management of the economies of OECD non-member countries and different initiatives have defined the role of important sectors such as fisheries in terms of economic growth and debt management. On the other hand, international organisations (such as the World Trade Organization) have also contributed to defining and adopting international measures concerning issues such as trade and the role of subsidies (for an in-depth debate on the role and impact of these instruments, see Dernbach, 1999). So what are the global consequences and priorities for the coherence of international fisheries policies in terms of economic aspects?

Two elements stand out. On the one hand, considerable differences can be seen in the characteristics of fisheries and their role in the economies of OECD member and non-member countries. In member countries, the fisheries sector is generally well established, relatively stable and organised and, despite representing only a minor component of the national economies, it has succeeded in gaining the support of the public authorities through economic instruments such as government financial transfers and trade protection measures. However, in non-member countries the (large-scale) fisheries sector is often relatively recent, unstable and less organised. The level of public aid for fisheries in these countries is variable and often insufficient, which threatens the overall sustainability of the sector. Thus in certain countries, despite weak management systems, public authorities have encouraged the expansion of fisheries production and the increase in trade as a means of generating foreign currency (a strategy that often falls in line with international economic policy – see Cunningham, 2003).

Furthermore, following on from the previous point, the economic frameworks that model the nature of international trade have had a decisive impact on the development of fisheries in OECD non-member countries. At present, member countries are the main market and non-

member countries the main suppliers of fishery products for international trade – trade in fish has become "globalised" (Schmidt, 2003). In theory, these relations should provide both partners with considerable economic benefits. However, there is concern that the distribution of benefits may involve an imbalance in favour of OECD countries, which has harmful effects on OECD non-member countries, and may, for example, undermine policies in favour of economic growth and disrupt the local food supply (the number of accurate assessments of these impacts remains very limited).

4.4. Social aspects

With regard to social aspects, the fourth field of action (table 4.1), two key elements have been identified as criteria for comparing OECD member and non-member countries: (4.1.) Employment and means of existence (poverty reduction); and (4.2.) Food security and nutrition. In OECD countries, the fisheries and aquaculture sectors (production, processing and marketing) employ a total of around 1.5 million people, a workforce that is generally declining and ageing. As regards nutrition and food supply, fish contributes to the diet of the OECD population, but is not an essential component as other sources of protein are widely available (although to varying extents from one country to another). In some countries, the consumption of certain fish is linked to culture (for example, cephalopods in Japan and the Mediterranean basin), while in others certain products have become luxury products (such as lobster in Europe).

In OECD non-member countries, fisheries and aquaculture employ over 33 million people, with Asia in the lead (30 million). They help provide a means of existence for millions of rural people in both coastal and inland areas and are often associated with other rural activities, especially agriculture. Fisheries and aquaculture are also important for two other reasons: first, they provide a means of existence for many underprivileged people (exposed to poverty), especially in countries where land rights are difficult to obtain, and second, they provide a safety net for individuals who have failed in other activities (such as agriculture) and have no alternative (with fishing thus playing the role of a "last resort" activity). In terms of nutrition and food supply, fish is important for many OECD non-member countries, especially when other sources of protein are lacking. This is especially true in many low-

income food-deficit countries (LIFDCs), such as Bangladesh and Cambodia.

As regards international action frameworks in the social impacts field (Annex 2), the most important issue is that of poverty reduction. In the 2000/2001 edition of its report on world development, the World Bank acknowledges that poverty is the "greatest challenge" facing humanity. International development organisations are striving to carry out concerted action to achieve the goal set by the UN and the OECD of halving the number of people living in extreme poverty (currently 1.2 billion) by 2015. The importance of natural resources in guaranteeing livelihoods and as a potential engine for economic growth is now recognised. Among the other social aspects concerning fisheries that have been addressed in the framework of international policy are the workforce, employment policy and social rights. (Scoop [2002] defines poverty reduction as a human rights issue.) So what are the global consequences and priorities for the coherence of international fisheries policies from a social perspective?

On the one hand, the role of fisheries in terms of economic and social development and its contribution differ between OECD member and non-member countries. For the majority of member countries, fisheries are only a minor sector in a vast and diversified economy. However, for many non-OECD countries, especially for least-developed countries (LDCs), fisheries and other sectors exploiting natural resources provide a crucial contribution to the means of existence, employment, income, food supply and nutrition for the rural population. In some OECD non-member countries (such as Mauritania, Namibia, the Pacific Islands and Cambodia), fisheries are also recognised as a major source of wealth and economic growth. It is clearly essential to define the role of fisheries in poverty reduction strategies and to identify and assess the possible causes of policy incoherence that could limit this role in the future.

On the other hand, the difference between member and non-member countries in terms of the social role of fisheries also raises the issue of globalisation. In many countries, the development of fisheries policy and fisheries management methods must henceforth take account of both national and international perspectives. Simple but extremely important interdependence relations have begun taking shape between OECD member and non-member countries. Thus, in international trade, the former constitute the main markets for fish while the latter are the main suppliers. Social and economic policy-making for fisheries must now take these relations into account: a fisheries policy that adopted a strictly

national perspective would run the risk of failing to see the opportunities and threats inherent in economic globalisation.

4.5. Governance in the fisheries sector

As regards the fifth field of action, fisheries governance, three main elements serve as criteria for comparing member and non-member countries: (5.1.) Forces for change in fisheries management; (5.2.) Current management; and (5.3.) New requirements. At the global level, it is clear that the mediocre results achieved by fisheries policies and management in both OECD member and non-member countries have led to the current decline in fisheries throughout the world and, in recent years, they have been the subject of thorough reviews. A set of needs has been identified, including new management strategies that adopt a cross-disciplinary approach with multiple objectives and integrate the concept of sustainable development, along with new distribution mechanisms in order to reconcile intra- and inter-sectoral demands. In terms of the management issues specific to different OECD countries, problems of overfishing and overcapacity are proving difficult and slow to resolve. Technical measures continue to play a key role in fisheries management strategies for the conservation of stocks, but their high economic and social cost leads those in charge to consider replacement strategies.

In OECD non-member countries, fisheries management is often hindered by factors such as insufficient organisation, a lack of management resources or weak political support. The situation is also complicated by the contradictions that often characterise public action in terms of the link between the sustainable use of resources and fisheries development initiatives, the priority given to income generation over other management objectives, as well as the mounting pressure of a growing population and the use of fishing as a safety net against poverty in the absence of other economic activities. Globally, new and different approaches are clearly emerging in member countries and non-member countries alike, especially in the form of management transfer to local authorities and levels, and increased actor participation at all levels in public action and management processes. However, to be successful, these new approaches must be backed up and supplemented by changes in other fields, including legislation, management methods, finance and administration, and must enjoy political support. At present, OECD non-member countries in particular lack the means and skills needed to attempt to draw up and implement new fisheries management

approaches and to deal with major changes such as the intensification of competition in the use of resources and the impact of globalisation. At the same time, it is not always a question of a lack of skills, but also of a lack of freedom to act. For example, for CSRP coastal countries, it would be more appropriate to speak of resistance to change than of the ability to drive change.

With regard to international action frameworks in the field of governance (Annex 2) several relate to fisheries. First, the United Nations is working to promote sustainable development and to solve the problem of IUU fishing. Next, the Code of Conduct for Responsible Fisheries (CCRF) stresses the importance of effective fisheries governance and of the link with other sectors conducting their activities within the same environment. Finally, the international community has taken up the idea that "good governance" is important as a major factor in the development of OECD non-member countries. So what are the global consequences and priorities for the coherence of international fisheries policies in terms of governance (or fisheries governance)?

At least three major issues stand out. First, the growing recognition of the need for "good governance" as a key component of development is an important legislative trend at the global level. But the specific implementation of its underlying principles (transparency, accountability and responsibility) is far more difficult. No government wants "bad governance" but exactly how to improve fisheries management systems for better governance is not always clear,

Second, there is no doubt that interaction between sectors is currently increasing throughout the world, and the conflicts between the fisheries sector and other sectors such as tourism and maritime transport will continue as long as appropriate governance mechanisms are lacking. At present, a major constraint in this respect is the lack of information and knowledge needed to assess the levels of interaction and to inform the different groups of actors concerned of the possible solutions.

Third, the need for better fisheries governance is not an issue that can be resolved in isolation; however, at present, public policy-making processes in many countries are implemented on a sectoral basis, which inevitably leads to a lack of policy coherence.

Chapter 5. The challenges of fisheries policy coherence for development in West Africa

The fisheries sector in West Africa plays a considerable socio-economic role in development. In terms of employment (small-scale and industrial fishing, trade and processing), according to the FAO, Senegal leads with about 600 000 workers, followed by Ghana (525 000) and Côte d'Ivoire (470 000). Globally, the sector includes almost 5 million fishers, processors nd retailers of fishery products, not to mention the other secondary jobs created by the sector. For example, the post-catch sub-sector plays an important role in the economic and social development of local communities, especially in terms of employment for women

Small-scale fishing is thus of considerable importance at the social level and in terms of income. Industrial fishing is geared towards foreign markets and plays a lesser domestic socio-economic role. In Senegal, fisheries represent 30% of export revenue. In Guinea-Bissau, 50% of State revenue comes from fisheries agreements. Fish provides on average of 34% of animal protein in the diet across the whole region, reaching over 60% in some countries. In addition to people working in the fishing industry, food security for millions of others, especially in remote rural areas, is highly dependent on small-scale fishing catches. From a social point of view, fishing across the whole of West Africa employs around 5 million people.

Why is it so important to work on policy coherence in the fisheries sector in West Africa? This sector is currently facing numerous environmental, economic, social and political challenges in the context of growing global demand for production. Fisheries management policies must respond to these constraints if the sector is to develop in a sustainable, efficient and fair manner.

Following the general comparison of the concept of policy coherence between OECD member countries and developing and West African countries in Chapter 4, we will attempt in this section to illustrate the issue of fisheries policy coherence in the light of West African specificities in the seven countries that make up the sub-regional fisheries commission (CSRP): Mauritania, Senegal, Cape Verde, the Gambia, Guinea, Guinea-Bissau and Sierra Leone. These are all coastal countries on the West Atlantic coast. They have many similarities in terms of their resources, their national policy, their history and their economy but also some clear differences.

This analysis aims to highlight the aspects of policy coherence from the perspective of fisheries in West African countries, starting from the same five fields of investigation: the environment, technology, contribution of the sector, economic aspects, social aspects and governance.

The tables below give a general idea of the characteristic trends and challenges for each country in each of the domains of analysis. The last line of each table presents a summary of the issues at the regional level.

5.1. Environment

Table 2. Matrix of major trends and challenges for environmental policy coherence

Country	Level of exploitation of catch potential (tonnes)	Primary catches[13]	Major trends	Challenges
Cape Verde	50% of potential (36 000 – 44 000 t)	SSF: 42%SP, 31%LP, 17%D IF: 54%SP, 40%T (2000)	Less abundant resources. Over-exploitation, particularly demersals. Highly vulnerable to IUU fishing (10% of FF catches in the EEZ are declared). Destruction of marine habitats (use of explosives). Proactive inter-sectoral environmental policy.	Combat IUU fishing, create monitored marine protected areas (MPAs). Promote responsible practices.
The Gambia	60-70% of potential estimated between 125 000and 140 000 t	SSF: SP, D, LP. INF: FWF. IF: D	Depletion of resources, reduction in catches. Over-exploitation of high commercial value species with substantial participation of the foreign fleet. Mangrove threatened by harmful practices.	Protect mangroves, develop suitable MPAs. Promote responsible practices.
Guinea	80-100% of potential estimated between 80 000 and 250 000 t	SSF: SP, D, PR, CE IF: D, CE, PR	Over-exploitation of main commercial stocks, especially demersals, due to shift from fishing SP to D, CE and PR. Serious degradation of the mangrove ecosystem. Low national capacity for monitoring resources.	Reduce demersal fishing by 40 to 60%. Protect mangroves. Take account of interaction with other industrial and urban activities.
Guinea-Bissau	20-25% of potential (300 000 t)	Mostly SP, D, CE, PR, LP, INF: 4% of total catches	Considerable resources, over-exploitation, mostly by foreign fishing.	Improve resource assessment and better quantify the foreign fleet's fishing effort.

13 SSF: small-scale fishing, IF: industrial fishing, NIF: national industrial fishing, FF: foreign fishing, INF: inland fishing, SP: small pelagics, LP: large pelagics, D: demersal fish, T: tuna, CE: cephalopods, PR: prawns, FWF: fresh water fish.

Mauritania			Over-exploitation of spiny lobster, octopus and white grouper. Full exploitation to over-exploitation of demersals. Fall in abundance index, biodiversity index stable. Considerable fluctuation in productivity. Possibilities for exploiting small pelagics and clams.	Protect biodiversity. Limit anthropogenic threats and create protected areas with appropriate monitoring.
Senegal	100-120% of potential estimated between 350 000 and 450 000 t	SSF: SP, LP, D, PR, CE IF: D, T	Over-exploitation of certain stocks, especially coastal demersals. Fall in abundance index. Considerable fluctuation in productivity. 85% of catches made by SSF.	Resource conservation is an environmental but also social and economic objective. Limit anthropogenic threats and create protected areas with appropriate monitoring.
Sierra Leone		IF: SP, D, PR, T SSF: SP, D, LP, FWF	Little scientific research and monitoring in the EEZ.	Develop the activity of the Institute of Marine Biology and Oceanography in Sierra Leone and improve the assessment of commercial stocks.
Sub-region	Fairly widespread over-exploitation of commercial stocks, especially demersals. Free access to resources for SSF, fishing effort unknown for IF. Species replacement seen in certain endangered areas and ecosystems. Upwelling zone with variable productivity. Increase in regional exploitation estimated at 60% of exploitable potential. Critical situation in Senegal, Guinea and the Gambia, which affects local consumption and employment.			Apply the precautionary principle in resource assessment. Need to cooperate and pool knowledge concerning research, planning and management at the sub-regional level. Develop sub-regional management for migratory stocks (tuna). Take account of interaction with other industrial and urban activities.

a) Major trends

CSRP countries are all part of an upwelling zone[14]. These are extremely productive ecosystems due to high primary production that affects the whole of the food chain. However, as the upwelling phenomenon is not regular every year, the productivity of ecosystems is subject to considerable variations. Indeed, for ecosystems where it is more difficult to quantify the impact of fishing on stocks exploited

[14] Upwelling is an oceanographic phenomenon that occurs when strong sea winds (generally seasonal winds) drive ocean surface water, leaving an empty space into which deep waters can rise and with them a considerable amount of nutrients. This is why a great deal of phytoplankton is produced in upwelling zones in comparison with other parts of the ocean. And as phytoplankton is the base of the diet of many marine animals, these effects spread along the food chain.

productivity is more variable than in temperate zones with no upwelling, from one year to another as the environment plays an important role and the recruitment of juveniles is therefore highly variable.

The western subset of the South Atlantic is of particular interest to us. It corresponds to the coasts of seven countries (Cape Verde, Mauritania, Senegal, Guinea-Bissau, Guinea Conakry, Sierra Leone and Liberia) and can be divided into four segments:

- **Mauritania – Senegal – The Gambia – Guinea-Bissau**: During the dry season (November to June), the cold Canary Current, linked to the *alizé maritime* winds, causes cold, mineral-rich deep waters to rise (upwelling). From June, the Equatorial Counter Current (also known as the *Guinea Current*), linked to the monsoon, causes an accumulation of warm water (piling-up) along coasts, especially to the south of Cape Verde. The alternation of these seasonal currents is one of the key reasons for the rich and varied marine fauna, in addition to the large amount of alluvium carried by the Senegal and Gambia rivers. This coast is considered as one of the richest in the world.

