

منظمة  
الأغذية والزراعة  
للأمم المتحدة

联合国  
粮食及  
农业组织

Food and Agriculture  
Organization of the  
United Nations



Organisation des  
Nations Unies pour  
l'alimentation et  
l'agriculture

Продовольственная и  
сельскохозяйственная  
организация  
Объединенных Наций

Organización de las  
Naciones Unidas para la  
Alimentación y la  
Agricultura

# EastMed

Report of the Seventh Meeting of the Coordination Committee

Beirut, Lebanon, 19 – 20 May 2016

The conclusions and recommendations given in this and in other documents in the *Scientific and Institutional Cooperation to Support Responsible Fisheries in the Eastern Mediterranean* series are those considered appropriate at the time of preparation. They may be modified in the light of further knowledge gained in subsequent stages of the Project. The designations employed and the presentation of material in this publication do not imply the expression of any opinion on the part of FAO or donors concerning the legal status of any country, territory, city or area, or concerning the determination of its frontiers or boundaries.

## **Preface**

The Project “Scientific and Institutional Cooperation to Support Responsible Fisheries in the Eastern Mediterranean- EastMed is executed by the Food and Agriculture Organization of the United Nations (FAO) and funded by Greece, Italy and EC.

The Eastern Mediterranean countries have for long lacked a cooperation framework as created for other areas of the Mediterranean, namely the FAO sub-regional projects AdriaMed, MedSudMed and CopeMed II. This made it more difficult for some countries in the region to participate fully in international and regional initiatives for cooperation on fishery research and management. Following the very encouraging experience of technical and institutional assistance provided to countries by the other FAO sub-regional Projects,

## **EastMed**

The project was born to support the development of regional cooperation and the further development of multidisciplinary expertise necessary to formulate appropriate management measures under the FAO Code of Conduct for Responsible Fisheries and the principles of the Ecosystem Approach to Fisheries (EAF) to ensure rational, responsible and participative fisheries management

The project’s **longer-term objective** is to contribute to the sustainable management of marine fisheries in the Eastern Mediterranean, and thereby to contribute to supporting national economies and protecting the livelihoods of those involved in the fisheries sector.

The project’s **immediate objective** is to support and improve the capacity of national fishery departments in the sub-region 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.

FAO – EastMed Project HQ  
FAO FIAF  
Viale delle Terme di Caracalla  
00153 Roma, Italy  
E-mail: [Eastmed@fao.org](mailto:Eastmed@fao.org)  
URL://[www.faoeastmed.org](http://www.faoeastmed.org)

## **Publications**

EastMed publications are issued as series of Technical Documents (GCP/INT/041/EC – GRE– ITA/TD-00) and Occasional Papers (GCP/INT/041/EC – GRE – ITA/OP-00) related to meetings, missions and research organized by or conducted within the framework of the Project.

Occasionally, relevant documents may be translated into national languages as EastMed Translations (GCP/INT/041/EC – GRE – ITA/ET-00)

Comments on this document would be welcomed and should be sent to the Project headquarters:

EastMed Project  
FAO FIAF  
Viale delle Terme di Caracalla  
00153 Roma, Italy

[Eastmed@fao.org](mailto:Eastmed@fao.org)

For bibliographic purposes this document should be cited as follows:

EastMed, 2016. Report of the 7<sup>th</sup> Meeting of the EastMed Co-ordination Committee.  
GCP/INT/041/EC – GRE – ITA/TD-23

## **Preparation of this document**

This document is the final version of the Report of the 8<sup>th</sup> Co-ordination Committee meeting of the EastMed Project, organized by the FAO-EastMed Project (Scientific and Institutional Cooperation to Support Responsible Fisheries in the Eastern Mediterranean) Beirut (Lebanon), 19–20 May 2016.

EastMed, 2016. Report of the 7<sup>th</sup> Meeting of the EastMed Co-ordination Committee. Scientific and Institutional Cooperation to Support Responsible Fisheries in the Eastern Mediterranean. GCP/INT/041/EC – GRE – ITA/TD-23. Rome 2016: 29 pp.

### **ABSTRACT**

The seventh coordination meeting of the EastMed project was held in Beirut, Lebanon, from 19 to 20 May 2016 under the kind invitation of the Lebanese Ministry of Agriculture (MoA). The meeting was attended by delegations from Egypt, Lebanon, Palestine, and Turkey and staff of the EastMed project. After the opening of the meeting and election of the chairperson, the activities during the 6<sup>th</sup> year of the project were presented, followed by the proposals of activities for the 7<sup>th</sup> year from each country. The participants expressed their satisfaction with the project and thanked both the staff of the project and the donors for their contribution. The agreed work plan for the 7<sup>th</sup> year includes training and support in data collection, data analyses, activities aiming in strengthening stakeholders' awareness and activities in promoting regional participation and cooperation. EastMed finally, will continue to support the participation of experts from the project's area at the meetings of the FAO-GFCM and other relevant regional/international organizations. The EastMed project, in close cooperation with the other Mediterranean sub-regional projects, will continue to find synergies among the various activities in the region.

# **REPORT OF THE 7<sup>TH</sup> MEETING OF THE EASTMED CO-ORDINATION COMMITTEE**

**Beirut, Lebanon**

**19 – 20 May 2016**

## **Opening of the meeting and election of the Chairperson (Agenda Item n. 1)**

1. The seventh Meeting of the Co-ordination Committee of the FAO EastMed sub-regional Project “Scientific and Institutional Cooperation to Support Responsible Fisheries in the Eastern Mediterranean” was held in Beirut, Lebanon, from the 19<sup>th</sup> to 20<sup>th</sup> May 2016, and hosted by the Lebanese Ministry of Agriculture (MoA).
2. The meeting was attended by delegations from Egypt, Lebanon, Palestine, and Turkey and staff of the EastMed project. In addition Mr. Abdalnasser Madi focal point of the project in Gaza Strip, participated in the meeting through teleconference. Mr. Samir Majdalani, from MoA and Chair of the Compliance Committee of GFCM, represented the GFCM in the meeting. The list of participants is given in Annex I.
3. The meeting was opened by the FAOR in Lebanon, Mr. Maurice Saade, who welcomed the participants and thanked the Ministry of Agriculture of Lebanon for hosting the meeting. He also expressed his thanks to the donors of the project (EC and Italy), on behalf of FAO. Mr. Chadi Mohanna, Director of the Rural Development and Natural Resources Directorate within the Lebanese Ministry of Agriculture, welcomed participants on behalf of the hosting country. He highlighted the importance of the project to the Eastern Mediterranean region, noting that the continuous support of the project to Lebanon has made important contributions to the development of capacity of MoA in different fronts, including in fisheries socioeconomic analysis, which is providing the means to evaluate the vulnerability of coastal fishing communities. In his welcoming remarks, Mr. Marcelo Vasconcellos, Acting Coordinator of EastMed, updated delegates on the current situation of the project and the plans for the next year. He noted that with the closure of the office in Athens, Greece, the project was temporarily moved to FAO HQ in Rome, from where the activities are being currently coordinated. He thanked the delegates and EastMed’s staff for the high level of activities developed during the year, including for the implementation of innovative experiences in the Mediterranean, such as the sub-regional socioeconomic analysis and EAF pilot studies. With regards to the future, he noted that the EC has made available funds for the continuation of the project in 2017 and that the project is currently working to secure the level of co-funding required to access the EC grant, including from Italy.
4. Mr. Samir Majdalani was elected as chairperson of the meeting.

### **Adoption of the Agenda (Agenda Item n. 2)**

5. The Agenda was presented to the Coordination Committee. The Chair invited the participants to offer any comments, but all agreed that the draft agenda reflected their expectations of the meeting. The Agenda was adopted with no changes.

