

# MCS in Small-scale Fisheries

## *Regulating the unregulated*



*MCS (Monitoring, Control and Surveillance) is perhaps the most important three-letter term in fisheries today. Without MCS, management – an urgent priority in fisheries everywhere – would be ineffective. This editorial discusses some of the issues relating to an effective MCS system for fisheries in countries around the Bay of Bengal.*

**D**windling resources, falling fish catches and incomes, concerns about sustainability, calls for a “paradigm shift” in mindset from production to management – the story is universal.

Management is the gospel that fisheries departments and institutions preach but fishers small and big ignore. Management policies are inadequate; compliance levels are low; enforcement is poor.

For all three to improve, Monitoring, Control and Surveillance (MCS) has to get better. It’s a potent tool of governance in fisheries, but like governance itself, it is easier to profess than to implement. “Monitoring” entails systematic

collection, measurement and analysis of data on fishing activities. “Control” refers to the conditions laid down under which resources can be harvested. “Surveillance” ensures that fishers and other players comply with laws and regulations.

MCS systems have mainly been designed for the industrial fisheries of developed countries. Special MCS systems are needed for small-scale fisheries of developing countries because of its special character – open access, multi-species, multi-gear, with thousands of small low-cost fishing units operating from beaches and landing fish at numerous small and remote landing centres. The process

of setting up an effective MCS system is slow, costly, and full of hurdles.

To help the process, the BOBP-IGO held a three-day workshop on MCS in fisheries in Chittagong, Bangladesh, in January 2008. Leading fisheries officials from BOBP-IGO member-countries (Bangladesh, India, Maldives, Sri Lanka) took part, besides experts and observers. The workshop’s “Chittagong Resolution” urged that MCS should be integrated into every member-country’s fisheries policy, its regulatory and managerial frameworks. Education, training and awareness programmes and media mobilization should be a part of the process.

Here are some insights and learnings from the workshop.

- An MCS system may be perceived as costly, but the cost of not managing the resource is far higher. This said, the MCS system should be designed to be cost-effective. It should encourage compliance, rather than demand enforcement. Further, the cost of conservation should not exceed the economic benefits from marine resources. The fisheries department or the management authority should examine all practical options for sharing the cost of management with industry. Likewise, information-sharing among all stakeholders is another practice that should be institutionalized.
- MCS in small-scale fisheries has to confront unique constraints:
  - Lack of accurate statistics in the small-scale/ artisanal sector.
  - Lack of 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 along the coast.
  - Lack of supporting legislation to implement MCS.
  - Inadequate funding for MCS.
- A sound MCS system can be based on either a preventive approach or an enforcement approach. The preventive approach entails measures to control access, such as licensing. The enforcement approach entails penalties on law-breakers so that law-abiding is seen as not merely wise or correct but as advantageous. But strong political will and government support are needed for firmness in enforcing penalties.
- All fishing vessels must be registered. Procedures for registration and licencing must be streamlined. In some

### *International MCS Network*

The International Monitoring, Control, and Surveillance Network for Fisheries-Related Activities



([www.imcsnet.org](http://www.imcsnet.org)) helps in the global battle against IUU (illegal, unreported and unregulated) fishing. Created in 2001, the network facilitates collaboration between MCS professionals.

Members of the network are national organizations which have been authorized to co-operate with organizations elsewhere to prevent, deter and eliminate IUU fishing. The network, which now has some 50 members, provides training, serves as a forum for professionals to meet and discuss MCS, and maintains a database of contacts and information for member-countries.

Why is such a network needed? Comprising over 70% of the earth's surface, the oceans feed the world. IUU fishing takes place in all oceans; while fisheries-related corruption and crime occur on land. Identifying and pursuing criminals

- countries, registration and licencing are seen as cumbersome multi-window processes. This discourages compliance. Further, registration systems should be uniform throughout a country.
- A Vessel Monitoring system (VMS) is an essential MCS tool. VMS enables accurate and timely information about vessel location and activity through transponders on the vessels and associated paraphernalia.