- **Guinea – Northern Sierra Leone**: Further south, Guinea's exclusive economic zone (EEZ) is at the interface of the Senegal-Mauritanian and Gulf of Guinea hydrodynamic systems. It is characterised by its shelf, the widest in West Africa (up to 200 km out from the coast) preceded by a dense mangrove coastline[15] subject to a humid tropical transition regime with two very marked seasons (hot and dry, hot and wet). In the dry season, the north of this EEZ benefits from the descent of waters from the Canary Islands, which are rich in nutritional elements, fertilising the surface waters and encouraging the development of phytoplankton. In the rainy season[16], from June to October, the source of enrichment is no longer oceanic but continental. The coastal rivers, which are low in mineral and organic matter, have a powerful mechanical leaching effect on the mangrove. By returning to suspension the nutrients trapped in coastal silt, they ensure high primary production in relation to other systems with no upwelling. Furthermore, they open up a second path for

[15] It should be remembered that the region from the Gambia to Freetown was known as "Rivières du Sud" (Southern Rivers) at the end of the 19th century.

[16] Rainfall in Conakry, at 4 000 mm, is among the highest in coastal West Africa.

enrichment with the massive flow of detritus into the coastal area, which can feed certain organisms. The northern part of the Sierra Leonean coast includes the far edge of the Guinea shelf, beyond which the shelf shrinks considerably and the waters are subject to the potentially poorer hydrodynamic system of the Gulf of Guinea.

- **The Cape Verde archipelago**, made up of 10 islands and 18 islets, stands out for having the largest EEZ in the sub-region (734 265 km²). Of volcanic origin, these islands are characterised by their narrow continental shelf and their deep waters. Lacking a particularly favourable hydrodynamic system like the ones just described, their overall fisheries potential is limited but diverse.
- **Southern Sierra Leone and Liberia** (Grain Coast), interfacing between the first subset of countries and the Gulf of Guinea, they correspond to zones with lower fisheries potential as a result of the permanence of warmer water.

When considering the "environmental" domain of the fisheries sector study for the different countries of West Africa chosen, certain trends common to almost all of these countries can be identified. A general tendency to over-exploit a large part of commercial stocks can thus be seen. This over-exploitation especially concerns coastal demersal fish stocks, cephalopods and crustaceans. These are mostly high commercial value demersals (groupers and red carp, for example) which are greatly appreciated by foreign fleets and reserved for export in the case of national catches. It is interesting to note that in Guinea-Bissau, for example, where the national fleet is too small to fish resources beyond 12 nautical miles, high commercial value species are mostly caught by foreign vessels, which is not necessarily the case in all the countries of the sub-region (especially in Senegal, where the national fleet plays a large part in the over-exploitation of stocks of coastal demersals). As regards small-scale fishing, a proportion of catches is kept for private consumption and local markets. This is the case of catches of low commercial value species (mullet and sardinella).

The over-exploitation of certain stocks is due to the failure to control the national small-scale (SSF) and industrial (IF) fishing effort, but also and above all for some countries (the Gambia, Guinea-Bissau), to foreign fishing vessels, which operate under fisheries agreements set up in the

Exclusive Economic Zones (EEZs)[17] of West African countries (see box on fisheries agreements). The weakness of monitoring and surveillance methods for fisheries makes this an ecological zone prone to the development of illegal, unreported and unregulated (IUU) fishing.

In addition to the over-exploitation of stocks with high commercial value, the ecosystems of the region are generally threatened by widespread harmful practices in most countries. A certain number have been identified among the different case studies used for this analysis:

- The destruction of marine habitats.
- By trawling (often by foreign vessels), dredging rocky bottoms and the use of explosives. Industrial fishing is largely responsible for these practices, and foreign fleets are particularly implicated (in Cape Verde, for example, where trawling is banned for national ship owners, but carried out by foreign fleets).
- The (very rich and multi-purpose) mangrove ecosystem found in several parts of the CSRP is one of the most endangered in the world.
- Ghost fishing by untracked vessels.
- Bycatches. The equipment used by certain fishing techniques has low selectivity for the target species (trawlers, dredgers, pots). Bycatches are often observed that have no commercial value but are important for the structure of the ecosystems concerned.
- Extraction of non-biotic resources.
- Marine pollution.

From the viewpoint of an ecosystem approach[18] to fisheries management, setting up governance requires taking into account other

[17] The **Exclusive Economic Zone** (EEZ) is a sea zone over which the coastal State has sovereign economic rights. Its legal basis lies in the United Nations Convention on the Law of the Sea, signed in 1982. "In the exclusive economic zone, the coastal State has:

- sovereign rights for the purpose of (…) exploiting, conserving and managing the natural resources, whether living or non-living (…)
- jurisdiction (…) with regard to (…) marine scientific research, the protection and preservation of the marine environment."

[18] "The purpose of an **ecosystem approach** to fisheries is to plan, develop and manage fisheries in a manner that addresses the multiple needs and desires of societies, without jeopardizing the options for future generations to benefit from the full range of goods and services provided by marine ecosystems" (FAO, 2003). The ecosystem approach aims to

activities related to fisheries activities. Some of these activities are in competition with fisheries for environmental, geographical, economic or social reasons. Maritime transport, the merchant navy, offshore oil drilling, and nautical and aquatic activities linked to tourism may enter into competition with fisheries activities for the marine area occupied and the coastal infrastructure needed. Coastal urbanisation raises problems at the level of coastal management in terms of pollution and use of the coastal area. Tourism may emerge as a competitor in terms of the economy, employment and development of the area. The human and industrial pressure on the coast and the coastal areas will increase in the future with the development of tourism and coastal urbanisation. Furthermore, oil drilling from oil rigs has considerable environmental consequences. This is why it is essential for public decision-makers to take all of these characteristics into account when implementing sectoral policies.

The environmental aspects of fisheries management are an important dimension that provides a good illustration of the interdependence between fisheries and other sectors, such as tourism, maritime transport, urbanisation and the development of coastal areas. But environmental issues are not always taken seriously by fisherfolk who are primarily concerned by unemployment and poverty in CSRP countries. Historically and religiously, marine resources have always been considered unlimited. It is essential to raise awareness in order to ensure the sustainable exploitation of resources, including stringent environmental measures that are appropriate for the local context. In this sense, in order to ensure coherence, an ecosystem approach to fisheries management requires reasoning in terms of the overall development of the coastal areas with a long-term perspective of managing and mitigating environmental effects.

b) Fisheries policy challenges with regard to the environment

One of the major challenges for CSRP countries in terms of the marine environment involves a better assessment of fishery resources. In addition to applying precautionary levels in the assessment of stocks that are subject to considerable inter-annual variability, an improvement in

guarantee future generations the possibility of benefiting from all the goods and services provided by natural and human ecosystems by approaching issues in a far more global manner, without limiting itself to certain species or groups of species targeted by fishing, as has often been the case to date.

scientific and technical knowledge seems to be an important element in the creation of coherent national and regional fisheries management policies. Certain countries have received particular attention from EU countries. Senegal has thus benefited from stock assessment and sectoral analysis of fisheries for different regions over the last few decades. All this has led to greater knowledge of the marine ecosystem in Senegal's EEZ. Other countries have not yet benefited from such assistance. The lack of knowledge of commercial stocks and the structure of marine ecosystems may lead to an overestimation of stocks and thus to their over-exploitation. Furthermore, in the negotiation of fisheries agreements with foreign fleets, poor knowledge of the state of stocks may mean the catch quotas negotiated are too high and may result in excessive fishing by foreign fleets in the zone, among other things. Additionally, an incorrect assessment of the fishing effort by small-scale and industrial fleets, both domestic and foreign, contributes significantly to the "overfishing" problem.

In general, CSRP member countries have nevertheless made efforts in the assessment of fishery stocks. In addition to Senegal, Mauritania, Guinea-Bissau and Cape Verde carry out yearly stock assessment campaigns to improve knowledge of their resources and the ecosystems they exploit. The real problem arises when scientific opinions are not taken into account by decision-makers when allocating fishing quotas as part of agreements or access rights for foreign fleets. If this were the case, certain countries would give no access rights for some demersal stocks that are fully or over-exploited. In order to achieve coherence in this field, CSRP countries should, like EU countries, reason in terms of fishing quotas, taking scientific opinions into account. Equally, it is important to note that efforts must yet be made to strengthen the capacities of the research centres working in this field in the countries of the sub-region.

One of the challenges for the near future will be the impact of climate change on West African fisheries. Climate change is likely to disrupt ecosystems and threaten the whole of the food chain as a result of changes in sea temperatures, among other effects. This could have an impact on the migration of species and therefore on catches in the zone. In the future, it will be important to take account of potential environmental alterations caused by climate change into policy-making processes and to make the sector as resilient and adaptable as possible.

From an environmental viewpoint, some countries, such as Senegal, have attempted to implement effective management measures. The

Senegalese authorities have particularly worked – using technical measures, specific fishing practices imposed on European vessels, clauses on monitoring and the compulsory declaration of catches – to bring the financial and social challenges of fisheries agreements in line with obligations and strategies for conserving national fishery resources. However, while these measures may appear coherent within the context of the fisheries sector, they cannot necessarily guarantee a basis for the sustainable management of resources. An effective implementation system is needed, ensuring rigorous monitoring and the accurate assessment of resources. It is therefore necessary to supplement these resource conservation measures by developing a suitable system to enable the application of these measures.

The main challenge for the coastal countries of West Africa will be overcoming these obstacles to develop a sustainable exploitation of fishery resources. This will depend on efforts made to improve the coherence of policy objectives. For certain countries (the Gambia, for example), it is clear that the objectives of national fisheries policy are in conflict with other sectoral policies concerning the fisheries industry. The Gambian government, like other governments in the sub-region, encourages the development of exports by setting up subsidies, especially in the form of tax exemptions or reductions in customs duties or domestic taxes. This plays a part in developing exports, while resources become threatened by overly intensive exploitation. This outward-looking national policy is however not likely to end soon: the Gambia will shortly be authorised to export to the United States with the adoption of the "African Growth and Opportunity Act" (AGOA). Thus the objectives of national policy may run counter to measures to combat over-exploitation and serve to further accentuate the problem. One of the major environmental challenges for the future will therefore be to bring the objectives of each of the policies into alignment, and to consider more sustainable exploitation objectives, biodiversity preservation and the balance of ecosystems in decision-making processes.

From an ecosystem approach, the problem of the over-exploitation of fishery resources is both a national and a regional issue. The actions of one country have inevitable repercussions on neighbouring countries. Thus acknowledging that the fisheries crisis is a "problem without a passport", actions to combat the over-exploitation of stocks must be conducted via a more regional approach, supported by sub-regional fisheries commissions and other regional organisations such as ECOWAS. At the level of fisheries development, for example, a regional

harmonisation seems necessary to avoid excessive discrepancies in the distribution of the fishing effort in the various CSRP countries. For example, Mauritania has imposed fishing bans on certain endangered stocks, while Senegal, its neighbour, has not yet taken equivalent steps. This has recently led to problems of illegal fishing in Mauritanian waters and conflicts have broken out between Senegalese small-scale fishers and the Mauritanian authorities.

A regional approach requires adopting and applying minimum conditions for access to fishery resources. This said, in searching for the benefits of policy coherence, countries in the sub-region may go beyond the negotiation of bilateral fisheries protocols and turn toward a regional approach in the allocation of fishing quotas.

Another important dimension in the environmental domain is the implementation of sustainable conservation measures for fishery resources, such as the creation of marine protected areas (MPAs) and the establishment of biological rest, periods when stocks are overexploited and fishing is stopped. Where marine protected areas (MPAs) are concerned, a trend or a follow-my-leader attitude has resulted in their proliferation throughout the countries of the sub-region. Several MPAs have been set up in the region. Although they can play an important role in the restoration of fisheries, they should be seen as instruments for the sustainable management of resources, by encouraging better governance through the effective participation of national and regional actors, especially direct users of resources in their identification, management, monitoring and assessment. In this respect, the creation of the West African Marine Protected Areas Network (RAMPAO), initiated by the Regional Coastal and Marine Conservation Programme (PRCM), is a very positive joint initiative by the IUCN, WWF, the FIBA and Wetlands International.

Biological rest, which is also seen as a tool for restoring fishery resources, is applied in some countries with no consideration for the need to adopt an ecosystems approach. It is sometimes applied by category of species (for example the *cymbium*) or by type of fishing (especially industrial fishing). By bringing biological rest conditions in line with this approach at both the national and sub-regional level, it is hoped that biological rest will have a positive impact on resources by focusing on a type of fishing (for example industrial fishing), a species or a country.

It is difficult to set up a biological rest period for a species in West Africa given the multi-species inherent in its fisheries, especially small-

scale. For small-scale fishing, the lack of selective fishing equipment means that the proportion of bycatch is always high. Applying biological recovery periods is also difficult when it comes to small-scale fishing because of the importance of this activity as a means of livelihoods for local communities. Applying a biological recovery period for small-scale fishing implies also implementing accompanying measures in order to avoid further economic deterioration for fishing communities and especially to avoid making it even more difficult for populations to access affordable animal proteins. Thus, to make biological recovery operational at the national and sub-regional levels, it is necessary to go beyond scientific opinions to encourage consultation between fisheries actors in order to arrive at a consensual and standardised approach.

c) Challenges between OECD and CSRP countries in terms of development cooperation

One may distinguish three important roles that OECD countries must play in terms of coherence with CSRP countries in the environmental field. This involves providing financial, technical or institutional support to the countries concerned in a bilateral or multilateral way, by calling upon international organisations or institutions. But it is also possible to define a role for OECD countries regarding coherence in terms of access to resources or markets. Access to resources will be developed in this section.

Certain OECD countries have long been involved in assessing West African fishery resources and have offered technical and scientific support for improving knowledge of ecosystems and resources in this area. Numerous projects have been set up aimed at improving knowledge (trawling and sampling campaigns, creation of institutions in charge of fisheries management, etc.). Such initiatives should be pursued and improvements must still be made in this field. However, attention should be given to ensure that methods and techniques of developed countries are complimented by those of developing countries and that local constraints are taken into account. Furthermore, this role is not solely reserved for OECD countries; Southeast Asian knowledge of fisheries and aquaculture, for example, can also benefit West Africa.

The developed OECD countries also have an important role to play when it comes to access to resources in the EEZs of West African countries. Figures of around 3% have been suggested for the rate of foreign fleet participation in total catches. This figure does not provide information on the value of catches, but rather the tonnage, and very

little accurate data is available on the landings made by the foreign fleet and the assessment of the fishing effort it represents. It therefore seems reasonable to assume that the European or Asian fleets have a considerable impact on local resources and are partly responsible for the over-exploitation of stocks and the disruption of ecosystems. Thus, OECD countries operating in West Africa must be coherent with the processes for implementing national and regional policies for protecting the environment and marine resources in CSRP countries.