### **Report on the Project's Progress (Agenda Item n.3)**

6. The project's technical officer, Mr. Mark Dimech, introduced this agenda item and the document "Report on Project's Progress" *EastMed CC7\_02* (Annex III) in which the main activities carried out by EastMed from April 2015 to May 2016 were described. The activities carried out correspond to the prioritized work programme and recommendations of the 6<sup>th</sup> Meeting of the EastMed Coordination Committee.
7. The Committee members thanked the project for the activities which were carried out in the intersessional period, and highlighted the importance of all the achievements of the project, especially the work being conducted on fisheries data collection and socioeconomic analysis.
8. The Lebanese representative thanked the project for the support received on the Fisheries Licensing System (FLS). He acknowledge the value of having the system, which allows MoA to maintain a comprehensive database of the fishing vessels. The MoA has finished the data entry for 2015 and is currently reviewing it and validating it. There are still problems in the full functionality of the system due to problems in the internet connectivity between outposts and MoA central office. He also noted the need to fix bugs in system. In this respect he informed the committee that a maintenance agreement is currently being drawn up with the company that developed the software so that bugs are fixed. He noted the need to develop a comprehensive fishery information system that builds on the available databases and helps the country to comply with GFCM requirements such as the vessel registry and IUU activities. The Project suggested to address this specific demand to the GFCM.
9. The Lebanese representative also highlighted problems with the data collection system of the FLOUCA Web, where the Ministry identified problems in the system, such as the random selection of the sampled fishermen to be interviewed. This lead to an overestimation of the activity which in turn affected the estimation of catches and days at sea for 2015. It was observed relatively low catches of sardines, which for Lebanon this was considered as unreliable.
10. The Lebanese representative also expressed the importance of the activities related to the Ecosystem Approach to Fisheries (EAF). The first steps in the pilot action for the development of a management plan for the purse seine fishery created an environment which enabled the close interaction with the sector. For example fishers were willing to cooperate in the provision of catch data for sardines which showed their engagement in the process. He also mentioned that the project is assisting in the biological sampling of "sardines" in order to

determine the catch composition of the surrounding nets and biological parameters for the assessment of the resources.

11. The Egyptian representative reiterated the positive comments of the Lebanese delegate including the SAMAC Web system for the collection of fisheries data, the collection of biological parameters, the assessment of the resources and the recent activities on the EAF management plan for the demersal fisheries. These activities gave considerable visibility to Fisheries in Egypt where before most of the activities in the country were dominated by aquaculture. He also stressed that the activity on EAF created the opportunity to discuss with stakeholders options for the management of the trawl fishery.
12. The Turkish delegation acknowledged the support the project gave to the country on data collection in the past. With respect to the EAF due to the recent change in the director of Institute the EAF pilot study on the development of a fisheries management plan for the small scale fishery in Gökova bay is currently on hold. They hope to resume the activities as soon as possible, including the EAF and the biological sampling of catches in the Aegean Sea and South of Turkey.
13. Following the comments received from the countries a general discussion was developed on the similarities and differences among the pilot studies EAF. The project explained that it plans to hold a meeting in the next semester to promote the exchange of experiences among the three pilot studies and to identify options for the identification of appropriate management measures. The workshop is expected to be conducted after the issue identification and risk assessment workshops. Palestine noted the interest to participate as well in the initiative, through the training and implementation of a pilot action on EAF.
14. The participants acknowledged the role of the project in the development of the capacity of countries in the collection and analysis of socioeconomic data in recent years. The methodologies used are comparable across the region and this enabled more robust data analysis. Further training opportunities were requested for boosting capacity of staff in data analysis. The project noted that the next WG on Data Analysis will give the opportunity for refreshing the concepts and methods. Additionally training courses will be offered to Gaza Strip through Skype in June -July this year.

#### **GFCM activities for the next intercessional period (Agenda item 4)**

15. Mr. Samir Majdalani introduced the preliminary work plan of the GFCM SAC for 2016-2017, which was adopted in the 18<sup>th</sup> SAC meeting. At the outset, he clarified that this plan will be submitted to the Commission at its 40<sup>th</sup> Session (30<sup>th</sup> May to 3<sup>rd</sup> June 2016, Malta) for consideration and endorsement. He presented the activities planned at the regional level, for the entire Mediterranean Sea and at the sub-regional level, specifically for the Eastern Mediterranean sub-region. At regional level, foreseen activities concern: the marine environment ecosystems; statistic and information, i.e. the DCRF; and stock assessments. At

the sub-regional level in common for all the sub-regions, activities are foreseen regarding the recreational fisheries and their interaction with small scale fisheries; the description of Mediterranean métiers; and the finalization of Guidelines on a common methodology for socio-economic data collection and analysis, in coordination with the FAO regional projects.

16. Specifically for the Eastern Mediterranean, the activities of the work programme include: i) Provide capacity-building on aspects related to data collection and stock assessments; ii) Compile and analyse information for the identification of stock boundaries; iii) Compile available information on alien species and their interaction with fisheries.
17. Participants were informed that the GFCM is preparing a mid-term strategy with the aim to strengthen fisheries management in the region and revert the situation of overfishing. The strategy will involve, among other things, a program of work on the monitoring and mitigation of by-catch and discards, fishery-independent surveys, capacity development assistance to countries and small-scale fisheries. A GFCM FishForum is also being planned to serve as a hub for the exchange of scientific knowledge on different aspects of fisheries in the Mediterranean and Black Sea. Mr. Majdalani also presented a summary of the compliance situation of Eastern Mediterranean countries with the GFCM requirements for data collection. He noted the good level of compliance of countries in the region and highlighted the role of EastMed in assisting some Eastern Mediterranean countries to overcome the difficulties in meeting the data requirements.
18. In the ensuing discussion different comments were made concerning the mid-term program of work of the GFCM. Participants noted the importance of having a scientific forum in the Mediterranean and acknowledged the relevance of the mid-term strategy. They also highlighted the need for coordination between GFCM, FAO regional projects and other concerned entities to ensure that the capacity development needs are addressed in the most effective and efficient way.

#### **Development of the project`s programme for the next period (Agenda Items 5 & 6)**

19. The EastMed Technical Officer presented the document “Tentative Work plan for the 7<sup>th</sup> Year of the Project”. The draft proposal for the EastMed 2016-2017 work plan was presented, based on the previous years` work plans. It was underlined that the proposed work plan for the future period aims to consolidate the achievements of the past years and provide technical assistance at national and sub-regional level during the coming year. The work plan proposal is based on the scientific cooperation established within the framework of the project in collaboration with the other FAO Mediterranean projects and GFCM. The Committee was reminded that the final work plan would take into account the recommendations emerging from this Committee meeting, the priorities expressed by the countries on each activity and the availability of the Project`s budget.

20. In view of the importance of by-catch and discards in the Mediterranean, and the lack of appropriate means for their monitoring, a program of work on by-catch was proposed to be implemented in the Eastern Mediterranean with the support of EastMed and in close coordination with the GFCM. The program will involve the sampling of catches in fish markets for by-catch species (e.g. elasmobranches) and most importantly using observers on board fishing vessels in selected fisheries in the sub-region to start collecting data. Candidate pilot fisheries were proposed, such as the purse seine fishery in Lebanon and the trawl fisheries in Gaza Strip, Egypt and Turkey. It was noted that in order to set up the program appropriate actions will need to be taken to ensure that observers are adequately trained and that the activity is implemented in accordance to legal and safety requirements in each country. Such details will be discussed bilaterally with each country during the drawing up of the program.
21. With respect to the modernization and diversification of small scale fisheries in Lebanon, the Lebanese representative proposed the collaboration with the CNRS in the construction of a dual purpose small scale vessel capable of conducting experimental fishing and environmental research. The vessel design should also serve as a reference fishing vessel for the modernization of the small scale fleet. The proposed fishing vessel, should be capable to explore offshore and deep water resources of the Lebanese coast from 6 nautical miles and beyond. The project could contribute with technical expertise in the vessel design and supplying equipment for the vessel.
22. The Egyptian representative described the progress on the development of the clam fishery. He mentioned that the market value chain survey was completed and that they would like to continue this activity. GAFRD will offer a fishing vessel to conduct some trials at sea which however will need some equipment and fishing gears. Depending on the availability of funds, the project could support the equipment of the fishing vessel and the experimental fishing trials at sea. The catch from the trials at sea could be used to launch the products on the local market through a wholesaler.
23. A discussion was developed on the application of EAF in the region. The participants expressed the need to scale up the activities on the development of management plans such as applying it to a larger number of fisheries in the countries and eventually for shared resources among two or more countries in the region (e.g, Round Sardinella) to support the development a sub-regional management plans. This however would be possible after the current pilot management plans have been developed. A request was made from Gaza strip to join the initiative and have also a pilot case study in the area.
24. With respect to the alternative methods in collecting catch and effort data, due to the problems being encountered with SAMAC Web and FLOUCA Web in Egypt and Lebanon respectively, the countries agreed to launch in parallel an alternative system for the collection of catch and effort data collection based on vessel sampling. The activity will be focused on a pilot basis for the purse seine fishery in Lebanon and the trawl and Purse seine fishery in Egypt. The data collection is expected to start during summer.

