

Bangladesh National Workshop Adopts Action Plan on Monitoring, Control and Surveillance

Fifty-one persons from 21 national, regional and international fisheries organizations took part in the National Workshop on Monitoring, Control and Surveillance (MCS) in Marine Fisheries in Bangladesh, held on June 7-8, 2008 in Cox's Bazar.

It was organized by the Danida-funded project "Strengthening Institutional Capacity of the DoF (SICD)" in coordination with the Ministry of Fisheries and Livestock (MoFL), and the BOBP-IGO.

Mr Nasiruddin Md Humayun, Project Director, SICD Project, welcomed participants. Describing the current crisis in global fisheries, Mr Humayun said that fish stocks had got depleted in many parts of the world because of over-exploitation, habitat destruction, industrial pollution and waste-dumping into marine waters.

In response, fisheries authorities have been regulating the fishing fleet; introducing gear restrictions, closed areas and closed seasons; and registering and licensing small-scale fishing operations, said Mr Humayun.

The National Fisheries Strategy formulated by Bangladesh in 2006 could be effective only if MCS was reviewed and strengthened, Mr Humayun said.

Mr Humayun thanked the chief guest, Mr Parikshit Datta Choudhury (Joint Secretary, MoFL) and the chairperson – Mr Md Rafiqul Islam, Director General, Department of Fisheries (DoF) – for their support to the workshop. He

thanked Dr Yugraj Singh Yadava, Director, BOBP-IGO for technical and financial assistance to the workshop; the Royal Danish Embassy, Bangladesh, for financial support and cooperation; and Mr Bundit Chokesanguan, Director (Training), SEAFDEC.

Mr Sajjadul Hassan, Deputy Commissioner, Cox's Bazaar District, Bangladesh, said that the potential of marine fisheries in Bangladesh was huge. Effective management was essential to tap the resources in a sustainable manner. "While doing so, the occupational hazards faced by the fishers need to be minimized", said Mr Hasan.

Declaring the workshop open, Mr Parikshit Datta Choudhury (Joint Secretary Fisheries), said that MCS in fisheries had been neglected in Bangladesh. An effective MCS programme was needed to strike a balance between conservation and sustainable exploitation.

The proposed action plan should be based on the Chittagong Resolution adopted by the BOBP-IGO member-countries in January 2008.

Mr Md Rafiqul Islam, Director General, DoF, said that capture fisheries in Bangladesh were stagnating because of lack of a reliable database, over-exploitation of some stocks and under-exploitation of others, inadequate MCS, plus the impact of global warming and climate change.

He suggested demarcation of the EEZ of Bangladesh. An effective information network; a central data base for information on the weather and on fauna and flora; a strong MCS system; management plans for shared stocks; marine parks; joint stock survey programmes; protection of nursery grounds; and a ban on capture of juveniles of fin and shellfish species – these were some other suggestions.

Dr Yugraj Singh Yadava made the keynote presentation on



Participants at the National Workshop on MCS.

“Monitoring, control and surveillance in small-scale fisheries - guiding principles and practices”. Stressing the uniqueness of fisheries to the national economy of Bangladesh, Dr Yadava said that some 1.77 million fishers were active in the primary sector and 67 300 in the secondary sector. Fisheries contributed significantly to the national GDP and to export earnings.

He said that the coastal marine fishery portrays a picture of unregulated access, overcapacity, low catch per unit effort and fishing rights conflicts. Most fishing communities rely almost entirely on fishing for their livelihood, and lack alternatives. A large proportion of fish stocks -- both marine and inland -- are fully exploited, over-exploited or depleted. While the commercial trawl fishery is regulated to a certain extent, the small-scale/ artisanal fishery is almost unregulated.

The DoF awards fishing licenses only to registered boats. But it's the MMD that registers the boats and only about 10 percent of the mechanized boats get registered. This means that a large number of boats are unlicensed and not monitored. The DoF has no magisterial power; fisheries personnel depend on the executive and the Police Department to enforce the Fisheries Act.

The MMD is ill-equipped to enforce existing legislation, as it has only two offices all along the coast. The Bangladesh Coast Guard, set up in 1994, is mandated to protect national interests in the maritime zones of Bangladesh and prevent illegal fishing. But the Coast Guard is ill equipped as well, it needs more manpower, more patrol boats, more equipment.

Small-scale fishing communities are illiterate, and provisions of the Fisheries Acts and Regulations are unknown to many of them. An effective and implementable legal framework is a pre-requisite to management and conservation of fisheries resources.

The main constraints to MCS in Bangladesh are lack of accurate fisheries statistics and a scientific information system; inadequate trained manpower at both management and operational levels; lack of awareness at the community-level of the need for MCS; a large number of inaccessible landing places; lack of supporting legislation to implement MCS; a multiplicity of agencies and lack of well-defined roles and jurisdictions; and inadequate funding for MCS.

