

TECHNICAL PAPER 3.

THE CHANGING FACE OF MONITORING, CONTROL AND SURVEILLANCE

by

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WHAT IS MCS?

Many people ask “What is monitoring, control and surveillance (MCS)?” and the response varies according to the person asked. A brief definition is provided below, but basically it includes: data collection and analyses; control mechanisms in support of approved management plans and strategies including legal instruments; and the surveillance activities, inspection and deterrent activities including arrest, etc. to ensure compliance with the law.

MCS was first defined in FAO in 1981, by a group of Member Countries that were trying to define the implementing mechanism for fisheries management. The definitions have been enhanced over the years by various conferences, but in essence the terms cover the following ideas:

Monitoring The gathering and analysis of data, e.g., vessel identification, specifications, catch and effort, positions of fishing, discards, processing and packaging and offloading, for the purposes of future management planning, and in the more immediate term to ensure compliance with the legislation supporting the currently approved management plan or strategy.

Control The control mechanisms to provide legislative and operational support for implementation of the approved resource (fisheries) management plan or strategy. This includes the legislative instruments, laws and regulations, and the operational tools for control, e.g., licences; mesh and fishing apparatus restrictions; zoning of activities by area or season; reporting and record keeping requirements; etc.

Surveillance The operations to ensure compliance with the legislative instruments supporting the management plan. These activities constitute the implementation of the management plan on the ground. Included in surveillance are the preventative and deterrent aspects of MCS. Preventative MCS incorporates the activities to encourage understanding, support for the management regime and hence voluntary compliance with the law. Deterrent MCS includes those activities that are required after inspection or investigation reveal that an unlawful act has occurred. These activities include: detention of goods or persons, investigation, interviews, arrest, interrogation, court proceedings, court findings, and post-court action.

The understanding of these definitions is key to recognizing that MCS is really the implementing mechanism for resource management plans, and also for comprehending the linkages between MCS and fisheries management.

TRADITIONAL MCS AND THE NEED FOR A CHANGING FACE

What then can be the changing face of MCS? If one still views MCS traditionally as the mechanism for fisheries law enforcement, inspection, investigation and arrest, one could then not

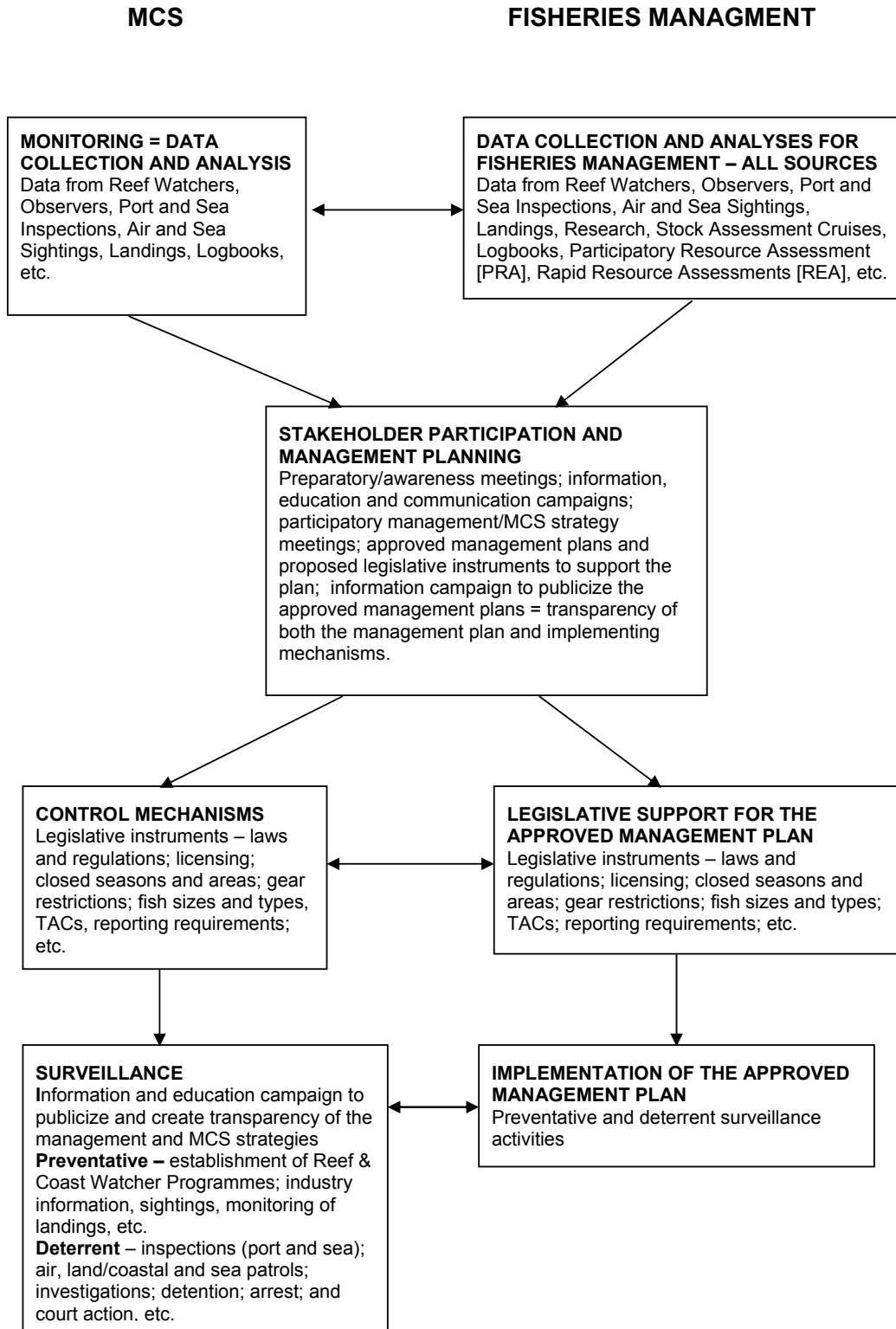
be blamed for asking the question. However, if one views the changes in management processes to involve the coastal communities, the fishers' associations, fishing industry, and the private sector for both the coastal and offshore fisheries, then the implementing mechanisms for MCS have also undergone a change, or if not, they need to do so.