25. In view of the continued demands of stock assessment courses across the Mediterranean, the Committee was informed by the Lead Technical Officer of the Mediterranean Regional projects that FAO is currently considering the organization of a regular summer course on stock assessment. The course would run for two or more weeks and would be modular, allowing projects to attend the demand for different levels of training in the region on a regular basis, according to the availability of funds. Such training courses could also be expanded to cover other topics such EAF management plans and socio-economic aspects.
26. With respect to the biological sampling of catches in Turkey a sampling program for priority species, the proposal will be reviewed by Turkish experts. The plan is that the project will organize a mission to Turkey to discuss the details after which sampling could start.
27. The participants welcomed the initiative to collect age data for stocks that are currently being assessed. This was especially important for shared resources such as sardines and the data derived from age reading including growth could also be used in the definition of stock boundaries and the determination of shared stocks. The participants agreed to support the collection of Round sardinella (*Sardinella aurita*) samples across the region, including in non-participating countries. Furthermore the participants suggested to also collect genetic samples which will aid in having a more accurate definition of the boundaries of the stock using genetic analysis.
28. With respect to the value chain analysis in Lebanon, the Lebanese representative proposed to explore the idea of product branding on a pilot basis in Lebanon to test options for the valorization of products based on territorial and environmental characteristics of individual communities. It was noted that the project could also explore the branding and marketing of fish species with potential high commercial values but which are currently undervalued in the country (e.g. monkfish, *Lophius* spp.).

#### **Date and venue of the next Coordination Committee meeting (Agenda Item 8)**

29. The representative of Egypt, Mr. Atif Salah, invited the Committee to hold its next meeting in Cairo, Egypt. The Committee accepted the offer, and the exact date and venue will be decided later. It was tentatively proposed to hold the meeting in the first quarter of 2017.

## Work plan for the 7<sup>th</sup> year of the project

### **Institutional Strengthening**

The Project will continue to support the needs in the Fisheries Departments, in particular:

#### 30. **Web-based licensing system in Lebanon**

The project will continue to follow up on the web based licensing system and provide technical assistance if required. The project can support a maintenance contract for the licensing system after it is fully operational.

#### 31. **Follow-up on the software for the processing of catch and effort data in Egypt and Lebanon.**

The project will continue to follow up on the catch and effort database and software applications in Egypt (SAMAC WEB) and in Lebanon (FLOUCA WEB) and it will provide technical assistance if required.

#### 32. **Provide IT and laboratory equipment**

The Project will provide IT and laboratory equipment following a specific request from the participating countries.

#### 33. **Develop a software application for the processing of socio-economic data**

After the successful implementation of the socio-economic surveys in the Eastern Mediterranean, during previous co-ordination committee meetings the need was felt to have a web-based database software application for the storage and processing of socio-economic data. The software would be used for the data entry and the estimation of socio-economic parameters, including outputs according to the GFCM requirements. In this respect the EastMed project could support the development of a software application for the sub-region that could be used in socio-economic surveys in the EastMed project area. This would assist fisheries administrations and scientists in conducting socio-economic surveys in Egypt, Palestine, Lebanon, and Turkey. The development of the software could be developed in phases. During the first phase, a database application for the data entry of socio-economic raw data and entry filters for data quality checks could be developed. During the second phase tools for final estimations and export of indicators could be developed.

#### 34. **Evaluate options for the modernization and diversification of small scale fisheries in Lebanon**

In past co-ordination committee meetings a request was made from Lebanon to determine the possibility to design and construct a new fishing vessel. The request came up since the existing fishing fleet is old and not properly equipped to fish beyond 3 nautical miles from the coast. Without a suitable design for fishing vessels and the associated equipment, the

Lebanese fishing fleet could never efficiently exploit offshore fisheries resource, maintain healthy fishing grounds, preserve the catch in good quality and work in the appropriate health and safety conditions. The project could contribute with technical expertise in the vessel design and supplying equipment for the vessel.

Furthermore information is lacking on the deep water fishing grounds of Lebanon. In this respect the project could support activities in the modernization and diversification of a small scale fisheries, including testing of artisanal fishing techniques and to survey deep water unexploited fishing grounds in Lebanon using passive gears.

35. **Further development and implementation of a roadmap for the development of a clam fishery in Egypt**

In Egypt fishing for clams is mostly conducted with a hand rake at depths shallower than 1 m. However, from the preliminary survey that was conducted recently, it was shown that clam resources exist in deeper waters, which are currently not exploited. The situation of overcapacity of the trawl fleet and the over exploitation of the demersal resources exploited by the trawlers has generated considerable interest in diversifying the trawl fleet in fishing for unexploited species. This is especially relevant for the trawlers smaller than 18 m in length who fish mostly inshore at < than 3 nm from the coast. As a result there has been strong political pressure to find other fishing opportunities. Fishing for clams could be one these solutions, since the small trawlers could be easily adapted to fish for clams. In this respect a roadmap needs to be developed to guide the sustainable development of the clam fishery. The roadmap should offer recommendations on which tools to employ, and it is intended to help fishery managers and other stakeholders better understand the process by which the clam fishery can be developed, with clear phases and steps with timeframes and required funding. Among the first actions to consider involves conducting experimental fishing to assess the feasibility of exploiting the resource and to determine the market potential of the product. First preliminary surveys carried out with the support of EastMed showed promising results. Options to scale up the surveys to make a more comprehensive assessment of the stock and market needs to be investigated and implemented.

36. **Support the development and implementation of the fisheries management plans in Egypt, Lebanon, Palestine (Gaza Strip) and Turkey**

There is now broad agreement at the international policy level that the ecosystem approach to fisheries (EAF) is the appropriate and necessary framework for fisheries management. One of the key outcomes of the EAF is the development of comprehensive fishery management plans. These plans can guide the implementation of agreed management measures, as well as their adaptation in face of changing conditions, thus helping managers make more informed decisions for the sustainable use of fisheries resources.

In this respect in Egypt, Lebanon and Turkey three case studies are underway on the application of EAF. In Egypt a fisheries management plan is being developed for the trawl fishery, in Lebanon the management plan deals with the purse seine fishery, while in Turkey it is being developed for the small scale fishery in Gökova bay. For all the three case studies the process has been started and the first stakeholder workshops have been conducted.

The objective is that the fisheries management plans will be drawn up by the end of the year. After their finalization and endorsement, the project could support implementation of activities to facilitate the implementation of the adopted management plans. New EAF pilot studies could be also supported, upon the request of countries, building on the know-how and capacity of national authorities.

## **Staff Training and Development**

The project will continue to support on-the-job training, national and sub-regional workshops and opportunities for experts to participate in regional management meetings, in particular:

### 37. **Support training on alternative methods for the collection of catch and effort data**

In Egypt, Palestine and Lebanon a sampling scheme for the collection of catch and effort data has been implemented using the fishing trip as the sampling unit. Although these systems have been mostly implemented on a pilot basis, after full implementation both in Egypt and Lebanon several concerns were raised on the utility of the systems. Another sampling approach for the collection of catch and effort data is to use the fishing fleet register as the population and the fishing vessel as the sampling unit. The sampling design and strategy is similar to the ones done for the collection of socio-economic variables, the main difference lies in the temporal stratification for sampling (every week or month instead of annually) and the variables collected (catch & effort instead of cost and revenue). However statistically, this method for the collection of catch and effort data is the same as that for the socio-economic data. Furthermore the statistics are simpler than the methods used at the moment and the experts in the country are already familiar with the statistical procedures in this method through the socio-economic surveys. This method is also the one suggested by the GFCM (see GFCM DCRF manual pg. 51). In this respect the project could support the collection of catch and effort data based on this approach on a pilot basis for selected fisheries in Lebanon and Egypt. To avoid an interruption in the ongoing system of catch and effort data collection, it is envisaged that this alternative approach would run in parallel with the ongoing system. This would also allow a comparison of the methods in terms of catch and effort estimates.

