



**ADRIAMED**  
**SCIENTIFIC COOPERATION TO SUPPORT**  
**RESPONSIBLE FISHERIES IN THE**  
**ADRIATIC SEA**  
GCP/RER/010/ITA  
GCP/RER/021/EC

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Report of the Sixteenth Meeting of the AdriaMed  
Coordination Committee  
(Podgorica, Montenegro 31<sup>st</sup> March- 1<sup>st</sup> April 2015)

The conclusions and recommendations given in this and in other documents in the *Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea* Project 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 MiPAAF or EC concerning the legal status of any country, territory, city or area, or concerning the determination of its frontiers or boundaries.

## Preface

The Regional Project “Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea” (AdriaMed) is executed by the Food and Agriculture Organization of the United Nations (FAO) and funded by the Italian Ministry of Agriculture, Food and Forestry Policies (MiPAAF). The DG-Fish of the European Commission co-funded the project from 2007.

AdriaMed was conceived to contribute to the promotion of cooperative fishery management between the participating countries (Republics of Albania, Croatia, Italy, Montenegro and Slovenia), in line with the Code of Conduct for Responsible Fisheries adopted by the UN-FAO.

Particular attention is given to encouraging and sustaining a smooth process of international collaboration between the Adriatic Sea coastal countries in fishery management, planning and implementation. Consideration is also given to strengthening technical coordination between the national fishery research institutes and administrations, the fishery organizations and the other relevant stakeholders of the Adriatic countries.

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## **GCP/RER/010/ITA Publications**

The AdriaMed Project publications are issued as a series of Technical Documents (GCP/RER/010/ITA/TD-00), Occasional Papers (GCP/RER/010/ITA/OP-00) and Scientific Reports (GCP/RER/010/ITA/SR-00) related to meetings and research organized by or conducted within the framework of the Project.

Occasionally, relevant documents may be translated into national languages as AdriaMed Translations (GCP/RER/010/ITA/AT-00).

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

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## Preparation of this document

This document is the final version of the Report of the Sixteenth Meeting of the AdriaMed Coordination Committee, organized by the FAO-AdriaMed Project (*Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea*) in Podgorica, Montenegro, 31<sup>st</sup> March- 1<sup>st</sup> April 2015.

## Acknowledgements

The Ministry of Agriculture and Rural Development of Montenegro, which through Ms Danijela Stolica provided kind hospitality and organization of the Meeting, is gratefully acknowledged. The assistance of Ms Nikol Bajčeta in the organization of the meeting is also acknowledged.

AdriaMed.

Report of the Sixteenth Meeting of the AdriaMed Coordination Committee. Podgorica, Montenegro, 31<sup>st</sup> March- 1<sup>st</sup> April 2015.

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### **ABSTRACT**

The Fifteenth Meeting of the Coordination Committee of the FAO AdriaMed Regional Project “*Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea*” was held in Podgorica, Montenegro, 31<sup>st</sup> March- 1<sup>st</sup> April 2015. It was attended by representatives of the Project’s participating countries (Albania, Croatia, Italy, Montenegro, and Slovenia) and other interested parties. The meeting sought to present and discuss the results of the activities carried out by the Project referring to the 2014.

The activities followed the methodological approach used by the Project and were presented according to the main components. The working paper “Project Future Implementation”, in which objectives, outputs and activities proposed for 2015 was introduced and agreed by the Committee including additional inputs coming out from the discussion.

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**Report of the Sixteenth Meeting of the AdriaMed Coordination Committee  
Podgorica, Montenegro, 31<sup>st</sup> March – 1<sup>st</sup> April 2015**

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

1. The Sixteenth Coordination Committee Meeting of the FAO Regional Project AdriaMed “Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea” was held in Podgorica, Montenegro, 31<sup>st</sup> March- 1<sup>st</sup> April 2015, kindly hosted by the Montenegrin Ministry of Agriculture and Rural Development.
2. The meeting was attended by representatives of the Donors, the Italian Ministry of Agriculture, Food and Forestry Policies (MiPAAF) and the Directorate-General for Maritime Affairs and Fisheries (DG MARE), representatives from the countries participating in the Project (Albania, Croatia, Italy, Montenegro and Slovenia), representatives of other FAO Regional Projects (namely MedSudMed), a representative of the FAO Fisheries and Aquaculture Department-Marine and Inland Fisheries Branch (FIRF) and of the FAO General Fisheries Commission for the Mediterranean (GFCM) Secretariat, as well as the staff of the FAO AdriaMed Project.
3. On behalf of the Government of Montenegro, the Director General for Fisheries and Aquaculture of the Ministry of Agriculture and Rural Development of Montenegro, Ms Danijela Stolica, welcomed all the Committee Meeting participants. Ms Stolica acknowledged the important role played in the Adriatic Sea by the Project. The large amount of scientific data collected and compiled in the framework of AdriaMed represents the building blocks of responsible fishery policy, which in turn can contribute meaningfully to the sustainable management of fisheries. She wished the meeting every success. She also expressed the hope that the results of the discussions could entail the continuation of coordination and collaboration on all the issues related to fisheries management, as well as the continuation of AdriaMed Project activities.
4. The Representative from Montenegro, Mr Aleksandar Joksimović, National Focal Point for Montenegro, welcomed the participants and expressed his honour at having the Committee members gathered in Montenegro on the occasion of this meeting. He drew the attention of the participants to the importance of the Project for his country. Although fishery in Montenegro is a small sector in comparison to other Adriatic countries, it plays an important role in its future development strategies. He also mentioned that, given its touristic vocation and in line with the EU blue economy approach, the future development strategies for the country foresee the appropriate combination of the multiple uses of Montenegrin coasts and natural resources.
5. The FAO AdriaMed Project Coordinator, Mr Enrico Arneri, took the floor and thanked the Montenegrin authorities for hosting the meeting. He welcomed all the Delegations to the city of Podgorica and thanked the participating countries for their strong commitment and

involvement at scientific and administrative level, which has resulted in the Project's achievements. In this view he further stressed that all Project's accomplishments have been made possible thanks to the collaboration of all the Adriatic institutions and experts.

6. The FAO AdriaMed Project Fisheries Information Officer, Ms Nicoletta Milone, thanked the Delegation and recalled that the meeting marked is taking place after sixteen years of Project activities. The Project began in 1999 and it is increasingly called upon to give answers and provide support to new, challenging topics on fisheries science. This Coordination Committee Meeting could therefore be considered a particularly relevant moment for reflection and discussion on the Project, its achievements and future implementation. Emphasis was placed on the results achieved by the Project and those activities that need to be further developed and discussed.
7. The Representatives of the participating countries, Albania, Croatia, Italy and Slovenia, thanked the Ministry of Agriculture and Rural Development of Montenegro for hosting the meeting and the AdriaMed Project for the support given to the countries. The national representatives further recognized the importance of the Project in building up future responsible management of Adriatic fisheries and stressed the role that each cooperating country can play and the advantages to be gained from this process. The Italian Donor, the MiPAAF, and the EC DG MARE were also thanked for their continuous support to the Project, as well as the FAO AdriaMed staff for the preparation of the meeting and for the hard work that has been put into the finalisation of the documents presented.
8. A short film prepared by the Fisheries Administration and Institute of Marine Biology in Montenegro with the support of AdriaMed was shown after the greetings from all delegations. The short film illustrated some of the main issues regarding fisheries and aquaculture (marine and inland aquaculture) research, management and perspective in Montenegro. The short film is available at the URL <http://youtu.be/FMmFYBGStq8>
9. The Project Coordinator informed the Meeting that a set of documents prepared by the Project staff had been made available on line for the participants at the URL: [http://www.faoadriamed.org/html/events-news/coord\\_comm/XVICC\\_Documents.html](http://www.faoadriamed.org/html/events-news/coord_comm/XVICC_Documents.html). A printed copy of the documents was also distributed to each delegation.
10. Ms Danijela Stolica, was proposed and elected as Chair for this session of the AdriaMed Coordination Committee.

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

11. The Project Coordinator drew to the attention of the Committee to the Agenda, inviting comments or amendments. The Agenda was adopted with no changes.

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

12. The Project Fisheries Information Officer, Ms Milone, introduced this agenda item and the document "Report the Intersessional Activities of the Project" in which the main activities carried out by AdriaMed from March 2014 to February 2015 are described. The activities carried out are in line with the work programme and the recommendations of the 15<sup>th</sup> Coordination Committee Meeting held in Trieste (Italy).
13. The meeting was reminded of the five main areas of intervention of the Project: Strengthening of the sub-regional network; supporting the establishment of a sub-regional fisheries monitoring system, based on standardized research methodologies; identification of management schemes to be applied on a pilot scale in selected zones towards strengthening the international and regional cooperation; supporting shared resource management decisions, including promotion of harmonised fisheries legislation; supporting the development of responsible mariculture, in particular for the enhancement of positive interaction between fisheries and aquaculture.
14. The Meeting was informed on the activities carried out in relation to objective 1. The relations and interactions with the participating countries were further strengthened, which contributed to the improved implementation of the Project activities. Numerous meetings were held with the administrations and research institutes in the participating countries, technical meetings were organised as well as *ad hoc* and informal consultations. The meetings with fisheries administrations of North Adriatic countries resulted in the definition and implementation of a common monitoring programme on small pelagic fishing gears (purse seiners in the Adriatic Sea). Contacts were made with researchers from Bosnia-Herzegovina.
15. Coordination meetings were held with the Project Donors to facilitate the exchange of information and to plan more efficiently the work. The draft of the project document for a single Mediterranean Programme was illustrated to the Donors.
16. The Project informed the Coordination Committee on the continuous technical support provided to the Adriatic countries for the creation and updating of databases, Web pages and national information systems. Technical support was provided to the Fisheries Research Institute of Slovenia (FRIS) for the upgrading of the Biological Information System (BIOS) and to the Ministry of Agriculture and Rural Development of Montenegro to update its Fishery Information System (Register on catch/effort data, Register of aquaculture data). Furthermore, the Project has developed and consolidated the database to store, manage and carry out preliminary analysis of small pelagic fisheries related data. The database (AdriaMed Small Pelagics Application, ASPA) has been designed on the basis of the experience gained through the preparation of ATrIS (AdriaMed Trawl Information System, the database for the management of trawl surveys data). The updated version of ATrIS, version 2.1, has been distributed to all the institutes participating in the Project.

17. The Meeting was informed that, in collaboration with FAO-RNE (FAO Regional Office for North Africa and Near East), the Project drafted a proposal to develop a version of ATrIS for the Ministry of Agriculture and Fisheries Wealth, Sultanate of Oman, this version is particularly suited to the recent and historical geo-referenced fisheries data in Oman: the project was signed in February 2014 and is ongoing.
18. Further collaboration by the Project includes continuation of the activities for the inclusion of Adriatic Scientific publications in the ASFAs database, as well as supporting the two ASFAs collaboration centres in Croatia and Montenegro.
19. In the context of Project support to the establishment of fisheries monitoring systems, the Meeting was informed on progress made concerning both small pelagic and demersal resources.
20. Demersal resources: The Project continued to support the establishment of a sub-regional fisheries monitoring system as well as fostering scientific cooperation in the area. In this context, and to progress in the joint evaluation of the shared stocks, the Project organized the *Study Group for the application of bottom-trawl survey data to fish stock assessment in South Adriatic Sea* (SG-DEM18) (Torre a Mare (BA) Italy, 22-26 September 2014). The Study Group jointly analyzed data on European hake (*Merluccius merluccius*) and Deep-water rose shrimp (*Parapenaeus longirostris*). The results were presented and discussed at the AdriaMed Working Group on Demersal Fisheries Resources, FAO-HQ, Italy, 7-9 October 2014. The results of the catch/effort survey carried out in Montenegro and the pilot action on biological sampling in the port of Durrës (Albania) were presented as well as the results of the SoleMon Project. Future common activities were identified and possible common actions were proposed. The stock assessments presented by the SG-DEM18 on European hake (*Merluccius merluccius*) and Deep-water rose shrimp (*Parapenaeus longirostris*) were reviewed. The WG-DEM assessed the state of the stock of Common sole (*Solea solea*) and European hake (*Merluccius merluccius*) in GSA 17. All the assessments produced were presented and discussed during the GFCM-SAC-SCSA Working Group on Stock Assessment of Demersal Species in November 2014 and the scientific advice endorsed by the SubCommittee for Stock Assessment (SAC-SCSA) in February 2015.
21. The Meeting was further informed on the support provided to cooperation between the Institute of Oceanography and Fisheries of Split (IOF) and CNR - Istituto Scienze Marine (ISMAR) of Ancona for the “Stock Assessment of *Solea solea* in the northern and central Adriatic Sea and evaluation of the impact of the different fishing activities” (SoleMon) research programme. The Project is also continuing to support the full participation of south Adriatic Sea countries (eastern GSA 18) in the MEDITS programme; the scientific experiments carried out in the Pomo/Jabuka Pits area on *Nephrops norvegicus* stocks as an example of additional methodology to assess demersal fisheries resources giving additional data to compare with the trawl survey data were also assisted.
22. The Working Group on Small Pelagic Resources met in two sessions during 2014 and reviewed the outcome of the Study Group on DEPM (SG-DEPM) and the Study Group on

intercalibration of fish otolith reading (SG-OTH). The preliminary results of the joint acoustic and DEPM survey performed in GSA 18 under the umbrella of AdriaMed were also discussed. The meeting produced s an assessment of small pelagic fish stocks, mainly anchovy (*Engraulis encrasicolus*) and sardine (*Sardina pilchardus*). Possible future activities were also identified.