Community motivation is the most important step for effective implementation of an MCS policy, Dr Yadava said. Joint effort by all stakeholders and coordination among them is essential; MCS can't be practiced in isolation by the Government.

Dr Yadava said that the Chittagong Resolution of January 2008 on MCS had recommended action plans for implementing MCS and for strengthening national agencies. The current workshop is aimed at formulating such an action plan to guide MCS in Bangladesh.

Dr Yadava called for a paradigm shift -- from a regime of open access in marine fisheries to limited and controlled access, and allocation of rights to user groups. Small-scale fisheries can benefit immediately from successful MCS measures through (i) effective demarcation of fishing areas, (ii) data strengthening, (iii) target fishing through resource mapping, (iv) sea-safety, (v) reflection of their interests in fishing policy, (vi) stabilization of catch per boat and hence income, and (vii) effective land and sea-based monitoring systems.

Mr Md Kabir Ahmed, District Fisheries Officer, Cox's Bazaar, proposed a vote of thanks at the end of the inaugural session.

Technical Presentations

Mr Bundit Chokesanguan, Director (Training) at SEAFDEC, Thailand, provided an overview of MCS in fisheries in Southeast Asia. He said that small-scale fisheries were

dominant in the region, barring Thailand, where industrial fisheries had grown faster.

Every coastal state in Southeast Asia faces theft of resources from Illegal, Unreported and Unregulated (IUU) fishing made possible by lack of MCS, the speaker said. IUU fishing undermines efforts to conserve and manage fish stocks. If this practice is not curbed, vulnerable stocks can't be rebuilt, said Mr Bundit.

He said a Regional Plan of Action to Promote Responsible Fishing Practices -- including combating IUU fishing -- had already been drafted by Southeast Asian countries. A workshop held in Bali, Indonesia from 4 to 6 March 2008 had made recommendations as follows:

- Formalize a MCS sub-regional network;
- Identify and assess key MCS gaps within the sub-region;
- Develop licensing and authorization processes for fishing and support vessels;
- Develop cooperative surveillance exercises;
- Develop sub-regional hot pursuit guidelines;
- Coordinate and integrate all relevant national agencies in MCS activities;
- Focus on mechanisms to improve the collection and analysis of information on fishing vessels, catches, trans-boundary market destinations of catches; and
- Strengthen institutional and human capacity building across the region.

Mr Bundit said that depletion of fish stocks, overfishing, conflicts between resource users, ignorance and violations of laws and regulations by fishermen were some of the main problems of coastal and marine fisheries in the region. In efforts to improve fisheries management by establishing MCS systems, some countries had succeeded, others had failed.

The failures might have been due to the 'common property' characteristic of fishery resources, lack of strict implementation of

MCS policies, shortage of manpower and equipment to enforce laws, and lack of coordination between government agencies concerned, said Mr Bundit.

Dr Md Giasuddin Khan, Senior Fisheries Specialist, WorldFish Center, Dhaka, discussed the “Status of Coastal and Marine Fishing Fleet in Bangladesh and Preparedness for a Monitoring, Control and Surveillance Regime”. He said that a short study undertaken by The WorldFish Center at the request of the government confirmed that fish stocks are continuously declining.

Dr Khan said that over the last 20 years a big shift had occurred in the composition of catches of finfish trawlers. In 1984-1986, major commercial species caught were white grunters, croakers, catfish, breams, snappers and hair tails. Since 2005-2006 these have mostly been replaced by low valued species like acetes shrimp, crab juveniles and Bombay duck.

Surveys during 1984-1986 showed that 20 species had contributed to the main landings. In 2005-2006, this number had declined to 12. More valuable and longer-lived species were being replaced by smaller, short-lived pelagic fish species, said Dr Khan. Destructive fishing practices must be phased out and precautionary management approaches should be implemented wherever necessary.

On marine catch monitoring, Dr Khan called for development of local reporting systems, especially for artisanal fisheries. Mechanisms should be instituted to ensure proper selectivity in fishing gear and fishing operations, minimization of wastes and discards, reduction in catch of non-target species. Registration of all mechanized boats should be completed urgently. Given the limited capacity to mount sea-borne inspection, efforts should focus on land-based inspection.

Dr Khan said that the marine fisheries policy should be revised to reflect both the precautionary

approach and the ecosystem approach (which recognizes that fisheries will impact the biological diversity of the wider ecosystem). Inter-sectoral conflicts should be minimized. Co-management and community-based fisheries management should be encouraged.

Commander Afazur Rahman Chowdhury of the Bangladesh Coast Guard (BCG) made a presentation on “Present status of legal support to implement MCS in the marine fisheries sector in Bangladesh”.