### 38. **Support training in stock assessment methods**

A general need for training on stock assessment has been indicated in several cases by the countries participating in the project. The project will support training sessions organised by other FAO Mediterranean regional projects or other entities relevant to the Mediterranean.

### 39. **Support training in the sampling and identification of by-catches, discards and incidental catches.**

The project can support training in the sampling and identification of by-catches, discards and incidental catches (see points numbers 43 & 44 under data collection and analysis for further details).

### 40. **Support training activities in otolith reading**

The project can support training in the reading of otoliths (see points number 42)

## **Data Collection and Analyses**

### **41. Support activities on the collection of catch, effort, socio-economic and biological data in Egypt, Palestine and Lebanon**

The project will continue to support ongoing data collection activities on catch, effort, biological and socio economic variables.

### **42. Support the collection of biological data for priority stocks in Turkey**

Data on the biological characteristics of the stocks in Turkey is lacking. During the FAO EastMed Working Group on Fisheries data Analysis that was held in Antalya Turkey from the 28-30 July 2015 a plan for the collection of biological fisheries data in Turkey was drawn up. Biological data could be collected for the most important commercial species in Turkey. The collection of biological data include length, weight, sex, and sexual maturity, and could be collected in 2016 on a pilot basis since this would be the first year biological data would be collected from the landings from all over the Aegean and Mediterranean Sea. The methodology to be used for the biological parameters should be according to GFCM Data Collection Reference Framework manual.

During the WG in Antalya, a sampling scheme was devised in order to collect the biological parameters for the most important commercial species in Turkey. In order to analyse the status of the stocks one small pelagic species and three demersal species could be collected per GSA. The species selected could act as indicator species for the respective fishery, so that scientific advice can be provided for both the small pelagic fishery, the trawl fishery and the small scale fishery. The objective is to start building up a time series for the selected species, so that more refined stock assessments can be done in the future when higher quality data will be available. In this respect the project could support the sampling of biological variables for the most important stocks in Turkey.

### **43. Support activities in developing age-length keys for species that are being assessed**

In the Eastern Mediterranean, at the moment stock assessments are being conducted using length based methods. The determination of growth and age are indirectly estimated from the Von Bertalanffy growth parameters which are obtained from the length frequency distributions. However length-based methods have several limitations, and the best approach to have accurate information on growth is by measuring directly the age of the fish, after which this information is used to produce Age-Length Keys (ALKs). Using direct measurements of age from hard structures such as otoliths, scales or spines to determine the age of the fish greatly improves the quality of the stock assessments.

The ALKs give the proportion of individuals by age in each length class. The length distribution of the whole catch is then used to estimate the age distribution of the whole catch by assigning ages to individuals in each age-length class according to their frequency distribution in the ALK. In this respect the project could support specific activities in developing age-length keys for the species which stock assessments are currently being conducted.

### **44. Support activities on the collection of discards in Egypt, Palestine, Lebanon and Turkey**

Discarding is a global issue and FAO estimates that around of 20 million tonnes of discards occur which are about 25 percent of the reported annual yield from marine fisheries. The discarding of targeted species and by-catches have long been recognized as a problem. Usually discarding constitutes a reduction of future harvesting opportunities and it might have negative consequences for the environment and ecosystem. Discarding and by-catches occur because most of fishing gears and fishing practices are not selective enough for the species and sizes being targeted and because target species inhabit also areas which are occupied by a wide range of other species. In a number of cases legislation make discarding compulsory affecting both juvenile and adult specimens, such as discarding of specimens smaller than the minimum landing size and catches in excess of quotas. Discards has several consequences, such as reduction of future spawning stock biomass and reduction in the growth potential of the stock with obvious economic consequences.

Discarding rates are often not very well estimated or they are totally unknown. In such cases discards may represent a major source of uncertainty about the real fishing mortality rates exerted on stocks. In stock assessments the main objective of including discard data is to improve the estimates of removals from the population due to the fishery. Accurate discard data should be obtained by observers on board fishing vessels, which can collect information on discards of commercial species for use in stock assessment and other discards to be used in the evaluation of the wider ecosystem effects of fishing.

According to the GFCM DCRF discard data should be collected in weight for the main commercial species and it is only compulsory for fleet segments for which the discard rate exceeds 10 percent of the total volume of catch for a given fleet segment in a given GSA. In this respect the project can support training and studies in order to determine the discard rates by fleet segment. If the discard rates are found to be more than 10% the project can then support the implementation of a regular monitoring program for discards.

#### 45. **Support activities on the collection of incidental catches in Egypt, Palestine, Lebanon and Turkey**

Incidental catches of vulnerable species such as marine mammals, seabirds, turtles, sharks and rays have recently become dominant factors in the management strategies of some fisheries. In some cases by-catches are so great that they are unsustainable, especially for populations of rare and endangered species. Regardless of the ability of different species to withstand by-catch mortality, public perception of the species involved has a strong influence on the outcome of management measures to limit the effect of the fishery concerned.

The available information on by-catch species and incidental catches of vulnerable species is very limited. The GFCM has a number of recommendations for the collection of data of incidental catches of seabirds, sea turtles, seals, cetaceans, sharks and rays species. Information should be collected on the number of individuals captured by fleet segment and gear types. As mentioned in the GFCM DCRF manual such data can be collected by on-board observers. In this respect the project can support training and studies in the sampling and assessment of by-catch species and incidental catches of vulnerable species.

46. **Conduct an experimental fishing survey as part of the roadmap for development of the clam fishery in Egypt**

In Egypt due to the Nile delta and the presence of large shallow waters (0-20 m), with areas composed of sand and mud, there could be a great potential for the exploitation of a variety of clams. In 2013 a pilot survey was conducted, to determine if the resources were present at sea. Overall the results showed that the *C. gallina* has a potential for exploitation together with other potentially commercial species. After the survey a market-chain analysis was conducted in order to better understand the existing bivalves market in Egypt. The survey was now completed and the preliminary results showed that the bivalve market in Egypt is managed by few key wholesalers, which move the product throughout the whole country. One important aspect is that the demand far exceeds the supply, providing several opportunities for the introduction of *C. gallina* in the local market.

To complete the evaluation of the potential feasibility of developing a new fishery for clams, it is necessary to expand the surveys to obtain a more comprehensive view of the stocks and the markets. Options to conduct the survey along the Egyptian coast need to be identified and confronted. Depending on the availability of funds, the project can support the survey of the stock in a larger and more representative area of the Egyptian coast. There is also a need to commercialise the product on the local market on a trial basis, to determine the reaction of the consumers. The coupling of the resource and market surveys could provide the needed amount of product for the market trial, with the support of local wholesalers.

47. **Support surveys using artisanal fishing gears in Lebanon**

One of the problems that is exhibited by the Lebanese fisheries is the restricted continental shelf, and the concentrated fishing activities close to the shore. In this respect in 2012, EastMed in collaboration with the CANA-CNRS project "Establishing monitoring and sustainable development of the Lebanese sea" conducted a study to evaluate the potentiality of offshore fishing grounds for the local artisanal fishery. A preliminary survey was carried out in the area between Tyre and Naqoura (South Lebanon), using both monofilament gillnets to target hake (*Merluccius merluccius*) and Spanish traps designed to catch the striped soldier shrimp (*Plesionika edwardsii*). The results of the survey, showed the occurrence of potentially exploitable resources on the Lebanese upper slope. Further surveys are required to gather quantitative data on the spatio-temporal distribution of hake, striped soldier shrimp and other resources offshore the Lebanese coasts and to identify the more suitable fishing periods and areas. In this respect the project could support further experimental surveys in offshore fishing grounds using small scale fishing gears.

48. **Support the organization of an EastMed WG on fisheries data analysis**

During the sixth co-ordination committee meeting of the EastMed project which was held in Rome, Italy, from the 21-22 of May 2015, the participants decided to support the organization of an EastMed Working Group on fisheries data analysis. Two meetings of the WG were conducted, one in Antalya (Turkey), and the main objective of the meeting was to devise a plan for the 2015-2016 fishery data analysis, which included stock assessments and socio-economic analysis. The plan would be in preparation to the next meeting of the Working Group, so that any data that would be used for the analysis could be prepared beforehand.

