Fishing rights

Opening the tragedy?

Institutional reform and the need for reallocation should figure prominently in policy on fishing rights, especially in developing countries

Through the last two issues of *SAMUDRA Report*, we have witnessed an interesting debate regarding the allocation of fish rights. First, Derek Johnson reflected on the Sharing the Fish Conference 2006, held in Australia, pointing out the traditional dominance of the rich 'temperate minority' countries over the Southern developing countries in matters of presentations, discussions and solutions (see *SAMUDRA Report* No. 43, March 2006, pg. 11). Later, Ichiro Nomura, Assistant Director General in the Fisheries Department of the Food and Agriculture Organization of the United Nations (FAO), came up with a reply, claiming that rights-based fisheries are *the solution* but admitting that 'one size does not fit all', ending with the suggestion for a conference where focus should be on the challenge of allocating fishing rights in developing countries (see *SAMUDRA Report* No. 44, July 2006, pg. 25).

My reflection here is on the dilemmas contained in this challenge. Before that, however, a clarification on rights-based fisheries management in the North. Rights-based management comes in many forms, including licensing and individual as well as community quotas. Individual quotas may again be allocated as individual fishing quotas (IFQs), individual vessel quotas (IVQs) or individual transferable quotas (ITQs), each with special features and outcomes. All solutions are well known in the North (and 'down under' South), but during the last ten years, focus has increasingly been on the ITQs, a fact reflected also at the first Sharing the Fish Conference in 1999, where New Zealand and Australia featured prominently.

I think it is fair to say that ITQ systems, as originally developed in New Zealand and Iceland and later copied in at least 15 other countries, have experienced differential success. They have, most often, improved the economic performance of the fisheries, and have contributed to more sustainable fisheries in biological terms (although hard evidence is still often lacking), but they have generally been weak on *equity,* especially in terms of neglecting crews and local communities. Some countries, like the United States, have introduced community quotas (as in Alaska), but these attempts have been few and marginal compared to the massive drive towards ITQs or systems closely resembling them (as is the case with the Norwegian IVQ system). Generally, these countries have the human and economic resources necessary to run ITQ-systems, and, even more important, they have (although to a variable degree) alternative employment possibilities for fishers who are made redundant. To illustrate, Norway had 115,000 fishers in 1946, but it now has fewer than 15,000. Yet, this decline has not created any major unemployment problems.

The problem arises, as pointed out by John Kurien in *People and the Sea: A Tropical 'Majority World' Perspective*, when the ITQ-missionaries start preaching the ITQ gospel to large developing countries with thousands of artisanal fishers, like China, India, Indonesia and Vietnam, and also smaller ones in Africa and Latin America.

Greater caution

FAO is a little more cautious, advocating in favour of *rights-based fisheries management* (although not necessarily ITQ systems), with the rhetorical bottom-line that without biological sustainability, all fishers are going to end up poor. According to Nomura, "The current variety of schemes for formally allocating fishing rights has vastly expanded the

Figure 1: A Framework to Identify the Occurence and Types of Poverty (Béné 2004)

range of fisheries and fishing situations to which rights-based schemes can be applied.

They should apply to large- and small-scale fisheries, both with large and small boats. They are, by far, the best tool to re-establish and formalize traditional fishing rights and thus, protect the rights of fishermen. Even ITQs need not threaten the livelihoods of small-scale fisheries, and they should not foster inequity if well designed."

As indicated by Johnson in his *SAMUDRA Report* article, there are good reasons to be sceptical about too simple solutions. While donor agencies have gradually changed their priorities, more in favour of small-scale fishers and, in particular, targeting the poor (and for a period 'the poorest of the poor'), the underlying logic has all along been that fishers in developing countries are generally poor, measured against any standard. However, as pointed out by C. Béné (*When Fishery Rhymes with Poverty: A First step Beyond the Old Paradigm on Poverty in Small-scale Fisheries*, World Development 31, No. 6, 2003), in the current literature on poverty there is almost a complete absence of references to case studies from fisheries. Béné attributes this lack of references not to the low number of fishing studies portraying poverty but to the nature of scientific production and the way the literature proposes to explain the cause(s) and origin(s) of poverty in small-scale fisheries.

