National Workshop on MCS in Marine Fisheries in India adopts a National Plan of Action

National Workshop on Monitoring, Control and Surveillance in Marine Fisheries, jointly organized by the Government of India and the BOBP-IGO, was held in Chennai on 1-2 December, 2008. Taking part were representatives from the Ministry of Agriculture, the Planning Commission, the Indian Coast Guard and the Mercantile Marine Department; several Departments of Fisheries (Andhra Pradesh, Goa, Karnataka, Tamil Nadu and West Bengal) and Union Territories (Lakshadweep and Puducherry); fisher associations; and the FAO.

Mr Tarun Shridhar, Joint Secretary (Fisheries), Department of Animal Husbandry, Dairying & Fisheries (DAHD&F), Ministry of Agriculture, chaired the opening session.

Welcoming participants, Dr Y S Yadava, Director, BOBP-IGO, recalled that this national workshop and a national plan of action on MCS had been suggested in the *Chittagong Resolution* of the January 2008 Regional Workshop on MCS.

Dr Yadava said that west coast states such as Gujarat, Kerala and Maharashtra were not represented at the workshop, nor Orissa. This indicated that MCS "is yet to be a priority in fisheries management in many coastal States". In many developed countries, on the other hand, MCS is deeply rooted in fisheries policy. "These countries are now moving from a conventional command-and-control type of MCS to more participatory forms of monitoring and control". This made MCS more cost-effective



Mr Tarun Shridhar, Joint Secretary (Fisheries), Government of India.

said Dr Yadava. Even in some Asian countries, MCS was now an integral part of responsible fisheries. In South-east Asia, some countries were moving towards regional strategies.

Expressing his grief over 9/11, Dr Yadava said that in the past too, fishing vessels had been used for unlawful activities. A strong MCS regime in maritime states could help strengthen national security. He hoped the two-day Workshop would analyze issues concerning implementation of MCS in India and emerge with an implementable action plan.

In his inaugural address, Mr Shridhar said the focus of MCS in India was on control and



The National Workshop in progress.



Commandant Donny Michael

surveillance rather than on monitoring. The MCS regime in India was weak because data was poor. A good database, strong institutional backing, the support of stakeholders and a consensus among them to adopt MCS, were essential. MCS should go beyond VMS (vessel monitoring system). It should be perceived as a measure to protect livelihoods, not as a policing activity. Making MCS high on the political and governance agenda was a challenge, Mr Shridhar said. He added that the Ministry of Agriculture has provided budgetary support for fisheries management in the 11th Five-Year Plan.

Mr Shridhar said that fish production had gone down in 13 of the world's 15 ocean zones, while the two Indian Ocean zones were still productive. He called for a proactive approach so that these zones remained productive. Some 50 percent of fish stocks worldwide were over-exploited, the reasons behind depletion of fish stocks should be ascertained.

Illegal, Unreported and Unregulated (IUU) fishing is becoming rampant, Mr Shridhar said. Some 25 percent of the global fish catch originates from IUU vessels. IUU fishing can't be brought down overnight. Apart from regulation, better scientific, economic and social understanding of fisheries was essential. The Coast Guard had the major responsibility for surveillance of the EEZ, but it could not focus on fisheries alone.



Dr C. P. Juyal

Port State responsibilities too were not being addressed adequately.

Mr Shridhar said that issues in fisheries varied from open access to regulated access to rights-based fisheries. The pressure on capture fisheries could be reduced by lowering post-harvest losses and strengthening aquaculture.

Technical presentations

In a presentation on "Monitoring, Control and Surveillance in Small-scale Fisheries – Guiding Principles and Practices",
Dr Y S Yadava said that the impact of small-scale fisheries was often overlooked due to its low scale of operation. MCS in India was a challenge because of the predominance of small-scale fisheries and its highly dispersed nature. He called for a time-specific plan of action on MCS and for



Mr Sebastian Mathew

strengthening national agencies responsible for MCS as per the *Chittagong Resolution*.

Dr C P Juyal, Fisheries Research and Investigation Officer, DAHD&F, made a presentation on "Overall Status of Marine Fisheries in India and its Preparedness for a MCS Regime". He described the status of fisheries resources in the Indian EEZ and the potential for deep sea fishing, particularly of tuna and tuna like species. He described existing legal mechanisms and the salient features of the 2004 Comprehensive Marine Fishing Policy of the Central Government. He said that many new initiatives were planned in the 11th Five-Year Plan to strengthen resource management and introduce satellitebased surveillance measures (Vessel Monitoring System or the VMS) for fishing vessels.



Group Discussion in progress.







Participants engaged in Group Discussions.

Mr Sebastian Mathew made a presentation on "Rights-based Marine Fisheries Management a nd the Role of Fisher Community in Implementation of Monitoring, Control and Surveillance in India". He said existing legislation on marine fisheries in India should complement and strengthen international instruments to which India was signatory. He said that if millions of automobiles could be registered annually, registration of fishing vessels should not be regarded as insurmountable.