For some 20 years, the capacity adjustment underway in the EU provided for the compensation of the use of vessels in third countries (outside the EU). This fishing capacity reduction policy was consistent with environmental policy, which aimed at ensuring the sustainable exploitation of European stocks. However, the result of this policy was to move part of the European fishing capacity to West Africa, with serious consequences for the region's resources. Since 2003, EU regulation n°2372/2002 has provided for the suppression of aid granted to transfers of EU overcapacity to third countries.

This has led to the destruction of vessels or a shift towards a non-productive activity (*e.g.* passenger transport, tourism). The EU still has a role to play in terms of policy coherence not only with its own EEZ, but also with those of its neighbours. It should be stressed here that a decision-making body's policy coherence should by no means stop at the limits of its own jurisdiction, but must imperatively tie in with the policies of neighbouring decision-makers: a concerted approach to policy coherence is a key to the success of the sustainable development of fisheries at the global scale.

Box 3. Applying intersectoral policy coherence: *West African Marine Protected Areas (MPAs)*

A marine protected area (MPA) is an exclusively or primarily marine area where specific management measures have been implemented with a view to protecting the marine environment.

The concept was brought into general use by the Convention on Biological Diversity (CBD), which recommends using specific measures to protect particularly endangered marine and coastal areas, but most regional conventions for the protection of the marine environment (OSPAR, the Barcelona Convention, etc.) advocate the creation of protected areas of this kind.

Six countries of the sub-region (Cape Verde, the Gambia, Guinea, Guinea-Bissau, Mauritania and Senegal) have created a remarkable set of Marine Protected Areas over the years, including eight National Parks, 10 Reserves with different statuses and two major Biosphere Reserves. These Marine Protected Areas were initially identified and created in order to protect biological diversity, with a "traditional" approach aimed at protecting certain endangered species; water birds, sea turtles, monk seals or manatees were thus at the origin of these classifications. With hindsight, the biodiversity criteria has proved effective as it has made it possible to protect ecosystems such as seagrass beds or mangroves, which are now recognised as being critical habitats for the regeneration of fishery resources. Today, faced with the over-exploitation of resources, emphasis is placed on a broader ecosystem approach with particular importance given to the role of these protected areas for marine resources.

Based on this observation, the West African Marine Protected Areas Network (RAMPAO) was officially created on Monday 16 April 2007 in Praia. The official representatives of the 15 MPAs in Senegal, Mauritania, Guinea-Bissau and the Gambia unanimously adopted the RAMPAO's charter and statutes. The aim of this network is to "guarantee, at the level of the West African marine eco-region, made up of Mauritania, Senegal, Guinea, Guinea-Bissau, the Gambia, Cape Verde and Sierra Leone, the maintenance of a **coherent set of critical habitats necessary to maintain the dynamism of the ecological processes vital to the regeneration of natural resources and the protection of biodiversity at the service of societies**".

5.2. Technology

Table 3. Matrix of major trends and challenges for technological policy coherence

Country	*Type of fishery (production in tonnes)*	*Fishing fleet (number of vessels)*	*Major trends*	*Challenges*
Cape Verde	Small-scale fishing: 5 762 tonnes Industrial fishing: 3 244 tonnes Export fishing:	Small-scale fishing: 1 257 (73% motorised) (1999) Industrial fishing: 69 (2001)	Small-scale fishing: Good motorisation level, on the increase, no safety devices, limited forays, Decline in industrial catch.	Develop national industrial fishing. Develop system for checking and monitoring foreign fleets and avoid

	600 tonnes but difficult to assess			disputes among fleets.
The Gambia	Small-scale fishing: 29 000 tonnes Industrial fishing: 8 500 tonnes	Small-scale fishing: Details awaited	Some industrial fishing catches on the decline while small-scale fishing catches are on the rise. Extensive commercial fishing. National industrial fishing poor in comparison to foreign fishing fleets enjoying the advantages of Fisheries Agreements.	Develop national fishing fleet so as to reduce dependency on foreign fishing fleets. Propose measures for resolution of disputes arising among fleets competing for certain fish stocks.
Guinea	Small-scale fishing: 72 000 tonnes (2001) Industrial fishing: 65 682 tonnes (2001) Export fishing:	Small-scale fishing: 3 636 (50% motorised in 1995) (2001) National industrial fishing: 93 (2001) Export fishing: 154 (2001)	Small-scale fishing, highly diversified, is a national priority. Several development measures. National industrial fishing poorly developed (despite joint ventures backed by government measures). 1/3 unloading by industrial fishing conducted in Guinea.	Opening of jetties, waterfront structure development, input supplies, credit financing for small-scale fishing.
Guinea-Bissau	Small-scale fishing: 26 000 tonnes Industrial fishing: 40 000 tonnes	Small-scale fishing: 107 (29% motorised) Industrial fishing: 170 (2003), 90% foreign vessels	Small-scale fishing and industrial fishing done mainly through foreign fitting of fishing vessels. European fishing fleets predominant, also those from the sub-region (Senegal). Foreign fishing fleets impacting heavily on the marine ecosystem.	Improve export fishing quantification in order to align catches made by foreign fleets with EEZ resources. Create infrastructure for un-loading.
Mauritania	Small-scale fishing: 10 000 tonnes Industrial fishing: Export fishing: around 450 000 tonnes	Small-scale fishing: 3 000 National industrial fishing: 169	Multi-specific small-scale fishing because over-exploitation has led to shift towards new fish species.	Reduce disputes related to access to resources with appropriate regulations.

Senegal	Small-scale fishing: 311 536 (2002) National industrial fishing: 63 000 Export fishing:	Small-scale fishing: 10 000 (1997) National industrial fishing: 176	Industrial and small-scale fishing competing for fish due to scarcity of resources. Unrestricted access to resources for small-scale fishing, undervaluing of industrial fishing activity.	Impose access fees for small-scale fishing and improve quantification of industrial fishing activity. Develop small-scale fishing infrastructure facilities.
Sierra Leone	59 437 tonnes	Small-scale fishing: 7 000 Industrial fishing: 40 to 50	Sector badly hit by the civil war. National fishing fleet barely developed. Commercial fishing practised for subsistence, badly hit by the civil war. Small-scale fishing for local consumption, industrial fishing for export and inflow of foreign exchange.	Encourage recorded, official unloading; improve transparency in trade.
Sub-region	Major trends: ▪ Sharp contrasts between small-scale and industrial fishing and national and foreign fishing fleets in terms of productivity, fishing techniques and economic benefits gained. ▪ Unrestricted access of small-scale fishing to resources, undervaluing of industrial fishing activities.		Challenges: ▪ Improve management and small-scale fishing's access to resources, improve export fishing quantification and regulate permits. Take into account technology differences among fishing fleets. ▪ Prevent disputes among fleets.	

a) Major trends

Fishing fleets operating in the waters of CSRP countries vary widely in their fishing practices. The disparities are most evident when OECD member countries conduct fishing operations in CSRP countries' EEZ waters, mostly on an industrial scale. Small-scale coastal fishing on the other hand fares poorly in comparison with the industrial sub-sector. The fishing activities of CSRP member countries are far more compartmentalised: industrial, semi-industrial or small-scale fishing. National vessels as well as foreign flag bearing ships that are allowed access to the concerned country's EEZ fishing grounds under the terms of the Fishing Agreements signed are engaged in these activities.

The industrial fishing fleet is generally of foreign origin – a vast majority from the EU but also some from Asian countries. Industrial fishing is a highly capital-intensive and technology-intensive industry,

highly mechanised and heavily dependent on fuel consumption. Some fleets are fitted out in neighbouring countries (mainly Senegal). State-owned industrial fishing fleets are generally obsolete and poorly developed. Following the fishing agreements signed with Europe, European fleets compete directly for catches of the same target species (mainly demersals) and the same (European export) markets. Far more competitive and armed with better access to European markets, European fishing fleets easily outdistance those from Senegal, Mauritania, Guinea-Bissau and Guinea, which are finding economic viability increasingly difficult to achieve.

Small-scale fishing fleets are mostly locally outfitted and serve a dual purpose. Small-scale fishing either aims at local consumption (food self-sufficiency) or exports. The vessels vary significantly according to the targeted fish species, ranging from ordinary, undecked log canoes called *pirogues*, to "improved" versions which are bigger, decked and motorised. Overall, a number of support measures and policies have been instituted for the modernisation of small-scale fishing. They consist mainly of motorising pirogues, providing infrastructure facilities for unloading catches and harbour plant equipment to ensure hygiene, quality and safety at sea. There has been a gradual increase in motorisation of such vessels, although the degree may vary considerably between countries (90% in Senegal, 73% in Cape Verde and 29% in Guinea-Bissau). Governments have often subsidised motorisation, such as in Senegal, for instance, which explains these variations. Unloading wharves have been built along the West African coast for small-scale fishing, although those for the fisheries sector remain generally inadequate in ensuring hygiene and quality standards in the post-catch processing stage for small-scale fishing. Situations vary from country to country, but there is a serious lack of infrastructure in terms of capacity as well as hygiene. The infrastructure for unloading operations and cold chain processing and packaging often proves to be an impediment for the fisheries sector in terms of local production. An even more serious cause for concern is the lack of sanitary conditions – and, in fact, they have recently come under criticism by importing countries (the EU in particular). In the Gambia for instance, some ships have to unload their catch in a neighbouring country as it does not have its own unloading port. Due to this, the Gambia is unable to benefit from the post-catch sector, an important source of employment and revenues.

CSRP countries urgently need to improve hygiene conditions, product quality and, in particular, safety at sea for fishers engaged in

small-scale traditional fishing. Firstly, measures must be taken to identify fishing vessels, fishers engaged in small-scale fishing and fishing zones; these measures need to be carried out prior to defining any fisheries management policy. In general, this is not done in the case of small-scale fishing. The utilisation of suitable technology may narrow the gap between industrial fishing and small-scale fishing. The pilot project for registration of pirogues and other fishing boats currently underway in Senegal could serve as a model for standardising the use of licence plates as a fishing boat identification method. The vessel monitoring system (VMS) that is already in use in industrial fishing boats should be adapted and extended to small-scale fishing boats in order to track them effectively, as their numbers have grown considerably over the past few years.

It can therefore be seen that technology development in the fisheries sector has primarily led to an increase in the efficiency and yield of fishing units, without really helping in the fisheries sector's effective control through efficient monitoring, control and surveillance systems. The field therefore remains wide open for illegal, unreported and unregulated fishing (IUU) and in general the unregulated exploitation of West Africa's fishery resources.

b) Fisheries policy challenges with regard to technology

In the previous chapter, we dealt with international action frameworks establishing technological objectives. CSRP countries also fall under these framework initiatives (namely UNCLOS, CCPR and SOLAS Convention). Policy makers therefore face a critical issue – the optimal exploitation of fisheries resources by various fishing fleets. On the one hand, the optimal yield level for each national as well as foreign fishing fleet segment needs to be quantified by calculating the Maximum Sustainable Yield (MSY). On the other hand, the sharing of yield levels for each sub-sector in compliance with a consistent distribution system that meets everyone's needs should be carried out. The type of technology utilised by each one, preferably one that favours equipment that is least destructive of the habitat and generates the least amount of waste, should be taken into account. The use of technologies for obtaining maximum yields must stem from a concerted and consistent approach, considering each one's characteristics. Unfortunately, this is not yet the case in West Africa. Based on the scientific data provided by research studies on the status of stocks (through regular scientific campaigns), regional fisheries administrators should distribute the catch

among industrial, small-scale, national and foreign fishing fleets (in accordance with fisheries agreements). It is therefore important to consider the sustainable yield level for each category of species while distributing quotas.

An important point included in the United Nations' recommendations was that fisheries management arrangements between States must take into account the rights and control of the fishing effort in a way that allows for the peaceful coexistence of industrial and small-scale fishing fleets. Moreover, West African nations need to try to prevent all risks of disputes between industrial and small-scale fishing fleets. The two fleets play different roles, and it is important that they continue to do so. While industrial fishing fleets bring in economic benefits, small-scale fishing often represents the only livelihood and food source for fishing communities that depend heavily on fishing. It also provides a source of potential animal protein for populations living in the rural hinterland. It is therefore important to consider the economic and social functions of fishing and its sub-sectors while drafting regulations for access to fishery resources. To avoid conflicts between industrial and small-scale fishing, regulatory policies for access to fishery resources must be adapted to the various actors' needs and should be arrived at through a process of consultation between the various parties. Effective measures – such as development plans for each zone and each group of species, registration of fishing fleets, etc. – should be implemented, but actual success depends on the sincere political will on the part of public authorities, backed by a suitable monitoring and supervisory policy and mechanisms.

To combat the over-exploitation of fish resources in CSRP countries, action must obviously be taken in both sub-sectors, small-scale and industrial fishing. However, given the importance of small-scale fishing in West Africa (more than 80% unloading in Senegal and 60-70% supply to export industries), it is essential to provide suitable management tools for this sub-sector and ensure harmonisation at the regional level. Given their over-exploitation, largely due to the small-scale fishing sub-sector, the policy of free access to fishery resources is no longer viable in West Africa. At the regional level, the conditions for access to fish resources need to be more consistent and harmonised for small-scale as well as industrial fishing.

One of the major technological challenges facing CSRP countries will be the development of their post-catch sector through the establishment of infrastructure suited to the various sectors of the fishing

chain. CSRP countries urgently need infrastructure for unloading operations, processing and packaging, not only catering to unloaded volumes but also complying with the EU and other OECD countries' health requirements, without which their exports to OECD countries will come under threat.

Another important issue that West African countries need to address is the traceability of fish products. It remains a huge challenge to overcome as the fish's journey from the boat to the consumer's plate is quite a long and winding one, with either nonexistent or partial information on the actual path taken. The catch is often transhipped, with the result that the shipping vessel unloading the catch is not the same as the one that initially caught the fish. On the dock where the catch is unloaded, there is no monitoring system and little information is exchanged with the wholesale and retail fish trading and processing sector. Given that the sector is highly segmented, it renders the traceability of catches difficult to implement. The authorities must therefore make serious efforts to bring about greater transparency among the industry's various segments and improve the availability of information. The current globalisation trend tends to favour responsible, certified fisheries whose products travel throughout the supply chain with transparency. If the West African fish industry wants a guaranteed place in the future of global fisheries trade then it must overcome the challenges posed by transparency and traceability in order to meet internationally recognised criteria in this sector.

c) Challenges between OECD and CSRP countries in terms of development cooperation

As outlined above, West African fishing resources are under considerable strain due to over-fishing. In addition, illegal fishing activities and illicit catches (mainly in prawn fisheries) endanger juvenile fish and threaten the survival of fish stocks. Various research projects are being carried out, aimed at developing more selective fishing devices for catching the targeted species. These technological advances should be shared with CSRP countries so that they may benefit from this expertise and themselves contribute to the protection of fish stocks in their EEZ. Industrial fishing, trawler fishing in particular, is deemed the most harmful for the ecosystem and marine habitat. And it is mainly foreign fishing fleets that practice this form of fishing. They should therefore also work towards preserving the environment by adopting responsible fishing practices, opting for selective fishing devices and gradually

discarding the use of bottom trawl nets that are particularly destructive. Ecologically responsible fishing practices must be adopted by all fishing fleets, whether national, foreign, small-scale or industrial. Decision-makers have to increase the involvement of fishers by imparting training programmes on fishing practices that help in preserving resources. They could even provide financial assistance to fishing firms to promote use of more selective gear, without necessarily increasing the fishing effort. Developed countries also have a responsibility for their fishing fleets operating in the CSRP countries' EEZ waters.

