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**GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN**

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**MAJOR ACTIVITIES OF THE FAO REGIONAL PROJECTS**

**I. INTRODUCTION**

1. This document summarizes the most significant activities carried out by the FAO Regional Projects, namely, AdriaMed<sup>1</sup>, MedsudMed<sup>2</sup> and MedFisis<sup>3</sup>, during the intersessional period of the Scientific Advisory Committee (SAC), and reports on the status of newly emerging projects, namely CopeMed II<sup>4</sup>, EastMed<sup>5</sup> and the GEF Mediterranean<sup>6</sup>. Project activities include research and training programmes, workshops and working groups, as well as the technical assistance provided to some countries, the SAC and its Sub-Committees and Working groups. The text below reflects the

<sup>1</sup> "Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea". The project is co-financed by the Italian Ministry of Agriculture and Forestry Policies (MiPaf) and the European Community.

<sup>2</sup> "Assessment and Monitoring of the Fishery Resources and Ecosystems in the Straits of Sicily". The project is financed by the MiPaf.

<sup>3</sup> "Mediterranean Fisheries Statistics and Information System". The project is jointly financed by the European Community and FAO.

<sup>4</sup> "Advice, Technical Support and Establishment of Cooperation Networks to Facilitate Coordination to Support Fisheries Management in the Western and Central Mediterranean". Phase one of the Project was financed by the Agencia Española de Cooperación Internacional. The second phase is expected to be co-financed by the Secretaría de Pesca Marítima de España, Agencia Española de Cooperación Internacional and the European Community

<sup>5</sup> "Scientific and Institutional Cooperation to Support Responsible Fisheries in the Eastern Mediterranean". The preparatory phase for this project has been financed by the Italian Ministry of Agriculture and Forestry Policies (MiPaf). The project will be co-financed by the MiPaf, the Government of Greece and the European Community.

<sup>6</sup> "Strategic Partnership for the Mediterranean Large Marine Ecosystem – Regional Component: Implementation of agreed actions for the protection of the environmental resources of the Mediterranean Sea and its coastal areas"/Biodiversity Component., entitled : 'Conservation and Sustainable Use of the Biological Biodiversity of Vulnerable Coastal and Marine Resources of the Mediterranean Large Marine Ecosystem'. The Programme is prepared under the responsibility of UNEP/MAP on behalf of the Global Environment Facilities (GEF).

information provided by the respective regional project Coordinator and complements document GFCM:SAC10/2007/2.

## II. ADRIAMED

### Introduction

2. The activities carried out during the intersessional period and are principally presented according to the main components. They followed the workplan for 2007 as approved by the 8<sup>th</sup> AdriaMed Coordination Committee meeting (Albania, December 2006), which included the continuation of research programmes, workshops, training programmes as well as the technical assistance given to the countries and the cooperation of the Project with GFCM.

### Demersal and Small Pelagic Fishery Resources

3. A meeting of the *Working Group on Demersal Fisheries Resources* was held at FAO Headquarters from 29<sup>th</sup> to 30<sup>th</sup> March 2007. The meeting reviewed, in particular, the future development of the application created to store and analyse trawl survey data (ATrIS), the possibility of creating a pilot study according to the definition of Operational Units and the forthcoming activities to support SAC activities.

4. *International bottom trawl survey in the Adriatic Sea*: The 5<sup>th</sup> AdriaMed trawl survey was carried out in Albanian and Montenegrin waters in February 2007 and in Croatian and Slovenian waters in March 2007.

5. *Training on cephalopods statoliths reading*: The training course was held at the Institute of Oceanography and Fisheries in Split (Croatia) from 16<sup>th</sup> to 18<sup>th</sup> April 2007. It aimed to illustrate all the steps required to use statoliths for cephalopod ageing: extraction from fresh animals (surgical method), preparation of the samples (cleaning, grinding, mounting), and microstructure analysis (counting of incremental rings). A Technical Manual to be published in the AdriaMed Technical Documents series is being finalized.

6. *Essential Fish habitat*: The Project is collecting and compiling data on the essential fish habitat of selected fisheries resources (demersal and small pelagic). The data include basic information on the environmental (e.g. location, depth, temperature, salinity) and biological features (e.g. growth, mortality, production) which characterise the different ontogenetic phases in the life-span of the species.

