

June 2003



منظمة الأغذية  
والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food  
and  
Agriculture  
Organization  
of  
the  
United  
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Organisation  
des  
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pour  
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et  
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Organización  
de las  
Naciones  
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para la  
Agricultura  
y la  
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## GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN

### Twenty-eighth Session

Tangiers, Morocco, 14-17 October 2003

## MANAGEMENT OF MEDITERRANEAN FISHERIES

### INTRODUCTION

1. The management of Mediterranean fisheries by the General Fisheries Commission for the Mediterranean (GFCM) is mainly based on the scientific knowledge and related analysis and advice, as provided by the Scientific Advisory Committee (SAC) and the Committee on Aquaculture (CAQ). There was no session of CAQ in 2003; the recommendations by this Committee that have been already endorsed by GFCM at its Twenty-seven session are not considered in this document. SAC carried out a number of activities during the intersessional period, as reported in document GFCM/XXVIII/2003/2. The following is a summary of SAC main conclusions and advice for consideration by the Commission.

### CONCLUSIONS AND ADVICE FROM THE SCIENTIFIC ADVISORY COMMITTEE (SAC)

2. The conclusions and advice adopted by SAC at its Sixth Session (Thessaloniki, Greece, 30 June-3 July 2003) stemmed mainly from the recommendations and suggestions made by its transversal Working Groups and its four disciplinary Sub-committees as detailed in document GFCM/XXVIII/2003/Inf.4.

#### *Ad hoc* Working Group on Operational Units

3. SAC endorsed the scheme for data collection, comprising lists of minimum data requirements for socio-economic data and resource-based data which should be collected to build the data base on Operational Units (OUs) under the coordinating leadership of SCSI. The role of the Medfisis project in support to the Working Group was acknowledged. SAC further recommended that :

- two pilot studies be conducted by AdriaMed and CopeMed to test the applicability of this data collection scheme;

- the largest possible involvement of experts in the work of the Working Group, from different sub-regions and from all Sub-Committees be sought;
- the results of the pilot studies and the prototype to host the data collected be validated by SAC.

#### ***Ad hoc Working Group on Sustainable Tuna Farming***

4. As reported in document GFCM/XXVIII/2003/2, the activities of this Working Group are progressing satisfactorily. At this stage, recommendations are related to functional issues, especially broadening the participation of scientists and stakeholders, and ensuring that agreed information is timely and properly collected and analysed.

#### ***Ad Hoc GFCM/ICCAT Working Party on Large Pelagic***

5. The Committee noted that the meeting on the Mediterranean Swordfish Stock Assessment, convened by ICCAT (Madrid, Spain, 26-30 May 2003) was not formally a meeting of this Working Group. It decided therefore not to discuss the draft report of that meeting which still needed to be validated by the ICCAT/SCRS.

#### ***Sub-Committee for Stock Assessment (SCSA)***

6. The following are among the general recommendations made by SAC:
- priority should be given to those assessments dealing with shared stocks and priority species;
  - stock assessment work should not necessarily be limited by GSAs boundaries but should encompass as much as possible the occurrence area of the stock concerned;
  - the work related to the length at first maturity of anchovy should be finalized;
  - projects to monitor, year by year, the discarded quantities of small pelagic species, taking into consideration market price fluctuations, should be formulated and implemented.

#### ***List of shared stocks and priority species by GFCM Geographical sub-areas (GSA)<sup>1</sup>***

7. SAC recommended to include within the GFCM list of shared stocks, the following:
- Black spot seabream (*Pagellus bogaraveo*) in GSA 1, GSA 2 and GSA 3.
  - Sardine and anchovy (*Sardina pilchardus* and *Engraulis encrasicolus*) in GSA 22.
  - Lobster (*Palinurus elephas*) and red mullets (*Mullus barbatus* and *M. surmuletus*) in GSA 8 and GSA 11.
  - Hake (*Merluccius merluccius*), blue whiting (*Micromesistius poutassou*) and Norway lobster (*Nephrops norvegicus*) in GSA 9.
  - Lobsters (*Palinurus elephas* and *P. mauritanicus*) in GSA 13 and GSA 16.
  - Horned octopus (*Eledone cirrhosa*); Angler (*Lophius budegassa*); Deepwater rose shrimp (*Parapenaeus longirostris*) in GSA 18.
  - Musky octopus (*Eledone moschata*); European squid (*Loligo vulgari*); Angler (*Lophius piscatorius*); Common pandora (*Pagellus erythrinus*); Common sole (*Solea vulgaris*); Common cuttlefish (*Sepia officinalis*); Atlantic mackerel (*Scomber scomber*) in GSA 17.

