



**GENERAL FISHERIES COMMISSION FOR
THE MEDITERRANEAN**

**COMMISSION GÉNÉRALE DES PÊCHES
POUR LA MÉDITERRANÉE**



SCIENTIFIC ADVISORY COMMITTEE (SAC)

Fourteenth Session

Sofia, Bulgaria, 20-24 February 2012

Major activities of the FAO Regional Projects

This document summarizes the most significant activities carried out by the FAO Regional Projects, namely, AdriaMed, MedSudMed, CopeMed II, EastMed, ArtFiMed, MedFisis 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.

AdriaMed - “Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea”

The project is financed by the Italian Ministry of Agriculture, Food and Forestry Policies (MiPAAF) and has been cofinanced in 2007-2008, 2010, and 2011/2012 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 intersessional period followed the methodological approach used by the Project, as well as the workplan for 2011 as approved by the 12th AdriaMed Coordination Committee (Slovenia, March 2011), 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 twelfth meeting of the Coordination Committee of the AdriaMed Project was held from 1st to 2nd March 2011 in Ljubljana, Slovenia, hosted by the Ministry of Agriculture, Forestry and Food and the Fisheries Research Institute of Slovenia. During the meeting the workplan for 2011 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 December 2012. In the intersessional period the project performed the following main activities:

The relations and interactions with the participating countries were further strengthened. Frequent contacts with the fisheries institutes and directorates with respect to the organization and implementation of Project's activities were maintained. Meetings with the DG of Fisheries Directorate of Albania were held to better address the support of the Project to the needs of the country. On October 2011 a meeting with the Minister of Agriculture and Rural Development of Montenegro was held to discuss the new organizational structure of the Fisheries Unit in the country and to identify a new AdriaMed National Focal Point for Montenegro.

AdriaMed Study Group for the application of bottom-trawl survey data to fish stock assessment in South Adriatic Sea (Italy, July 2011): The Study Group was organized and carried out to joint analyse data on hake (*Merluccius merluccius*) collected in the area by trawl surveys. Scientists from Albania, Montenegro and Italy participated and the results were then presented and discussed at the AdriaMed Working Group on Demersal Fisheries Resources.

Working Group on Demersal Fishery Resources (Albania, October 2011): The WG was focused on the appraisal and stock assessment (standard and alternative methods) of demersal stocks including 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 Project. The existence in the Adriatic of two species of sole, *Solea solea* and *Solea aegyptiaca* was discussed.. The stock assessments produced by the Working Group for sole *Solea solea* in GSA 17 and for hake (*Merluccius merluccius*) in GSA 18 were presented and discussed during the SAC Working Group on Demersal Species (Greece, October 2011).

Working Group on Small Pelagic Fishery Resources (Italy, September 2011): The meeting reviewed the knowledge and information on small pelagic fish stocks, mainly of anchovy and sardine. The review summarizing all the data and information available on these species in the Adriatic Sea is being finalized. The stock assessments of anchovy and sardine were jointly performed for GSA 17 and for GSA 18 combining all data made available by the experts of the participating countries. The WG reviewed also the preliminary results of the joint acoustic and DEPM survey performed in GSA 18 in the framework of AdriaMed. Possible future activities were identified including those concerning the Coordinating Team on echo surveys (e.g. the adherence to the EU MEDIAS programme) and joint research activities in the Adriatic Sea. The results of the stock assessment of anchovy and sardine for GSA 17 and GSA 18 were presented and discussed during the SAC-Working Group on Small Pelagic Species (Greece, October 2011).

The Project continued to support the countries in developing expertise on small pelagic fisheries as well as in the standardization of the methodologies applied. In July 2011, a joint acoustic and ichthyoplankton survey using R/V "Dallaporta" covering South Adriatic waters (GSA 18) was organized and supported by the Project, in cooperation with CNR-ISMAR Ancona. Taking advantage of the occasion, theoretical and practical onboard training activities were carried out. The joint data processing for ichthyoplankton samples as well as preliminary data analysis was carried out during the AdriaMed Study Group on DEPM for the estimation of the spawning biomass of anchovy (Croatia, January 2012).

The Project continued to support the scientific experiments carried out in the Pomo/Jabuka Pits area and additional collection of data by means of trawl survey was supported by the Project in the area, to gather additional data for the completion of a proposal for the management of this critical area. In addition the Project is continuing to support the activities carried out in the framework of the SoleMon Project. A specific Technical meeting on SoleMon activities (Italy, May 2011) was organized with the aim of jointly analyse the megabenthos samples collected. The meeting focused on the preparation of a joint document summarizing the results of the SoleMon surveys from 2005 to 2010, the progress towards the complete standardization of sampling protocol, the development of a standard procedure for mapping benthic fish and megabenthos and improvement of ATRiS database. In November 2011 the seventh SoleMon survey covering the North-Central Adriatic Sea was carried out. Synergies were sought with the EastMed Project and scientists from the Eastern Mediterranean area participated to the survey.