23. Support continued in developing expertise on small pelagic fisheries resources as well as for the standardization of the methodologies applied to study small pelagic fish and fisheries. In July –August 2014 a joint acoustic and ichthyoplankton survey was carried out using R/V “Dallaporta” covering southern Adriatic waters (GSA18). In July 2014, the Project arranged and supported *ad hoc* on-the-job training for scientists of the Fisheries Research Institute of Slovenia on DEPM. The training activity was performed by expert staff from the Institute of Marine Biology of Kotor (Montenegro). The occasion was taken to perform an ichthyoplankton survey to improve knowledge on the spatial and seasonal distribution of planktonic stages of European anchovy. Furthermore, the Project initiated support for a research activity aimed at molecular identification of stock boundaries and larval drift in anchovies (*Engraulis encrasicolus*) in the Adriatic Sea. The study uses microsatellite DNA loci and will be instrumental to map local areas that contribute to the spawning events, also producing useful data for fisheries management.
24. The Coordination Committee members were reminded of the socio-economic relevance of small-scale fisheries in the Adriatic Sea and of their role in the exploitation of some shared stocks. The AdriaMed Working Group on Small-Scale Fisheries (WG-SSF) in the Adriatic Sea met in December 2014. The Working Group reviewed and analysed data; made progress on the identification of key elements related to SSF for management purposes and initiated discussion on alien species in the Adriatic. The contribution that the WG-SSF could provide to the Second Symposium/Regional Conference on Small Scale Fisheries organized by the GFCM was discussed. Future activities were also planned.
25. The Meeting was informed on the activities being carried out in Montenegro in support of the monitoring of the national fisheries sector. The monitoring began as a pilot action in 2007 and is carried out in the form of biological sampling of the commercial catch from fishing vessels, this activity has been developed in coherence with the indications given by the GFCM and according to the EU regulations. Furthermore, the Project supported a survey for the establishment of a socio-economic data collection programme in Montenegro. The support provided follows the request formulated by the Ministry of Agriculture and Rural Development-Directorate for Fisheries of Montenegro, (MARD) during the 15<sup>th</sup> Coordination Committee (2014) on the need to update the fisheries socio-economic information available in the country. As a consequence, in the first week of June 2014 a training exercise was organized and held in Podgorica, Tivat and Bar for four data collectors and one supervisor, in order to interview fishers, vessel owners and to record and store data. At the end of June 2014 the survey was completed by covering all the landing sites along Montenegrin coast.

26. The Committee was provided with an update on the pilot action in Albania concerning biological sampling in the fishing port of Durrës, carried out in cooperation with the Laboratory of Fisheries and Aquaculture of Durrës (LFAD-Agricultural University of Tirana). This activity aims to verify and test the feasibility of catch-and-effort data collection at national scale. It also aims to provide a description of the main resources exploited and landed per fishing fleet segment. Moreover, in May 2014, AdriaMed organised a socio-economic survey in Albania. In this context a training exercise was carried out in Durrës and Shëngjin in May 2014 for four data collectors. The exercise consisted in interviewing fishers, vessel owners and workers, as well as recording and storing data. In May-June 2014, after the completion of the training exercise, the survey took place and data were collected in the ports of Shëngjin, Durrës, Vlorë, Sarandë.
27. The Meeting was informed on the Project initiatives to elaborate possible management options to be adopted in the Adriatic Sea. A series of technical meetings was held, the main objective was to facilitate the discussion of a common monitoring pilot study on the height (drop) of purse seine nets targeting small pelagic resources, to be carried out in GSA 17. Particular attention was paid to identifying some preliminary steps aimed at gathering all the information available on the issue before a second technical meeting with fishing gear experts. Furthermore, the Project is taking part in discussions for the improvement of the multiannual management plan on small pelagic fisheries resources in the Adriatic Sea (Recommendation GFCM/37/2013/1). This discussion, led by the GFCM, saw the endorsement in May 2014 of the *Recommendation GFCM/38/2014/1 amending Recommendation GFCM/37/2013/1 and on precautionary and emergency measures for 2015 on small pelagic stocks in the GFCM GSA 17*. The technical discussion is on-going and the Project, in synergy with the GFCM, supported the Adriatic experts in the definition of a road map aimed at overcoming the technical issues hampering the proper stock assessment of small pelagics in the Adriatic Sea.
28. The Project staff recalled that AdriaMed sought synergies and is cooperating with the GFCM and its sub-committees; the other FAO Regional Projects, as well as other relevant Mediterranean fisheries-related entities.
29. At the end of the presentation the Chair opened the discussion. The Committee members appreciated the amount and accuracy of the work done by the Project, and emphasized that it represents the follow up to the expected output of the last Coordination Committee Meeting and is totally coherent with expectations. All the countries acknowledged the support being provided by the Donors in continuing to support the Project activities.
30. The Representative from Montenegro, Mr Aleksandar Joksimović, thanked the AdriaMed Project for the support given to the country in particular for the technical assistance provided to Montenegro. He stressed the importance of the biological sampling (catch/effort survey) carried out so far. Thank to this data collection on catch and effort, a concrete time series is being created and this is a valid support towards the assessment of the state of fisheries resources. On the subject of the support provided on data collection, Mr Joksimović underlined the importance of the socio-economic survey carried out in June 2014, for which

supportive synergies with the EC-SEDAF Project were sought. The data collected proved to be useful for the national administration, which now has one extra tool to describe national fisheries. He also stressed the importance of the discussion developed by the WG SSF, and the joint case study that the Adriatic experts are currently working on and that will be presented during the next regional conference on SSF. Lastly, Mr Joksimović acknowledged the support to the ASFAN network and the involvement of the Institute of Marine Biology of Kotor as national collaborating data entry center.

31. The Representative from Slovenia, Mr Roman Čičmirko, echoed the importance of the FAO AdriaMed Project for the Adriatic Sea and for Slovenia in particular. He recalled that the country has a small coastline and fishing fleet. Therefore, in terms of scientific data and capacity for the evaluation of stock status and fisheries management he underlined that Slovenia is very much dependent on regional projects and in particular on the FAO AdriaMed Project. Moreover, he stressed the relevance of technical support provided by AdriaMed in tackling the technical aspects of the purse seiner fisheries.
32. The Representative of the GFCM Secretariat, Mr Nicola Ferri, congratulated the Project on the results achieved, most of which provided extremely valuable contributions to the work of the Scientific Advisory Committee for fishery (SAC) as well as for the Committee on Aquaculture of the GFCM (CAQ). He reiterated the acknowledgment of the role played by the FAO Regional Projects in the Mediterranean, and in particular, he put forward the Adriatic Sea as the perfect example for good regional cooperation practices, established between the GFCM and the FAO Regional Projects., He informed the participants that in recent months the GFCM Secretariat had contacted the Government of Bosnia-Herzegovina following a request made by the country to become member of the GFCM. In these preliminary meetings, the readiness of the Bosnia-Herzegovina Institutions to join the AdriaMed Project was also expressed.
33. The Albanian Representative, Ms Lauresha Grezda, further thanked the Montenegrin authorities and the Project for organizing the meeting. She reiterated the important role played by the Project that, in collaboration with GFCM and other initiatives, provides continuous support to regional cooperation and national capacity development. This is particularly relevant for a country like Albania in which the fishery sector and the relative administration are progressively evolving. She also acknowledged and congratulated the Project which, over time, has succeeded in promoting cooperative discussion and brainstorming, thus contributing to sharing experiences and coping together with emerging priorities.
34. The Representative of Albania, Ms Kolutari, echoed the congratulations to the Project for the work done at regional and at single country level. In particular, she put an accent on the activities carried out in Albania which, implemented at country level, provided inputs for fisheries management both at country and regional level: e.g. the multi-disciplinary monitoring of the fishery sector. The Pilot biological sampling carried out in the port of Durres provided an opportunity for capacity development and input for the joint stock assessment of demersal species in the south Adriatic Sea (GSA 18); the socio-economic data

collection contributed to the acquisition of new data on national fisheries and fed discussion on methodologies for socio-economic data collection at GFCM level. She also underlined the importance of continuing with the work started and pointed out the need to further expand it to provide a more complete picture of Albanian fisheries.

35. The EC-DG MARE Representative, Mr Mirko Marcolin, participating for the first time in the AdriaMed Coordination Committee meeting, thanked the Montenegro Ministry for hosting the meeting and each member country for the cooperation and the achievements in the context of AdriaMed. He stressed the importance for the European Commission of the AdriaMed and FAO Regional Projects, which are considered very important tools to enhance regional cooperation on fisheries issues and to achieve sustainable results in coherence with the requirements of the GFCM.
36. The Representative of Croatia, Mr Ante Mišura, thanked the Project for the large amount of activities carried out and results produced. He stressed that had Croatia benefitted from Project support since its inception and underlined the importance, for his country, of ensuring the continuation of this key Project.
37. The Representative of Italy, Mr Riccardo Rigillo, acknowledged the work carried out by the Project. He stressed the highly positive appraisal of the AdriaMed Project, remarking on the relevance of the work carried out to date and its essential contribution in terms of scientific support at Mediterranean level for both fisheries and aquaculture. Although it began 16 years ago, the Project is continuing to provide tangible results as well as new inputs to the Adriatic region on fisheries related issues. Therefore he reiterated the interest of the Italian Donor in continuing its support to the Project in the future.

#### **FAO GFCM work plan for the next intersession period (Agenda item 4)**

38. Mr Nicola Ferri, from the GFCM Secretariat, introduced the work-plan of the GFCM SAC for 2015-2016. At the outset, he clarified that this plan had just been endorsed by the SAC at its annual session and was now due to be submitted to the Commission at its 39<sup>th</sup> Session (May 2015, Milan, Italy) for consideration and endorsement. Mr Ferri presented activities planned under four different thematic categories, consistent with the current reference framework of the SAC: information and statistics, socio-economics, environment and stock assessment. He stressed in particular the synergies between the workplan of SAC and the valuable work carried out by the AdriaMed Project which could continue to provide sound support to the SAC throughout the next inter-sessional period. In concluding, he also mentioned the meetings scheduled to take place in the framework of SAC, depending on the availability of funds and subsequent to endorsement by the Commission at its 39<sup>th</sup> Session.
39. The Committee thanked Mr Ferri for the presentation and pointed out the strategic role that the collaboration between AdriaMed and the GFCM assumed. They looked forward to further strengthening this cooperation with the aim of providing, as Adriatic experts, additional contributions to the development of the SAC and GFCM work plan.

## Development of the Project's Programme for the next period (Agenda Item 5)

40. The document "Project Future Implementation" was introduced by the Project Coordinator, Mr Enrico Arneri. The Meeting was thus informed on the concrete steps that the Project will take in the next twelve month period. Every attempt has been made to draft a tentative common calendar for the activities together with other regional fisheries bodies, in order to avoid any overlap and strengthen the coordination among the activities carried out.
41. Where small pelagic fisheries resources are concerned, the Meeting was informed that the joint Acoustic and DEPM survey, due to its implications for management, would be anticipated to May-July, with the objective of covering the entire GSA 18 and the western GSA 17. In parallel, the Project is investigating the possibility to extend the summer DEPM survey planned for the eastern GSA 17. This survey will help to accelerate the process of rebuilding expertise on DEPM, as well as updating the currently available information on the spawning areas for anchovy in the whole Adriatic. A meeting of the DEPM Study Group is also foreseen. The Project has also launched a research activity aimed at molecular identification of stock boundaries and larval drift in anchovies (*Engraulis encrasicolus*) in the Adriatic Sea.
42. The Project will continue to support participating countries in the process of standardization of data collection and analysis. The Study Group on intercalibration of fish otolith reading (SG-OTH) will meet in April 2015. The output of the SG-OTH will contribute to solving the uncertainty expressed on the length-at-age data used for the stock assessment. Results will be discussed at the annual WGSP meeting and presented to the relative GFCM SAC Sub Committee. Furthermore, in accordance with the agreement reached in the last WGSP meeting, the revision of the database on small pelagics in the Adriatic Sea will be completed. The revision work will be carried out at national level: each country will check, consolidate and make ready a final dataset for both anchovy and sardine. The Project will arrange a validation meeting back-to-back with the next WGSP meeting.
43. Where demersal resources are concerned, the Coordination Committee was informed that the Project will continue to encourage the process of standardization of sampling methodologies and monitoring of demersal stocks. In addition, the Project will support data collection and analysis during the UnderWater TV (UWTV) survey in the central Adriatic Sea (mainly in the Jabuka/Pomo Pit area). The Project will also continue to support the research programme "Stock Assessment of *Solea solea* in the northern and central Adriatic Sea". The Project will continue to support the extension of MEDITS data collection in the eastern GSA 18 as well as the organization of the Study Group on GSA 18 for the application of bottom-trawl survey data and fisheries commercial data to fish stock assessment, and a similar Study Group for GSA 17 will be organized.
44. Following the 2014 meeting of the AdriaMed Working Group on Demersal Fisheries Resources, the Project will support trial research on the ageing of elasmobranchs in the Adriatic. The trial will be performed on two selected species: *Squalus acanthias* (spines) and *Raja clavata* (vertebrae). It foresees the collection of spines and vertebrae from target

species in several areas of the Adriatic Sea. The collection of samples will continue throughout 2015. As follow up, an *ad hoc* AdriaMed Working Group on age determination shall be convened to jointly agree on the criteria and ageing of these two species. Moreover, the Project will support research activity aimed at molecular identification of stock boundaries and stock unit identification of red mullet (*Mullus barbatus*) and striped red mullet (*Mullus surmuletus*) in the Adriatic Sea, which will provide additional data for the GFCM-SAC SCSA “Workshop on benchmarks to estimate growth and maturity parameters in *Mullus barbatus*”, as foreseen in the SAC workplan for 2015. The Study Group and Working Group on Demersal resources will meet during 2015. The Project will also organize the annual meeting of the AdriaMed Working Group on Small Scale Fisheries (WG-SSF) in the Adriatic Sea, potentially back to back with the WG-DEM meeting. The next WG-SSF meeting is expected to be held before the regional conference on Small Scale Fisheries, in order to provide a solid contribution from the Adriatic region.