The 2<sup>nd</sup> meeting of the WG was conducted from the 2-6 of November in Athens, Greece. The aim of the working group was to undertake stock assessments and to conduct a socio-economic analysis of the fisheries in the Eastern Mediterranean. Two sub-groups were held, one to conduct Stock Assessments, and the other to conduct Socio-Economic analysis. During sub-groups, stock assessments and socio-economic analysis were conducted. In the next phase the project could support the organization of another WG on fisheries data analysis in order to undertake stock assessment and socio-economic analysis. The WG could be held in Turkey, in the third quarter of this year.

49. **Assessment of the Seafood market in Lebanon**

Within the Country Programming Framework 2016 to 2019, which sets out government priority areas to guide the FAO partnership and support the Government of Lebanon, innovative actions will be promoted to increase the efficiency of value chains through conducting marketing studies. In this respect the FAO EastMed project can support the assessment of the market in the fisheries sector. The goal of the value chain analysis would be to better understand the existing fisheries market in Lebanon in order to map the flows of products throughout the different stages of the value chain, from the producers to the consumers.

Furthermore project will also explore the idea of product branding on a pilot basis in Lebanon to test options for the valorization of products based on territorial and environmental characteristics of individual communities and species with potential high commercial values but which are currently undervalued in the country.

50. **Collection of genetic samples for the identification of shared resources**

In order to better define the stock boundaries and the identification of shared resources, the project will support the collection of genetic samples which will then be sent to specific labs for genetic analysis. This will be done in collaboration with international initiatives on genetic analysis such as the Fish barcode of Life (FISH-BOL; <http://www.fishbol.org/>).

## **Increased Participation and Cooperation**

### **51. Strengthening the cooperation with the other FAO Regional Projects**

The existing cooperation with the other FAO sub-regional projects AdriaMed, MedSudMed and CopeMed II will be further strengthened. In this context, synergies including training activities will be coordinated among all the projects, in order to avoid duplication or overlapping of activities. The participation of other experts from the projects in training courses organized by EastMed and vice versa will be foreseen.

### **52. Support Government staff to attend and fully participating in GFCM meetings**

The Project will continue to strengthen the international and regional cooperation at Mediterranean level with the GFCM and its related bodies (SAC, Sub-Committees, Working Groups), according to budget availability, through the support to the preparation of scientific contributions for GFCM events, the participation of experts from the EastMed countries in GFCM events and through support to the countries to be compliant with the GFCM requirements.

### **53. Support the organization of the Co-ordination Committee meeting**

The project should organize the meeting of the Co-ordination Committee, where lessons learned and possible recommendations regarding requirements and priorities will be discussed, also in the light of a possible follow-up project supporting the development of national and regional capacity for fisheries management.

### **54. EAF sub-regional workshop to review the EAF case studies**

Following the case studies to develop fisheries management plans in Egypt, Lebanon and Turkey, according to the Ecosystem approach to Fisheries, a regional workshop could be held to share experiences among the countries on the application of EAF. The project could support the organisation of this workshop.

### **55. Disseminate Project's results and develop fishery information systems through the use/development of databases, web pages and technical papers**

The contents, and consequently the EastMed web portal, will continue to be updated and further developed in order to make it always easily accessible in areas of interest to website users. The Project will continue to disseminate the project's results through the preparation of technical documents, meeting reports, brochures and posters.

## **Annex I List of Participants**

### **Egypt**

Atif Salah Megahed  
General Director of Fisheries Dept.  
General Authority for Fish Resources  
Development (GAFRD)  
Tel: +20/1009201108  
E-mail: atif\_gafrd@yahoo.com

### **Palestine**

Yaser Shetaya  
Fisheries Manager  
Ministry of Agriculture of the  
Palestinian Authority  
Tel: +97/2598928174  
E-mail: yaser1971@hotmail.co.uk

### **Lebanon**

Chadi Mohanna  
Director of Rural Development and Natural  
Resources Directorate  
Ministry of Agriculture  
Tel: +961/01849600-611 100  
E-mail: cmohanna@agriculture.gov.lb

Samir Majdalani  
Head Department of Fisheries & Wildlife  
Ministry of Agriculture  
Tel: +961/01849600-611 108 (office)  
+961/03384421 (mobile)  
E-mail: sem@cyberia.net.lb

Dahej El Mokdad  
Head of Forestry & Natural Resource Division  
Ministry of Agriculture  
Tel: +96/13602794  
E-mail: dmokdad@agriculture.gov.lb

Imad Lahoud  
Agricultural Engineer  
Department of Fisheries & Wildlife  
Ministry of Agriculture  
Tel: +961/01849600-611 110  
+961/01849622  
E-mail: ilahoud@agriculture.gov.lb

Hussein Nassar  
Fisheries Officer  
Department of Fisheries & Wildlife  
Ministry of Agriculture  
Tel: +961/01849600-611 110  
E-mail: hnassar71@hotmail.com

Samer Jawhar  
Fisheries Officer  
Department of Fisheries & Wildlife  
Ministry of Agriculture  
Tel: +961/01849600-611 110  
E-mail: sakaj.insp@hotmail.com

Ali Nassar  
Fisheries Officer  
Department of Fisheries & Wildlife  
Ministry of Agriculture  
Tel: +961/01849600-611 110  
E-mail:

Stefano Lelli  
Project Coordinator  
National Council for Scientific Research,  
Lebanon  
Tel: +961/70953537  
E-mail: stefano.elli@cnrs.edu.lb

## **Turkey**

Erdoğan Güneş  
Head, Department for Statistics  
& Information System  
DG for Fisheries & Aquaculture  
Ministry of Food, Agriculture  
& Livestock  
Tel: +90/312 2868451  
E-mail: [erdincgunes67@gmail.com](mailto:erdincgunes67@gmail.com)

Aydin Ünlüoğlu  
Assistant Professor of Fisheries  
Biology  
Dokuz Eylül University  
Institute of Marine Sciences and  
Technology  
Baku Bul. No 100 Inciralti 35342,  
Balçova, Izmir, Turkey  
E-mail: [aydin.uoglu@deu.edu.tr](mailto:aydin.uoglu@deu.edu.tr)

## **FAO - Lebanon**

Maurice Saade  
FAO Representative  
FAO - Lebanon  
Tel: +961/5924005-006-007  
E-mail: [maurice.saade@fao.org](mailto:maurice.saade@fao.org)

Solange Matta-Saade  
Assistant FAO Representative  
(Programme)  
FAO - Lebanon  
Tel: +961/70146170  
E-mail: [solange.mattasaade@fao.org](mailto:solange.mattasaade@fao.org)

Elie Choueiri  
Programme Assistant  
FAO - Lebanon  
Tel: +961/3256707  
E-mail: [elie.choueiri@fao.org](mailto:elie.choueiri@fao.org)

## **FAO HQ - FIAF**

Marcelo Vasconcellos  
Fishery Resources Officer  
FAO – FIAF  
Tel: +39/0657052091  
E-mail: [marcelo.vasconcellos@fao.org](mailto:marcelo.vasconcellos@fao.org)

Mark Dimech  
Technical Officer  
FAO – FIAF - EastMed Project  
Tel: + 39/065705 5860  
E-mail: [mark.dimech@fao.org](mailto:mark.dimech@fao.org)

Dario Pinello  
Socio-Economic Consultant  
FAO – FIAF - EastMed Project  
Tel: +30/2108847960  
E-mail: [dario.pinello@fao.org](mailto:dario.pinello@fao.org)

## **Annex II Agenda**

### **Day 1 :Thursday 19<sup>th</sup> May, 9:00-18:00**

#### **1. Opening of the meeting and election of the Chairperson**

- Welcome and introduction of the participating countries international organisations and other participants and designation of the chairperson

#### **2. Adoption of the agenda**

#### **3. Report on the Project's progress**

- Presentation of the EastMed Project's 6<sup>th</sup> year activities  
*Information will be given on the progress and achievements of the project since the last Coordination Committee Meeting. The project's initiatives to seek additional strategic alliances with other projects and GFCM will also be mentioned.*

#### **4. GFCM activities for the next intersessional period**

- Presentation of the GFCM planned scientific and technical activities of relevance to the project.

#### **5. Activities on the By-catch studies in the Area covered by the project**

- Presentation on the issue of by-catch.