However, VMS is practical only for a large industrial fishing fleet. For small-scale fisheries, colour coding of fishing fleets on the basis of their place of origin and area of operation, and display of flags with registration numbers, are necessary measures. Random sampling of catch is essential – the enforcing authority ought to use modern communications technology to

over large areas requires resources and effort beyond the reach of any single nation. Developing nations are particularly vulnerable to incursions in their waters.

#### *The Network's objectives:*

- Efficient information exchange.
- Preparing analyses and studies related to IUU fishing.
- Recognizing the dangers of IUU fishing and seeking common solutions.
- Facilitating communication with members and between them.
- Develop capabilities among member nations to work regionally and globally to prevent, deter and eliminate IUU fishing.
- Training of MCS officials in member nations to improve their effectiveness, skills and capacity to address IUU fishing.

The Network conducted the first Global Fisheries Enforcement Training Workshop in Kuala Lumpur in 2005 and the second in Trondheim, Norway, in August 2008.

make the process effective. Better two-way communication systems in all fishing vessels is essential.

- Limits should be imposed on fishing effort through access regulations (licensing of fishing vessels, for example), closed seasons, closed areas and gear restrictions.
- A comprehensive stock assessment is essential to ensure sustainable exploitation of resources, and also work out optimum fleet size by area and species. This may help reduce conflicts as well.
- The MCS authority should probe and address the reasons for non-compliance with regulations – apart from that of inadequate enforcement. It could be lack of awareness, inconsistencies in regulations issued by different ministries, a culture where community solidarity is a

stronger force than government edict.

- Legislation on MCS in the region is either poor or inadequate. It should be revised. It is widely believed that fisheries laws are often complex, difficult to understand and implement. Those concerned should consult a wide range of stakeholders in formulating laws that are simple and clear and relatively easy to enforce.
- Co-operation and support from advanced countries for an MCS system should be regarded as a priority – on technology, on search-and-rescue systems, on strengthening the Coast Guard, on curbing illegal fishing, on a vessel monitoring or vessel tracking system. The Code of Conduct for Responsible Fisheries suggests such co-operation.
- MCS systems must be local-specific, and take account of prevailing cultural, financial and human factors. The focus should be on improving data collection, strengthening local awareness of the need for conservation and management, and encouraging fishers as whistle-blowers who will report infringements.
- MCS has to be a co-operative effort with industry and the entire fisher community. It can't succeed if it's just government-driven. Decentralizing management, and moving towards co-management and community management, is the way to the future.
- CBFM (community-based fisheries management) structures at the community, district, regional and national levels should be tapped for MCS activities. In fact, fishers should be able to help enforce MCS, with NGOs serving as facilitators, if an appropriate legal, management and financial framework is devised.
- The MCS authority could conduct a micro-level exercise 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.

- Illegal fishing should be combated through port state measures such as inspection of gear and catch onboard arriving vessels, and inspection of documents.
- “Sustainability” may have neither meaning nor relevance for artisanal fishers who live from day to day. It would be relevant, however, if fishers are provided with useful information – on fish abundance by area, weather forecasts, market prices, safety at sea, etc. In Maldives, for example, fishing forecast information is provided free of charge exclusively to registered vessels.
- Regional cooperation can strengthen understanding and knowledge on all MCS-related issues and lower costs as well. The ‘Chittagong Resolution’ on MCS is a good beginning and must be taken further.
- Ultimately, MCS confers manifold benefits that go far beyond resources. For small-scale fisheries, it could mean more accurate resource mapping; a better insurance deal; greater safety; more stable incomes; greater employment opportunities and a win-win situation for all.

At the national level, a strong MCS in fisheries could even enable more effective operations against terrorism, drug-peddling, arms smuggling and other social evils.

– Y S Yadava

*Paintings by school children in India, Maldives and Sri Lanka depicting post-tsunami reconstruction.*