

Regional Workshop on Monitoring Control and Surveillance Adopts the Chittagong Resolution

The first regional workshop on Monitoring, Control and Surveillance (MCS) for marine fisheries in the Bay of Bengal was held in Chittagong, Bangladesh, on 16-18 January 2008. Fisheries officials and representatives from the coast guard and the navy of member-countries (Bangladesh, India, Maldives, and Sri Lanka) took part, besides consultants, representatives of the FAO and the BOBP-IGO.

The inaugural session was chaired by Mr Parikshit Datta Choudhury, Joint Secretary, Ministry of Fisheries and Livestock (MoFL), Bangladesh.

Welcoming participants, Mr Datta Choudhury emphasized on the danger to marine resources posed by increasing fishing effort. He hoped the workshop would pave the way for effective policy formulation on MCS in member-countries.

The workshop was divided into technical presentations and discussions; a field trip; and group discussions to analyze issues and recommend action.

Summary of the technical session

Dr Yugraj Singh Yadava, director of BOBP-IGO, initiated the technical session with an overview of MCS measures in member-countries. He said the rapid increase in the fisher population in an open-access regime has led to low catches and fishing rights conflicts. Member-countries are not ready yet for a paradigm shift in policy emphasis from production to management. The legal framework is insufficient, policies for fisheries management are inadequate and compliance levels are low. Citing FAO data, he said that in the Bay of Bengal region, of 46 commonly exploited



The Regional Workshop on MCS in progress.



species, 11 species are fully exploited and four are fully or over-exploited.

He said that MCS ought to go beyond its traditional definition of policing. It should be seen as a path to sustainable fisheries. An array of tools was available for MCS – legislation, data collection, improved communication and overall support from political, social and business interests. He highlighted the importance of a vessel monitoring system (VMS) for MCS.

Dr Yadava suggested that member-countries seek cooperation from advanced countries on MCS – in data and technology, for example – as proposed by the Code of Conduct for Responsible Fisheries (CCRF).

Mr Arne Andreasson, an independent consultant, made a presentation on “Application of MCS in small-scale fisheries”. He said that MCS systems have mainly been designed for the industrial fisheries of developed countries. Special MCS systems are needed for

small-scale fisheries – which are scattered, with many small units operating close to the shore, employing a wide range of gear, and landing fish at numerous small and remote landing centres.

These special systems would include monitoring through random sampling and the use of modern communications technology by the enforcing authority. Limits on effort through access regulations (licensing of fishing vessels, for example), closed seasons, closed areas and gear restrictions, are enforceable measures.

He said that all MCS systems are costly – but not in relation to the cost of not managing the resource at all. Efforts to decentralize management decisions and move towards co-management and community management would lead to cost-effective MCS systems, with elements of self-control.

Discussing MCS in Bangladesh, Commander A R Chowdhury from the Bangladesh Coast Guard said that small-scale fisheries accounts for about 93 percent of the Bangladesh fish production of 2.1 million tonnes.

The marine fishing fleet (industrial trawlers, gill netters, set bag netters, long lines and trammel nets) increased from 17 385 to 44 082 between 1997 and 2006.

He said Bangladesh had already implemented various control measures, such as limits to fishing days, control of mesh sizes, restricting trawling to within the 40 m depth zone, guidelines for fish capture, declaration of a sanctuary for hilsa. The government is registering boats and encouraging alternative livelihoods for fishers. Despite these measures, MCS on small-scale fisheries is very inadequate, Mr Chowdhury said. Only 15 to 20 percent of the country's fishing vessels are registered. Registration and licensing are multi-window processes that discourage fishers. The licensing fee is perceived as high, it has to be renewed annually.



The Bangladesh Coast Guard and the Navy, responsible for enforcement as well as search and rescue operations, are constrained by manpower shortage and lack of air support. Illegal fishing is widespread, foreign vessels engage in poaching.

Mr Chowdhury suggested that Bangladesh learn from the experience of countries like Malaysia in designing a cost-effective MCS regime. The country's surveillance system needed to be upgraded. VMS, over-the-horizon radar and a strong Coast Guard were essential, as also well-coordinated research to advance the MCS regime.

Discussing the status of MCS in India, Dr V S Somvanshi, Director General, Fishery Survey of India, said that India is endowed with 8 118 km of coastline, 0.53 million sq. km of continental shelf and 2.02 million sq. km of EEZ. Fisheries contributes 1.07 percent to the total GDP. India's fish biodiversity represents nearly 10 percent of the world's fish biodiversity. Fisheries in India is complex because of its multi-species, multi-gear, multi-craft and multi-stakeholder character.

The Ministry of Agriculture (2001) has estimated the potential yield from marine sources as 3.92 million tonnes. The present exploitation level is about 76 percent of the potential. The country has some 3.57 million marine fishers and a fishing fleet of 0.3 million. An open-access system leads to uncontrolled exploitation. Illegal, Unreported and Unregulated (IUU) fishing further aggravates the problem.

