

December 2014



**CENTRAL ASIAN AND CAUCASUS REGIONAL
FISHERIES AND AQUACULTURE
COMMISSION**



TECHNICAL ADVISORY COMMITTEE (TAC)
THIRD MEETING
BISHKEK, KYRGYZ REPUBLIC
16-18 FEBRUARY 2015
FISHERIES MONITORING, CONTROL AND SURVEILLANCE (MCS)

INTRODUCTION

1. This document aims to provide basic background information to TAC in its effort to generate scientific and technical advice on fisheries monitoring, control and surveillance (MCS) in respect of inland fisheries in the CACFish area.
2. Effective and efficient management instruments for monitoring, control and surveillance (MCS) and their implementation are key factors to management and conservation of responsible exploitation of fisheries resources. The following sections will present the expanded FAO definitions of monitoring, control and surveillance:
 - **Monitoring:** The collection, measurement and analysis of fishing activity including, but not limited to: catch, species composition, fishing effort, bycatch, discards, area of operations, etc. This information is primary data that fisheries managers use to arrive at management decisions. If this information is unavailable, inaccurate or incomplete, managers will be handicapped in developing and implementing management measures.
 - **Control:** Involves the specification of the terms and conditions under which resources can be harvested. These specifications are normally contained in national fisheries legislation and other arrangements that might be nationally, subregionally, or regionally agreed. The legislation provides the basis for which fisheries management arrangements, via MCS, are implemented.
 - **Surveillance:** Involves the regulation and supervision of fishing activity to ensure that national legislation and terms, conditions of access, and management measures are observed. This activity is critical to ensure that resources are not over exploited, poaching is minimized and management arrangements are implemented.

3. International fisheries instruments (i.e. UN Convention on the Law of the Sea; FAO Compliance Agreement and UN Fish Stocks Agreement) give special attention to MCS in terms of sustainable management and conservation of fisheries resources. Another example of international fisheries instrument that comprises MCS provisions is the FAO Code of Conduct for Responsible Fisheries (1995). It includes the following specific articles on the MCS:

- **Article 6.10:** Within their respective competences and in accordance with international law, including within the framework of subregional or regional fisheries conservation and management organizations or arrangements, States should ensure compliance with and enforcement of conservation and management measures and establish effective mechanisms, as appropriate, to monitor and control the activities of fishing vessels and fishing support vessels.
- **Article 7.1.7:** States should establish, within their respective competences and capacities, effective mechanisms for fisheries monitoring, surveillance, control and enforcement to ensure compliance with their conservation and management measures, as well as those adopted by subregional or regional organizations or arrangements.
- **Article 7.7.3:** States, in conformity with their national laws, should implement effective fisheries monitoring, control, surveillance and law enforcement measures including, where appropriate, observer programmes, inspection schemes and vessel monitoring systems.
- **Article 8.1.1:** States should ensure that only fishing operations allowed by them are conducted within waters under their jurisdiction and that these operations are carried out in a responsible manner.

4. At global level, illegal, unreported and unregulated fishing” generally refers to a series of activities defined in paragraph 3 of the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing. IUU fishing refer rather briefly to fishing conducted in violation of an obligation under national law or internationally adopted measures for conservation and management of fisheries resources, including those of the Regional Fisheries Management Organizations.

5. The current fisheries governance at global, regional and national levels is struggling against the problems caused by illegal, unreported and unregulated (IUU) fishing; a long-standing global problem that poses significant challenges in the management of fisheries in a responsible and sustainable manner. It is well documented that IUU fishing is one of key drivers that has led to rapid destruction of aquatic ecosystems and fish stock collapses since the 1970s. Besides, economic global loss from IUU fishing could amount to about USD 24 billion annually.

6. In response to the global request for international cooperation against IUU fishing, over the last years many countries have enforced, (following considerable legislative, regulatory, policy and enforcement adjustments) different types of regulatory measures in order to prevent, deter, and eliminate IUU fishing. For example, in 2010, the European Union introduced regulation to prevent, deter and eliminate the import of IUU fishery products into the Community. The regulation sets a series of criteria and requirements for fish and fisheries products entering the EU market from third countries. The regulation requires the importer to submit documentary proof that the fish and fish products to be imported, have been caught legally. In this regard, some import bans have been enforced by European Commission to a number of countries that failed to meet the requirements of the respective regulation. Similarly, at regional level, efforts have also been intensified over the last decades against IUU fishing, particularly through the Regional Fisheries Management Organizations (RFMOs).