Furthermore, developed countries have a role to play in helping CSRP countries gain access to export markets. In fact, sanitary and phytosanitary measures (SPS) are increasingly being imposed on fish exports due to increasing demand from consumers and distributors in developed countries for safe and high quality seafood products. They are increasingly pushing for the certification of fisheries (through the Marine Stewardship Council, MSC[19]) and for product traceability. Developed countries therefore have a crucial role to play in assisting with the development of the post-catch sector and with necessary infrastructure, keeping in perspective the difficulties of improving quality through certification and of following the path of catches all the way up to the consumer.

Box 4. Migration of small-scale fishers and access to resources

Despite the lack of standard regulations governing access to fishing resources for small-scale fisheries, the migration levels of fishers engaged in small-scale fishing remain very high in the sub-region. Each country has its own small-scale fishing regulations, ranging from unrestricted entry to the payment of a fee, often high in the case of foreigners. The CSRP has not played any role so far in implementing a sub-regional protocol on conditions of access to fishing resources in case of small-scale fishing. Countries sign bilateral protocols on access to fishing resources between themselves. Thus, Senegalese fishers engaged in small-scale fishing, forming the bulk of the migratory wave in the sub-region, purchase fishing permits in Mauritania and Guinea-Bissau, at prices ranging from 250 000 to 1 million Francs CFA.

More clandestine migration may also take place. In some cases, no permits or declarations are issued so there is no checking or monitoring. A case in point is that of the Senegalese fishing communities engaged in small-scale fishing who migrate to neighbouring countries to take advantage of the more abundant resources available in certain areas. Whole villages comprising of Senegalese fishers have cropped up in the Bijagos archipelago, which is a protected marine

[19] The **Marine Stewardship Council** was founded by Unilever and the WWF (World Wildlife Fund). It is the only international fishery certification programme and eco label in the world with assessment standards consistent with the guidelines adopted by the United Nations' Food and Agricultural Organisation. The attainment of MSC certification is of vital importance to West African fisheries.

reserve in Guinea-Bissau. These migrants operate openly and illegally, outside the realm of government control. Such practices cause many problems in terms of the control of the fishing effort and the protection of fish resources, particularly in marine reserves where fishing is banned or very strictly regulated.

One of the consequences of overfishing in West Africa is the fall in the yield levels of small-scale fishing units, and therefore a fall in the income of small-scale fishers and a phenomenon of "ecological dumping". Small-scale fishers, in order to compensate for the decline in their incomes, put further pressure on already strained fish resources in the hope of higher returns, but product prices and their incomes remain unaffected.

Fishers in the sub-region resort to migration due to the scarcity of fishing resources and the decline in yield of fishing units. This has given rise to a recent phenomenon – migrants on traditional boats leaving the shores of Senegal and Mauritania and heading towards the Canary Isles with the objective of continuing on to Europe. This phenomenon, initiated by a small group of small-scale fishers, has also affected the lives of many employed or unemployed African youth seeking a better future in Western countries. This kind of clandestine migration points to the deeper issue of the inconsistencies underlying, for example, the (more restrictive) migration policies pursued by Western countries and yet their role in persistent illegal fishing, or development aid policies which are marked by a stagnation and even a decrease in recent years. Whether aid is effective in combating illegal fishing which has direct impacts poverty in West Africa is a problematic issue.

5.3. Economic aspects

Table 4. Matrix of major trends and challenges for policy coherence with regard to economic aspects

Country	*Production value (USD million) volume, catches + aquaculture (tonnes 2005)*[20]	*Exports Imports (USD 1 000) (2005)*	*Major trends*	*Challenges*	*Challenges for OECD countries*
Cape Verde	12.4 (2001) 7 742	11 122 1 117	Undeveloped aquaculture. High trade deficit. Country heavily dependent on imports. Fish product exports less	Improve sanitary quality of fishing products so as to be included in list of countries authorised to export fish to EU. Finalise preparatory	Assist the fisheries department in its modernisation of production facilities and improvement of sanitary standards.

[20] FAO Fisheries and Aquaculture Information and Statistics Service, 2007 (Total production 1950-2005) FISHSTAT Plus.

			than in rest of CSRP countries and in decline due to non-compliance with EU standards.	work to gain WTO membership.	
The Gambia	Not available 32 000	919 365	Trade balance almost stabilised. High level of national demand creates dependency on imports. Hardly any commercial fishing unloading in the country due to absence of proper fishing ports. Fisheries agreements signed mainly with the EU, Asia and other African nations.	Develop aquaculture to improve fish supply. Develop proper infrastructure for the post-catch sector (jetties, processing and packaging units).	Extend financial and technical aid for development of infrastructure in the post-catch sector.
Guinea	75 (2004) 96 571	10 418 7 581	Trade deficit. Fisheries agreements have benefited foreign fleets and led to foreign currency inflow. Lack of diversity in exports, fresh whole fish or smoked fish only. Unregulated imports. Aquaculture sector highly promising.	Aquaculture to be developed for domestic consumption and industry. Improve the sanitary standards for promotion of fishery products. Develop industrial fishing facilities and land route accesses to port zones.	Extend financial and technical aid for improving the post-catch sector's sanitary standards. Promote partnerships for sustainable aquaculture practices

Guinea-Bissau	Not available 6 200	4 570 308	Substantial exports thanks to small-scale and industrial fisheries, very low imports. Heavily dependent on fisheries agreements signed mainly with the EU, Asia and other African nations. Fishing industry sector highly developed (accounts for 15.8% of the total GDP). Aquaculture very poorly developed.	Develop fisheries industry. Develop sanitary standards of processing and packaging units for exports to EU. Improve other market penetration levels, in particular to African nations, in order to reduce dependency on the EU.	Provide financial and technical assistance through the European Development Fund (EDF) for improving sanitary standards and developing the post-catch sector.
Mauritania	Not available 247 577	157 168 5 214	Second export sector due to a high level of external demand. Fisheries agreements signed with EU, Asia and other African nations. Liberalisation measures since 1991. Aquaculture exists on small-scales	Competitiveness of ACP fish exports undermined by liberalisation. Penetration of other countries' markets to be considered. Develop local promotion of fishery products apart from salted/ dried fish.	Assist development of post-catch sector and better promotion of fish products.

Senegal	Not available 405 263	251 670 1 263	Primary national export. Heavily dependent on European market. Africa second export market. Fisheries agreements geared towards export-oriented fishing. Aquaculture still in process of being developed with high potential both on coasts and inland.	Liberalisation process undermines the competitiveness of ACP exports, market penetration of other countries to be considered.	Assist development of post-catch sector and in better promotion of fish products.
Sierra Leone	30 (1998) 145 993	13 006 1 655	Trade not well developed, trade relations badly established and lacking transparency. Foreign fishing limited. Aquaculture still at an experimental level.	Promote official exports through a proper trade platform.	Assist in development of trade platform: port facility in Freetown.
Sub-region	Not available 941 346	448 873 17 503	▪ Most countries heavily dependent on European market. ▪ Trade barriers hinder product movement in regional unions. ▪ Aquaculture hardly developed with high potential	▪ Negotiate a customs and fiscal harmonisation policy at sub-regional level that would benefit the entire sub-region. ▪ Turn towards aquaculture production with regional adoption of guidelines for best practices.	▪ Assist in the post-catch sector's development ▪ Assist in better promotion of fish products ▪ Extend financial, scientific and technical support for promotion of aquaculture production.

a) Major trends

From 1980 to 2000, West Africa's coastal countries have implemented various measures promoting export-oriented fishing (free on board status or duty-free export companies, export subsidies, Lomé Convention, devaluation, fuel subsidies, fishing agreements, etc.), sometimes with the help of their economic partners (or under pressure from them). These measures, along with sustained international demand, always attractive, have increased the returns of export-oriented fishing units as compared to units devoted to catching specific species, such as small pelagics, destined for the domestic market. The increase in operational and depreciation costs, brought upon by the CFA Franc's devaluation and the rise in fuel prices, has dealt a heavy blow to such fishing units. This situation has led to a great deal of shifting fishing activity towards catching more choice species such as demersals, crustaceans and cephalopods, thereby endangering many species and pushing them to the verge of biological extinction (please refer to the section on the environment).

At the same time, restrictions on catching small pelagic fish species have led to an increase in demand (due in large part to the rising population) and in prices. This situation poses a threat to food security since the local population relies mainly on fish as their main source of animal protein.

Senegal's small-scale fishing sector constitutes a case in point. In the early days, the Senegalese State aided the modernisation of small-scale fishing as it performed a crucial role in the local market supply system and benefited Senegalese customers. The Senegalese government had used economic tools such as tax refunds on fishing equipment, cross-subsidisation of fuel-driven fishing boats and credit facilities for purchasing fishing gear and for the modernisation of production tools. Presently, small-scale fishing in Senegal accounts for more than 80% of fish landings and contributes about 60% of supplies to export units, to the detriment of the domestic market supply system, which had been the main reason for introducing the aforementioned economic tools. In fact, small-scale fishers target exportable fish species rather than species intended for the domestic market. The local market supply system is therefore disrupted, which in turn puts pressure on prices. The utilisation of economic tools for the management of West African fisheries must be conducted in a balanced and efficient manner in order to ensure consistency between export development, food security and resource preservation objectives.

The consistency to be sought in this regard is to ensure that economic policies, such as financial incentives for export development, do not lead to an over-exploitation of fishing resources and fishing overcapacity that may pose a threat to sustainability.

West African fisheries, particularly in CSRP countries, have become highly export-oriented and most exports are to developed countries, mainly the EU (60%-80% of total exports). Hence, more than 70% of the total catch in the CSRP countries' EEZ waters is aimed at the export market. The fact that exports of fish products brought in 642 million Euros in 2003 gives a fair idea of the sector's importance. Mauritania and Senegal's governments have therefore clearly adopted export-oriented policies. The same is the case, albeit to a lesser extent, with the Gambia, Guinea and Guinea-Bissau. Cape Verde differs from the rest, as it has a huge trade deficit.

In many West African countries, the close links between the fisheries sector, overseas markets and partnerships with developed countries have had considerable economic and social consequences. Export incentives granted under the Lomé and later Cotonou agreements have impacted fishing resources, access management and local market supplies. As mentioned earlier, the increasing interest in exportable fish species has led to their over-exploitation (coastal demersals being a typical example). The scarcity of resources due to overfishing has in turn given rise to disputes over access to them.

Disputes over access have therefore started between the industrial (mainly foreign fleets) and the small-scale fishing sector (mainly State-owned fleets). A case in point is Mauritania, where there have been numerous instances of foreign trawlers fishing in areas reserved for small-scale cephalopod fishing. These trawlers load huge quantities of terracotta trapping pots – traditional fishing gear used to catch cephalopods. This can be disastrous for smaller boats that then have to buy the traps at high prices in order to continue fishing.

The trade benefits and preferential treatment extended to CSRP countries for the European market, under the ACP-EU agreements' provisions, are likely to be replaced. They no longer conform to WTO rules and the demands of globalisation. The exemption period that ACP countries were entitled to under the preferential trade arrangements will expire by end 2007. However, it has been fairly widely acknowledged that the ACP countries were barely benefiting from these tariff concessions, and that over the years, these benefits were slowly whittled

down. This was essentially due to the general reduction in custom tariffs and their exemption in 2001 for Least Developed Countries (LDCs) (see Box3).

b) Fisheries policy challenges with regard to production and trade

National public policies are mostly geared towards maintaining exports and negotiating more lucrative fishing agreements. Certainly the latter enable considerable cash inflows that countries need in order to repay their external debts or for various investments. However, this policy clearly has severe repercussions on the marine ecosystem and fish stocks and is extremely incompatible with the fishing sector's management policies as these seek the sustainable exploitation of fish stocks and a general reduction in the fishing effort. One of the key policy coherence issues regarding trade for CSRP countries is that of balancing sectoral and national policies by formulating a strategic growth plan that combines economic and environmental factors in order to improve sectoral and national consistency.

As previously outlined, CSRP countries are heavily dependent upon imports from developed nations, mainly the EU. Governments need to concentrate on diversifying export markets in order to reduce this precarious dependency. A key objective for CSRP countries is the need to foster closer trade ties with other importing countries in the future, mainly within Africa. Coastal countries with surplus fish production must expand their economic penetration to landlocked countries lacking in fish supplies. Of course, such measures should also be accompanied by the creation of the necessary infrastructure and the development of land, air and sea transportation through the concerned transit countries (fish quality suffers due to the state of the roads and the lack of refrigerated transport discourages long distance travel). By diversifying their export base, CSRP countries will be able to stabilise and strengthen their economy.

Another set of non-tariff barriers that are a problem for the viability of CSRP exports are the EU's sanitary measures and technology. Exporters are compelled by these measures to comply with sanitary and technical norms that can, at times, be very exacting, if they want to continue exporting. These measures represent a major challenge for CSRP countries, which often lack the required funds to process fish products. The standardisation of processing and packaging units entails considerable additional expenditure that could create trade imbalances

and exclude these countries from the realm of international trade. Public policies must therefore focus on the promotion of fish product processing and packaging, in order to maintain their position on European and overseas markets and comply with the sanitary and technical norms in place.

In addition, exports by CSRP countries to OECD countries are subject to tariff escalations – non-tariff barriers of another kind. These are restrictions applicable to export-oriented processed products. No export taxes are imposed on raw fish products under the EU-ACP agreements' provisions. However, processed fish products (fillets, tinned food, etc.) are heavily taxed when they are exported to EU markets. The potential for developing local seafood products processed for export is seriously diminished as the situation's economics dictate that unprocessed, raw fish be exported for overseas processing. These tariff escalations create an unstable economic environment for investing in processing plants. That is one of the reasons why the processing plants set up through government investments in Mauritania are under-supplied and are no longer a profit-making venture. This trade policy favouring the food processing and packaging industries in the importing developed countries is therefore incompatible with the post-catch sector's development in exporting countries, such as Mauritania. In the forthcoming WTO round discussions on trade in fish and fish products, one of the items should be the imposition of revised custom duties that are consistent with the sustainable development of processing plants in exporting countries so they will then be able to reap the considerable socio-economic benefits accruing from value addition.

In the aquaculture sector, production in Sub-Saharan countries in 2001 was 0.06 million tonnes, *i.e.* 0.15% of world production. However, the FAO (2004) anticipates that the growth rate for 2001-2020 could be as high as 4.6% to 8.1% according to the maximum estimation for the region. That is the highest growth rate in the world. The sector is therefore likely to develop considerably in the coming years. Aquaculture development constitutes a promising opportunity for West Africa not only in terms of revenue, but also in sustainable management of fish resources as well as a diversified source of food security. Although aquaculture promises interesting economic opportunities, it also gives rise to potential environmental, technical and sanitary problems when it is not managed within an ecosystem approach. It is therefore necessary to ensure coordinated development of aquaculture with local, national and regional actors involved while bearing in mind

the various challenges that are likely to arise. On the other hand, the objectives of all activities within the aquaculture sector must be clearly specified: production for export, industrial production and/or local production for food security (both commercial and non-commercial). In all cases, synergies between regional development policies will be essential for the establishment of a sustainable development plan for the aquaculture sector, in accordance with internationally established production guidelines and trade requirements.

c) Coherence challenges between OECD and CSRP countries in terms of development cooperation

As mentioned earlier, access to the value-added sector for fish products constitutes a major challenge for CSRP countries in the future. Developed countries have a role to play in this regard, given the problems hindering value addition to fish products at unloading points and all parts of the supply chain prior to export. The WTO's forthcoming negotiations will provide a much needed opportunity to review fisheries partnership agreements in order to enable CSRP countries to develop their post-catch sector and reap the benefits of value addition.

