## SOME OBSERVATIONS ON DEVELOPMENTS IN WORLD FISHERIES

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The Food and Agriculture Organization of the United Nations(FAO) has taken a number of steps to tackle the problems of overfishing, says David Doulman of FAO's Fisheries Department. Governments need to demonstrate the political will to halt overfishing, he says. Developing countries could well fall further behind developed countries as management of fisheries becomes ever more complicated, he says.

See FAO data on global fish stocks on page 36.

It is difficult to pinpoint a single overriding reason why many of the world's marine capture fisheries — those harvesting wild fish stocks in the oceans and seas — have become so overfished. Rather, there is a suite of interrelated reasons that have contributed to a greater or lesser extent in different situations. Generally, these reasons include:

- Access to a large share of the world's capture fisheries, and in particular small-scale fisheries, remain open or quasi-open. Even where efforts are made to manage these fisheries, measures are often inadequate to limit or roll back fishing effort. Moreover, management measures are often poorly enforced with sanctions insufficiently severe to discourage irresponsible fishing.
- Political support is lacking for unpopular decisions that underlie fisheries management. Governments tend to take a short-term view and defer difficult management decisions because of their social and economic consequences. Regrettably, such procrastination occurs even in the face of declining catches and declining financial returns.
- Fisheries biology has been the primary focus while management of the fishers has received relatively little attention. This syndrome continues despite widespread recognition that the human dimension of fisheries management and the need to promote behavioral change on the part of fishers is essential.

- Capacity and institutional constraints, especially in developing countries, restrict implementation of effective management arrangements in capture fisheries. However, capacity and institutional strengthening cannot be pursued in isolation: They presuppose the existence of a governance framework that will enable technical and financial assistance efforts to take root and flourish.
- Fisheries management systems become centralized with little stakeholder participation in decision making. It is recognized widely, and certainly within FAO, that smallscale fisheries, especially in developing countries, cannot be managed effectively through a centralized process. In industrial fisheries, the merits of co-management have been demonstrated, with fishers and industry groups seizing the opportunity to participate in assessing and developing management measures and in turn monitoring their implementation. Where industry groups contribute to determining research programs, fishers and their organizations are usually willing to contribute to their cost. However, bureaucrats administering fisheries often find it difficult to work comfortably in an environment where fishers, fishing communities and industry groups share power in making decisions about how fisheries should be managed.
- In fisheries where resources are shared and jointly exploited on a regional basis, major differences among participants in objectives and approach can inhibit effective management. While the 1982 U.N. Convention on the Law of the Sea underscores the duty of states to cooperate in fisheries management, international cooperation often falls short of the level required to achieve rational and sustainable outcomes. Furthermore, perceptions of what constitutes management vary between parties to an arrangement, depending often on their particular interests and pressures from fishers.

• Fisheries monitoring, control and surveillance (MCS) is often inadequate. Only in the past five years has MCS been recognized widely to be an integral part of fisheries management and not a military or police function. Without MCS there can be no certainty that predetermined management objectives will be realized. MCS systems should be bolstered and enhanced through the exchange of information, regional cooperation and the introduction of cost-effective technologies such as vessel monitoring systems.

Regional fisheries are managed cooperatively through regional fishery management organizations (RFMOs). There is no realistic alternative approach. The 1995 U.N. Fish Stocks Agreement places RFMOs at center stage for management of straddling fish stocks and highly migratory fish stocks. RFMOs have to foster cooperation among their member countries for adopting and implementing management measures. Where necessary, they have to encourage non-members to join or at least refrain from engaging in activities that undermine regional management efforts.

With a strong international focus on dealing effectively with illegal, unreported and unregulated (IUU) fishing, several RFMOs are taking positions against some of their own members as well as non-members that would not have been contemplated five years ago. So called "name and shame" strategies adopted by RFMOs mean that the polite, soft diplomatic measures of the past, where members and other countries were not named, are no longer in vogue. Information made available on the Internet provides lists of vessels that have engaged in IUU fishing, their flags and other related information. There is evidence that making such information available publicly has a positive impact on vessel and fleet behavior and encourages some countries that offer "flags of convenience" to rein in offending vessels that damage the countries' reputation.

