

GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN



COMMISSION GÉNÉRALE DES PÊCHES POUR LA MÉDITERRANÉE

SCIENTIFIC ADVISORY COMMITTEE (SAC)

Fifteenth Session

FAO Headquarters, Rome, Italy, 8-11 April 2013

Major activities of the FAO regional projects

1. This document summarizes the most significant activities carried out by the FAO Regional Projects, namely, AdriaMed, MedSudMed, CopeMed II, EastMed and the GEF-supported Partnership for the Mediterranean (MED-LME), during the intersessional period of the Scientific Advisory Committee (SAC). 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.

<u>AdriaMed - "Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea"</u>

The project is financed by the Italian Ministry of Agriculture, Food and Forestry Policies (MiPAAF) and has been co-financed since 2007 by the Directorate-General for Fisheries and Maritime Affairs of the European Commission. It is operative since September 1999. The participating countries are Albania, Croatia, Italy, Montenegro and Slovenia, with waters included in GFCM Geographical Sub-Areas (GSAs) 17 and 18. The Project aims at promoting scientific cooperation among the Adriatic countries and to improve the management of fishing activities in compliance with the Code of Conduct for Responsible Fisheries. The main goals of the Project are to develop common basic knowledge and support regional fishery management through improved scientific coordination among the fishery institutions.

The activities carried out during the inter-sessional period followed the methodological approach used by the Project, as well as the workplan for 2012 as approved by the 13th AdriaMed Coordination Committee (Albania, March 2012), 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 relevant institutions, primarily the GFCM, through the SAC and its Sub-Committees.

The thirteenth meeting of the Coordination Committee of the AdriaMed Project was held on 26-28 March 2012 in Tirana, Albania, hosted by the Ministry of Ministry of Environment, Forestry and Water Administration of Albania. During the meeting the workplan for 2012 was discussed and approved.

Following the communication of the Italian Donor, the Ministry of Agriculture Food and Forestry Policies (MiPAAF), of its readiness to continue the support to the AdriaMed Project, the Project

activities were extended to June 2013. In the intersessional period the project performed the following main activities.

At the beginning of 2012, the FAO Office of Evaluation, the FAO Fisheries Department and the Project management agreed on the need to perform an external evaluation of the Project, according to the FAO rules. A FAO Independent Evaluation Team initiated the evaluation on March 2012. The evaluation assessed the work carried out through the Project and provided accountability to the participating Member Countries, to resource partners including the Italian MiPAAF, the European Commission, and FAO on the extent of Projects' results, including outputs, outcome and impact to date. Lessons learnt were drawn and recommendations were formulated for the potential future role and strategies of the Project, aiming at enabling all key stakeholders to take decisions regarding the utilization of Project results as well as on the design and implementation of similar projects in the future.

The relations and interactions with the participating countries were further strengthened, which contributed to the improved implementation of the Project activities. Several missions were organised to Croatia (Split), Montenegro (Kotor and Podgorica), Slovenia (Ljubljana) and Albania (Tirana and Durrës). In particular, a meeting with the Director General of Fisheries Directorate of Albania, was held to better adapt Project support to the emerging priorities of the country, whereas on Summer and in Autumn 2012 specific meetings with the Assistant to the Minister for Fishery of the Ministry of Agriculture of Croatia were held to define a road map for the future involvement of Croatia in the Project. Informal meetings were held during all the year and occasion was taken back to back to international meetings to liaise with representatives and experts of the participating countries (both fisheries administrations and research institutes).

As indicated by the Coordination Committee and also by the FAO Independent Evaluation, the Project strengthened the liaison with the Donors (MiPAAF and EU-DG-MARE) and intensified the meeting of coordination with them, accordingly several coordination meetings were organized and held.

The Project continued to support the establishment of sub-regional fisheries monitoring system as well as to foster the scientific cooperation in the area. To this extent and in order to progress in the joint evaluation of the shared stocks, the Project organized the Study Group for the application of bottom-trawl survey data to fish stock assessment in South Adriatic Sea (Italy, September 2012). The Study Group was carried out to joint analyse data on hake (*Merluccius merluccius*) and Deep-water rose shrimp (*Parapenaeus longirostris*) collected in the area by scientific trawl surveys together with commercial fisheries data. Scientists from Albania, Montenegro and Italy participated the results were presented and discussed at the AdriaMed Working Group on Demersal Fisheries Resources, Italy, September 2012.

The annual meeting of the AdriaMed Working Group on Shared Demersal Fisheries Resources (WG-DEM) was held in Italy, 17-19 September 2012. The WG focused on the appraisal and stock assessment (standard and alternative methods) of demersal stocks and on indicators and reference points which may be considered at regional level in line with the EC Marine Strategy Framework Directive. The result of the monitoring system for the Montenegrin fisheries sector were presented as well as the results of the SoleMon and SoleDiff Projects. The stock assessments produced by the WG-DEM for Common sole Solea solea, and Spottail mantis shrimp, Squilla mantis in GSA 17 and for European hake (Merluccius merluccius) and Deep-water rose shrimp (*Parapenaeus longirostris*) in GSA 18 were presented and discussed during the GFCM-SAC-SCSA Working Group on Stock Assessment of Demersal Species (Croatia, November 2012) together with a preliminary assessment on Red mullet (*Mullus barbatus*) stock for GSA 17.

In addition the Project is continuing to support the activities carried out in the framework of the SoleMon Project: in November 2012 the eighth SoleMon survey covering the North-Central Adriatic Sea was carried out with mixed scientific crew from Italy, Slovenia and Croatia. The stock assessments for sole, Solea solea, in GSA 17 was performed and presented for discussion at the AdriaMed WG-DEM and then at the GFCM SAC - SCSA Working Group on Demersal Species (Croatia, November 2012). In addition, a research activity, namely SoleDiff, to support analysis on

differentiation of Solea solea and Solea aegyptiaca inhabiting Northern Adriatic Sea and the identification of the population structure of common sole (S. solea) in the whole Adriatic Sea and the related stock assessment, has been initiated with the support of the Project.

In the framework of the activities related to the demersal fisheries resources, the Project is supporting the full participation of South Adriatic Sea countries to the EC funded MEDITS programme. Participation to the annual MEDITS Coordination meeting (Slovenia March 2012; Greece, March 2013) was supported. In addition the extension to the eastern waters of the South Adriatic Sea (Albania and Montenegro) of the MEDITS trawl survey was supported with scientific campaigns carried out in July 2012. During the survey theoretical and onboard training activities have been carried out for new national staff from Albania.

The Project continued to support the scientific experiments carried out in the Pomo/Jabuka Pits area on *Nephrops norvegicus* stocks as an example of methodology to assess demersal fisheries resources giving additional data to compare with the trawl survey data. The CNR – ISMAR of Ancona (Italy) in cooperation with the Institute of Oceanography and Fisheries of Split (Croatia), under the auspices of AdriaMed, carried out an evaluation of the *N. norvegicus* stocks in the Jabuka/Pomo pits area using the towed UnderWater TV (UWTV) methodology in April-May 2012.

The annual meeting of the AdriaMed Working Group on Small Pelagic Fisheries Resources (WG-SP) took place from 3 to 5 October 2012. The meeting reviewed the knowledge and information on small pelagic fish stocks, mainly of anchovy (*Engraulis encrasicolus*) and sardine (*Sardina pilchardus*). The stock assessments of anchovy and sardine were jointly performed for GSA 17 by combining all data made available by the experts of the participating countries. The WG also reviewed the outcomes of the Study Group on DEPM (SG-DEPM) and the Study Group on intercalibration of fish otolith reading (SG-OTH). The preliminary results of the joint acoustic and DEPM survey performed in GSA 18 under the umbrella of AdriaMed were discussed. Possible future activities were identified as well as joint research activities to be carried out in the Adriatic Sea. The results of the joint stock assessment of anchovy and sardine for GSA 17 and GSA 18, were presented and discussed during the GFCM SAC- SCSA Working Group on Stock Assessment on Small Pelagic Species (Croatia, November 2012).

The Project continued to support the countries in developing expertise on small pelagic fisheries resources as well as for the standardization of the methodologies applied. In July –August 2012, a joint acoustic and ichthyoplankton survey using R/V "Dallaporta" covering South Adriatic waters (GSA18) was organized and supported by the Project, in cooperation with CNR-ISMAR Ancona, the Institute of Marine Biology of Kotor (Montenegro) and the Laboratory of Fisheries and Aquaculture of Durres Agricultural University of Tirana (Albania). Taking advantage of the occasion, theoretical and practical onboard training activities were carried out.

The Project continued to foster the rebuilding of the expertise on DEPM method and organized two meetings of the SG-DEPM (Italy June 2012 and Slovenia October 2012) aimed at revising the DEPM protocol used and improving the accuracy of staging (eggs, larvae and postlarvae). During the meetings agreement was found on the aging of Post Ovulatory Follicles (POFs) and a small Atlas have been produced for record. The SG-DEPM agreed to revise the ageing of postovulatory follicles (POFs) in samples collected since 2005 and the DEPM approach used for the estimation of spawning biomass for data collected in 2010 and 2011. A revised estimation of anchovy biomass, by using 2010 data, was then performed and presented at the GFCM- SAC –SCSA Working Group on Stock Assessment on Small Pelagic Species (Croatia, November 2012).

