Artisanal fisheries

# Don't jump the fence

**Fisheries development and management must choose an integrated approach**

In Ghana, as in Senegal, there are hardly any foreign entrants to the national fishery. The socioeconomic situation is a lot more precarious, though. Illiteracy rates are very high (over 60 per cent), and community organization beyond traditional chief systems is very weak. Many communities live below the poverty line (often defined as a daily per capita income of less than US$1), sanitary conditions are daunting, and early recruitment of children into the fisheries leaves many actors within the sector without any formal education whatsoever. Poverty is mainly a result of booming coastal populations, increasing numbers of entrants joining the fishery, dwindling fish stocks and evaporating resource rent combined with an often inherent lack of access to viable economic alternatives.

Cameroon, located at the eastern end of the region, yields a completely different picture; 70 per cent of the fisher folk active in the sector are immigrants from Ghana, Benin and Nigeria, and harvest an estimated 80 per cent of all landings. There are currently no government policies or programmes in support of the sector, and weak access to credit facilities is readily portrayed as the main culprit for failing national mobilization within the sector. There is no single, properly established and managed landing site in the whole country, and the national earnings from the sector *per se*, including access fees negotiated with Senegal and Equatorial Guinea, are low. Out of 63 artisanal fishing companies operating seine nets in Cameroon's Exclusive Economic Zone (EEZ) a few years ago, only four were owned by Cameroonian nationals (and employed mostly Ghanaian fishermen).

In Liberia, years of civil war have strip-mined government financial reserves and contributed to the further impoverishment of communities. Fishing communities are portrayed as being very poor, very traditional, highly illiterate and very resistant to change. Although the government is paying lip service to concepts such as participatory approaches and community-based resource management, there are no functional programmes currently implemented on scales large enough to warrant modernization and development of the sector. As a result of low levels of exploitation throughout the war years, Liberian fisheries resources are believed to be abundant, and able to support major increases in fishing pressure—one of the very few positive outcomes a protracted civil war may ever be able to boast of.

In terms of food security, artisanal fisheries play an important role in most countries of the region, for the coastal populations, as well as for important numbers of people inland. Per capita consumption of fish is very high, and fisheries products form a very prominent component of total protein intake in the region, next to bushmeat and poultry products. In several countries, especially along the Gulf of Guinea, inland and coastal lagoon fisheries contribute a lot in terms of additional fish supplies.

Although a simplification, the resources exploited across the region are mainly small pelagics, such as sardinellas, ethmalosas and anchovies. Demersals are generally exploited by industrial vessels further offshore. The species targeted by the artisanal fisheries are generally small-sized, have short life spans, and recruit and reproduce early.

**Seasonal upwelling**

Spawning success is largely dependent on ill-understood seasonal upwelling

systems displaying considerable variation between years, and hence, in combination with the delicate biological characteristics of the targeted stocks, gives rise to a resource that is highly vulnerable to stock depletion under a scenario of excessive fishing pressure.

Problems in the sector pertain to overcapitalization and resource depletion in a few countries, generally due to cultural and socioeconomic factors by and large unrelated to the resources and their harvesting as such. This is an important point to remember, since much of the efforts to modernize and develop the sector address resource and resource exploitation facets, and not the root causes for underdevelopment and poverty.

Ghanaian and Senegalese waters display rather clear and alarming signs of stock depletion, and there is an awareness that remedial action must be taken, if greater harm is to be avoided. Harm resulting from depleting stocks comes in many forms, the first noticeable effects being the impoverishment of communities, earning less income for the same amounts of effort expended in catching fish. Pertaining to the migratory aspects of the fisheries in the region, exhausted resources will engender more migration, and form the basis of conflicts between national and immigrant fisher folk in places where catches are still good. It is easily conceivable that regional tensions could arise in the future, when excessive numbers of fishers from Senegal or Ghana choose to migrate to neighbouring countries in search of still viable fishing grounds.