7. *SOLEMON Project*: in the framework of the activities related to demersal resources, the Project supported the cooperation, in terms of technical advice, between the Institute of Oceanography and Fisheries of Split (IOF) and the CNR - Istituto Scienze Marine (ISMAR) of Ancona for the "Stock Assessment of *Solea solea* in the northern and central Adriatic Sea and evaluation of the impact of the different fishing activities" (SOLEMON) research programme. Some preliminary results of the scientific activities carried out so far by this research programme were presented and discussed during the 8<sup>th</sup> Coordination Committee meeting (Albania, December 2006). The possibility to extend the SOLEMON Project to Slovenia, Montenegro and Albania was discussed during the WG on demersal fishery resources (Rome, February 2007). A survey in the southern Adriatic Sea has been planned for November 2007 to be carried out with R/V Dalla Porta.

8. As a follow-up to the *Working Group on Small Pelagic Fishery Resources* (Ancona, Italy, 15<sup>th</sup> - 19<sup>th</sup> May 2006) a meeting to establish a Coordinated Team on echo-survey in the Adriatic Sea was held in FAO-HQ in March 2007. The aim was to discuss the standardisation of the methodologies/scientific protocol adopted by the Adriatic countries for the evaluation of small pelagic fishery resources (GCP/RER/010/ITA/OM-157). It was agreed to organize a two-week training activity to address this issue. Subsequently the first week's training activity was held in Ancona in July 2007 to verify the possibility of jointly analysing data from national echo surveys (Croatia and Italy) during which the comparison, step by step, of the methodologies used by the IOF of Split and the CNR-ISMAR of Ancona was carried out, underlining similarities and dissimilarities. The results of these meetings were presented at the Sub-Committee on Stock Assessment (Kavala, Greece, 17<sup>th</sup> – 20<sup>th</sup> September 2007).

9. In addition, as follow-up to the Working Group on Small Pelagic Fishery Resources (Ancona, Italy, 15<sup>th</sup> - 19<sup>th</sup> May 2006) a Training course on the daily egg production method (DEPM), was held in the Institute of Marine Biology of Kotor (Montenegro) from 11<sup>th</sup> to 15<sup>th</sup> September 2007. Eleven (11) participants from Mediterranean countries attended the training course.

10. In collaboration with the FAO Fisheries and Aquaculture Department and the IOF of Split, AdriaMed organized a *Training course on the use of GIS* in fisheries and aquaculture. The training course was held in Split, Croatia 2nd – 13<sup>th</sup> July 2007 involving a total of twelve participants from five research institutions. The training course lecture notes are being compiled and will shortly be distributed.

### **Social and Economic Fishery Sciences**

11. The Project started to collect information to update the *database on the fishery legislation* of all countries bordering the Adriatic Sea, in particular the section related to recreational fisheries. A draft proposal has been prepared for a programme of activities to be carried out in cooperation with the GFCM Secretariat, to develop a multidisciplinary approach to the understanding of recreational fisheries in the Adriatic Sea. Contacts and meetings with experts on this topic have started in order to plan the future steps of the programme. A presentation of the preliminary information gathered were presented at the SCESS - Workshop on the use of socio-economic indicators in Mediterranean fisheries management (Tripoli, Libya 3<sup>rd</sup> - 5<sup>th</sup> July 2007).

12. The Project has designed and created a database to hold and manage the data available from socio-economic surveys. The *DataBase on fisheries sector social surveys* data version 1.1 (AdriaMed DBS) is a stand-alone application designed and produced to organize the storage and preliminary analysis of the dataset available after the social survey of the fisheries sector in Albania (carried out in 2003). It is a simple, common tool to store data collected during any fisheries sector social survey and perform basic processing. AdriaMed DBS was presented to the SCESS and the Sub-Committee on Statistics and Information. A social survey of the fisheries sector in Montenegro is being carried out using the AdriaMed DBS.

13. On the basis of the work carried out so far on the *identification of Operational Units* in the Adriatic countries, the Project started to update the information on OUs collected so far (up to 2004), including by Montenegro (which joined the AdriaMed project in 2004). A pilot study was designed with the primary objective of describing and monitoring the Montenegrin fisheries sector, including biological, environmental, economic and social information, applying the OUs concept. The pilot study has been developed in coherence with the indications given by the GFCM and also considering current EU regulations, bearing in mind the existing monitoring practice and data collected in the country. Moreover the creation of an additional monitoring system has been included and set up relative to data concerning fisheries economics for each country.