The project continues to progress in the standardization of data collection and data analysis (statistical data collection, biological sampling, age determination, etc.). The AdriaMed Study Group on intercalibration of anchovy otolith reading (SG-OTH, Italy June 2012) was organized to review the the age reading criteria adopted for anchovy in the sub-region and proposed measures to improve quality and accuracy of the biological data collected. In addition as outcome of the procedure established, an otoliths exchange exercise for sardine (*Sardina piclhardus*) otoliths was initiated among the Adriatic research institutes. In addition the Project continues to improve national capacity at institutional level by organizing training activities according to requests formulated by the

participating countries; accordingly, 7 training activities have been carried out and/or supported. Moreover the Project in cooperation with the other FAO Mediterranean Project is seeking synergies on common activities.

The Project further supported the activity started in 2007 and designed to implement a monitoring system for the Montenegrin fishery sector. The monitoring activity is carried out in cooperation with the Institute of Marine Biology of Kotor and the Ministry of Agriculture Forestry and Water Management (Fisheries Directorate). The collection of biological data at the present represents the most important catch/effort survey in place in the country. Synergies were found with the "EC funded IPA Project on the sustainable development of the fisheries sector of Montenegro".

In consideration of the socio-economic relevance of small-scale fisheries and of their role in the exploitation of some shared stocks, the Project organized the AdriaMed Technical Meeting on Adriatic Sea Small-Scale Fisheries (Split, Croatia, 13-14 November 2012). The meeting reviewed the current knowledge and the status of small-scale fisheries in Adriatic countries, existing monitoring systems, available scientific and technical knowledge in each country, on-going programs focusing on small-scale fisheries. Needs and priorities were identified and the basis was established for cooperative future work either within AdriaMed or other contexts. The proposal to re-establish the Working Group on Small Scale Fisheries was formulated.

According to its mandate and the objective to provide technical advice for fisheries management decisions at national and sub-regional levels through joint analysis of common issues, joint technical meetings and activities, as well as by the indication provided by the FAO Independent External Evaluation of the Project (June 2012), the Project continued in its pilot approach through multilevel consultations (fisheries administration and research institutions) toward the support in the identification of ways and means to elaborate possible management options to be adopted in the Adriatic Sea. In the intersessional period the attention was mainly dedicated to the small pelagic fisheries and the Pomo/Jabuka fishing grounds. Accordingly, an ad-hoc meeting on the Jabuka/Pomo Pit was held at the FAO-HQ, Rome on July 2012 with representatives of Fisheries Administrations and Fisheries Research Institutions from Croatia and Italy. The main objective of the meeting was to facilitate the discussion on the feasibility of creating a protected zone in the Jabuka/Pomo Pit area and identify some possible steps to progress towards this direction. An ad hoc meeting on fisheries management plans in the North Adriatic Sea was organized and held at the FAO-HQ, Rome on January 2013. The meeting was attended by representatives of the Fisheries Administrations and Fisheries Research Institutions from Croatia, Italy and Slovenia and by the AdriaMed Project staff. The meeting aimed at facilitate the adoption of a set of common rules within the national management plans for the fisheries exploiting shared small pelagic fish in the North Adriatic Sea (GSA 17). Particular attention was paid to the technical aspects of purse seines used to exploit small pelagics in the GSA 17 and to the related European Council Regulation No 1967/2006. The meeting was considered informal and served to exchange information and opinions and agree in principle on a series of further steps towards the harmonization of the management of small pelagic fisheries resources in Northern and Central Adriatic.

The Project continued providing technical support to the countries. In particular, support was provided to the Directorate of Fisheries Policies of Albania to continue to collect data on production and consolidate the data on the aquaculture facilities in the country. This activity was in accordance with the recommendation GFCM/2009/33/4 (17-19 December 2008, Tirana, Albania), with the need to standardize the collection of production statistics data on aquaculture, and followed the request formulated by the Directorate itself. In addition, preliminary meetings with GFCM CAQ staff and the Director of the Institute of Marine Biology of Kotor (IBMK, Montenegro) were held in order to find synergies and avoid overlap in the pilot study that will be planned in Montenegro within the GFCM-CAQ-InDAM Project (Indicators for Sustainable Development of Aquaculture and Guidelines for their use in the Mediterranean). The pilot action will mainly aim at the production of sets of indicators and relative reference points and standards to guide evaluate and provide incentives towards the sustainable development of aquaculture.

The Project continued to provide technical support to the participating countries for the creation and updating of databases, web pages and national information systems as in past years. In particular, technical support to the Water and Fisheries Resources Directorate (WFRD) Ministry of Environment, Forestry and Water Administration of Albania is being provided on national fisheries statistics which was previously covered by the MedFisis Project (ended in July 2011). The Project is also continuing to improve and test the common database to store, manage and perform preliminary analysis of small pelagic data collected for stock assessment purposes in the Adriatic region. The technical team in charge of the software development fully involved researchers from all the institutes participating in the Project in the collection and management of data of small pelagics in the Adriatic Sea.

The updated version of ATrIS (version 2.1), the computerized system developed to manage and undertake preliminary analysis of the data sets from the trawl survey, is continuously updated and technical assistance to the to the participating institutions is being provided. ATrIS is now the common tool being used by more than 20 Mediterranean research institutes to manage trawl survey data (including in many cases MEDITS data). The Project initiated to upgrade the software in order to include the latest modification of the MEDITS protocol (adopted in Summer 2012).

The Project is in the process of restructuring the information included in the web portal (www.faoadriamed.org) according to new areas of interest to website users.

The Project pursued the activities carried out so far for the inclusion of Adriatic Scientific publications into the ASFA database, as well as supporting the collaboration centres created at the Institute of Marine Biology of Kotor (Montenegro) and the Institute of Oceanography and Fisheries (IOF) in Split, Croatia. A report summarizing the activities carried out and the records submitted to the ASFA publisher has been prepared and submitted to the ASFA Board Meeting (Ireland, 25-29 June 2012).

In order to strengthen international and regional cooperation the Project interacts closely with the FAO Regional Project MedSudMed. In addition, several meetings of coordination were held with the other regional projects, CopeMed II, and EastMed throughout the year (the lasts being on 19 February 2013) in order to consolidate and envisage common activities. In this respect the Project also participated to in the Coordination Committees of the other regional projects where synergies were identified. The cooperation with "MedSea Large Marine Ecosystem (MedSea-LME)" Project funded by the Global Environment Facility (GEF)" on topics of common interest, was also sought. A common leaflet describing the objectives of the FAO Mediterranean Projects was prepared and distributed in occasion of the 30th session of the Committee on Fisheries (COFI, Rome Italy 9-13 July 2012) and other international meetings. Cooperation was further sustained with the GFCM and the GFCM Subsidiary Bodies. Several informal meetings of coordination were held with the GFCM staff back to back GFCM events, in order to strengthen the cooperation and to find synergies. AdriaMed continued to provide direct support to the activities of the GFCM by providing scientific contributions for discussion and supporting the participation of 28 Adriatic experts in 9 GFCM meetings (both SAC and CAQ related) held in the intersessional period.

<u>MedSudMed</u> - "Assessment and Monitoring of the Fishery Resources and Ecosystems in the Straits of Sicily"

The project is financed by the Italian Ministry of Agriculture, Food and Forestry Policies (MiPAAF) and it is operative since April 2001. In 2011 an *ad hoc* contribution was provided to FAO by the Regione Siciliana (Italy) to carry out specific actions on crustacean fishery resources in the south-central Mediterranean in the framework of the Project activities. These funds are used to reinforce the effectiveness and the activities carried out in the framework of MedSudMed. The MedSudMed participating countries are Italy, Libya, Malta and Tunisia. In 2012 a co-funding from the European Commission (EC) Directorate for (DG-MARE) was initiated. The main goal of the Project is to support the scientific communities of the participating countries in the monitoring of fishery resources and their ecosystems (GSAs 12, 13, 14, 15, 16 and 21), thus contributing to the development of a

common view on the management of fisheries. In this framework, the Project promotes the scientific cooperation between participating countries and supports national capacity development. The activities carried out in 2012 followed the work plan approved by the 10th MedSudMed Coordination Committee held in Djerba (Tunisia 13-14 March 2012).

According to the ruling procedures of FAO, due to its total budget and the life span, the Project, was subject to a FAO independent evaluation as foreseen in the Project Document. The FAO Office of Evaluation, the FAO Fisheries Department and Project management agreed that the evaluation be conducted in 2012. A FAO Independent Evaluation Team was selected and initiated the evaluation on March 2012. The evaluation assessed the work carried out through the project and provided accountability to the participating member countries, to resource partners including the Italian MiPAAF, the Regione Siciliana, and FAO on the extent of Projects' results, including outputs, outcome and impact to date. Lessons learnt were drawn and recommendations were formulated for the potential future role and strategies of the Project, aiming at enabling all key stakeholders to take decisions regarding the utilization of Project results as well as on the design and implementation of similar projects in the future.

Following the communication of the Italian Donor, the Ministry of Agriculture Food and Forestry Policies (MiPAAF), of its readiness to continue the support to the MedSudMed Project, the Project activities were extended to June 2013. An outline of the main activities performed by the Project is provided hereunder.

