

December 2009



**GENERAL FISHERIES COMMISSION
FOR THE MEDITERRANEAN
COMMISSION GÉNÉRALE DES
PÊCHES POUR LA MÉDITERRANÉE**



E

GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN
SCIENTIFIC ADVISORY COMMITTEE (SAC)
Twelfth Session
Budva, Montenegro, 25-29 January 2010
SAC PRELIMINARY WORKPLAN FOR 2010

INTRODUCTION

1. As part of its mandate, the Scientific Advisory Committee (SAC) submits to the General Fisheries Commission for the Mediterranean (GFCM) its preliminary workplan for the Committee's next intersessional period, for adoption by the annual Session of the Commission. This document presents a number of activities to be undertaken during the intersessional period, on the basis of the Commission's priorities and suggestions made by SAC Sub-Committees (document GFCM:SAC12/2010/3), for consideration by SAC when drawing up its preliminary 2010 workplan.

ELEMENTS FOR THE 2010 WORKPLAN

2. The activities listed hereafter are based on the proposals made by the respective Sub-Committees (documents GFCM:SAC12/2010/Inf.5, Inf.6, Inf.7, and Inf.8), supplemented by the suggestions emerging from the Coordinating Meeting of the Sub-Committees (document GFCM:SAC12/2010/Inf. 9).

Sub-Committee on Stock Assessment (SCSA)

- Pursue activities on stock assessment using both commercial data and surveys at sea.
- Pursue the work aimed to develop a GFCM protocol for undertaking surveys at sea.
- Improve knowledge on biology, stock structure and other biological parameters and agree on a set of biological parameters to be used each for the stock assessments in the eastern, central and western Mediterranean.
- Develop specific sheets in the assessment forms for survey-based assessment approaches.
- Improve biological indicators and further develop reference points with the view to evaluate the status of the stocks and fisheries including also the effects on exploited stocks of FRAs.
- Organize the meetings of the Working Groups on stock assessment of demersal and small pelagic resources, considering the new functioning approach.
- Carry out a review of the current scenario and knowledge on age reading in the GFCM area.
- Contribute to the implementation of the medium term Working program to improve the knowledge and to assess the status of the stock of elasmobranchs.

- Contribute to the perform the case studies on implementing the EAF, in coordination with GEF team, and on 40 mm square mesh in demersal fisheries.

Sub-Committee on Statistics and information (SCSI)

- Organization of a workshop on data collection methods applied to all segments of the fleet, and their coherence with the requirements of the GFCM Task 1 (see Annex I (A) for Terms of Reference).
- After reception by the GFCM Secretariat of the Task 1.1, 1.2, and 1.4 datasets:
 - Update the statistical bulletin accordingly;
 - Work on proposing data summary outputs and data access functions to be proposed at the next SCSI meeting;
 - Work on data policy linked to the Task 1 dataset.

Sub-Committee on Marine Environment and Ecosystems (SCMEE)

- Identification for each GFCM priority species the corresponding sensitive habitats to be submitted to the next SCMEE meeting.
- Preparation of a detailed form for data collection on endangered species bycatch to add to the Task 1 system.
- Elaboration of a comprehensive review of the literature dealing with artificial reefs.
- Organization of a workshop on alien species in relation to fisheries back-to-back with the SCMEE meeting.
- Organization of a workshop on selectivity improvement, bycatch reduction and alternative gears.
- Implementation of the programme on elasmobranchs species including an expert meeting and training course. The detailed proposal related to this program is presented in Annex II.
- Contribute to the perform the case studies on implementing the EAF, in coordination with GEF team, and on 40 mm square mesh in demersal fisheries.

Sub-Committee on Economic and Social Sciences (SCESS)

- Constitution of an expert network for the analysis on the fisher's social structure across all Mediterranean countries, along with the compilation of studies through email exchange.
- Opening of a section in the GFCM Web site to put all related studies on the impact of changes in the cost of energy.
- Collection of the relevant legal changes in the national fisheries legislations which would allow the comparison of the different levels of protection, the divergences and common elements in fishing regulations, as well as the comparison of the economic and social effects of the different facets of the regulations.
- Initiation of a quantitative and qualitative collection of information on recreational fisheries and on the "non-professional commercial fishing" segment. The SCESS also suggested holding a workshop on the potential and conflicts of recreational and non professional fisheries in the Mediterranean according to the draft terms of reference as given in Annex I (B).
- Contribute to the perform the case studies on implementing the EAF, in coordination with GEF team, and on 40 mm square mesh in demersal fisheries.