Registration of fishing vessels in India follows stipulations under different Acts for vessels < 20m and

◀ *Speakers at the Regional Workshop (from top to bottom): Mr Arne Andreasson, Mr Nimalsiri Abeywickrama, Cdr A R Chowdhury, Dr V S Somvanshi, Capt. Ahmed Jihad and Mr Mohamed Shameem.*

vessels > 20m. But there is no uniformity either within a state or between states. A standard system throughout the country would be a priority. Regional co-operation would help curb IUU fishing.

The paper proposed standardization of craft and gear; zonation of sea fishing areas; a colour code for fishing boats; a uniform system of registration; installation of VMS; strengthening of the fisheries database; information networking for fisheries; awareness-raising among fishermen on resource management.

Mr Mohamed Shameem, Ministry of Fisheries, Agriculture & Marine Resources (MoFAMR), Maldives, and Capt. Ahmed Jihad of the Maldives Coast Guard, discussed the status of MCS in their country. They said the island nation of Maldives has more water than land, and marine fisheries is the strongest traditional sector. The country has a total population of just over 300 000 scattered over 200-odd small coral islands.

The major fisheries are pole and line fishing for skipjack tuna; hand lining and long lining for yellowfin and bigeye tuna; reef fisheries targeting different species; and a small yet profitable aquarium fishery targeted at export markets.

The major governing regulation is the Fisheries Act of 1987. It is presently being revised to take into account changes in management needs and international obligations. MoFAMR is the lead agency tasked with fisheries management and development in the country. It is supported in the execution of its mandate by the Fisheries Advisory Board (FAB).

Compliance is a major problem, the two authors said. Some reasons for non-compliance: lack of awareness, inconsistencies in regulations issued by different ministries, inadequate enforcement capacities, the socio-cultural environment of small island communities that rely on community cohesion and solidarity.

Maldives has implemented a Vessel Tracking System (VTS) for all vessels licensed to operate in the outer EEZ. Established in 1995, the VTS is monitored by the Maldivian Coast Guard. This is done by installing vessel-tracking transponder equipment on board the vessel. Frequent power failure and absence of written rules in operating transponders impair the efficacy of the system.

Maldives plans motivating fishers to regulate themselves. MoFAMR will provide fishing forecast information free of charge exclusively to registered fishing vessels. Fishers will then be encouraged to install VMS systems: better catches for them, systematic vessel information and catch reports for MoFAMR. This will encourage boat registration and enhance sea safety as well.

Mr Nimalsiri Abeywickrama, Director (Planning), Ministry of Fisheries & Aquatic Resources (MoFAR), Sri Lanka, presented a paper on the status of MCS in his country. He said Sri Lanka's marine fishing fleet of some 43 000 includes more than 39 000 in coastal fisheries. Some 600 000 people depend on the coastal fishery. Small-scale crafts, about 90 percent of the fishing fleet, contribute about two-thirds of the domestic fish production.

The December 2004 tsunami triggered uncoordinated and un-monitored restoration effort and a big rise in the number of fishing boats; consequently, lower catch per unit effort and income from coastal fisheries. Harmful, IUU fishing has also gone up.

The Department of Fisheries and Aquatic Resources (DFAR) is the agency that enforces various Acts. Other key agencies for fisheries management in Sri Lanka are the MoFAR, the National Aquatic Resources Research & Development Agency and the National Aquaculture Development Authority.

The paper said that coastal fisheries in Sri Lanka have either reached the maximum sustainable yield or are close to it. A management programme has been launched for coastal fisheries. Seven hundred areas have been set apart for management through community participation. Alternative income opportunities for fishers are to be created to reduce fishing pressure.

Strengthening of MCS and introducing a vessel monitoring system will be other priority areas. Assistance and co-operation will be necessary from regional and global management organizations.

Summary of group discussions

Three groups were constituted to discuss different aspects of MCS — physical environment requirements (Group I); governance and policy environment requirements (Group II) and the role of CBOs/ NGOs in setting up MCS regime (Group III).

According to Group I, comprehensive stock assessment is necessary to determine the fleet's optimum size for sustainable exploitation. The right fleet size and gear can be then worked out, and category-wise operational area of fleets defined. This will also help reduce inter-category conflict. Registration of vessels should be mandatory. Awareness should be built to foster a culture of registration.

The group said that VMS should be mandatory for large vessels. For small vessels, measures like colour-coding and display of flags and registration numbers, could be considered as part of the VMS.

Encouraging community participation in MCS and SAR operations is urgently necessary, the group said. NGOs can be effective in this context. For harbour-based vessels, governments can introduce a smart card and a harbour pass. Two-way communication (VHF and cell phone) could be promoted to enable both MCS and distress communication. Local communities

equipped with internet access could be tapped to provide needed information.

Group II said that existing MCS legislation in member-countries should be revised. An information base is lacking, and mechanisms for

collecting, collating and disseminating national statistics are inadequate. All stakeholders should take part in making data collection effective. The group lauded the MCS regime in Maldives and urged stakeholder consultations for developing any MCS regime.



