



Food and
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Italian
Ministry
of Agriculture
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Policies

GCP/RER/010/ITA/TD-16

*Scientific Cooperation
to Support Responsible Fisheries in
the Adriatic Sea*

Report of the Sixth Meeting of the AdriaMed Coordination Committee





*SCIENTIFIC COOPERATION TO SUPPORT
RESPONSIBLE FISHERIES IN THE ADRIATIC SEA*

MiPAF

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AdriaMed

GCP/RER/010/ITA

Report of the Sixth Meeting of the AdriaMed

Coordination Committee

Budva, 5th and 6th October 2004

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 MiPAF 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 and Forestry Policies (MiPAF).

AdriaMed was conceived to contribute to the promotion of cooperative fishery management between the participating countries (Republics of Albania, Croatia, Italy 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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The AdriaMed Project publications are issued as a series of Technical Documents (GCP/RER/010/ITA/TD-00) and Occasional Papers (GCP/RER/010/ITA/OP-00) related to meetings, missions and research organized by or conducted within the framework of the Project.

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

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This document is the final version of the report of the Sixth Meeting of the AdriaMed Coordination Committee, organised by the FAO-AdriaMed Project (*Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea*) in Budva, Montenegro, 5th and 6th October 2004.

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The Ministry of Agriculture, Forestry and Water Management of Montenegro, through Mr Milutin Simovic who provided kind hospitality and assistance in the organization of the Meeting which is gratefully acknowledged.

AdriaMed.

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ABSTRACT

The Sixth Meeting of the Coordination Committee of the FAO AdriaMed Regional Project “Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea” was held in Budva, Serbia and Montenegro, 5th and 6th October 2004. It was attended by representatives of the Project participating countries (Albania, Croatia, Italy, Serbia and Montenegro, and Slovenia) and other interested parties. The meeting sought to present and discuss the results of the activities carried out so far by the Project in its first phase of activities and the Coordination Committee was asked to discuss and deliberate on AdriaMed achievements and future direction. Moreover the activities carried out during the inter-committee period (2003-2004) with detailed description of the major scientific achievements and results of the Project highlighting their relevance to resource monitoring and the formulation of scientific advice for fishery management were presented according to its three main components: Adriatic fishery resources, Adriatic social and economic fishery sciences, Adriatic fishery statistics and information system. The Committee was reminded that the end of AdriaMed Project was scheduled for October 2004 and that an extension period (bridging phase) of one year (October 2004 – October 2005) was made possible thanks to additional funds provided by the Donor. The main issue of the first phase of the Project was to set up the data exchange, data gathering, to harmonize the methods applied at basin level and to form a joint data base on a number of issues. Phase two should include another level thus translating these data and results into actual advice to managers. The AdriaMed countries concurred on the necessity to ensure the continuation of the national execution of most programmes aimed at the routine and standardized monitoring and appraisal of shared resources and of the fisheries upon which they are based. Thus the Committee requested that FAO and the AdriaMed Project prepare a Project Proposal for the second phase of the Project.

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Report of the Sixth Meeting of the AdriaMed Coordination Committee

Budva, Serbia and Montenegro, 5th –6th October 2004

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

1. The Sixth Meeting of the Coordination Committee of the FAO AdriaMed Regional Project “Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea” was held in Budva, Serbia and Montenegro, 5th and 6th October 2004 as guest of the Ministry of Agriculture, Forestry and Water Management of Montenegro.
2. The meeting was attended by representatives of the Donor, delegations from the countries participating in the Project (the Republic of Albania, the Republic of Croatia, the Republic of Italy, the Republic of Serbia and Montenegro and the Republic of Slovenia), a representative of the Marine Fishery Resources Service of FAO also in quality of MedFisis Coordinator, the Secretary of the General Fisheries Commission for the Mediterranean (GFCM), a representative of the European Community (EC), the Director of the FAO Regional Project CopeMed as well as the staff of the FAO AdriaMed Project. The List of Participants is given in Annex A.
3. The Deputy Minister of the Ministry of Agriculture, Forestry and Water Management of Montenegro, Dr Milan Markovic, acted as Chairperson for this sixth AdriaMed Coordination Committee Meeting. He greeted the Meeting delegates and expressed his honour at having the Committee members gathered in Montenegro in occasion of the sixth AdriaMed Coordination Committee meeting.
4. On behalf of the Government of Montenegro, the Minister of Agriculture, Forestry and Water Management of Montenegro, Mr Milutin Simovic welcomed all the Committee Meeting participants. He underlined the great attention paid by his Ministry to the monitoring and stock appraisal of fishery resources. He referred to the slow progress made by Serbia and Montenegro in the exploitation of small pelagic fish and underlined the hope to find partners for training of fishers also through the AdriaMed Project. The Minister highlighted the need of the Country to provide a stable supply of material for the manufacturing industry, and also to increase the supply for the domestic fish market as it is presently lacking. He stressed the need of the future continuation of the AdriaMed Project.
5. The Project Coordinator took the floor and welcomed the Delegations. The Montenegrin authorities were also thanked for hosting the meeting, being the first official FAO AdriaMed meeting held in the country since it became a member in January 2004. Emphasis was put on the fact that AdriaMed is closing its first phase of activities and therefore this Coordination Committee Meeting was a particularly relevant moment of deliberation and discussion of the Project, its achievements and future direction.

6. The Representative of Italy thanked Serbia and Montenegro for hosting the meeting and remarked on the importance given by Italy to the FAO AdriaMed Project as demonstrated by the provided financial means for its one year bridging period towards its second phase. It was with satisfaction that he underlined the multidisciplinary approach being pursued by the Project, the assistance effectively provided to the GFCM including the formulation of methodologies that could be applied in other areas of the Mediterranean. Moreover, he was pleased to inform the Committee that Italy presented the candidature to host the GFCM HQ in Rome. The large premises could also be suitable to host the regional projects like AdriaMed.
7. The Croatian Representative expressed her gratitude to the Montenegrin Ministry for organizing this meeting in the beautiful city of Budva. She thanked the FAO AdriaMed staff for the preparation of the meeting, and all the hard work that has been put into the preparation of all the documents on which to base the Committee's discussion. She pointed out that FAO AdriaMed has been a «pilot project» in many ways. It was the tiny little rubble that started the avalanche of scientific cooperation at the level of the Adriatic, and it provided a lot of information to the GFCM, the SAC and the Adriatic Sea fishery managers. She emphasized that the goal stated in the title of the project – scientific cooperation to support responsible fisheries in the Adriatic Sea – has been achieved in full and expressed the wish that AdriaMed be much more in the future. With reference to the location of Project Headquarters the Croatian Representative acknowledged the kind offer of Italy and considered it convenient especially when time comes to decide on the future of the Project to take into consideration the Project arrangements and the organization, number of people in the staff, and further strengthened ways of participation and commitment from all participating countries.
8. The Slovenian delegation greeted the Committee and praised the results obtained by the Project in the inter-committee period and renewed the conviction that the continuation of the Project can only be successful and beneficial for each one and all of the participating countries.
9. The Albanian representative further emphasised the exemplary role of the AdriaMed Project in cooperating with the five member countries and showed his desire for an increasing collaboration as an essential condition to achieve reciprocal benefits and responsible exploitation of Adriatic fishery resources.
10. The Serbia and Montenegro representative wished to highlight the importance for the country to participate in AdriaMed as, amongst the other things, this permits the full scientific coverage of the entire Adriatic Sea thus adding further value to the implementation of responsible fishery in the Adriatic Sea.
11. The EC Representative thanked the Montenegrin Ministry and AdriaMed Project for the organization of the Meeting as well as Italy for financing the Project. He underlined the role played by the Adriatic countries in the ratification of the GFCM autonomous budget thus fostering the GFCM reform. He was pleased to inform the

Committee that starting from 2005, the EC intends to become an additional Donor to the AdriaMed Project. He was confident that the success of the Project will continue and Italy will keep on in ensuring the continuity of AdriaMed.

12. The Secretary of the General Fisheries Commission of the Mediterranean (GFCM) warmly thanked the Government of Serbia and Montenegro for hosting the 6th AdriaMed Coordination Committee. He recalled that the Republic of Serbia Montenegro since its adhesion to the Commission in 2003 is a very active Member of the Commission. The Secretary also emphasized the importance of this Coordination Committee meeting for paving the way for the next phase of the AdriaMed Project, in a context whereby renewed expectations are put on the role of the FAO Regional Projects, as relevant instruments to provide necessary scientific and technical inputs, to feed the formulation of sound fisheries management advise in support to the work of the Scientific Advisory Committee (SAC) and in the new era which follows the extraordinary session of the GFCM held in Malta in July 2004. Furthermore the Secretary invited AdriaMed Members to actively participate to the next 7th session of SAC (Rome, 19-22 October 2004) and provided information on action taken as follows/up to the Extraordinary Session of GFCM.
13. The possibility to host the duty station of AdriaMed in Rome was appreciated. It was recalled that this issue remained pending since the previous Coordination Committee meeting and should be addressed in a timely way.
14. The Committee unanimously expressed its high appreciation of the further effort made by Italy to provide the financial coverage for the one-year Project extension.

Adoption of the Agenda (Agenda Item n. 2)

15. The Agenda was presented to the Coordination Committee. The Chairman invited the participants to offer any comments. The Agenda was adopted with no changes (Annex B).

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

16. The Project Coordinator introduced this point of the agenda and the document "Report on the intersessional activities of the Project" (CC/06/02) in which most of the activities carried out by AdriaMed from September 2003 to October 2004 are presented. These includes research programmes, workshop, training programmes as well as technical assistance given to the countries and the cooperation of the Project with the relevant institution, primarily the GFCM, the SAC and its Sub-Committees. The activities described concern the work programme and recommendations of the Fifth Meeting of the AdriaMed Coordination Committee held in Rome in September 2003 (CC/06/info 2). It was also highlighted the recently finalized participation of the Republic of Serbia-Montenegro in AdriaMed, since January 2004 a specific

programme “Scientific Support to Strengthen the Montenegrin Fishery Sector” has been implemented by the Project.

17. It was called to the Committee’s attention that the five Coordination Committee meetings to date have underlined the integrated, adaptive approach being adopted by the Project, this was particularly reflected at the fifth meeting held in Rome, September 2003, on which occasion a mid-term review of AdriaMed was presented and a series of recommendations were made to the Project.
18. The activities carried out during the inter-committee period followed the methodological approach used by the Project, are principally presented in the above document according to its three main components: Adriatic fishery resources, Adriatic social and economic fishery sciences, Adriatic fishery statistics and information system. In the presentation of the document, chief outputs and results of these activities were commented on and presented.
19. The Committee was also informed that many working papers were presented during the recent SAC Sub Committee meetings held in Malaga in May 2004 dealing with aspects of fishery management, i.e. stock assessment, fish population genetics, fishery sociology and economics.
20. The Committee members were also informed that in the Meeting document folder there was a series of documents including a detailed description of the major scientific achievements and results of the Project highlighting their relevance to resource monitoring and the formulation of scientific advice for fishery management. Further Working Papers brought to the attention of the Meeting include the scientific papers presented to GFCM SAC Sub-Committee meetings in the intersessional period. The list of documents distributed was given in the meeting folder as CC/06/info 15.
21. The Committee members appreciated the amount of work done by the Project, exhaustively reflecting the work programme and recommendations of the fifth meeting of the AdriaMed Coordination Committee. It was also commented that the great deal of information and data produced by the Project is an essential tool to ensure the appropriate scientific information for the fisheries sector in the Adriatic Countries and represent a strong support to the activities of the GFCM.
22. Satisfaction was expressed for the pilot role played by the Project and how the multidisciplinary approach in considering the biology, economic and social aspects should be considered essential to ensure the management and development of the fisheries sector in the whole Adriatic in a more systemic approach. Reference was also made to the work of AdriaMed on the Operational Units in the Adriatic Sea, the “General Outline of the Fisheries Legislation and Regulations in the Adriatic Sea” and the “Expert Consultation on the Interaction between Aquaculture and Capture Fisheries”.