One central problem in Ghana is that many entrants to the fishery do not have viable alternatives to fishing. Fishing is a deeply traditional activity, which has been carried out along family lines for generations unbroken, and to many, a life outside of fisheries is utterly inconceivable. It is not uncommon, both on the coast and inland on Lake Volta, to find children joining the fishery as deck hands or net menders at the age of four or five. A rather gloomy trade in "slave children" exists on Lake Volta, where children from poor families are sold to gear owners for protracted periods of time (that is, many months or years) to join their operations as cheap labour. In a setting of complete lack of formal schooling, and waking up to life as a child-labourer in a rough trade, economically viable re-orientation out and away from this sector in later life can prove very difficult, if not impossible. With an acute lack of basic skills to perform in any other domain, poverty must also be defined as a lack of access to economically viable alternatives even where they are given. Inland fisher folk generally display a more varied range of skills in other domains of agricultural and forestry practices. (Lake Volta, for instance, is artificial and only some 40 years old.) By comparison, traditional coastal fisher folk display a rather more limited set of skills, in addition to those of catching and processing fish.

A concomitant phenomenon of reduced catches is the increased use of gear ever more efficient at catching fish. This phenomenon is certainly not restricted to industrial and capital-intensive fisheries. It applies to artisanal fisheries as well. Governments across the region have put in place bodies of law and fisheries regulations, which often specify in ambitious detail which gear, and of which particular specifications, can be operated where and when. There is, however, very little or no enforcement of laws and regulations by fisheries authorities. This has inevitably encouraged the use of ever more indiscriminate gear and shrinking mesh sizes.

A good example is the now widespread use of beach seines. They have been spread in the region by migrating fishermen, after the Portuguese introduced the gear to Ghana. Every single beach seine operated in Ghana, Togo and Benin today is of illegal mesh size, with a ubiquitous stretched diagonal mesh opening of 10 mm in both the wings and the central sections.

**Deadly nets**

While this gear is a critical income-earner for hundreds of communities in the region, the nets are extremely problematic as they catch anything and everything meeting their deadly embrace. I have been amazed enough earlier this year in Ghana,

to pull a post-larval trevally, all of 9 mm in length, off one of the seines being hauled in. The damage inflicted to the resource is not only to deplete inshore stocks, but it also affects valuable offshore pelagic and demersal stocks whose juveniles exploit inshore areas as nursery grounds, and fall prey to beach-seine induced recruitment overfishing.

Through its inbound new Fisheries Bill, the Ghanaian government plans to outlaw beach seining altogether. Enforcing a radical step such as this one would inevitably lead to increased economic hardship and emigration in communities depending on these catches, and does not unveil itself as a sound substitute for earlier failures to enforce fisheries law at the village level. The rise of political will to properly integrate small-scale fisheries management into national policy, and to initiate programmes that will bring about pondered and gradual solutions are very much in need. Introducing community-based fisheries management schemes is generally perceived as the most promising option to start addressing the issues.

Conflicts also besiege the artisanal fisheries sector. They are commonly encountered amongst artisanal fisher folk themselves, or arise between artisanal fishermen and industrial vessels. Amongst these we count gear theft at sea, gear run-ins, and incursion of industrial fishing vessels into artisanal fishing areas. The list is long, and conflicts can result in loss or damage of property, and, more importantly, serious injury and loss of life. Mitigation is usually through either traditional, and in more serious cases, government bodies. As above, it appears that the lack of formal enforcement of fisheries regulations through community-based and/or national monitoring, control and surveillance (MCS) schemes is encouraging fisher folk, through mechanisms inherent to what is commonly referred to as the "tragedy of the commons", to carry out their fishing operations by resorting to poor or illegal/criminal practices. It is self-evident that laws and byelaws are only as good as the enforcement that is sent along. Without incentives or deterrents to warrant compliance with the rules, illegal practices will not cease, stocks will not fare better, economic hardship will not lessen, and conflicts, in ultimate consequence, will not subside. Conflict management programmes targeting fishing communities would be well advised to focus part of their efforts on these aspects, if they are to have sustainable impact.