Steady budget support is essential for MCS, the group said. It can be used commercially, as in the Maldives, to make it popular. Given the shared stock of member-countries, regional cooperation is must for a successful MCS. There is also scope for sharing information to curb IUU fishing.

Group III suggested that community-based organisations (CBOs) could help enforce MCS. In fact, fishers should be able to help enforce MCS through CBOs, with NGOs serving as facilitators. The government should incorporate fisher concerns into the management regime.

The group found that co-management will not work without legal empowerment of CBOs. On the other hand, there is a risk of power misuse by CBOs. The practical solution at present is for CBOs to work with the government.

The group recommended a micro-level exercise by government to determine the norms for scientific and environment-friendly MCS, depending on the type of craft, fish species, time of the year and gear type. This should be carried out and published. Accordingly, an area-specific management plan could be set out.

The group concluded that a CBO network could help ensure a sound MCS in fisheries, if properly conceived and designed, with an accompanying legal, management and financial framework.

On the final day of the regional workshop, participants passed the Chittagong Resolution on the basis of the group recommendations. The text of the resolution is given on page 42.

◀ *Participants engaged in Group Discussions.*

The Chittagong Resolution

Conscious that the marine fisheries sector is highly important for the economies of member-countries of the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO);

Recognizing that the marine fisheries sector is a major contributor to the livelihoods, food and nutritional security and foreign exchange earnings of member-countries;

Realizing that a high percentage of the world's artisanal fisheries and small-scale fisheries are concentrated in South Asia, where many of the coastal stocks are almost fully exploited;

Recognizing that the marine fisheries sector largely operates in an open-access regime, and that the present condition of fisheries is largely attributable to weaknesses in the institutional and regulatory environment, a declining resource base and poor socio-economic conditions;

Realizing that monitoring, control and surveillance (MCS) regimes are weak in the marine fisheries sector of member-countries;

Concerned about the social and political constraints to regulating access to marine fisheries and to optimizing the fishing fleet;

Concerned that the current fisheries management regime for coastal fisheries in the region may lead to further unsustainable levels of exploitation of fisheries resources, and thereby impact the livelihoods of small-scale fishermen;

Concerned that the supporting regulations and policy framework relevant to the needs of MCS for small-scale fisheries, remain inadequately addressed by fisheries and maritime administrations in the sector;

Recognizing the limitations in institutional capacity of fisheries and maritime administrations in the region to undertake all responsibilities associated with the mandate;

Recognizing that the 1995 Code of Conduct for Responsible Fisheries (CCRF) of the FAO does not adequately address the need and requirements of MCS in small-scale marine fisheries;

Emphasizing the urgent need to address the multi-dimensional issue of MCS for small-scale fishermen in a holistic manner; and

Recognizing that the problem is not insurmountable;

We, the representatives of Fisheries and Maritime Administrations, Coast Guard and Fishermen's Associations, nominated by the Governments of Bangladesh, India, the Maldives and Sri Lanka, having participated in the BOBP-IGO Regional Workshop on MCS for Small-scale Fisheries held in Chittagong, People's Republic of Bangladesh, from 16 -18 January 2008, now therefore:

Resolve to address, as a matter of urgency, the issue of MCS for small-scale fisheries;

Recommend that MCS requirements be comprehensively integrated into every member-country's fisheries policy and regulatory and managerial frameworks. This would include associated commitments under the CCRF and other regional, inter-regional or global instruments and initiatives;

Emphasize the need to rationalize institutional mandates and inter-sectoral cooperation at the national level, in order to enhance implementation of MCS in small-scale fisheries;

Recommend that fisheries and maritime administrations enhance their knowledge and database on the health of the fish stocks and on commensurate efforts required to harvest resources in a sustainable manner;

Recommend the development and implementation of education, training and awareness programmes which satisfy and promote MCS requirements;

Recommend that mandatory requirements for improving implementation of MCS be supplemented by other strategies which involve the participation of fisher communities, families, the media and other stakeholders in order to promote the adoption of a wide range of MCS measures;

Recommend that member-countries, while implementing MCS, also undertake measures to enhance the economic viability of small-scale fishing enterprises, as an essential element of the marine fisheries sector;

Recommend that member-countries make full use of the available technologies, including Vessel Monitoring System wherever feasible, in support of MCS;

Recommend that member-countries employ innovative measures such as co-management. This will be an effective cost-sharing measure for MCS and enhance the participation of fishers and other stakeholders in the management of marine fisheries resources;

Recommend that member-countries undertake measures to formulate time-bound action plans for successful implementation of MCS and for strengthening the national agencies responsible for MCS;

Recommend that member-countries undertake measures directed towards regional cooperation in ensuring successful implementation of MCS; and

Strongly recommend the formation and implementation of a regional MCS programme, employing a consultative and participatory approach, building upon institutionally derived data and the operational experiences of small-scale fishermen.

Adopted on Friday, 18th January 2008 in Chittagong, Bangladesh.