Scientific activities, achievements and formulation of scientific advice for fishery management (Agenda Item 4)

23. An overview of the AdriaMed scientific progress in terms of activities and achievements was presented to the Committee with reference to the document CC/06/03. It also took into consideration scientific programmes initiated before the last Committee intersessional period.
24. It was pointed out that being at the end of the last year of the first phase of AdriaMed, the state of completion of the main scientific programmes have to be carefully assessed and their prosecution under national execution within the regionally-concerted context established by AdriaMed should be dealt with by the Committee.
25. From the outline given to the Committee it resulted that most of the core scientific programmes were either completed or under completion within a short time period. The Committee was invited to appraise the “before and after AdriaMed” scientific cooperation scenario.
26. The Committee commended that the briefing provided by the Project clearly made evident the amount of scientific achievements compared with the given objectives of each scientific programme, the current state and the future options and actions to be considered in terms of sustainability and continuity also under a national execution scheme.
27. It was remarked that following the established scientific cooperation framework, the secondary level of cooperation, i.e. cooperation for fishery management of shared resources, could now be properly addressed and to be fully dealt with within the envisaged second phase of the Project.
28. The main achievements of the AdriaMed Expert Consultation on “Interactions between Capture Fisheries and Aquaculture” (Rome, from 5th to 7th of November 2003) were presented to the Committee. The aims of the Consultation were to achieve a comprehensive description and analysis of the aquaculture sector in the Adriatic coastal countries and to acquire the tools to improve the knowledge on the interactions between aquaculture and capture fisheries using the existing knowledge at Adriatic basin level. A comprehensive framework on aquaculture in the Adriatic countries and its interaction with capture fisheries was obtained. The Consultation defined a matrix to synthesize the interactions between capture fisheries and aquaculture. The Consultation provided a series of recommendations related to the interactions between capture fisheries and aquaculture in the AdriaMed area. The Consultation outcome was also appreciated by the Fourth GFCM Committee on Aquaculture in Alexandria, Egypt, 7th – 9th June 2004 (CC/06/info 10).
29. The FAO-FIRM representative and coordinator of MedFisis project introduced the current situation of the national statistical systems being developed with the assistance of AdriaMed. Specifically, he informed the Committee on the new organizational

arrangement after the start of the EU-FAO MedFisis Project. The information given helped to explain the relationship between the statistical data collection activities under implementation in AdriaMed and the Medfisis Project. The whole statistical development work carried out so far under AdriaMed, CopeMed, and the FAO-TCP (covering the Eastern Mediterranean Countries) has been structured within a regional product: MedStat. MedStat has been built around a series of considerations and experiences not only of scientific nature. Considerations on national working habits and the organizational structure within the national Fishery Departments as well as their mandate have strongly influenced the design of the MedStat System.

30. The whole national system developed within this activity consists of a set of databases and associated statistical data collection and implementation methodologies covering the Census, the Catch and Effort Survey, and other surveys. The three basic objectives of MedStat were also highlighted. Firstly the MedStat System (as a whole) is developed and implemented to first serve the countries' priorities and immediate needs. Secondly the data structure assumed in MedStat is designed to satisfy regional requirements vis-à-vis the compatibility of national system with regional and international institutions to which they belong (FAO, GFCM, etc). Finally the systems will be made to be "colloquial" with the communities they belong to in data uploading and downloading according to given protocols. It was also emphasised that the data communication protocols with EC has been technically tested and applied in the case of MaltaStat (the first one among the MedStat family used as example). The Committee members were also informed on the current situation of the activities, the level of support provided by the project and on the results in each of the member countries.
31. The Secretary of the GFCM expressed satisfaction for the achievements of the Project since the 5th Coordination Committee meeting. He remarked that the project has implemented its entire work programme during the intersessional period and especially has provided extremely valuable contribution to the priority issues for SAC. Progress made for testing Operational Units using available data and methodological proposal for addressing the interaction between capture fisheries and aquaculture were particularly emphasized. In addition appreciation was expressed for the cooperation established with the GFCM Secretariat and CopeMed for publishing in GFCM Studies and Review Series a number of scientific publications of concern for the whole Mediterranean.
32. The Committee highlighted the timely and effective achievement of the scientific programme components as originally scheduled. The pragmatic approach followed by the AdriaMed in submitting to the attention of the Committee the Project progress was particularly underlined. It was remarked with the specific reference to the issues raised about the national execution of some of the programmes how such aspects have to be carefully considered by each AdriaMed country. Time has arrived to add up and summarize and to decide how to progress further. Perhaps there are issues that need to be reconsidered, reinforced or rephrased. At the last Coordination Committee meeting

the Project was given a task of drafting the plan for the future. This was considered the important thing to focus on.

33. The main issue of the first phase of the Project was to set up the data exchange, data gathering, to harmonize the methods applied at the level of the basin, and to finally form a joint data base on a number of issues. Phase two should include another level thus translating these data and results into actual advice to managers. By all means, research should continue, data should be gathered in the future, monitoring should be secured at the national and regional levels, as this secures the sound basis of the management.
34. The Committee agreed on the fact that a regional project addressing the whole Adriatic Sea fishery system should ideally and necessarily relies on two phases of at least ten years. This would allow for the concentration of the Project work on new tasks and goals while consolidating those aspects of the work programme still in need of further effort. Within such a temporal perspective, specific topics related to fishery management (e.g. indicators and reference points for Adriatic Sea fisheries management, Operational Units, fishery statistical systems, etc.), about which the Project has recently made remarkable and effective progress could be further developed.
35. In this perspective, cooperation for management of shared fishery resources should constitute the central element. Moreover, resource users' involvement, as previously addressed by the Project could be further developed. It was also recalled that the amount of scientific information made available by and through the Project is so significant and its full use should pursued.
36. The Committee acknowledged with satisfaction the overall progress achieved concerning scientific cooperation in comparison with the pre-AdriaMed period. In general, the AdriaMed countries concurred on the necessity to ensure the continuation of the national execution of most of programmes aimed at the routine and standardized monitoring and appraisal of shared resources and of the fisheries upon which they are based. The Project assistance would be called in to sustain and, when necessary, coordinate the national execution so to ensure the full continuation of the regional cooperation framework established.
37. However, it was also stressed that while AdriaMed will have to continue to play a determinant role within the Adriatic region to coordinate fishery research and management effort, specific technical assistance including training will still be needed and will have to be provided by the Project.
38. The EC representative informed the Committee that starting from 2005 the Community will provide direct financial support to the Project therefore becoming co-donor together with Italy. This should also serve to further strengthen the assistance provided by AdriaMed to the GFCM work, notably in its future and new framework.

39. On behalf of the Donor country it was reiterated the full satisfaction with the Project performance, which has already implied the financial coverage of the one-year (October 2004-2005) “bridging phase”. The consolidation of the remarkable amount of work done should be consolidated, and the Project should carry on focusing on shared resources and on providing technical support to beneficiary countries. A dynamic role should be actively undertaken to support cooperation among national fisheries administrations.
40. The fact that the Project was implemented along sound and well-conceived guidelines was acknowledged by the Committee as one of the basic elements which have made it successful. The experience accrued by the FAO Regional Project CopeMed was illustrated to the Committee as extremely valuable experience to be taken into consideration in the planning of the AdriaMed future.

Project future implementation (Agenda Item n. 5)

41. The Committee was reminded that the end of AdriaMed Project was scheduled for October 2004 and this extension period (bridging phase) of one year (October 2004 – October 2005) was made possible thanks to additional funds provided by the Donor who also funded a specific programme to meet the needs of the new member of the Republic of Serbia-Montenegro, which joined the Project in January 2004. EC representative has already mentioned it will be participating in the bridging phase.
42. It was also highlighted that during the 5th CC meeting the Project Technical Review was presented and discussed and many issues concerning the further development of AdriaMed were taken into consideration in the preparation of the project extension. The project extension document follows the structure set out by FAO, in that the immediate objective and activities identified according also to some recommendations indicated in the technical review presented and discussed during the 5th Coordination Committee meeting.
43. It was recalled that during the 5th Coordination Committee meeting the necessity to prepare a Project Document proposal for a second phase of AdriaMed was highlighted. In order to facilitate the preparation of this document the Committee was asked to provide guidance to the FAO and AdriaMed Project.
44. According to the above, the Committee, on the basis of the results and experience accrued by AdriaMed so far, discussed which should be the activities for future implementation and in particular which of these activities should be further consolidated and developed.
45. The Secretary of GFCM mentioned the emerging trend toward institutionalising a sub-regional approach to the fisheries management in the Mediterranean through the Regional Projects. He recalled that this approach was acknowledged at the Venice Conference (November 2003) and is likely to be in the agenda of the forthcoming

Plenary Session of the Commission. He expressed the view that current activities and output of AdriaMed were already in line with this policy and that existing project set-up was adequately responding to disciplinary and multidisciplinary needs to support the SAC and to the specific requirements of AdriaMed member countries.

46. The Committee fully agreed on the necessity to have a formalized project document for the forthcoming second phase of the Project and which will serve reference document to ensure the necessary financial means. Such a document to be prepared by FAO-AdriaMed in consultation with the member countries will have to take into account and capitalize on the results attained during the first phase of AdriaMed.
47. The results of the discussion on the implementation of the second phase of the FAO AdriaMed Project are summarized hereunder:
 - 47.1 The Committee agreed that many scientific objectives of the Project have been achieved and the subregional scientific network must remain one of the main tools for the fisheries scientific cooperation;
 - 47.2 The second phase of AdriaMed should provide assistance to the fisheries directorates and support to fisheries managers in the decision making process also through the participation and enhanced coordination among the different Adriatic Fisheries Administrators;
 - 47.3 The second phase of AdriaMed should continue to provide technical assistance and services to the countries, in upgrading the national capacity for fisheries resources assessment, database development and maintenance and to providing support to the countries responding to particular needs in the fisheries sector;
 - 47.4 The second phase of AdriaMed should continue in strengthening the cooperation and actively supporting the activities of the GFCM.
48. On the basis of the above the Committee requested FAO and AdriaMed Project for the preparation of a Project Proposal for the second phase of the Project. The draft of the document must be prepared in consultation with the Adriatic countries, the EU and the GFCM. The Project Document should be prepared during the “Bridging Period” and the second phase should start in November 2005.

AdriaMed Memorandum of Understanding on Data Access and Use (Agenda item n. 6)

All the country representatives expressed a positive opinion in principle on the proposed Memorandum of Understanding. It was found convenient for its use to verify the relevant and appropriate FAO procedures on this specific issue. Furthermore, the Committee remarked that such a document could be of interest for the GFCM-SAC.

Other matters (Agenda item n.7)

53. The EC representative submitted to the Committee the issue of “rapido” trawl fishery and invited the Project to possibly consider carrying out an appraisal of the state of this fishery in the Adriatic Sea.
54. The relevance of the utilization of regional data set was illustrated by Pr Jukic who presented the Committee with a bio-economic synthesis of the current level of exploitation exerted on some demersal resources. The importance of multidisciplinary indicators as essential tool for fisheries management was further stressed.
55. The draft technical report on the Adriatic Sea Operational Units was distributed to the Committee members. The document refers to the pilot work performed by AdriaMed on the Operational Unit issue following a specific request made by the GFCM SAC to AdriaMed and CopeMed Projects. The Committee agreed on the suitability of making the document available to the SAC at its next session. It was deemed necessary to complete the draft technical report also referring to the component of the Adriatic fishing fleet made up of polyvalent (multipurpose) fishing vessels.
 - 55.1 The Committee also agreed to make available any other relevant information produced by the Project which may be of support to the SAC at its next sessions.
56. All the delegates and Meeting participants wished to express their thanks to the authorities of Serbia and Montenegro for the kind hospitality.

Date and venue of the next Coordination Committee meeting (Agenda item 8)

57. Upon the kind invitation of the Slovenia 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.
58. This report was adopted on 6th October 2004.

Annex A

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Annex B

Agenda

1. Opening of the meeting and election of the Chairman
2. Adoption of the Agenda
3. Report on the Project's progress
4. Scientific activities, achievements and formulation of scientific advice for fishery management
5. Project future implementation
6. AdriaMed Memorandum of Understanding on Data Access and Use
7. Other matters
8. Date and venue of the next Coordination Committee meeting

Annex C

Report on the inter-sessional activities of the Project

Background

This paper summarises the most significant activities carried out by the Project AdriaMed between September 2003 and October 2004, including research programmes, workshops, training programmes as well as the technical assistance given to the countries and the cooperation of the Project with other relevant institutions, primarily the GFCM, the SAC and its Sub-Committees. The activities described concern the work programme and recommendations of the fifth meeting of the AdriaMed Coordination Committee (Rome, 18th and 19th September 2003, GCP/RER/010/ITA/TD-11 refers CC/06/info 2). It should also be noted that with the recently finalised participation of the Republic of Serbia-Montenegro in AdriaMed, since January 2004 a specific programme “Scientific Support to Strengthen the Montenegrin Fishery Sector” has been implemented by the Project.

The activities carried out during the inter-committee period followed the methodological approach used by the Project, and are principally presented in this paper according to three main components: Adriatic fishery resources, Adriatic social and economic fishery sciences, Adriatic fishery statistics and information systems. The chief output and results of these activities are highlighted hereafter.