The Project, as follow up of the MedSudMed inter-calibration exercise at sea for bottom trawl surveys (July 2011), organised a Study Group on the Joint Processing of Survey Data. The Study Group was attended by experts from all the research institutions participating in the Project, namely the Institute National des Sciences et Tachnologies de la Mer (INSTM, Tunisia), the Ministry for Resources and Rural Affairs (MRRA, Malta), the Marine Biology Research Centre of Tajura (MBRC, Libya) and the Istituto per l'Ambiente Marino Costiero-Consiglio Nazionale delle Ricerche of Mazara del Vallo (IAMC-CNR, Italy). During the meeting national experts: i) completed the processing of the data collected during the MedSudMed inter-calibration exercise at sea and estimated inter-calibration factors for *Parapenaeus longirostris* and *Merluccius merluccius*; ii) identified the best approach to standardise the survey data, for the years 2003 and 2008; iii) initiated a joint exercise to obtain abundance (biomass and density) indices per km² and length frequency structures for some species for each survey; iv) produced preliminary maps of nurseries and spawning grounds of *Merluccius merluccius* in the Project area; and v) provided a rough description of the state of the stock of *M. merluccius* using direct (fishery independent) methods..

In the view of enhancing the scientific networking and promoting the harmonising of protocols for experimental surveys at sea, MedSudMed organised an *ad hoc* meeting in Palermo between the Libyan and Italian National Focal Points involving also experts from the IAMC-CNR (Italy, 03 February 2013). During the meeting discussion was held on the protocol currently adopted in the GSA 16 for experimental bottom trawl survey, i.e. the MEDITS (international bottom trawl survey in the Mediterranean) protocol. The basic specifications and requirements related to the application of the MEDITS sampling scheme were discussed. The project, in cooperation with the FAO Fisheries Resources Use and Conservation Service (FIRF) also provided technical support to the initial steps for the allocation and mapping sampling stations according to the bathymetric stratification foreseen in the MEDITS protocol.

The MedSudMed Working Group on Demersal Fisheries Resources (WG-DEM) was organised (Malta September 2012). The Working Group focused on the appraisal of the state of selected demersal shared stocks and fisheries in the south-central Mediterranean Sea. Discussion was also held on the tools available for a bio-economic analysis of fisheries in the south-central Mediterranean Sea and on the identification of a case study to be developed with the support of the Project. The Working Group was also called to discuss and define a medium-long term work plan for possible joint activities to be carried out in the framework of the Project. The experts agreed to initiate a case study using both bio-economic models and empirical indicators on the fisheries targeting *P. longirostris*. The stock assessment completed during the WG on *Parapenaeus longirostris* and *Merluccius*

merluccius were presented and discussed during the GFCM-SAC Working Group on Stock Assessment of Demersal Species (Split, Croatia, 5-9 November 2012).

MedSudMed continued to support the identification of shared stocks of *Octopus vulgaris* in the south central-Mediterranean Sea. During the intersessional period the genetic comparison of *O. vulgaris* samples collected in the entire Project area was carried out. Collaboration with the University of Oviedo was established. All the samples collected were processed. Experts from the INSTM of La Goulette (Tunisia) were involved in this activity. The analysis of the results for the discrimination of population units was also initiated.

The Project supported the preparation of a review on some demersal crustacean species relevant for fisheries in the south-central Mediterranean Sea. According to the list of priority species identified by the MedSudMed countries, and taking into account the importance for fisheries in terms of economic values and total commercial catch, the following species were considered: *Palinurus elephas*, *Nephrops norvegicus*, *Penaeus keraturus*, *Metapenaeus monoceros*, *Aristaeomorpha foliacea* and *Parapenaeus longirsotris*. The structure of the MedSudMed Technical Document 15 "Synthesis of information on some target species in the MedSudMed Project area (central Mediterranean)" was used as template of the document.

The Project organised a Workshop on fisheries and appraisal of *Palinurus elephas* (4-5 December 2012, Palermo, Italy) in collaboration with CopeMed II. During the meeting national experts presented research and monitoring activities on *P. elephas* performed in recent years. The data and/or information currently available in each country on biology and fisheries of *P. elephas* were presented as well. Eventually, gaps and possible scientific activities to progress on the proper description of the stock, fisheries and management regimes for *P. elephas* in the projects area were discussed and agreed on. The outcomes of the meeting will be part of the background for the identification of possible harmonised strategies for *P. elephas* fisheries management in the central and western Mediterranean Sea

The Project continued to support the standardisation of surveys procedures in the south-central Mediterranean. An *ad hoc* meeting was organised by the Project on 31 May - 01 June 2012 in La Goulette, Tunisia. During the meeting the sampling scheme and the work plan for an inter-calibration exercise at sea on acoustic survey for small pelagic fish between the Tunisian (R/V Hannibal) and Italian (R/V Dallaporta) vessels was established. The Italian (IAMC-CNR Capo Granitola) and Tunisian (INSTM of LA Goulette) experts involved in acoustic surveys for the investigation of distribution and abundance of small pelagic fisheries resources participated to the meeting.

As for the previous years, the Project promoted the joint discussion on small pelagic fish in the Project area. Particular importance was given to enlarge and consolidate the group of researchers involved in studies on this group of species. In this view, the Working Group on small pelagic fisheries resources (WG-SP) was organised in Palermo (Italy, January-February 2013). During the meeting: i) the ongoing national and international programmes on small pelagic stocks were outlined; ii) the MedSudMed technical details of the inter-calibration exercise at sea for acoustic surveys and data processing were discussed; and iii) a tentative plan for the implementation of joint oceanographic and ichthyoplankton surveys at sea was agreed on. Progresses were made during the toward the definition of a medium- and long-term work plan for MedSudMed cooperative activities on small pelagic fish. During the meeting consideration was also given to the issues raised by the GFCM-SAC referring to small pelagics fishery stocks and those actions/activities which may contribute to SAC tasks

In the intersession period, the Project supported the joint processing of the ichthyoplankton samples and acoustic data collected during the MedSudMed surveys carried out in Libyan waters during Summer 2010. Mixed international teams of experts from the Istituto Ambiente Marino Costiero of Mazara del Vallo (IAMC-CNR, Italy), the Marine Biology Research Centre of Tajura (MBRC, Libya) and the Russian Federal Research Institute of Fisheries and Oceanography (VNIRO, Russia) participated to the activities. The ichtyoplankton samples processing was held on May 2012 at the IAMC-CNR of Capo Granitola (Italy). The processing and elaboration of the acoustic data was held in three sessions at the IAMC-CNR of Capo Granitola (i.e. May 2012 and February 2013) and at the

MBRC (i.e. February-March 2013). Overall, a description of the oceanographic characteristics, the composition and spatial distribution of ichtyoplankton, estimates of the biomass of some small pelagic fishes were produced for the area covered by the survey.

The discrimination among stock units of *Coryphaena hippurus* in the Mediterranen region and the identification of possible connections among them are probably two of the main factors to be considered in the management of the fisheries exploiting this species. However, information on this aspect is still poor as clearly emerged emerged during the MedSudMed and CopeMed II workshop on Fisheries and appraisal of *C. hippurus* in the south-central and western Mediterranean Sea (Italy, July 2011). The contribute to overcome this limit, the Project, in collaboration with AdriaMed, CopeMed II and EastMed, coordinated the collection of samples of *C. hippurus* in the entire Mediterranean region for genetic analysis. The first part of the analysis (extraction and amplification of DNA) was completed at the University of Palermo in March nd April 2013. Advantage was taken from this activity to organise an on-the-job training for experts of the INSTM of Monastir (Tunisia) and the MBRC of Tajura (Libya)

An *ad hoc* meeting on closed seasons for fisheries currently occurring at national level in the south-central and western Mediterranean was organised by the Project (Tunisia, February 2012). The objective of the meeting was to discuss the case study of the Gulf of Gabès with a view to the future harmonization of closed seasons for fisheries in the MedSudMed area. During the intersession period, the Project supported the preparation of a proposal document including: an overview of: i) the existing information on the bottom trawl fisheries operating in the Gulf of Gabès; ii) an overview of the state of the stock of the main fisheries target species in the area as estimated by national research institution; iii) an outline of the national strategies adopted to manage such fisheries; iv) a technical proposal for the harmonisation of the closed season for trawl fisheries operating in the Gulf of Gabès currently in place at national level.

The MedSudMed portal (www.faomedsudmed.org) has been further developed and updated. The adaptation of the website contents and structure in Arabic and Italian continued. The section describing the main activities carried out in the framework of the Project is under renewal. A specific section including the reports of meeting jointly organised with CopeMed II is being developed.

The list of Technical Documents available on the Project web site has been updated and more than 15 MedSudMed Technical Documents are now available as .pdf files.

A common leaflet describing the objectives of the FAO Mediterranean Projects, including AdriaMed, was prepared and distributed in occasion of the 30th session of the Committee on Fisheries (COFI, Rome Italy 9-13 July 2012) and other international meetings.

During the intersessional period, considerable effort was dedicated to the organisation/support of training courses, mainly upon request of the participating institutes. Some of the training courses allowed for joint processing of survey data and aimed not only at enhancing capacity development but also at producing scientific information directly related to the Project activities, accordingly 9 training activities have been carried out and/or supported.