He provided an overview of international laws such as the 1982 United Nations Convention on the Law of the Sea, the FAO Compliance Agreement and the 1995 UN Fish Stocks Agreement. He also discussed the 1995 FAO Code of Conduct for Responsible Fisheries (CCRF), which served as an instrument of reference to help States establish or improve the legal and institutional framework for responsible fisheries.

Mr Chowdhury said that many legislative instruments were already in force in Bangladesh to support MCS, directly or indirectly. These were ordinances, acts and rules administered by various ministries. The Marine Fisheries Ordinance, 1983, was the base law and regulatory instrument for marine fisheries in Bangladesh. It authorized the government to specify the types, classes and numbers of fishing vessels that could be deployed in Bangladesh waters.

Mr Chowdhury said that marine fisheries legislation had been generally implemented for industrial fishing trawlers. Implementation for the artisanal sector had been a challenge. The socio-economic conditions of fishers were a primary cause, but lack of responsibility, interference of pressure groups and lack of trained manpower in marine fisheries were other factors.

During Session II, the workshop divided itself into four groups to discuss four subjects.

Action Plan for Implementations of MCS in Bangladesh

A. Fish Stock Assessment

- Monitoring of catch and stock assessment should be carried out regularly. The provisions under the Bangladesh Marine Fisheries Capacity Building (BMFCB) Project should be utilized for the purpose. After completion of the BMFCB Project, the Department of Fisheries (DoF) should carry out this function with the involvement of the Local Stakeholder Committees (LSCs).
- Resource survey(s) should be organized, for which the Government may consider additional funding. Such survey(s) may take into account both maximum sustainable yield and maximum economic yield.
- Marine fish landings should be estimated on the basis of a statistically designed programme. To achieve satisfactory results, it needs to be ensured that fish catches are landed at designated fish landing points (Fishing Harbours or Fish Landing Centres).

B. Optimization of Fishing Fleet

- A thorough review of the mechanized and non-mechanized fishing fleet should be undertaken. Based on the present marine fish landings, available data on catch per unit effort and other biological parameters, the fishing fleet (both mechanized and non-mechanized and trawlers) should be adjusted and excess capacity phased out in a time-bound manner.
- The 31 numbers of ‘under trial’ fishing vessels operating at present must be banned. The 50 numbers of modern fishing

trawlers already licensed should commence fishing in the deep sea.

C. Registration and Licensing of Fishing boats

- All unregistered and unlicensed fishing boats should be registered/ licensed in a time-bound manner.
- The dual system of registration of fishing boats by the Mercantile Marine Department (MMD) and licensing by the DoF should be discontinued. There should be one-stop service point (single window) for registration and licensing under the control of DoF.
- The registration/ license fee structure should be reviewed.

D. Zonation of Fishing Grounds

- No fishing should be permitted in the coastal waters up to 5 meter depth/ 3 nautical mile (NM) distance. Non-mechanized fishing vessels may be allowed to fish beyond 5 meter depth and up to 40 meters. The zonation should take into consideration aspects such as the size of the fishing vessel, gear to be deployed and the engine horsepower.

E. Review of Fisheries Legislation

- A thorough review of the existing fisheries and supporting legislation should be undertaken and necessary amendments should be proposed keeping in view the requirements of Monitoring, Control and Surveillance (MCS).
- The review may also consider harmonization of the fisheries and supporting legislation with the global fisheries instruments and other documents aimed at sustainable development of the fisheries resources.
- To make the implementation effective, harmonization of the legislation may be considered.

F. Policy and Management Frameworks

- The exiting policies on fisheries development may be reviewed and, if necessary revised to meet the local requirements and also to confirm to the global instruments on sustainable fisheries development.
- The good practices adopted in the neighbouring countries may also be considered while reviewing the fisheries policies.
- A comprehensive marine fisheries management framework should be formulated for all commercially important fin and shellfish species. Implementation of the management framework already developed for species such as hilsa (*Tenulosa ilisha*) should be strictly enforced.

G. Institutional Strengthening and Human Resources Development

- Capacity building of officials of the DoF, MMD and other concerned organizations in both government and non-government sectors should be initiated in a planned manner. A GAP Analysis may be undertaken to arrive at the actual needs of capacity building and institutional strengthening.
- Strengthening of the fisheries institutions and other agencies concerned with the implementation of MCS (*e.g.* Coast Guard, Navy) should be taken up in a time-bound manner. This should also include strengthening of the organizational set up of the DoF at the coastal District and Upazila levels.
- The use of information technology should be stepped up in implementation of MCS. The Geographical Information System established in the DoF should be further strengthened.

- Skills and capacities of fisher groups and community-based organizations should be built through short-term and highly focused vocational trainings and hands-on workshops.

- Fisher communities in all the coastal districts should be mobilized to participate and assist in the MCS activities. The print and electronic media should be made use of to the fullest extent in creating awareness on MCS and its objectives.