#### **6. Project's Programme for the next period**

- Presentation of the work plan for the next period  
*Following the current activities of the project, the work plan for the next intersessional period will be discussed and finalised. The Committee will be asked to provide feedback on the work plan presented.*

#### **7. Any other matters**

#### **8. Date and venue of the next Coordination Committee meeting**

### **Day 2: Friday 20<sup>th</sup> May, 10:00**

#### **9. Adoption of the report**

**Coffee breaks:** 11:00 - 11:15 and 16:00 - 16:15  
**Lunch breaks:** 13:00 - 14:00

## **Annex III Report on the Intercessional Activities of the Project**

### **FAO EastMed Working Document**

#### **Introduction**

This document summarizes the main activities carried out by the Project EastMed from May 2015 – April 2016, including workshops, training, research activities and the technical assistance provided to the countries; as well as the cooperation established with the GFCM, the SAC and Sub-Committees and other relevant institutions. The work programme and recommendations of the 6<sup>th</sup> coordination committee meeting of the EastMed Coordination Committee (Rome, Italy 21-22 May 2015) were mostly implemented.

The activities carried out during the inter-committee period comply with the methodological framework of the project and its mandate for this phase. This report details the main outputs of the activities of the project and the results achieved with direct reference to the following project components:

- 1) Institutional strengthening.
- 2) Staff training and development.
- 3) Data collection and analysis.
- 4) Increased participation and Cooperation.

#### **Component 1 - Institutional Strengthening**

*To undertake institutional analysis and needs assessments of Fisheries Departments and provide recommendations for change and support*

##### **➤ *Follow up of the development of the software for the licensing system in Lebanon***

After the appraisal of the fishing vessel licensing system in Lebanon which is handled manually, a proposal was drawn up 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. A bid was set up and a private company undertook the development of the software including the training of the staff of the MoA. The software was first tested in 2013 and the software bugs were fixed in 2014. The private company also handled the training of the staff of the MoA. The system is now operational however there were some logistical problems in the provision of internet access in the outposts of the MoA and this has hampered the full use of the system.

➤ ***Follow up of the Web-based flow of data in Egypt***

In 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. The new decentralized and web-supported system was installed on five PCs from Alexandria, Arish, Damiette, Kafr-El-Sheikh and Port Said, while a sixth component was installed on a PC at the GAFRD office in Cairo. In 2015 the system was installed at all the eleven fishing ports in Egypt, and hence the collection of data was expanded to cover the whole Egyptian Mediterranean coast. A training course was organised in March 2015 in Rome so that the IT administrators of the system in Egypt were training, so they could manage the system independently from the project.

Project Component 2 - Staff Training and Development

*National and sub-regional workshops and on-the-job training will be organized.*

➤ ***Workshop on the Ecosystem Approach to Fisheries (EAF) in Egypt.***

A training workshop on the Ecosystem Approach to Fisheries (EAF) was conducted, in Alexandria, Egypt from the 12<sup>th</sup> to the 15<sup>th</sup> of October 2015, which was hosted by the Arabic Academy for Science and Technology. Fifteen participants from different Egyptian institutions attended the workshop, including GAFRD, AAST, University of Alexandria, National Institute of Oceanography and Fisheries (NIOF) and two fisherman's co-operatives. The main objectives of the training workshop were to improve the understanding of EAF and the processes involved in the preparation and implementation of fisheries management plans and develop a concept note for the application of EAF in Egypt. The training workshop was composed of lectures with a practical hands-on approach. After an initial introduction to fisheries management and the principles of the Ecosystem Approach by the FAO experts, the training workshop proceeded as a sequence of short presentations of a technical nature, followed by exercises, where the different groups presented and contrasted their approaches and solutions. In terms of acquired knowledge, the group assimilated the basic concepts of the EAF and of some practical tools for its implementation. An agreement was reached to conduct a case study on the development of the EAF process for the trawl fishery in the Mediterranean coast of Egypt. A concept note was developed after the workshop which was endorsed by the respective authorities. The concept note was developed into a Letter of Agreement by which FAO will support the pilot case study on the application of EAF in Egypt

➤ ***Workshop on the Ecosystem Approach to Fisheries (EAF) in Lebanon.***

The workshop was held in Balamand, Lebanon from the 10th to the 11th of November 2015, and was hosted by the University of Balamand. About 30 participants from different stakeholder groups, including fisheries administration, academia, research institutes, fishermen co-operatives and NGOs, attended the workshop. The first day dealt with an introduction to fisheries management, showing its history up to the present situation as well as most of the problems the current fisheries management practices are faced with. After that the principles of the Ecosystem Approach were described followed by a very short description of the steps of the EAF process, i.e. the Initiation and Scope, Assets and Issue Identification, Risk Assessment, the operational objectives, the indicators and management

measures and the implementation, monitoring and performance review. The second day was dedicated to decide on a pilot case study for the implementation of the EAF in Lebanon. An exercise was given to the participants to fill out a table which would describe the basic contents of a concept note for a typical fishery. The participants proposed to implement the EAF approach on the purse seine fishery. Finally, together with the Ministry of Agriculture, the University of Balamd, and the FAO representation in Lebanon, discussions were held on how to implement the EAF approach for the development of a fisheries management plan for the purse seine fishery in Lebanon. An EAF project team was set up and the roadmap discussed and finalised. A draft Letter of Agreement by which FAO will support the pilot case study on the application of EAF was discussed with the University of Balamand together with the Ministry

➤ ***Training course on the processing of socio-economic data.***

The course was conducted from the 27-30 of October in Athens Greece. The training course started with an explanation of the basic concepts in sample based data collection for socio-economic variables, with a description of the sampling design, the stratification and segmentation scheme, the geographical stratum, the temporal stratum, the vessel and gear strata, the population and sample size. A presentation was given on how to classify the fishing fleet according to the GFCM TASK I using the definitions of fishing gears, size classes and fleet segments. Random sample selection was then described with a simple excel function, describing how an unbiased random selection of individuals is important so that the sample represents the population. A excel exercise was given to the participants to classify a fleet and randomly select the sample. Following this a description was given on how to make the quality checks that could be conducted on the data, for example to compare the gear and costs, check for missing values, estimate roughly the costs and revenue, etc. The participants were first given a data set with errors and then the task to correct the data. Following this basic statistical principles, such as the normal distribution, mean, variance, precision, accuracy and quality indicators such as standard error (S.E.) and co-efficient of variation (C.V) were described. This was important so that the participants could apprehend the calculation of the main socio-economic variables and the S.E and C.V per variable. After this, from the example dataset the participants estimated the mean socio-economic variables by fleet segment. This involved explanation on how to group certain raw data, such as costs and formulas to estimate socio-economic indicators. After the parameters were calculated it was demonstrated how to raise the sample data to the total fleet by each fleet segment. The raising procedure and results of every participants were reviewed altogether. After that, it was demonstrated how to estimate the C.V and the group was instructed to estimate the C.V. for each variable per fleet segment.

Project Component 3 - Data Collection and Analyses

*The project will assist countries to improve/develop fishing vessel surveys, national catch, effort and socio-economic surveys, and ecosystem characterization.*

➤ ***Support to fisheries data collection in Egypt***

The project assisted Egypt in implementing the new GFCM Data Collection Reference Framework (DCRF) which aims to be instrumental in achieving a more efficient data collection programme at sub-regional level. The project described each module of the DCRF

and discussed and reviewed the existing data collection systems, most of which have been supported by the FAO EastMed project, addressing any problems which existed, and then adapting it to the new GFCM DCRF. It assisted Egypt in developing the sampling strategy and sampling design for the implementation of a fisheries data collection system in 2015 and 2016. The project then supported the country's fisheries data collection system through a Letter of Agreement with the General Authority for Fish Resources Development (GAFRD) for the collection of catch, effort socio-economic and biological sampling. This will assist Egypt in continuing the data collection, so that it could assess better the status of the fisheries resources. Furthermore FAO EastMed continued to assist technically the Egyptian fisheries administration in any problems they encountered during the implementation of the fisheries data collection program.