The project continues to progress in the standardization of scientific protocols in the Adriatic area. The AdriaMed Workshop on intercalibration of sardine otolith reading (Croatia June 2011) was organized to review the sardine age reading criteria adopted in the sub-region, propose measures to improve quality and accuracy of the biological data collected and to develop a standard for the sub-region. In addition the Project continues to improve national capacity at institutional level by organizing training activities according to requests formulated by the participating countries. In December 2011 a training course on stock assessment was organized by the MedSudMed Project and young scientists from the Adriatic countries participated in it supported by AdriaMed.

The Project further supported the monitoring system for the Montenegrin fisheries sector, including biological, environmental, economic and social information, applying the Operational Unit (OU) concept. The study 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 started in 2007 and 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”.

The Project supported the participation of several experts in GFCM - CAQ related meetings. The Project continued its technical support to the countries in particular in accordance with recommendation GFCM/2009/33/4, on the need to standardize the collection of production statistics on aquaculture. Following the request formulated by the Directorate of Fisheries Policies of Albania, support was provided to the Directorate to make a first census of the aquaculture facilities in the country. Additional data related to the production statistics were collected.

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, the Project continues to support the national fisheries statistics systems in Albania. 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. Feedback received from the participating institutions has been incorporated in the preliminary version of the database.

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. For the latter a training course on ASFA methodologies has been carried out for the new staff involved in this task (Croatia, June 2011). 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 (Ecuador, 5-9 September 2011).

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, has been distributed to the participating institutions. 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 continues to provide technical assistance to the research institutes and to work on the development and improvement of this application.

AdriaMed continued to provide direct support to the activities of the GFCM by providing scientific contributions for discussion and funding the participation of 24 Adriatic experts in 8 GFCM meetings (both SAC and CAQ related) held in the intersessional period.

MedSudMed - “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. The main goals of the Project are to support the scientific communities of the participating countries in the development of a monitoring system for the study of fishery resources and their ecosystems (GSAs 12, 13, 14, 15, 16 and 21), with particular focus on the standardisation of methodologies. In addition, the Project promotes the scientific cooperation between participating countries and supports national capacity development. The activities carried out in 2011 followed the work plan approved by the 9th MedSudMed Coordination Committee held in Mazara del Vallo-Capo Granitola (Italy 16-18 May 2011).

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 December 2012. In the intersessional period the project performed the following main activities:

- To progress toward the harmonisation of sampling procedures and joint processing of bottom trawl survey data in the south-central Mediterranean, MedSudMed organised an inter-calibration exercise at sea between the Tunisian vessel “R/V Hannibal” and the Italian vessel “M/P Santanna”. The inter-calibration was carried out on 08-19 July 2011 in GSA 13. 40 sampling stations were performed in parallel by the two vessels and data on catch and on the performance of the fishing gears were gathered. Samples of target species (*Parapenaeus longirostris* and *Merluccius merluccius*) were also collected. Tunisian and Italian experts from the Institut National des Sciences et Technologies de la Mer (INSTM) of La Goulette and of the Istituto per l’Ambiente Marino Costiero-Consiglio Nazionale delle Ricerche (IAMC-CNR) of Mazara del Vallo were on board of the “R/V Hannibal” and “M/P Santanna” respectively. Experts on gear technology from the Istituto di Scienze Marine-CNR (ISMAR-CNR) also participated to the activities at sea. After the survey, a meeting between experts of the research institutes responsible for the work at sea was organised (Italy, January 2012). During the meeting discussion was held on the data available and preliminary results. The future work in terms of joint data analysis was preliminary agreed. The preliminary results of the inter-calibration were presented during the meeting of the Sub-Committee on Stock Assessment (SCSA) of the FAO-GFCM SAC.
- A Working Group for the assessment of the *Parapenaeus longirostris* stock in the south-central Mediterranean was organised in cooperation with the CopeMed II Project (Tunisia, September 2011). The Working Group updated the joint stock assessment on *P. longirostris* in GSAs 12, 13, 14 and 16 carried out in 2009 and 2010 (Malta, October 2009; Italy September 2010). The classic stock assessment analysis was also broadened by integrating available economic data in order to strengthen the technical advice for the management of fisheries exploiting *P. longirostris* in the Project area. Some economic and catch data from Tunisia, Malta and Italy (south-Sicily) were pooled together to run a preliminary bio-economic analysis of the fisheries exploiting *P. longirostris*. The results of the joint stock assessment of *P. longirostris*, including the management advice proposed, were presented at the SAC Working Group of Demersal Species (SAC WG Dem) (Grece, October 2011).
- A Working Group on *Merluccius merluccius* and related fisheries was organised in Tunis (September 2011) in cooperation with the CopeMed II Project. The Working Group aimed at initiating a joint preliminary stock assessment exercise on this species in the area. To this extent the existing knowledge on *M. merluccius* was reviewed, including trends and properties of the catch data, biological parameters, fishing segments targeting the species. National catch data from Tunisia, Malta and Italy (south-Sicily) on *M. merluccius* were jointly analysed at sub-regional level by experts of participating countries. Preliminary results of the joint stock assessment of *M. merluccius* were presented at the SAC WG Dem.
- The second Sub-regional Working Group on Shared Demersal Fisheries Resources was organised in cooperation with CopeMed II (Tunis, September 2011). The main objective of the