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<sup>1</sup> The list of GSAs adopted at the Twenty-sixth session of the Commission is attached as Appendix 1, for easy reference.

8. SAC suggested incorporating the following species in the GFCM priority species list:
- European eel (*Anguilla anguilla*)
  - Black spot seabream (*Pagellus bogaraveo*)
  - Danube sturgeon (*Acipenser gueldenstaedtii*), Starry sturgeon (*Acipenser stellatus*) and Beluga (*Huso huso*).

#### **Biological reference points (BRP)**

9. SAC reiterated the importance of developing an agreed precautionary framework in the Mediterranean by identifying appropriate BRPs for some key species. It further acknowledged that an Ecosystem Approach to Fisheries (EAF) seemed the most indicated approach for the identification of specific BRP although suggesting that in view of current lack of available database on EAF, less complex approaches should be considered in the short term.

10. In this context, SAC recommended:
- that a workshop be organized at Mediterranean level, early 2004, to estimate and validate the most suitable BRPs;
  - to use as starting parameters, indicators such as Biomass abundance, trend by species or groups of species together with its length and/or age distribution, the Exploitation rate; the Spawning Stock Biomass Ratio, the Fishing Mortality Rate, the Mortality Rate.
  - To use both MEDITS and SAMED data sets, for the Northern side of the Mediterranean, as well as data sets available in other areas covering the Southern Mediterranean rime, and initiate with analysis of stocks of hake, red mullet and anchovy.

#### **Large Pelagic Species**

- the results of the CopeMed/CORY project on Dolphin fish (*Coryphaena hippurus*) should be presented directly to the SCSA meetings.

#### **Demersal and Small pelagic species**

11. The Committee reiterated its 2002 recommendations concerning the species included in the GFCM 2002/1 Resolution on the grounds that such stocks are in the same exploitation situation or have not been recently assessed.

12. More generally, SAC agreed that the advice provided to the Commission at its Twenty-seventh Session were still valid, with exception for those stocks where specific new recommendations are addressed to the Commission. Appendix D of document GFCM/XXVIII/2003/Inf.4 contains the full advice on all stocks concerned. Below are the advices for those stocks assessed in 2003.

- ***Merluccius merluccius*** in GSA 9: in view of important fleet reduction over the last 3 years, the assessment should be revised and enlarged, taking into consideration that the stock is shared between France and Italy.
- ***Mullus barbatus*** in GSA 10: reduce the total mortality by 10-15%, leading towards a safer position of the SSB/SSB0, which could be obtained *inter alia* through enforcing the already existing permanent spatial closures.
- ***Mullus barbatus*** in GSA 3: 60 percent reduction of the fishing effort in coastal areas; this could be achieved, *inter alia*, by transferring part of the fishing effort to more offshore fishing grounds. This preliminary assessment should be updated as soon as possible.
- ***Aristeus antennatus*** in GSA 1, in GSA 5, and GSA 6: reduction of fishing effort by 25%. This preliminary assessment should be updated as soon as possible.

- *Trachurus trachurus* in GSA 3: based on the 2002 assessment, not to increase fishing effort.
- *Engraulis encrasicolus* in GSA 7 and GSA 6: fishing effort should not be increased.
- *Engraulis encrasicolus* in GSA 17: fishing effort should not be increased. Members should provide updated figures on size and characteristics of fishing fleets and gear exploiting this stock in order to stabilize or maintain the current level of fishing effort.
- *Sardina pilchardus* in GSA 17: fishing effort should be reduced to achieve an exploitation rate below 0.4.

13. In addition, SAC requested specifically that its 2002 recommendations for *Parapenaeus longirostris* in GSA 3, *Aristeomorpha foliacea* in GSA 11, *Nephrops norvegicus* in GSA 9, be maintained, although no specific new advice was formulated.