1. The participation of Serbia and Montenegro in the AdriaMed Project.

A specific programme “Scientific Support to Strengthen the Montenegrin Fishery Sector” was prepared by AdriaMed and funded by the Italian Ministry of Agriculture and Forestry Policies; activities started in January 2004. So far AdriaMed has mainly focused on supporting the integration of the Montenegrin Fishery Directorate and scientists in the framework of the scientific cooperation in the Adriatic Sea already established by AdriaMed. Participation in the AdriaMed research programmes has begun and Montenegrin scientists are taking part in the planning of the activities to be undertaken.

Experts from the Institute of Marine Biology in Kotor took part in the AdriaMed Working Group on Shared Demersal Resources for the first time at the meeting held in Fano (Italy, 12th and 13th March 2004), thus making the coverage of the whole Adriatic Sea possible. The third demersal trawl survey, which is currently underway, will involve Montenegrin scientists and therefore the eastern Adriatic Sea from Slovenia to Albania will be completely covered. An *ad hoc* technical meeting was held at the Marine Biology Institute of Kotor on 17th June 2004 concerning the procedures and protocol of the AdriaMed demersal trawl survey as well as data handling, input and compilation for the AdriaMed Trawl Bank, together with an introduction to the cartographic software GEBCO and KARTO.

There was also Montenegrin participation in the AdriaMed Working Group on Small Pelagic Fishery Resources, at the meeting held in Bari, Italy on 30th June and 1st July 2004. During this and the above-mentioned meeting on Demersal Resources the activities related to the implementation of the FAO-AdriaMed research programme on “Appraisal of small pelagic fish resources in the Adriatic Sea by means of Daily Egg Production Method” were planned.

A specific research programmes are under implementation at the Institute of Kotor. The first refers to the collection of relevant data on marine capture fisheries to obtain reliable statistics on species catch composition, catch and effort and fishery production. The second programme concerns statistical data collection on socio economic aspects related to the fishery in Montenegro.

The translation into the local language of the Code of Conduct for Responsible Fisheries has been completed; AdriaMed supported the participation of the experts from the Republic of Serbia and Montenegro in the GFCM SAC and Sub-Committee meetings in Malaga, Spain (May 2004).

2. Adriatic Shared Fishery Resources (demersal and small pelagic)

The topics related to the region's shared fisheries resources have remained the main focus of the activities carried out by the Project during the inter-committee period; the scientific network and the Working Group meetings are the main functional tool used to implement the activities of the Project. These networks have been further strengthened by the participation of Montenegrin fishery scientists.

A Meeting of the AdriaMed Working Group on Shared Demersal Resources was held in Fano (Italy) 12/13 March 2004 (GCP/RER/010/ITA/OM-126 refers). The meeting focused on the activities related to and in support of the GFCM-SAC work, the appraisal of the Adriatic demersal fishery resources, the identification and use of indicators and reference points, the results of the AdriaMed research programme Identification of Population Units in Adriatic Sea Shared Stocks by Genetic Structure Analysis (IPUAS), the AdriaMed Trawl Survey and the identification and applicability of Operational Units to Adriatic Sea fisheries. Particular attention was also paid during the meeting to the importance of identifying the nursery areas of the main demersal fishery resources in the Adriatic Sea. The preliminary results of IPUAS were introduced to the GFCM SAC in Malaga (May 2004).

The second phase of the AdriaMed International Bottom Trawl Survey Programme took place in the autumn/winter of 2003 in the eastern Adriatic Sea, back to back with the Italian national survey in the western Adriatic. The Third Trawl Survey is currently underway in the eastern Adriatic Sea, (GFCM Geographical Sub-area 18 and GSA 17) using the same procedures and protocol as the previous surveys. The details of this latest survey phase were finalised during the recent meeting of the AdriaMed Working Group on Demersal Resources (Zagreb, 15/16 September 2004) with the participation of research institutes from Albania, Croatia, Italy, Slovenia and Serbia-Montenegro.

Distribution of the first version of the AdriaMed Trawl Data Bank began in 2002 and many valuable suggestions and comments have been received from experts collaborating with AdriaMed. An updated databank "AdriaMed trawl survey regional databank" on an access (rather than excel) platform is now being developed and will be made available to the relevant scientific institutions participating in AdriaMed. Furthermore the possibility of an interface with a GIS system is under investigation. Given the need of the scientific counterparts of AdriaMed to have suitable digital maps available for scientific purposes, the application will include a digital chart (scale 1:250000) of the Adriatic Sea obtained through the cooperation of the Italian Marine Hydrographical Institute with the understanding that the cartographic material will but used exclusively of the purpose of scientific research and not

for navigation. In addition, during the above-mentioned meeting held in Fano in March, the Project was requested to draw up a letter of understanding between the scientists and the research institutions involved about the use of the data (GCP/RER/010/ITA/OM-126 refers).

Referring to the shared small pelagic fishery resources, the Second Regional Small Pelagic Stock Assessment Workshop was held in Ancona 26 - 29 April 2004. The Workshop was carried out within the AdriaMed-SP programme and executed by ISMAR. At the end of the workshop a meeting was held to evaluate the current status of the AdriaMed-SP programme. It was agreed that the availability of a proper, comprehensive regional database is essential for the future development of the programme. Two assessment papers on sardine and anchovy shared stocks were presented and discussed by the GFCM SAC Sub-committee on Stock Assessment in Malaga, May 2004, (GCP/RER/010/ITA/OP13 and OP 14 refer) (CC/06/info 5 and CC/06/info 6).

Furthermore a meeting of the AdriaMed Working Group on Small Pelagic Resources was hosted by the Laboratory of Marine Biology of Bari (Italy) in June 2004 (meeting Memorandum GCP/RER/010/ITA-OM129 refers). The meeting focused on the current knowledge of the status of small pelagic stocks, the use and integration of available small pelagic assessments and related information, particular attention was paid to the scientific advice for Adriatic small pelagic fishery management. The meeting also covered some technical issues related to the organisation of research activities such as: Inter-ship acoustic calibration (i.e. parallel acoustic surveys, GSA 17); eggs and larvae survey (GSA 18); fish ageing otolith reading calibration exercise (AdriaMed –SP).

3. Adriatic experts network on small scale fisheries

An AdriaMed Technical Consultation on Sea Small-Scale Fisheries was held in Split, Croatia on 14th and 15th October 2003. The Consultation reviewed current knowledge on this key sector of Adriatic fisheries, identifying needs and priorities as well as providing the basis for cooperative future work either within AdriaMed or other contexts. National Reports for each AdriaMed country were presented. The proceedings of this meeting will be published in the AdriaMed Technical Document series; a draft is included for reference (CC/06/info12).

4. Adriatic Social and Economic Fishery Sciences

The research programme “AdriaMed Social Survey of Albanian Marine Fisheries”, has been executed in cooperation with the Albanian Fisheries Directorate, Ministry of Agriculture. The database holding the information gathered has been designed and developed. Data analysis has been carried out and results were made available in early 2004. The final editing of the document is underway. Survey design and progress were presented to the fifth meeting of SAC Sub-Committee on Economic and Social Sciences (SCESS) Malaga, Spain 10-12 May, 2004 (AdriaMed Social Survey of Albanian Marine Fisheries Preliminary Results GCP/RER/010/ITA/OP-15 refers) (CC/06/info 7). On the basis of the initial results obtained, the Sub-Committee indicated that the social survey should ideally be developed in the framework of socio-economic analysis and indicators. The SCESS therefore suggested that guidelines on implementing sociological studies of fisheries could be developed based on AdriaMed experience.

During the same Sub-Committee meeting, a review was presented of the general issues covered by AdriaMed where the Adriatic fish markets are concerned (the paper “Aspects of Fish Markets in Adriatic Sea”, GCP/RER/010/ITA/OP16 refers) (CC/06/info 8) on the basis of which it was suggested that guidelines on implementing studies of fish markets, including fish market trade, price systems and fish product quality, according to the recommendations of the 28th GFCM session, be developed based on AdriaMed experience and expertise. The full Technical Document “Report of the AdriaMed Meeting on the Aspects of Fish Markets in the Adriatic Sea” (GCP/RER/010/ITA/TD-10) was also published in this intersessional period.

A review of the legislation regarding the fishery sector of all countries bordering the Adriatic Sea has been made; a draft version is available for consultation (CC/06/info 11). An initial version of this document was distributed at the 4th Coordination Committee Meeting in Split, December 2002. The document was fully updated in September 2003 and more recently the legislation of the Republic of Serbia and Montenegro has been integrated. This document is a review and is not intended as a comparative analysis, rather it is an informative document made available to the countries participating in the Project. AdriaMed intends to publish this document and therefore the latest decisions or confirmations are required from each country.

The document “Report of the AdriaMed Seminar on Fishing Capacity: Definition, Measurement and Assessment” has recently been published in the AdriaMed Technical Document series (GCP/RER/010/ITA/TD13) (CC/06/info 3). This document is addressed primarily to fishery scientists, managers and professionals; the Seminar was the first of such a topic specifically taking into account also Mediterranean Sea fisheries and in particular Adriatic fisheries. The chief aim was to provide the basic elements to define, measure and appraise the fishing capacity and to underline how the management of fishing capacity could help in the fisheries management decision making process.

5. Adriatic Fishery Statistics and Information Systems

Support to the national statistic systems of the participating countries

AdriaMed continued supporting the national fishery statistical systems in participating countries by providing assistance to the Albanian and Croatian Fisheries Directorates. In particular in Albania for this period the Project finalised the national fishing fleet register "census data", the setting up of a national catch and effort survey system, training and capacity building. For Albania AdriaMed is evaluating the possibility to extend the support to the fishery statistical systems to inland fisheries, an activity that would be financed by the World Bank under the “Pilot Fishery Development Project” while maintaining the coordination and supervision of AdriaMed.

Web Pages - Information Centre

The AdriaMed Information System has been further updated and developed. At present the Project web hosts 5 databases: Adriatic Institutions (155), Fishing Ports (252), Fish Markets (27), Adriatic libraries (211), Adriatic links (210), AdriaMed Documents available (over 50 documents). The website now gives more emphasis to the databases compiled by the Project. A new section “Adriatic Fishery Country Information” has been included: it summarizes the basic information gathered by the Project on geography, fisheries and aquaculture, for each participating country. An address directory of the institutions related to the fishery sector in

the Adriatic has been added; it contains data relative to 155 institutions. A databank on the publications included in the Project library has been created (over 300 titles included). During the intersessional period, an average of more than 5000 pages of the AdriaMed website have been visited per month; over 14000 AdriaMed Technical Documents have been downloaded. The publication of a new document is communicated using the AdriaMed Mailing List, which includes 347 names.

Information on Aquatic and Fishery Sciences

AdriaMed continues monitoring Adriatic scientific literature, at present there are 23 titles in the AdriaMed Serials Monitoring List. A new record batch (66 records) was sent at the beginning of January 2004 to the ASFA Publisher CSA and published on the ASFA products. AdriaMed prepared a proposal that was presented in March 2004 to the ASFA Editor in Chief, in order to transform AdriaMed into a Technical Backup Centre for the Adriatic region. A counterpart institute in Croatia has been approached in order to set up a national centre there.

AdriaMed, in cooperation with the GFCM Secretariat and the support of FAO Copemed, is preparing the retrieval of the publications and scientific contributions edited or produced within the framework of GFCM activities since 1952, more than one thousand documents are listed.

6. Operational Units in the Adriatic Sea

During the 28th session of the GFCM held in Tangier in 2003, the relevance of the Operational Unit issue was highlighted and discussed; it was decided to implement two pilot studies, one in the area of the AdriaMed Project and the other in the area of the Copemed Project. In cooperation with the Adriatic fisheries research institutes and the Adriatic Fisheries Directorates two meetings were organised in order to achieve this objective. The first Meeting of the AdriaMed Working Group on Operational Units in the Adriatic Sea was held in Dürres, (Albania) on 1st and 2nd April 2004. The meeting discussed the application of the Operational Unit concept in the Adriatic Sea, the assessment of the available multidisciplinary data existing in GSA 17 and GSA 18 of relevance to the Operational Unit application, and the identification of possible pilot studies to be implemented in the area coverage of AdriaMed. The results of this meeting, as well as the methodologies applied, were presented during the meeting of the SAC Sub Committees on Statistics and Information, Economic and Social Sciences, and Stock Assessment, held in Malaga (Spain) in May 2004. A second meeting of the AdriaMed Working Group on Operational Units was held in September 2004 in Zagreb, Croatia. This meeting, *inter alia*, took into consideration possible ways to overcome the constraints identified in the application of Operational Units for the needs of fisheries management; the possibility of preparing a document on the practicality of identified Operational Units in a fishery management framework was also discussed and appraised. The work carried out during the two meetings and in the time in between permitted the finalisation of a document in which Operational Units are described on basis of the best available scientific knowledge, the document "Operational Units in the Adriatic Sea" refers (CC/06/info 13).