meeting was to discuss issues related to shared demersal resources in the Projects' area. Particular importance was given to the discussion on the joint assessments carried out in the framework of MedSudMed and CopeMed II and to the planning and completing of joint activities regarding the shared demersal stocks and their fisheries. The experience gained and lessons learnt during the joint analysis of data have been capitalised and the species to be investigated and tentatively jointly assessed in the Projects' framework were identified by sub-region: Alboran Sea and surrounding areas (GSAs 01-06), Gulf of Lion (GSAs 01-06), Straits of Sicily (GSAs 12-16 and GSA 21). A work plan, including specific activities to be jointly carried out in the MedSudMed area and the species to focus on in the short and medium term were agreed on.

- MedSudMed continued to support the identification of shared stocks of *Octopus vulgaris* in the south central-Mediterranean. During the intersessional period the work plan to carry out the genetic comparison of *O. vulgaris* samples collected in the entire Project area was agreed on and the preliminary procedure for the analysis was initiated.
- As for the previous years, the Project promoted the joint discussion on small pelagics 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, a Working Group on small pelagic fisheries resources was organised in Capo Granitola (January 2012). During the working group the activities carried out at national level on small pelagic fish were reviewed and proposal for joint cooperative activities were discussed and preliminarily formulated.
- A Workshop on fisheries and assessment of *CoryphaenaCoryphaena hippurus* in the south-central and western Mediterranean Sea was jointly organised by MedSudMed and CopeMed II. The Workshop was aimed at initiating a process that in the medium term would facilitate sub-regional experts to better describe the main characteristics of fisheries and the stock of *CoryphaenaCoryphaena hippurus* in the Mediterranean region. To this end, the national activities carried out and/or currently implemented on *C. hippurus* in the south-central and western Mediterranean were reviewed together with the data available at national level on this species. The knowledge gaps to be filled to understand the biology and population dynamics of this species in the Mediterranean region were identified. The foundation was laid for a process toward the common analysis of the available data on *C. hippurus* stock and fisheries.
- According to the recommendations of the 9th MedSudMed Coordination Committee (Italy, May 2012), an ad hoc meeting on closed seasons for fisheries was organised. Fishery experts and representatives of the national administrations from the MedSudMed area participated in the meeting. The meeting was held in Salammbô, Tunisia on 15-16 February 2012 kindly hosted by the INSTM (Institut National des Sciences et Technologies de la Mer). The aim 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 Project area. The current fishing operations taking place in the national and international waters of the area were described, especially in terms of seasonality, and management tools affecting the fisheries. The output of the meeting was the identification of a road map for future activities addressing this issue.
- The MedSudMed portal has been further developed and updated. The development of the version in Italian and Arabic was initiated. 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.
- Three MedSudMed Technical Documents were finalised and published. The documents were widely distributed to the Project network of experts and institutes and an electronic version is also available on the web site.
- The project continues to organize training activities according to the requests formulated by the participating countries. In December 2011, following a specific request formulated during the 9th Coordination Committee, the Project organized and held a training course on the basic concepts and models used for stock assessment. The course was designed for fisheries biologists working

in fisheries centres or other research institutions involved in fisheries monitoring, research and management in the Mediterranean. To the course participated scientists from the MedSudMed area and the other areas covered by the FAO Mediterranean projects AdriaMed, CopeMed II and EastMed. Twenty eight scientists from eleven countries participated to the course.

- On-the-job training was carried out during the inter-calibration at sea for scientists from the INSTM of La Goulette and IAMC-CNR of Mazara del Vallo (July 2010) on the procedure and setting used in the MEDITS surveys, as well as on the operational measurements of the fishing gear; particular attention was also attached to the description of settings commonly used for sampling at depth > 200 m. Overall more than 10 scientists from the INSTM and IAMC-CNR were trained on these surveys.

CopeMed II “Coordination to Support Fisheries Management in the Western and Central Mediterranean, phase 2”

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). Although the project should finish in February 2011 complementary financial contributions from Spain and the EU has been received for activities until December 2012.

The overall objective of the project is to maintain the sustainability of the marine resources in the Central and Western Mediterranean and their ecosystem, 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 donors are also members of the Coordination Committee.

The 4th meeting of the Coordination Committee (Madrid, April 2011) reiterated the interest of having future activities supporting the extension of CopeMed, including the activities of ArtFiMed to the whole region. The workplan of CopeMed II was presented and it was adopted.

A relevant aspect during the intersessional period was the situation in Tunisia and Libya. The Tunisian revolution retarded some meetings but without major consequences. On the contrary the Libyan revolution produced a break in the communications despite the efforts made by the project to have contact with the national delegate.