45. Following indications received by the AdriaMed Working Group on Small Scale Fisheries, the Project will initiate a series of research activities addressing the emerging biotic changes within the Adriatic. The occurrence of alien species in the Adriatic Sea is one of the challenges that need to be addressed. In this framework, Local Ecological Knowledge (LEK) methodology will be adopted; the Project will also promote synergies with the Seawatcher Project, a useful tool to track the occurrence of exotic fish species in the Adriatic Sea. This activity will in turn improve both awareness and coordination among AdriaMed countries on this issue.
46. Due to a reduction in local expertise on fishing technology, e.g. gear construction, assemblage, testing, highlighted in Montenegro, the Project was requested to provide training for local experts to rebuild these skills. The Project will investigate the possibility of providing training activities on fishing gear construction.
47. Training is transversal to all AdriaMed activities, however some specific activities will be organised following the requests received. In particular, theoretical and field training activities on data collection will be performed. Moreover the Project will organize a training course on the use of the software environment for statistical analyses “R” in cooperation with the other FAO Mediterranean Projects, tentatively in June 2015.
48. Where socio-economic data is concerned, the Meeting was informed that technical support will continue to be provided to the participating countries to implement fisheries monitoring systems. The support will enhance the national Ministries’ capacity to monitor the fisheries sector by applying standard methodologies. In Montenegro the Project will support the organization of socio-economic data collection in the country. In Albania the Project will support the Fishery & Aquaculture Policies Sector of the Ministry of Agriculture, Rural Development & Water Administration for the third consecutive year in the organization of a socio-economic survey in Albania.
49. The Project will continue to support the catch-and-effort survey (biological data) in Montenegro in 2014. In this same context, the Project will continue supporting the

monitoring of commercial fisheries in Albania by continuing the pilot action in the port of Durrës and possibly extending the activity to other ports.

50. Where fisheries management issues are concerned, the Project will continue to provide technical assistance with the aim of harmonising existing fisheries management systems. The possibility of continuing discussion on management focusing on the whole Adriatic Sea (GSA 17 and 18), or part of it will be explored. Furthermore, the Project will facilitate the organization of meetings to bring together scientists, government and fisheries sector representatives to discuss the situation of fisheries and review the state of the main bio-economic fishery indicators, their trends and their possible impact on the management of these fisheries.
51. Activities on the sustainable development of aquaculture in Montenegro will continue to be pursued. The Project is also working to extend the lessons learnt in Montenegro to Albania.
52. At the end of the presentation the Chairperson opened the discussion. The Committee members appreciated the work plan proposed and provided further comments.
53. The Representative from Albania, Ms Jerina Kolitari, manifested high appreciation for the work plan proposed. In particular, for what concerns the appraisal of fisheries resources, she underlined the importance of the support provided for fisheries data collection continues in the future. In this context and with reference to the socio-economic survey, she stressed the relevance for Albania and in particular for the Ministry of Agriculture and Rural Development, of performing a similar survey in 2015, thus requesting the support of the Project. In addition, she underlined the importance of ensuring continuation to the catch/effort survey (biological sampling) in 2015. In this view, based on the experience accrued in the past years, Ms Kolitari put forward the possibility to expand data collection coverage to the ports of Shëngjin, Sarandë and Vlorë.
54. Further to this, Ms Kolitari pointed out the relevance of the foreseen activities on aquaculture. Such activities are fundamental in this particular moment in Albania, as a new law on Aquaculture is being discussed with the involvement of stakeholders. In particular, indicators are being identified and used for the definition of potential mariculture zones in order to develop offshore farming using a system of sustainability indicators and allocated zones for aquaculture (AZA). The pilot action will take place in autumn with the support of the GFCM CAQ (INDAM Project) and the AdriaMed Project.
55. The Representative of Montenegro, Mr Joksimović, echoed the intervention of Albania and stressed the importance of support to activities on data collection in his country. He also welcomed the activity planned on fisheries resource appraisal. With reference to the activities foreseen on aquaculture, he expressed the wish that the Project would further investigate the possibility of supporting the Institute of Marine Biology of Kotor in restoring the aquaculture facilities at its premises. He also informed the meeting that recently, as result of a process that initiated in 2009 with the support of AdriaMed, the IBMK was recognized as Centre for the protection of biodiversity and stock enhancement in

Montenegro due to the high natural value of some specific sites in Boka Kotorska Bay. To further progress in this direction and to have the IBMK properly working on issues related to the interaction between fisheries and aquaculture, further assistance was requested from the Project. In particular, possible synergies with other international initiatives to further support the development of this centre should be explored. The activation of the centre will in turn have a positive impact on three levels: educational (by providing training for schools); scientific (by providing experimental work on aquaculture) and tourism (by improving local tourism with the construction of a small aquarium for the city).

56. Mr Joksimović also brought the Committee's attention to the possibility that AdriaMed could apply the experience accrued so far on the monitoring of shared fisheries resources to areas of common interest for the Adriatic countries. He then provided the example of the Skadar Lake, which is shared by Albania and Montenegro as well as the Bojana River. The Bojana River and the Skadar Lake define the borders of the national territories of Albania and Montenegro and their fisheries resources are shared by the fishing communities of the two countries. The Committee was also reminded of the importance of the Bojana river and Skadar lake for several Adriatic species (e.g. *Anguilla anguilla*), especially in terms of biodiversity. Accordingly he pointed out the importance of potential AdriaMed support to the development of a monitoring programme for fisheries targeting sensitive or endangered species in the Skadar Lake and the Bojana River.
57. With reference to the small pelagics, in particular with the possibility to extend the DEPM survey planned for summer 2015 to eastern Adriatic Sea (GSA 17), the representative of Croatia, Mr Vrgoč, informed the Committee on the "technical" difficulties faced by IOF in having the research vessels available in the period indicated (May/July). For this reason, with reference to the support envisaged by the Project to the DEPM survey in GSA 18 and western GSA 17, the possibility of also supporting the eastern side of GSA 17 was called for. In addition, he reiterated the importance of further supporting the Solemon Project/survey. The Solemon survey could be useful not only for resource appraisal purposes, but also for the additional information that could be provided on benthonic communities and on discards. In this view, with the support of AdriaMed, he suggested that the possibility of extending the current coverage of the Solemon survey be explored, in terms of including some additional sampling stations in the territorial waters of Croatia. In addition, the proposal to utilise UWTV in other areas (e.g. Velebit channel) was formulated.
58. The Representative of EC-DG MARE, Mr Marcolin, while acknowledging the relevance of the work plan presented, pointed out that as a results of the inclusion of all northern and central Adriatic countries in the European Union new challenges would be faced by the Adriatic countries. He recalled that the future development of AdriaMed should be put into the proper perspective, also taking into consideration the ongoing discussion on a possible new Mediterranean set up, involving all the FAO regional projects, as announced during the presentation made during the 38<sup>th</sup> GFCM Session (May 2014). This shall provide the Project with the possibility to continue contributing to scientific cooperation in the Adriatic Sea.

59. The Representative of Italy, Mr Rigillo, reiterated the important role played by the AdriaMed Project at Adriatic level. He stressed that the Project, from a purely managerial perspective, has several pros, it provides tangible results and is able to provide answers to specific issues efficiently. Considering future perspectives, AdriaMed should continue to ensure support both to the Adriatic region and to the GFCM (both SAC and CAQ). AdriaMed, thanks to its potential to promote cooperation between countries, should ensure streamlining of the cooperative framework between EU Member countries and non EU countries (candidate countries). He gave an example of good cooperation practices promoted by AdriaMed in the discussion on the management plans in the north and central Adriatic Sea (GSA 17)., He therefore stressed the importance of building on the experience and the added values accrued when considering the future development/perspective of the Project.
60. The representative of Croatia, Mr Mišura, acknowledged this and pointed out the relevance of the activities proposed in the work plan. In particular, he stressed the significance of continuing the activities related to small pelagics. He also pointed out the importance of broadening the perspective of the activities of the Project further and informed the participants on the consideration made in Croatia to participate more directly in Project activities by becoming a donor of the AdriaMed Project in the near future (2016).
61. After wide discussion and comments on the content of Document CC/16/03, the Committee agreed on the programme of activities proposed for the coming period; some specific elements were pointed out with reference to some of the activities and related outputs. The approved programme of work is annexed to this report.

#### **Other matters (Agenda item 7)**

62. The Delegates and Meeting participants expressed their thanks to the Montenegrin authorities for their hospitality.
63. Upon the kind invitation of the Slovenian delegation, the next Meeting of the AdriaMed Coordination Committee will be held in Slovenia. The date and venue will be proposed in due time by the Project. This proposal was welcomed by the Meeting participants.

This report has been adopted on 1 April 2015.

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## Agenda

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

### **2. Adoption of the Agenda**

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

*The main activities and the Project's outputs will be presented and reviewed. Information will be given on the activities of the AdriaMed Working Groups, the on-going cooperative research work, the training sessions, and the relationship and cooperation of the Project at Mediterranean level.*

### **4. FAO GFCM work plan for the next intersession period**

*The scientific and technical activities foreseen in the FAO GFCM work plan for 2015 will be presented. Discussion on how the activities foreseen by the Project are integrated and will contribute to the First GFCM Framework Programme (2013-2018) will be held.*

### **5. Development of the Project's Programme for the next period**

*The work plan of the Project will be outlined and discussed. Topics to be dealt with are those pertaining to the ongoing research programmes, the training activities, the joint activities directed toward the national capacity development and the preparatory work towards joint fishery management decisions in the project area. Particular attention will be given to the follow-up of AdriaMed Working Groups and initiatives on the fisheries socio-economic aspects and small scale fisheries. The international cooperation, the relationship with other projects at Adriatic level, the relationship with the Donors, with the GFCM and other topics brought forth by the Committee will be discussed. The Committee will be asked to provide the Project with an appraisal and orientation of the programme presented and/or any other contribution.*

### **6. Other matters**

### **7. Adoption of the report**

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

**Report on the intersessional activities of the Project**

(March 2014 – March 2015)

This paper summarizes the main activities carried out by the Project AdriaMed between March 2014 and March 2015, including workshops, training, research activities and the technical assistance provided to the countries; as well as the cooperation established with the GFCM, the SAC, the CAQ and Sub-Committees and other relevant institutions. The work programme and recommendations of the 15th Meeting of the AdriaMed Coordination Committee (Trieste, Italy, 11-13 March 2014) were implemented (CC/16/info2).

In the intersessional period, progresses were made in the preparation of a common programme for fisheries cooperation in the Mediterranean under which the AdriaMed Project, as well as all the other FAO Mediterranean Projects, namely MedSudMed, EastMed and CopeMed II, will converge. On 21 May 2014 during the 38th session of the FAO General Fisheries Commission for the Mediterranean (GFCM) the FAO Fisheries and Aquaculture Department- Fisheries and Aquaculture Resources Use and Conservation Division (FIR) illustrated the concept note for the creation of a FAO-FIRF common programme in the Mediterranean Sea to the GFCM Member countries. Consequently, in July 2014 FAO FIRF prepared a complete draft proposal “Scientific and Institutional Cooperation to Support Responsible Fisheries Management in the Mediterranean” and circulated it to the Mediterranean countries for comments/suggestions and feedback. In March 2015 during the 17th session of the GFCM Scientific Advisory Committee (SAC) FAO-FIRF informed that the proposal is under major revision and a new proposal will be circulated shortly to the countries.

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 Project activities and the results achieved with direct reference to the following Project Objectives:

1. Strengthening of the sub-regional network by involving relevant institutions of the fisheries sector to follow up on aspects of scientific coordination and cooperation.
2. Supporting the establishment of a sub-regional fisheries monitoring system, based on standardized research methodologies.
3. Identification of management schemes, to be applied on a pilot scale in selected zones, towards strengthening the international and regional cooperation.
4. Supporting shared resource management decisions, including promotion of harmonised fisheries legislation.
5. Supporting the development of responsible mariculture, in particular for the enhancement of positive interaction between fisheries and aquaculture.

## **1. Strengthening of the sub-regional network by involving relevant institutions of the fisheries sector to follow up on aspects of scientific coordination and cooperation**

### **Meetings with the Member countries**

The relations and interactions with the participating countries were further strengthened, which contributed to the improved implementation of the Project activities. Several meetings were organised with the aim of following up on planned activities and finding overall agreement on possible future joint actions to be carried out in the framework or with the support of the Project. In view of this, meetings were held with the Institute of Oceanography and Fisheries (Split), with the Ministry of Agriculture and Rural Development of Montenegro, with the Institute of Marine Biology of Kotor (IBMK), with the Ministry of Agriculture and Environment of Slovenia, at the Fisheries Research Institute of Slovenia.

In particular, meetings were held with the Director - Agriculture Production & Trade Policies (Ministry of Agriculture, Rural Development and Water Administration) under which the Fisheries and Aquaculture sector is, and the Director of the Laboratory of Fisheries and Aquaculture of the Agricultural University of Tirana (LFAD). The meetings were aimed at planning and organizing the fisheries socio-economic survey in Albania. In May 2014 a meeting with the Director General - Directorate for Agriculture and Fishery (Ministry of Agriculture and Rural Development) of Montenegro, the staff of the Fisheries Unit and the Project staff (May 2014) was organized to discuss on the need of streamlining fisheries development policies in Montenegro in view of EU admission and the imminent socio-economic survey.

Ad hoc meetings with the fisheries administrations of Croatia, Italy and Slovenia were held to define a common monitoring pilot study on the height (and drop) of purse seiners net for small pelagic species in the Adriatic Sea (CC/16/info14).

Preliminary contacts with researchers from Bosnia-Herzegovina were taken in concomitance of the GFCM MedSuit regional workshop (FAO-HQs, Italy 6-7 November 2014). Some researchers from the Hydro-Engineering Institute Sarajevo HEIS Institut za hidrotehniku Sarajevo were invited to participate to the AdriaMed Working Group on Small Scale Fisheries (Split, Croatia 16-17 December 2014).

In addition, informal meetings were held throughout the year and opportunities were taken back to back with international meetings to liaise with representatives and experts of the participating countries (both fisheries administrations and research institutes).

All these activities lead to: i) Strengthened cooperation in the region and improved implementation of Project activities; ii) Priorities and needs of the participating countries are better addressed and reflected in the workplan of the Project; iii) Greater efficiency of the Project in steering activities according to the emerging needs of the countries; iv) The meetings with fisheries administrations of Albania and Montenegro resulted in the workplan for the forthcoming start-up of data collection activities. The meetings with fisheries administrations of North Adriatic countries facilitated the preparation of a common technical document on purse seiners in the Adriatic Sea.

### **Meetings with the Donors**

As indicated in the last meetings of the Coordination Committee and also in the FAO Independent Evaluation, the Project strengthened liaisons with the Donors (MiPAAF and EU-DG-MARE) and intensified coordination meetings with them. In the intersessional period, a series of coordination meetings were held at the MiPAAF Headquarters.