## FAO'S ROLE IN PROMOTING RESPONSIBLE FISHERIES

FAO has a mandate to monitor and assess developments in fisheries globally and to make this information available to the international community. The Organization must also promote responsible, long-term sustainable outcomes in fisheries. To this end FAO actively encouraged a number of important initiatives, some of which include:

- The 1992 Cancùn Conference on Responsible Fisheries, hosted by the government of Mexico, which provided input for the 1992 U.N. Conference on Environment and Development (UNCED), or "Earth Summit."
- Conclusion of the 1993 FAO Compliance Agreement. This seeks to ensure that all vessels operating on the high seas are properly authorized and that national and international records of such vessels are maintained. This Agreement is expected to take effect by mid-2003. It is an integral component of the 1995 FAO Code of Conduct for Responsible Fisheries.
- Elaboration of the Code of Conduct. This voluntary code takes a holistic approach to promoting responsibility in fisheries by urging structural change in the fisheries sector. It provides the umbrella for the FAO fisheries work program and a reference point for the work of national fishery administrations. Indeed, some countries have adopted national codes of practice based on the FAO Code.
- Conclusion of four international plans of action (IPOAs) designed to address specific issues addressed by the Code of Conduct. These IPOAs concern management of fishing capacity, management of sharks, interaction between seabirds and longline fisheries, and IUU fishing. FAO members are encouraged to implement these IPOAs through national plans of action. Progress by countries towards implementation has varied.
- More recently, the 2002 World Summit on Sustainable Development (WSSD) adopted the Johannesburg Plan of Implementation. The plan sets deadlines for completing certain actions, including 2015 for the restoration of depleted stocks. Apart from providing goals for achievement of certain outcomes, the plan presses the international community to move towards greater responsibility and sustainability in fisheries. FAO will play a key role in this process.

## **POINTS TO PONDER**

UNCED's Agenda 21 pointed out that 50 percent of the world's population lived within 60 kilometers of a coast in 1992 and that the proportion would increase to 75 percent by 2020. This population will put all living and non-living resources in coastal zones under increasing pressure. The poverty and job insecurity characteristic of many fishing communities in developing countries will

therefore make implementing responsible practices in fisheries and aquaculture all the more difficult.

About 90 percent of fishing activity takes place in areas under national jurisdiction even though high-seas fisheries remain important for exploiting certain high-value stocks. Nonetheless, the most intense and severe fisheries management problems are to be found in the 200-mile exclusive economic zones (EEZs). This situation will not change in the foreseeable future. A focus on management of these fisheries, which are critical for food security, is necessary.

In developing countries, inshore and inland capture fisheries are the main source of protein for many of the world's poor and socially disadvantaged. Under current scenarios of resource usage, expectations are that, despite the resilience of fish stocks, capture fisheries production will continue to drift downwards. Despite growth in aquaculture production, fish prices for the poor are likely to go up, thereby increasing food security vulnerability for the poor.

Fisheries management is becoming much more complicated. Countries with capacity and institutional constraints are likely to lag ever further behind their more affluent counterparts. Following are some of the concepts now finding general international acceptance:

- ecosystem approach to fisheries management, which involves taking into consideration the impacts of fisheries on the marine ecosystem and the impact of the marine ecosystem on fisheries, should be the baseline for management;
- fisheries should be exploited in a precautionary manner: That is to say that when there is uncertainty about the effects of fishing on stocks and on the marine ecosystem, caution should be exercised until better information becomes available; and

• indicators should be used to measure progress towards achieving responsible and sustainable fisheries.

Although these concepts are relatively unambiguous in theory, they are difficult to put into practice. Moreover, they place a major additional burden on fisheries administrators in collecting and analyzing data and then developing and implementing management plans. Developed countries occasionally point out the implementation burden of the ecosystem approach to management — additional stock assessments require more staff development and training. Where does this leave developing countries? One can reasonably conclude that implementation of sophisticated new approaches to fisheries management will further increase the alreadywide gap between developing and developed countries in management performance.

Fisheries administrations are notorious for responding to management problems only after they have become entrenched. There is often a reluctance to take responsible and pre-emptive measures to restrict fishing effort because of the social and economic impact of such action. For example, policy makers in some developed countries are under intense political pressure not to implement fleet reductions even though the science demonstrates that current levels of fishing effort cannot be sustained. To defer introduction of these reductions in fishing capacity, even for five years, would be irresponsible. Policy makers should stand firm and insist on the reductions despite the political ramifications. By taking such a position these policy makers will send a positive signal to the international community that these fisheries are ailing and in need of both preventive and curative care.

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