### **Adriatic Fishery Statistics and Information Systems**

14. *Information on Aquatic and Fishery Sciences.* As one of the ASFA International Partners the Project is continuing the activities carried out so far for the inclusion of Adriatic Scientific publications in the ASFA database. In addition the Project is continuing to provide assistance to the FAO ASFA Secretariat. Following the positive establishment of an AdriaMed - Croatian Collaborating Centre for ASFA (IOF, Split), the Project is supporting the establishment of an ASFA data input centre at the Institute of Kotor (Montenegro). In April 2007 a three-day training activity on the use of ASFA products and retrieval of data was held at FAO-HQ for the tuition of a Montenegrin national.

15. The *AdriaMed Information System (AIS)* has been updated and further improved. Currently, the Project Web site hosts 13 databases: Institutions (155), Fishing Ports (252), Fish Markets (27), Libraries (211), Links (210), Library (810), and Documents available (over 50 documents), Fisheries Legislation (covering all the Adriatic countries), Shared Demersal Stocks (13 species) and Abstracts (4500 records, including abstracts). In the section Country Fishery Information, for each country the basic information on geography, fisheries and aquaculture are summarised. In addition, a section containing baseline data (from 1976 to 2006) on the interactions between capture fisheries and aquaculture was published on the Web site.

16. The *AdriaMed Website*. Over the last year, an average of 17235 users a month visited the Website. Over 26,000 pages a month have been visited and over 53,000 AdriaMed Technical Documents have been downloaded in the last six years. Recently issued Project publications are also disseminated through the project mailing list, which includes 474 names. Furthermore the Project is providing technical support in Albania and Montenegro for the creation/updating of web pages for the fisheries directorate and fisheries research institution.

17. The updated version of the *AdriaMed Trawl Survey Information System (ATrIS)* version 2.1 - the computerized system developed to organize storing and preliminary analysis of the dataset available after the AdriaMed trawl survey has been distributed among all the institutes. In particular this new version includes a module for the estimation of biological indicators (identified by the Adriatic researchers). On a yearly basis the Project presents the updated version of ATrIS to the SAC Sub-Committees. External requests to use the application have been made to the Project. At the moment there are ten Adriatic research institutions using ATrIS. The Project is continuing to work on the development and upgrading of this application

18. *GFCM Publications (1952-2006)*: in cooperation with the GFCM Secretariat, the project collected and compiled all the publications issued so far by the GFCM (since 1952) and created a CD-Rom with bibliographic records including keywords and abstracts. The CD-ROMs were distributed during the 9<sup>th</sup> GFCM SAC meeting held in Rome, October 2006, during the 8<sup>th</sup> AdriaMed Coordination Committee and during the 31<sup>st</sup> GFCM Session held in Rome, Italy, 9<sup>th</sup> - 12<sup>th</sup> January 2007. Moreover the contents of the CD ROM have been included in a web-structured database. The web version of the database has been delivered and is now ready to be made available on the AdriaMed and GFCM websites.

19. *Support to the national statistic systems.* The support to the national statistic systems is being continued in Albania in cooperation with the Fisheries Directorate and the MedFisis Project. In particular support was given for the creation of a fleet register for artisanal fisheries.

### **Interactions between aquaculture and capture fisheries**

20. As a follow-up to the AdriaMed Expert Consultation on the interactions between aquaculture and capture fisheries (November 2003) and in cooperation with the Albanian Fisheries Directorate, the Project is finalising a technical document focusing on the implementation a *Pilot Study on the "Interactions between capture fisheries and aquaculture and environment in the Lezha Lagoon system"*. Upon request of the Fisheries Directorate of Montenegro, a similar task is being prepared for the national lagoons. A data base containing the main relevant information of the lagoons in the Adriatic sea is being finalized.

### **III. MEDSUDMED**

#### **Introduction**

21. The MedSudMed Project aims to support the scientific communities of the participating countries in the development of a monitoring system for studies of fishery resources and ecosystems (GSAs: 12, 13, 14, 15, 16 and 21), with particular focus on the standardisation of methodologies. Intersessional activities were conducted for the following project components: "Spatial distribution of demersal resources in the Project area and the influence of environmental factors and fishery characteristics"; "Small pelagic fish: stock identification and oceanographic processes influencing their abundance" and "Fishery and Ecosystem Information System" (FEIS). MedSudMed organized Working groups, training and cooperative research programmes on demersal and small pelagic species. The project also supported the participation of scientists in relevant meetings of SAC subsidiary bodies. The activities carried out for 2007 followed the workplan approved by the MedSudMed Coordination Committee and updated during the last meeting held on 09-10 November 2007 in Rome, Italy, as follows:

#### **Demersal Fisheries Resources**

21. The Project has undertaken a review of the knowledge currently available on the biology, ecology, reproduction patterns, legislation, management and exploitation trends of *Merluccius merluccius*, *Mullus barbatus*, *Parapenaeus longirostris*, *Aristaeomorpha foliacea*, *Octopus vulgaris*.