As indicated in the last meetings of the Coordination Committee and also by the FAO Independent Evaluation, the Project strengthened the liaison with the Donors (MiPAAF, Regione Siciliana and EU-DG-MARE) and intensified the meeting of coordination with them. In order to strengthen international and regional cooperation the Project interacts closely with the FAO Regional Projects AdriaMed, CopeMed II, EastMed and MedSea Large Marine Ecosystem (MedSea-LME)" Project. In the framework of FAO decentralisation MedSudMed is reinforcing collaboration with the subregional (SNE) and regional (RNE) FAO offices in the north African countries by liaising periodically, by supporting joint initiatives on fisheries and sharing information on the activities and results of the Project. Cooperation was further sustained with the GFCM and the GFCM Subsidiary Bodies. Several informal meetings of coordination were held with the GFCM staff back to back GFCM events, in order to strengthen the cooperation and to find synergies. MedSudMed continued to provide direct support to the activities of the GFCM by providing scientific contributions for discussion and supporting the participation of experts in 8 GFCM meetings held in the intersessional period.

<u>CopeMed II "Coordination to Support Fisheries Management in the Western and Central Mediterranean, phase 2"</u>

This sub-regional project coordinated by FAO-FIRF with offices in Málaga (Spain) started in February 2008 and is funded by DG Mare (UE) and the Spanish Government (Secretaria del Mar and AECID). A financial contribution has been requested to the EU for activities until January 2014.

The overall objective of the project is to maintain the sustainability of the marine resources in the Central and Western Mediterranean and their ecosystems, taking into account environmental, biological, economical, social and institutional issues, and promoting scientific cooperation among the regions. Countries involved are Algeria, Libya, Morocco, Tunisia, Malta, Italy, France and Spain. FAO-FI, GFCM, and the two donors are also members of the Coordination Committee.

The 6th meeting of the Coordination Committee (Malaga, March 2013) reiterated the concerned by the financial problems of the project and expressed wishes for the extension of CopeMed II with the support of the two traditional donors in solving the budgetary problems. The workplan of CopeMed II was presented and it was adopted.

According to the guidance provided by the Coordination Committee CopeMed II conducted activities during 2012-March 2013 on the following project' components:

Strengthening national capacity in the field of fisheries statistics

In coordination with the FAO Subregional Office in Tunis (FAO SRNE), CopeMed II maintained contact and availability to provided support to implement the SSPAT (Sytème de Suivi pour la Pêche Artisanale en Tunisie), following the evaluation of the pilot phase.

The project supported national experts from research institutes and fisheries administrations to participate in international meetings on statistical matters and in particular at the meetings of the GFCM.

To prepare the statistical data necessary for analysis of shared stocks, including socio-economic data, CopeMed organized and financed a meeting of the working group (WG) of small pelagic (sardine and anchovy) in Nador and a WG on demersal (white shrimp and hake) held at the project headquarters in Malaga.

In the framework of the CopeMed II Subregional WG on Small pelagic, the project supported two consultations (Morocco and Algeria) producing documents on the national data collection and responsible institutions for socio-economic aspects related with the exploitation of small pelagic fishery resources in the Alboran Sea. Data and Results obtained were included in the CopeMed Technical Document No 30.

CopeMed participated in two meeting of the GFCM related with the implementation of the FWP and data collection: the *Preparatory meeting under the first phase of the GFCM Framework Programme* (GFCM-FWP) in Rome 6-7 December 2012 and the *Workshop on data collection at the Mediterranean Sea* held in Frascati (Italy), 25-27 march 2013. To this last CopeMed was involved to support the organisation of the Workshop in Malaga (Spain) finally moved to Italy.

Strengthening fisheries research

Interactions with the participating members were further strengthened and missions were organised to the research institutes/administrations in the countries. The Project supported experts from the national fishery research Institutions in international training courses, workshop and joint research activities, including on the job training. CopeMed organised and supported subregional joint meetings on shared stocks of demersal and small pelagic, including stocks assessment and training within the CopeMed region and facilitate the organisation of WG jointly with MedSudMed in the central region.

The project provided support to the GFCM and its WGs and to the national fisheries research institutes and experts facilitating the preparation of documents, data providing and shared stock assessments. Three assessment forms and four related documents prepared by CopeMed and the

countries were sent to the GFCM and presented during the SCSA WGs on demersal and small pelagic in Split (Croatia, 5-9 November 2012).

To facilitate information and data providing for the experts to the different annual meeting of the CopeMed Subregional WGs and updating the common data bases for joint stocks assessment, CopeMed prepared and the Coordination Committee (March 2013) adopted that CopeMed II organise the Subregional CopeMed Networks. The goal of the two Networks on small pelagic and on demersal fisheries is to implement a common approach and to set different options for the management of shared demersal and small pelagic stocks in the CopeMed II area as a previous step for taking decisions at the GFCM arena.

Activities on small pelagic stocks

The project organised the annual meeting of the Subregional Working Group on Small Pelagic Fisheries Resources in the Alboran Sea (2-4 October 2012, INRH Nador, Morocco), GSAs 01, 02, 03 and 04. This meeting allows producing a joint assessment form for *Sardina pilchardus* stock, presented at the Working group of the GFCM SCSA-SAC, a related document on "Advances in preparing a joint assessment of *Engraulis encrasicolus* stock, a document on anchovy from the Alboran Sea and a report of the meeting (CopeMed Technical Document N° 30).

For the first time, a compilation of socioeconomic information of small pelagic fishery through the indicators provided by the GFCM was pursued by the three countries (Algeria, Morocco and Spain) and tabulated. The results of this socio-economic activity were presented by the Project at the SCESS (Roma, 18-20 February 2013).

Activities on demersal stocks

The project organised the Study Group Meeting on *Parapenaeus longirostris* and *Merluccius merluccius* Stocks (September 2012 Málaga, Spain) in the GSAs 01, 02, 03 and 04. This meeting allows to produce a preliminary joint assessment of *Parapenaeus longirostris* stock and an assessment form presented at the (SCSA-SAC, GFCM), a related document on "Advances in preparing a joint assessment of European hake, *Merluccius merluccius*, and a report of the meeting (CopeMed Technical Document N° 29).

CopeMed organized the second meeting of the Working Group on *Pagellus bogaraveo* shared stocks in the Strait of Gibraltar between Spain and Morocco (Tangier, 19-21 March 2012), GSAs 01 and 03, and updated the assessment conducted in 2010. This meeting allows to produce a preliminary joint assessment of *Pagellus bogaraveo* stock which was presented at the GFCM SCSA-SAC, and elaborate a report of the meeting (CopeMed Technical Document N° 26).

CopeMed co-organized with MedSudMed a workshop on Fisheries and appraisal of *Palinurus elephas* in the south-central and western Mediterranean Sea. Palermo (Italy), 4-5 December 2012. This meeting allows to update and share the last research achievements and fishery information and to formulate recommendations to follow up the fisheries and improve the biological and fisheries knowledge. CopeMed prepared an Occasional Paper (OP N° 18) to support the meeting.

Capacity building

CopeMed contributes to the standardisation of common methodologies in the Mediterranean area in different ways such as organising joint WGs, supporting on the job training and international courses, organising workshops and courses. During the past year the project supported:

- On the job training of an expert in the EU Pan-Mediterranean Pelagic survey (MEDIAS) and the participation of three experts (Algeria, Morocco, Tunisia) in the annual EU MEDIAS coordination meeting (March 2012).
- In collaboration with CNRDPA and INSTM, the project is supporting actions on the implementation of the 40 mm square mesh size bottom-trawl experimental survey and selectivity effects on biological and economic aspects. A meeting with the CNRDPA experts and the fishing vessel fishermen was done in Bouzedjar (Oran, Algeria) at the beginning of the survey (February 2013).

- CopeMed staff is participating with the project GEF_Med LME and MedSudMed on the implementation of different measures/methodologies to standardize the analysis of discards and by-catch in Tunisia, and to incorporate artisanal fishermen in the monitoring and management of a MPA in Morocco.
- CopeMed supported the on-the-job of one Tunisian expert (INSTM) on growth parameters and otolith reading of juveniles of hake (*Merluccius merluccius*) at the IEO (Spain), and the on-the-job in Spain (IEO, Cádiz) for a Moroccan expert (INRH, Tangier) on the growth parameters and fishing sampling methodology for the Blackspot seabream, *P. bogaraveo*.
- CopeMed supported the participation of an Algerian expert (CNRDPA) to the GFCM training workshop on growth parameters for elasmobranchs (Antalya, Turkey).
- In coordination with the GFCM Secretariat, and under the direction of the GFCM TECHNOMED network, CopeMed II organized, a Workshop on Mediterranean Gears, Fishing Technology and Selectivity. It was locally supported by INRH (Morocco) and the participants from the entire region were supported by the others FAO Mediterranean projects. It was attended by 21 participants from 9 Mediterranean countries. A report was prepared for the GFCM.
- CopeMed II organized a training course (Tunis, Tunisia, December 2012) with the participation of the FAO-FIRF Service (Fisheries and Aquaculture Department) and the other FAO-projects, MedSudMed, AdriaMed and EastMed, on Introduction to Fish Stock Assessment models. It was attended by 22 experts from 11 Mediterranean countries.

Summarising, in 2012 CopeMed II financed the participation of 58 experts and consultants from Algeria, France, Italy, Libya, Morocco, Tunisia and Spain in different scientific activities, according requests from the national focal points, the FAO projects and the GFCM, in different activities (mainly on the assessment of shared stocks).

Strengthening institutional capacity at national and sub-regional level

CopeMed II continued working in 2012 in various fisheries and marine issues with the fisheries administrations of the project's countries and the productive and research sectors, with other FAO projects in the Mediterranean, the GFCM and other regional representatives.