Developed countries have a considerable role to play in providing assistance in the aquaculture sector. Several aquaculture development projects financed by developed countries have been launched in West Africa. However, most of these have failed. It is important for projects to be set up jointly with local decision-makers, bearing possible constraints such as infrastructure, financing and land tenure in mind. Apart from financial assistance, developed countries could provide technical and scientific support for setting up aquaculture farms. If production is large scale commercial, and thus intended primarily for exports, sanitary norms must conform to the standards prevailing in developed countries. Training programmes on aquaculture farming techniques for local fishers will, in addition, hasten the aquaculture sector's development.

Box 5. Development policy and the common fisheries policy: EU-ACP negotiations and implementation of international EU-ACP fisheries agreements in West Africa

Policy coherence issue: Outside the EU, its Common Fisheries Policy (CFP) primarily seeks to maintain the presence of European fishing fleets in long distance fishing, thereby ensuring access for European fishing fleets to surplus stocks in the EEZ waters of third countries. The United Nations Convention on the Law of the Sea (UNCLOS) stipulates that if the capacity of coastal States is less than the admissible catch volume, they may authorise other States to exploit the surplus of the admissible catch volume, and establishes provisions in this respect. However, the implementation and impact of such fishing agreements have been widely criticised and the lack of coherence between development objectives and fisheries agreements has been underscored. The EU itself has prepared a status report and has agreed in the CFP to gradually revise its approach in partnership agreements in the fisheries sector. (Refer to COM(2002)637 final dated 23.12.2002.)

Impact on development: In their studies of the impact on development, Kaczynski and Fluharty gave the following example: in 1996, Guinea-Bissau received USD 8 million (by way of permit fees); fish landings in European markets by European fleets were worth USD 78 million and the processed fish market value rose to USD 110 million. The country only benefited marginally from the utilisation of its fishing resources; instead, the country became increasingly dependent on foreign exchange payments from the EU. The fisheries sector remains poorly managed and marine resources are threatened with over-exploitation.

Solutions and measures: Several significant remedial measures have been carried out in the past few years by the EU under the revised Common Fisheries Policy. These are aimed at counteracting the potential negative effects of bilateral fisheries agreements.
In its circular COM (2002)637 final dated 23.12.2002 (subsequently approved by the European Parliament in October 2003 and the EU Council in July 2004), within the revised CFP's framework, the Commission proposed an integrated framework for Fisheries Partnership Agreements with third countries. The strategy consists partly of gradually discarding traditional fisheries agreements in favour of "new fisheries partnership agreements" (FPAs) that would contribute to responsible fishing in the concerned parties' mutual interest. The revised CFP, along with its new FPA provision, among others, clearly distinguishes between the financial contributions given in exchange for fishing rights (with the private sector gradually assuming greater responsibility for the said contribution) and those allocated for partnership activities, such as fisheries management, fish stock assessments, monitoring, follow-up and surveillance.

The new approach builds upon the commitment made by the Heads of State and Government during the World Summit on Sustainable Development (Johannesburg, 2002) to "Maintain or restore stocks to levels that can produce the maximum sustainable yield with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015" Moreover, the new Fisheries Partnership Agreement approach is based on the idea that coherence between development policies is indispensable and toward that end, it is necessary to ensure that the EU fisheries policy towards third countries does not conflict with the European Union's own development cooperation objectives. Moreover, the Fisheries Partnership Agreements must contribute to the establishment of sustainable management and development systems in developing countries.

The future of the EU's bilateral fishing agreements with West Africa – Partnership agreements:

In July 2004, the Agriculture and Fisheries Council ratified the European Commission's proposal of implementing an integrated framework for Fisheries Partnership Agreements with third countries. These agreements are an external dimension of the Common Fisheries Policy (CPF). Their primary objective is to give priority to sustainable development, while meeting the EU's fishing fleets' and the fisheries sector's needs in developing countries. Hence, unlike previous fisheries agreements, nearly 20-40% of financial transfers to third countries will be allocated for development assistance for their domestic fisheries sector.

If the EU's policy regarding development follows the new strategy, it will need to ensure coherence between these agreements' two objectives – promoting the European fishing fleet's interests in long distance fishing and ensuring the sustainable development of fisheries in third countries.

Regarding the partnership agreements, Hudson (2006) pointed out that coherent development policies need to also incorporate the developing countries' aspirations. Partnership policies should then not only form an integral part of EU policy but also and above all of third countries' strategic policies.

Source: Kaczynski and Fluharty (2002); Cunningham (2000); Manning, 2003; CCE (2001); CCE (2002).

5.4 Contribution of the fisheries sector

Table 5. Matrix of major trends and challenges for policy coherence with regard to the contribution of the fisheries sector

Country	*Contribution of fisheries /GDP*	*Availability (kg/capita/year) Share of fish in animal proteins (%)*	*Major trends*	*Challenges*
Cape Verde	2.25% (2000)	19.2 (2001)	Considerable marine resources for consumption due to scarcity of other resources. Fish is the main source of animal protein.	Promote local processing and packaging in fisheries sector.
The Gambia	2% (2001)	28 (2003)	Very high fish consumption in the Gambia, particularly along the coast and near the river. Better distribution of local fish exports improves fish supply to inland areas.	Develop aquaculture, especially fresh water aquaculture in rivers to ensure food security in country. Developing the post-catch sector will provide employment to local communities.
Guinea	3.6% (2003)	14.3 (2003) 45%	Jetties difficult to access through land route. Few have modern facilities. International trade has hindered the development of local markets. Fish provides the main source of animal protein.	Develop local value addition of fisheries. Standardise small-scale fisheries.
Guinea-Bissau	3.7%	2.1 (2001)	Availability of seafood products poor as compared to other CSRP countries, causing food security problems. Yet fisheries account for 15.7% of the GDP.	Develop infrastructure, processing and supply circuits.
Mauritania	2.8% (1999)	12.6 (2001)	Facilities available are under-utilised as national fish landings are insufficient. Great disparities in fish consumption at national level.	Improve integration of fisheries in the national economy for the sector's all-round development.
Senegal	2.3%	28.8 (2001) 75%	Small-scale fish processing, wholesale trade and fish distribution play an important role in food security.	Increase local value addition of fisheries. Improve distribution network in rural interiors .
Sierra Leone		12.3 (1999)	Small-scale fishing is local population's main supplier of animal protein. Huge migrations have led to a significant decline of the hinterland market. Fish is an important source of animal protein.	Develop fisheries for countries' economy after civil war. Create sufficient facilities for unloading, processing and packaging of fish products.
Sub-region			Development and value addition of fish products important for food security.	Develop local value addition in fisheries Standardise small-scale fisheries

a) Major trends

Fish products contribute to food security in two ways – firstly, as a source of animal protein and secondly, indirectly, by providing a source of income to the actors involved and the State. Although individual fish consumption in Africa is less than half the average world consumption (7.8 kg as against 16.3 kg in 2001), this must be viewed against the fact that diets in Africa generally include a smaller quantity of protein than in the rest of the world. In Africa, fish provides 18.6% of animal protein, which is well above the world average of 15.9%.

Fish products are an important source of nutriments (proteins and polyunsaturated fatty acids), vitamins (A, B and D), minerals (calcium, phosphorus and iron) and essential trace elements (iodine). In some countries, fish accounts for more than 75% of the animal protein intake and therefore forms the basis of these countries' food consumption and therefore, its food security. However, fish consumption is still largely concentrated in coastal areas, among communities that depend upon fishing for their livelihood, and in large towns. This is due to the difficulty of supplying fish to rural populations and those far away from coastal areas.

The fisheries sector in CSRP countries has not contributed as much as it should have to poverty alleviation. The fisheries supply chain is largely geared towards the overseas market and the export of raw fish (see above). Poverty reduction, as an explicit objective, does not seem to be a priority for the fisheries sector. Moreover, decision-makers do not seem to view fishing as a sustainable means of livelihood but more as an export industry. Despite the fact that fishing contributes substantially to food security and employment for a considerable section of the population, in most CSRP countries, domestic markets can no longer rely on their own supplies, as supplies are directed towards more lucrative overseas export markets, even in the case of small-scale fishing. This shift in the fisheries sector has also led to a disruption of supplies to the rural hinterland and threatens the promotion of local processing and packaging of fish products.

b) Fisheries policy challenges with regard to the contribution of the fisheries sector

In the coming years, the fisheries sector may be faced with an unprecedented socio-economic crisis if the over-exploitation of most fish stocks does not come to an end. Fishing is the source of livelihood for a

large portion of the local population and the depletion of fish resources would entail a lack of food proteins, possibly leading to famine. A key issue for the fisheries sector, with regard to its nutrient and economic contribution, is to maintain its role in providing animal protein and incomes to a vast proportion of the population. As this sector is heavily dependent on export markets, the situation is likely to change drastically upon the new ACP-EU fisheries agreements and the increasing trade liberalisation of these products. One of the challenges before decision-makers is to ensure food security by maintaining a constant supply of fish and fish products to the local population. Coherent policies will have to be instituted, incorporating not only environmental objectives (reduction of fishing effort, stock preservation) and economic objectives (continuing exports), but also social objectives (providing sustainable livelihoods to populations that depend on fishing).

Trade liberalisation measures in the form of fishing agreements with EU countries or increased exports of demersals and other high-value fish products can have harmful repercussions on national consumption. The majority of the high-value fish species caught in the waters of CSRP countries is exported and at the same time, these countries import the same quantity of low-value fish. Several case studies conducted by Enda Diapol/REPAO (a network of actors working towards economic sustainability) show that neither national nor EU fishing fleets under the EU fisheries agreements target the domestic markets.

All this would have been inconsequential if fish were not a major source of animal protein for West Africa's coastal populations. In Guinea-Bissau, fish consumption is more than 100 kg/capita/year and it must be emphasised that in Senegal, fish has become an increasingly important source of animal protein (up to 75%) for the coastal population. Migrations to the large coastal urban centres of Nouakchott, Dakar, Banjul, Bissau Conakry and Praia are accompanied by changes in dietary habits, with fish gradually replacing meat. This substitution is explained by two factors: the first is the abundance of small pelagics at low prices due to surplus production by small-scale fishing fleets; the second relates to the high cost of meat products, particularly red meat from livestock breeding areas in the hinterland (or imported). In this context, the absence of fish landings, accompanied by national exports, has the following repercussions (with the exception of small pelagics that are currently abundant):

- Fish supplies to local markets are reduced, with its corollary – a rise in prices, given the current resource depletion, which in turn

has reduced the purchasing power of West African households, a majority of whom already live below the poverty line.

- It has prompted an initial phenomenon of the substitution of traditionally consumed species by species that were scarcely consumed or not consumed at all until a decade ago. It has also led to the substitution of high-value species, now absent, by species that until recently were only consumed by low-income households. This has led to a second substitution phenomenon between fish and poultry, partly imported from Europe[21] due to lower prices for white meat as compared to fish prices.

As a result, it seems that fishing agreements and national exports tend to restrict market supply and therefore contradict other national, sectoral policies that rely on the supply to national markets. Industrial and small-scale fishing fleets are almost entirely oriented towards overseas markets, neglecting domestic market supplies, or supply only second-rate quality fish that are unfit for export, or fish species not yet saleable on the export market. This is all the more ironic as the national small-scale fishing fleet's development, through direct subsidies to local fishers, was intended originally to ensure supplies to local markets and contribute to national food security.

The question of coherence therefore arises, given the vital role played by fisheries in the national economy, employment sector and as the principal supply of animal protein to local populations. The issue consists of finding ways to reconcile the trends observed (over-exploitation of stocks, export-oriented economy, etc.) with the supply of fish products to all the country's domestic markets. This is a key issue, on which the very future of the fisheries sector in CSRP countries depends. Decision-makers waiver between two seemingly incompatible visions of the fishing sector: fisheries as a profitable industry and hence a factor for the country's economic development or, fisheries as a source of livelihood and sustenance for the local population and a vector for human growth in the country.

[21] Particularly due to export subsidies

c) Coherence challenges between OECD and CSRP countries in terms of development cooperation

Decision-makers are faced with a policy dilemma which justifies on its own the need to introduce the concept of policy coherence in a region such as West Africa and to study it more closely, actively and sustainably. In fact, decision-makers are already torn in opposite directions and although no improvement seems to be in sight – the field reality shows the contrary. These difficult circumstances call for concerted and coherent policies that are not contradictory and have multiple objectives and a mid-term vision. Developed countries could help in evolving these policies by supporting the initiatives taken in this direction by West African countries and by checking these initiatives against their own fishery and development policies. Developed countries need to be made aware of the realities of this dilemma, and to take them into consideration during their negotiations with CSRP countries, particularly in the course of the upcoming WTO round of talks.

Moreover, developed countries must continue financing projects in the post-catch fisheries sector, bilaterally or multilaterally, through various organisations. These projects are essential for the development of the region's infrastructure and for its food security. However, they need to be set up in close partnership with local decision-makers and in accordance with local priorities. Without institutional support and coherence between donors and local authorities, the sustainability of such projects can no longer be ensured.

5.5 Social aspects

Table 6. Matrix of major trends and challenges for policy coherence with regard to social aspects

Country	Number of fishers	Number of jobs relating to fishing	Major trends	Challenges
Cape Verde	Small scale fishing: 4 283 (2000) Industrial fishing: 9,108	27 400 (2000)	3 500 women engaged in fishing.	Create more jobs in post-catch sector
The Gambia	Small-scale fishing: 30 000 (2003) direct and indirect jobs Industrial fishing: 1 500	200 000 (2003) people dependent on fishing	The fisheries sector is of great social importance. Small-scale fishing creates numerous jobs. The sector, including the small-scale fishing sector, is dominated by non-nationals, mainly Senegalese.	Develop small-scale fishing and provide industrial fishing infrastructures in order to increase the involvement of people in the fisheries sector, particularly women.
Guinea	Small-scale fishing: 80 000 Industrial fishing: 1 700	No data available	The fisheries sector is a migration hub for fishers from Senegal, Sierra Leone, Liberia and Ghana. The policy of promoting export-oriented small-scale fishing has affected the local social fabric.	Develop training programmes for fishers and wholesale fish merchants for better management of savings and local administration of fisheries.
Guinea-Bissau	Small-scale fishing: 1 232 Industrial fishing: Export fishing provides 50 national-level jobs.	15 000 people are employed in the processing and marketing sector.	The fisheries industry creates a high number of jobs in comparison with the fishers themselves. Export fishing hardly benefits the country in terms of social aspects.	The sector's development is very important in social terms. Imparting training programmes for fishers is important for joint management.
Mauritania	Small-scale fishing: 12 100 (2001) National industrial fishing: 4 260 Export fishing: 5 832	10 330 jobs on land	Strong growth in employment in small-scale fishing (3 800 in 1994, 12 100 in 2001). Overseas markets have a negative impact on employment. Small-scale processing fulfils an important social function (for women).	Develop local value addition of fish products, apart from dried-salted fish in order to develop employment opportunities in fisheries sector.