22. The Project is finalizing the technical report summarizing the results obtained on the *spatial distribution of hake and Red mullet* and on the identification of areas of major concentration of juveniles and mature females. Moreover, data processing is being carried out to obtain similar information for other demersal species.

23. Following the finalisation of the Pilot study on "Spatial pattern of fisheries demersal resources, environmental factors and fishery activities" that was undertaken in the GSA 15 (Malta Island), the Project is currently working on technical guidelines related to the pilot study and that will provide methodological indications for multidisciplinary studies in areas of interest for fisheries.

#### **Small Pelagic Fisheries resources**

24. A technical report on *sea temperature, salinity and total velocity climatological fields* for the Central Mediterranean was produced by the Project. The report provides a general description of the hydrodynamic characteristics of the Project area and climatological fields that were calculated in the form of monthly and seasonal averages from the output of a numerical model run over a period of five years (2000-2004). Maps were generated for salinity, temperature and currents at different depths and

are relevant in areas where no or little information is available, to provide an overview of the oceanographic characteristics of the area.

25. As for the previous year, the Project encouraged the organisation of *cooperative surveys at sea* with mixed teams on board the research vessels and during which, in addition to collecting data, on-the-job training is provided:

- *Cooperative ichthyoplankton surveys* (June-July 2007) were conducted along the southern coast of Sicily and in Maltese waters on board the R/V Urania in cooperation with the Istituto per l'Ambiente Marino Costiero (IAMC-CNR) and the Malta Centre for Fisheries Sciences (MCFS). A survey planned in the eastern part of Libya had been organised in collaboration with the Istituto per l'Ambiente Marino Costiero (IAMC-CNR) and the Marine Biology Research Centre of Tajura, Libya but had to be cancelled due to unexpected events.
- *Cooperative acoustic surveys*. R/V "Dalla Porta" covered South-Sicilian and Maltese waters in July 2007 in cooperation with the Istituto per l'Ambiente Marino Costiero (IAMC-CNR) and the Malta Centre for Fisheries Sciences (MCFS). In agreement with the Marine Biology Research Centre of Tajura, Libya and while authorisations had been delivered by the Libyan authorities, the survey planned along the Libyan coast had to be cancelled at the last moment due to unavailability of vessel and crew.

26. A *catalogue on ichthyoplankton* is being prepared by the Project on the basis of the results obtained in 2006 in Libyan waters.

27. A *review on small pelagic fisheries resources* in the MedSudMed area is being prepared.

### **MedSudMed Fishery and Ecosystem Information System (FEIS)**

28. The regional component of the *FEIS* is being updated in particular regarding the web interface. Data gathered from the AdriaMed Trawl Information System (ATrIS) were incorporated in the *FEIS*. Results of the work were presented at the last meeting of the Sub-Committee on Statistics and Information.

### **Transversal issue**

29. The Project supported the *compilation of bibliographic scientific references* from the grey literature published in Tunisia and in particular by the Institut National des Sciences et Technologies de la Mer (INSTM) from 1976 to 2005. References of all available grey literature were edited, with a view to producing a thematic compilation covering a total of eleven topics: Fisheries biology, Exotic species, Threatened species, Physical and chemical oceanography, Fish disease and parasites, Development of fishery products, Fish markets and marketing, Algae, Marine pollution, Fishing techniques/technology, Aquaculture.

### **Training**

30. In line with one of the main Project priorities, national capacity building, the following courses were organised during the intersessional period.