During the reporting period, CopeMed held formal meetings visiting the countries and the higher authorities for fishery in Morocco, Spain and Tunisia with different objectives and to reinforce the collaboration. More informal meetings were organised during international events (GFCM meeting and GFCM Task Force meeting) with representatives from Algeria and Libya, discussing the activities adopted by the CC and the main issues of the countries needing the support of CopeMed. A meeting was held in Alger (Algeria, February 2013) and in Morocco (Agadir, February 2013) with the Ministries for Fisheries and corresponding General Directors to inform on the advances of the project in the countries.

The project organised meetings with the General Directors of the national fisheries and marine research institutes from Algeria (CNRDPA), Tunisia (INSTM), Morocco (INRH) and Spain (IEO) at its offices and maintained a meeting with the new Director General of the MBRC (Libya) and responsible for fisheries, the Marine Wealth Authority during meeting in Italy, Spain and Morocco. CopeMed, jointly with MedSudMed and the GFCM and the FAO-SNE Office for the region, supported the organisation of the Maghrebian Network of Research Institutes.

CopeMed contributed to keeping fisheries administrations, main fisher's organisations and other stakeholders informed on fisheries and marine-related issues by distributing information generated by the project (meeting agendas and documents, technical and occasional documents), information from others sources (courses, meeting, documents, jobs opportunities) It is also channelling communication among different regional organizations and disseminating fisheries documents and information on events and activities of interest in the region through the project's web page.

Strengthening regional cooperation

In order to strengthen international and regional cooperation beyond its own activities (that all target reinforcement of regional cooperation) CopeMed II led or participated in a number of initiatives organised by the Mediterranean projects as a whole. These are described in greater detail in the section on Common activities and overall coordination.

CopeMed organised the sixth meeting of the Coordination Committee (Malaga, Spain, 7-8 March 2013). The revision of the activities carried out during the annual period and a new workplan for the period April 2013- January 2014 was discussed and adopted. Representative from all the Members countries and the donor Spain were presented. The participation of the Coordinators of the other FAO Mediterranean projects was important for improving coordination of activities and reinforcing synergies. The GFCM Secretariat also proposed issues that were discussed by the Committee, including options to better approach the GFCM FWG and the activities by the FAO sub-regional projects.

The projects also prepared, edited and published technical and informative documents on different aspects of fisheries in the project area, aiming at reinforcing common standards in the sub-region and to disseminate general and scientific information. Documents produced in 2012 are available in the project's Web page (www.faocopemed.org).

All the FAO-led Fisheries Management Support projects in the Mediterranean are tightly coordinated and develop their activities in a joint way, among them and with the GFCM, whenever this can bring added benefits to the participating countries and the GFCM.

Following the decisions taken at its last Coordination Committee meeting, CopeMed II has also, in cooperation with FAO-FIRF, reinforced the activities of coordination and contacts with the current donors of the project, the European Commission and the Spanish Government. It also explored new options for support to its activities. Since its publication, the Project's website is continually updated. The FAO Mediterranean projects harmonized the information and appearance of the different websites, to present a unified image to the visitor.

Coordination with the donors

Following the decisions taken at its last Coordination Committee meeting, CopeMed II, in cooperation with FAO-FIRF service, reinforced the coordination and contacts with the donors of the project, the European Commission and the Spanish Government.

European Commission: Directorate general for maritime affairs and fisheries

The annual Coordination meeting FAO-FIRF with DG Mare was held in Brussels, at the Commission headquarters (25 June 2012. Brussels, Belgium). Two meetings and a Conference of the Marine and Inland Fisheries Service of the FAO Fisheries Department represented by the Coordinator Ms. Gabriela Bianchi and the staff were held at DG Mare.

Coordination meeting in Rome (FAO HQ, 9-10 January 2013). The meeting included the progress and results achieved during the reporting period (2012), the budgetary problems of the FAO projects in the Mediterranean and budgetary status of the ongoing EC funded projects in the Mediterranean and the agreement to implement the four projects as of 1st April 2013.

Spain: Secretaría General de Pesca

Close communication with representatives of the government of Spain, in particular with the General Secretariat of Maritime Fisheries (Ministry of Agriculture, Food and Environment) is maintained. Thanks to additional funding secured by the Spanish donor in 2012 CopeMed II activities were extended until April 2013.

Following the request of the Fisheries SG a coordination meeting was organised on February 4, 2013 in Madrid.

The SG Pesca sent a letter in February 2013 to FAO supporting the continuity of the project, underlining the difficulties in contributing during 2013 as in previous years and the intention in continue supporting if the economic circumstances are improved.

CopeMed II representing FAO in different Forums

Fourth Meeting of the Advisory Committee of the Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region (SAP BIO) and Third Meeting of National Correspondents of the Convention for the Protection of the Marine and Mediterranean coastal region (Barcelona Convention), 4-6 July 2012. Malaga, Spain.

Meeting with IUCN office representatives in Malaga (Mediterranean Office) and Gland Offices on issues related with regional cooperation and fisheries, including artisanal fisheries cooperation.

Meeting of the Commission of Professional Fishers Organisation between Morocco and Spain (Agadir, Morocco, 13 February 2013). The project was invited by the two national organization and the Fisheries Chamber from Tanger (Morocco).

Salon Halieutis in Agadir (Morocco): Under invitation of the Chair of the Moroccan Fisheries and Aquaculture Federation the coordinator visited the Halieutis Fair, a specialized exhibition on fisheries and fisheries products, having meeting with the Moroccan and Spanish authorities on fisheries management.

<u>EastMed - "Scientific and Institutional Cooperation to Support Responsible Fisheries in</u> the Eastern Mediterranean"

The Project is financed by the Ministry of Foreign Affairs and Ministry of Rural Development and Food of Greece, the Italian Ministry of Agriculture, Food and Forestry Policies and by the European Community. It is operative since September 2009 and will run for five years. The beneficiary countries are those with waters included in the GFCM Geographical Sub-Areas (GSAs) 19-20 and 22-28. The project's longer-term development objective is to contribute to the sustainable management of marine fisheries in the Eastern Mediterranean, and thereby at supporting national economies and protecting the livelihoods of those involved in the fisheries sector. Its immediate objective is to support and improve the capacity of national fishery departments to increase their scientific and technical information base for fisheries management and to develop coordinated and participative fisheries management plans in the Eastern Mediterranean sub-region.

The activities carried out during the intersessional period followed the project document, as well as the workplan for 2012-13 as approved by the 2nd and the 3rd Meeting of the EastMed Coordination Committee in Antalya, Turkey (5-6 April 2011) and Bari, Italy (19-20 April 2012) respectively, which included the continuation of research programmes, workshops, training programmes and promotion of regional cooperation as well as the technical assistance given to the countries and the cooperation of the Project with relevant institutions, primarily the GFCM, through the SAC and its Sub-Committees.

During the SAC intersessional period a number of activities, shown below, were carried out.

Institutional Strengthening

In GAFRD-EGYPT a web-supported computer system was set up in February 2012 for the storage and analysis of catch/effort data collected in outposts during the pilot survey, which is supported by the EastMed Project. A workshop was organized at which the current data collection methods would have to be associated with computerization aspects. The workshop reviewed the initial boat/gear set-up and revised the lists according to GFCM Task 1 standards. The new decentralized and web-supported system was installed on five PCs from Alexandria, Port-Said, Damiette, Arish and Kafr-El-Sheikh, while a sixth component was installed on a PC at the GAFRD office in Cairo. The purchase of the six PCs was supported by the project.

After the appraisal of the current licensing system in Lebanon which is handled manually and the proposal to develop a web based system, a prototype system for the analysis of fleet data was demonstrated to the Ministry of Agriculture (MOA). The system was followed by recommendations on how the licensing system should have to be developed including its utility in future catch and effort assessment surveys which were also provided to the MOA. A bid was set up and a private company in April 2012 undertook the development of the software including the training of the MOA staff. The software was delivered by the Ministry of Agriculture (MoA) in December 2012 and was tested for

bags. The private company will also handle the training of the MoA staff. The development of the software is currently in its final stages, and it is being tested by the Lebanese Fisheries department.

During the 3rd Coordination Committee (Bari, Italy 19-20 April 2012) it has been approved to develop software for the application for the socio-economic data in Lebanon. During the intersessional period contacts have been made with Institutes/scientists in order to optimize solutions in developing the software. After a long period search, a relevant consultant was identified, who in collaboration with the socio economist of the project will work in developing the software. The application although requested to be conducted in Lebanon, will be developed for the project Area so that it can be used by other participating countries.

The legal frameworks in most of the countries in the EastMed area are very old and cover a limited number of fishery issues. Laws and regulations for fisheries need to be modernized to take the ecosystem requirements more clearly into account. They should clarify rights, responsibilities and liability. Fisheries and environmental legislation need to be harmonized. National fisheries authorities need to be strengthened. Their mandate should be redefined and expanded to cover the ecosystem management. Links with the research capacity should be strengthened where appropriate. Their "litigation power" should be increased to improve their effectiveness. Thus, a review of the national and international legal framework in the project area countries is under process, which in close collaboration with the GFCM will be eventually extended in the whole region. A data base of fisheries legislations aiming in a continuous update and future harmonization will be also developed.