14. SAC also recommended that SCSEA ensures the assessment and/or design longer term programmes for monitoring the following stocks: *Sardina pilchardus* in GSA 3; *Engraulis encrasicolus* in GSA 22; *Sardina pilchardus* in GSA 7; *Sardina pilchardus* in GSA 16; *Sardina pilchardus* in GSA 20 and in GSA 22.

#### **Sub-Committee on Economic and Social Sciences (SCESS)**

15. The Committee expressed the need for increased research related to fish markets (including prices, quality control, processing and labelling) and national and international marketing policies, distribution systems and aspects related to import/export.

16. SAC agreed to include the following sociological indicators in the existing list of basic economic indicators: age; number of years of active fishing; capital share; education attainment; household structure; social background; and professional experience. SAC further endorsed the proposal of adding new definitions of "fleet" and "fishery" and "metier" to the GFCM glossary.

17. SAC further endorsed the proposal for priority socio-economic research, as follows:

- Feasibility studies related to the collection of socio-economic indicators;
- Training in the realm of fisheries socio-economic analysis and management;
- Case studies relating to the application of the socio-economic indicators to fisheries management and the development of bio-economic models, especially the use of BEMMFISH under development with involvement from SCSEA and SCESS;
- Research related to fish and fish products markets.

18. SAC further recommended that the Commission encourage all GFCM Members to promote work on socio-economic indicators using the methodology agreed upon as being done in Albania, Algeria, France, Italy, Morocco, Spain and Tunisia with the support of CopeMed and AdriaMed. SAC also endorsed the suggestion that the Secretariat organizes a technical meeting on the use of socio-economic indicators in fisheries management.

#### **Sub-Committee on Fisheries Statistics and Information (SCSI)**

19. The Committee endorsed the following recommendations:

- the MedStat statistical approach should be presented for evaluation in the last quarter of 2003, in order to initiate the implementation process of MedFisis;
- a thematic Working group should be established on the measurement of fishing effort with the view to establishing standards on catch and effort data collection schemes;
- representatives from the national fishery statistical offices should participate in the work of SCSI, including for resolving possible discrepancies between the national official statistics and those prepared by research institutions, when relevant;
- catch assessment surveys carried out in different countries should be used for collating information on Operational Units.

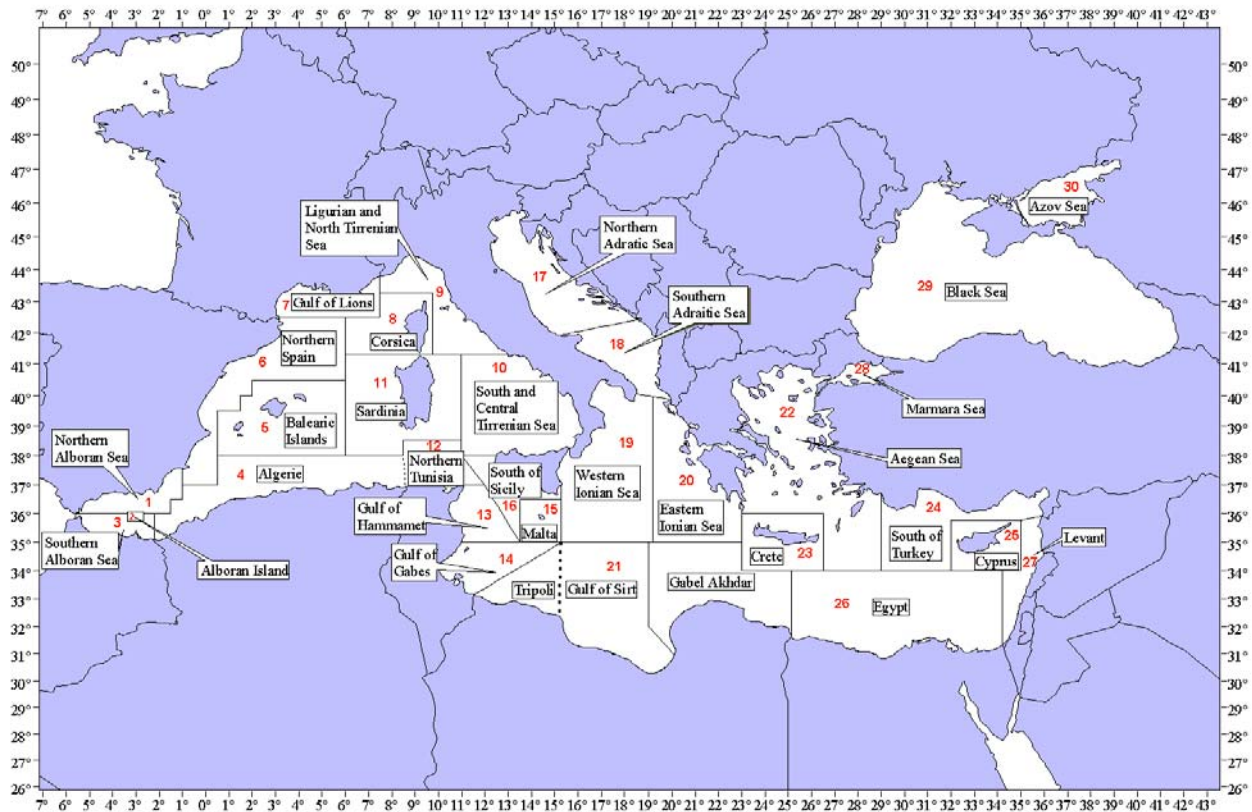
#### **Sub-Committee on Marine Environment and Ecosystems (SCMEE)**