Generally, there seem to be two contrasting interpretations of the relationship between poverty and fisheries. The first claims, "They are poor because they are fishermen". Within this intellectual tradition, there are two lines of reasoning. One has its origins in H. S. Gordon's classic paper on open-access fisheries (*The Economic Theory of a Common-Property Resource: The Fishery,* Journal of Political Economy 62, 1954), an idea that was powerfully reinterpreted in Hardin's seminal article, describing the tragedy of the commons (*The Tragedy of the Commons*, Science 162, 1968). Here the open-access nature leads to more and more people entering the fisheries, resulting in overfished resources, an elimination of the resource rent and, ultimately, in the impoverishment of the fishers and their communities. This intellectual tradition is a solid one, with a large number of contributions from both scientists and donor organizations. There is no doubt that overexploitation is a major cause of impoverishment, but not necessarily *the major cause.*

Exogenous origin

While poverty, in this tradition, is explained as an endogenous effect, the exogenous origin of poverty is explained by showing the low alternative cost of labour in the fisheries. Writing on the

particular problems of small-scale fisheries, T. Panayotou pointed to the fact that most fishers (in Asia) have a low alternative cost of labour, and with easy access and difficult exit they are 'trapped' in the fisheries (*Management Concepts for Small-scale Fisheries: Economic and Social Aspects*, FAO Fisheries Technical Paper 228, 1982).

In other words, the situation *outside* the fisheries is most important. However, several writers combine the two explanations without making the necessary distinction, thus confusing the analytical understanding of what causes poverty in the fisheries.

The other major idea—"They are fishermen because they are poor"—indicates that fisheries is an employer of last resort, where those falling out of the agricultural system can manage to eke out a living by fishing. Common-property resources are, therefore, extremely valuable for poor people, and any attempt to close the participation may result in increased poverty.

The coastal fisheries in Mozambique may be a good case in point, where large numbers of people have migrated from the countryside to the coast, because of the civil war and the problematic agricultural situation. They have taken up subsistence fishing, partly in competition with existing fishers. Limiting access for them would often be a life-and-death matter.

Both solutions (limiting access and providing alternative employment) have been utilized by a variety of donor-assisted fisheries projects, with mixed success. The latter approach opens the way for a diametrically different policy than the former. If the fisheries is seen as an essential employer of last resort, within a much larger system of livelihood creation (based on various resources and various occupations), it is hard to stick to the idea of *sector development.* It is even harder to limit access in the classic way done in Western, developed fisheries. On the other hand, unlimited access can cause severe damage to a developing fishery. So what should we do? If we limit access to 'traditional fishers', 'original fishers' or 'existing fishers', we run the risk of cutting off an important source of livelihoods for poor coastal populations, while, if we keep the commons open, the resources will sooner or later be fished down.

Some try to escape the dilemma, by pointing to the fact that open access does not necessarily have to produce the tragedy.

According to one study (*Management, Co-management or No Management? Major Dilemmas in Southern African Freshwater Fisheries*, FAO Fisheries Technical Paper 426/1, FAO, 2004), classical management approaches applied to the inland lake fisheries in southern Africa have been misplaced, being led by patchy or simply wrong information regarding fishing effort (catching capacity).

The main argument is that the catching capacity of the inland lake fisheries has been extremely variable, fluctuating not only with the amount of fish available (following natural variations), but also following macroeconomic variations, thereby creating increasing or decreasing opportunities in other occupations. During severe droughts, many people are naturally attracted to the fisheries, while when the situation is more normal, they will return to former occupations. Capacity moves up and down as a result of numerical flexibility, while few fishers have invested in more efficient gear or vessels. Most fishers in the southern African inland fisheries are not specialist fishers. They have fishing as one of several possibilities in a livelihood repertoire. Even if the total effort has increased in all inland lakes' fisheries, this increase is not always considered serious enough to warrant limiting access. Limiting access under these conditions would only aggravate the situation for the poor. In some cases, *no management* can actually be better than the existing regime!

Greater mobility

This is, no doubt, an important result, having profound consequences for management of the fisheries in these lakes, but it is difficult to generalize and extend these findings to other artisanal fisheries, for example, in the marine sector, for several reasons. First, because of greater mobility in marine fisheries, it is much more difficult to maintain the idea of slow growth. Vessels from neighbouring

countries as well as distant-water fleets will easily operate in fisheries that seem promising and profitable. This is even more so since most developing countries do not have an efficient system of monitoring and control.