Senegal	Small-scale fishing: 52 200 (1997) Industrial fishing: Total: 100 000	About 500,000	Overseas markets have a negative impact on employment. Small-scale processing fulfils a very important social function (for women). Training problem in administration.	Develop local value addition of fish products. Policies must focus on training of managers and definition of posts.
Sierra Leone	Small-scale fishing: 20 000 to 30 000 Industrial fishing:	No data available	The civil war has led to massive population displacements. The fisheries sector employs less than its capacity.	Develop society's interest in fisheries for employment of fishers and women in the post-catch sector.
Sub-region	Major trends: ▪ Local value addition of products provides employment opportunities. ▪ Literacy issues among communities dependent on fishing as a source of livelihood.		Challenges: ▪ Develop local value-addition of fisheries products ▪ Link policies for sustainable fisheries management to food security throughout the sub-region. ▪ Improve education and training of sectoral actors so that they are involved in the policy making process.	

a) Major trends

In all CSRP countries, fishing is a very important activity, not only in economic but also in social terms. Despite the fact that the contribution of fisheries to the GDP in some countries is modest as compared to that of other industries, fishing remains a source of livelihood for a majority of the population residing near coasts and rivers (see above). Historically, fishing has always played a part in West African culture. Fish constitutes a common staple food, although today, because of their high cost, traditionally consumed fish species have been substituted by low-cost fish, particularly small pelagics.

Communities living near the coasts are heavily dependent on fishing. Their social fabric revolves around fishing activities. Men make up the majority of fishers, employed in upstream jobs (production of equipment, boats, etc.) or working in the post-catch sector (packaging, transport, processing). Women are employed in fish trading or in the post-catch industries. On the whole, for most communities, local society revolves around small-scale fishing. It is a community activity in which the whole population is sometimes involved. The livelihood of a large proportion of the population, which needs to be preserved, therefore hinges on the fishing sector's future and sustainability.

The export-oriented trend of national fisheries policies has had critical social repercussions on coastal communities dependent on fishing

livelihoods. Raw fish product exports, which benefit from export duty exemptions on EU markets, have overshadowed the local value-addition of fish products. As a result, those traditionally dependent on processing industries, local markets and inland supply systems have been deprived of employment opportunities. Consequently, overfishing, as mentioned earlier, is a significant factor that has led to an increase in poverty in coastal communities whose livelihoods depend on small-scale fishing from loss of income to diminishing supply which then leads to a rise in fish prices.

b) Fisheries policy challenges with regard to social aspects

Another problem faced by fishing communities is illiteracy. Fishers have on the whole very low levels of education as they start working at a very early age. This represents a major constraint to the development of fishing in most areas. A certain level of education is useful in order to implement development objectives such as participatory management schemes based on inputs from all users or community-based management of fisheries at the local level. In order to develop a participatory management approach, decision-makers therefore need to make parallel efforts to improve the educational level of coastal fishing communities.

Educating all the fishing sector's actors at the local level is also important in terms of savings management, the setting-up of credit financing and company management for fishers and women traders. Specific training programmes would enable the development of microfinance in the post-catch sector and improve management of small-scale companies in the sector. Regarding the staff of local fisheries administrations, training programmes on local project and development programme design, assessment and monitoring could be envisaged.

In some countries like Sierra Leone, one of the key social issues relates to the development of the post-catch fisheries sector. Fish landing infrastructure is poorly developed, therefore fish catches from EEZ waters are unloaded in neighbouring countries with processing facilities in order to facilitate exports to developed countries or else, products are transhipped on board other vessels and then unloaded in European ports. Infrastructure development would provide local employment to the population. This would be of special interest to fishers' wives who already avail of similar opportunities elsewhere in CSRP countries.

It is therefore essential for decision-makers in CSRP countries to take account of the close links between economic and social objectives. As these objectives are closely interdependent, it is important to ensure consistency between the economic and social dimensions in the decision-making process. This means that if they decide to favour overseas markets at the cost of local fish product distribution, it would lead to a reduction of lower-end fishing opportunities for the local population. In addition, the heavy dependency on the EU-ACP agreements, and in general on the developed world's markets, leaves the local population, which is dependent on the fishing industry, vulnerable to serious social crises that could jeopardise their food security and local livelihoods.

c) Coherence challenges between OECD and CSRP countries in terms of development cooperation

Developed countries have to play a very important role in this field. The challenges of economic development (mentioned earlier) notwithstanding, the OECD and other countries involved in development projects in West Africa must recognise the cultural impact of fishing in CSRP countries and must work towards maintaining the social fabric of fishing communities. This would entail extending financial as well as technical assistance for the development of educational and training programmes intended for the sector's actors, and supporting collective initiatives undertaken at the local level. Supporting policies aimed at the fisheries sector's integration in the national economy, and which are coherent with the country's social policies, remains equally important.

As mentioned earlier under the chapter on "economic aspects", the issue of access to promotion for CSRP countries is an important challenge as well for social development. Tariff escalation represents a major obstacle to the utilisation of processing and packaging infrastructure facilities in the exporting countries. As we have seen, such infrastructure is an important source of employment and can provide a sustainable means of livelihood to countless families. But for this to be realized, importing countries must first recognise the issues involved on the social and economic levels, taking into account the policy obstacles hindering the social development necessary to sustain local promotion of fish products. In addition, importing countries should continue to focus on renegotiating customs duties with exporting countries so that the latter are able to add value to their products prior to export.

5.6 Governance

Table 7. Matrix of major trends and challenges for policy coherence with regard to governance

Country	*Major trends*	*Challenges*
Cape Verde	Legal system currently under review.	Strengthen institutional capacities. Review and adjust incentives system.
The Gambia	The Gambia has an economic and social fisheries policy and a resource preservation policy. Several programmes aim at developing small-scale fishing.	Strengthen institutional capabilities. Involve local players in the decision-making process.
Guinea	One of the very first countries to implement a legal fisheries management framework. Previous policy of supporting export-oriented small-scale fishing had a visibly negative impact on the local social and economic structures.	Implement a long-term policy, with a preliminary appraisal. Conduct a prospective study on fisheries management and processing. Institute a customs system simplification policy. Sectoral decentralisation to be envisaged.
Guinea-Bissau	Lack of capability to promote sustainable economic growth. Heavy dependency on EU (and what happens after 2008 and the expiry of trade benefits?).	Develop strategic planning. Attempt to reduce the heavy dependency on the EU and sustain economic growth.
Mauritania	Increasing awareness of environmental constraints with freezing of fishing effort.	Support policies for sector's integration into the national economy. Reduce strong dependency on overseas markets through appropriate policies.
Senegal	Financial support for small-scale fishing (lowered interest rate, tax refund on engines and equipment, cross-subsidisation of fuel for pirogue fishing boats). Participatory management initiatives taken (local fishers' communities).	Review beneficiaries of direct financial assistance granted by the State. Continue participatory management initiatives.
Sierra Leone	A major part of trade does not bring in any real profits to the country. Institutions are in the process of being rebuilt after a severely damaging civil war.	Develop coherence between national and sectoral policies for a better level of fisheries' integration in the national economy. Provide institutional support for the sector's development.
Sub-region	Generally, policies oriented towards overseas markets. Lack of coherence between sectoral and national policies. Potential conflicts arising between the fisheries sector and other sectors of activity (tourism, maritime transport, etc.)	Encourage the involvement of fisheries sector decision-makers in national strategic planning processes. Develop participatory management initiatives for local players.

a) Major trends

One point that emerges from publications devoted to the fisheries sector in West Africa and particularly CSRP countries is that fishery policies appear to be disconnected from the main priority areas of national policies. In fact, although national policies are directed outwards towards developed countries' markets, the sectoral policies run counter to these trends. Senegal and Mauritania, for example, had initiated a shift towards the sustainable exploitation of fish stocks by implementing fisheries management policies aimed at reducing the pressure on fish stocks. As a result, fisheries governance has operated in isolation for many years.

The fisheries sector has long been considered marginal and of little significance as far as its share in the GDP is concerned. Thus, while implementing national poverty-reduction programmes, decision-makers preferred to focus on agriculture rather than fisheries as a sustainable means of livelihood for local populations. However, for some time now, it has been possible to highlight the place of the fisheries sector in the national economy in terms of employment, household revenue, food security, and as a social safety net in general (FAO & DFID, 2006). Henceforth, national governance bodies are incorporating the fisheries sector in far more national-level policies and strategies, but this trend has still to develop fully.

The notion of governance highlights several points, including "good governance" as a key element for development. The notion implies a set of specific principles that are necessary for the implementation of reflective and coherent policies in line with a sector's objectives. However, applying these principles in practice (transparency, reporting obligations, and accountability) seems difficult in most CSRP countries. Assessing these notions within the leading institutions is also difficult, but public authorities have noted the lack of follow-up on these issues, which are indispensable for the implementation of coherent policies for the sustainable development of the fisheries sector.

In several regions of the world, such as West Africa, the emergence of conflicts between the fisheries sector and other sectors such as tourism and maritime transport can be observed. These will continue as long as appropriate governance mechanisms have not been implemented. A major constraint is the lack of requisite information and knowledge to

assess the levels of interaction between sectors and to inform the various actors involved in these sectors of possible cross-sector solutions.

In Senegal, initiatives have been taken to involve fishers in the fisheries management process. Launched by the Senegalese head of Government, an integrated marine and coastal resources management programme was implemented with the support of donors such as the World Bank. A participatory management approach is one of the programme's fundamental tenets. The fisheries administration officially agreed to share its "top-down" prerogatives with local actors at the grassroots level. In turn, fishers were authorised to take effective measures to manage their fish resources. In fact, the joint management[22] concept promotes dialogue among actors at the local level, with feedback given at the national level. Those using local resources who participate in the management process thus get a better idea of the major environmental constraints posed and the interests of all those involved in the concerned resources' utilisation. This allows for less contentious management and greater respect by users for the development and measures implemented.

The globalisation phenomenon poses both challenges and opportunities for the fisheries sector in West Africa. Indeed, with the opening of markets and the increasing interdependence of economies, CSRP countries need to take a stand that would enable them to ensure the sector's maintenance on a regional level. Throughout this study, we have noted the strengths and weaknesses of fisheries in West Africa and underscored the obstacles to its development. In today's scenario of globalisation, the sector faces several threats to its survival. The tariff escalation mentioned above is not conducive for the post-catch sector's development. On the other hand, sanitary and phytosanitary measures (SPS) for fisheries raise the issue of the sustainability of exports to developed countries. Decision-makers are jostling to find a place aboard the globalisation train, but this has not proved to be an easy task. Nevertheless, they must take into account the inevitability of globalisation, and the fact that CSRP countries must adapt and make the appropriate decisions that will allow them to hold on to their place in the world's fisheries economy.

[22] **Joint management** is a compromise between community self-management and government centralisation, which involves local actors in the fishery management process by organising local-level meetings, for instance, in order to get a better understanding of opinions and initiatives that are then communicated to the decision-makers, who use them to formulate management policies.

b) Fisheries policy challenges with regard to governance

a. The challenge of integrating the fisheries sector in national governance

The integration of the fisheries sector in the national governance system would mean that the fisheries sector's objectives for the sustainable development of fisheries resources and for industrial development would be fully taken into consideration. This would help bring down the existing barriers between environmental policies and development policies, which are often governed by different institutions and different budget lines. A better integration would also promote the redefinition of certain institutional objectives and reduce unnecessary competition among certain administrative departments.

Over and above the integration of the fisheries policy in the national economy, another important issue is to bring the other sectors' policies in line with the fisheries sector (tourism, maritime transport, urban development, etc.), within the national governance framework. Currently, in the majority of cases, public action processes are implemented sector-wise, which inevitably leads to a lack of coherence in a natural resource sector like fisheries which requires an alignment of related policies. All interdependent activities related to the fisheries sector must be taken into consideration in the decision-making process and in national and regional governance. Decision-makers must take the entire gamut of interactions and potential conflicts that incorporates all sectors into consideration while establishing priorities and standardising policies for coordinated governance.

b. The challenge of extensive regional coordination among national policy makers

The trends observed and the constraints faced by CSRP countries raise the issue of increased cooperation among CSRP countries, especially with regard to external relations (e.g. regional fisheries agreement negotiations) and the management of common resources (tuna, small pelagics). At the same time, natural resource management generally requires a flexible approach that should not be confined within narrow institutional or sectoral rigidities. In this sector more than others, the prevailing situation should instigate coalition-building. If ECOWAS or the CSRP help to promote the emergence, expression and implementation of awareness and political will in the fisheries sector,

they will be able to establish a precedence of dialogue and problem-solving through an approach based on concentric policy circles. Let us take two revealing examples concerning CSRP countries – small pelagics and tuna. While the former seem to justify management and conservation measures within the framework of the Commission, the latter seem to call for much broader action at the ECOWAS level. This is not only because of the migratory dynamics and the economies of scale required for processing tuna., but also in view of the role played by Ghana, Nigeria or Côte d'Ivoire with regard to their catch, and the fact that the lack of unity during negotiations on fisheries agreements or the grant of fishing permits could actually threaten supplies.

Indeed, the State's role in fisheries governance needs to be reassessed. For instance, the high degree of mobility in fishing activities on the West African coastline takes place outside of the local management framework and this fact must be addressed not just at the local level, but also at the national and regional levels. The links with the human migratory phenomenon, discussed earlier, is an additional factor where the State's role merits reassessment.

The lack of adequate regional coordination in the management of protected marine areas has had significant consequences. The absence of regulations governing migratory movements across borders and the level of small-scale fishing happening in these concerned areas was also observed. It is true that coordination means constant cooperation between States and civil society. To this end, the CSRP could coordinate its interests through a network developed from the PRCM, or Regional coastal and marine conservation programme for West Africa ("*Programme régional de conservation de la zone côtière et marine en Afrique de l'Ouest*"), or an initiative of international NGOs or intergovernmental organisations.

c. The challenge of actors' participation in fisheries management

Management systems all advocate better consultation of actors for the joint implementation of fisheries management and development policies. In West Africa as elsewhere, it is important to garner the viewpoints of the fisheries sector's local actors and take their views into consideration while formulating policies. This "bottom-up" approach can result in smoothing out any inconsistencies in the policies implemented. Thus, in Senegal, the local councils of artisanal fisheries ("*Conseils Locaux de Pêche Artisanale", ou CLPA*) have understood the government's willingness to involve local actors

and bear their experiences in mind. One of the major challenges in the future will be to incorporate this practice while formulating policies.