Occasion was taken during the GFCM 38th session (May 2014), and other informal meetings were held to discuss and coordinate with the EU-DG-MARE staff for the presentation of new grant applications for additional funds and for the proposal of a single FAO Mediterranean Programme under the coordination of FAO-FIRF.

The liaison with the Donors lead to: i) strengthened coordination; ii) improved information flow between the Project and the Donors; iii) a more efficient planning of Project funding; iv) the draft of the project document for a single Mediterranean Programme was illustrated to the Donors.

### **Technical support to the Member countries**

The Project continued to provide technical support to the Adriatic countries for the creation and updating of databases, Web pages and national information systems as in the past years.

Technical support was provided to the Fisheries Research Institute of Slovenia (FRIS) for upgrading of the Biological Information System (BIOS) available at the FRIS. This was carried out by developing: i) a data entry form for biological data (meristic and morphometric) and ii) a data entry form for data describing the interactions between organisms.

In addition, technical support was provided to the Ministry of Agriculture and Rural Development of Montenegro in upgrading its Fishery Information System (FIS). To this extent the system was provided with the possibility to prepare a series of subsystems for each fishery statistic component, e.g. one subsystem for the catch/effort data collected by the Institute of Marine Biology of Kotor (Register on catch/effort data), one subsystem for the data collected on aquaculture (Register on aquaculture data).

Following the recommendations of the last Project Coordination Committee meetings and the discussion held during the annual AdriaMed Working Group on Small Pelagics, the Project developed and consolidated the database to store, manage and carry out preliminary analysis of small pelagic fisheries related data. The database (namely AdriaMed Small Pelagics Application, ASPA) has been designed on the basis of the experience gained through the preparation of ATrIS (AdriaMed Trawl Information System, the database for the management of trawl surveys data). The technical team in charge of the software development comprises researchers from all the Adriatic institutes participating in the project and involved in the collection and management of data of small pelagics. Feedbacks provided by Adriatic experts are being used by the technical team to better tailor the database to the real needs of the research institutions. The database used by the application is under revision and consolidation by the national experts and will be put at disposal of the national administrations. Technical work to make available the ASPA server to all the users has been done with the kind support of the ISMAR-CNR of Ancona (Italy).

The technical support activities resulted in: i) Strengthened scientific cooperation and improvement of technical capacity at regional level; ii) Progress towards the standardization in the Adriatic sub-region; iii) With the inclusion of new forms in BIOS, FRIS has improved capability for monitoring the dynamic of fisheries and natural resources and to provide more relevant information to the national administration in support of fisheries management; iv) The ASPA technical team was established for the development of the software. Researchers from all the participating institutes are being fully involved in the process.

### **AdriaMed Portal**

The AdriaMed portal ([www.faoadriamed.org](http://www.faoadriamed.org)) and the AdriaMed databases are available on line. The Project is restructuring the information included in the portal to group it according to new areas

of interest to website users. Work is being done on the re-organization of the sections and the databases available on the web with the close cooperation of the research institutes in the participating countries. Over the last year, about 135 000 web pages were visited and over 60 000 users visited the AdriaMed web site. Over 54 000 AdriaMed Technical Documents have been downloaded in the last five years. The most recent Project publications are also disseminated through the Project's mailing list, which includes 474 scientists and institutions.

The presence of the portal results in the widest possible dissemination of results and lessons learnt in the framework of the Project activities.

### **AdriaMed Trawl Survey Information System (ATrIS)**

The updated version of the AdriaMed Trawl Survey Information System (ATrIS, version 2.1), the computerized system developed to organize, store and undertake preliminary analysis of the trawl surveys data has been distributed to all the institutes participating in the Project. 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).

Support to the research institutes on the use and/or development of special/new features of ATrIS was further provided: an ad hoc training course on the use of ATrIS have been organized for the staff of the Laboratory of Fisheries and Aquaculture of Durrës (Agricultural University of Tirana, Albania).

In addition, support to the “Institut National des Sciences et Technologies de la Mer” (INSTM, Tunisia) was provided in March 2015 with installation and training to selected staff of INSTM on the use of ATrIS (Tunisia, March 2015).

Moreover, following a request from the Director General of the Fisheries Department, Ministry of Agriculture and Fisheries Wealth, Sultanate of Oman, in collaboration with FAO-RNE and FAO Oman, the Project staff prepared a proposal to develop a version of ATrIS suited to the recent and historical geo-referenced fisheries data in Oman: OTrIS. The OTrIS project was signed in February 2014 and will run for 18 months. Two technical missions, involving Project staff, were organized in Oman, (May and December 2014) and two trainings/workshops were organized to identify, define the characteristics of the new package, according to the needs of the Oman Fisheries Research Institute and initiate the training on the use of the new application. During the missions the survey data gathered through time in Oman from scientific surveys at sea were reviewed and discussion was held to develop OTrIS.

The production of data management tools by the Project lead to: i) increasingly developed scientific capacity and provision of tools at national and sub-regional level; ii) progress towards the harmonization of the methodologies (data entry) in the Project area; iii) cooperation with FAO decentralised offices reinforced; iv) more than 20 experts from OMAN, Tunisia, Malta and Albania have been trained on the use of ATRIS/OTrIS.

### **Information on Aquatic and Fishery Sciences (ASFA)**

As one of the ASFA International Partners, the AdriaMed Project is continuing the activities carried out so far for the inclusion of Adriatic Scientific publications in the ASFA database, as well as supporting the two collaboration centres created at the Institute of Oceanography and Fisheries (IOF) in Split, Croatia, and at the Institute of Marine Biology of Kotor (Montenegro). ASFA records have been submitted to the Publisher of ASFA (ProQuest). In this context, articles from journals published in Croatia, Montenegro and Slovenia (e.g. *Acta Adriatica*, *Ribarstvo*, *Anali za*

*Istrske in Mediteranske študije-Series Historia Naturalis, Natura Croatica, Natura Slovenica, Studia Marina*) are regularly included in the ASFA database. Assistance in the form of feedback and technical support to the two centres has been provided. In addition, the Project continued to support the FAO ASFA Secretariat by providing feedback to the ASFA National Partners of Egypt. A report summarizing the activities carried out and the records submitted to the ASFA publisher was prepared and submitted to the ASFA Board Meeting (Beijing, China, 13–17 October 2014). The main results of this activity were: i) Improved dissemination of scientific information in the sub-region and worldwide; ii) Improved scientific capacity at national level; iii) Adriatic scientific journals included regularly in the ASFA database (CC/16/info15).

## **2. Supporting the establishment of a sub-regional fisheries monitoring system, based on standardized research methodologies**

As part of its mandate, AdriaMed continued to support the establishment of monitoring systems in the Adriatic Sea (at national and sub-regional levels) through, inter alia, the standardization of the methodologies commonly applied on fisheries research and data collection. The activities within this component foresee support to scientific surveys, coordination meetings, and scientific research activities, addressing both demersal and small pelagic fisheries resources and socio-economic fisheries related aspects.

### *Demersal fisheries resources*

#### **Study Group for the application of bottom-trawl survey data to fish stock assessment in the South Adriatic Sea (GSA 18)**

The Project continued to support the establishment of a sub-regional fisheries monitoring system as well as fostering scientific cooperation in the area. With this aim, and to progress in the joint evaluation of the shared stocks, the Project organized the Study Group for the application of bottom-trawl survey data to fish stock assessment in South Adriatic Sea (SG-DEM18) (Torre a Mare (BA) Italy, 22-26 September 2014). The SG-DEM18, kindly hosted by COISPA Tecnologia & Ricerca (Italy), was carried out to jointly analyze data on European hake (*Merluccius merluccius*) and Deep-water rose shrimp (*Parapenaeus longirostris*) collected in the area through scientific trawl surveys (MEDITS) and commercial fishery fleet monitoring/sampling. Scientists from Albania, Montenegro and Italy participated in the meeting. Stock assessment was carried out for *M. merluccius* and *P. longirostris*. The results of the joint study were then presented and discussed at the AdriaMed Working Group on Demersal Fisheries Resources, FAO-HQs, Italy 7-9 October 2014 (CC/16/info8).

#### **Working Group on Demersal Fishery Resources (WG-DEM)**

The annual meeting of the AdriaMed Working Group on Shared Demersal Fisheries Resources (WG-DEM) was held at FAO-HQs, Italy 7-9 October 2014. The meeting was attended by researchers from the Adriatic fisheries research institutes involved in the Project and members from the AdriaMed networks. The WG focused on the appraisal and stock assessment (standard and alternative methods) of demersal stocks and on indicators and reference points which may be considered at regional level in line with the EC Marine Strategy Framework Directive. The result of

the catch/effort survey carried out in Montenegro and the pilot action on biological sampling in the port of Durrës (Albania) were presented as well as the results of the SoleMon Project. Future common activities were identified and possible common actions were proposed. The stock assessments presented by the SG-DEM18 on European hake (*Merluccius merluccius*) and Deep-water rose shrimp (*Parapenaeus longirostris*) were reviewed. The WG-DEM assessed the state of the stock of Common sole (*Solea solea*), and European hake (*Merluccius merluccius*) in GSA 17. All the assessments produced were presented and discussed during the GFCM-SAC-SCSA Working Group on Stock Assessment of Demersal Species (GFCM-HQs, Rome, Italy 24-27 November 2014) and endorsed by the GFCM Sub Committee of Stock Assessment (GFCM-HQs, Rome, Italy 4-6 February 2015). Full details can be found in the related Meeting Memorandum and stock assessment forms (CC/16/info5 and CC/16/info6).

### ***Solea solea* related activities**

In the framework of the activities related to the Demersal Fisheries Resources, the Project supported the cooperation between the Institute of Oceanography and Fisheries of Split (IOF) and CNR - Istituto Scienze Marine (ISMAR) of Ancona and FRIS of Slovenia for the “Stock Assessment of *Solea solea* in the northern and central Adriatic Sea and evaluation of the impact of the different fishing activities” (SoleMon) research programme. In November 2014 the tenth SoleMon survey covering the North-Central Adriatic Sea was carried out with a mixed scientific crew. Experts from Italy, Slovenia and Croatia participated in the survey. The stock assessments for sole, *Solea solea*, in GSA 17 was performed and presented for discussion at the AdriaMed Working Group of Demersal Fisheries Resources (October 2014). The consolidated stock assessment was brought to the attention of the GFCM SAC - SCSA Working Group on Demersal Species (GFCM-HQs, Rome, Italy 24-27 November 2014) and endorsed by the GFCM Sub Committee of Stock Assessment of the (GFCM-HQs, Rome, Italy 4-6 February 2015), (CC/16/info6).

### **Support to the research programmes on demersal stocks in the Adriatic**

In the framework of the activities on demersal fisheries resources, the Project is supporting the full participation of South Adriatic Sea countries in the EC-funded MEDITS programme. Participation in the annual MEDITS Coordination meeting (Rome, 26-27 March 2014) was supported. In addition, the extension of the MEDITS trawl survey to the eastern waters of the South Adriatic Sea (Albania and Montenegro) was supported with scientific campaigns carried out in August 2014. During the survey, on-board training activities were carried out for staff from the Laboratory of Fisheries and Aquaculture of the Agricultural University of Tirana (Durrës, Albania).

Moreover, the Project continued to support scientific activities carried out in the Pomo/Jabuka Pits area on *Nephrops norvegicus* stocks. The Istituto di Scienze Marine (CNR – ISMAR) of Ancona (Italy) in cooperation with the Institute of Oceanography and Fisheries of Split (Croatia), carried out an evaluation of the *N. norvegicus* stocks in the Jabuka/Pomo pits area using the towed UnderWater TV (UWTV) methodology in spring (April-May 2014). The survey provides a methodology to assess the stock status of demersal fisheries resources providing additional data to compare with the trawl survey data. The footage collected in the last two surveys was analysed in November 2014 by a joint team of experts from Italy and Croatia.

The support to the surveys resulted in: i) Scientific cooperation being strengthened; ii) Scientists from Albania, Croatia, Italy, Montenegro and Slovenia receiving training and their scientific

research skills being thus improved; iii) standardization of methodologies reinforced in the sub-region.

### *Small pelagic fisheries resources*

#### **AdriaMed Working Group on Small Pelagic Fisheries Resources (WG-SP)**

The annual meeting of the AdriaMed Working Group on Small Pelagic Fisheries Resources (WG-SP) took place in two separate sessions at FAO-HQs, Italy: session 1 (7-11 July 2014) and session 2 (30 September-2 October 2014). The meeting was attended by researchers from the Adriatic fisheries research institutes involved in the Project and members of the AdriaMed networks. The WG-SP reviewed the outcomes of the Study Group on DEPM (SG-DEPM) and the Study Group on intercalibration of fish otolith reading (SG-OTH) that continued to work throughout the 2014. The preliminary results of the joint acoustic and DEPM survey performed in GSA 18 under the umbrella of AdriaMed were also discussed. The meeting reviewed the knowledge and information on small pelagic fish stocks, mainly of anchovy (*Engraulis encrasicolus*) and sardine (*Sardina pilchardus*). The stock assessments of anchovy and sardine were jointly performed for GSA 17 by combining all data made available by the experts of the participating countries. A roadmap for the revision of the dataset on small pelagics in the Adriatic Sea, to be used for stock assessment (including actions on ageing and acoustic surveys), as well for the preparation of a joint appraisal of the entire Adriatic Sea on anchovy and sardine, was agreed on. Possible joint research activities to be carried out in the Adriatic Sea were identified. The results of the joint stock assessment of anchovy and sardine for GSA 17, were presented and discussed during the GFCM-SAC-SCSA Working Group on Stock Assessment of Small Pelagic Species (GFCM-HQs, Rome, Italy 24-27 November 2014) and endorsed by the GFCM Sub Committee of Stock Assessment (GFCM-HQs, Rome, Italy 4-6 February 2015), (CC/16/info3 and CC/16/info4).