Apart from the activities aiming to support directly the fisheries departments, a request was received by Lebanon to study the feasibility for a new fishing vessel design that would improve the safety conditions of the vessels at sea and the possibility to fish in new fishing grounds in waters beyond the 6 nautical miles. The study was conducted during the intercessional period, in that a review of the existing fishing vessels, particularly their construction and maintenance facilities was made and all the technical and economic information necessary to prepare a preliminary proposal for new design and material of small scale fishing vessels was gathered. In close collaboration and consultation with FAO-FIRO, a report will be produced which will include the status of the fishing vessels as well as a preliminary proposal for a new small scale fishing vessel design and material. As a follow up of the feasibility study, vessel project/s will be developed on a later stage.

Basic equipment which is used to undertake fisheries control and inspection was supplied to Egypt and Lebanon. The equipment consisted of measuring tapes, which can be used to measure lengths of fish for minimum size regulations, lengths of nets and large mesh sizes, and vernier calipers which can be used to measure lengths of crustaceans and bivalve molluscs for minimum landing size regulations and for mesh and hook sizes of nets and hooks respectively. A total of 35 measuring tapes and 35 vernier calipers were supplied to Egypt, 10 of each to Gaza Strip and 12 of each to Lebanon.

Staff Training and Development

Within the framework of the project "Assistance to the artisanal fishery in the port of Naqoura" financed by the Italian Cooperation, the National centre for Scientific Research (CNRS) is carrying out a series of activities in order to establish a pilot testing unit for the use of new fishing techniques in Lebanon. The project is providing technical assistance to build the capacity of the staff of CNRS in terms of data collection and analysis and train the fishers on the correct use of new fishing techniques. Two missions were conducted by the support of the project, in March and May 2012 during which experimental use of alternative gears, such as monofilament gillnets targeting hake and Spanish tarps targeting shrimps, was tested.

During the 2nd co-ordination committee of the EastMed project which was held in Antalya, Turkey from the 5-6th April 2011, the Egyptian and Lebanese delegations highlighted the lack of fisheries control and enforcement in their respective countries. The delegations had proposed the conduction of a training course in order to increase the capacity of the countries to undertake fisheries inspection. Thus, a seminar on control, inspection and good hygienic procedures was conducted in Egypt and Lebanon in March and April respectively. In Egypt the course was conducted in 5 separate cities

including Cairo, Alexandria, Kafr el Sheik, Damietta and Port Said so that several stakeholders could benefit from the course, which actually was delivered to around 300 people in total. Ten participants from Gaza Strip also attended the seminar conducted in Alexandria. The seminar in Lebanon was conducted in Beirut. It consisted in presentations on the utility of fisheries inspection in safeguarding the sustainability of the fisheries resources and to secure the safety of fisheries products. The seminar was intended to upgrade the knowledge and skills of the fish inspectors in the countries and strengthen their capacity. At the same time it was intended to inform other stakeholders (e.g. fishers, scientists) about fisheries inspection procedures. The acitvity was carried out in collaboration with GFCM.

Under the framework of the fisheries economic surveys, training course were conducted in March 2012 in Lebanon, in September 2012 in Egypt, in January 2012 in Turkey and in February 2012 in GSWB. The socio-economic consultant of the project was responsible of the courses, which included lectures and practical work experience in the field with interviews with fishermen. The aim of the training courses were to introduce the general scheme and the goals of the data collection survey, to provide the definition of the variables, to introduce the methodologies to validate the questionnaire and describe the approach that should be followed by the data collectors to interview the fishermen.

The project supported training on catch and effort data collection including biological sampling in Turkey. The project staff travelled to Antalya and Demre, Turkey in May, July 2012 and January 2013. During the mission in May the technical and logistical requirements in the implementation of a data collection system were described including basic theory with practical applications in the collection of catch and effort data. An imaginary fleet of fishing vessels from the fleet register of Antalya bay was used to prepare the sampling design, including the stratification scheme or fleet segments, population, sample size and vessels to be sampled. The next mission which was carried out in July 2012 was done to conduct a training course on catch, effort and biological sampling as part of the pilot study. The course was conducted over five days, with lectures, practical exercises, work in the field and in the laboratory. The course covered presentations on fishing gears and target species with practical experience in the field and in the laboratory. In January 2013 another mission was organised to review the catch, effort and biological data. Under the framework on the pilot study on data collection, Turkish colleagues accompanied by the project staff visited the landing porst in Fiumicino and in Ancona (Italy), to meet the data collector in field and get experience on the practical aspects in the data collection process. They also visited the Institute for Economic Research in Fishery and Aquaculture (IREPA) in Salerno and the Centre for National Research (CNR) in Ancona, where they were experienced in the sampling methodology that is used in Italy, together with the administrative and logistical arrangements involved in the data collection program.

The Project supported the participation of 9 experts from countries of the project area at the Workshop on Selectivity which was organized through the collaboration of CopeMed and GFCM (Tangier, Morocco, Nov 2012).

Under the pilot survey on implementation of the 40 mm square mesh size on the trawl codend, which will be carried out in the next period in Egypt and will be supported by the EastMed project, one mission was conducted in order to contact local technologists, net makers, fishing vessels and skippers for formulating objectives and defining the experimental conditions.

The Project supported 6 experts from the countries of the project area to participate at the training course on stock assessment organized by CopeMed (Salambo, Tunis, Dec 2012).

As agreed during the 3rd Coordination Committee meeting, a LoA had to be prepared between FAO and the University of Balamand, under which the University is responsible for the training of the staff in the Ministry, which will conduct the data collection on catch and effort. During the training course, time will be also allotted for the description of the most important commercial species and fishing gears used. That LoA was signed in December 2012, while the training will start in 2013.

A training course was carried out in the island of Kalymnos (Greece) in October 2012 to 22 fishermen's wives in fish products processing. The goal was to make use of low value fish such tuna like species and involve fishermen's wives to add value in the products in order to improve the

welfare not only of the family but also the community. The first two days were covered by theoretical lectures related with 1) fishes conservation on ice and freezing; 2) canning, marinating, drying, smoking, salting and preparing surimi products; 3) quality control based on chemical, microbiological and organoleptic criteria; 4) traditional and new techniques on packaging and canning and 5) marketing of the fishes including EC regulations. The other three days, the trainees moved to the field where they were trained in different ways on fish process. They were experienced in sterilizing, drying, salting and smoking techniques. They processed Thunnus alalunga which is caught in big quantities by the local fishermen, while they used only local ingredients. Consultants were used for both theoretical and practical lessons that also covered marketing issues. The activity was very welcome by the local community and became public through the local media

During the 3rd Coordination Committee Meeting, it was agreed to support Egypt in exploring the possibility to assess the clam resources and then assist the country in developing this fishery, both in terms of management at sea, value added of the product and marketing. The initiative should be a joint activity between GAFRD, fishermen co-operatives, scientific institutions (e.g. NIOF) and FAO – EastMed. In February 2013, the first trials were conducted in order to test the fishing vessel, the fishing gear and train the fishermen in the appropriate use of the gear. Furthermore some preliminary samples were collected during this trial, and data on biological characteristics, microbiological and heavy metal analysis were conducted on the target species i.e. Chamelea gallina (Venus clam or "Vongola" in Italian).

During the 2nd Coordination Committee Meeting (Antaly, Turkey, 5-6 Apr 2011) it was agreed to prepare for the work on the field, plastic cards with the most commercial species in the Eastern Mediterranean region. The material was collected and reflected in cards with species figures in color accompanied by the scientific name and the common name in English and Arabic or Turkish. The plastic cards were prepared and circulated to the countries concerned.

From the 27th of January to 8th of February 2013 a mission was organised to provide technical support to the fisheries administration and to set-up a detailed work plan for data collection in GSWB. The technical part of the mission involved presentations and technical discussions that took the form of a workshop/training course for the national experts and staff. This activity was followed by the preparation of an implementation plan for a pilot study. During the mission several meetings were held with the FAO offices in Jerusalem, and Gaza Strip and the fisheries administration in West Bank and Gaza Strip. The mission focused on the current fisheries monitoring procedures of the department by first looking in detail at the catch and effort system. Since no biological and socio-economic data collection activities exist, the project drew up a workplan for the implementation of a pilot study on data collection. In this respect several lectures on basic principles of data collection and fisheries biology, which also included field visits to landing ports, interviews with the fishermen and laboratory exercises were conducted. The scientists were given several material in order to assist them in data collection. The material included, among others, the FAO field identification guides, and a protocol for sampling. The experts stressed that they would continuously provide assistance when deemed necessary, while training will be provided either locally or in regional meetings in the future.

A Seminar on the Utility of Data in Fisheries Management was held the support of the project from 7 to 9 January 2013 in Athens, Greece. It was attended by nineteen participants from Cyprus, Egypt, Gaza Strip & West Bank, Greece, Italy, Turkey, Lebanon and Tunisia. It was targeted at managers and was designed to illustrate the use of scientific information, point out the importance of a proper data collection system and introduce the various tools that can be used in the decision making process. In particular a description of the basic models used for stock assessment was presented as well as case studies from the Mediterranean. The participating countries expressed their gratitude to the Project's staff as well as their interest and willingness to hold further seminars relating to other relevant aspects of management issues in the future.