7. Expert Consultation on the interaction between aquaculture and capture fisheries

The meeting on “Interactions between Capture Fisheries and Aquaculture” was organized in Rome, Italy from 5 to 7 November 2003 as an Expert Consultation that was attended by 21 experts from the AdriaMed participating countries, Albania, Croatia, Italy, Serbia-Montenegro and Slovenia. The aims of the Consultation were to achieve a comprehensive description and analysis of the aquaculture sector in the countries which border the Adriatic Sea and to acquire the tools to improve the knowledge on the interactions between aquaculture and capture fisheries using the existing knowledge at Adriatic basin level. The National contributions provided the Consultation with background information on the aquaculture sector in the Adriatic countries and supplied the necessary basic data set for the discussion. A comprehensive framework on aquaculture in the Adriatic countries and its interaction with capture fisheries was defined as a result of the information from the countries and from further presentations on specific themes provided by the regional experts. The Consultation defined a matrix to synthesize the interactions between capture fisheries and aquaculture. The identification of some indicators using a systemic approach (ecology, economy, governance and legal framework) helped in the analysis. Finally the consultation provided a series of recommendations related to the interactions between capture fisheries and aquaculture in the AdriaMed countries/area. The outcome of the Consultation will be published as GFCM Studies and Reviews and AdriaMed Technical Document series and was also presented at the Fourth GFCM Committee on Aquaculture in Alexandria, Egypt 7th – 9th June 2004. (CC/06/info 10). The report of the Expert Consultation will also be introduced at the forthcoming SAC 7th session to be held in Rome 20th – 22nd October 2004.

8. Relations and cooperation with the General Fisheries Commission for the Mediterranean; Presence of the Project within other international scenarios.

AdriaMed supported the participation of the experts from the Adriatic countries at the majority of the GFCM-SAC Sub-Committees meetings held in Malaga, May 2004, at the meetings the Project provided scientific contributions through the presentation of working papers and technical reports as detailed in this report. The 28th session of the GFCM, 14 – 17 October 2003 was also attended by the Project, as well as The GFCM SAC Coordination Meeting in Malaga, Spain 13th May 2004, GFCM Committee on Aquaculture, Alexandria, Egypt 7th – 9th June 2004, GFCM SAC Working Group on Reference Points, Rome, Italy 20/21 April 2004 The extraordinary session of the GFCM, Malta, 19th – 23rd July 2004.

In the context of its cooperation with the other FAO Regional Projects, in this intersessional period the Project has also attended the FAO MedSudMed Expert Consultation on small pelagic fish in Tunisia, 1-3 October 2003; the FAO MedSudMed Second Coordination Committee Meeting in Tunisia 11 – 13 February 2004.

During the period September 2003 – October 2004, the Project also attended the “Preparatory Meeting concerning the creation of the Association of Mediterranean Fisheries Professionals” organised by Europêche with support from the European Commission (DG Fish) - Malta, 29th September 2003; The Venice Ministerial Conference for the sustainable development of Mediterranean fisheries was attended with observer status 25th and 26th November 2003. The Project also attended the Preparatory Meeting to discuss a draft Concept Paper for a full-sized GEF Project "Mediterranean Sea Strategic Partnership, with special focus on the Adriatic Sea”, Athens, Greece, 22-23 June 2004

Furthermore, experts attended the 7th SIPAM National Coordinators Meeting in Casablanca, Morocco, from 19 to 20 September 2003; the 1st Coordination Meeting TCP/INT 2904 Beirut, Lebanon 19 – 24 January 2004; the GFCM CAQ External Evaluation Meeting, Rome, 29/30 March 2004; the GFCM SAC Working Group on Reference Points, Rome, Italy 20/21 April 2004; the 16th Annual Conference of the European Association of Fisheries Economists, at FAO, Rome 5-7 April 2004. More recently the Project activities were introduced at the meeting “Pour une gestion durable de la Mer Adriatique: la coopération entre les collectivités territoriales” organized by the Parliamentary Assembly of the Council of Europe.

Where the EU Adriatic INTERREG Programme is concerned, AdriaMed is frequently involved in the context of cooperation in the Adriatic Sea region, however there are no concrete areas of direct collaboration.

Adriatic Shared Fishery Resources

AdriaMed activities	AdriaMed International Bottom Trawl Survey Programme	
AdriaMed Meetings	Working Group on Shared Demersal Fishery Resources in the Adriatic Sea	12-13 March 2004 Fano (Italy)
	Second Regional Small Pelagic Stock Assessment Workshop	26 - 29 April 2004 Ancona (Italy)
	Working Group on Small Pelagic Resources	31 June - 1 July 2004 Bari (Italy)
	Working Group on Shared Demersal Fishery Resources in the Adriatic Sea	14-15 September 2004 Zagreb (Croatia)
Presentation at other meetings	GFCM-SAC Working Group on Small Pelagic Species (Malaga, 6 th -7 th May 2004)	
Training sessions	On-the-job training on AdriaMed demersal trawl survey data collection and processing (Institute of Marine Biology of Kotor, Serbia and Montenegro-- 16 th and 17 th June 2004)	
Publications	<p>Vrgoč, N., Arneri, E., Jukić-Peladić S., Krstulović Šifner, S., Mannini, P., Marčeta B., Osmani, K., Piccinetti, C., and Ungaro, N. 2004. Review of current knowledge on demersal shared stocks of the Adriatic Sea. FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/TD-12. <i>AdriaMed Technical Documents</i>, 12: 91 pp.</p> <p>AdriaMed. 2004. Report of the AdriaMed Seminar on Fishing Capacity: Definition, Measurement and Assessment. FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/TD-13 <i>AdriaMed Technical Documents</i>, 13: 119 pp.</p> <p>Cingolani, N., Santojanni, A., Arneri, E., Berladinelli A., Colella, S., Donato, F., Giannetti, G., Sinovic, G., Zorica, B. (2004) Sardine (<i>Sardina pilchardus</i>, Walb.) stock assessment in the Adriatic Sea: 1975-2003. Paper presented at the GFCM-SAC Working Group on Small Pelagic Species (Malaga, 6th-7th May 2004). FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/OP-13. <i>AdriaMed Occasional Papers</i>, 13: 09 pp.</p> <p>Cingolani, N., Santojanni, A., Arneri, E., Berladinelli A., Colella, S., Donato, F., Giannetti, G., Sinovic, G., Zorica, B. (2004) Anchovy (<i>Engraulis encrasicolus</i>, L.) stock assessment in the Adriatic Sea: 1975-2003. Paper presented at the GFCM-SAC Working Group on Small Pelagic Species (Malaga, 6th-7th May 2004). FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/OP-14. <i>AdriaMed Occasional Papers</i>, 14: 10 pp.</p> <p>Guarniero, I., Garoia, F., Cilli, E., Landi, M., Di Placido, R., Cariani, A., Ramsak, A., Mannini, P., Ungaro, N., Piccinetti, C., Tinti F. (2004) Genetic stock structure analysis revealed single population units in the shared stocks of Adriatic demersal species Paper presented at the GFCM-SAC Working Group on Demersal Species (Malaga, 6th-7th May 2004). FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/OP-17. <i>AdriaMed Occasional Papers</i>, 17: 06 pp.</p>	

Adriatic Social and Economic Fishery Sciences

AdriaMed activities	AdriaMed Social Survey of Albanian Marine Fisheries
AdriaMed Meetings	
Presentation at other meetings	--GFCM-SAC Sub-Committee on Economic and Social Sciences (SCESS) Malaga, Spain 10-12 May, 2004 --16th Annual Conference of the European Association of Fisheries Economists, Rome, Italy 5-7 April 2004
Training sessions	n.a.
Publications	<p>AdriaMed. 2003. Aspects of Fish Markets in the Adriatic Sea. Report of the AdriaMed Meeting on the Aspects of Fish Markets in the Adriatic Sea. FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/TD-10. <i>AdriaMed Technical Documents, 10</i>: 152 pp.</p> <p>AdriaMed. 2004. Report of the AdriaMed Seminar on Fishing Capacity: Definition, Measurement and Assessment. FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/TD-13 <i>AdriaMed Technical Documents, 13</i>: 119 pp.</p> <p>AdriaMed (2004) AdriaMed Social Survey of Albanian Marine Fisheries-Preliminary Results. Paper presented at the GFCM-SAC Sub-Committee on Economic and Social Sciences (Malaga, 10th-12th May 2004). FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/OP-15. <i>AdriaMed Occasional Papers, 15</i>: 10 pp.</p> <p>AdriaMed. (2004) Aspects of Fish Markets in the Adriatic Sea. Paper presented at the GFCM-SAC Sub-Committee on Economic and Social Sciences (Malaga, 10th-12th May 2004). FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/OP-16. <i>AdriaMed Occasional Papers, 16</i>: 09 pp.</p> <p>**AdriaMed. 2004. General Outline of Fisheries Legislation and Regulations in the AdriaMed Countries. FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/TDXX. <i>AdriaMed Technical Documents, XX</i>: 73 pp.</p>

Adriatic Fishery Statistics and Information Systems

AdriaMed activities	Support to the national statistic systems of the participating countries Web Pages - Information System Information on Aquatic and Fishery Sciences (AdriaMed-ASFA) ASFA –GFCM list of documents
AdriaMed Meetings	
Presentation at other meetings	ASFA Advisory Board Meeting, Mar del Plata, Argentina, 29 June to 2 July 2004
Training sessions	n.a.
Publications	AdriaMed. 2004. AdriaMed Report. <u>In</u> : ASFA Advisory Board Meeting, Mar del Plata, Argentina, 29 June to 2 July 2004. Final report (including ASFA Partners Reports). Pepe, R., Wibley, H. (comp.) ASFA Aquatic Sciences and Fisheries Abstracts. FAO, Rome, 2004.

Adriatic Fishery Management

AdriaMed activities	Operational Units in the Adriatic Sea Adriatic experts network on small scale fisheries Expert Consultation on the interaction between aquaculture and capture fisheries	
AdriaMed Meetings	1 st Meeting on Operational Units in the Adriatic Sea 2 nd Meeting on Operational Units in the Adriatic Sea AdriaMed Technical Consultation on Sea Small-Scale Fisheries Expert Consultation on the interaction between aquaculture and capture fisheries	1-2 April 2004 Durrës, Albania 14-15 September 2004 Zagreb, Croatia 14-15 October 2003 Split, Croatia 5 - 7 November 2003 Rome, Italy
Presentation at other meetings	GFCM-SAC Sub-Committee on Economic and Social Sciences (CESS) Malaga, Spain 10-12 May, 2004 4th GFCM Committee on Aquaculture Alexandria, Egypt 7 th – 9 th June 2004	
Training sessions	n.a.	
Publications	<p>**AdriaMed. Report of the AdriaMed Technical Consultation on Adriatic Sea Small-Scale Fisheries. FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/TD. <i>AdriaMed Technical Documents</i> (in preparation)</p> <p>**GFCM. “Interaction between aquaculture and capture fisheries”. GFCM Studies and Reviews. FAO, Rome. (in preparation)</p> <p>**AdriaMed. Report of the Expert Consultation on the “Interaction between aquaculture and capture fisheries”. FAO-MiPAF Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea. GCP/RER/010/ITA/TD. <i>AdriaMed Technical Documents</i> (in preparation)</p>	

Annex D

Report on scientific progress: activities and achievements

Introduction

This document aims at providing a brief overview of the scientific progress made by AdriaMed within the guiding scope of strengthening the scientific cooperation in support of responsible fisheries within the Adriatic Sea fishery system.

The synthesis provided here is inevitably incomplete and somewhat diminishes the work carried out by all those individual experts, institutes and institutions participating and contributing to the Project. Full, detailed information is available from the scientific materials published by AdriaMed upon which these notes draw.

The Project work is structured according to the main scientific components: Adriatic fishery resources and social and economic aspects of Adriatic fisheries. Some notes have been included on issues being dealt with by AdriaMed related to the support to formulation of scientific advice for fisheries management.