➤ ***Support on fisheries data collection in Lebanon***

The project assisted Lebanon in implementing the new GFCM Data Collection Reference Framework (DCRF) which aims to be instrumental in achieving a more efficient data collection programme at sub-regional level. The project described each module of the DCRF and discussed and reviewed the existing data collection systems, most of which have been supported by the FAO EastMed project, addressing any problems which existed, and then adapting it to the new GFCM DCRF. It assisted Lebanon in developing the sampling strategy and sampling design for the implementation of a fisheries data collection system in 2015 and 2016. The project then supported the country's fisheries data collection system through a Letter of Agreement with the Centre for National Research (CNRS) for the biological sampling and other administrative arrangements with the Ministry of Agriculture for the catch and effort sampling. This will assist Lebanon in continuing the data collection, so that it could assess better the status of the fisheries resources. Furthermore FAO EastMed continued to assist technically the Lebanese fisheries administration in any problems they encountered during the implementation of the fisheries data collection program.

➤ ***Support to fisheries data collection in Gaza strip and West bank***

Following the EastMed's mission to WBGS it was agreed with national counterparts to carry out a pilot survey on data collection along the coast of Gaza in four landing sites (Gaza City, Dar al Balah, Khan Yunes and Rafah). The pilot survey was completed in the first year, and was conducted for a second year as agreed during the EastMed 5<sup>th</sup> co-ordination committee meeting. The period during the second year was from January until December 2015. The data collection in 2015 included the collection of biological parameters for four species (which include three small pelagic species namely *Sardinella aurita*, *Scomber japonicus* and *Alepes djedaba*, and one demersal species, *Upeneus mollucensis*) and the collection of socio-economic parameters. The project extended the collection of fisheries data in Gaza Strip for the year 2016. The data collection will be a continuation of what was done in previous years.

➤ ***Support the organization of the EastMed WGs on Fisheries Data Analysis.***

The first EastMed WG on Fisheries Data Analysis was held in Mediterranean Fisheries Research and Production Institute (MFRPI), Antalya, Turkey from 28 to 30 July 2015. The objective of the meeting was to evaluate the biological and socioeconomic datasets available in the region and to elaborate a plan of work for the assessment of stocks and the

socioeconomic analysis of fisheries. The meeting was attended by experts from Egypt, Italy, Lebanon and Turkey. The WG identified 17 stocks with available data for stock assessment in GSAs 25, 26 and 27 and agreed on the organization of a meeting of WG in October 2015 for the assessment of these stocks. The meeting also agreed on a set of socioeconomic indicators and analysis to be performed on a regular basis in dedicated meetings of the WG. In addition, two specific actions were proposed to be implemented by the project in Turkey with the support of the MFRPI: the collection biological data to support the assessment of selected priority stocks; and the implementation of a case study on EAF

The second WG was conducted from the 2-6 of November in Athens, Greece. It was attended by participants from Cyprus, Egypt, Gaza strip and West Bank, Greece, Italy, Lebanon and Turkey. The aim of the working group was to understand stock assessments and to conduct a socio-economic analysis of the fisheries in the Eastern Mediterranean. At the start of the meeting a presentation of the available data was given. The most appropriate methodology that was going to be used for each of the analysis was discussed. The participants then divided themselves into two sub-groups, one to conduct Stock Assessments, and the other to conduct Socio-Economic analysis. During the stock assessment sub-group, stock assessments were run for Cyprus, Egypt, Gaza Strip, Lebanon as well as a sub-regional assessment of Round Sardinella (*Sardinella aurita*), in the Eastern Mediterranean. During the WG, assistance was given to run stock assessment models to many of the participants and in this respect the WG served also as a training forum. After the finalization of the stock assessments a presentation was given on how to fill in the GFCM stock assessment forms. The participants then filled in the forms and submitted them for the formal reviewing process of the GFCM working groups on stock assessment.

In the socio-economic sub-group a presentation was first given on the type of analysis that would be conducted. The analysis focused on the production of a basic description of the economic performance of the national fleets and each GFCM fleet segment for the year 2012. Information was prepared on the cost structure and socio-economic indicators with their performance or percentage change from the previous year, when information was available. The final document containing all the information is in the proces of being published.

➤ ***Market Value Chain Analysis as part of the development of the clam fishery.***

The project assisted Egypt in conducting the market value chain as part of the development of the clam fishery, which is being done in order to diversify the existing overcapacity of the trawling fleet. Clams in general are found in the local market in Egypt, however the clam *C. gallina* is not known. The project trained local staff in conducting the survey, followed them during the initial phase and obtained a preliminary understanding of the market dynamics in Egypt. The study was focused on key areas where seafood consumption is important, namely Alexandria and Cairo. The goal of the value chain analysis was to better understand the existing bivalves market in Egypt. During the initial meeting it was explained that it was important to focus on mapping the flows of bivalves throughout the different stages of the value chain, from the producers to the consumers. This will serve to develop strategies that will allow the marketing of the new bivalve species *Chamelea gallina*. Questionnaires were prepared in order to collect data from producers, wholesalers/traders, restaurant owners and retailers. Field visits were then conducted in Alexandria and Cairo in order to test the questionnaires and obtain a preliminary picture of the situation. The field visits involved the collection of volumes and values of production and other information from wholesalers, restaurant owners, retailers, fish market traders. The preliminary investigations show that the

bivalve market in Egypt is managed by few key wholesalers, which move the product throughout the whole country. One important aspect is that the demand far exceeds the supply, providing several opportunities for the introduction of *C. gallina* in the local market. The EastMed project will continue supporting Egypt in this activity and follow up closely any improvements which are achieved, especially from the fisheries management perspective.

#### Project Component 4 - Increased Participation and Cooperation

*The Project will promote sub-regional cooperation and collaboration for fishery research, monitoring and management and will support Government staff to attend and fully participating in GFCM (and other) regional meetings*

##### ➤ ***Organisation of the 6<sup>th</sup> EastMed Coordination Committee Meeting.***

The sixth Co-ordination Committee Meeting of the EastMed Project was held in FAO HQ, Rome, Italy from the 21st to 22nd May 2015. The meeting was attended by delegations from Cyprus, Egypt, Gaza Strip & West Bank, Greece, Italy, Lebanon and Turkey, as well as staff from FAO HQ, FAO Mediterranean sub-regional projects and the GFCM. After the opening of the meeting and election of the chairperson, the activities during the 5th year of the project were presented, followed by the workplan of activities for the next period. The participants expressed their satisfaction with the project and thanked both the staff of the project and the donors for their contribution. The agreed work plan for the next period includes training and support in data collection, data analyses, activities at implementing the Ecosystem Approach to Fisheries (EAF) in specific case studies and activities in promoting regional participation and cooperation. The tasks of the project will be the follow up of the activities which had started in the previous years' such as activities in fisheries data collection and analysis, in institutional strengthening and capacity building, as well as new activities which are more focused on the EAF and regional co-operation between the countries such as the Working Group on fisheries data analysis. EastMed, finally, will continue to support the participation of experts from the project's area at the meetings of the FAO-GFCM and other relevant regional/international organizations. The EastMed Project, in close cooperation with the other Mediterranean sub-regional projects, will continue to find synergies among the various activities in the region.

##### ➤ ***Participation at the GFCM WG on Stock Assessment***

The project participated in the Working Group on stock assessment for Demersal and small pelagic species to support experts from the Eastern Mediterranean to present stock assessments from the region. Several stock assessments were presented in the Working Group, most of which were produced during the EastMed Working Group on fisheries data analysis (Athens, Greece, Nov, 2015) and included *Saurida undosquamus* (GSA 26), *Mullus surmuletus* (GSA 26), *Metapenaeus stebbingi* (GSA 26), *Sardinella aurita* (GSA 27), *Sardinella aurita* (GSA 26 & 27), *Mullus barbatus* (GSA 25) and *Boops boops* (GSA 25). All of the stock assessments show that the stocks are in overexploitation.

➤ ***Participation at 18<sup>th</sup> session of the Scientific Advisory Committee (SAC) of the General Fisheries Commission for the Mediterranean (GFCM).***

The project supported experts to participate to the 18<sup>th</sup> session of the Scientific Advisory Committee (SAC) of the General Fisheries Commission for the Mediterranean (GFCM) and to *ad hoc* coordination meetings with Projects' participating countries to plan future joint and cooperative activities. The SAC was held in Cyprus. The meeting was attended by delegates from contracting parties, by observers from non GFCM Member Nations, from intergovernmental organizations and non-governmental organizations: ACCOBAMS, OCEANA, CIHEAM and World Wide Fund For Nature (WWF). The main activities carried out by the FAO FIRF Projects operating in the Mediterranean Sea (i.e. AdriaMed, CopeMed II, EastMed, MedSea-LME and MedSudMed) were presented and contributed to the discussion for the development and approval of multi-annual fisheries management plans, as well as on the definition of the annual work plan for the SAC and its subsidiary bodies. The SAC acknowledged the support received from the FAO Projects, in particular in relation to the progress fostered in capacity development, standardization of methodologies, assessment of shared stocks, development of harmonised fisheries management strategies.