20. The Committee endorsed the following recommendations, mainly directed to SCMEE:
- continue addressing the issue of the migration of marine turtles vis-à-vis the interaction with fisheries and to provide data type of interaction and species;
  - undertake more studies on acoustic deterrent devices (pingers and passive acoustic reflectors) and dolphin tubes;
  - monitor closely and implement the new developments on EAF, taking into account the information provided by the pilot project executed under the auspices of MedSudMed;
  - undertake multidisciplinary research integrating hydrological, geological and biological aspects to ascertain the effects of trawlers on bottom sediments;
  - pursue research on separator grids for escape of small fish in trawl gears and also square mesh bearing in mind the multi-species character of Mediterranean fisheries;
  - conduct studies, as appropriate, on the early life stages of small pelagic species, with due account of development dynamics of these species and the strong productivity fluctuations observed;
  - elaborate clear Terms of reference indicating priority areas and a list of species or groups of species to be addressed in the studies on the vulnerability of cartilaginous fishes;
  - undertake required planning for organizing a workshop on mucilaginous algae blooms in the view to producing *inter alia* a catalogue of toxic species in the Mediterranean Basin, as a manual of methods and standardized protocols.
21. In addition, SAC expressed serious concerns regarding catches of non-target species by driftnets and invited the Commission to request Members to submit all available relevant information in this respect.

#### **SUGGESTED ACTION BY THE COMMISSION**

22. The Commission is invited to review the conclusions and advice submitted by SAC and to endorse those it deems appropriate. GFCM may also wish to provide guidance on priority activities and on aspects related to research planning by SAC subsidiaries.

## GFCM Geographic Sub-areas (Athens, June 2001)



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|-------------------------------------|---------------------------|
| 1. Northern Alboran Sea             | 17. Northern Adriatic     |
| 2. Alboran Island                   | 18. Southern Adriatic Sea |
| 3. Southern Alboran Sea             | 19. Western Ionian Sea    |
| 4. Algeria                          | 20. Eastern Ionian Sea    |
| 5. Balearic Islands                 | 21. Libya                 |
| 6. Northern Spain                   | 22. Aegean Sea            |
| 7. Gulf of Lions                    | 23. Crete Island          |
| 8. Corsica Island                   | 24. South of Turkey       |
| 9. Ligurian and North Tirrenian Sea | 25. Cyprus Island         |
| 10. South Tiffenian Sean            | 26. Egypt                 |
| 11. Sardinia                        | 27. Levant                |
| 12. Northern Tunisia                | 28. Marmara Sea           |
| 13. Gulf of Hammamet                | 29. Black Sea             |
| 14. Gulf of Gabes                   | 30. Azov Sea              |
| 15. Malta Island                    |                           |
| 16. South of Sicily                 |                           |