As the fisheries sector and its actors are taken increasingly into consideration, policies with a multidisciplinary approach can be formulated. This would make it possible to implement fisheries management policies with multiple objectives that are consistent with the interests of all the actors and to reduce room for conflicts over access or interests. Why then is it deemed necessary to expand the scope of discussion to include other fisheries-related sectors in order to formulate coherent multi-sectoral policies that are in line with coastal area management and the economic, social and environmental interests of different sectors?

d. Illegal, unreported and unregulated fishing (IUU) – Improving national and regional governance to contain the problem

Despite national and international efforts, pirate fishing remains a flourishing activity. Illegal, unreported and unregulated (IUU) fishing, which is rife in territorial as well as international waters, is practiced by all sorts of fishing vessels irrespective of their registration, size or state of origin. It leads to the extraction of world fish stocks and compromises the protective and restorative measures implemented to ensure their sustainability. Thus, IUU fishing has harmful repercussions on the economic and social well-being of all those who exploit these resources legally, thereby reducing the incentive to respect the rules. In fact, pirate fishing has become an international priority. Over the last few years, governments the world over have become aware of the seriousness of the problem and have intensified efforts to bring it under control.

The profits involved are the primary motivation for this economic activity. Awareness of this fact is important in order to understand why the adoption and implementation of several international preventive measures have failed to curb it. In the current scenario, illegal fishing is profitable. That is why the first step in the fight to stem it consists of identifying the measures likely to prevent it from being profitable. In the last few years, IUU fishing activities have become the primary concern at the international level in the fisheries sector. At the 3 June 2003 summit in Evian, the G8 heads of State adopted an action plan calling for the urgent formulation and implementation of international plans of action, within the FAO framework, to eliminate them. In more general terms, IUU fishing was brought up in the WSSD in Johannesburg in

September 2002, and throughout the 1990s, various rules and measures were decreed by the UN and the FAO.

Open registry is an important issue, as it promotes IUU fishing. In some countries, registry books are not subject to any limitations in terms of the number of boats or other constraints. Such registry books offer enormous economic advantages to the boats they list and comparatively far fewer benefits to the States issuing them. Illegal fishing is also facilitated by the use of several flags of convenience to hide the ship owner's true identity. Many different tactics are used to falsify the fishing vessel's identity, such as multiple names and frequent changes in name and registration certificates. Thus, it is difficult to penalise offenders and in most cases, fines do not act as a deterrent, given the considerable gains to be made from illegal fishing.

In fact, West Africa's coasts are known to be subject to extensive illegal fishing by foreign trawlers, which has been growing despite the attention paid to this issue by the international community over the last few years. Some of the boats boarded and inspected by West African countries' authorities were later seen in Las Palmas, in the Canary Islands, which are part of Spain, thereby suggesting that illegal fish originating in West Africa is sold in the European Union. According to a report for the British Department for International Development (DFID, 2005) on IUU fishing in West Africa, examining 10 case studies of countries including Sierra Leone and Guinea, losses due to IUU fishing amount to USD 105 million in Guinea and USD 30 million in Sierra Leone. The authors estimate that 20% to 60% of boats looking for prawns, octopus or pelagics operate without permits and about a third of the boats that have permits fish in prohibited areas. They further estimate that in West African EEZs, the IUU catch is worth 16% of the total catch value. But IUU fishing is also practiced in the high seas. According to the authors' estimate, IUU fishing accounts for 19% of the total high seas catch.

The institution of Monitoring, Control and Surveillance (MCS) programmes, as in the case of the Surveillance Operations Coordination Unit (SOCU) in West Africa, clearly indicates the determination to combat this phenomenon, which affects the entire sector. Although the MCS programmes are extremely useful, some unscrupulous operators make the most of the weak links in Monitoring/Control/Surveillance, for instance by using different ports of convenience (such as Las Palmas, mentioned earlier) for their IUU fleets that are active in West Africa. These areas then become the headquarters from where IUU fishing

operates, thereby undermining the ACP coastal States' efforts to combat these destructive activities.

- *Lack of coherence between national policies and international treaties: The case of IUU fishing*

  At the international level, the FAO's International Plan of Action (IPOA) to prevent, deter and eliminate IUU fishing was approved in 2001 by all FAO members. The FAO requires all its member States to take necessary measures to implement the international plan of action no later than three years after its adoption.

  However, the FAO has identified major constraints that prevent developing countries from implementing the action plan. As far as the ACP States are concerned, these constraints include:

  A lack of financial means, technical know-how, staff and sometimes even political will to develop a plan for combating IUU fishing. These constraints are especially significant for some of the ACP countries and can be identified as marks of complacency.

  A lack of co-operation among ACP States. This is an obstacle for actions such as the exchange of information at the regional level concerning boats involved in IUU fishing and the implementation of regional registration of authorised boats (with permits).

- *IUU fishing and governance*

  Along with the implementation of an effective MCS system and procedure, the necessary political will to enforce regulations, cooperation with neighbouring countries on surveillance and active participation in regional and sub-regional fisheries agreements, it is necessary to ensure good governance if we wish to curb the problem of IUU fishing.

  It is obvious that one of the only means of fighting effectively against IUU fishing is to improve the general level of governance among all parties, including internationally, as this would provide enhanced stability, profitability and investment in the fishing sector. It would also enable better MCS and better control of foreign flags and boats, as well as more active participation in the regional coordination and implementation of joint surveillance arrangements. It is also important to implement effective sanctions against all the actors involved in IUU fishing: the State in whose waters the fishing takes place (in this case, CSRP States), the flag State and the port State.

Clearly, it will be difficult and very expensive to try to resolve the issue of IUU fishing by attempting to improve a State's overall governance, and yet it seems important to bear in mind the links between governance and IUU fishing while striving to find effective solutions. Indeed, even if decision-makers try to develop the MCS in a given region by increasing the credits allocated, it does not necessarily follow that IUU fishing will reduce in the area. In fact, along with the development of the MCS, it is important to ensure that national governance structures also follow up in this matter (corruption level, legal and penal capacity, etc.). Moreover, all actions taken should be pooled at the regional level (ECOWAS) and greater coherence in regional governance should be developed. This would lead to a marked improvement in the MCS at national and local levels and enable the imposition of the sanctions established for IUU fishing boats.

Such coherence in governance at the regional level could take the form of several concrete actions, including:

- Establishing regional information networks on permit-holding vessels, those using flags of convenience and pirate vessels. A continuous information exchange system between countries within the same region should be instituted (between various MCS administrations), covering all arrests of vessels violating the rules, as soon as they are arrested (vessel's name and description, type of violation, penalty, etc.)
- Coordinating surveillance operations and joint inspections.
- Signing agreements on the right to pursue offending vessels beyond national waters.
- Withholding permits to vessels with flags of convenience/open registration books.
- Bringing international (government and consumer) pressure to bear on countries harbouring IUU fleets in their ports.

c) Challenges between OECD and CSRP countries in terms of development cooperation

For several years, international organisations (international NGOs and institutions) focused their financial efforts primarily on strengthening certain interest groups, such as socio-professional and social organisations. These organisations attempted to restrict the impact of "top-down" type governance systems by providing direct assistance to fisherfolk, wholesale fishmongers or local fish product processing and packaging actors. Thus, we saw a rise in the number of such groups in

West Africa playing a disproportionate role in the sector. At the same time, this led to the weakening of government authorities, which had a negative impact on the sector by hindering the progress of public management.

In terms of contributing to the improvement of governance, developed countries can help in improving institutional capacities. Without really changing their existing institutional structure, they could provide CSRP governments with key elements for the development of institutional capacities, in terms of transparency, reporting obligations, monitoring and policy assessment. Indeed, it appears that West African governments' policies are subject to very little monitoring and evaluation, although these procedures are essential in order to avoid repeating the same errors and to accurately measure the real results achieved by development policies, especially in the fisheries sector. This would also give policy makers a solid base for drafting long-term strategic development plans.

As we saw earlier, aquaculture seems a very promising sector in terms of exports and employment with eventual some benefits of food security. However, it can only be developed if decision-makers demonstrate a clear political will to incorporate the sector into the national economy and to institute policies coherent with its sustainable development. Developed countries too have a key role to play in developing aquaculture in West Africa. Several bilateral or multilateral projects have emerged, essentially aimed at increasing supply of fisheries resources for food security. Other perspectives could be envisaged, such as cultured fish production for export, with the required sanitary and environmental standards. Institutional or private investors would then have to play an active role in supporting such projects, as they call for high levels of start-up capital and extensive technical support over several years in order to ensure their sustainability.

Chapter 6. Lessons learned and future prospects: Towards improved policy coherence for control and management

It is clear that a deeper sectoral analysis of policies at the regional level is extremely useful in improving our understanding of the extent of inconsistencies in West Africa's fisheries sector. It highlights a number of shared interests that could be managed with greater coherence and be better coordinated at various levels. This said, natural resource management generally requires a flexible approach that should not be confined within narrow institutional rigidities. In this sector more than others, the prevailing situation should incite coalition building. For this region, institutions like ECOWAS or CSRP will be critical as they are the appropriate structures to conduct the political and technical dialogue necessary to promote the emergence, expression and implementation of increased awareness and clear political will for sustainable fisheries management. They must nonetheless maintain a level of autonomy by using an approach based on concentric policy circles. Let us take two very revealing examples concerning CSRP countries – small pelagics and tuna. While the former seem to justify management and conservation measures within the framework of the Commission, the latter seem to call for much broader action at the ECOWAS level, not only because of their migratory dynamics and the economies of scale required for their processing, but also in view of the role played by Ghana, Nigeria or Côte d'Ivoire with regard to their catch. In this case, the lack of cohesion during negotiations on fisheries agreements or the grant of fishing permits could threaten supplies.

In general, important measures of concerted management could be drawn up in the areas of juvenile fish and marine reserve protection sector, in the harmonisation of export support measures and regulations on foreign fishing, in allocating exceptions within fishing agreements, in authorised fishing effort levels with regard to certain fish stocks, etc. If West African governments understand the dimensions of these challenges and take action

today, sub-regional fishing will continue to meet several food security, export, employment and economic development needs. There is a strong likelihood, however, that inaction will lead to higher costs in this sector. West African exports in particular, which have boosted the entire sector's development for several decades, seem to be directly threatened by the mismanagement of demersal, crustacean and cephalopod stocks.

West African countries first must have a clear understanding of their own national fisheries policies in terms of priorities, strategies, objectives and planning while at the same time incorporating regional considerations into national policies. Similar to the situation found in OECD countries, particularly European Union countries, West African countries will also need to better define their national and regional priorities in the light of the following key strategic issues for policy coherence (Box 6).

Box 6. Various strategic issues for CSRP countries

- What obstacles hinder consistency in policies and how should they be overcome in terms of access to resources by small-scale, industrial, national and foreign fishing?
- How to define management tools (quotas, TACs, permits, licenses, etc.) that are well adapted to the various types of fishing and enable the sustainable use of marine resources whilst taking national, sub-regional and international market supply priorities into consideration?
- What are the local producers, State's and trading partners' needs in the fisheries regulation sector, especially with regard to the FAO's Code of Conduct for Responsible Fisheries Management and national fishing regulations? Have the various sectoral actors been adequately consulted to make it possible to identify the shortcomings or weaknesses in these regulations or in their application?
- How can priorities in terms of market access be defined? How can a surplus trade balance be maintained while ensuring domestic market supplies and safeguarding people's food security?
- How can sub-regional fisheries' cooperation be improved and on the basis of what criteria?
- How can different countries' conditions of access to fish resources be harmonised in order to develop an ecosystem-oriented fisheries' management approach? How could that help in improving sub-regional fish research for a better knowledge of fish stocks and their exploitation?
- How can coherence between investment and official development aid policies in the fisheries sector be improved? And for fleet and fishery production tools' modernisation? For post-catch infrastructure and equipment (unloading docks, cold chains, road infrastructure)? What about fish product hygiene and quality (standardisation and traceability issues)? And finally, for strengthening the technical and strategic skills of the actors involved in the fishing sector?

Lessons learned and implications for OECD and West African countries

Addressing the issue of policy coherence in the fisheries sector is a difficult but unavoidable exercise for the region, if the sector's actors in general, with State arbitration, wish to create a balance between the various policies to be instituted while ensuring the absence of contradictions.

The various development objectives have to be reconciled. Lessons can be drawn from the OECD countries' experience. During their implementation, different development objectives have to be reconciled. In the case of the West African fisheries sector, how can the maximisation of the countries' economic benefits be reconciled with the sustainable exploitation of the region's fish resources while taking account the critical social aspects of food security and poverty alleviation?

As a first step, problem areas on the issue of "policy coherence" in the fisheries sector at national and regional levels have to be prioritised. The prioritisation exercise could be followed by the definition of these priorities and a dialogue between the various actors to understand their nature and causes, and identify possible solutions.

Box 7. Various questions with regard to a North-South dialogue on fisheries policy coherence in West Africa

- How can West African realities and political priorities be taken into consideration in programmes, especially fishing access agreements?
- How can the most urgent development issues of the three aspects of trade/sustainable fish resource management/food security be dealt with?
- How can the necessary political will be developed to control and put an end to illegal, unreported and unregulated (IUU) fishing in West Africa?
- How can Northern countries' private sector and civil society be encouraged to play a greater role in responsible investment and consumption in order to give an impetus to the sustainable and equitable development of fisheries in West Africa?
- What costs are we paying for the inconsistencies in fishery policies? In terms of costs to development partners? To States? To producers? To consumers? Given the current depletion of resources? In figures? As regards the problems faced in fisheries partnership agreements with the EU? In terms of policy ineffectiveness, including development aid?
- What are the real driving forces behind coherence in the region and how can they become strengthened?
- In the context of globalisation, how can West African fishers gain access to the international market (sanitary standards, etc.)?
- How can current policies be amended in order to ensure that food security always remains a priority in fisheries policies?
- In what way can this analysis be applied to other sectors, in relation to fisheries?
- How can development partners support West African decision-makers in drafting strategies for the sector's sustainable and coherent development in the medium and long-term?

Conclusion

The fisheries sector in West Africa has long been considered marginal and insignificant in terms of its contribution to the region's gross domestic product. Hence, while drafting national poverty alleviation programmes, decision-makers prefer to focus on agriculture rather than on fishing as a sustainable source of livelihoods for local populations. This can help to explain the lack of policy coherence we still see today between policies directly and indirectly affecting the region's fisheries management. Nevertheless, due to the attention given to halieutic resources in West Africa within the framework of trade agreements, the fisheries sector's place in the national economy – in terms of employment, revenue, food security and safety (FAO & DFID, 2006) – is being highlighted. As a result, the West African fisheries sector is slowly beginning to be better integrated into national policies and strategies by national governments, as well as within the international cooperation frameworks. This positive trend, which is essential in order to guarantee the West African population a stable means of sustaining their livelihood linked to fisheries, still has a long way to go before it gains hold, but important progress is being made, particularly at the intra-regional level.