According to the guidance provided by the Steering Committee CopeMed II conducted activities 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 provided technical support to Tunisia (Direction Générale de la Pêche et de l'Aquaculture) in preparing a diagnosis of the small scale fishery statistical system. This included identification of weaknesses and gaps and elaborating a draft project for monitoring these fisheries. It also supported the preparation of basic documents on the artisanal fisheries and the statistical system. The project also cooperated with EastMed and MedSudMed in the development of activities related to fisheries statistics.

As requested by SAC, the project distributed the document on Socio-economic indicators prepared during CopeMed phase 1 to the SCESS. It was also included in the project Web page.

Strengthening fisheries research

The interactions with the participating countries were further strengthened, and several missions were organised to the countries. The Project supported experts from the fishery research Institutions in international training courses, workshop and joint research activities. The project co-organised several joint meetings on shared stocks within the CopeMed region.

In coordination with MedSudMed, the project organized a meeting to assess the stock of *Parapenaeus longirostris* in the Sicily channel area and a joint meeting on demersal shared stocks.

The evaluations of *P. longirostris* stocks from Sicily channel and Alboran Sea were discussed and options for assessment of *M. merluccius* from the Sicily channel were proposed.

With the support of the project, experts from the CopeMed region jointly analysed and prepared assessments on different shared stocks.

Sardina pilchardus in Alboran Sea: three documents reviewing the progress in the “pilot project for the management of small pelagic fisheries in the Alboran Sea” were prepared. A WG on “Small pelagic fisheries in the Alboran Sea within the framework of the Ecosystem Approach to Fisheries Management” was created with the participation of experts from Algerian, Moroccan and Spanish research institutions and fisheries administrations and one NGO. Two meetings of this WG were organised in 2011 (Málaga, Spain, March and September 2011). In its framework, an assessment of the Alboran stock of *S. pilchardus* was carried out by experts from Morocco and Spain, and presented to the SAC WG on small pelagic fish. The SCSA recommended to improve the information on stock distribution and data collection in this area.

Deep water rose shrimp (*Parapenaeus longirostris*) is a major shared resource in Algeria, Spain and Morocco. The project organised a WG on *P. longirostris* in the Alboran Sea (Spain, 18 to 19 July 2011) hosted by IEO. A preliminary assessment in GSA 01, 02 and 03 was carried out using Moroccan and Spanish data, and results presented to the SAC WG Dem. The SCSA recommended to improve the investigation on stock distribution and data collection.

CopeMed II co-organised, with MedSudMed, a workshop on *CoryphaenaCoryphaena hippurus* in the MedSudMed and CopeMed II Projects area (Palermo, Italy, 05 - 06 July 2011). CopeMed experts presented four scientific documents, all available as Occasional Papers at the project Web page.

CopeMed contributes to the standardisation of common methodologies in the Mediterranean area and supported the participation of an expert in a MEDIAS survey at sea and the participation of three experts from Algeria, Morocco and Tunisia in the EU MEDIAS annual meeting (Ancona, Italy 28-30 /03/2011).

CopeMed II in collaboration with INRH and CNRDPA is supporting actions on the implementation of the 40 mm square size bottom-trawl gears. Equipment was exported to Algeria by CopeMed and the project maintains contacts with the CNRDPA to carry out the selectivity campaign during 2012. CopeMed II is in contact with the INRH and the fishery administration in Morocco to carry out the pilot research survey with a commercial vessel.

CopeMed II financed the participation of 55 experts from Algeria, Morocco and Tunisia according to requests from the national focal points and the GFCM, in different activities organised by the GFCM and by the FAO projects (mainly on the assessment of shared stocks).

Strengthening institutional capacity at national and sub-regional level

CopeMed co-organised, in cooperation with the Moroccan fisheries institutions and FAO office in Rabat, the national artisanal fishery day in Morocco (Tangier, 2 June 2011) and prepared a technical document with the Conclusions and Recommendations for improvement of the management of these fisheries. The meeting report and a summary with the Conclusions and Recommendations were sent to the Moroccan Fisheries Administration.

CopeMed co-organised, in cooperation with Tunisian fisheries institutions and FAO subregional office in Tunis, a one-day meeting for discussion on a National approach for the development of artisanal fisheries in Tunisia (Tunis, 28 June 2011) producing a report with Conclusions and Recommendations.

CopeMed supported the participation of 7 experts from Algeria, Morocco and Tunisia in international training activities, covering Monitoring and Surveillance in fishery control systems, EAF, Stock Assessment and Fisheries Management.

Project staff cooperated with the Institut Agronomique et Vétérinaire Hassan II, Rabat. Morocco and the University of Agadir (Morocco) in the training of national and regional experts on fisheries. This included lecturing in the EAF course co-organised by FIRF in Morocco.