**Law bodies**

Every government in the region has got a Department of Fisheries or a Department of Marine Resources. National policies, development strategies and bodies of law governing artisanal fisheries exist in most

countries. Ghana's recent move to create a Ministry of Fisheries headed by its own Minister, separate from Agriculture and Forestry Ministries, is meant to indicate the importance that the government attaches to its fisheries sector. Still, political posturing needs to be followed by real political will, clearly defined development strategies and thoroughly planned and consistently executed programmes. In many of the countries of the region, most of these ingredients are still lacking.

In countries with very short coastlines, such as The Gambia, counting no more than 70 km of beachfront and roughly 2,000 artisanal fishermen, the Department of Fisheries has gone a long way in supporting and organizing its communities. Infrastructure and facilities have been provided a decade ago, and communities are today actively engaged in the management of community fisheries centres. Community-based Fisheries Management (CBFM) is perceived as a successful venture in The Gambia. It is evident, that the scale of things in this particular country has been an enabling factor, and the emerging picture is a very encouraging one.

CBFM is perceived as the key solution for governments that do not manage to handle the regulation of their artisanal fisheries sector out of their own resources. In West Africa, as in many other places, Departments of Fisheries are generally understaffed and poorly funded in terms of yearly budgetary allocations. Yet, to turn a centrally managed system on its head, and to decentralize and devolve the authority for fisheries management back to the communities, is a very bold and labour-intensive enterprise. Everybody talks about CBFM, and many countries have policies and strategies for it, but successful schemes remain relatively few. What seems to be lacking is a clear understanding that devolving management authority, and the powers to create byelaws to communities, takes more than a one-off meeting with community leaders and a pat on the back. In countries like Ghana, where gear ownership is concentrated in the hands of the privileged few, where the communities are structured along stiff traditional and hierarchical lines, and where the general education and literacy levels of fisher folk are very low, introducing a CBFM scheme on the national scale is hard work. It would require both resources, and more importantly, a very sound and stepped approach involving, amongst many other things, armies of purpose-trained extension officers interfacing with every single community for months, or even years.

**Colonial heritage**

Yet, especially in countries endowed with a British colonial heritage, questions of

interfacing between the government and the communities is a thorny issue. With its love for academia, Britain has left in its wake scores of former colonies in which people find it difficult today to valorize field-based jobs and officers; in this case more specifically educators such as primary school teachers and extension officers.

Both of these have completed secondary and/or tertiary education, and many were hopeful of entering a career as high-ranking government officers, or to find their way into teaching and working at the university or abroad. In all too many a case, ending up as a teacher or an extension officer in a rural setting has not been a career choice; it is the living proof of a failure to make it to Oxford or Cambridge. It is a real stigma borne in a society that has its eyes fast on the highest professional ranks, and frowns at the very essential field-based jobs never properly taken care of. A real marketing strategy to valorize these careers is in dire need, in order to turn them into careers of choice, and to guarantee both commitment and the quality of the work rendered.

Otherwise, CBFM and other community development undertakings might prove very difficult to take off for the pervasive lack of functional interfaces. This is a prime example of a serious stumbling block, which is difficult to anticipate and to accommodate when designing nation-wide community development programmes. The problems flowing from it cannot be solved by the size of the financial envelope alone, and may well prove fatal to the outcome of any such programme.