- ***Training on processing of ichthyoplankton samples (Italy, 09-17 January 2007)***. The objective was to provide baseline knowledge on the identification of the eggs and larvae of fishery resources, on this occasion, all samples collected in 2006 in Libyan waters were processed.
- ***Training on analysis of ichthyoplankton data (Italy, 14-24 February 2007)***. Techniques for density calculation and mapping were taught during this course and preliminary maps were produced for the main species found along the Libyan coasts.
- ***Training on processing of oceanography data (Italy, 07-13 January 2007)***. The training course focused on the post processing of CTD casts (filtering of raw data), analysis of temperature, salinity, oxygen patterns (vertical and horizontal patterns) and calculation of geostrophic currents. Maps of oceanographic variables were produced (temperature, salinity, direction and velocity of geostrophic currents).
- ***Training on processing of water samples (Italy, 19-24 February 2007)***. The course aimed at teaching laboratory techniques used for the processing of water samples collected with Niskin bottles for the analysis of POC (Particulate Organic Carbon), PON (Particulate Organic Nitrogen) and nutrient concentration.
- ***Training micro-algae identification (Italy, 19-24 February 2007)***. During the course, some samples of waters collected with Niskin bottles were prepared and processed under scanning electronic microscope for the analysis of phytoplankton, in particular calcareous phytoplankton (Coccolithophyceae). The objectives were to carry out a qualitative analysis for the identification of species and a quantitative analysis with the enumeration of individuals for each species and hence characterize the phytoplankton association along the Libyan coast.
- ***Training course on macroscopic identification of maturity stages (Tunisia, 03-05 April 2007)***. The course provided a comprehensive overview of the techniques and scales used for the macroscopic identification of maturity stages of the main demersal fisheries species.
- ***Training processing of acoustic data related to zooplankton (Libya, 31 May-17 June 2007)***. Methodology for the processing of acoustic data related to zooplankton was taught, including the basic techniques to process raw acoustic data and calculations to provide estimates of zooplankton biomass. During this course data collected in 2006 in Libyan waters were processed.
- ***Training course for technical operators on marine biotoxins (Italy, 20-31 August 2007)***. This course was a follow-up to the previous one organised in Tajura, Libya (September 2006) and consisted of laboratory work on techniques to detect lipophilic and water soluble toxins.
- ***Training course on Daily Egg Production Method (Montenegro, September 2007)***. The course was organized by AdriaMed. A scientist from MedSudMed attended the course.

#### IV. MEDFISIS

## **Introduction**

31. The MedFisis project was conceived to promote and develop a Mediterranean Fishery Statistics and Information System with the ultimate objective of achieving a region-wide integrated system as outlined by the MedStat adaptive approach<sup>7</sup>. Eventually, the system will be based on national fishery statistics systems, enhanced and standardised to meet both national and regional (international) requirements. Central to the MedFisis concept is that the fundamental components of any fisheries management information system are the vessel record and catch and effort data.

32. During the intersessional period, the overall performance and activities of the project were much constrained and reduced compared to the first twelve-month period of MedFisis's implementation (September 2004 – August 2005). Indeed the funds for the second year of the project were only received by FAO in March 2006, leaving a gap of eight months since the end of the first year of the project. Again, for the third year, the project is experiencing the same problem, mainly due to the different financial and administrative rules and regulations of the donor and the executing agency. Since the end of the second year seven months have already elapsed and no funds have been yet released. This caused a slackening in the implementation of the project's activities.

33. As a consequence of those factors, the Project has been formally operational for 24 months within an overall time period of 37 months. Under these circumstances, it is rather difficult to implement a complex project with such a vast scope and geographical coverage as the MedFisis. Moreover, the delays in the implementation of the second phase of the CopeMed and of the EastMed main phase projects has further weakened and limited the MedFisis operations and effectiveness.

34. In spite of the problems mentioned above, and to avoid hampering the implementation of MedFisis, FAO explored appropriate ways to keep the project operational. This demanding exercise requested close monitoring and extensive management to make use of all the funds allocated to the project from the on-going FAO-executed Mediterranean projects to plan the activities, including the relevant staff to perform the tasks. In the intersession period from October 2006 to February 2007 (end of the project's second year), the MedFisis project undertook a number of actions and initiatives at the regional (GFCM) and national (GFCM member countries) levels as reported below. Part of them constitute and will be included among the activities and outputs of the third and last year of MedFisis first phase.

## **Database software development and implementation**

35. The current version of the *MedStat fishing vessel register*, developed in Visual Studio .NET running .NET Framework, reached an advanced level of development and it is now a fully operational software, capable of meeting most of the needs and requirements of final users. This database software has been built through interconnected modules (assemblies) to ensure easy and timely maintenance and incorporation of future developments.