CopeMed maintained collaboration with the Spanish Association of Responsible Sport Fishing and other organisations. In collaboration with the fishery administration of the Balearic Island (Spain), CopeMed prepared an OP on the artisanal fishery of *Coryphaena*.

The project was present at the 2nd Congress of the Spanish Network of Women in the Fisheries Sector "Incorporation and entrepreneurship of women in the fishery sector".

CopeMed represented FAO-FIRF during different activities related to fisheries management and research in the Mediterranean organized by the GFCM and other national and regional organizations.

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) and an i-bulletin with the main activities of the project members. 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.

The projects also prepared, edited and published over 10 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 2010 are available in the project's Web pages.

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.

ArtFiMed - "Sustainable development of Mediterranean artisanal fisheries in Morocco and Tunisia"

The objective of the ArtFiMed Project (Sustainable Development of Artisanal Mediterranean Fisheries in Morocco and Tunisia) is to contribute to reduce the poverty of the target artisanal fisheries communities by improving their livelihoods in the respect of the ecosystems which they exploit so as to contribute to improve positive integration of these communities in the dynamics which affect them directly, in particular the management of fisheries and the development of the coastal areas. Expected results concern three different levels: i) at the level of the three artisanal fishing communities where the project is carried out; ii) at country level (Morocco and Tunisia) particularly as concerns lessons learned and promotion of the role of artisanal fisheries at national scale and, iii) at the Mediterranean level, strengthening the information on artisanal fisheries and promoting lessons learned and methodologies at regional scale. The ArtFiMed project is funded by the Spanish Government through the Spanish Agency for International Cooperation for Development (AECID).

CopeMed II coordinates the project under the general coordination of the FAO-FIRF Service. As CopeMed II, ArtFiMed started in March 2008 and finished July 2011. The identification of priority activities to be undertaken under the project has been a permanent participatory process, coordinated in the framework of an internal (FAO) and regional process. The fifth and last Internal Committee meeting (CPSI) was held in June 2011 in Tunis.

Following guidance given by the Coordination Committee of CopeMed II during the 4th Coordination meeting, activities were conducted by ArtFiMed to fulfil its activities on the following project's components:

Contribute to improving the socio-economic situation and sustainable livelihoods of the target communities in Morocco and Tunisia.

ArtFiMed promotes responsible fisheries through the application of the Ecosystem Approach to Fisheries (EAF) principles and the dissemination of the Code of Conduct for Responsible Fisheries (CCRF). Different activities were implemented through the following areas of intervention:

- Support fishermen's organization: The project continued to strengthen the two artisanal fishermen's organization created in Morocco and Tunisia. The Dikky artisanal fishers' cooperative and Ghannouch artisanal fishers' grouping were created with the support of ArtFiMed. The members of both organisations have been trained and received support and materials to develop and manage activities in the framework of this professional organizations. The Ghannouch grouping is now integrated as one of the principal actors to receive support and to be implicated in a future artificial reef which should be installed in Ghannouch. The Dikky fishermen cooperative is also identified as a fisheries stakeholder in the Tangiers region.
- Enhance safety at sea and improve the working conditions: As part of the participatory process, ArtFiMed supported the construction and supply of manual winches for the Dikky fishermen cooperative. The winches have been installed and a management protocol has been developed by the cooperative with the support of the project to improve maintenance and promote safety management for fishing boats.
- Contribute to prevent and deter Illegal, Unreported and Unregulated fishing activities: In Ghannouch, ArtFiMed organized a participatory process and meetings with fisheries management, local authorities and fishermen's organizations to promote the reduction of illegal practices and the use of destructive fishing techniques to promote sustainable fishing practices. Guides and technical documents on gears, size at landing etc., were produced by the project in support of this action. As a result, authorities initiated the regularization process for 100 artisanal boats, which should allow the owners to comply with fisheries legislation and therefore be entitled to social benefits and facilities for the development of artisanal fisheries.
- Support the transformation and quality of fisheries products: In Tunisia ArtFiMed, in collaboration with local and national actors, organized a training course for 10 women on basic hygiene and fish products processing and conservation techniques, based on traditional methods.
- Support and reinforce the collaboration process between fisheries actors (Administration, research and profession) for sustainable fisheries management: organization of two regional and two national small scale fisheries workshops/days; the process for creation of fishermen organization; the meetings on good practices and two courses on safety at sea; implementing ad hoc fisheries monitoring system; collaborating in better integration of small scale fishing communities at local, regional and national as main stakeholders.
- Contribute to disseminate the fisheries legislation and the good practices: through participatory process, elaboration and diffusion of technical documents. For example, the project published guides to raise awareness on the minimum authorized size for the species landed by SSF, the fishing gear technical characteristics and target species in Morocco and Tunisia. Moreover, a guide on the fisheries regulation and the fisherman was also published in Tunisia.
- Support the monitoring of the small scale fisheries activities: ArtFiMed designed, implemented and monitored a community-based monitoring system for the fishing activity in the 3 sites of the project during one year. This system demonstrated that it is suitable and replicable to other sites of artisanal fisheries in the Mediterranean. Moreover, the project

participated in the diagnosis and assessment of weakness of the national statistical system for improving SSF statistics in Tunisia.