There are a number of international, bilateral and non-governmental organization-funded and executed programmes targeting artisanal fisheries in all of these countries. Currently, the Sustainable Fisheries Livelihoods Programme (SFLP), funded by the UK's Department for International Development (DFID) and executed by the Food and Agriculture Organization of the United Nations (FAO), is the largest programme in the region, endowed with a budget of some US$35 million. In any one given country, it is not uncommon to find a dozen or more donors funding or executing projects within the fisheries sector. Sometimes, aid is linked to preferential trade or access agreements; sometimes programmes set specific conditions that have to be met by the government (for example, cross-sectorally unified extension services, revised texts of law, and so on). While these issues would lead to a bigger discussion on aid and the broader philosophy behind it, it is important to note two things. The Ministries and Departments of Fisheries have to make sure that technical inputs from a wide range of sources are coherent, and are in line with sector policy and the law. That is not always the case, and it is not rare at all to find projects operating in the same country, trying to achieve quite opposite goals. Secondly, pre-conditions to receive funds or loans are dangerous, as they eat away at the ownership principle behind projects, and endanger the long-term sustainability of interventions. Problems of the kind are many, and governments need to be aware of them if external aid is to have positive and sustainable impacts on the development of the sector.

The countries of West Africa are rich in natural resources, both marine and land-based. The poverty encountered on the coast and inland often seems to stand in sharp contradiction with this fact. The roots of poverty and underdevelopment are deep, and there is no custom-tailored, or easy way out. Most countries are still caught in the transition between independence, functional governance, and their colonial past in search of reliable leadership, a firm national identity and economic achievement and independence. The problems faced in the artisanal fisheries sector can not be viewed by making an abstraction of the entire picture; they are a function, as much as they are a consequence, of the whole setting. For this reason, development programmes targeting this sector must inscribe themselves into the development efforts involving the nation. There is no sector that can jump the fence, and rush ahead.

**Few structures**

Such efforts would inevitably be brought to failure for the acute lack of national structures that are necessary to warrant

sustained development and sectoral support and stability. Free-of-charge political will and enabling sectoral policies can go a long way in laying the foundations for positive development, as Senegal's case seems to be demonstrating.

At any rate, it appears that the development of this sector, as that of any other sector, needs to be stepped and built up from the base. No need to look for economic alternatives in order to decrease fishing pressure, when children are not being sent to school. No need to talk about reducing fishing pressure, when coastal population growth rates remain astronomical, and family planning programmes remain elusive. No need to re-write fisheries bills, when laws have never been enforced. No need to talk about initiating community development programmes, when extension services are dysfunctional and understaffed. No need to talk about national development, when projects persistently, or conveniently, target two or three 'model communities', from which 'lessons' will flow one day.

Education and health (including family planning) are basic essentials, which are lacking badly in many fishing communities. Education and health are, in my humble opinion, fundamental pre-requisites to provide the communities with the tools to help themselves. In most countries, providing coastal communities with these two assets would form a very ambitious target in its own right. It would entail the building of many more schools, the training of teachers, the revision of national curricula, the building-up of efficient and well-staffed national extension units, etc. Without them, the foundation in 'human capital' (to use DFID's Sustainable Livelihoods Approach jargon for a second) upon which to build is very weak. While talking of governance, of national policies and of development strategies, it is eventually quite easy to forget that fishing is not done by governments, bodies of law, regions, fishing gear, or even communities; fishing is done by a large pool of very individual fishermen displaying a range of very human characteristics. Ultimately, programmes must address these very people and their needs, engage them in meaningful dialogues and involve them directly in order to bring about any hoped-for changes. Failing to do so will spell failure to deliver change. Overall, it appears that few governments or externally funded aid programmes in the region are currently achieving that goal.

The management of artisanal fisheries has to start with the people exploiting the resource, and their most basic human needs. Fisheries development programmes might find it difficult to sell the idea to donors that reducing fishing effort, for instance, might best be achieved by sending children to school, as such an activity would not readily be regarded as 'fisheries proper'. Would it be more easily considered 'fisheries proper', if progress in fisheries development would be found unworkable without the same issue being addressed first? And would that not be a better and more pragmatic way to handle sectoral development, guaranteeing more meaningful and sustainable impacts in the long run?

Hence remains the need for more holistic perspectives and approaches. Fisheries development and management must be integrated in their approach; not as a catch-phrase, but as a process, and must make sure that sound prioritization of issues to be addressed, and step-wise bottom-up implementation, are taking place.

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