1. Adriatic Shared Fishery Resources (demersal and small pelagic)

1.1 Identification of Population Units in Adriatic Sea Shared Stocks by Genetic Structure Analysis.

This AdriaMed research programme concerning genetic stock structure analysis of the Adriatic shared demersal resources has been carried out contemporarily and in a concerted way with a similar research (on other species) financed by the Italian Ministry of Agriculture and Forestry Policies. A preliminary overview of the results was presented at the GFCM-SAC Working group on Demersal Species (Malaga, May 2004) and it is being published in the AdriaMed Occasional Papers series.

This research programme represents the first example of a multi-species analysis of the population's genetic structure regarding a comprehensive pool of internationally-relevant shared stocks.

The specific goals of these two projects were: *i*) to develop species-specific genetic markers useful for the stock structure analysis (i.e. microsatellite and mitochondrial loci); *ii*) to define the genetic polymorphism of Adriatic stocks; *iii*) to identify the number and boundaries of population units in the area investigated.

Species-specific microsatellite molecular markers were developed for all the seven target species. Genetic estimators for population status (i.e. genetic polymorphism in terms of allelic diversity, heterozygosity and fitting of Hardy-Weinberg equilibrium) and structure (i.e. genetic differentiation in terms of fixation indexes and gene flow rates) were applied using specific statistical software.

The results showed high levels of genetic polymorphism and the relevance of the Hardy-Weinberg equilibrium in several species (*Loligo vulgaris*, *Nephrops norvegicus* and *Mullus barbatus*). Similarly, high levels of genetic homogeneity were observed among geographical samples in most species (*Loligo vulgaris*, *Nephrops norvegicus*, *Mullus barbatus* and *Solea vulgaris*), clearly suggesting the occurrence of single population units within the Adriatic shared stocks. The low genetic polymorphism and weak genetic divergences occasionally found (*Lophius budegassa*) could probably be related to the specific bio-ecological and behavioural features, and/or to methodological artefacts.

The genetic structure analysis for the Adriatic stocks of several other species (*Eledone cirrhosa*, *E. moschata*, *Parapeneaus longirostris*, *Merlangius merlangus*, *Pagellus erythrinus*, *S. pilchardus* and *Engraulis encrasicolus*) is ongoing. Preliminary data, not presented yet, revealed substantial genetic homogeneity within these stocks.

Remarks

Once final results have been obtained for the whole set of species considered, the research programme can be considered completed. The release of the exhaustive final technical report will conclude the programme. No further development is currently envisaged.

1.2 Joint echosurvey appraisal of small pelagic fish in Geographical Sub Area 17

The successful execution in November 2001 of the AdriaMed-organized first-ever acoustic survey covering all the northern end of the Adriatic Sea (i.e. international and national waters of Croatia, Italy and Slovenia) has highlighted as the comprehensive coverage of the area of occurrence of the surveyed stocks a basic requirement.

The survey promoted by AdriaMed in the northern end of GSA 17 and a successive survey carried out by the Institute of Marine Biology of Kotor (Montenegro) and the ISMAR of Ancona (Italy) in part of GSA 18 demonstrated that important differences resulted concerning the estimated biomass when considering only the west side and not the entire north Adriatic Sea, whereas there were not significant differences in species composition (<2%). Moreover, the western and the eastern parts of south Adriatic would seem to be deeply different, both in species composition (differences from 20% to 30%) and in the level of biomass. This testifies to the need to perform whole area coverage echosurvey to obtain meaningful stock size estimates.

AdriaMed is promoting the establishment of permanent international acoustic monitoring on pelagic stock variability on an annual basis. Such a routine monitoring scheme would ideally imply the simultaneous and coordinated use of more than one research vessel, thus reducing the time needed to cover the whole area. These vessels should have similar technical characteristics as well as acoustic and fishing gears and oceanographic equipment. In general the proposed sampling strategy is based on zigzag alternatively parallel transects. This strategy would allow the data to be processed as two independent, parallel grids.

In this framework AdriaMed is providing assistance for the essential appraisal of the feasibility of parallel acoustic surveys. The necessary arrangements for an acoustic inter-calibration exercise between two different research vessels are being made. The aim of such inter-ship calibration is to ensure that the acoustic system on the two vessels (Italian R/V Dallaporta operating in the western Adriatic sector and Croatian R/V BIOS operating in the

eastern side) work correctly and to enable data comparison to achieve a reliable estimate of stock size for the whole area.

Remarks

Following the inter-ship acoustic calibration a routine of annual joint echosurveys should be established by the countries concerned. No further action should be carried out by AdriaMed.

1.3 Data Collection and Biological Sampling on small pelagics

A Regional monitoring system for the assessment of the small pelagic fish biomass and related fishery exploitation patterns in the Adriatic Sea (AdriaMed-SP) has been established. Sardine and anchovy commercial catch samples were collected monthly from 12 ports in the Adriatic Sea. Catch and effort statistics and biological data have been compiled in a common database.

The overall standardization in data collection and analysis achieved by this programme has led to two regional small pelagic stock assessment workshops, the first of this kind in the Mediterranean. The last workshop was held at the ISMAR of Ancona (Italy) on 26 - 29 April 2004. Four regional assessments of anchovy and sardine stocks (GSA 17) were produced. The last two assessment papers on sardine and anchovy shared stocks were presented and discussed at the GFCM SAC Sub-committee on Stock Assessment (Malaga, May 2004). Annual estimates of mid-year stock biomass and of mean fishing mortality rates were obtained. The mean ratio between fishery catch and estimated mid-year biomass was assessed for both anchovy and sardine stocks.

A fish otolith reading calibration exercise is being organized, this will allow the utilisation of the full age data set from the whole area covered by AdriaMed-SP.

Remarks

This programme's on-the-job training component will be concluded with the fish ageing inter-calibration. The execution of the programme should be placed under national responsibility as routine monitoring within the wider regional framework. Efforts should be made in GSA 18 to be effectively included in the monitoring scheme.

1.4 International Demersal Trawl Survey in the Eastern Adriatic Sea

The second AdriaMed demersal trawl survey took place in autumn-winter of 2003 within national and adjacent international waters of Albania, Croatia and Slovenia. In comparison to the AdriaMed 2001-02 trawl survey, the sampling coverage was increased through the direct support of Albania and Croatia. In the case of Albania, number of stations was augmented from 18 to 31, in the case of Croatia from 22 to 42, the number of stations in Slovenian waters remained constant. The basic results of the survey were given in a final report which details the survey execution logistics, catch records, description of the biomass spatial distribution patterns through the appropriate relative biomass and abundance indices by total and by depth strata, the species composition of the catch including the size structure of the

target species as well as other relevant biological features. The AdriaMed international trawl survey scientific protocol has recently been refined on the basis of the experience accrued. The third AdriaMed demersal trawl survey will be carried out in the autumn/winter 2004, the details were finalised during the recent meeting of the AdriaMed Working Group on Demersal Resources (Zagreb, Croatia, September 2004). Montenegrin territorial and adjacent international waters will be included in the trawl survey thus allowing for the first time the joint and complete coverage of the eastern Adriatic Sea from Slovenia to Albania. National scientific staff have been made familiar with survey standard procedure through an *ad hoc* technical meeting in June 2004.

A first software application to hold and manage the resultant dataset “AdriaMed trawl survey regional databank” has been developed and made available to the relevant scientific institutions participating in AdriaMed. The final release of the trawl survey data bank application will include a digital chart (scale 1:250000) of the Adriatic Sea obtained through the cooperation of national hydrographical institutes.

Remarks

AdriaMed will complete this component with the production of the final version of the trawl survey database and ensuring the availability of the relevant digitalized cartography. Integration of AdriaMed survey data with GRUND data (2001, 2003, 2004) should be sought. Upon the execution of the year 2004 survey no further surveys are planned. From now on regular, regionally coordinated, full national survey execution could be carried out on the basis of the thoroughly standardized procedures established (from data collection at sea to final survey reporting).

1.5 AdriaMed Demersal Trawl Survey Databank

Since the first AdriaMed demersal trawl survey the need to have the large amount of data collected easily available and to utilize it was identified. Consequently, the development of a regional logical databank holding all the data was undertaken. The idea was to design a simple system, common for the AdriaMed countries participating in the surveys, which would facilitate and standardized data entry and retrieval, and basic analysis. The AdriaMed Trawl Survey Databank is a computerized system originally developed on a MS Excel[®] platform. The availability of such a databank has allowed for: effective data sharing among the participating countries; implementation of common data collection protocol; standardization of data entry procedures; standardization of primary data compiling and reporting. A User Manual has been produced and published in the AdriaMed Occasional Paper series.

Currently, the AdriaMed trawl Databank is a usable prototype of a regional database. However the next planned step concerning the development of a new version of the survey database system is being completed. It has been realized with MS Access[®], better suited to hold the large data set. The final databank will be suitable to store not only data from the AdriaMed trawl surveys, but also those from any other national or international surveys carried out in the Adriatic Sea. This constitutes further real progress towards the establishment of a common, effective database shared by all coastal countries. In addition, a

new tool of the system will be the possibility to perform the data spatial analysis through GIS application.

Remarks

The production of the final version of the trawl survey database and the availability of the relevant digitalized cartography will conclude this activity. For the latter, assistance from hydrographical institutes of Albania, Croatia and Montenegro will be pursued. Integration of AdriaMed survey data with GRUND data (2001, 2003, 2004) should be achieved.

1.6 Review of current knowledge on shared demersal stocks of the Adriatic Sea

The document “Review of current knowledge on demersal shared stocks of the Adriatic Sea” was published in the AdriaMed Technical Document series. This review is one of the products of the AdriaMed Project component “Adriatic Sea Shared Resources” which focuses on the appraisal of shared fishery resources of the Adriatic Sea. It was conceived on the basis of the necessity to have a scientific review available encompassing and compiling the large amount of scientific knowledge that has been accrued over the years, through fishery research work, on some of the main shared demersal resources of the Adriatic Sea. The collaboration of several co-authors from four countries has also allowed for the retrieval and summarizing of those scientific works that were originally issued in the national languages. Furthermore, attentions has been given to the so-called grey literature often of value and relevance but poorly known. It includes scientific information and findings from the first expedition “Challenger” in 1873 up to the year 2000-01. Lastly, the review meets, as far as the Adriatic Sea region is concerned, the request of the General Fisheries Commission for the Mediterranean (Twenty-sixth GFCM Session, 2001) to its Scientific Advisory Committee of producing summarized information on the biology, life history and gear selectivity parameters of key fishery species.

Remarks

This activity is now completed according to its original formulation. However, this work cannot, and it is not aimed to, be exhaustive either in terms of species coverage or of literature screened. Moreover, in recent times, a considerable amount of relevant scientific literature has been published which could not be accounted for in the present review the periodically updating of which should be sought in the future. A second edition covering the 2000/01 – 2005 period should possibly be foreseen.

1.7 Overview of small scale fisheries of the Adriatic Sea

In the Adriatic Sea region, as in the world in general, unlike larger-scale commercial fisheries, small-scale fisheries are relatively less documented and investigated, as well as being difficult to monitor because of their characteristics (e.g. landing points are many and scattered along the coast, fishing activity can be irregular, multiplicity of gear and of exploited resources, etc.). Yet, in the Mediterranean small-scale fisheries are thought to be in line with worldwide tendencies, contributing significantly to the overall fishery production.

So far the AdriaMed Project has mostly focused on the commercial fisheries exploiting shared demersal and small pelagic fishery resources in the Adriatic Sea. However, many species whose stocks are shared are also exploited by small-scale fisheries either regularly or during specific phases of their life-cycle.

In consideration of the relevance of small-scale fisheries and of their role in the exploitation of some shared stocks, in occasion of the fourth meeting of the AdriaMed Coordination Committee (December 2002) it was agreed to establish a network of regional experts. Consequently, the AdriaMed Technical Consultation on Adriatic Sea Small-Scale Fisheries was organized and held in Split, Croatia on 14th and 15th October 2003; this was the first at the Adriatic sub-regional level on this topic.

The Technical Consultation reviewed, on the basis of participants' experience, the current knowledge and the status of small-scale fisheries in Adriatic countries (with the exclusion of Montenegro which at the time was not member of the Project), existing monitoring systems, available scientific and technical knowledge in each country, on-going programs focusing on small-scale fisheries. In particular, species whose stocks are shared and small scale fishing gears exploiting these species were dealt with. Needs and priorities were identified and the basis was established for cooperative future work either within AdriaMed or other contexts. National Reports and Working Papers were presented from each AdriaMed country and Geographical sub-area. The proceedings of the Technical Consultation together with the documents presented will be available in the technical document to be issued shortly by AdriaMed. In consideration that this was the first time that small-scale fishery issues were dealt with at the global Adriatic scale, some information on the outcome of the Consultation is given:

Albania: most of small-scale artisanal fishing is practiced without a licence, only a small fraction of fishing units are licensed and therefore registered while the large majority are not officially accounted for. Artisanal fishery has developed remarkably since the 1990s as an alternative to unemployment and low income in coastal areas. A first field survey exercise carried out, in view of the Technical Consultation, by the Fishery Department in summer 2003 recorded 462 fishing units (363 with engines and 99 without) performing (either full or part-time) small-scale coastal fishing with an estimated number of more than 900 fishers, most of them part-time fishers primarily employed in agriculture.