- Activities carried out to support sustainable livelihood and socioeconomic development: the project supported the creation of a women's organization in Morocco and the training of its members. With the same purpose, ArtFiMed also organized and supported technical training for fishers (men and women) and supports the development of alternative activities which are generating new incomes for the communities:
- Beekeeping cooperative (Morocco): Fishermen trained and equipped with materials for beekeeping. Now they are organized through a cooperative and develop this activity which generates new income for the community.
- Production and repair of small scale fisheries nets (Tunisia): Women were trained by local and national experts to manufacture and repair SSF gears, in accordance with the fisheries legislation. The group developed this new activity which is already generating complementary incomes for the SSF community.
- Traditional carpet weaving and embroidery (Tunisia): Women of the fishers community were trained and equipped to produce traditional carpet and artisanal embroidery. Now they develop this new activity which improves their family livelihood.
- Fish processing and conservation (Tunisia): Women trained with the support of the project to process and conserve fish as alternative activity to improve families' livelihood for the community and to avoid fishing products loss.

Promote and extend the results of the project to other artisanal fishing areas based on lessons learned.

Different activities have been carried out to promote the use of the lessons learned from ArtFiMed and to extend the results obtained by the project to other artisanal sites:

- A protocol for monitoring fishing activities and indicators has been elaborated and published. The fishery monitoring system, involving members of the artisanal fishing communities, was implemented in the 3 sites and all the information recorded in a database was analysed and disseminated in various formats for promoting this kind of data. The database analysis demonstrated that results obtained through this monitoring system on captures, effort and production is not expensive and is relevant, and that the system is adapted to provide biological and economic information, particularly on shared stocks of priority species of the GFCM, as *T. thunnus*; *P. bogaraveo*; *P. kerathurus*, *S. officinalis*, *O. vulgaris*, *S. aurita*, *T. trachurus*
- The project website www.faoartfimed.org is regularly updated and contains all the information and the technical documentation produced in the framework of the project. Technical documentation includes guides on small scale fisheries, species and authorized sizes; synthesis on local artisanal fisheries; description of local artisanal fishing gears; selection of indicators and monitoring system adapted to SSF.

ArtFiMed staff participated in different national and international meetings and Workshops, promoting the results obtained and the role of artisanal fisheries, as the FAO Mediterranean coordination meetings, GFCM Sub Committees, SAC and Commission meeting, technical meeting with Fishery ministry and national fisheries institutions in Morocco and Tunisia. Moreover, the experience of ArtFiMed has been useful for the implementation of activities of the FAO component of the Mediterranean GEF LME project, particularly in supporting fisher's participation in monitoring and management of coastal MPA's.

Reinforce the information base on Mediterranean artisanal fisheries

All the information and documentation elaborated in the framework of ArtFiMed contributed to reinforce the information base on national and Mediterranean small scale fisheries.

In Tunisia and Morocco, ArtFiMed organized national workshops on small scale fisheries. These meetings contributed to stress the numerous existing associations and local groups; give visibility to the socio-economic role of the artisanal fisheries in the context of the national and Mediterranean context; to promote artisanal fisheries and reinforce the information base on Mediterranean small scale Fisheries. Recommendations have been agreed by the artisanal sectors during these two meetings and channelled to fisheries administrations for better integration and recognition of small-scale fisheries in national and regional development. The two events have been included as national consultation in the FAO Voluntary Guidelines on Securing Sustainable Small Scale Fisheries development process.

ArtFiMed supported and strengthened GFCM activities on small scale fisheries in Mediterranean sea. Main results were presented during a transversal session on artisanal fisheries organised in the framework of the SAC-SCs meeting (Rome, 23-26 January 2011) Informative sessions are foreseen in Morocco and Tunisia, to inform all stakeholders on ArtFiMed main results, achievements and lessons learned.

EastMed - “Scientific and Institutional Cooperation to Support Responsible Fisheries in 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.

During the intersessional period, the recruitment of the project staff has been completed by the appointment of the project clerk and the technical officer.

The activities carried out during the intersessional period followed the project document, as well as the workplan for 2011 as approved by the 2nd EastMed Coordination Committee (Antalya, Turkey, 5-6 April 2011), 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 under each project component, were carried out.

Institutional Strengthening

The project carried out an appraisal of the Egyptian Fisheries Institutions and also of Lebanese institutions. Several proposals for improving the systems to be in line with the Ecosystem Approach to Fisheries management (EAF) were developed, and forwarded to the relevant national institutions.

EastMed carried out an assessment of the fishing gears in Lebanon. The mission visited the main landings ports, and conducted interviews with fishers, fishing gear suppliers, fishmongers and officers from the Ministry of Agriculture. The main findings were shared with the Lebanese fisheries institutions.