36. The new reengineered version of the *MedStat catch and effort (CAS) database software* is almost completed and will be finalized during the third year of MedFisis, as foreseen in the original workplan. The package being developed includes both logbook and a sample-based approach to CAS. This software application is developed in Object Oriented Programming.Net Framework<sup>®</sup>. As in the

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<sup>7</sup> Coppola, S.R. 2006. MedStat - An adaptive approach for the improvement of fishery statistical systems in the Mediterranean countries under FAO projects. Studies and Reviews. General Fisheries Commission for the Mediterranean. No. 79. Rome, FAO. 57 pp.

case of the most recent release of the MedStat fishing vessel register database, this technical approach makes it possible to easily update a target software system. Concomitantly, the catch and effort software is being developed to be fully compatible with the fishing fleet database.

### **Regional level: support to GFCM Secretariat**

37. The GFCM Secretariat received assistance for the initial establishment of the *GFCM record of vessels over 15 m* authorized to operate in the GFCM area (also known as the “white list”, Recommendation GFCM/2006/1). Basic data quality and consistency checks were performed, with results being reported to the Secretary under the necessary confidentiality requirements. Technical assistance was also given to compile a first overview of the white list data features and to report it to the GFCM Compliance Committee in the occasion of the Commission’s 31<sup>st</sup> Session (January 2007).

38. The landing pattern by country and statistical area of the *GFCM priority species*, which had been previously compiled and analysed, was further refined. It will be made available through the production and dissemination of an *ad hoc* CD incorporating a software tool for the easy and real time visualization and preliminary analysis of the priority species landings time series. This tool will provide additional information on the stock assessment and fisheries appraisal work within the SAC framework.

39. The Project actively participated in the SAC “Transversal Workshop on the Compilation of the GFCM Task 1 Data” (June 2007), by assisting the MedFisis National Focal Point of Egypt and Syria in compiling data using the Task 1 data entry tool prepared by the Secretariat. Pros and cons of the Operational Unit approach as outlined in Task 1 could be assessed, and many constraints and limitations could be identified in advance, thus contributing to a more effective implementation of the workshop.

40. The renewal and re-development of the *Information System for the Promotion of Aquaculture in the Mediterranean (SIPAM)* was carried out within the MedFisis framework until April 2007, when this activity continued under the direct control of the GFCM Secretariat. During the last months of MedFisis’s involvement, SIPAM/MedFisis development team has effectively contributed to the organization and outcome of the 9<sup>th</sup> SIPAM Annual Meeting (November 2006), introducing the renewed SIPAM to the National Coordinators and carrying out in depth-training exercise on the new information system under development. Among the technical documents and notes produced, three issues of the “SIPAM Revitalizaion Bulletin” (October 2006, December 2006 and March 2007) were published.

### **National level: support to individual GFCM member countries**

41. A national *training workshop on “Design and Implementation of Fishery Catch and Effort Assessment Surveys”* was held in Syria (December 2006). A total of thirty participants (fishery officers) attended the workshop, together with four observers from Egypt and Lebanon. The workshop aimed at reviewing and analysing the available information and data on fishing patterns and resources targeted by the national fishing fleet. Consequently, the objective of this workshop was to outline the national pilot catch and effort survey for the Syrian marine capture fisheries. A CD was produced and distributed to all the participants with the compilation of the didactic material used and the exercises *ad hoc* developed for the workshop.

42. A joint AdriaMed/MedFisis activity concerted with the Albanian Fishery Directorate was undertaken in December 2006 to update the *national (MedStat) fishing vessel register*, to develop and

establish the first small scale fishery database, and to finalize the technical report on the national catch and effort assessment survey.

43. As a follow-up to the aforementioned training in Syria, a *data analysis workshop* was organized at the Syrian Fisheries Department (February 2007). This workshop focused on the appraisal of the catch and effort survey programme being developed by the country. It continued to integrate the technical assistance provided by the project to strengthen the national fishery statistics system. Such assistance started with the establishment of the national (MedStat) fishing vessel register and followed a series of logical steps that consisted of international and national training workshops, technical meetings and field work.

44. As a response to a request from the Egyptian General Authority for Fish Resources Development (GAFRD), a *joint MedFisis/GAFRD review mission* was conducted (February 2007) in order to appraise the current catch and effort monitoring system and to identify those activities that might be implemented according to the available human and financial resources and to improve/upgrade the fishery statistic system in the country. The mission's findings were reported in the document "Brief Review of the Egyptian National Fishery Statistics and Information System (Mission Report)" that also includes the "Preliminary Analysis of the Maadeya Fishing Fleet and Fishery Production (Jan.-July 2006)".