7. A range of different fisheries MCS systems are being used at regional, national and local levels. Examples of MCS systems comprise the following: registry and information systems, including logbook; landing declaration; transportation- and document of sale; on-board inspection and enforcement schemes; observer schemes; IUU vessel blacklist; national or regional plan of action against IUU fishing; and trade measures (catch certification and trade documentation). Thanks to rapid

technological advances, satellite tracking, such as Vessel Monitoring System, electronic recording and reporting systems are increasingly being used in fisheries MCS. These MCS systems can be used for either an individual fishery or clustered fisheries.

8. Despite the intensified management instruments, actions and regulatory measures taken against IUU fishing, major challenges still remain particularly for developing countries. It should be noted that the above-mentioned international effort has been mostly limited to fishing in marine areas and to fishing in high seas (i.e., international waters beyond national jurisdiction) although IUU fishing also frequently occurs in inland capture fisheries, where the ecosystems might be even more vulnerable than in the marine environment. Compliance with international and regional regulatory frameworks in respect of MCS activities is often costly. The cost of MCS and enforcement is presumed to be one of major hurdles affecting establishment and implementation of effective and efficient MCS mechanisms for inland fisheries in the Central Asian and Caucasus (CAC) region. In this region, “poaching” is often used as a term referring to Illegal, Unreported and Unregulated (IUU) fishing, while it is internationally seen as a common type of “illegal” fishing. Poaching in CAC region has been reported to be widespread across the state-owned public water bodies (lakes, rivers, reservoirs, etc.) and in ponds and waters in private ownership. However, the scale of IUU fishing in inland fisheries of CAC region is not known well due to lack of data or reliable estimates. Common IUU activities related to inland fisheries in CAC region include the following: poaching (unlawful taking and possessing, transportation and selling of fish by unlicensed operators); unlicensed fishing; use of non-authorized fishing gear and equipment; destruction of habitat and nursery grounds, taking of undersized specimens, taking of protected species, fishing in closed seasons and areas; catch in excess of quota; unreported, under-reported or misreported catch; transportation, processing and trade of fish illegally caught.

9. MCS are key factors to compliance with internationally or regionally agreed frameworks, policies, plans or strategies for the management and conservation of fisheries resources. Its absence or ineffectiveness is a major result of a poor or insufficient fisheries management. Improved inter-State, State, and Regional coordination and information exchange, and support of resource users are known to be foremost factors to success in addition to effective implementation of MCS systems referred to in paragraph 7. When compared to commercial fisheries, overall MSC of small-scale fisheries is often more difficult because of limited application of the MCS systems in addition to complex socio-economic factors. Different fishery types require different MCS responses. In general, fisheries management systems use different MCS approach to deal with each fishery. For instance inspection and observer schemes are more frequently applied in commercial marine fisheries. In fisheries MCS, two basic approaches are being used, namely deterrent and preventive approach. The first is mostly based on rigid rules and sanctions. The second instead is based on a voluntary compliance and offers flexibility and could more easily be adapted to local or regional conditions. “Voluntary compliance will be compromised if stakeholders see non-compliant fishers successfully evading the law and receiving economic returns from their illegal activity, at the expense of the fishers who comply with all requirements.” Under effective fisheries MCS systems, enforcement needs to be neither too loose nor too rigid. In general governing bodies should consider their capacity on enforcement before they issue fisheries laws and regulations; there need to be a certain balance on incentives to obey the laws and regulations. In addition acceptance by the stakeholders of the regulations is important for efficient management and compliance.

10. The MCS and IUU fishing issues were tabled at the Regional Workshop on Fisheries Monitoring, Control and Surveillance and Illegal, Unreported and Unregulated (IUU) Fishing, which was held at Baku, Azerbaijan between 2 and 4 October 2012) under the FishDev Programme. In addition and to a limited extent, similar issues were also addressed at the Regional Workshop on Management, Assessment and Monitoring of Inland Fisheries Resources (26-29 May 2014, Tashkent, Uzbekistan) which was also organized under FishDev Programme.