It has been widely recognized that "top-down" management has not been successful in fisheries, as shown by the well-publicised management failures in the past two decades. The swing of the pendulum to community-based fisheries and self-enforcement has not yet run its course, but is predicted to do so in the near future. Full community-based fisheries management and fishers' management of the offshore fisheries resources have proven to be not completely effective mechanisms in the United States and other countries. This is especially the case for self-enforcement. It is more like the case of believing that the general good nature of the fox will prevent it from eating the chickens it is detailed to guard – the simple hunting nature of the beast has not been taken into account. The community of fishers has varying and diverse agenda, and it is thought that it cannot effectively police itself, especially without a legally mandated enforcement authority to do so, as the differing directions often lead to conflict and hence lack of effective management. If self-enforcement were the norm, we would not need municipal law enforcement agencies.

There are thoughts emerging that the idea of community-based management really might be better implemented if there were an understanding that there still remains a need for a holistic approach to management principles at a national level. These would include an encompassing umbrella of policies and principles. These policies would serve to guide the communities in their management responsibilities. This refined community-based management concept implies a joint partnership of government and the community, including fishers, academia and private sector, for the rational and sustainable management of coastal resources. In the case of offshore fisheries, the principles are similar, as the concept includes the participatory approach and involvement of the fishing industry and other maritime agencies in the management process. This proposed concept brings sustainable management back into scope and the management pendulum swings more evenly over the sector instead of locking on extremes. The proposed concept therefore, is one of a participatory partnership approach to resource management that includes all the stakeholders. MCS must also change its direction to accommodate these changes in management approach without losing its effectiveness and consistency within the agreed area of jurisdiction, be it country, region, province or community.

The traditional approach to MCS has been a centrally controlled, enforcement-oriented approach to conservation, e.g., this is the law, ignorance is no excuse, and we shall enforce the law. The idea of a partnership, or involvement of the community and fishers, was far removed from MCS thinking and had no real impact on the MCS programme for many years. There are still some who believe that it should remain that way to preserve the credibility, integrity and independence of the MCS enforcement programme. One outcome of such logic would be the isolation of the MCS programme, and the final result would be a lack of effectiveness or acceptance of traditional mechanisms.