Mr Mathew said that powers for resource management ought to be legally delegated to the fisher community. He called for a management architecture for sustainable development of fisheries. During discussions that followed the presentation, references were made to the appalling conditions of hygiene and sanitation on fishing vessels; the lack of effort to promote co-management; and the lack of political support for devolution of power to panchayats. Responding to the questions, Mr Mathew said that legal reforms were needed to recognize traditional management arrangements and their adaptation to facilitate an equitable rightsbased approach.

In the workshop's final technical presentation, Dr Yadava reviewed the Marine Fisheries Regulation Act as well as the rules, regulations and notifications of coastal States and the Union Territories (UTs), and highlighted gaps relating to MCS. He discussed provisions in international binding and nonbinding instruments like the 1982 United Nations Law of the Sea, the 1993 FAO Compliance Agreement, the 1995 UN Fish Stocks Agreement and the 1995 FAO's Code of Conduct for Responsible Fisheries.

During discussions, participants raised several issues – such as weak patrolling; the failure of a central scheme in the late 90s under which patrol boats had been provided to coastal States; the lack of efforts to

optimize fishing fleet size; poor enforcement of regulations to prevent fishing in restricted areas. Participants pointed out that some countries had switched effectively from *de facto* open access fishery to regulated access fishery through effective implementation of registration and licensing procedures in consultation with the stakeholders.

Participants suggested that panchayats should be involved in fisheries governance. They said the focus of fisheries development in most states was on fisher welfare programmes; development aspects and MCS were overlooked. On VMS, the workshop felt that caution should be exercised in applying this technology to small fishing vessels.

Working Group discussions

Four Working Groups were formed to discuss the following issues:

Group 1: Registration and Licensing of Fishing Boats, Demarcation of Zones, Colour Coding, Communication and Surveillance Infrastructure

Group 2: Estimation of Fishing Capacity, Maximum Sustainable Yield and Optimization of Fishing Fleet.

Group 3: Governance, Policy and Legislative Support to MCS.

Group 4: Institutions, Human Resource Development and Role of Non-Governmental and Community-based Organizations.

Mr M K R Nair, Fisheries
Development Commissioner,
chaired the proceedings. Presenting
the recommendations of Group 1,
Mr Ravi Kumar stressed the urgent
need for registration and licensing
of all seaworthy fishing vessels and
for stronger surveillance. He
recommended the use of an
Automatic Identification System
(AIS) for all vessels below 15 meter
LOA. On the impoundment of
fishing vessels that violate rules and
regulations, he said fishing harbours
and fish landing centres do not have

National Plan of Action on MCS - India

Resource Estimation

Marine fish landings should be estimated regularly on the basis of a scientifically designed programme, which should be uniform for all coastal States and Union Territories (UTs). Data should be included on biological aspects of commercially important fin and shellfish species. Data should be obtained separately on fish landings from the territorial waters and those from the Exclusive Economic Zone (EEZ). Stock assessment should be carried out at regular intervals.

Estimation of Fishing Effort and Adjustment of Fishing Capacity

Deployment of fishing fleet/ effort by coastal States/ UTs in their territorial waters should be commensurate with the potential yield estimated for such area. It should be made mandatory for fishing vessels to file log sheets containing information on species-wise fish catch, area of operation, effort deployed, etc after each fishing trip to the designated authority. Such mechanisms should be imposed first on harbor-based mechanized fishing vessels, and extended later to other categories of fishing vessels.

Registration and Licensing of Fishing Vessels

All sea-worthy unregistered and unlicensed fishing vessels should be registered/ licensed.

To overcome the shortage of manpower, the Mercantile Marine Department (MMD) may consider delegating registration powers for fishing vessels less than 20 meters Length Overall (LOA) to the Department of Fisheries (DoF) of coastal States and UTs.

Fishing vessels and crew should be insured. Such insurance should be mandatory for vessel registration and for grant of a licence. Colour coding of fishing vessels should also be mandatory – to indicate the port of registry and the licensed zone of operation.

Infrastructure Development

The existing landing and berthing facilities cater to the requirements of only about 25 percent of the fishing fleet in the country. Result: acute congestion in fishing harbours and landing centres. A thorough assessment must be made of existing infrastructure facilities.

Surveillance

The coastal States/ UTs should provide marine fishers with Identity Cards after proper verification.

A comprehensive surveillance mechanism should be evolved. Such a mechanism should involve the Indian Coast Guard, State Governments and UTs and stakeholders. Fishing vessels operating in territorial waters should use Channel 16 exclusively for distress communication. Separate channels should be used for other communication.

Review of Fisheries Legislation

The Central Government should enact a central legislation to regulate fishing in the EEZ by Indian vessels, A thorough review should also be done of existing fisheries and supporting legislation, and MCS features should be incorporated.

Adequate manpower and funds should be provided for MCS.

Where relevant, MCS provisions may be delegated to agencies such as the Marine Enforcement Wing and the Coastal Protection Police.

Fisheries Policy and Management Frameworks

Based on the 2004 Comprehensive Marine Fishing Policy of the Central Government, all coastal States/ UTs should formulate policies in concert with stakeholders. The policies should clearly define the objectives and goals of fisheries development. They should ensure decentralization. They may consider promoting rights-based fisheries management to the extent possible. Such policy documents should be dynamic in nature and allow for periodic revision.

