31 October 1995 can be considered as a halcyon day in the history of global fisheries management and fisheries science. It was on this day that the Food and Agriculture Organisation (FAO), in its 28th session of FAO conference, unanimously adopted the FAO Code of Conduct for Responsible Fisheries (FAO CCRF). The code is considered as a landmark document symbolizing the international consensus achieved on the necessity for providing guidelines to ensure sustainable utilization of fisheries resources of the world.

Why the Code?

That the sustainability of marine capture fisheries at the current level of harvesting is at stake is no longer a moot point. It is being realized that fisheries anywhere in the world is more a socioeconomic process with biological constraints than anything else. The open access nature of the resource coupled with unregulated penetration of advanced, but not necessarily eco-friendly, harvesting technologies (a phenomenon called technological creep) has enacted a virtual “tragedy of the commons” in our seas. Making the issue still more complex, especially in the context of the Millennium Development Goals, is the rampant poverty existing among our fisher folk though the capture fisheries makes significant foreign exchange contribution in our country.

Foundations of the Code

If there are no technological magical bullets for the current impasse what is the way out? This is precisely the question the FAO code is trying to answer. “The right to fish carries along with it an obligation to do it responsibly” is the cardinal principle of the code. This principle is built on the foundation of what is known as a Precautionary Approach. Precautionary approach, which originally was proposed as Principle 15 of Agenda 21 the Rio Earth Summit meeting in 1992, enunciates that “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation”. While in simple terms the precautionary approach means “better safe than sorry”, it clearly recognizes that changes in fisheries systems are only slowly reversible, difficult to control, not well understood, and subject to changing environment and human values. It involves the application of prudent foresight. It is about applying judicious and responsible fisheries management practices, based on sound scientific research and analysis proactively rather than reactively to ensure the sustainability of fishery resources and associated ecosystems for the benefit of future as well as current generations.

Taking account of the uncertainties in fisheries systems and the need to take action on incomplete knowledge, it requires, inter alia: a. consideration of the needs of future generations and avoidance of changes that are not potentially reversible; b. prior identification of undesirable outcomes and of measures that will avoid them or correct them promptly; c. that any necessary corrective measures are initiated without delay, and that they should achieve their purpose promptly, on a timescale not exceeding two or three decades; d. that where the likely impact of resource use is uncertain, priority should be given to conserving the productive capacity of the resource; e. that harvesting and processing capacity should be commensurate with estimated sustainable levels of resource, and that increases in capacity should be further contained when resource productivity is highly uncertain; f. all fishing activities must have prior management authorization and be subject to periodic review; g. an established legal and institutional framework for fishery management, within which management plans that implement the above points are instituted for each fishery, and h. appropriate placement of the burden of proof by adhering to the requirements above.

The reversal of burden of proof means that those hoping to exploit our marine resources must demonstrate that no ecologically significant long-term damage will result due to their action. Or in other words human actions are assumed to be harmful unless proven otherwise.

Contents of the Code

The code provides a necessary framework for national and international efforts to ensure sustainable exploitation of aquatic living resources in harmony with the environment. It is achieved through 12 articles covering areas like nature and scope of the code (article 1) objectives of the code (article 2), relationship with other international instruments (article 3), implementation, monitoring and updating (article 4), special requirements of developing countries (article 5), general principles (article 6), fisheries management (article 7), fishing operations (article 8), aquaculture development (article 9), integration of fisheries into coastal area management (article 10), post-harvest practices and trade (article 11), and fisheries research (article 12).

Characteristics of the Code

The most salient feature of the code is that it is voluntary in nature. (Contd...)
Central Marine Fisheries Research Institute and the Department of Animal Husbandry, Dairying & Fisheries (DAHD&F), Ministry of Agriculture, Government of India, have successfully conducted the National Marine Fisheries Census during 15 April to 15 May 2005 all along the west and east coasts with a budgetary provision of Rs. 80.5 lakhs. Tamil Nadu and Union Territory of Pondicherry have not been covered at present under the census data collection due to the havoc caused by Tsunami.

The objective of the National Marine Fisheries Census was to recognize the need for an informed fisheries management regime, and updating the national database on fisher population, which are important requirements for planning strategic inputs in the development sector as well evolving appropriate policies for fisheries management. A similar national level exercise was undertaken by the CMFRI in 1980 to carry out an all India frame survey.

The Census covered about 2,445 marine fishing villages situated in the 6200 km coastal belt. Around 1,116 trained enumerators were employed in the month-long exercise for census data collection covering around 5.9 lakh households supervised by a three tier system of around 300 personnel of CMFRI. The basic information from each household was collected through personal interview and registered in specially prepared schedules designed to cover the entire gamut of parameters comprising family size, education, occupation status, inventory of craft & gear, other fishing related equipment apart from information on skill acquisition through specialized training etc.

Mechanization in mussel harvesting

To help farmers separate the farm grown mussels without damage and in a hygienic manner from the core materials such as ropes, a manually operated de-roping (stripping) was designed and fabricated. The unit (Prototype I) with a wooden ramp of height 75 cm, a cylindrical winding drum and a separator was fabricated and field-tested in the mussel farms of Korapuzha estuary.

On-shore mabe production

In the Marine Hatchery of CMFRI at Calicut, preliminary success was achieved in producing mabe pearls in the pearl oyster Pinctada fucata by rearing the oysters onshore cement tanks. The oysters were provided mixed algal diet with drip feeding system @ 50 liters per h. Thirty percent nacre coating was observed on implanted image after 45 days and full coating by 90 days.

The Code and CMFRI Initiatives

It is in this context that the actions and initiatives being taken by CMFRI, mainly through a NATP funded research project titled "Designing and validation of communication strategies for responsible fisheries—a co-learning approach" become relevant. A Responsible Fisheries Extension Module (RFEM), which consists of 13 tools including a Malayalam translation of the code, animation films in all maritime languages etc. developed have been widely used to create awareness among the fisherfolk. A statewide campaign on Responsible Fisheries was launched and the RFEM was released for further scaling up by the respective State Fisheries Departments. These mass communication tools have the potential to reach almost 85 % of the fisher folk and other stakeholders in the country. It is reasonable to conclude that CMFRI has made a pioneering initiative in the cause of popularization of the concept of Responsible Fisheries in India.

Our marine resources need careful protection and stewardship. In this regard, it is worth noting that CMFRI, through its multifaceted research activities and outreach programmes for the last five decades, has been committed to promote the idea of responsible fisheries in the country. The recent reorientation given to the capture fisheries research projects by taking into focus each of the maritime states instead of regions denote yet another manifestation of this commitment. In the march towards “Fish for all, and for ever”, we hope to build new forms of co-management partnership with the stakeholders in the sector. In order to rededicate our global efforts towards marine fisheries sustainability it is prudent for FAO to declare an international day for responsible fisheries, preferably 31st of October every year.

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