Croatia: the country has a long tradition of small-scale coastal fishing, also proved by the 55 different fishing gears currently officially listed and employed. The total amount of small-scale artisanal fishers is guessed by national experts at around 18000 including both those licensed to sell the catch and those not authorised. The impact on coastal resources is believed to be rather significant. It is thought, although unsubstantiated because of lack of specific fishery statistics, that small-scale fishery could make up more than half Croatian landings of demersal species. Seemingly, the number of fishers has increased during the last decade as small-scale fishery constitutes an important support and subsistence means for coastal and particularly islands communities.

Italy: currently fishery statistics on Italian capture fisheries are collected by Irep through a National Observatory, the sampling scheme adopted allows for the monitoring of the national small-scale fishery through a sample of 3.5% of the total small-scale fleet. In the year 2002 out of the total fishing fleet of 15915 vessels, 10296 belonged to the small-scale segment, 2983 of

which operated in the Adriatic employing 4875 fishers. The landing volume from the Adriatic Italian small-scale fishery amounted to more than 24000 tonnes.

Slovenia: small-scale fishery is poorly known and basically not monitored. The current number of fishing units which may be attributed to the small-scale fishery sector is estimated at 73 vessels. Indicatively, the average yearly catch could be estimated at around 100 tonnes.

Lack of appropriate bio-economic statistics or information was identified as one of the main gaps in the most of the countries. In some countries even basic data such as those regarding the number of fishers or fishing units can only be guessed. Technical knowledge on the spatial and seasonal occurrence as well as relevance of the various fishing gears and their impact on resources is rather fragmented and geographically scattered. This lack of information was addressed as one of the gaps that might be overcome through a collaborative exchange of information. It was evident that regionally-concerted case studies, along both the eastern and western coast of the Adriatic Sea, should be planned and should follow a common research protocol. Such case studies should include the biological, gear technology, economic and social components of the small-scale fisheries sector.

Lastly, the Technical Consultation identified the following activities to be regarded as priority and functional to promoting regional scientific cooperation focusing on the small-scale fishery sector:

- 1) The compilation of a gear catalogue with an up-to-date and detailed description of all fishing gear types presently employed by the fisheries of the Adriatic coastal countries.
- 2) A case study aimed at the in-depth analysis of selected fishing communities.
- 3) A fishing effectiveness appraisal based on comparative analysis of similar fishing gears or of the gears targeting a given species (in terms of catch composition, species vulnerability to fishing gears, gear selectivity, abundance indexes) in different areas around the Adriatic basin thus allowing improved scientific advice for fishery management and technology improvements.

Remarks

Upon the publication of the full technical document, the follow-up to the activities indicated under points 1 to 3 above should be considered either within or outside the AdriaMed framework.

1.8 Digitalized Adriatic Sea cartography

The lack of a common and standard proper digitalized cartography, an essential tool to include the geo-spatial dimension in the resources assessment procedure, was evaluated by AdriaMed as a main constraint around the Adriatic Sea. Therefore the Project took action in order to provide the counterpart scientific institutes with suitable digital cartography. The digital cartography which is being prepared (scale 1:250.000) will also be used in the future to develop and apply GIS applications with various kinds of data (e.g. oceanographical, primary and secondary production, abundance indices of fishery resources other than

groundfish, etc.). The chart will feature bathymetry as appropriate and main urban coastal settlements, river mouths and lagoons.

The Italian Navy's Hydrographical Institute actively cooperated on this issue and assisted the Project by providing the main cartographic source to obtain the coverage of most of the Adriatic Sea.

Remarks

To finalize the digitalized chart in the best way, the assistance of the national hydrographical institutes of Croatia, Montenegro and Albania is being requested.

The digital cartography will be supplied to the scientific institutes participating in the AdriaMed Project upon the formal agreement that such cartography will be used only for scientific purposes.

2 Adriatic Social and Economic Fishery Sciences

2.1 Social survey of the Albanian marine fisheries

Fisheries management is not essentially about the management of fish. Fishery is an industry and fishing is a human activity. It is through regulatory measures of fishing behaviour that the securing of the viability of fish stocks is pursued. For fisheries management to be sustainable it should take into consideration the social dimension of fisheries communities. A knowledge of the fishing community and of how people operate in the fishery system is nowadays considered a key aspect of the fisheries management process. The relevance of social issues is indicated in all 12 articles of the Code of Conduct for Responsible Fisheries (FAO, 1995). The social component of fisheries management not only consists of markets, efficiency and access to exploitable resources. It is also the social science of households, gender, communities, power, equity, democracy and knowledge. Fishery managers need to know the fishery and also need to have a sound knowledge and understanding of the whole resource user system (stakeholders), for the purpose of cooperation on conservation, consensus building, conflict resolution and not least fishery planning.

In the mandate of the GFCM Scientific Advisory Committee it is highlighted that the Committee must provide scientific, social and economic information, data or advice relating to the work of the GFCM. In particular, at the opening of the First Session of SAC it was underlined that "For any fisheries management to be sustainable it should take into consideration the social dimension of the fishing community. A purely scientific approach to fisheries management did not have any chance of success unless it was accepted by all stakeholders. A balance between the scientific requirements for the conservation of the stocks and the socio-economic conditions prevailing in the areas concerned was the best guarantee for sustainable management of the fishery sector".

In Albania, since the late 1980s, fisheries has been a growing sector contributing to employment, nutrition, trade, foreign exchange earnings, etc. Albania marine capture fisheries have drastically changed since the end of the 1980s, rapidly switching from a largely small pelagic based fishery to an almost entirely demersal trawl fishery, meanwhile undergoing the difficulties and hardships associated with the national transition from a

centralized to a free market economy. Consequently, Albanian society experienced major changes which also affected the social component of the fishery sector. However, such changes could be only supposed but not assessed because of the lack of specific investigations due to a shortage of both financial resources and expertise. Such a gap in the knowledge of the fishing sector was identified as one of the priorities for fishery planning and management in Albania. This constituted the rationale for a formal and complete survey exercise.

The social survey was executed in cooperation with the Albanian Fisheries Directorate and AdriaMed. A random-stratified sample (by port and fishing vessel /gear category) was obtained consisting of a total sample size of 183 fishers interviewed (561 questionnaires) from 67 fishing vessels (30% coverage). The data collected were then organized into an *ad hoc* database structured to insert, modify and browse the information, as well as to extract some basic statistical analyses.

The survey provided the fisheries management authority with an analytical tool for: the identification of the target groups and the livelihood of the fishers; the identification of the motivation of the resource users; the evaluation of the working conditions and fishing strategies; the understanding of the characteristics and the relations within and between the maritime districts; the business practices and strategy. Moreover, the study allowed an analysis of the fisher intergenerational dynamics, the interrelation between the various roles within the crew structure and the perception of strengths and weaknesses in the sector, within each maritime district and between the districts.

A scientific contribution introducing the preliminary considerations resulting from the AdriaMed social survey of Albanian marine fisheries was presented at the GFCM-SAC Sub-Committee on Economic and Social sciences in May 2004, Malaga (Spain). The social survey initiative was considered a highly positive and concrete contribution in the context of social indicators for Mediterranean fisheries whose experience should be replicated around the Mediterranean.

Remarks

The preparation of the full, final technical document is underway, the release will conclude this programme in Albania. The expediency, on the basis of this pilot experience, of having such an analysis available for other Adriatic countries would be worth considering.

2.2 Aspects of the fish market system of the Adriatic Sea

The main objective of this activity was to gain a better understanding of the Adriatic markets for fish and fish products through the collection of relevant information available at national and international level. The importance of reliable fishery statistics and constraints often imposed by their unavailability was pointed out with reference to all Adriatic coastal countries.

Among the different aspects influencing the fish markets in the Adriatic Sea region, the most relevant were identified. First of all, fish marketing and trading systems in the Adriatic are very different. They are more developed in some countries and less developed in others, where they are currently being improved. There is general agreement on the fact that without

a fish market system, and related proper legislation framework, there is little chance of rationalising fisheries in the Adriatic basin. The Adriatic is a semi-enclosed area and this implies that most fishery resources are shared by the fleets of coastal countries. It emerges that trade is also somewhat shared, as resources are the same both from the point of view of fishery resources distribution and exploitation and from the point of view of trading. Import and export dynamics are particularly important for the Adriatic Sea also because of the aforementioned characteristics. These dynamics should be increasingly investigated because they are very complex.

The absence in some countries of fish markets from an institutional point of view is to be particularly stressed. This is shown by the fact that continuous import/export links have always characterized the whole Adriatic basin, even if these links have not been identified or regulated by the presence of real fish markets. Another issue emerging from the review of Adriatic fish markets is the need to invest in quality as a positive effort. Investments in quality naturally need resources, but seemingly they pay back. Lastly, it appears that the development of a common strategy not only for fishery management but also for fishery product marketing and trading would highly desirable. This should also include the imparting of value on the fish product and limiting as much as possible the waste of fishery resources. Product certification and ecolabelling are tools that can complement and strengthen conventional regulatory measures to achieve conservation and management results.

The “Report of the AdriaMed Meeting on Aspects of Fish Markets in the Adriatic Sea” was published in the AdriaMed Technical Document series. A review of the AdriaMed study on Aspects of Fish Markets in Adriatic Sea was presented at the GFCM-SAC Sub-Committee on Economic and Social sciences (May 2004, Malaga, Spain).

Remarks

The review is available and is being utilized by stakeholders. No further development of this activity is foreseen.

2.3 Fishing capacity

Over the last few years, the issue of excess fishing capacity has received much attention worldwide. It follows decades of effort to deal with the degradation of fish stocks and the related issue of overexploitation, without due consideration being paid to the direct or indirect effect of fleet capacity. The impact of fishing capacity on the biological and economic conditions of fishing communities is under consideration at various institutional levels. Its evaluation is considered fundamental for the fisheries management process.

In the Code of Conduct for Responsible Fisheries, particular recommendation is made to the States to prevent an excess of fishing capacity.

In line with its mandate and coherently with the indications given by the Code of Conduct for Responsible Fisheries, the fishing capacity issue was raised by the AdriaMed Project and specific action was taken. The AdriaMed Seminar (Fano, Italy, October 2002) was the first on this topic specifically taking into account Mediterranean Sea fisheries, in particular Adriatic fisheries. This initiative also originated with the awareness that, although the use of the term fishing capacity is increasingly widespread, its definition varies between countries

and institutions and the related assessment and management aspects are not always familiar. In the Adriatic region, as well as in the whole Mediterranean, the issue of fishing capacity is relatively new.

This AdriaMed activity and the related seminar aimed at providing the basic elements to define, measure and appraise the fishing capacity and at underlining how the management of fishing capacity could help in the fisheries management decision making process.

The concepts of capacity utilization and target capacity, overcapacity and overcapitalisation were dealt with and clarified, together with the meaning of capacity under-utilization. In a context such as Adriatic fisheries, appropriate fleet segmentation is essential for capacity assessment. An important step is the establishment of a proper comparative monitoring system in the Adriatic Sea region, based on correct segmentation of the fleet and also accounting for the important issue of polyvalent vessels. To assess effective fishery management plans it is important to know the fleet size and structure, the potential output from the current fleet and the target management objectives, considering both biological and economic parameters.

In comparison with northern European fisheries, which have seen a dramatic decline in recent years, the Mediterranean can be considered somewhat “safer” for a range of biological, economic, sociological and geo-morphological reasons. The very complexity of the Mediterranean case, however, presses for a management plan that applies a careful, balanced mix of tools; it is particularly important not to oversimplify the management options for the area. Healthy fisheries in an area such as the Mediterranean and Adriatic can result from careful collaborative management with the sharing of national information at all levels. Broadening the scope of the existing Regional Projects may be the way ahead and would certainly guarantee an appropriate exchange of information and the achievement of mutual understanding and cooperation.

The document “AdriaMed Seminar on Fishing Capacity: Definition, Measurement and Assessment” has been published in the AdriaMed Technical Document series.