45. The above outputs were also made possible through the collaboration with the FAO sub-regional projects operating in the Mediterranean (AdriaMed and EastMed Formulation and Preparatory Phase).

### **Future perspectives**

46. The project was originally conceived for a first three-year phase to help countries develop their national fishery statistics system. Likewise, it was supposed to contribute to create a regionally compatible system that could monitor the state of fisheries resources and the well-being of the whole ecosystem in the Mediterranean.

47. In the third and last year of the first phase, the Project will continue to follow the adaptive approach, also finalizing the development and implementation of catch and effort assessment surveys and related database software. It is expected that, the concerted synergy and integration of MedFisis, including the AdriaMed, MedSudMed, the forthcoming CopeMed II and EastMed projects, will be continued and be further developed. This coordinated action will provide technical assistance to the GFCM Secretariat and to the member countries to develop and consolidate internationally compatible fishing vessel registers where needed and promote and establish catch and effort monitoring systems. The core MedStat software suite of the MedFisis fishery statistics and information system will be completed with the release of the marine fisheries catch and effort software application that, integrated with the fishing vessel register, constitutes a basic component of the GFCM fisheries information and management system.

48. A significant constraint is constituted by the limited resources available for a project with such a vast scope and geographical coverage. The project dimension should be reconsidered on the basis of its scope, the results obtained and on the current needs of the GFCM. Adequate resources will need to be mobilized, if MedFisis is to evolve to efficiently carry out its complex tasks, both at national and international levels.

## **V. COPEMED**

### **CopeMed Phase I**

49. Awaiting the second phase of project, the CopeMed website has still been accessible and all materials (e.g., virtual library) available to the users. The book “Is There a Future for Artisanal Fisheries in the Western Mediterranean”, conceived and initiated during the first phase of the CopeMed project. The book aims to divulgate the problems of the artisanal fisheries, the obstacles to their development, and some possible opportunities for such a development.

### **CopeMed Phase II**

50. In May 2006 the Fisheries and Aquaculture Department of the FAO has officially submitted the project document to the two donors: the Spanish General Secretariat of Marine Fisheries and the General-Directorate for Fisheries and Marine Affairs of the EC. To date only the DG-Fisheries of the EC has approved the project and released the funds for the first year. In early 2007, the project proposal was informally shown to the CopeMed National Focal Points for their comments and suggestions on the activities and work plan, which will be discussed at the Inception/Coordination Committee meeting, hopefully early 2008.

### **ArtFiMed**

51. Past initiatives and activities, focusing on the Mediterranean artisanal small-scale fisheries, have highlighted the relevance of this sub-sector. They also stressed that artisanal fishery and its interaction with the other activities in the same areas needed special attention. At the final CopeMed Coordination Committee Meeting (Tunis, May 2005), representatives from all participating countries agreed to a continuance of the initiative focussing on the artisanal fisheries sector undertaken by the project. The AECI (Agencia Española de Cooperación Internacional) expressed to the FAO its readiness to support pilot targeted initiatives in this specific sector in Morocco and Tunisia with the aim of contributing to the socio-economic development and welfare of coastal communities. Consequently, the project “Sustainable development of Mediterranean Small Scale Fisheries: Morocco and Tunisia” was formulated by the FAO Fisheries and Aquaculture Department.

52. Through valorisation of the fish chain and promotion of fishers’ organizational systems, the proposed project aims to support sustainable development of Mediterranean small-scale fisheries, which can alleviate poverty in fishing communities. The project will constitute a pilot activity implemented at two selected sites in Morocco and Tunisia that will operate within the framework of the second phase of CopeMed. Furthermore, in agreement with the national fisheries management authorities, the envisaged project will lay the basis and initiate the processes that, gradually, will develop and eventually lead to the establishment of participatory fishery co-management framework. This will not reasonably be reached within the first three years of project’s implementation, but will act as an objective, and, should the necessary conditions occur, will be pursued in the long term on the basis of the results obtained during this first period.

53. It is believed that this project will play a pilot role within the context of the existing FAO-executed fisheries projects in the Mediterranean, as well as within the broader framework of GFCM. Should this project initiative prove successful, it may be replicated at a larger scale in the region.