#### **Joint acoustic and ichthyoplankton survey in the South Adriatic Sea (GSA 18)**

The Project continued to support the countries in developing expertise on small pelagic fisheries resources as well as for the standardization of the methodologies applied. In July –August 2014, a joint acoustic and ichthyoplankton survey using R/V “Dallaporta” covering south Adriatic waters (GSA18) was carried out. The survey was organized with the support of the Project, in cooperation with CNR-ISMAR Ancona (Italy), the Institute of Marine Biology of Kotor (Montenegro) and the Laboratory of Fisheries and Aquaculture of Durres Agricultural University of Tirana (Albania). Theoretical and onboard training activities on acoustic survey and DEPM methods were carried out for national staff from Albania, Italy and Montenegro

The support to the survey resulted in: i) Scientific cooperation being strengthened; ii) Six scientists from Albania, Montenegro and Italy receiving training and their scientific research skills being thus improved; iii) standardization of methodologies reinforced in the sub-region; iv) Acoustic data were logged over around 600 nautical miles, 16 pelagic trawls were performed in the study area together with 54 CTD&DEPM stations (CC/16/info9).

#### **Pilot ichthyoplankton survey in Slovenia**

In line with the mandate of the Project to provide technical assistance to the countries towards understanding of fisheries population dynamics, efforts have been devoted in surveys at sea, data

collection, standardization of methodologies and rebuilding of expertise in the countries. In July 2014, the Project arranged and supported ad hoc on-the-job training to scientists of the Fisheries Research Institute of Slovenia on the Daily Egg Production Method (DEPM). The training activity was performed by expert staff from the Institute of Marine Biology of Kotor (Montenegro). The occasion was taken to perform, an ichthyoplankton survey to improve knowledge on the spatial and seasonal distribution of planktonic stages of European anchovy and sardine.

This action in turn contributed to identifying key mechanisms impacting on recruitment success and hence, on a long term, will provide useful information on the management of fisheries exploiting small pelagic resources at Adriatic level. The survey will also provide additional information on the eggs and larvae distribution in the north Adriatic Sea. This information will be used for proper positioning the sampling stations in occasion of a forthcoming DEPM survey that will cover the entire Adriatic Sea. In addition, this action will also contribute to the re-building of expertise on DEPM method in the Adriatic Sea by improving the institutional technical capacity of the Fisheries Research Institute of Slovenia.

### **Stock Unit Identification of *Engraulis encrasicolus***

The Project initiated the support of a research activity aimed at molecular identification of stock boundaries and larval drift in anchovies (*Engraulis encrasicolus*) in the Adriatic Sea.

The research activity is organized in cooperation with the ISMAR-CNR of Ancona and the University of Ancona (Italy). The study uses microsatellite DNA loci and foresees two steps. Step 1 was finalized to track the geographic origin of larvae caught in several areas within the Adriatic basin. Step 1, by working with fish larvae, will also be instrumental to map local areas that contribute to the spawning events. The Step 2 will be focused on the comprehension of the Adriatic anchovies stock structure and its boundaries, in particular in the North Adriatic Sea, thus producing useful information for management (CC/16/info13).

### **AdriaMed Working Group on Small Scale Fisheries in the Adriatic Sea**

In consideration of the socio-economic relevance of small-scale fisheries and of their role in the exploitation of some shared stocks and following the indications received by the Adriatic experts and by the Coordination Committee, the Project re-established the AdriaMed Working Group on Adriatic Sea Small-Scale Fisheries (WG-SSF). The second meeting of the WG-SSF was held in Split, Croatia, 16-17 December 2014.

The meeting was attended by researchers from the Adriatic fisheries research institutes involved in Project activities and members of the relative AdriaMed networks. The WG-SSF: i) reviewed and analysed data availability on SSF at Adriatic level (e.g. at métier level) to identify steps for progressing in the harmonization of the different data collection.; ii) made progress in the identification of key technical elements for SSF management; iii) discussed on the contribution that the WG-SSF could provide to the Second Symposium/Regional Conference on Small Scale Fisheries organized by the GFCM; iv) initiated discussion on alien species in the Adriatic Sea; v) identified the main and priority issues concerning fishery research management aspects of small scale fisheries of the Adriatic Sea; and; iv) identified some joint future activities to be carried out in the framework of the Project (CC/16/info7).

### **Monitoring system for the fisheries sector in Montenegro**

The Project is supporting the monitoring of fisheries sector in Montenegro. The monitoring is carried out in the form of biological sampling to the commercial catch from fishing vessels. The activity, started in 2007 as a pilot action, was designed to implement a monitoring system for the Montenegrin fishery sector. The monitoring activity was carried out in cooperation with the Institute of Marine Biology of Kotor and the Ministry of Agriculture and Rural Development (Fisheries Directorate). The monitoring system was developed in coherence with the indications given by the GFCM and according to the EU regulations. The activity is at present the only catch and effort survey in place in the country. The support to this activity resulted in: i) National capacity development on data collection and analysis; ii) standardization of methodologies reinforced in the sub-region; iii) Data from the biological sampling are regularly used to perform the appraisal of demersal fisheries resources in the south Adriatic Sea. The results of the first three years have been summarized in the AdriaMed Technical Document 32.

### **Pilot action on biological sampling in the port of Durrës (Albania)**

According to a request formulated by representatives of the Agricultural University of Tirana (Albania) during the 13th Coordination Committee meeting (26-28 March 2012), the Project designed and initiated a pilot action on biological sampling in the fishing port of Durrës in cooperation with the Laboratory of Fisheries and Aquaculture of Durrës (LFAD-Agricultural University of Tirana). The aim of this pilot activity is to verify and test the feasibility of fisheries catch-and-effort data collection at national scale. It also aims to provide a preliminary description of the main resources exploited and landed per fishing fleet segment in the Port of Durrës. The pilot action started in May 2013 and is providing additional element to design a comprehensive monitoring system including all aspects of the fisheries sector (biological economical and sociological) to be defined and agreed on with the national administration. This on-going activity is resulting in improved capacity of the Laboratory of Fisheries and Aquaculture of Durrës to perform scientific surveys, to monitor fisheries, and handle biological and fisheries-related data. The pilot survey is contributing to provide the national authorities with the information necessary to plan fisheries management strategies in the medium term according to the ecosystem approach to fisheries, EAF (CC/16/info10).

### **Albanian socio-economic survey**

Following the request formulated by the Ministry of Environment, Forestry and Water Management, Directorate of Fisheries Policies of Albania, (MEFWA) during the 12th Coordination Committee (2012) on the need to update the socio-economic information available in the countries on fisheries, the Project supported a pilot survey for the establishment of a socio-economic data collection programme in Albania in May 2013. In March 2014, the Ministry of Agriculture, Rural Development and Water Administration reiterated the need of support in such monitoring by the Project. In May 2014, AdriaMed organized a socio-economic survey in Albania. The survey is in line with the Project mandate of supporting the participating countries in the fulfilment of the GFCM requirements, in particular of the GFCM Data Collection reference Framework (DCRF, task 1.5, according to the Recommendation GFCM/33/2009/3). A sampling scheme for the socio-economic survey was drafted and consolidated after discussion with the local administrations and data collectors. A training exercise was organized and held in Durrës and Shëngjin in May 2014 for four data collectors. The exercise consisted in performing interview to fishers, vessel owners and

workers, as well as to record and store data. In May-June 2014 the survey was carried out and data were collected in the port of Shënjin, Durrës, Vlorë, Sarandë.

The survey, together with the information from the commercial catch-and-effort surveys, will: a) contribute to providing the national authorities with the information necessary to plan fisheries management strategies according to the principle reported in the FAO Code of Conduct for Responsible Fisheries and in the Ecosystem Approach to Fisheries; and b) improved national capacity on the fulfilment of data requirements according to the principles and formats set by the GFCM DCRF and EU-DCF; c) the data were used to feed the EU-Sedaf Project (Socio-Economic Development of Adriatic Fisheries) aimed at providing a baseline description of the main socioeconomic elements pertaining to the national Adriatic fisheries (CC/16/info11).

### **Montenegro socio-economic survey**

The Project supported a survey for the establishment of a socio-economic data collection programme in Montenegro. The support provided follows the request formulated by the Ministry of Agriculture and Rural Development-Directorate for Fisheries of Montenegro, (MARD) during the 15th Coordination Committee (2014) on the need to update the fisheries socio-economic information available in the country. In June 2014 the survey was carried out with the support of AdriaMed. The survey is in line with the Project mandate of supporting the participating countries in the fulfilment of the GFCM requirements, in particular of the GFCM Data Collection Reference Framework (DCRF, task 1.5, according to the Recommendation GFCM/33/2009/3). In addition, the survey is also in compliance with the EC-DCF, to which, Montenegro, as candidate country for the accession to the European Union, is interested to. A sampling scheme for the socio-economic survey was drafted and consolidated after discussion with the local administrations and data collectors. The first week of June 2014 a training exercise was organized and held in Podgorica, Tivat and Bar for four data collectors and one supervisor, to interview fishers, vessel owners and, as well as to record and store data. At the end of June 2014 the survey was completed by covering all the landing sites along Montenegro coasts.

The survey, together with the information from the commercial catch-and-effort surveys, will: a) contribute to providing the national authorities with the information necessary to plan fisheries management strategies according to the principle reported in the FAO Code of Conduct for Responsible Fisheries and in the Ecosystem Approach to Fisheries; and b) improved national capacity on the fulfilment of data requirements according to the principles and formats set by the GFCM DCRF and EU-DCF (CC/16/info12).

### **Training sessions**

The Project continues to improve national capacity at institutional level by organizing training activities according to the requests formulated by the participating countries. Moreover, in cooperation with the other FAO Mediterranean Projects, the Project is seeking synergies on common activities. In this context, the following training activities were carried out or supported:

- Training on board during the MEDITS survey in Albania (August 2014)
- Training on board on eggs and larvae survey data collection (GSA 18, July-August 2014)
- Training on board on eggs and larvae survey data collection (Slovenia, July 2014)
- Training for data collectors during the AdriaMed socio-economic survey in Albania (May 2014)

- Training for data collectors during the AdriaMed socio-economic survey in Montenegro (June 2014)
- MedSea LME-AdriaMed-MedSudMed-EastMed-CopeMed Training and Planning Workshop on the Ecosystem Approach to Fisheries and Aquaculture (EAF/EAA) FAO-HQs, Rome, Italy 22-26 September 2014
- Training course on the use of ATrIS /OTRIS (Oman, May 2014; December 2014)
- MedSudMed - Training course on Introduction to the “R” system, FAO HQ, Rome, Italy, 26-30 January 2015 Training on the use of ATrIS (Tunisia, March 2015)

### **3. Identification of management schemes to be applied on a pilot scale in selected zones with the aim of strengthening international and regional cooperation**

According to its mandate, to the recommendations of its Coordination Committee and of the FAO Independent External Evaluation of the Project (June 2012) and with the objective of providing technical advice for fisheries management decisions at national and sub-regional levels, the Project continued in its pilot approach through multilevel consultations (fisheries administration and research institutions) towards the identification of possible management options for the Adriatic Sea fisheries.

This component of the Project is taking more and more importance considering also the implementation of the GFCM Recommendations aimed at establishing a framework for the preparation of multiannual management plans (Guidelines on a general management framework and presentation of scientific information for multiannual management plans for sustainable fisheries in the GFCM area, GFCM/36/2012; Guidelines on precautionary conservation measures pending the development and adoption of GFCM multiannual management plans for relevant fisheries at sub-regional levels in the GFCM area, GFCM/37/2013; Guidelines on the management of fishing capacity in the GFCM area, Resolution GFCM/37/2013/2E) and the GFCM management plan for Adriatic small pelagic fisheries.

During the intersessional period, attention was mainly dedicated to small pelagic fisheries.

#### *Purse seiners*

In January 2013, the fisheries administrations and research institutes of Croatia, Italy and Slovenia agreed to hold a series of technical meetings, within the framework of the FAO AdriaMed Project, to establish a road map to address the issue of purse seiners in the central and northern Adriatic Sea. In particular, the meetings were scheduled within the rules set by the common management plan for small pelagic in the Adriatic Sea defined by the GFCM Reg. 2013/37/1 and EC Reg. 1967/2006. In 2013 two further meetings were organized, respectively in July and October. The meetings identified the main steps of the road map to support management decisions on the height (drop) of purse seine nets targeting small pelagics: i) to fill the existing gaps by means of a coordinated action funded by the National Administrations; ii) to prepare a common document aiming at evaluating the impact of the purse seiners on the ecosystem and iii) to define the strategy towards the definition of a community-level management plan for purse seiners in the Adriatic. A fourth meeting was convened by the Project in July 2014 for the preparation of the final technical document summarizing the situation of purse seiners in the Adriatic Sea.

These activities are in line with and contribute to establishing the principles of the FAO Code of Conduct for Responsible Fisheries and the Ecosystem Approach to Fisheries. In addition they resulted in reinforced cooperation at sub-regional level between fisheries administrations (CC/16/info14).

*Multiannual management plan for fisheries on small pelagic stocks in GFCM-GSA 17 (Recommendation GFCM/37/2013/1)*

As per its mandate, the Project, since its inception, is reinforcing and supporting cooperation, among the Adriatic countries, aimed at fisheries management. In this line, in the past two years, the Project facilitated the discussion and cooperative process that brought towards the establishment of a multiannual management plan on small pelagic fisheries resources in the Adriatic Sea (GSA 17). In May 2013 the GFCM endorsed the GFCM Recommendation GFCM/37/2013/1 on a multiannual management plan for fisheries on small pelagic stocks in the GFCM-GSA 17 (Northern Adriatic Sea) and on transitional conservation measures for fisheries on small pelagic stocks in GSA 18 (Southern Adriatic Sea). The technical discussions that followed the adoption of the Recommendation GFCM/37/2013/1 during the GFCM technical meetings (Working Groups, SubCommittees and SAC) were backed up by the AdriaMed Project. The Project, in this view, is fostering the technical discussion necessary to address practical aspects linked to the implementation of the management plan. This discussion, lead by the GFCM, brought in May 2014 at the endorsement of the Recommendation GFCM/38/2014/1 amending Recommendation GFCM/37/2013/1 and on precautionary and emergency measures for 2015 on small pelagic stocks in the GFCM GSA 17. The technical discussion is on-going and the Project, in synergy with the GFCM, supported the Adriatic experts in the definition of a road map aimed at overcoming the technical issues hampering the proper stock assessment of small pelagics in the Adriatic Sea.