Remarks

At the Twenty-fifth Session of the FAO Committee on Fisheries (2003), where reference is made to the progress in the implementation of the Code of the Conduct for Responsible Fisheries and related International Plans of Action, the AdriaMed regional seminar on fishing capacity was acknowledged as one of the relevant initiatives contributing to strengthen their implementation.

3. Issues on Adriatic Sea fisheries management

3.1 Operational units

Much attention is currently given to the issue of Operational Units as a multidisciplinary tool for the sake of fishing effort management in the Mediterranean. AdriaMed (therefore meaning the countries participating in the Project) together with CopeMed took on the task of acting as pilot case for the whole Mediterranean region.

The GFCM requested that the SAC define the Geographical Sub-areas in the Mediterranean and thereafter to define and list the Operational Units within the Geographical Sub-areas. The definition of an Operational Unit, as endorsed by the GFCM, encompasses four key-components: fishing effort; (group of) fishing vessels operating a given category of fishing gear (practising the same type of fishing operation); target resources (either made up of one species or group of species); and (similar) economic structure. Therefore an Operational Unit could be considered as characterised and constituted by identified fishing vessel categories which target resources consisting of one or, more probably, of a species assemblage. Given this, the identification of Operational Units involves the prior identification of key-fisheries which at the initial disaggregated level may be seen as locally structured according to the resource, the local fishing grounds and related ports where the fishing vessels operate from and where the economics of production originate (e.g. access to local/regional markets, trading, processing, vessel-related activities and costs, etc.). These basic aggregations might be considered as elementary Operational Unit constituents.

AdriaMed focused on the identification and listing of the Adriatic Sea Operational Units in a number of occasions, among which recently the AdriaMed Working Group on Operational Units in the Adriatic Sea (Dürres, Albania, April 2004) whose outcome was presented at the meeting of the SAC Sub Committee on Statistics and Information, Economic and Social Sciences, and Stock Assessment held in Malaga (Spain) in May 2004. Another *ad hoc* AdriaMed meeting was held in September 2004 in Zagreb, Croatia. So far, the work carried out within the AdriaMed cooperative framework has led to the following:

- Clarification and consensus on the ultimate useful meaning of the Operational Units with particular reference given to the practicality and sustainability of the Operational Unit concept as an effective fishery management tool. The Operational Units should primarily be a tool for the fishery manager to facilitate management actions. Once established they could be used by all countries allowing management measures to be more specifically addressed and implemented and results to be appraised, discussed and evaluated.
- The implementation of a multidisciplinary approach upon a regionally-concerted and standardized methodology.
- The preliminary qualitative and quantitative identification and listing of the Operational Units of the Adriatic coastal countries. For instance, in the important case of demersal trawl fisheries they were assessed as actually consisting of 2437 fishing vessels of which 1862 in the GSA 17 and 575 in the GSA 18, structured into 27 Operational Units, 17 in GSA 17 and 10 in GSA 18.
- The appraisal of the Operational Unit concept applicability as important tool for management purposes. While the Operational Units and the information related are useful to describe the fishery and to allow a fishing effort management system, it should be pointed out that the fishery management process needs biological, economic and social data to implement an efficient system of management measures. The constraints due to the lack of economic information for some Adriatic countries can reduce the effectiveness of the Operational Units identified as a practical fishery management tool.

Remarks

AdriaMed experience and results so far accrued will be communicated to the international community and made available to the Adriatic national fishery management entities. Further action could be taken to overcome constraints identified.

3.2 Indicators and reference points for Adriatic Sea fisheries management

The GFCM through the SAC is making considerable efforts to address the need of setting and having available reliable indicators and reference points for fisheries management purposes. Indicators are a variable, a pointer, or index related to a criterion. Their fluctuations reveal the variations in those key elements of sustainability in the ecosystem, the fishery resources or the sector and the social and economic well-being. The position and trend of an indicator in relation to reference points or values indicate the present state and dynamics of the system. Indicators provide a bridge between objectives and actions. At regional level, indicators can assist in the process of harmonizing strategies for management of transboundary and straddling resources and for measuring the overall health of large-scale marine ecosystems.

The ultimate goal is that of establishing a multidisciplinary reference system for the sustainable development of fisheries, which should be able to constitute an effective framework contributing to address and overcome the constraints affecting the current Mediterranean fishery management systems.

Within the AdriaMed experts framework this necessity has been well acknowledged for a long time and due consideration has been given to conventional stock assessment tools and possible alternative and/or complementary options to appraise the status of demersal resources and fisheries in particular. The practical purpose of indicators is that, as it is dealt with in the AdriaMed context, to assist in the process of assessing the performance of fisheries policies and management at regional, national and sub-national levels. AdriaMed experts agree on the following key-criteria and properties of indicators:

- 1) Indicators must be scientifically valid in the sense that, according to our best scientific understanding, they are indicative of the objective they are intended to reflect and utilize the “best scientific information available”;
- 2) Indicators should be feasible and cost-effective in terms of their information collection demands;
- 3) Indicators should be easily understood.

More specifically indicators should be:

Observable: within economic resources for research on a sustained basis, and by stakeholders, either directly or by transparency in the observation process.

Understandable: they should have research-based substance, reflect analytical soundness, and they should reflect features in accordance with stakeholders’ understanding of the resource system.

Acceptable: by fishers and by the public at large

Related to management: they should indicate a direction of action, quantitatively or through associated reference points, and they should respond to management measures

So far, progress has been made to identify regionally concerted biological indicators and their reference points for fishery management on the basis of available data and information. The main guidelines followed focus on the importance of having scientifically sound, comprehensible and suitable tools available for describing the actual state of the resources to support the fishery management process. This has led to the presentation of various scientific contributions, focusing on fish biomass indices and the geo-spatial occurrence of some important fish stocks, in occasion of the GFCM-SAC International Workshop on Reference Points held in Rome (Italy) in April 2004.

Work has been undertaken to make a first suite of indicators available for the fisheries of a set of key-reference species and multispecies assemblage in GSA 17 and 18. Tentatively, a total of twenty-three selected indicators (thirteen for single species and ten for multispecies group) have been identified and their performance is being tested.

Remarks

The multidisciplinary multiple-indicator system is being developed and its performance will be assessed, if proved to be a suitable tool it will be introduced and discussed with fishery managers and resource users.

3.3 Nursery areas

In line with the GFCM-SAC mandate for 2003-2004, in which the identification of nursery areas and sensitive habitats are highlighted among the priorities, and with the high consideration given to this topic by the recent Ministerial Conference on Mediterranean Fisheries (Venice, Italy, November 2003). Identification of nursery areas of priority species whose stocks are shared has been attempted on the basis of the best available data sets jointly by the Institute of Oceanography and Fisheries of Split (Croatia) and the Laboratory of Marine Biology and Fisheries of Fano (Italy).

Remarks

Geographic location, spatial size and juvenile density are considered as important biological indicators and are an integral component of the multiple-indicator system being experimentally developed for the Adriatic Sea fisheries.

3.4 Small pelagic fisheries

The substantial amount of work which has been carried out on small pelagic fishery resources (e.g. pilot joint acoustic survey, commercial catch monitoring and regional stock assessments, *ad hoc* training courses), together with analogue national research programmes, makes the Adriatic Sea a rather fortunate case where different and independent assessments (i.e. fishery-dependent and independent) of small pelagic resources are taking place. Particular attention has been made by the Project to promote and facilitate the process of integration of existing information so as to maximize and benefit from the available scientific knowledge base for fisheries management.

Based on the above, the AdriaMed Working Group on Shared Small Pelagic Resources discussed and agreed the following guidelines:

- Fishery management is based on estimation of either absolute or relative number, biomass and productivity of individuals of target species. It also requires characterization of the species' population structure. Surveys of commercial (fishery-dependent) and fishery-independent data are used routinely worldwide to characterize stock size and population characteristics. Surveys (both fishery-dependent and independent) are vital for resource monitoring and fishery management; they must be planned with appropriate statistical design and executed with appropriate means to gather data that are comparable over time. Data collection and processing are crucial because the entire fishery management process relies, necessarily, on a foundation of sound scientific data upon which the status of exploited populations are characterized.
- All length/age-structured assessment approaches require reasonably accurate estimates of the number, weight, and ages (or sizes) of fish removed from the population. Such information can only be obtained from fishery-dependent data through commercial catch (i.e. landed catch and discarded catch) monitoring. On the other hand and complementarily, the objective of fishery-independent surveys is to monitor temporal and spatial changes in the relative or absolute abundance of a target species or a particular component of that population (e.g. larvae, juveniles, spawners) in a manner that it is not subject to the biases inherent to commercial fishery data.
- It is necessary to examine in a critical way the results obtained, using different monitoring schemes and data analysis methodologies, and to begin to compare the observed trend instead of the single absolute values. It is important to comprehend the characteristics of each assessment method, fishery dependent and independent, and the kind and features of the information produced. This will allow an appreciation the pros and cons of each approach to contribute to the description of different aspects of the same topic. When based on sound scientific data, the different information and views provided by different methodologies should improve the quality of assessment results.
- In line with the GFCM indications, the undertaking of different and independent methodological approaches, both fishery dependent and independent, can only contribute to strengthen resource appraisal efforts. A multiple analytical approach would certainly ensure a more reliable and sound appraisal of the small pelagic stocks. It has to be underlined that the amount of extremely useful and valuable information, from both fishery dependent and independent sources, is much more than just the stock size estimates

On the basis of the research and assessment work carried out on small pelagic stocks of the Adriatic Sea, possible general options for their fishery planning and management have been dealt with.

The multi-species nature of the small pelagic fishery, although limited compared demersal fishery, should be taken into consideration, together with the limitation derived from single species stock assessment in terms of practicability of scientific management advice in a mixed (i.e. multispecies) fishery context. It is therefore important to distinguish between single species assessment procedure (which is still the best approach for assessing specific

population parameters and providing management advice for the species concerned) and multispecies management. It would be necessary to make available both biological and socio-economic indicators to appraise the status of the small pelagic fishery resources, in a similar way to that being considered for demersal fisheries. A multiple-indicators approach, which should take in consideration both biological and socio-economic aspects, is considered as an important work hypothesis to be pursued. Moreover, the importance of the environmental, biological factors in determining the fluctuations of the small pelagic stocks cannot be ignored.

In consideration of the overall amount of reported information about the total biomass of the small pelagics, a moderate increment of the fishing effort in some Adriatic areas might not be ruled out, provided that a precautionary approach is applied for a gradual increase of effort and under an effective monitoring scheme. Furthermore, fishery management decisions should necessarily take economic aspects into consideration, inasmuch as market factors are known to have a direct and marked effect on small pelagic fishery production dynamics.

Remarks

In consideration of the research activities on small pelagic fish stocks of the Adriatic Sea constantly carried out by each research institute, the issue has emerged of involving the Adriatic experts in an annual meeting, in the framework of the AdriaMed Project, to present, review, discuss and integrate the obtained results.

Annex E

Future Implementation of the Project

The FAO AdriaMed Project "Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea" is a five-year Regional Project executed by the Food and Agriculture Organization of the United Nations (FAO) and funded by the Italian Ministry of Agriculture and Forestry Policies (MiPAF). The Project started in October 1999 and it was scheduled to end in October 2004. An extension period of one year is about to begin following the provision of the necessary additional funds by the Donor.

During the 5th AdriaMed Coordination Committee meeting in September 2003 a Project review was presented to the Committee members. In the Project review the overall achievements of the Project were considered highly satisfactory and the amount of activities carried out in order to achieve the set objectives was considered appropriate. In particular it was noted that the Project still needed to consolidate the networking systems, to run and update the databases, to collect additional data and information on resources, socio economics, marine environment and fish trade for management purposes would still require support. While scientists from the region benefited from training activities, other stakeholders should be further involved. The benefits of continuing with data collection and the standardization of methodologies as developed by the Project in line with FAO and GFCM standards was recognised. The Review proved the need for an extra period for the Project activities.

The Committee members gave the mandate to FAO-FIRM to prepare a project proposal for the extension of AdriaMed for five years in consultation with the interested parties (GFCM, EU and national representatives). They also stressed that due attention must be given to widening the Project's terms of reference which, in addition to the research component, should also include activities concerning artisanal fisheries and studies on coastal zone management. The issue of the Project HQ location in respect of operational cost optimisation and the necessity to allocate funds for the integration of the new AdriaMed member (Serbia-Montenegro) were also highlighted.

Following these recommendations, the Donor (MiPAF), provided additional funds for a Project extension of one year (for the period October 2004 – October 2005) and to meet the needs of the new member the Republic of Serbia-Montenegro, which joined the Project in January 2004.