In the current atmosphere of enhanced human rights, intelligence and ability to ask the question "WHY?" and expect answers, the traditional approach and the idea of only paying lip service to the industry is no longer acceptable. Involvement of stakeholders is the key to successful and sustainable renewable resource management. Creating ideas of joint ownership between government and the stakeholders, and the sharing of risk for conservation and long-term use and sustainability is now seen as the more acceptable approach for effective management. It has long been recognized that government does not have enough resources to go it alone: it needs the support of the industry and communities, or – as experience has shown – MCS is doomed to failure. In the traditional case, the only interest of the fishers is to maximize exploitation;



sustainable conservation has not been an issue, except to pay lip service to government. The joint responsibility of government and industry for the collapse of the famous Atlantic cod fishery off Canada is an example of the negative results of such a strategy.

HOW MUST MCS CHANGE?

If one looks at fisheries management and MCS in a very simplistic manner and notes the linkages, it can be argued that MCS could be considered the key implementing mechanism for fisheries management. MCS contributes considerably to the data collection, analyses and operational decisions for fisheries management planning on a daily basis. The control mechanisms, including the legislative instruments such as licences, closed seasons and zones, gear restrictions, etc., are key to the implementation of the approved management plans. Surveillance activities result in the timely verification of compliance with the management plan.

MCS implementation, noting the more acceptable requirement of involving the stakeholders to gain support for the compliance activities, now needs to be implemented with two parallel thrusts:

- **Preventative MCS** activities, including public awareness, education in respecting the need for management and compliance, community involvement for Reef Watcher and Observer-type activities, and close liaison with the fishing industry for offshore fishing, resulting in timely information, leading to the second surveillance activity, namely
- **Deterrent MCS** activities (full enforcement), including; port and sea inspections, air and sea sightings that can turn to investigations, arrests and court proceedings by professional law enforcement personnel.

It is no longer acceptable to just enforce the fisheries laws; although perhaps still the case for illegal foreign fishing, it is not the case for domestic fisheries. Consultation and a participatory approach for offshore and coastal fisheries management are now required to ensure stakeholder involvement, understanding and support for management strategies. Such support thus encourages – and often results in a high degree of – voluntary compliance, thereby minimizing the focus and need for the more expensive deterrent MCS activities. This is the proposed changing face for MCS activities in the future, towards a resultant cost-effective and efficient system.

The above approach further emphasizes the requirement for involvement of the MCS component early in management planning exercises to ensure publicity, awareness planning and transparency in the process with the stakeholders. This has been a failing of many countries and fisheries regimes in the past. This is especially true for those countries that focused on MCS as only an enforcement regime, and merely added this component as an afterthought to the process.

KEY STEPS FOR PREVENTATIVE AND DETERRENT MCS ACTIVITIES

1. Strong leadership from fisheries authorities for participatory, joint management planning and implementation, and close liaison with other maritime agencies.
2. Participatory Coastal Resource Management (P-CRM) involving MCS personnel and including the establishment of Reef Watcher Programmes with communities, and Observer Programmes with the fishing industry, plus meetings on regulatory control mechanisms, etc., all encourage and foster voluntary compliance with the management plan.
3. Data collection and analyses from MCS sources – reef watchers, observers, logbooks, sightings (air, sea and coastal), inspections, cross-checks with logs and landings, etc. –

are all essential elements of sustainable management. These data activities require an informatics warehousing system for storage and later analyses for planning, coupled with a timely operational data system for rapid analyses of data for patrol planning, identification of anomalies in data sets, directed deterrent MCS activities, etc.

4. Appropriate legislative instruments are required in support of the management plan, namely transparent, logical laws acceptable to the community and fishing industry that are enforceable and backed up with an appropriate and sufficient penalty to promote deterrence.
5. Transparency in preventative and deterrent MCS activities – ranging from stakeholder meetings to the publication of deterrent activities, inspections resulting in arrest, court findings, etc. – all contribute to effective MCS operations. The publicity associated with effective MCS operations further enhances the deterrent effect of MCS and promotes voluntary compliance. It emphasizes the risk, probability of detection and the penalties for non-compliance.

CONCLUSIONS

The various concepts and their interrelationship are summarized graphically on the next page.

It is hoped that this short paper will be stimulate thought within the MCS community, provoking it to build on these concepts as appropriate.