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Annex 1. Fisheries in OECD and non-OECD countries: Policy coherence

Policy domain	Key element	OECD	Non-OECD	Issues for policy coherence
Environment	Aquatic ecosystems	Temperate & productive; Good knowledge; Much inter-sectoral interaction and concern;	Tropical & variably productive; Less knowledge; Less interaction;	Management policies must be appropriate for each system;
	Fish resources	Fully or overexploited;	Under or moderately exploited or depleted;	Management policies must recognise opportunities and threats of this gradient;
Technology	Types fisheries	Industrial level, large offshore and onshore; some coastal;	Mixture of types (industrial to artisanal);	Balancing sector structure with economic/social functions of fisheries;
	Fishing fleets	8 million GT ; decked vessels; fleet decreasing overall;	12 million GT; mixture of vessels; fleet increasing overall;	Competition for fishing opportunities between fleets increasing;
Economics	Production (vol)	24 million mt (declining); but aquaculture increasing;	62 million mt (increasing); aquaculture increasing;	Fish supply gradient and opportunities for contributing to development;
	Production (value)	In 2000, first sale value of capture fisheries production was USD 81 billion		High value fisheries create opportunities and problems for development;
	Trade	Main destination for traded fish (80%);	Main source of fish exports; valuable FOREX;	Consumers & suppliers; who benefits?
	Consumption	High supply; high intake; (one diet component);	Lower supply; lower intake;	Variation in nutrition supply trends; relative importance of fish;
	GDP	<1% for most countries	>1% for some countries (important for agric GDP);	Relative importance to economy;
Social issues	Employment & livelihoods	1.6 million people employed (decreasing);	33 million people; crucial for poor livelihoods in many regions (Asia);	Coherence between economic and social objectives;

	Nutrition	Varies by country; fish is one component of varied diet;	Fish important as sole protein supply in many countries, especially for poor;	Nutrition value of fish compromised by commercial activities in some regions;
Governance	Changing forces	- Fisheries policies & management in state of flux, SD increasingly recognised; - Increasing interaction with other sectors (shipping, urbanisation, tourism); - Emergence of ecosystem approach; - conflict management important; - fisheries management needs to be multi-objective and multi-disciplinary;		
	Management	Technical measures dominate fish stock management; but increasing recognition of economic and social dimensions, and possible new approaches;	Need to clarify linkage between fisheries management & development; high social value; management systems difficult to implement;	National and international fisheries policies need to recognise mutual needs, impacts and problems; both sectoral and inter-sectoral aspects should be considered;
	Emerging needs	- alternative fisheries management approaches are emerging globally; - greater and wider stakeholder involvement (but requires more official support); - serious gap between developed and developing countries; - globalisation impact is increasing and needs to be part of management policy; - capacity for management needs to be increased globally;		

Source: Neiland (2006)

Annex 2. Key International Conventions, Agreements and Declarations with regard to fisheries, poverty and development

Treaty/Agreement	Date signed	Key points	Participants/further information
ENVIRONMENT			
United Nations Conference on the Law of the Sea (UNCLOS)	10 Dec. 1982, Montego Bay, Jamaica. Entry into force: 16 Nov. 1994.	a) to establish a comprehensive legal order to promote peaceful uses of the oceans and seas, the equitable and efficient utilization of their resources, the conservation of their living resources, and the study and protection and preservation of the marine environment, as well as to facilitate international navigation b)to integrate and balance the right to exploit natural resources with the duty to manage and conserve such resources and to protect and preserve the marine environment;	138 parties by 11 June 2002. 32 Signatories have not yet ratified. www.oceanlaw.net
Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA)	Adopted on 4 Aug. 1995. Entered into force on 11 Dec. 2001	Sets out principles for the conservation and management of straddling fish stocks and highly migratory fish stocks and establishes that such management must be based on the precautionary approach and the best available scientific information and holds the fundamental principle that States should co-operate to ensure conservation and promote the objective of the optimum utilization of fisheries resources both within and beyond the exclusive economic zone.	31 Parties by 11 June 2002. 38 Signatories, including the European Community, have not yet ratified. www.oceanlaw.net
Convention on Biological Diversity	1992	The conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate	188 parties, 168 signatories www.biodiv.org

		transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding	
Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention)	2 February 1971, Ramsar. Entry into force: 21 December 1975.	The Convention's mission is the conservation and wise use of wetlands by national action and international co-operation as a means to achieving sustainable development throughout the world	131 Parties by 8 April 2002. No Signatories without ratification, acceptance, or approval. www.ramsar.org
Code of Conduct for Responsible Fisheries	At the Twenty-eighth Session of the FAO Conference on 31 October 1995.	To promote protection of living aquatic resources and their environments and coastal areas To promote research on fisheries as well as on associated ecosystems and relevant environmental factors.	www.fao.org
TECHNOLOGY			
UNCLOS	See above	International organisations will endeavour to establish programmes of technical co-operation for the effective transfer of all kinds of marine technology to States which may need and request technical assistance in this field, particularly the developing land-locked and geographically disadvantaged States, as well as other developing States which have not been able either to establish or develop their own technological capacity in marine science and in the exploration and exploitation of marine resources or to develop the infrastructure of such technology.	
CCRF	See above	Provide standards of conduct for all persons involved in the fisheries sector (see Section 8 of CCRF for more details)	
UNFSA	See above	(Part II, Art.5) take into account the interests of artisanal and subsistence fishers	
SOLAS (Safety of Life at Sea)	1914 with subsequent adaptations,	Stipulations regarding rescue equipment on board; informing IMO about the degree to which states apply SOLAS to	http://www.fao.org/DOCREP/003/X9656E/X9656

	now SOLAS 60	fishing vessels; fishing vessel stability recommendations. SOLAS is regarded as the most important Safety at Sea convention, although there are a number of other minor ones.	E01.htm
ECONOMICS			
The Lomé Convention	Lome, 28 February 1975. The convention has been renewed several times (each time a number is added: Lomé II, III, IV etc) as new countries are admitted.	An agreement between the European Community (EC) and the African, Caribbean, and Pacific (ACP) states whose provisions call for the EC to extend economic assistance to ACP countries. Much of the aid is for project development or rehabilitation, but a large portion is set aside for the Stabilization of Export Earnings (STABEX) system, designed to help developing countries withstand fluctuations in the prices of their agricultural exports.	46 ACP countries and the European community http://www.aede.org /a33a.html
Bretton Woods Pact	1944 with subsequent amendments	A group of two principle economic agencies: the World Bank (consisting of the IBRD, IDA, IFC, MIGA and ICSID) and the IMF. Original aim was to stabilised currencies, remove restrictive exchange practices and rebuild Post WWII Europe; institutions now focus on poverty alleviation and economic stabilisation measures through financial instruments (the IMF providing loans, the World Bank providing funds).	184 members of IBRD (the most numerous) www.worldbank.org
Monterrey Consensus of the International Conference on Financing for Development	Monterrey, Mexico in March 2002	Resolves to address the challenges of financing for development around the world, particularly in developing countries. The goal is to eradicate poverty, achieve sustained economic growth and promote sustainable development as the world advances to a fully inclusive and equitable global economic system	UN members www.ICSTD.org
World Trade Organisation (WTO)	Geneva, 1 January 1995	Derives from the 1986-1994 Uruguay Round of talks (GATT) and establishes a set of legal agreements to liberalise world trade and a platform for discussion and negotiation.	146 countries www.wto.org

SOCIAL ISSUES			
Agenda 21	Adopted at UN Conf on Environment and Development (UNCED) Rio de Janeiro, 3 to 14 June 1992.	a) A set of principles for action addressing broad social and economic development needs. b) The full implementation of Agenda 21, the Programme for Further Implementation of Agenda 21 and the Commitments to the Rio principles, were strongly reaffirmed at the World Summit on Sustainable Development (WSSD) held in Johannesburg, South Africa from 26 August to 4 September 2002.	Adopted by more than 178 Governments www.habitat.igc.org/agenda21
Johannesburg Declaration on Sustainable Development	World Summit on Sustainable Development in Johannesburg South Africa, from 2 to 4 September 2002	A set of guiding principles on peace and sustainable development with poverty reduction as the core ethos.	www.johannesburgsummit.org
CCRF	See above	Promote the contribution of fisheries to food security and food quality, giving priority to the nutritional needs of local communities;	
United Nations Millennium Declaration (Millenium Development Goals – MDG)	September 2000	a) Various quantified targets for 2015 including reducing the number of poor, improving schooling rates, reducing child and maternal mortality, spread of HIV/AIDS and malaria. b) Other targets include developing further an open trading and financial system that includes a commitment to good governance, development	www.developmentgoals.org

		and poverty reduction – nationally and internationally, dealing comprehensively with developing countries' debt problems	
GOVERNANCE			
UNCLOS	See above		
International Plan of Action to Prevent, Deter and Eliminate IUU Fishing (IPOA-IUU)	2001	The objective of the IPOA is to prevent, deter and eliminate IUU fishing by providing all States with comprehensive, effective and transparent measures by which to act, including through appropriate regional fisheries management organizations established in accordance with international law.	FAO members
CCRF	See above	a) facilitate and promote technical, financial and other cooperation in conservation of fisheries resources and fisheries management and development; establish principles and criteria for the elaboration and implementation of national policies for responsible conservation of fisheries resources and fisheries management and development; b) serve as an instrument of reference to help States to establish or to improve the legal and institutional framework.	

Source: Neiland (2006).

Annex 3. Capture Production Data 1960-2005

Table A3.1. Capture Production CSRP 1960-2005

	1960	1970	1980	1990	2000	2005
Cape Verde	1 600	5 181	8 351	6 579	10 821	7 742
Gambia	3 000	4 747	10 565	18 902	26 516	29 500
Guinea	3 400	5 000	18 900	41 000	87 513	90 000
Guinea-Bissau	700	1 500	4 156	5 200	6 165	6 050
Mauritania	12 000	43 570	15 598	60 000	104 456	242 577
Senegal	56 200	110 965	217 653	293 863	379 762	355 070
Sierra Leone	19 600	30 050	34 006	41 536	60 730	131 993

Source: Fishstat FAO.

Table A3.2. Capture production 1980-2005 Non - CSRP countries

	1980	1990	2000	2005
Benin	3 632	7 908	5 924	9 835
Cameroon	61 045	48 742	57 109	67 345
Côte d'Ivoire	52 068	74 000	65 270	50 000
Ghana	184 148	337 872	370 441	317 274
Liberia	7 791	2 463	7 726	6 000
Nigeria	147 735	217 364	309 062	285 131
Togo	5 634	10 878	17 277	22 732

Source : Fishstat FAO, Metric tonnes.

Table A3.3. Capture Production 1960-2005 (Mali, Burkina Faso, Tchad and Niger)

		1960	1970	1980	1990	2000	2005
Burkina Faso	Miscellaneous freshwater fishes	2 000	5 000	6 500	7 000	8 500	9 000
Chad	Miscellaneous freshwater fishes	40 000	70 000	60 000	70 000	83 200	70 000
Mali	Miscellaneous freshwater fishes	56 000	77 000	61 760	49 374	76 909	70 000
Mali	Tilapias and other cichlids	24 000	33 000	26 468	21 161	32 961	30 000
Niger	Miscellaneous freshwater fishes	3 400	2 400	8 892	3 192	16 250	50 018
Niger	Tilapias and other cichlids	.	-	-	126	.	.

Source : Fishstat FAO, Metric tonnes.

Annex 4. Fisheries Agreements in West Africa

Fisheries agreements between countries engaged in foreign fisheries practices (which are almost all OECD countries) and the coastal states of West Africa can guarantee to industrial foreign fleets with advanced technology the access they require to fish stocks in return for a variety of financial compensation packages. In the terms of these agreements, foreign fleets are not authorized to fish except in certain areas and certain fish stocks. Coastal zones are reserved for local fleets which supply local markets and local employment. At the same time, certain sources (Molsa, 1996; Van Bogaert, 2004, for example) indicate that the exploitation of these zones by vessels from foreign fleets is at the origin of discrepancies with local artisanal fishing fleets. In Senegal, the decrease in capture of demersal species has been attributed to industrial fishing. As a result, artisanal fishing boats will have to fish farther away from the coast, which in turn increases the potential for contestation.

Fisheries agreements relative to access provide important sources of revenue for concerned developing countries which they can then invest in national development. At the same time, the contribution of fisheries agreements depends in part on the initial modalities of negotiation (conditions for a common agreement) and their implementation in coastal states. To ensure an equitable and sustainable allocation of fisheries access between international vessels of foreign fleets and local artisanal fishing fleets, measures taken must be supported by a system of effective management (including monitoring, control and surveillance, MCS). Unfortunately, a number of coastal states do not have adequate fisheries management systems, and the advantages gained by fisheries agreements are at high risk of being neutralised by the negative circumstances stemming from, for example, conflicts between artisanal fleets (also resulting in a loss of advantages on the local level).

Coastal states like Senegal and Mauritania have become aware of the problems stemming from the competition between foreign vessels and artisanal vessels (even if there have not been precise and systematic quantifications of incidences and costs). Among other actions targeted at reinforcing fisheries management systems, they have addressed the issue with new investments in monitoring, control and surveillance activities, as well as in developing strategies for reinforcing the capacities of international agencies.

An interesting question evoked by the issue of fisheries agreements concerns transparency vis-à-vis the negotiations held and the usage of funds coming from these agreements. In fact, the subject of funds is perceived as generally controversial as it contributes, to a certain degree, to overfishing of available resources. On the other hand, from the point of view of development, funds seem to have introduced distortions in the decisions of aid allocation and centered attention on the benefits of generations of expected revenues more than on other development objectives such as poverty reduction or food security.

The issue of fisheries trade agreements in West Africa is of great importance at many levels, and has been the center of a growing body of international literature. Focused mainly on the priority of technological aspects, it raises concerns in three major issue areas relative to policy coherence and to the relationship between developed and developing countries in terms of sustainable development. First of all, it shows that fisheries development policies can be taken up on numerous levels. For the governments in question, fisheries policies have both industrial and artisanal components, which could generate a range of different advantages, from financial contributions to State budgets (by the bias of access agreements and industrial fishing fleets) to employment to local food security (through the development of local fishing and artisanal fishing boats). In addition, to successfully develop and implement this strategy (founded on the consolidation of improved technologies), a certain level of capacity is critical to provide an appropriate management system.

It is without doubt that the fisheries policies of coastal states must place greater focus on internal coherence between industrial and artisanal fishing sectors, and their systems of management need to be reinforced, in particular within the framework of monitoring, control and surveillance. At the same time, the solutions to these problems remain a challenge, not only in the technological domain (as remedies for the "failures" of fisheries management systems), but also in other domains,

notably governance and in processes of public action on the national as well as regional and international levels.

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The Development Dimension

Fishing for Coherence in West Africa

POLICY COHERENCE IN THE FISHERIES SECTOR IN SEVEN WEST AFRICAN COUNTRIES

Fisheries represent up to 30% of state budget revenues in West African countries and employ 7 million people in West and Central Africa. If the sector is to develop, or simply continue to exist at present levels, a number of policy challenges will have to be addressed in a coherent manner, covering the environment, technology, economic aspects, social aspects, governance and the contribution of fisheries to poverty alleviation and nutrition. The number of issues is vast, ranging from illiteracy to EU trade policy. Unfortunately, fisheries policies often appear to be disconnected from national policies and conflicts between the fisheries sector and other sectors such as tourism and maritime transport can be observed. Moreover, governments of West African countries explain fishing agreements by the level of financial compensation received, even though better fisheries management could provide greater financial benefits than fisheries agreements.

Lack of coherence among fisheries and other policies is detrimental to the sustainable and efficient management of the fisheries sector. In this context, the Sahel and West Africa Club (SWAC/OECD) and the OECD Fisheries Policy Division worked with regional organisations, notably Enda Diapol/REPAO, to help them tackle the question of policy coherence, by providing an analytical framework adapted to the local context, based on the facts and realities in the field, in order to improve the coherence of fisheries policies on both the national and regional levels. This report has been prepared for use by both local decision-makers and OECD member countries, as well as by all actors concerned by the sustainable development of fisheries in West Africa.

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