**Strengthening the cooperation with the GFCM and other FAO Regional Projects**

In order to strengthen international and regional cooperation, the Project interacts closely with the FAO Regional Project MedSudMed “Assessment and Monitoring of the Fishery Resources and Ecosystems in the Straits of Sicily”, with support provided on administrative matters, information technology and Web-site building, as well as other technical issues. In addition, several coordination meetings were held with the other regional projects, CopeMed II and EastMed throughout the year (the last being in February 2015), in order to consolidate and plan common activities. In this respect, the Project also participated in the MedSudMed Coordination Committee (Tunis, Tunisia 14-16 April 2014) and in the Coordination Committee Meeting of the EastMed Project (FAO HQs, Rome, 6-7 May 2014).

Cooperative actions were carried out with “MedSea Large Marine Ecosystem (MedSea-LME)” Project on topics of common interest and executed by FAO-FIRF. AdriaMed co-organized with MedSea LME and the other FAO Mediterranean Projects (MedSudMed-EastMed-CopeMed) the “MedSea LME-AdriaMed-MedSudMed-EastMed-CopeMed Training and Planning Workshop on the Ecosystem Approach to Fisheries and Aquaculture (EAF/EAA) FAO-HQs, Rome, Italy 22-26 September 2014”. Eight scientists and fisheries managers from Croatia and Montenegro were involved and trained. During the meeting, issues of relevant interest at national level concerning the implementation of the EAF/EAA in the preparation of fisheries management plans according to the

Ecosystem Approach to Fisheries and Aquaculture were dealt with. In addition, a meeting for the presentation and discussion of the outcomes of an analysis assessing the legal framework for the implementation of an Ecosystem Approach to Fisheries and Aquaculture (EAF/EAA) in Montenegro is being organized with the involvement of the Ministry of Agriculture and Rural Development (MARD) and the Ministry of Sustainable Development and Tourism (MSDT). A similar meeting has been planned for the presentation to the national authorities and stakeholders of Croatia (date to be defined). In this framework, the Project staff also initiated an institutional analysis for national administrations of Adriatic countries with a view of further integration of EAF principles in annual work plan.

In line with the Project's support in streamlining Montenegrin fisheries development policies for EU entry, AdriaMed sought synergies and collaborated with the EU-SEDAF Project (Socio-Economic Development of Adriatic Fisheries) namely Improved knowledge of the main socio-economic aspects related to the most important fisheries in the Adriatic Sea. The main objective of the EU-Sedaf Project was to provide a baseline description of the main socioeconomic elements pertaining to the different fisheries undertaken by the relevant countries (e.g. Adriatic coasts of Italy, Slovenia, Croatia, Montenegro and Albania) on the basis of their evolution over the last years. Indicators were defined and selected variables were taken and estimated at fishery and/or GSA level for bio-economic modeling. Two meetings of the Sedaf Project were organized in cooperation with the AdriaMed Project (FAO-HQ, Italy 15-17 September 2014; Split, Croatia 17-19 December 2014). The socio-economic data collected by Albania and Montenegro through the support of AdriaMed were used to feed the analysis of the Sedaf Project. This resulted in the preparation of an overview of the socio-economic status of selected fisheries in the Adriatic Sea. The analysis made on the small pelagic of the GSA 17 (Adriatic Sea) were also instrumental to feed the workplan of the GFCM SAC SubCommittee of Social and Economic Sciences (SCESS). In this line, a presentation of the preliminary results of the SEDAF Project on small pelagic was delivered at the GFCM SAC-SCESS (GFCM HQs, Italy, 4-5 February 2015).

Cooperation was further sustained with the GFCM and the GFCM Subsidiary Bodies (CC/16/info16). Several informal coordination meetings were held with the GFCM staff back to back with GFCM events to strengthen the cooperation and find synergies.

In addition the following meetings were held:

- Preparatory meeting with the GFCM Secretariat on the Follow-up workshop on the implementation of management measures in selected case studies in the Mediterranean (GFCM HQ, Rome, Italy 2-3 February 2015)
- Preparatory meeting with GFCM CAQ on the SAC intersessional meeting on management plans for the small pelagic fishery in the Adriatic Sea (GFCM HQ, Rome, Italy 28-29 November 2014)

AdriaMed continued to support the activities of the GFCM by providing scientific contributions for discussion and by funding the participation of 65 Adriatic experts in the following 17 GFCM meetings (both SAC and CAQ related) held in the intersessional period:

- GFCM-Scientific Advisory Committee (SAC) - 16th Session St Julian's, Malta 17-21 March 2014
- General Fisheries Commission for the Mediterranean - Extraordinary Session 7-9 April 2014 Athens, Greece and FAO HQ, Rome, Italy
- General Fisheries Commission for the Mediterranean - 38th session 19-24 May 2014
- GFCM-Committee on Compliance (CoC) - 8th Session FAO HQ, Rome, Italy 19-24 May 2014
- GFCM-Committee on Administration and Finance (CAF) -5th Session FAO HQ, Rome, Italy 19-24 May 2014
- EIFAAC/GFCM/ICES Working Group on Eels (WGEEL) GFCM HQ, Rome, Italy 3-7 November 2014
- GFCM-MedSuit Regional Workshop GFCM HQ, Rome, Italy 6-7 November 2014
- GFCM Working groups on stock assessment of demersal and small pelagic species (including assessment of red coral populations) GFCM HQ, Rome, Italy 24-27 November 2014
- GFCM-SAC intersessional meeting on management plans for the small pelagic fishery in the Adriatic Sea GFCM HQ, Rome, Italy 28-29 November 2014,
- Regional Aquaculture Conference: "Blue Growth in the Mediterranean and the Black Sea: developing sustainable aquaculture for food security" CIHEAM-IAM Bari, Italy 9-11 December 2014,
- GFCM-Workshop on the implementation of the DCRF in the Mediterranean and the Black Sea, Madrid, Spain 15-16 December 2014
- GFCM-Intersessional meeting of the Compliance Committee (CoC) (including a session on legislation), FAO HQ, Rome, Italy 29-30 January 2015
- GFCM-Follow-up workshop on the implementation of management measures in selected case studies in the Mediterranean, GFCM HQ, Rome, Italy 2-3 February 2015
- GFCM-SAC subcommittee on Economic and Social Sciences (SCESS) - 15th Session GFCM HQ, Rome, Italy 4-5 February 2015
- GFCM-SAC subcommittee on Stock Assessment (SCSA) - 16th Session GFCM HQ, Rome, Italy 4-5 February 2015
- GFCM Committee on Aquaculture (CAQ) - 9th Session (including SIPAM) - Marrakesh, morocco 24-26 February 2015
- GFCM-Scientific Advisory Committee (SAC) - 17th Session FAO HQ, Rome, Italy 24-27 March 2015

#### **4. Supporting shared resource management decisions, including promotion of harmonized fisheries legislation**

In 2003 the Project started to collect updated information on the fisheries legislation in the Adriatic Sea (up to September 2004) in cooperation with the administrations of the countries involved. The information was published as AdriaMed Technical Document N.14 and made available online on the AdriaMed web site. In 2007 an updated version of the AdriaMed Technical Document N.14

(rev.1) was produced. At the end of 2014 the Project initiated the revision of the document and updating of the information included. The legislative frameworks of Albania, Montenegro and Slovenia reported in the AdriaMed Technical Document N.14 have been updated. The AdriaMed Technical Document N.14 (rev.2) will be shortly released. This activity leads to increased dissemination of information in the sub-region. In parallel, in the framework of the synergies created with the “MedSea Large Marine Ecosystem (MedSea-LME)” Project, an analysis assessing the legal framework for the implementation of an Ecosystem Approach to Fisheries and Aquaculture (EAF/EAA) in Montenegro and Croatia was made. The outcomes of the analysis are to be presented and discussed with the national authorities and stakeholders, and meeting are organized for the final delivery of the outcomes in these two countries (Montenegro, April 2015; Croatia, date to be defined).

## **5. Supporting the development of responsible mariculture, in particular for the enhancement of positive interaction between fisheries and aquaculture**

The Project supported the participation of several Adriatic experts in a number of GFCM -CAQ related meetings, including in the Regional Aquaculture Conference “Blue Growth in the Mediterranean and the Black Sea: developing sustainable aquaculture for food security” (Bari, Italy 9-11 December 2014).

The Project continued providing technical support to the countries. In particular, support was provided to the Directorate of Fisheries Policies of Albania to continue data collection on production and to consolidate the data on the aquaculture facilities in the country. This activity was in accordance with the GFCM recommendation GFCM/2009/33/4 (17 19 December 2008, Tirana, Albania), with the need to standardize the collection of production statistics data on aquaculture, and followed the request formulated by the Directorate itself.

Following the results achieved in Montenegro (July 2013), the Project is co-organizing in Albania a pilot study step I on the identification of indicators for sustainable aquaculture. The activity is being organized in close cooperation with the GFCM-CAQ- GFCM-CAQ-InDAM Project (Indicators for Sustainable Development of Aquaculture and Guidelines for their use in the Mediterranean). The pilot study is aimed at supporting Albania in the introduction of the concept of indicators and their implementation for: the definition of potential mariculture zones, to develop offshore farming using a system of sustainability indicators and allocated zones for aquaculture (AZA). To this extent, the InDAM methodology will be applied.

The Project supported the realization of a movie promoting the sustainable mariculture practices and their interaction with the small scale coastal fisheries in Montenegro and in particular in the Boka Kotorska Bay.

### **Project Future implementation**

The aim of this document is to offer the Coordination Committee (CC) members elements for discussion on the AdriaMed Project Work Programme for the coming year.

The Project has been operative since October 1999 with an initial mandate of 5 years (AdriaMed I phase). During the 5th AdriaMed Coordination Committee meeting (2003), the Committee reviewed the conclusions and recommendations made by the Project Mid-term Review and recommended a five-year extension period from 2005 to 2010 (AdriaMed II phase). At the last Coordination Committee meeting (Trieste, Italy, 11-13 March 2014), the Italian donor confirmed the extension of its financial support to the Project activities for the whole of 2015. Therefore this work plan covers approximately 12 months of activities.

The activities proposed take into account the objectives and results achieved so far, the recommendations received during the 15th Coordination Committee meeting (Trieste, Italy, 11-13 March 2014), as well as the scientific cooperation established within the framework of the FAO General Fisheries Commission for the Mediterranean (GFCM) and the indications collected from the countries during the year.

In addition, some of the activities take into consideration the indications provided by the FAO Independent Evaluation of the Project, carried out in March – June 2012 by an FAO independent team of experts.

All the activities planned are integrated and will contribute to the development of the GFCM Framework Programme (2013-2018), and in particular to the Work Programmes 1, 2, 3 and 4.

The final work plan will take into due account the recommendations of the 16th Coordination Committee meeting, in accordance with the priorities expressed by the countries on each activity and directly linked to Project budget availability.

### **WORKPLAN**

In order to facilitate the presentation of the workplan for the next 12 months, all the activities were organized into the following main themes:

- Fisheries Resources
- Training Activities
- Socio-Economic Aspects
- Statistics and Information System
- Fisheries Management

- Aquaculture
- Regional Cooperation

Moreover, in coordination with the participating countries, all the Mediterranean FAO Regional Projects and the GFCM, efforts have been made to draft a tentative common calendar for the activities, in order to avoid any overlap, to find synergies and strengthen the coordination among the activities carried out.

## **Fisheries Resources**

### *Small pelagic fisheries resources*

#### **Joint surveys using acoustic methods and DEPM**

In line with the need to develop scientific advice on small pelagic fish and fisheries status based on the most recent scientific data available, due to its implications for management, the possibility to anticipate the acoustic survey to May- July was investigated. To cope with this requirement, the CNR-ISMAR of Ancona moved the calendar time of the R/V Dallaporta, with the objective to cover the entire GSA 18 and the western GSA 17 between May and July 2015. This could allow for acoustic-based biomass estimates to be generated by the end of December of the same year of the survey (as requested by GFCM Recommendation GFCM/38/2014/1-Point 85 and as suggested by the EU-DCF). Therefore, given the importance to take the best possible advantage of the vessel calendar, a joint acoustic and DEPM (Daily Eggs Production Method) survey using R/V “Dalla Porta” covering southern Adriatic waters (GSA18) will be organized for May-July 2015. This will replicate the survey carried out annually since 2008 in cooperation with the CNR-ISMAR of Ancona (Italy). The Institute of Marine Biology of Kotor (Montenegro), the Laboratory of Fisheries and Aquaculture of Durres (Albania) and CNR-ISMAR of Ancona (Italy) will be involved in the survey. Theoretical and onboard training activities to new staff will be carried out during the Acoustic and DEPM survey for national staff from Albania, Italy and Montenegro.

In parallel, the Project is investigating the possibility to extend the summer DEPM survey planned for GSA 18 to the GSA 17. The GSA 17 DEPM survey could be carried out taking advantage of the concomitant MEDIAS and MEDITS survey. Sampling stations in north and central Adriatic Sea could be used for the collection of eggs and larvae. This would result in the execution, for the first time, of a DEPM survey covering the whole Adriatic Sea.

The Project will support the participating research institutes by providing equipment or ad hoc training. The planned surveys will contribute to catalyse the rebuilding of expertise on DEPM in the Adriatic Sea, as well as updating the currently available information on the spawning areas for anchovy.

#### **Stock Unit Identification of *Engraulis encrasicolus***

The Project launched a research activity aimed at molecular identification of stock boundaries and larval drift in anchovies (*Engraulis encrasicolus*) in the Adriatic Sea.

The research activity is organized in cooperation with the ISMAR-CNR of Ancona and the University of Ancona (Italy). The research will be based on the use of microsatellite DNA loci and

is planned into two steps. Step 1 has already been implemented: set up of protocols to obtain genomic DNA from larvae and the subsequent typing with 14 microsatellite markers. Step 2 will be focused on the comprehension of the Adriatic anchovy stock structure and boundaries, in particular in the North Adriatic Sea.

#### **AdriaMed Study Group on DEPM (SG-DEPM)**

The Project will continue to foster the rebuilding and further development of expertise on DEPM, as requested by the participating countries during several technical and Coordination Committee meetings. During its last meeting (September 2014), the AdriaMed Working Group on Small Pelagic Fisheries Resources agreed that the final version of the document outlining the newly revised DEPM protocol for the Adriatic Sea will be prepared and distributed among participants for discussion. In the light of the new DEPM protocol all data on anchovy collected starting from 2008 in GSA 18 and the resulting spawning stock biomass estimates, will be revised in a joint exercise. The results of the exercise will be discussed during the next meeting of the SG-DEPM. To optimize the financial and human resources, the possibility to organize the SG-DEPM back to back with the AdriaMed Working Group on Small Pelagics will be pursued.