➤ ***Participation at Conference on Economic Advice in Fisheries Management.***

The project travelled to Malta from the 4 to 5 of February 2016 to present the results of the study, the macroeconomic context of the Eastern Mediterranean Fisheries at the Conference on Economic Advice in Fisheries Management organized by the European Commission. In the Eastern Mediterranean, with the support of the project, socio-economic data has been collected throughout the sub-region. In November 2015, the project organized a Working Group where experts from the countries analyzed national socio-economic data in a standard way after which a sub-regional analysis was conducted. The aim of the analysis was to support the economic advice in the Eastern Mediterranean and to contribute to the inclusion of socio-economic considerations when new management measures are being developed. The experts from the countries used data from the Eastern Mediterranean, including Cyprus, Egypt, Gaza Strip, Greece, Italy (Ionian Sea), Lebanon and Turkey. The economic performance of a total of 25 fleet segments from the seven areas mentioned above were analyzed and compared for the year 2012. According to the data presented, the value added generated by fisheries made up 0.05% of the total GDP generated in the region, employing less than 1% of the labour force. However, in the coastal communities of the region it represented an important source of employment, income and a highly valuable source of animal protein. In terms of profitability, the best performances were showed in Egypt, Lebanon and Italy, while the worst in Gaza where the activity was not profitable. The salary per fisher compared to the minimum wage of the manufacturing sector, showed a completely negative value in Gaza and Lebanon, and an almost entirely positive value in Egypt. The small-scale fleet, as it is in its nature, was the most labour-intensive with the salaries absorbing about a half of the total operating costs, with the exceptions of Gaza and Turkey where the labour costs were below 20%. The analysis adds to the understanding of the socio-economic situation, including the harvesting cost structure and the constraints that the fleets are faced with. From the outcomes of the study presented in this conference, the project will publish a technical document to be distributed among all the Mediterranean countries.

➤ ***1<sup>st</sup> meeting of the stakeholders to develop an EAF management plan for the small scale fishery in Gökova Bay, Turkey.***

The project travelled to Antalya, Gökova, from the 19<sup>th</sup> to the 21<sup>st</sup> of February 2016 to co-lead the 1st meeting of the stakeholders to develop an EAF management plan for the small scale fishery in Gökova Bay, Turkey. The mission on the application of EAF in Turkey started with a project team meeting to discuss the implementation of the EAF process. After the meeting in Antalya, the group travelled to Gökova Bay by car to attend an information meeting with the local stakeholders in the MPA. A total 15 representatives from various stakeholders attended the meeting where the EastMed project was introduced, and a brief introduction of the EAF process was made. It was highlighted that the EAF process promotes strong stakeholder participation in all the steps of the fisheries planning and implementation process. During the meeting the stakeholders also expressed their concerns and problems that are currently being faced in the MPA including its management. The participants also asked several questions about the role the EAF process will have in the management of the MPA and it was clarified that the EAF is basically a management planning process rooted in the principles of sustainable development and using risk assessment methodologies. After the meeting, field trips were conducted to visit the two fisheries co-operatives in the area, and two of the six No Fishing Zones (NFZs). During the visits the aim of the EAF case study was introduced and discussions were held with the fishers about their main problems and expectations from the EAF planning process. The next step will now be to elaborate and consolidate the EAF Baseline report and after that organize a 2nd stakeholder workshop to discuss the baseline report that will be done tentatively at the end of May 2016. The EastMed project will follow up closely the implementation of the EAF process in Turkey and through the mechanisms of the pilot study on EAF, the project is expected to contribute in developing the capacity of Turkey to prepare and implement fisheries management plans in line with the principles of responsible fisheries.

➤ ***1<sup>st</sup> EAF Stakeholder meeting for the development of a trawl fisheries management plan in Egypt.***

The project travelled to Cairo, Egypt from the 26 to the 28 of February 2016 to attend the 1st stakeholder meeting as part of the EAF process to develop a trawl fisheries management plan. Various stakeholders were invited to the meeting including the General Authority for Fish Resources Development (GAFRD), the fishermen's associations, representatives of wholesalers, traders, scientists, the environmental ministry and coast guard. During the stakeholder meeting the EAF process for the development of a trawl management plan in Egypt was officially launched by the Vice-Chair of GAFRD. During the workshop the basic concepts of EAF were presented, together with the steps for the implementation of the EAF process followed by a description of the trawl fishery. During the meeting time was also allotted for the stakeholders to give their initial input. The chairman of the Cooperative Union for fishermen which represents all the fisheries co-operatives in Egypt pointed out the importance of the participation of fishermen representatives' in the various stages of the decision making process, in order to ensure the implementation of the management plan. The Vice-Chair of GAFRD, highlighted the importance and technical role that FAO plays in the development of the plan. Overall there was a great interest from the various stakeholders to develop a management plan not just for the trawl fishery, but for all the fisheries in Egypt. All those present agreed that the fruitful cooperation between all stakeholders is a necessity for the successful development of a management plan based on the ecosystem approach.

The next step will now be to elaborate and consolidate the EAF Baseline report and after that organize a 2nd stakeholder workshop to discuss the baseline report that will be done tentatively at the end of April 2016.

➤ ***1<sup>st</sup> EAF Stakeholder meeting for the development of a Purse seine fisheries management plan in Lebanon.***

The Project travelled to Beirut, Lebanon from the 14<sup>th</sup> to the 16<sup>th</sup> of March 2016 to attend the 1<sup>st</sup> stakeholder meeting as part of the EAF process to develop a Purse seine fisheries management plan. In Lebanon the EAF process has been started with a training workshop, after which FAO developed and signed a Letter of Agreement with the University of Balamand, in order to implement the EAF activities in close collaboration with the Ministry of Agriculture and FAO. The meeting was organised in the Ministry of Agriculture, and about 90 stakeholders attended the workshop ranging from fishermen`s associations, representatives of wholesalers, traders, scientists, UNEP, environmental NGOs and the coast guard. The meeting was opened by the Director General responsible for Fisheries, who pointed out how important it is for the Ministry to involve the stakeholders in the management process. The project then briefly described the objectives of the EastMed project and that the development of fisheries management plans, is a sub-regional activity that has been started by FAO in counties covered by the project. Furthermore this was also an initial step, as the aim of FAO is to assist the region to develop management plans for all its fisheries, and build also the countries` capacities for the implementation of the management plans. The stakeholders were very eager to provide some input, and raised several issues and the Ministry explained that future workshops will be held with representatives of the fishermen from different regions of Lebanon in order for them to raise the problems they face and try to find a way on how to solve them. The next step will be to prepare the EAF baseline report which will be discussed in a 2nd stakeholder meeting that will be held on the 17-18 of May 2016. In general there was a great interest from the various parties to develop a management plan which was seen by the stakeholders as a big gap in the management of the fisheries in Lebanon. The attendees agreed that a huge effort must be undertaken by the different stakeholders to have better collaboration, regular meetings and participatory approaches, which are needed for a sustainable use of fisheries resources and the wellbeing of the fishermen.

➤ ***Coordination among the sub-regional projects, with the GFCM and the donors including Italy and the EU***

In order to strengthen international and regional cooperation the project is interacting 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 RPs` experts in training courses organized by EastMed and vice versa was conducted. Common informative material (leaflets, CD-rom, etc.) are prepared that can improve the visibility of the RPs in the Mediterranean.

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 several experts from the Eastern Mediterranean countries to GFCM and other international activities.

Technical documents have been prepared and the ones published are available online through the website. Hard copies have also been distributed to participating countries. Posters were prepared, and presentations were given to several meetings, in which the publications were distributed.

The project web site ([www.faoeastmed.org](http://www.faoeastmed.org)) has been improved and active links have been created with the websites of the other sub-regional projects and GFCM. It is continuously updated with new information, and on the home page a new section on upcoming events was developed.