Under the framework of the selectivity trials to be conducted in Egypt regarding the application of the 40 mm mesh size on the trawl codend, a request has been made to the EastMed project to support a seminar to fishermen on fishing technology. This seminar was carried out in two places in Alexandria from 23-24 February and in Ras El Bar from 25-26 February. The Project Coordinator

travelled to both places for accompanying the International Consultant and providing any assistance deemed as necessary. During the seminars, general knowledge and practices to improve Egyptian fishing gears were given. The first day the lectures focused on trawling technology, which is the main gear in the country, while the second the lectures focused on purse seiners and static gears. The lectures aimed in understanding terminology, gear construction and uses.

During the implementation of the pilot survey on data collection in Egypt and particularly the biological sampling, it was noted that the collectors had difficulties to recognize the species of shrimps mainly when found in small sizes, such as *Metapenaeus stebbingi*, *Metapenaeus monoceros*, *Metapenaeus stebbingi*, *Marsupenaeus japonicus*, *Penaeus kerathurus*, *Penaeus latisulcatus*, *Penaeus semisulcatus*, *Trachypenaeus curvirostris*, which apparently leaded in sampling bias. Thus it was requested from the Project to support a seminar on shrimps identification. The Project Coordinator travelled to Alexandria to support the implementation of the seminar, which was carried out from 23-24 February 2013, during which twenty collectors were trained. Theoretical lectures on the first day were followed by practical exercises after purchasing a sample of shrimps.

Data Collection and Organization of Data

Under the framework of the fisheries-dependent data collection pilot survey in Egypt, the project supports the collection of biological data for one year period (January 2012 to December 2012). For this purpose a LoA was signed with GAFRD. Catch and effort data are collected since 2011. In order the project staff have a follow up of the progress in collecting the biological data together with their process, mission were conducted in February, September and December 2012. During the mission of February, the outposts of the survey were visited and discussions were developed with the collectors aiming in providing technical support. In the mission of December 2012, the project staff examined the data analysis, identified gaps and recommended improvements on biological sampling upon which will be based the preparation of the 2nd LoA, under which the continuation of the biological sampling will be supported.

Under the framework of the running pilot survey on fisheries dependent data collection in Egypt, a data collection protocol was prepared in 2011 in English. During the intersessional period, the protocol was translated in Arabic and circulated in all the Arabic countries which participate in the project.

After the training course conducted by the Project staff in Antalya Bay, Turkey (July 2012) on catch, effort and biological data collection, a pilot survey on data collection was started in September 2012, which will run for one year. After 4 months of data collection, a mission was organised to review the progress of the data collection, answer to any problems the data collectors might have and to conduct some data analysis for checking the quality of the data.

During the third co-ordination meeting of the EastMed project held in Bari, Italy, from the 19-20th of April 2012, the countries proposed to hold a Working group on deep water biological resources in the Eastern Mediterranean. This Working Group took place in Athens, Greece from 12-15 June 2012. The objectives of the meeting was to discuss, exchange ideas and collaborate in order to improve the knowledge on deep-water resources, to identify gaps in data, assessment and management and to assist in the establishment of a management regime for these resources in the Eastern Mediterranean. The participants recognised the importance of the occurrence of shared stocks in deep waters, which are exploited by several countries. However the group highlighted the lack of information on basic data such as catch and effort, from the fleets exploiting the demersal resources. In this respect the group agreed to firstly start collecting some basic data in the region, and use a questionnaire by interviewing fishers on their fishing activity in deep waters and the respective catches.

After the training courses on fisheries data collection a workplan on a pilot study on data collection was discussed with the colleagues in Gaza. The pilot study included the refinement of the catch and effort system, the collection of biological parameters for four species which include three small pelagic species namely *Sardinella aurita*, *Scomber japonicus*, *Alepes djedaba*, and one demersal species, *Upeneus mollucensis*; and the collection of socio-economic parameters. The data collection will probably start in March-April 2013 and after 6 months of data collection, a mission would be organised probably in October/November to review the progress of data collection, answer to any problems that the data collectors might have and to conduct some data analysis to check the quality of the data

Increased Participation and Cooperation

A donor meeting was held at FAO HQ in Rome, Italy on the 20th of March 2012. The purpose of the meeting was to update the three resource partners on the progress of the project and highlight the important role the project is playing in supporting the development of regionally consistent fisheries management plans among the Eastern Mediterranean countries through the monitoring of commercial fisheries and the development of fisheries research and management capacities. Based on the financial situation of the project, an effort was done to identify appropriate solutions and agree on proposals to facilitate its implementation.

Aiming in a better visibility of the project, a meeting with representatives of administration from Fisheries Departments and Ministry of Foreign Affairs, representatives of the scientific community and fishermen cooperatives was held in Athens on the 22nd of March 2012. The objectives of the meeting was to present the project, its structure and scope and finally to discuss on the activities and significant achievements. During the meeting the importance of the Project for Greece as both donor and beneficiary country was highlighted as well as the need for support by the Greek government. The participants acknowledged the significant role of such meetings, which help to coordinate their actions and exchange knowledge and information on the issues of their interest and they asked to repeat those meetings at least once a year.

The 3rd Coordination Committee Meeting of the EastMed project was held in Bari, Italy from 19-20 April 2012. The aim of the meeting was to present and review the activities during the 2nd year of the project, the proposals of the countries' delegates to be implemented in the coming year and to adopt the final workplan. In the Meeting apart of the counties delegates, representative of the subregional projects, FAO, GFCM and EC were also present.

The FAO EastMed project has conducted a special workshop on Fisheries in the Mediterranean during an afternoon session (7 May 2012) at the 10th Pan-Hellenic Symposium on Oceanography and Fisheries in Athens organized by the Hellenic Centre of Marine Research (HCMR). The workshop consisted of a presentation on fisheries governance in the Mediterranean, followed by a description of the main objectives and activities of the EastMed project. The major activities dealing with data collection, surveys at sea, fisheries development and experiment fishing were then described followed by a presentation on the socio-economic activities of the project with special reference to Egypt and Lebanon. The session ended with a presentation on Lessepsian migration and its impact on fisheries.

In order to strengthen international and regional cooperation the Project interacts closely with the FAO sub-Regional Projects, AdriaMed, MedsudMed and CopeMed II throughout the year with several co-ordination meetings. These meetings were held in order to consolidate and envisage common activities. In this respect the Project also participated to in the Coordination Committee of AdriaMed, MedsudMed and CopeMed II where synergies were identified. Training activities were coordinated among all the Projects, in order to avoid duplication or overlapping of activities. The participation of other RP experts in training courses organized by EastMed and vice versa is foreseen. Common informative material (leaflets, CD-rom, etc.) are prepared that can improve the visibility of the RPs in the Mediterranean area is foreseen.

Cooperation was further sustained with the GFCM Secretariat and the GFCM Subsidiary Bodies. EastMed continued to support the activities of the GFCM by providing scientific contributions for discussion and by funding the participation of 225 experts from the Eastern Mediterranean countries to GFCM and other international activities

A donor meeting, a lunch time Conference and the annual DG-Mare/FAO Coordination Meeting, were held in Brussels on the 25th of June 2012. There were 3 different events during the day. The first one referred to the meeting with the donors (Spain, Italy, Greece and EU) of the sub regional Mediterranean Projects (CopeMed, AdtriaMed, MedSudMd and EastMed), the second to a lunch time conference for presenting the FAO-Mediterranean Projects main achievements and the third one to the annual coordination meeting between FAO and DG-Mare. In the meeting with the donors, the FIRF-Service Coordinator, the executive GFCM Secretary, the projects Coordinators, projects operators' officers as well as officers from the DG-Mare were present. The aim of that meeting was to have a general overview of the projects goals, achievements and perspectives and to discuss the difficulties of the donor's countries and the continuity of the financial support either through the existed donors and/or looking for additional ones. During the lunch time conference organised by DG Mare, there were invited colleagues from various departments of the DG-Mare and the European Commission. In the conference which was focused to give visibility to the projects, the achievements of the projects and the benefits so far to the region were presented by the coordinators. The executive GFCM Secretary also presented the GFCM framework and highlighted the contribution of the projects to the achievements of the GFCM. In the last part, in the Coordination Meeting between FAO and DG Mare financial and administration issues were clarified as well as the obligations by the projects. Finally it was agreed to keep the annual Coordination Meeting at the same approximately period.

The Project coordinator participated at the Coordination Meeting between FIRF, Sub regional projects and GFCM on the 21st of Sep 2012 to discuss the contribution of the sub regional projects for the first and second year of the GFCM framework program 2013-2018. During the meeting ideas were interchanged, outputs were clarified, priorities were put and procedural ways to achieve the expected outputs were defined.

The project coordinator participated in the GFCM/SAC/SCSA WG on stock assessment on demersals and small pelagic (Split, Croatia 5-9 Nov 2012) during which she provided technical assistance to the participating experts.

The Project Coordinator participated in the 1st meeting for the Concerted Action for Lebanon, in Rome, Italy 3-4 Dec 2012. The meeting aimed in discussing actions for Lebanon following a request by Lebanon for technical assistance. The Coordinator highlighted the activities implemented or to be implemented in Lebanon and which refer to web-based fishing licensing system; data collection including socio economic; fishing gears appraisal; catch assessment; GFCM Task I data reporting; Puffer fish; basic training in stock assessment for administrators and managers, etc. As a follow up was to consider the design of a fully-fledged programme to be proposed to potential and interested donors.