11. The combined key findings from the two above-mentioned workshops were as follows:
- The region generally lacks effective systems of fisheries monitoring, control and surveillance due to financial, infrastructural and institutional hurdles,
 - The existing institutional and administrative management structuring for MCS is generally not functional in the region,
 - The CAC region generally lacks robust MCS policies/strategies,
 - Poaching is a substantial problem,
 - Marketing and trade related measures are not in place as a tool for combating IUU fishing and tracing of fish and fishery products,
 - The region lacks landing data,
 - Lack of systems and mechanisms for record of harvested or marketed fish
 - The region lacks effective management tools for combating IUU fishing.
 - Fishing licensing system is not functional,
 - Vessel registry system is inefficient,
 - The region lacks data on fishing effort and fishing capacity,
 - The regions lacks preventative controls and monitoring in terms of deterring, eliminating and preventing IUU fishing,
 - Co-management approach has not generally been put into practices,
 - Fisheries management plans are not being used in the region,
 - Destructive fishing nets are being commonly used
 - IUU fishing drives a number of endemic species to extinction,
 - Fishers and other stakeholders are not fully aware of the importance of MCS and voluntary compliance.
 - Need for trade-related incentives for controlling of illegal fishing
12. The combined key recommendations from the two above-mentioned workshops were as follows:
- Development of more directed works on MCS and combatting IUU Fishing under CACFish,
 - Consideration of establishment of a Compliance Committee under CACFish,
 - Participation of Central Asian region into the universal MCS network,
 - Establishment of a regional MCS network in Central Asia,
 - Encouragement of attendance of experts of Central Asian and Caucasus region to the related works of FAO, i.e. expert meeting, technical consultation, and sub-committee meetings,
 - Application of precautionary approach in the absence of updated scientific national data and information,
 - Development/improvement of fishing licensing system,
 - On-board oversea training of ministerial staff on fisheries MCS,
 - More regional and national focus on MCS in small-scale fisheries,
 - Study visits and observations on MCS tools, including vessel monitoring system, fisheries information system, fishing license system, and vessel registry system,
 - Formulation and implementation of a regional project on MCS and combatting IUU fishing,
 - Review and updating of national fisheries legislation for strengthened frameworks for deterring, eliminating and preventing IUU fishing,
 - Harmonization of national technical regulation at regional level,

- Development of better management practices for MCS,
- Promotion of development of national policies to combat IUU fishing.
- Promotion of the development and implementation of internationally agreed market-related measures to combat IUU fishing,
- Strengthening institutional, administrative structuring for MCS and enforcement against IUU fishing,
- Review of current national fisheries legislation for strengthened frameworks for MSC,
- Promotion of preventative controls and monitoring,
- Ad-hoc trainings on vessel monitoring system, fisheries information system, fishing license system, and vessel registry system, and fisheries controlling,
- Promotion of the establishment national/regional databases and other information systems, including data/information on fishing vessels, catch, effort, etc,
- Promotion of voluntary compliance with law and management rules through a process of education, awareness and participatory approach, and
- Promotion of public awareness of the impacts of IUU fishing.

13. In CAC region, the existing MCS and enforcement functions seemingly are not effective enough to influence fisheries management effectiveness due to limited institutional, technical, and financial capacities. Gradual development of national and regional systems for, *inter alia*, collection and dissemination of fisheries data and information, establishment or development of registry system for vessels and fishers, establishment or development of national fisheries information; use of logbook, awareness raising on IUU and the harms it causes and awareness raising on MCS, updating of national legislation for strengthened compliance and enforcement, technical capacity building and improved institutional cooperation are expected to overcome the general limitations which exist in terms of MCS, and enforcement. Ineffective implementation practices of fisheries MCS systems and IUU fishing activities is undoubtedly affecting fisheries in CAC region.

SUGGESTED ACTION FOR TAC

14. TAC would have a role in development of fisheries MCS frameworks that can be applied across CACFish area, taking into consideration the regional needs and future challenges. In this regard, TAC is invited to examine the above-mentioned needs, challenges, findings and recommendations of the workshops referred to in paragraph 10 and to formulate technical/scientific advice for the consideration of CACFish. In addition, it is suggested that TAC identify the likely technical/scientific and management actions that might be taken to address the implications of national or regional MCS related schemes like inspection and enforcement schemes.