#### **AdriaMed Study Group on intercalibration of fish otolith reading (SG-OTH)**

The Project will continue to support participating countries in the process of standardization of data collection and analysis. The aim of the Study Group on intercalibration of fish otolith reading (SG-OTH) will be: i) to develop a standard for the sub-region and ii) to establish periodical monitoring of the “reading” activities at national level by setting up the regular exchange of otoliths among Adriatic research institutes. In summer 2013 a first exercise on sardine was carried out involving all the AdriaMed participating research institutes. The preliminary results showed a general low level of agreement on age reading. Since then, several meetings have been held to address the issue. In September 2014, during the AdriaMed Working Group on Small Pelagic Fisheries Resources, the SG-OTH met and agreed to convene a new meeting to define a road map toward a new common agreement. The meeting in 2015 foresaw the participation of a non Adriatic international senior expert with a deep knowledge on sardine otoliths reading and on Mediterranean small pelagic related issues. The participation of such an expert would: i) provide a further view on otoliths reading; facilitate the discussion; ii) support the SG-OTH to identify new common criteria for otoliths reading; and iii) enhance the ageing calibration exercise. The Project will identify the best option available and circulate the proposed name to the participants. The next meeting of SG-OTH will be scheduled in the first part of 2015 (April 2015) and held well in advance to the AdriaMed WG-SP. The outputs of the SG-OTH will contribute to solve the uncertainty expressed on the length-at-age data used for the stock assessment.

#### ***Ad hoc* meeting for the validation of dataset on small pelagic in the Adriatic Sea**

The Project is continuing to support countries in providing technical advice for fisheries management decisions at national and sub-regional levels. In this context, and in the framework of the GFCM management plan in force in the Adriatic Sea for small pelagic (Rec. 37/1/2013 and Rec. 1/38/2014), the Project is supporting Adriatic countries in addressing the criticisms raised by the SAC to the stock assessment performed so far by the Adriatic experts on anchovy and sardine in GSA 17. During last meeting of the Working Group on Small pelagic Fisheries resources, the experts agreed on a common roadmap to be followed. One of the steps is the revision of the

database on small pelagics in the Adriatic sea. The revision work will be done at national level: each country will check, consolidate and make ready a final dataset for both anchovy and sardine. All the revised national datasets will be part of the Adriatic dataset. The work of revision will have two objectives to set up: a final database for use of the GFCM management plan in force in the Adriatic Sea for small pelagics (Rec. 37/1/2013 and Rec. 1/38/2014); and the historical dataset available in the area (1975-2009). The Project will call a meeting to validate the datasets and to consolidate the final database on which any future stock assessment will be performed. The validation meeting can be held back to back to the next WG-SP.

### **Working Group on Small Pelagic Fisheries Resources (WG-SP)**

The annual AdriaMed Working Group on Small Pelagic Fishery Resources (WG-SP) is tentatively planned for the first semester of 2015. The WG-SP will be called to discuss the progress made on monitoring activities in the Adriatic area. Particular attention will be devoted to the roadmap identified by the WG-SP to address issues linked to the stock assessment of anchovy and sardine. Some of the topics to be dealt with are:

- a) Identify priorities and needs for the Adriatic region;
- b) Coordinate and organize joint surveys;
- c) Facilitate the coordination, at Adriatic level, of different data-collection requirements;
- d) Review the work carried out by the Study Group on DEPM (SG-DEPM);
- e) Review the work carried out by the Study Group on intercalibration of fish otolith reading (SG-OTH);
- f) Address the request from the GFCM-SAC to provide sub-regional stock assessment on priority species;
- g) Revision of the dataset for stock assessment
- h) Revision of the ageing, ALK to be used
- i) Test the possibility of adding existing data to GSA 18 and performing a joint stock assessment of anchovy and sardine in the entire Adriatic Sea (GSAs 17 and 18)
- j) Perform stock assessment
- k) Foster the technical discussion on fisheries management plans at Adriatic level

### *Demersal fisheries resources*

#### **Joint biological monitoring of demersal stocks in the Adriatic Sea**

The project will continue to foster the standardization of sampling methodologies and monitoring of demersal stocks. With this aim the Project, depending on budget availability will provide support to the research institutes for the participation of national experts in the international surveys carried out in the Adriatic Sea (e.g. MEDITS survey). In addition, the Project will support data collection and analysis of data collected during the Under Water TV (UWTV) survey carried out in the Central Adriatic Sea (mainly in the Jabuka/Pomo Pit).

#### ***Solea solea* related activities**

In the framework of the activities related to Demersal Fisheries Resources, the Project will continue to support the research programme “Stock Assessment of *Solea solea* in the northern and central

Adriatic Sea and evaluation of the impact of the different fishing activities” (SoleMon), in GSA 17. The research institutes from Croatia, Italy and Slovenia will be involved. The annual SoleMon survey will take place in November 2015.

### **Ageing of elasmobranchs**

Despite their ecologic and iconic importance, little is known about elasmobranchs, and in particular on their ageing (mainly performed by vertebrae or spines reading) and growth. Following the requests arisen, and agreed on by the AdriaMed Working Group on Demersal Fisheries Resources (October 2014), the Project will support a research trial focused on the ageing of the elasmobranchs in Adriatic. The trial will be performed on two selected species: *Squalus acanthias* (spines) and *Raja clavata* (vertebrae). It foresees the collection of spines and vertebrae in several spots from the Adriatic Sea. The samples collection will cover the entire 2015. As follow up, an ad hoc AdriaMed Working Group on age determination shall be convened to jointly agree on the criteria and ageing of these two species. Advantage will be taken by the experience gathered by the other FAO regional Project (i.e. MedSudMed) on this issue.

### **Stock identification of red mullet (*Mullus barbatus*) and striped red mullet (*Mullus surmuletus*)**

The Project will support a research activity aimed at molecular identification of stock boundaries and stock unit identification of red mullet (*Mullus barbatus*) and striped red mullet (*Mullus surmuletus*) in the Adriatic Sea.

The research activity is organized in cooperation with the Institute of Oceanography and Fisheries of Split (Croatia) and seeks the cooperation of all the research Institute of the Adriatic Sea. Specimens of *Mullus* spp. will be collected using local fishers at 8 localities in Adriatic Sea, 9 in the Mediterranean Sea and 1 in the Atlantic Ocean (Portuguese waters). Analysis foresees the use of microsatellite DNA loci.

The outcomes of the research activity will feed the GFCM-SAC SCSA “Workshop on benchmarks to estimate growth and maturity parameters in *Mullus barbatus*”, foresees in the workplan of the SAC for 2015.

### **Study Group on Demersal resources**

As from 2011, the Project will continue to support the organization of the Study Group on GSA 17 and 18 for the application of bottom-trawl survey data and fishery commercial data to fish stock assessment. The achievements of the Study Group will contribute to the discussion on the state of fish stocks during the Working Group on Demersal Fisheries Resources (WG-DEM). In line with its objective, the Study Group will be organized before the next WG-DEM (or back to back with it). The Study Group will focus on *Mullus barbatus*, *Merluccius merluccius*, the priority species indicated by GFCM SAC-SCSA to be assessed in 2015 in the whole Mediterranean basin, and *Nephrops norvegicus*.

### **Working Group on Demersal Fisheries Resources (WG-DEM)**

The annual AdriaMed Working Group on Demersal Fisheries Resources (WG-DEM) will be organized to discuss the progress made on monitoring activities in the Adriatic area, paying particular attention to:

- a) Identifying priorities and needs for the Adriatic region;

- b) Facilitating the coordination at Adriatic level of different data collection requirements;
- c) Addressing the request from the GFCM-SAC to provide sub-regional stock assessment on priority species; with particular attention to *Mullus barbatus* and *Merluccius merluccius* and *Nephrops norvegicus*;
- d) Fostering technical discussion on fisheries management plans at Adriatic level;
- e) Promoting discussion on the effects of management measures on the fisheries resources (e.g. data available at national level on fishing ban);
- f) Facilitating the discussion for the development of indicators and reference points for fisheries management which may be considered at regional level in line with the EC Marine Strategy Framework Directive in the Adriatic Sea; and
- g) Identifying training requirements.

During the WG, the results of the Study Groups on GSA 17-18 will be discussed and joint analysis of data is foreseen to take place where appropriate. The WG is scheduled to be held during the second semester of 2015.

### **Alien species**

Following the indication received by the AdriaMed Working Group on Small Scale Fisheries, the Project will initiate a series of research activities addressing the emerging biotic changes of Adriatic diversity. The occurrence of alien species in the Adriatic Sea is among the other, one of the challenges that need to be addressed. In synergy with the EU-BALMAS Project, AdriaMed foresees to adopt the Local ecological Knowledge (LEK) methodology for detecting fish diversity and exotic species occurrence in the Adriatic Sea by means of interviews. The use of this methodology is considered to be promising for improving data collection for fisheries. At the Mediterranean level, LEK has been already tested in a pilot study that comprised the Adriatic Sea and in data poor countries, such as Libya and Tunisia. The results of these studies can be used to guide the assessment and management of resources and to reduce the risks associated to invasive species. The activity is aimed at providing support to the process of transferring, standardizing and harmonizing the interview protocols among the Adriatic countries. The Project will facilitate the organization of a technical workshop to present/discuss/apply the LEK methodology.

In this line, the Project will promote synergies with the Seawatcher Project (<http://www.seawatchers.org/index.php>) as a useful tool to track the occurrence of exotic fish species in the Adriatic Sea. This project involves volunteers (usually divers and sportive fishers) in reporting sighting of exotic fish species all over the Mediterranean Sea. All together, these actions contribute to track the advance of invasive species, providing information that otherwise cannot be obtained. This activity will in turn improve both awareness and coordination among AdriaMed countries on the subject of exotic species.

### **Working Group on Small Scale Fisheries (WG-SSF)**

The Project will organize the annual meeting of the AdriaMed Working Group on Small Scale Fisheries in the Adriatic Sea, re-established following the AdriaMed Technical meeting on Adriatic Sea Small-scale Fisheries (Split, Croatia, 13th – 14th November 2012). The WG-SSF will strongly cooperate with the AdriaMed Working Groups on Fisheries Resources (both Demersal and Small Pelagic). This could facilitate the work of the two WGs and could support them in addressing issues such as conflicts or interactions between small scale and industrial fisheries. Synergies with the

GFCM Sub-Committee on Economic and Social Sciences will be sought. During the meeting the WG-SSF will be called to:

- a) Finalize the case study to be brought to the next Regional conference on Small Scale Fisheries in Mediterranean, fostered by GFCM
- b) Progress in the research activities on alien species in the Adriatic Sea
- c) Foster the technical discussion on fisheries management related to SSF at Adriatic level.
- d) Identify emerging priorities and needs for the Adriatic region

The WG-SSF meeting will be tentatively organized before the second regional conference on Small Scale Fisheries in order to provide a solid contribution from the Adriatic region to the conference. The next meeting of the WG-SSF is tentatively planned back to back with to the Working Group on Demersal Fisheries Resources.

### **Fishing technology**

Montenegro implemented the GFCM Recommendation GFCM/33/2009/2 “on the minimum mesh size in the codend of demersal trawlnets” indicating the use of a minimum 40 mm square mesh codend or a diamond mesh size of at least 50 mm, of acknowledged equivalent or higher size selectivity, for all trawling activities exploiting demersal stocks when operating in the GFCM Area. In the past years, Montenegro fishing community is experiencing a reduction in the local expertise on fishing technology, e.g. gears construction, assemblage, testing. The importance to recover expertise and further improve knowledge on fishing gear technology in the country was urged in several occasions. This issue was brought to the attention of the Project and support was requested in providing training to local experts in rebuild the local expertise on net makers. The Project will investigate the possibility to provide training activities on fishery net making.

### **Training activities**

Some training activities will be organized further to specific requests formulated by the Adriatic experts during the past years and also raised during the recent AdriaMed Working Groups (September/October 2014). In particular:

#### ***Training activities on small pelagic fishery resources - direct appraisal methods (Echo survey and DEPM)***

The Project will continue to provide assistance concerning theoretical and on-board training activities for new national staff during the acoustic and DEPM surveys on R/V DALLA PORTA, foreseen in summer 2015. The aim is to create a sub-regional, cooperative working team on echosurvey and DEPM.

#### ***Training activities on data collection***

The Project will continue to provide assistance for theoretical and on the field training activities on data collection (e.g. pilot action in Albania for fishery dependent data). In particular training for data collectors in Albania and Montenegro can be foreseen in view of the forthcoming socio-economic surveys planned in the two countries.

### ***Training course on new software/languages for fisheries***

A general need for training on stock assessment, basic and advanced level, has been indicated on several occasions to the Project. The possibility of having training sessions prepared by the Project will be investigated or alternatively the possibility of taking advantage of training session organized by other FAO Mediterranean Projects and/or in the context of the GFCM Framework Programme will be explored.

In particular an ad hoc training on the application of stock biomass models applied to small pelagic fishery resources is foreseen.

In addition, considering the rapidly growing popularity of the software environment for statistical analyses “R”, and the related use of the Fisheries Library developed in R (FLR), the Project will co-organize a training course on the use of R. The training course will be organized in cooperation with the other FAO Mediterranean Projects and will target inexperienced staff of the fisheries research institutes of the Adriatic region. The training is tentatively foreseen in June 2015.

### **Socio-economic aspects**

Technical support will continue to be provided to the participating countries to implement fisheries monitoring systems. The support will enhance the national Ministries capacity of monitoring the fisheries sector by applying standard methodologies. The activity is in line with the Project mandate of supporting the participating countries in the fulfilment of the GFCM requirements, in particular of the GFCM Data Collection reference Framework (DCRF, endorsed by the 38th session of the GFCM, May 2014, task 1.5, and the Recommendation GFCM/33/2009/3). Overall, these activities will contribute to providing the tools for planning and managing national capture fisheries.