Management plans for major fish stocks should be formulated by the Central Government in coordination with States/ UTs. Where sufficient data are lacking, such plans may rely on the 'precautionary approach'. The plans may consider fixed time schedules for allowing the stocks to be harvested, ex situ and in situ conservation and management measures and stock enhancement using proven technologies such as artificial reefs, fish aggregating devices and sea ranching.

The MCS, which is an integral part of fisheries management, should be implemented in stages. The first stage should include mandatory registration and licensing. The second stage should take up enforcement of the provisions contained in the rules and regulations. Involvement of stakeholders from the very beginning would help promoting voluntary compliance by fishers and other concerned user groups.

To coordinate various activities related to fisheries management (e.g. management plans, MCS, safety at sea, exercise of coastal State jurisdiction, port State and flag State control), the setting up of dedicated Fisheries Resource Management and Enforcement Units (FRMEU) may be considered.

Capacity Building and Empowerment

The DoF in each state ought to be adequately staffed with trained technical manpower to address issues of sustainable fisheries development. Capacity-building of fisheries staff should be undertaken in a planned and systematic way. Fisheries institutions and other agencies concerned with fisheries management should also be strengthened.

The fishing community should be empowered to participate in fisheries management programmes. Its skills and capacities should be enhanced through short-term highly focused vocational trainings and hands-on workshops. The socioeconomic well being of fisher community should be improved. Living conditions of fishers on board fishing vessels should be improved.

Community Mobilisation, Communication and Awareness

Fisher communities should be mobilized to assist in implementing fisheries management programmes. Fisher cooperatives should be strengthened and co-management should be promoted. Community interaction programmes should be undertaken on issues such as resource management and formulation of management plans, MCS, safety and survival, health, hygiene and literacy. Women must be included in such programmes.

The print and electronic media should be made use of to the fullest extent to educate fishers about fisheries management and to build stakeholder capacity.

Success stories (and stories of failure) in fisheries management should be documented and shared with fishers and other stakeholders. Vocational education for fishers and non-formal education of fisher's children should be promoted. These will prepare the community for resource ownership.

Coordination and Networking

The Central Government should constitute an interdisciplinary committee to help implement the MCS action plan and monitor progress through performance indicators.

space to keep such boats. The group called for revamping of the two 24-month training courses conducted by CIFNET, Kochi, which were oriented to merchant shipping; they ought to be more relevant to fisheries.

Some of the points made during discussions: While estimating fishing capacity, both the length of the fishing vessel and gross tonnage (fish hold capacity) should be considered. Working conditions in fishing vessels (as provided for in the ILO Convention on 'Work in Fisheries Sector') should be taken into account while issuing licences to fishing vessels. Resale of fishing vessels should be done with the knowledge of the DoF. The antecedents of boat owners should be verified by the police prior to registration. Life- saving appliances in fishing vessels should be mandatory. The area of operation should be mentioned in licenses issued to boat owners. The various Marine Fishing Regulation Acts/ Rules should be streamlined and harmonized with the Merchant Shipping Act to the extent possible.

Presenting the recommendations of Group 2, Dr H Mohamed Kasim urged the need for regular stock assessment, for estimation of maximum sustainable yield, for infrastructure enumeration, etc. Some points made during discussions: (i) Should log sheets be used to estimate fish landings? (ii) An 'allowable catch' should be fixed for selected fish stocks. The 'precautionary approach' should be adopted for management (iii) Commercially important stocks should be considered in place of species. (iv) Opening and closing seasons should be declared for fisheries to ensure sustainable fishing.

The chairperson urged coastal states and UTs to urgently assess fleet capacity and prepare an inventory of boatbuilding yards.

Presenting the conclusions of Group 3, Commandant Donny Michael described MCS as a misnomer in India. Coast Guard officers, who have the prime responsibility for MCS in the EEZ, do not undergo any MCS course after an initial capsule programme at CIFNET. During discussions that followed the presentation, it was suggested that fishing vessels be marked with radio identification frequency and that the DoF in each state should exercise greater control on smallscale fishing in territorial waters. The Ministry of Agriculture is

contemplating the use of VMS on all categories of fishing vessels, also proposing a new Bill to regulate fishing by Indian vessels in the EEZ.

Making the presentation of Group 4, Commandant Paramesh said that existing fisheries and other institutions contributed in one way or the other toward implementation of MCS. During discussions, it emerged that the workshops conducted periodically by the zonal bases of the Fishery Survey of India discuss MCS. Empowering the DoF was essential to successfully implement MCS, the workshop was told.

Draft National Plan of Action

A draft National Plan of Action for Implementation of MCS was prepared by the BOBP-IGO secretariat on the basis of the Working Group recommendations and participant feedback, and presented at the workshop's concluding session (see box on pages 18-19). The chairperson, in his concluding remarks, asked coastal States and to include the plan in their own work plans, and involve Panchayati Raj institutions in planning and implementation.



Participants at the National Workshop on MCS.