Meetings

3. A list of meetings is set out below for SAC's consideration:

Meeting	Place/Date
13 th session of the SAC (5 days)	TBD/TBD
Session of the SCSA (4 days)	TBD/TBD
Working Group on Stock assessment of Demersal Species (6-7 days)	Istanbul, Turkey/TBD
Working Group on Stock assessment of Small Pelagic Species (6-7 days)	Mazzara del Valo, Italy/TBD
Session of the SCESS (4 days)	TBD/TBD
Workshop on the potentialities and conflicts of recreational and non professional fisheries in the Mediterranean (3 days)	Palma de Mallorca, Spain/ October 2010
Session of the SCSi (4 days)	TBD/TBD
Workshop on data collection methods applied to all segments of the fleet, and their coherence with the requirements of the GFCM Task 1 (3 days)	Rome, Italy/TBD
Session of the SCMEE (4 days)	TBD/TBD
Workshop on alien species in relation to fisheries back-to-back with the SCMEE meeting	TBD/TBD
Transversal workshop on selectivity improvement, bycatch reduction and alternative gears (3 days)	TBD/TBD
First experts meeting on the status of elasmobranches in the Mediterranean and the Black Sea (4 days)	TBD/TBD
Training course on age reading and growth parameters of the main elasmobranches species (5 days)	TBD/TBD
Session of the CMSC (1 day)	TBD/TBD

Joint GFCM/ICCAT Working Group on Large Pelagic Species

4. Considering the decision taken during the last SCRS/ICCAT session to postpone until 2011 the Joint GFCM/ICCAT Workshop on small tuna fisheries initially scheduled for 2010, the Sub-Committees also proposed that this meeting be postponed until 2011.

OTHER MATTER

5. The SAC Coordinating Meeting of the Sub-Committees (CMSC) acknowledged that the exponentially increasing SAC and Sub-Committees activities and has consequently put a heavy burden on the Secretariat and agreed that there is an urgent need to strengthen it in terms of technical human resources. Specific technical needs were identified in the fields of stock assessment and scientific editing.

6. The SAC is invited to consider this recommendation from the CMSC together with proposals made by the GFCM Secretariat related to duties and responsibilities of a population dynamics expert and a scientific editor (See Annexes III and IV).

SUGGESTED ACTION BY THE COMMITTEE

7. The Committee is invited to consider the activities proposed for its subsidiary bodies in 2010. The Committee may wish to identify necessary inputs to support activities as well as to specify, where relevant, the expected timeframe and output.

8. The SAC is also invited to refine the priorities outlined in this document, taking into consideration the suggestions made by the Coordination Meeting of the Sub-Committees (CMSC) (document GFCM:SAC12/2010/Inf.9) and related budget implications. In doing so, the Committee may wish to decide on the venue and dates of meetings and seek to encourage Members to host some of them. The SAC is invited to provide guidance on programming of next CMSC meeting.

DRAFT TERMS OF REFERENCE FOR SELECTED MEETINGS

A- WORKSHOP ON DATA COLLECTION METHODS APPLIED TO ALL SEGMENTS OF THE FLEET, AND THEIR COHERENCE WITH THE REQUIREMENTS OF THE GFCM TASK 1.

The terms of reference proposed are :

- a) to review the different methodologies and data collection programmes in place within GFCM Member countries;
- b) to review the problems arising from the submission of task 1 data;
- c) for each of the problems raised in the point above, to exchange experiences from other countries on the same field;
- d) to agree on methods to address the problems raised;
- e) to anticipate problems related to the submission of Task 1.3

B- WORKSHOP ON THE POTENTIAL AND CONFLICTS OF RECREATIONAL AND NON PROFESSIONAL FISHERIES IN THE MEDITERRANEAN

Considering the decline of marine resources, new developments in the fishing activities and increasing conflicts among stakeholders, the SCESS proposed a new definition and classification of non professional fishing activities:

- **Recreational Fisheries** means “*non commercial fishing activities exploiting marine living aquatic resources. For Mediterranean management purpose it comprises four independent segments: leisure, sportive, underwater and charter fisheries*”.
- **Non Professional Commercial Fishing** means “*the fishing activity developed in partial time by non professional fishermen, that sales part of their production to obtain complementary incomes*”.