An appraisal of the socio-economic situation of the Lebanese fisheries sector was conducted, with a field visit from 22 to 29 September 2011. Information was collected on the management and the organization of the fisheries sector, with particular reference to the economic and commercial aspects, including the system of loans with respect to the fisheries sector, as well as to the vessel licensing

system. Again, the conclusions of the appraisal were shared with the relevant Lebanese fisheries institutions.

Following contacts with the Turkish fisheries institutions, project staff travelled to Ankara, Turkey (11-12 October 2011) in order to discuss possibilities for the contribution of the EastMed Project to fisheries data collection in Turkey. A tentative work plan was developed in order to conduct a pilot survey to undertake fisheries data collection. Once the Turkish administration officially agrees with the work plan, the activity will be brought to the co-ordination committee for consideration.

Staff Training and Development

EastMed organised a training course on Single-species Length based Stock Assessment methods (Kavala, Greece, 21-25 February 2011). This was attended by 23 representatives from the project area including one from the CopeMed Project area. The general objective of the course was to train participants in data requirements for stock assessment, population dynamics and stock assessment models. The course covered the theoretical elements but also guided participants in putting theory into practice through case studies and hands-on exercises on the computer.

During the second mission of the fisheries-dependent data collection pilot survey in Egypt (29 May to 8 June 2011), a training course on data collection was carried out in the west part of Egypt, in Alexandria.

In the framework of the exchange training programme for collection of survey data at sea, an Egyptian and a Lebanese scientist were supported to participate in the 2011 Cypriot leg of the Mediterranean International Trawl Survey (MEDITS) from 10-17 July 2011. The scientists gained valuable experience in the conduction of a demersal survey at sea. Also, two Turkish scientists were supported to participate in the Solemon demersal survey for sole in the Adriatic Sea from 24-30 November 2011 on board of the Italian research vessel.

EastMed supported the participation of ten scientists from the project area in the training course on fish stock assessment models that was held in Sliema, Malta from 12-16 December 2011, in an initiative of the MedSudMed Project, in cooperation with the other FAO-led Mediterranean fisheries management support projects. Scientists from Albania, Algeria, Egypt, Gaza Strip and West Bank, Greece, Italy, Lebanon, Malta, Tunisia, Turkey attended the course.

Data Collection and Organization of Data

EastMed is supporting the execution of a pilot survey for catch and effort monitoring in Egypt. The project also supported the collection of biological data for one year, which is conducted in five landing ports. The biological sampling supplements the catch and effort, which has started to be collected and elaborated since the beginning of the year 2011. It is expected that after the pilot collection, the country will have the capacity to continue monitoring the resources. The project closely monitored the activities, provided technical support and supervised, with the assistance of the National Institute of Oceanography and Fisheries of Egypt, the process that is implemented by GAFRD. To support this process, the Project staff travelled to Egypt from 7 to 15 February 2012. The aim was to assess the difficulties in implementation and provides inputs to improve it. The team also visited GAFRD in Cairo to discuss about the central system for data recording. Meetings with FAOR, FAORNE and FAOSNO were also held, to discuss possible ways to optimize FAO support to Egypt. A data collection protocol was prepared, covering all steps of the data collection process. The protocol is intended to be translated to Arabic and circulated to other Arabic countries of the project area after relevant adjustments for each country.

The project organized the first meeting of the Permanent working group on stock assessment (Demre, Turkey, 27 June - 1 July 2011). The Working Group constitutes a follow-up of the training course on stock assessment methods in Kavala, Greece (21-25 February 2011) and its organization had been agreed during the second Coordination Committee Meeting (Antalya, Turkey, 5-6 April 2011). During the meeting, the shared stocks were identified as the most important stocks for which scientific advice is needed. An inventory of existing data required to undertake a stock assessment

was made and the various information gaps were defined together with the most adequate stock assessment models to be used in the Eastern Mediterranean region.

At the 2nd Co-ordination Committee meeting of the EastMed project (Antalya, Turkey 5-6 April 2011), it was agreed to support Lebanon in the development of a licensing system which should be linked with a functional fleet vessel register. This will be carried in two phases. The first, an appraisal of the current licensing system and the preparation of a well-defined operational and methodological framework, has been conducted during the period from 18 September – 30 September 2011. The second one, the implementation of the recommendations from the appraisal, is under execution, with a tender for the development of the respective software.

Following the decision of the 2nd Co-ordination Committee, to perform, using the MEDITS protocol, and on board of a Turkish research vessel, a preliminary demersal trawl fishery survey in the Eastern Mediterranean with the participation of several EastMed member countries, the project supported the creation of a scientific committee to discuss the details of the survey. A concept note on the proposed survey was prepared by the staff of the project and distributed to the committee.

Increased Participation and Cooperation

The project organized a workshop on Fisheries Management Strategies and Approaches (Athens, Greece, 15-17 March 2011), where country representatives presented their current management strategies including their strengths and weaknesses. The participants discussed how management strategies could be improved in the Eastern Mediterranean and highlighted the importance of the EastMed Project in the region. The countries also identified how the Project could assist in improving their current management systems, including the support in capacity development, training, data collection, management and analysis, and networking.