## **VI. EASTMED**

### **Project Formulation and Preparatory Phase**

54. The whole preparatory phase leading to the formulation of the EastMed project was made possible through the Italian contribution to the “EastMed Project Formulation and Preparatory Phase”. During the intersessional period, the technical formulation of EastMed was completed.

55. One of the weaknesses affecting the national fishery sectors in the eastern and southern Mediterranean region is the limited knowledge of and skills needed for marine species identification that hinders the establishment and development of responsible fishery management measures and the proper attribution of catches at species level. Scientifically sound field guides will therefore be prepared for the eastern and southern Mediterranean bio-ecological areas and will be made available and understandable to Arabic-speaking users, as a joint effort with the MedFisis and MedSudMed Projects, as well as with the FAO/FI Species Identification Programme. This Guide will serve as an essential tool for the acquisition of reliable statistical data, for the control of fishing activities and for the enforcement of management technical measures. Additionally, the Guide can help monitor biodiversity and report the presence of Lessepsian species, and monitor more reliably the marine species landed. For this purpose, an *ad hoc* network of regional fishery experts and taxonomists was composed and complemented by high-level experts from, when necessary, outside the region.

### **Project Implementation Phase**

56. The technical formulation of the main phase of the EastMed project was completed in 2006. Since June 2006, options are being considered between donors and FAO on the implementation arrangements of the project and to ensure the integration of the financial contributions from the different sources.

## **VII. GEF**

57. The Full Brief “Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem. Regional Component: Implementation of agreed actions for the protection of the environmental resources of the Mediterranean Sea and its coastal areas” was approved by the GEF Council on July 2007.

58. FAO and the GFCM Secretariat are the executing agencies for the component 3 of the proposal: “Conservation of biological diversity: Implementation of SAP BIO and related NAPs”, subcomponent 3.2: “Promote the sustainable use of fisheries resources in the Mediterranean through ecosystem-based management approaches”. The objective of the Sub-Component is to increase the ability of coastal nations to utilise coastal and high seas resources through the adoption of the ecosystem approach to fisheries management and the application of targeted interventions to reduce bycatch and other unsustainable fishing practices. The following are the activities to be developed during the next 5 years:

- Identification of regional needs and priorities for mainstreaming biodiversity conservation into fisheries research and management in four countries (Croatia, Montenegro, Tunisia, Turkey): practical directions to enhance the full development of EAF-based research supporting the implementation of policies to address the impact of fisheries on marine biodiversity and ecosystems.
- Implementation of biodiversity conservation and ecosystem approach into fisheries research and management in four countries (Croatia, Montenegro, Tunisia, Turkey): integration of ecosystem and environmental considerations in effective fisheries management policy.

- Development of legal and management reforms to ensure the long-term limitation of fishing impacts on biodiversity and marine ecosystems in four countries (Croatia, Montenegro, Tunisia, Turkey): Overall fishing impacts on biodiversity and marine ecosystems are greatly reduced over the long-term.
- Undertake a risk assessment to prioritise regional threats to vulnerable fish and fisheries interactions with iconic vertebrate species in five countries (Algeria, Egypt, Morocco, Tunisia, Turkey), priority will be given to the three countries involved in 3.2.2.2): to assess the scale and drivers for the bycatch on vulnerable species (sharks, certain invertebrates, cetaceans, monk seals, sea turtles and seabird populations). 1 or 2 fishing métiers per country to be identified and targeted.
- Development and implementation of demonstrable solutions to bycatch mitigation for protected / endangered species of fish and invertebrates and for iconic vertebrate species in three countries (Algeria, Morocco, Turkey): by-catch mortality on sharks, marine mammals, sea turtles and sea birds is significantly reduced.
- Identification of significant fishing impacts in areas of particular vulnerability in five countries (Algeria, Egypt, Morocco, Tunisia, Turkey). The impact of towed gears on critical bottom habitats, forbidden fishing practices and protected species significant by-catch identified and mitigation approaches developed with the support of stakeholders

59. Currently UNEP/MAP is in the process of preparation of the Mediterranean Sea Large Marine Ecosystem Project Document including detailed budgets, terms of reference for staff and consultants, and the implementation modalities and arrangements. Once finalized, the Project Document will be submitted to the GEF CEO for signature.

#### **VIII. SUGGESTED ACTION BY THE COMMITTEE**

60. The Committee is invited to review the work performed by the FAO regional projects and provide comments and views, especially on those activities directly supporting the current scientific and technical priorities of SAC.