To facilitate the future work on the data collection, legal framework and scientific discussion the SCESS proposes to hold a workshop on the Potential and Conflicts of Recreational and Non Professional Fisheries in the Mediterranean with the objectives to:

- ❖ Describe the situation of the non professional fishing activities in the Member Countries and provide all quantitative information available on each segment, including number the people concerned, species affected, environmental effects, economic impact, etc.
- ❖ Provide quantitative and qualitative information on the tendency of each segment in the Mediterranean area.
- ❖ Evaluate the relative economic and social importance of these activities
- ❖ Describe the conflicts and difficulties in relation to the resources and other stakeholders resulting from the recent evolution in these activities.
- ❖ Compile and analyze the different regulatory systems in connection with these activities in the Mediterranean countries

Annex II**PROPOSAL OF A MEDIUM WORKING PROGRAM TO IMPROVE
KNOWLEDGE AND ASSESS THE STATUS OF ELASMOBRANCHES
IN THE MEDITERRANEAN AND THE BLACK SEA****Background**

Many species of elasmobranches are living in the Mediterranean (about 47 sharks and 38 rays). They are mostly caught as by-catch of commercial fisheries targeting bony fishes; but usually all specimens are marketed. Few fisheries are targeting sharks. The landing of elasmobranches increased from 10,000 to 25,000 tons between 1970 and 1985, and then slowly decreased to 15,000 tons in 2002.

There is evidence that the elasmobranches of the Mediterranean are declining in abundance, diversity and range due to the intense fishing activity. Their biological characteristics (low fecundity, late maturity and slow growth rates) make also elasmobranches vulnerable to fishing pressure. Some species are already threatened. In addition, there is a lack of aggregated knowledge on the biology and fishery of elasmobranches in many parts of the Mediterranean.

Taking into account the vulnerability of elasmobranches fishes and in frame of a protection and stock management strategy of this group, many action plans were elaborated on this issue (FAO IPOA-shark, the Action Plan for the conservation of the cartilaginous fishes in the Mediterranean (UNEP-RAC/SPA, 2003), the EC Action Plan for the Conservation and Management of Sharks). The GFCM addressed the issue by organizing a transversal working group on bycatch/incidental catches (Italy, September 2008) and a transversal workshop on selectivity improvement and by-catch reduction (Tunisia, September 2009) where major concern for elasmobranches were well manifest.

These last meetings concluded that there is a lack of knowledge on the biology and fishery of elasmobranches in many parts of the Mediterranean and strongly encouraged more studies on population dynamics (population size, structure and demographics) on species of conservation concern (also in terms of fishery management) in parallel to mitigation measure in those cases where protected species are involved.

The above mentioned workshop held in Tunisia suggested to setup a medium term working program to identify and fill gaps in the current knowledge that exist in elasmobranches fisheries, in order to assess and manage the Mediterranean stocks. With a view of elaborating this regional program, it is proposed to carry the following activities:

1. Undertake an inventory of elasmobranches including a review of the available information on taxonomy and species distribution in the area as well as on the status of these species in the Mediterranean and the Black Sea. A working document updating this information will be prepared ;
2. Gather and compile data and information on fishing activities targeting elasmobranches including the potential impact on habitat Loss and Degradation as

well as on bycatch of elasmobranchs species, in particular those of concern. The main Indicative data shown below is needed in relation to the fisheries and the biology of species following a standard protocol:

- Description of the fisheries
 - Catch estimates/bycatch
 - Catch by unit effort
 - Fishing areas
 - Sex and sizes composition of the catches
 - Reproductive biology
 - Age and growth
 - Feeding habits
3. Update the available information on studies on mitigation measures for bycatch reduction. It is proposed to test mitigation measures and technologies that have been developed outside the Mediterranean and that are currently used and employed by the Regional Fisheries Management Organizations;
 4. Gather the available information on critical habitats (nursery grounds) and species distribution, mainly for those at high risk needing special management or protection measures.
 5. Organize an expert meeting in 2010 (3-4 days) to assess and analyze the outcome from the above mentioned activities (1 to 4) and identify appropriate methodologies and approaches to assess the stocks of selected commercial species and required action for the following years. This meeting will also consider the possibility to establish a regional network of expert dealing with this issue
 6. Organize in 2010 a training course on age reading and growth parameters of the main elasmobranchs species. The available guidelines and other tools will also be used as documentation for the training.
 7. Organize a meeting in 2011 on stock assessment (5-7 days) of selected elasmobranchs species with particular attention to the species listed on annex 2 and 3 of SPA/BD protocol of Barcelona convention
 8. Finalize a GFCM publication on the results obtained through this medium term

Scheduling

Actions 1 to 4	:	May to October 2010
Action 5	:	November-December 2010
Follow up (if any) of the action 5:		May- September 2010
Action 6	:	2010 (date to be defined)
Action 7	:	September-October 2011
Action 8	:	February 2012

Requirements

- a. Designation of a general coordinator¹ of the medium term working program with the following terms of reference:
 - Coordination of activities aiming to collect data and information as well as preparing working documents for the expert meetings including the elaboration of required terms of reference;
 - Organization of the expert meetings (agenda, identification of the key speakers, finalization of the report etc....);
 - Organization of the training course
 - elaboration of the program
 - facilitation of the training
 - elaboration of the report of the training course
- b. Designation of an expert in the field of stock assessment of sharks to prepare and moderate the relevant expert meeting

Budget estimates

General coordinator and consultancy:	24.000 dollars
Travels/coordinators and experts	: 40.000 dollars
Training (5 days, 20 trainees)	: 30.000 dollars
Expert in the field of stock assessment:	12.000 dollars
Reports and publication	: 14.000 dollars
Total	: 120.000 dollars

The SC requested the SAC for identifying sources of funding.

¹ Qualifications: Advanced university degree in marine sciences; extensive experience in the field of elasmobranchs biology, ecology and population dynamic and familiarity with the GFCM's structures and procedures

ANNEX III

**PROPOSAL RELATED TO THE POPULATION DYNAMICS
POSITION WITHIN GFCM SECRETARIAT****Duties and Responsibilities**

Under the overall guidance of the GFCM Executive Secretary and the general supervision of the Deputy Executive Secretary, to be responsible for the development and maintenance of procedures for quality assurance of stock assessments and related scientific advice to the Commission.

Specific duties include:

- to establish review mechanisms to benefit both the individual scientists involved in the GFCM/ Scientific Advisory Committee (SAC) Sub-Committee and specialized Working groups on stock assessments and to foster consistency in approach and assumptions made for various assessments of the Mediterranean fisheries as well as in the scientific advice provided to the Commission.
- to guide and conduct performance evaluations of the available assessment models, clarify the implicit assumptions, establish rules and guidelines on their appropriate use and normalize the methods, and maintain at the Secretariat, the software accepted for use by the various Working Groups. This guidance would, in turn, be available to all scientists interested in the assessment work carried out and would give more transparency to the results of assessment analyses.
- Active participation in the Secretariat scientific work in the following areas:
 - The maintenance and dissemination of appropriate and approved software for analyses of GFCM fish stocks and maintenance and archives of previous assessments data and analytical methodology.
 - Participation in multi-disciplinary teams and committees to develop quality control procedures for GFCM assessment methodologies and data bases.
 - The review, in collaboration with the GFCM biostatistician, of fishery data collection proposals and advice on their technical feasibility and the soundness of proposed institutional arrangements.
 - The contribution to the organization and improvement of the data management system of the GFCM data base and preparation of data for stock assessments, including the development of specific software to facilitate such work.
 - The review of the limitation of the quality of data and their variability.
 - Assistance to scientific groups in drafting and/or finalizing their reports.
 - Maintain close collaboration with regional projects for the stock assessment carried out at sub-regional level.
 - Regularly update the stock assessment forms and similar tools.