During the reporting period the project signed Memoranda of Understanding (MoUs) with the Hellenic Centre for Marine Research-Institute for Marine Biological Resources (HCMR/IMBR), the National Agricultural Research Foundation-Fisheries Research Institute (NAGREF-FRI) and with the National Council for Scientific Research (CNRS) in Lebanon. A Letter of Agreement was signed between GAFRD-Egypt and FAO-EastMed, which enabled implementing the national fisheries dependent data collection pilot survey. A collaboration with the Italian Cooperation, which conducts research activities in Lebanon through the National Council for Scientific Research (CNRS), has been set up.

Following the decision of the 2nd Co-ordination Committee meeting, a review of the biology of *Lagocephalus sceleratus* was prepared, its impact on fishing gears, fisheries information, related legislation and potential commercialization. An analysis of the impact of Lessepsian species on fisheries of the Eastern Mediterranean was presented at the MedCoast International Conference (Rhodes, Greece Oct 2011).

During the intersessional period, EastMed supported the participation of experts from the participating countries in over 10 meetings, workshops and training courses, including the GFCM SAC and its sub-committees.

The project web site (www.faoeastmed.org) 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.

The project concluded five more technical documents, that are available on-line through the website.

MedFisis - “Mediterranean Fisheries Statistics and Information Systems”

The MedFisis project was conceived to promote and develop a Mediterranean Fishery Statistics and Information System with the ultimate objective of achieving a region-wide integrated system.

The project was jointly financed by the European Community and FAO, and ended in June 2011. During the intersessional period, the project completed the development of the software tools and the documentation for carrying out Fleet Censuses (Frame Surveys) and managing fishing Fleet information. The Fleet register and the accompanying documentation were completed, and were distributed to the partner countries and the GFCM. Both the software and the documentation can be obtained from FIRF, but will also be distributed by AdriaMed, MedSudMed and EastMed, that will continue supporting their participating countries in the improvement of their fisheries statistical systems.

The project also assisted some pilot countries, namely Albania, Egypt and Lebanon in transferring their existing data into the new system, training staff to use the system and in adapting the system to their specific requirements.

Finally, the project, in cooperation with AdriaMed, provided assistance to MonteNegro in expanding its Fishery Information System to include the functionalities necessary for the regular production of reports complying with GFCM Task 1 requirements.

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

The project “Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem. Regional Component: Implementation of agreed actions for the protection of the environmental resources of the Mediterranean Sea and its coastal areas” includes, as its component 3, the “Conservation of biological diversity: Implementation of SAP BIO and related NAPS”. This component of the Strategic Partnership for the Mediterranean LME in turn 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”.

The objective of Sub-Component 3.2 is to increase the ability of coastal nations to utilise coastal and high seas resources sustainably through the adoption of the ecosystem approach to fisheries management and the application of targeted interventions to reduce by-catch and other unsustainable fishing practices. The Sub-Component focuses on the dissemination of the ecosystem approach to Fisheries, on by-catch of regionally important species at a fleet level and on unsustainable fishing practices at regionally- representative Marine Protected Areas (MPA’s). The duration of the project is five years.

The project has been supporting the Moroccan Fisheries Research Institute, INRH, develop a fisheries monitoring system for artisanal fisheries in the Al Hoceima MPA, involving fishers’ associations. The collation and organization of the existing information has been completed, as well as the technical discussions with the INRH laboratory in charge of the area.

The field work on the by-catch activity was initiated during June 2011, in Tunisia, and the data collection on the main métiers has already started. Interactions with stakeholders to exchange information on the by-catch issues are planned for 2012.

The project has also supported the organization and lecturing of the University training course on the Ecosystem Approach to Fisheries, that was planned under the overall organization of FAO-FIRF, in Agadir, Morocco (12-30 September 2011). This course was also used to increase the cooperation between Mediterranean fisheries managers and researchers and their counterparts from African countries facing the Atlantic. Some delays in the implementation of the EAF capacity-development initiatives, that arose from agenda issues, are being resolved in 2012.

Black Sea Fish Project

During the intersessional period, FAO, through its Budapest office, carried out additional consultations on the concept of the project with fisheries institutions from the Black Sea countries. The formal issues that were delaying the signature of the financing agreement for the preparatory phase of the project have been overcome, and the process should start soon.

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 reinforcing the Commission and increasing cooperation and linkages in fisheries management across the Mediterranean, as well as at sub-regional level.

The Projects organized a common exhibition during the Committee on Fisheries (COFI) session (Rome, Italy, Feb 2011), drawing the attention to the issues of fisheries management in the Mediterranean. A stand was dedicated for the purpose and the projects had the opportunity to display informative materials and posters, and explain to visitors the activities undertaken by the Projects in support to Mediterranean countries.

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.