### **Socio-economic surveys in Albania and Montenegro**

Montenegro: Following the request formulated by the Ministry of Agriculture and Rural Development of Montenegro, the Project will support the organization of socio-economic data collection in the country. The data collection aims to contribute to national capacity development through the establishment of the basis for a multi-disciplinary fishery monitoring system.

Albania: To ensure continuity to the collection of data started in 2013, the Project will support the Fishery & Aquaculture Policies Sector of the Ministry of Agriculture, Rural Development & Water Administration for the third consecutive year in the organization of a socio-economic survey in Albania.

### **Statistics and Information Systems**

Technical support will continue to be provided to the participating countries for the creation and updating of databases, web pages and national information systems as in the past years. In addition, the Project will continue to support the national fisheries statistics systems in eastern Adriatic countries (Albania and Montenegro). Support to fisheries data collection, in accordance with the GFCM requirements is planned. The activities will be coordinated with those foreseen in the GFCM Framework Programme.

### **Monitoring system for the fishery sector in Montenegro**

The Project will continue to support the catch-and-effort survey (biological data) in Montenegro throughout 2015, in cooperation with the Institute of Marine Biology of Kotor. The data collected so far have been used for the joint evaluation of the state of stock of *Merluccius merluccius* and *Parapenaeus longirostris*; for the drafting of a proposal for fisheries management plans and to fulfil the requirement of data collection defined by the GFCM. AdriaMed will follow up the activity in close cooperation with the Ministry of Agriculture and Rural Development of Montenegro (MoARD) and with the national official statistics office of Montenegro (MONSTAT).

In this regard, considering the recent agreement signed between MONSTAT and MoARD on the fisheries data collection, the Project will facilitate the organization of a workshop with MONSTAT, MoARD, IBMK staff to design a proper fisheries monitoring system, and identify data and standards needs, in line with the international requirements to which Montenegro is called to comply (e.g. GFCM DCRF; and in the future the EC-DCF). The possibility to provide training for national data collectors will be investigated as well.

### **Monitoring system for the fishery sector in Albania**

Following the indication of the Ministry of Agriculture, Rural Development and Water Administration regarding the importance of having fishery-dependent data for fishery monitoring purposes, the Project will continue supporting the monitoring of commercial fisheries in Albania. In this context, AdriaMed will continue the pilot action in the port of Durrës initiated in 2013 in cooperation with the Laboratory of Fisheries and Aquaculture of Durrës (Agricultural University of Tirana, Albania). In 2015 the data collection will be extended also in the port of Shëngjin and Sarandë. AdriaMed will follow up the activity in close cooperation with the Ministry of Agriculture, Rural Development and Water Administration to investigate the possibility, in the medium term, of extending the action to all the main ports of Albania.

### **Fisheries data management tools**

In line with its mandate to support the participating institutions with the knowledge and tools for proper fisheries management, the Project will continue improving the data management tools designed and developed so far.

With reference to the trawl survey data, the computerized system developed to organize, store and undertake the preliminary analysis of the dataset collected, ATrIS, will be further upgraded to address the new needs raised by the MEDITS protocol amendments. Training activities for the new version of ATrIS are foreseen.

With reference to the data on small pelagic fisheries, the “AdriaMed Small Pelagic Application (ASPA)” developed by the Project for the storage and management of small pelagic related data, will be further improved on the basis of the indications and feedback received during last Working Group on Small Pelagics (October, 2014).

### **Collaboration between AdriaMed and ASFA**

The activities carried out so far to include Adriatic scientific publications in the ASFA database will continue. Furthermore, support to the Croatian national collaborating centre for AdriaMed-ASFA (IOF-Split) and the Montenegrin ASFA data entry centre (IMBK-Kotor) will be provided. In addition, the Project will continue to provide assistance to the FAO ASFA Secretariat and in particular to the ASFA National Partner of Egypt.

## **AdriaMed Web site**

The contents of the AdriaMed portal ([www.faoadriamed.org](http://www.faoadriamed.org)) will be updated and reorganized based on the main Project components and areas of activity to group information according more logical and easy accessible areas of interest to website users.

## **Fisheries management**

### **Support for fisheries management plans**

The Project will continue to provide, at the request of the countries concerned, technical assistance in the harmonization of existing fisheries management schemes at national and sub-regional levels, including related regulatory measures. Technical assistance could also be foreseen to monitor the effectiveness of management measures already in place or in modelling likely consequences of planned management scenarios. The development of this activity follows the indications provided so far to the Project by its Coordination Committee (2012, 2013, 2014) and by the latest FAO External Project Evaluation on the need to tackle fisheries management issues. Accordingly, designing the necessary methodologies to test and adjust management plans, with emphasis being put on their possible replication in other zones, will be supported. The possibility to continue facilitating the discussion on fisheries management, focusing on the whole Adriatic Sea (GSA 17 and 18), or on part of it will be investigated. In this view, particular attention will be attached to issues related to the management of small pelagic fisheries.

In addition, following the requests received on several occasions and the indications provided by the FAO External evaluation of the project, AdriaMed will facilitate the organization of meetings to bring together scientists, government representatives and representatives of the fisheries sector to discuss the situation of fisheries and review the state of the main bio-economic fishery indicators, their trends and their possible impact on the management of these fisheries. Synergies with the GFCM, which will be the final forum for the discussion and adoption of any international management plan, will be sought, to optimise resources and avoid overlapping and duplications.

## **Aquaculture**

### **Production statistics data on aquaculture**

In accordance with the Recommendation GFCM/2009/33/4 on the need to standardize the collection of statistics data on aquaculture production, the Project will continue to support the eastern Adriatic countries (Albania and Montenegro), upon request, for the collection of data on aquaculture. The activities will be planned consistently with the GFCM guidelines and will contribute to develop pilot studies on the interactions between capture fisheries and aquaculture.

Support to identification of indicators for the sustainable development of aquaculture

Following the success of the “Workshop on pilot study step I on the identification of indicators for sustainable aquaculture in Montenegro” (9-12 July 2013, Kotor, Montenegro) organized by the GFCM-CAQ-INDAM initiative in cooperation with AdriaMed, the Project will continue supporting Montenegro in: i) the next phases of the identification of an Allocated Zone for Aquaculture, and ii) the use of indicators for the sustainable development of aquaculture in the country.

A similar action is foreseen in Albania, in the second half of 2015. The activities will be organized in close cooperation with the GFCM CAQ Secretariat and the INDAM project.

## **Regional Cooperation**

### **Strengthening the cooperation with the GFCM**

In line with previous decisions of the Coordination Committees and with the recommendations that emerged from the Independent Evaluation carried out in 2012, the Project will continue to strengthen international and regional cooperation at Mediterranean level with the GFCM and its related bodies (SAC, Sub Committees, Working Groups, CAQ) through the:

- i) preparation of scientific contributions for GFCM events;
- ii) participation of experts from the AdriaMed countries in GFCM events; and
- iii) support to the Adriatic countries to be compliant with the GFCM requirements.

Moreover, the Project will continue to act in synergy with, and will be part of, the new GFCM proposed framework programme for 2013-2018. In this view, with the overall purpose of taking the best possible advantage of expertise available at sub-regional level, lessons learnt and overall resources, interactions with the GFCM will be further strengthened.

### **Strengthening the cooperation with the other FAO Mediterranean Projects and other initiatives in the region**

The existing cooperation with other FAO Regional Projects (RP) such as the MedSudMed Project will continue and further collaboration with CopeMed II, and EastMed will be sought.

In this context, synergies are foreseen with other regional Projects, also taking into consideration the indications provided during the FAO FIRF internal coordination meeting (Rome, February 2015). Areas of cooperation have been indicated for surveys at sea and socio-economic aspects of fisheries and training. The preparation of common informative material (leaflets, CD-rom, etc.) to improve the visibility of the RPs in the Mediterranean area and in the international context is foreseen. To this extent, the preparation of a common technical manual for the collection of socio-economic data, based on the experience gained by the FAO Mediterranean Projects is foreseen.

Training activities will be coordinated among all the Projects, in order to avoid duplication or overlapping. The participation of other Regional Project experts in training courses organized by AdriaMed will be foreseen and vice-versa.

Moreover, the Project will participate in the Coordination Committees of CopeMed (April 2015), EastMed (TBD) and MedSudMed (April 2015) where additional synergies will be identified.

Synergies are also sought with the Mediterranean Large Marine Ecosystem - MedSea LME Project, Sub-Component 3.2: Promote the Sustainable Use of Fisheries Resources in the Mediterranean through the application of the Ecosystem Approach to Fisheries -- Activity 3.2.1: Application of the Ecosystem Approach to Fisheries, for the identification of training needs and priorities for mainstreaming the Ecosystem Approach to Fisheries into fisheries research and management. AdriaMed, in cooperation with the other FAO Mediterranean Projects, will support the organization of a meeting for the discussion of the outcomes of an analysis assessing the legal framework for the implementation of an Ecosystem Approach to Fisheries and Aquaculture (EAF/EAA) in Croatia.

In addition, the Project will also contribute to perform an institutional analysis for national administrations of Croatia and Montenegro with a view of further integration of EAF principles in their annual work plan.

Synergies and cooperation will be further sought with the EU funded (DGMARE) Project BALMAS, as already mentioned, in divulging and applying the LEK methodology for gathering data on invasive species in the Adriatic Sea.

Cooperation with international institutions or projects on topics that may be of common interest will also be sought. Synergies with other initiatives acting in the Mediterranean regarding fishery subjects of interest for the Adriatic region will be sought for the sake of avoiding duplication of efforts and optimizing the use of human and financial resources.

Cooperation will also be strengthened with FAO RNE (Regional Office for the North Africa and Near East) and FAO-OM (Subregional Office in Oman). In this framework, the Project staff will finalize the Unilateral Trust Fund (UTF) Project with Sultanate of Oman “Oman Trawl Survey Information System”. The UTF, based on the successful use of ATrIS, is providing the Sultanate of Oman with a tool to store, retrieve and handle survey data.

## List of Documents

<b>FAO AdriaMed: CC/16/01</b>	Provisional Annotated Agenda
<b>FAO AdriaMed: CC/16/02</b>	Report on the intersessional activities of the Project
<b>FAO AdriaMed: CC/16/03</b>	Project future implementation
<b>FAO AdriaMed: CC/16/info 1</b>	Provisional list of participants
<b>FAO AdriaMed: CC/16/info 2</b>	Report of the Fifteenth Meeting of the AdriaMed Coordination Committee. <i>AdriaMed Technical Documents N. 35</i>
<b>FAO AdriaMed: CC/16/info 3</b>	AdriaMed Working Group on Small Pelagic Fisheries Resources Session 1 FAO-HQs, Rome, Italy, 7-11 July 2014 Session 2 FAO-HQs, Rome, Italy, 30 September-2 October 2014. <i>AdriaMed Meeting Memorandum 194</i> . GCP/RER/010/ITA OM 194
<b>FAO AdriaMed: CC/16/info 4</b>	Stock Assessment Forms on Small Pelagic Fisheries Resources, namely <i>Engraulis encrasicolus</i> (GSA 17) and <i>Sardina pilchardus</i> (GSA 17). Data presented at the GFCM - SAC - SCSA Working Group on Stock Assessment on Small Pelagic Species (GFCM HQ, Rome, Italy 24-27 November 2014)
<b>FAO AdriaMed: CC/16/info 5</b>	AdriaMed Working Group on Demersal Fisheries Resources (FAO-HQs, Rome, Italy, 7-9 October 2014). <i>AdriaMed Meeting Memorandum 195</i> . GCP/RER/010/ITA OM 195
<b>FAO AdriaMed: CC/16/info 6</b>	Stock Assessment Forms on Demersal Fisheries Resources, namely <i>Merluccius merluccius</i> (GSA 17; GSA 18), <i>Parapenaeus longirostris</i> (GSA 18), and <i>Solea solea</i> (GSA 17). Data presented at the GFCM - SAC - SCSA Working Group on Stock Assessment on Demersal Species (GFCM HQ, Rome, Italy 24-27 November 2014)
<b>FAO AdriaMed: CC/16/info 7</b>	AdriaMed Working Group on Small Scale Fisheries (Split, Croatia 16-17 December 2014). <i>AdriaMed Meeting Memorandum 196</i> . GCP/RER/010/ITA OM 196
<b>FAO AdriaMed: CC/16/info 8</b>	Report of the Study Group for the application of bottom-trawl survey data to fish stock assessment in South Adriatic Sea (GSA 18) (Torre a Mare, Italy 22-26 September 2014). <i>AdriaMed Meeting Memorandum 195</i> GCP/RER/010/ITA OM 195

<b>FAO AdriaMed: CC/16/info 9</b>	Report of the echosurvey and Daily Egg Production method (DEPM) survey carried out in the South Adriatic Sea (GSA 18) - Albania and Montenegro continental shelf (July-August 2014)
<b>FAO AdriaMed: CC/16/info 10</b>	Pilot study to collect catch and effort data in the port of Durrës: Biological sampling - (preliminary results)
<b>FAO AdriaMed: CC/16/info 11</b>	Socio-economic survey in Albania – 2014 (Preliminary overview)
<b>FAO AdriaMed: CC/16/info 12</b>	Socio-economic survey in Montenegro – 2014 (Preliminary overview)
<b>FAO AdriaMed: CC/16/info 13</b>	Genetic characterization of European anchovy adults and larvae from the Adriatic Sea-Preliminary report
<b>FAO AdriaMed: CC/16/info 14</b>	Technical Meeting on purse seiners in the Adriatic Sea (GSA 17) (Rome, FAO-HQs, Roma, Italy 8-9 July 2014) <i>AdriaMed Meeting Memorandum 193</i> . GCP/RER/010/ITA OM 193
<b>FAO AdriaMed: CC/16/info 15</b>	AdriaMed ASFA activities. Report presented at the annual ASFA Advisory Board Meeting (Beijing, China, 13–17 October 2014)
<b>FAO AdriaMed: CC/16/info 16</b>	Major activities of the FAO Regional Projects. Documents presented at the GFCM 38 <sup>th</sup> session (FAO HQ, Rome, Italy 19-24 May 2014) and at the 17 <sup>th</sup> session of the GFCM Scientific Advisory Committee (24-27 March 2015)
<b>FAO AdriaMed: CC/16/info 17</b>	List of documents