- Perform other related duties as described.

Qualifications and Experience - Essential

- High degree in Fisheries, or a closely related field
- Various years of progressively responsible experience in quantitative analysis of fisheries stock assessments and the development of management advice based upon scientific studies, including the planning and implementation of review processes, substantial experience in the development of procedures for fisheries assessment, and the generation of management advice.
- Familiarity with fisheries biology, environmental and assessment science methodologies including statistical/mathematical modeling methods in which population models are statistically matched to fisheries/biological/environmental observational data.
- Demonstrated ability to make judicious choices as to the appropriateness of models based upon available data experience in utilizing fishery data bases for use in assessments.
- Experience in leading and participating in multi-disciplinary teams for fisheries biology and assessment
- Demonstrated experience in computer modeling technology as it pertains to fisheries assessment and environmental data bases.
- Demonstrated capacity to conceptualize and quantify scientific problems associated with fisheries assessment and management and to communicate these orally and in writing.
- Ability to work well under pressure and to work effectively and harmoniously with people of different national and cultural backgrounds
- Excellent working knowledge of English with limited knowledge of French

Qualifications and Experience - Desirable

- A high degree in Fisheries or a related field.
- Experience in developing new mathematical modeling techniques for fisheries stock assessment.
- Experience in designing and developing fishery databases for multiple users.

ANNEX IV

**PROPOSAL RELATED TO THE SCIENTIFIC EDITOR
POSITION WITHIN GFCM SECRETARIAT****Duties and responsibilities**

The Commission has four official languages (Arabic, English, French and Spanish), and its publications are produced mostly in English and French. Since 2009, the Arabic is also a working language but only for the annual session of the Commission. Under the overall guidance of GFCM's Executive Secretary, the Editor's main responsibility will be to oversee the preparation of all the publications produced by GFCM. These consist of:

- Annual Reports of the Commission. These contain Commission meeting proceedings, reports of technical subsidiary bodies such as the Scientific Advisory Committee (SAC) and The Committee on Aquaculture (CAQ), National Reports prepared by Commission Members, and administrative reports.
- The GFCM "Studies and Reviews" publications": This is a GFCM publication written by scientists associated with GFCM and by Consultants.
- Documents and books produced by Secretariat staff. These generally contain summaries of statistics or other relevant information produced in support of the various Working Groups. The Secretariat produces about 25 working documents annually, including the Compendium of GFCM's Decisions.

The position also includes responsibility for follow up on the notifications of decisions to the Members.

Other duties may be assigned by the Executive Secretary if the need arises.

Specific duties will include:

- Provide editorial review of meeting reports.
- Provide editorial review of scientific documents.
- Liaise directly with authors regarding requirements and revisions to documents.
- Strengthen quality-control mechanisms for scientific publications.
- Review and maintain layout standards for the publications.
- Coordinate the adoption of meeting reports by correspondence.
- Coordinate peer-review of selected scientific documents.
- Coordinate the translation of publications and meeting documents.
- Coordinate the copying and distribution of documents.
- Maintain a bibliographic database of GFCM publications and documents, including the preparation of inputs to regional databases.
- Prepare XML versions of the summaries of stock status reports for web-based publishing in the Fishery Resources Monitoring System (FIGIS-FIRMS)
- Maintain current publications in electronic form
- Develop efficient electronic publication options for GFCM documents.
- Perform the tasks related to maintaining and elevating the quality of the Commission's publications, as assigned.

Essential qualifications

- High degree of XXXX with fluent knowledge of Marine Science.
- Excellent written and verbal communication skills.
- Experience with editing and collation of publications and/or reports according to FAO/GFCM style.
- Experience with word-processing software, formatting and layout tools.
- Familiarity with the terminology used in fisheries research and management.
- Excellent working knowledge of English and French.
- Ability to work under pressure and to work effectively and harmoniously with people of different national and cultural backgrounds.

Other desirable qualifications

- Knowledge of Internet publishing.
- Good knowledge of International and Regional Organizations responsible of fisheries and in particular GFCM regulations and protocols.