- Cost-effective approaches such as 'co-management' of resources should be promoted to achieve the objectives. Stakeholder consultations should be initiated to decide on the modalities of co-management approach for MCS and related activities.

- Implementation of MCS should ensure that the livelihoods of small-scale fishers are safeguarded.

- The use of MCS should not be restricted to enforcement alone, but for providing multiple benefits to the fisher community such as promoting safety-at-sea, reducing post-harvest losses and promoting hygiene and sanitation in boat and at landing and berthing sites.

H. Coordination and Networking

- An inter-disciplinary high powered inter-ministerial committee should be constituted to coordinate the activities and also monitor the progress through performance indicators. Such a committee should be coordinated by the Ministry of Fisheries and Livestock.
- Formal and effective linkages should be established between the key players - DoF/ Navy/ Coast Guard/ MMD for implementation of the MCS programme.

Group I: Registration and Licensing of Fishing Boats, Demarcation of Zones, Colour Coding, Communication and Surveillance Infrastructure: This Group recommended that a one-stop service point be fixed for registration and licensing of fishing vessels; fishing zones for different categories of vessels should be demarcated; a no-fishing zone should be declared up to 5 meter/ 3 nautical mile; non-mechanized vessels should be allowed to fish in the 5 - 40 meter depth zone; the number of shore stations should be increased; the MMD should mount a vessel registration drive.

Group II: Estimation of Fishing Capacity, Maximum Sustainable Yield and Optimization of Fishing Fleet: This Group suggested that all categories of fishing vessels be reduced in number; the dual system for licensing/ registration of fishing boats should be stopped; the 'Zaman Committee Report' on trawlers should be implemented.

Group III: Governance, Policy and Legislative Support to MCS: This Group suggested that the Fisheries Policy document of Bangladesh should be revised in conformity with the CCRF; good practices from the experiences of neighboring countries should be incorporated in the policy; a high powered ministerial committee should be formed with DOF as lead agency to strengthen implementation of MCS and plug loopholes.

Group IV: Institutions, Human Resource Development and Role of Non- Governmental and Community-Based Organizations: This Group suggested better coordination between marine fisheries agencies; institutional strengthening; vocational and short-term training for fishers throughout the coastal belt; utilization of print and electronic media to create management and MCS awareness.

The Group presentations generated much discussion. There was unanimity on several of the points listed below:



- A cadre of enforcement officers should be created from the existing manpower.
- Strong coordination is needed among agencies such as MoFL, DoF, Navy and Coast Guard in implementing MCS.
- Registration of fishing vessels should be accorded top priority and modalities worked out by the DoF/ MoFL and the MMD. The registration procedure should be transparent.
- The fishing fleet must be restricted to optimum size and zones should be set up for different categories of fishing boats to help reduce conflicts and promote sustainability.
- A manual on MCS should be prepared. It will set out procedures for implementing agencies and their work, funds needed, time-frame, etc.
- Should trawlers fish only in depths beyond 40m? Should zoning decisions be made on the basis of depth of the waters or distance from the shore? The questions should be discussed.
- The Bangladesh Navy and Coast Guard must be strengthened both to implement MCS and assist fishers at sea.
- Log books should be mandatory for fishing boats.
- Pollution from land-based sources is increasing and should be checked.
- Landing centres should be maintained and managed better, and all fishing vessels must land at these centres. New landing centres should be established.

- A one-stop service should be provided for registration of fishing vessels; MMD should be given this responsibility.
- Mesh size regulations should allow fish at least one opportunity to breed and propagate.
- No fishing should be permitted in breeding grounds such as mangroves.
- Catch-based surveys should be initiated prior to stock assessment.
- The services of the Bangladesh Space Research and Remote Sensing Organization should be used to identify potential fishing zones.
- Colour coding should be carried out for different categories of fishing vessels.
- New surveillance check posts should be set up along the coastline (at places such as Borguna, Satkhira, Patherghata, Bagerhat, etc.)
- Fisher community participation in MCS should be encouraged to foster the feeling of community ownership of resources, also to make MCS cost-effective.

On the basis of the recommendations made by the workshop, a draft Action Plan on Implementation of MCS in Bangladesh was presented by Dr Yadava. It was discussed and a final Action Plan adopted by the workshop (see page 10-11). Dr Yadava described the Action Plan as comprehensive. Its implementation would help sustainable development of marine fisheries resources in Bangladesh.

In the workshop's concluding session, Mr Rafiqul Islam, chairperson, said that the Action Plan would have to be implemented in a phased manner. A group would be constituted to prioritize actions and identify the modalities for implementation.

Mr Nasiruddin Md Humayun proposed a vote of thanks. He said the Royal Embassy of Denmark would be willing to support development of sound policies on MCS through the SICD Project.