The project Coordinator participated at the preparatory meeting to strengthen data collection and submission frameworks and promote the implementation of the GFCM Guidelines for multiannual management plans (Rome, Italy 6-7 Dec 2012). The objective of the meeting was to discuss and approve the methodology to implement a series of actions within the GFCM FWP planned for 2013. The meeting consisted of four sections, i) a first introductory part for the planned actions in 2013 within the Framework Programme, ii) a section on actions related to data collection, iii) a section on actions related to the implementation of management plans, and iv) a closing section to review and adopt the conclusions and recommendations of the meeting. During the meeting it was stressed that Regional Projects play a key role in developing the national data collection programs, and therefore

will be key to the evaluation of strengths and needs of national data collection systems in the different Mediterranean sub-regions.

The Project Coordinator met with the Minister of Rural Development and Food in Greece (Jan 2013) to present the achievements of the project and perspectives. During the meeting the fact that reduced funds due to the economical crisis have leaded to activities limitation, was discussed. However the Minister confirmed their support to the project and their continuity to support at least the running costs till the end of the project

The Coordinator of EastMed participated in the Coordination Meeting between DG-MARE, FAO-FIRF Mediterranean Projects and GFCM from 10-11 January 2013 in Rome, Italy. On the 1st day of the meeting, the Project Coordinators presented the progress and results achieved since October 2012, when EC funds were available, and highlighted the difficulties and actions which were taken to resolve them. The budgetary status for all the ongoing EC funded projects, which were extended up to 31 March 2013, was then discussed. The detailed work plans and the budgets for the next oneyear period were presented based on the statement made by the three co-funded Donors during the meeting held in Brussels on 25 June 2012 that the funding would be in line with the contributions of the previous years. Due to the critical financial situation of Spain, Italy and Greece, the possibility to increase the EC contribution as well as its percentage was put forward. On the 2nd day, a presentation on the on-going activities of the FAO project in the Black Sea was made, which is actually acting as the component of the GFCM Framework Programme relating to the Black Sea. The outcomes of the performance reviews for AdriaMed and MedSudMed were discussed. Finally the outlines of a 5-year Mediterranean Project in support to the GFCM Framework Programme were presented. Administrative issues were also clarified, as well as those related with visibility. The representative of GFCM made finally a briefing on the meeting held in Rome regarding the concerted actions for Lebanon, where the roles of the various actors were clarified.

The Project Coordinator participated at the GFCM WS on fisheries data collection in the Mediterranean Sea (Frascati, Italy, 25-27 March 2013), which is one of the actions included in the GFCM strategic Framework Programme (FWP). In the meeting, the GFCM secretariat presented a compilation of the questionnaires circulated to the countries through which problems of collection and data transmission were analysed. The national focal points described their national scheme on data collection and presented their gaps and weaknesses. The Sub regional projects presented the activities achieved in the participating countries regarding training and pilot activities on data collection. At the end and based on the outcomes of the meeting, a deep discussion was dedicated to the improvement of GFCM TASK 1. The participants agreed to withdraw TASK 1.5 given that all the information is available in the stock assessment forms.

Six technical documents have been prepared and the ones published are available on-line through the website. Hard copies have also been distributed to participating countries. Two posters were prepared, the one describing the third year activities of the Project and the second the seminar on canning technology in the island of Kalymnos (Greece). The fish identification templates have been finalised and published in English, Arabic and Turkish. The publications were distributed in several meetings including those of the GFCM.

The project web site (<u>www.faoeastmed.org</u>) has been improved and active links have been created with the websites of the other subregional projects and GFCM. It is continuously updated with new information, and on the home page a new section on upcoming events was developed.

MedLME Fisheries - "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" – Conservation of Biological Diversity – Implementation of SAP-BIO and Related NAPS

This component of the Strategic Partnership for the Mediterranean LME has two main sub-components, 3.1: conservation of coastal and marine diversity through the development of a Mediterranean MPA Network and 3.2. Promote the sustainable use of fisheries resources in the Mediterranean through the development and application of ecosystem-based management approaches. FAO, in close cooperation with the GFCM Secretariat and with the support of the regional Projects, prepared and is the Executing Agency for subcomponent 3.2., the "EAF component".

Under subcomponent 3.2 there have been three main lines of activity: a) improving involvement and participation of the local communities of fishermen on the monitoring of the fisheries activity in the National Park of Al Hoceima (PNAH); b) Bycatch management in the Gulf of Gabes and c) training in EAF

As part of a) a first activity consisted in a scoping survey of the fishing activity in the PNAH. In order to engage stakeholders in the process, a launching workshop was organized and held in Cala Iris (September 2012) to present the project and the results of the scoping survey. The discussion was open, and the project was well received by all, including fisher's and local authorities. The final recommendations approved by the workshop included the creation of a fisheries monitoring cell for the Park fisheries, including representatives from the fisher's associations and the Administration, and the full involvement of the fishers and their associations in the regular monitoring of the fisheries.

The next activity carried out jointly between FAO and INRH, was the characterization of the modus operandi of the fishing and commercialization operations. A series of field surveys and meetings were held to design the methodology and the monitoring system. The sites and the fisheries samplers have been identified during this process. Specific toolkits (guidelines, technical manuals) were elaborated and translated, to be understandable by the fishing community. A set of sampling material and other field work tools is being prepared for each of the fisheries samplers engaged in the project.

Future steps include training of the fishers and the implementation of the monitoring system in selected sites.

Management of bycatch has been another area addressed by the project through a case study in the Gulf of Gabes. Main phases so far have included:

- 1. Phase-I was conducted in 2012 and involved the baseline data collection (at sea) of bycatch and discards in the Gulf of Gabes multi-species bottom trawl fisheries. Phase-I was fairly successful and we now have fairly good understanding about the seasonal quantity and composition of bycacth and discards in that major fisheries.
- 2. The key results, conclusions and recommendations of Phase-I have been presented to Fisheries Authorities and Fisheries Organizations in Tunisia. The latest stakeholder meeting was held in Sfax on January 10, 2013. Matthieu attended that meeting and expanded the issue to cover the interest of COPEMED project. In fact, we will move on to Phase-II together with COPEMED.
- 3. Phase II will be executed in 2013 and Tunisian fisheries expert are supposed to play key role in the work. The work will involve among others sea trial demonstrations of the effects/impacts of more selective bottom trawl gears (e.g. 40 mm square mesh codend) and demonstrations of utility of alternative fishing gears such as modern fish pots. The Phase-II also include impact assessment, and an analysis of barriers and potential incentives to make a real change. Activity 3.2.3: Supporting fisher's participation in monitoring and management of coastal MPA's

Following the training on the Ecosystem Approach to Fisheries, conducted by FAO-FIRF in Agadir, Morocco (12-30 September 2011), a new training is being organized to take place for the whole Mediterranean region in Turkey, to take place in May 2013.

Common activities and overall coordination

All the FAO-led Fisheries Management Support projects in the Mediterranean are tightly coordinated and develop their activities in a joint way, among them and with the GFCM, whenever this can bring added benefits to the participating countries and the GFCM.

During the intersessional period, the projects co-organized several Working Groups, Workshops and Training Courses. This co-organization not only promotes the best use of limited human and financial resources, it also contributes to increase the linkages and connections among the fisheries researchers and managers of the whole Mediterranean. It is expected that the connections thus established, and the common language and methods shared, will also contribute to facilitating the reinforcement of the regional and sub-regional cooperation frameworks considered essential for sustainable fisheries management in the Mediterranean in the GFCM framework.

The projects have also jointly supported several initiatives in the framework of the GFCM, aiming at increasing cooperation and linkages in fisheries management across the Mediterranean, as well as at sub-regional level.

Moreover of a continuous participation in the GFCM activities already mentioned by the different projects and to reinforce the coordination, the FAO projects organised or participated in the next coordination meeting with the GFCM Secretariat:

- ✓ Coordination meeting FAO-FIRF projects and GFCM. Rome, FAO HQ, 11 June 2012
- ✓ Meeting between FIRF, Sub regional projects and GFCM. Rome, 21 September 2012. The purpose of the meeting was to discuss the contribution of the FAO sub regional projects for the first and second year of the GFCM framework work plan 2013-2018

Also, the projects harmonized the information and appearance of the different websites, to present a unified image to the visitors, reinforcing the concept of harmonized projects.

To ensure a tighter coordination, all projects are represented in the Coordination Committee meetings of the other projects. This contributed to avoiding overlap in activities, and to the planning of joint activities. Also, the project staff met all together twice yearly, once at FAO Headquarters and another at the GFCM SubCommittee meeting, to take stock of the development of the activities and problems faced by each of them, and to plan the joint or shared activities. This tight coordination and sharing of information and resources has already led to a significant increase in the number and importance of jointly-organised or shared activities, as is evident in this report. It also means that the total number of activities implemented has effectively increased, as the specific advantages (human or otherwise) of each project is put at the disposal of all the projects, and there was no duplication of efforts, reducing the wastage of resources.

In the framework of the FAO decentralisation, and with the same objective of maximizing the support to the participating countries and the GFCM, the projects are reinforcing the collaboration with the FAO regional and subregional offices in the region. Thus, the projects have regular communication and also co-organise activities with the Regional Office for the Near East and North Africa, in Cairo, the Regional Office for Europe and Central Asia, in Budapest, as well as with the sub-regional offices in Ankara (Central Asia) and Tunis (North Africa). This tighter cooperation also increases the overall delivery of FAO for the benefit of the countries in the region and for the reinforcement of the GFCM as the Regional Fisheries Management Organization with responsibilities for the Mediterranean and the Black Sea.