Second, it seems that technological improvements are much more easily spread in the marine fisheries. This is partly because marine fishing, especially in several Asian countries, is extremely dynamic, with access to varied sources of capital and with few obstacles in acquiring more efficient gear.

Third, much of the marine catch is now meant for a world market, being within reachable destinations and quality standards, and market opportunities are much greater than those for African inland lake fisheries.

Finally, there are good reasons to return to Panayotou's argument about easy access and difficult exit or Daniel Pauly's concept of 'Malthusian overfishing' (*On the Sex of Fish and the Gender of Scientists: Essays in Fisheries Science*, Chapmann and Hall, 1994). While this may not be the case for inland fisheries in southern Africa, it is definitely the case in a number of Asian fishing nations. Effort is being increased both vertically (improved technology) and horizontally (numerically).

In sum, these factors would indicate that we cannot be too optimistic regarding the catching capacity in the marine fisheries. Even if stock assessments are scarce, we know enough to say that the fishing pressure on near-shore resources in a number of large fishing nations in the Third World, especially in Asia, is not sustainable in biological terms. Still, we should maintain the institutional perspective, turning "the research away from the issue of natural resources limitations per se, toward social, cultural and political elements which shape the relationships between poor people and these natural resources and between poor and less poor people" (Béné, 2003).

There is no clear-cut solution to this dilemma, but perhaps we should start discussing more in the direction of *policy reform*, that is, on the need for reallocation. While fisheries economists are eager to make a distinction between management and allocation, I believe that there is a clear connection.

Effective management

Without a better, more legitimate allocation, it will prove impossible to introduce (and maintain) an effective management system. Again, I find it useful to return to a scheme developed by Béné (*The Challenge of Managing Small-scale Fisheries with Reference to Poverty Alleviation*. In Neiland, A. and C. Béné

(Eds.): *Poverty and Small-scale Fisheries in West Africa.* Kluwer Academic Publishers, Dordrecht, 2004).

One route to poverty is via the lack of surplus generation, caused by lack of efficient gear or an ecological crisis (a temporary disappearance of the exploited stocks). But even *with* surplus generation, there may be poverty, because of what is called an institutional entitlement failure. As Béné puts it: "In other words, satisfying the constraints of ecological and economical viabilities is a necessary, but not sufficient, condition to reduce the level of, or to prevent the occurrence of, poverty in fishery. A second necessary condition is the existence of some sort of (re-)distribution mechanism which will ensure that the rents generated through fisheries activities are redistributed (either directly or indirectly) to the community / society. If such mechanisms do not exist, the rent is likely to be appropriated by the most powerful, and poverty will occur."

Béné concludes by saying, "Poverty in fisheries [may be] more related to institutional factors than to natural ones". If this is the case—and I happen to believe Béné's analysis is correct also outside west Africa—more effort and thinking need to be devoted to institutional reform. The point is simple: rights-based fisheries management may secure some type of ownership, be it individual or collective. But we need to secure rights for the right people. That can only be done through institutional reforms, giving some type of preferential access to the poor fishers. This can be done in many ways. Indonesia, for instance, has shown the beneficial results of prohibiting trawling in the near-shore fisheries.

In other cases, fishing rights have to be reallocated. Needless to add, this will be difficult. Even in developed countries, it is extremely complicated to carry out redistributional reforms. But this institutional requirement has to be set on the agenda, and one start could be made by donor organizations operating in fisheries contributing to the buying out of more powerful interests. While confiscation was the key to many previous land reforms, the principle of a 'willing buyer' and a 'willing seller' is more appropriate at present. To phrase it differently: starting a new fisheries policy by confiscating the rights of the most powerful will quite often be detrimental. I am not saying that direct reallocation of rights and quotas can be done in all developing countries' fisheries, but we certainly need to start the process of considering such reforms. If not, we will repeat the case of the South African fisheries reform, where a large part of the bona fide fishers were excluded from participating precisely because the reforms mainly catered to the more powerful interests. Institutional reform and the need for reallocation should figure prominently in policy and a future conference on rights-based fisheries should perhaps be called 'Fishing Rights to the Right People'. Even if one size does not fit all, *reallocation* will certainly fit most poor fishers.

This article is by Bjørn Hersoug (Bjorn.Hersoug@nfh.uit.no) of the Norwegian College of Fishery Science, University of Tromsø, Norway