As a result of the Coordination Committee's recommendations and in strict coherence with the content of the AdriaMed Project Document signed by the participating countries in 1999, the Project prepared a programme (abbreviated version attached) for a "bridging phase", from October 2004 to October 2005. This document follows the structure set out by FAO, in that the

immediate objectives are identified and the output/activities referring to each objective are then listed; there follows an outlined workplan and details of reporting requirements.

It must be noted that, in order to avoid any undesirable gaps in the AdriaMed research programmes, the implementation of many of the activities indicated in the “Project Extension” began during 2004. Among other things, this allowed AdriaMed and the scientific community in the Adriatic area to achieve some significant results that were in turn conveyed to the interested parties in the participating countries and at to the many GFCM SAC-CAQ venues.

The 5th AdriaMed Coordination Committee meeting also requested a draft Project Document for an extension period from October 2005 – October 2010, this document is currently being substantiated. During the 2004 – 2005 period, the Project in consultation with the counterpart institutions and entities will prepare a proposal for a work plan and budget for a second phase. This document will be finalised according to the indications of the Coordination Committee in terms of objectives to fulfil and budget availability. In consideration of the situation laid out in this document, the Coordination Committee members are called on to advise FAO FIRM and the AdriaMed Project in order to facilitate this process.

Appendix 1

PROJECT EXTENSION Bridging phase (October 2004 – October 2005)

The project provides a cooperative framework for the Countries bordering the Adriatic Sea (Albania, Croatia, Italy, Serbia and Montenegro and Slovenia) in the assessment of their fishery resources and their sustainable management. Technical assistance is provided through the Project in the improvement of fishery statistics, the development of networking and data exchange, the strengthening of research institutions and Administrations and the planning and implementation of cooperative fishery resource appraisal.

Such large scope of activity raised new needs and expectations that needed to be addressed. Additional financial and human resources are required not only to finalise some of these activities but also to meet the needs of a new member (Serbia and Montenegro), which joined the Project in January 2004.

The immediate objectives of the Project remain unchanged as follows:

- Strengthened cooperative arrangements and collaborative mechanisms between relevant fisheries-related institutions involved in the management of Adriatic fisheries;
- A sub-regional fisheries-monitoring system established, based on standardised methodologies, sub-regional data-bases and networking systems covering all those issues related to biological, socio-economic and environmental aspects of fisheries management planning;
- Technical advice for fisheries management decisions at national and sub-regional levels being supplied by experts from the Adriatic sub-region, through joint analysis of common issues, joint technical meetings and activities;
- The implementation of fisheries management plans being tested at the pilot scale with the involvement of professional associations and the industry.

A. OUTPUT AND ACTIVITIES

The expected output for the period October 2004 – October 2005 would be the consolidation and improvement of the achievements made in the present phase of the Project in the various fields of its activity, in the light of the recommendations of the mid-term review and the fifth session of the Project Coordination Committee (CC).

During this period, the Project, in consultation with the CC members and with the Donor Government concerned Authorities will finalise the Work Plan and Budget of the second main phase of the Project (October 2005-October 2010). The Signature of the new phase

(ADRIAMED II) document should intervene six months before the end of this bridging period in order to avoid any interruption in the delivery of the Project as an entity.

Output 1. Computerised communications networks and fishery monitoring systems, operated by national institutes.

Activity 1.1 continue strengthening of national staff in updating and developing the networks, files and databases established by the Project.

Activity 1.2 continue to identify and organise appropriate upgrading/re-orientation programming for those national offices responsible for the operation of the national communication centres established by the Project.

Activity 1.3 continue to develop and make available to the fishery authorities and institutes in the member countries software packages covering the different aspects of fisheries data analysis and model designing.

Output 2 Coordinated research programmes and scientific activities together with upgraded individual and institutional capabilities.

Activity 2.1 further promote and support research activities that proved to be required for the managers and policy decision makers, in addition to the current monitoring programme of the fishery resources.

Activity 2.2 pursue the development of the concept of “management pilot scheme” in the light of the knowledge gathered in the present phase in the Pomo/Jabuka area, which was selected to develop such a scheme.

Activity 2.3 train national staff in the field of resource assessment and monitoring and promote exchange of expertise among Project member countries.

Activity 2.4 Identify prospects for the sustainable development of the artisanal fisheries Sector in the Adriatic Area.

Activity 2.5 Provide the necessary technical support to member states to enable them to become ASFA partners by the end of the present extension period.

Output 3 Fishery management strategy and related technical measures identified.

Activity 3.1 Identification of biological indicators required for a common management of the Adriatic fisheries. Such indicators, together with socio-economic ones, should be made available to the policy makers and fishery managers together with management options concerning each individual stock or resource category.

Activity 3.2 Strengthening the exchange of information on the state of individual stocks by updating and enlarging databases, training local staff and organising expert meetings.

Activity 3.3 Identification of ways and means to elaborate a pilot management schemes throughout consultative process involving interest parts (fishery administration; fishery associations; fishery scientists).

Output 4 Fishery Administrators fully involved in the Project activities and continuously updated on the Project achievements and constraints.

Activity 4.1 By the end of the present phase activities such as database updating and running should be the responsibility of the fishery Administrators in the member Countries. Sampling activities and evaluation surveys should be phased out and responsibility for the planning and carrying out of these activities should lay with the national institutes and Administrations. Training and institutional building should be continued and intensified. Particular attention should be given to the participation of fishery Administrators in the planning and implementation of the Project phasing-out process.

Activity 4.2 Transitional consultative meetings should group high-level top administrators, research institute directors and representatives of the industries from the member countries. The Project results in the various fields of its activity should be discussed and options for common management policies prepared by the Project reviewed. Adjustment and revisions of priorities should also be agreed on by scientific, political and professional authorities represented at these meetings.

Activity 4.3 A document on the fishery legislation in the Adriatic area including some aspects on the harmonisation will be prepared for consideration by the authorities concerned in the member countries in a consultation or *ad hoc* meeting.

Activity 4.4 Continue to provide support to member Countries in drawing up registers of fishing vessels in line with the provisions of the “Agreement to Promote Compliance with the International Conservation and Management Measures by Fishing Vessels in the High Seas” and the “Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks”.

B. WORKPLAN

1. Communication networks and fishery monitoring systems

- Improvement of the AdriaMed information Centre and AdriaMed Web Pages.
- Fishery statistics system established in Albania
- Support to Croatian and Slovenian fishery statistics systems
- Establishment of national and regional scheme for routine monitoring of small pelagic fishery through the use of both fishery dependent and independent data

- Establishment of regional scheme for routine ground fish appraisal surveys
 - Monitoring and appraisal of fishery economic performance
 - Finalisation of the AdriaMed Trawl Data Bank
 - Finalisation of the AdriaMed Social Survey Data Base
 - Publication and dissemination of Project Technical Documents and Occasional Papers
2. Research programmes and scientific activities

- 1 international demersal trawl survey
- 1 international small pelagic stock assessment survey (eggs and larvae)
- 1 international parallel echosurvey calibration
- 1 small pelagic stock assessment workshop
- 1 demersal stock assessment planning workshop
- Elaboration of the scientific reference document on Pomo/Jabuka Pit fishing grounds
- 2 technical multidisciplinary meetings on the experimental identification of Operational Units in the Adriatic Sea.
- Finalization of standardized handling, compiling and basic processing of demersal trawl survey data
- Training session on integration of data from parallel acoustic surveys
- Training course on small pelagic fish age determination
- Training for the AFSA cataloguing and indexing methodologies :
- Participation of regional fishery scientists and managers in international meetings (e.g. GFCM-SAC)

3. Fishery management strategies

- 2 meetings for the identification of regionally concerted indicators for fisheries management
- 1 international seminar on fishery management experiences worldwide (e.g. Mediterranean, Atlantic, Baltic, etc.)
- 1 meeting on the application and analysis of the indicators referring to the sustainable development of the relationship between capture fisheries and aquaculture in the Adriatic Region.
- Pilot approach through multilevel (administrations, research, resource users) consultation and participation to identify management options for small pelagic fishery and the Pomo/Jabuka fishing ground.

4. Involvement of fisheries Administrations in the Project activities

Six-monthly consultative meetings will be organised during the period October 2004 – October 2005 grouping fishery Administrators, representatives of research institutions and the fishery industry.

Reporting

- FAO will report to the Donor Government, to the other participating Governments and to the Secretariat of the GFCM.
- Technical papers on the Project activities, conclusions and recommendations will be contributed to the Scientific Advisory Committee of the GFCM and its subsidiary bodies whenever required.

The Project is responsible for the preparation of working documents for meetings, organised within the Project framework and for reporting on the Coordination Committee meetings and any other gathering that is organised by the Project.

Annex 2

OUTPUT AND ACTIVITIES		WORKPLAN
Output 1		
Computerised communications networks and fishery monitoring systems, operated by national institutes	<p>Activities</p> <p>Activity 1.1 Continue strengthening of national staff in updating and developing the networks, files and databases established by the Project</p> <p>Activity 1.2 Continue to identify and organise appropriate upgrading/re-orientation programming for those national offices responsible for the operation of the national communication centres established by the Project.</p> <p>Activity 1.3 Continue to develop and make available to the fishery authorities and institutes in the member countries software packages covering the different aspects of fisheries data analysis and model designing.</p> <p>Activities</p> <p>Activity 2.1 further promote and support research activities that proved to be required for the managers and policy decision makers, in addition to the current monitoring programme of the fishery resources.</p> <p>Activity 2.2 pursue the development of the concept of "management pilot scheme" in the light of the knowledge gathered in the present phase in the Pomo/Jabuka area, which was selected to develop such a scheme</p> <p>Activity 2.3 Train national staff in the field of resource assessment and monitoring and promote exchange of expertise among Project member countries</p> <p>Activity 2.4 Identify prospects for the sustainable development of the artisanal fisheries Sector in the Adriatic Area.</p> <p>Activity 2.5 Provide the necessary technical support to member states to enable them to become ASFA partners by the end of the present extension period.</p> <p>Activities</p> <p>Activity 3.1 Identification of biological indicators required for a common management of the Adriatic fisheries. Such indicators, together with socio-economic ones, should be made available to the policy makers and fishery managers together with management options concerning each individual stock or resource category.</p>	<p>Communication networks and fishery monitoring systems</p> <ul style="list-style-type: none"> Improvement of the AdriaMed Information Centre and AdriaMed Web Pages. Fishery statistics system established in Albania Monitoring and appraisal of fishery economic performance Publication and dissemination of Project Technical Documents and Occasional Papers Support to Croatian and Slovenian fishery statistics systems Establishment of national and regional scheme for routine monitoring of small pelagic fishery through the use of both fishery dependent and independent data Establishment of regional scheme for routine ground fish appraisal surveys Finalisation of the AdriaMed Trawl Data Bank Finalisation of the AdriaMed Social Survey Data Base <p>Research programmes and scientific activities</p> <ul style="list-style-type: none"> 1 international demersal trawl survey 1 international small pelagic stock assessment survey (eggs and larvae) 1 international parallel echosurvey calibration 1 small pelagic stock assessment workshop 1 demersal stock assessment planning workshop 2 technical multidisciplinary meetings on the experimental identification of Operational Units in the Adriatic Sea. Finalization of standardized handling, compiling and basic processing of demersal trawl survey data Participation of regional fishery scientists and managers in international meetings (e.g. GFCM-SAC) <p>--Elaboration of the scientific reference document on Pomo/Jabuka Pit fishing grounds</p> <ul style="list-style-type: none"> Training session on integration of data from parallel acoustic surveys Training course on small pelagic fish age determination <p>--Training for the AFSA cataloguing and indexing methodologies</p> <p>Fishery management strategies</p> <p>2 meetings for the identification of regionally concerted indicators for fisheries management</p>
Output 2		
Coordinated research programmes and scientific activities together with upgraded individual and institutional capabilities.		
Output 3		
Fishery management strategy and related technical measures identified.		

	<p>Activity 3.2 Strengthening the exchange of information on the state of individual stocks by updating and enlarging databases, training local staff and organising expert meetings</p> <p>Activity 3.3 Identification of ways and means to elaborate a pilot management schemes throughout consultative process involving interest parts (fishery administration; fishery associations; fishery scientists).</p>	<ul style="list-style-type: none"> - 1 international seminar on fishery management experiences worldwide (e.g. Mediterranean, Atlantic, Baltic, etc.) - 1 meeting on the application and analysis of the indicators referring to the sustainable development of the relationship between capture fisheries and aquaculture in the Adriatic Region. <p>Pilot approach through multilevel (administrations, research, resource users) consultation and participation to identify management options for small pelagic fishery and the Pomo/Jabuka fishing ground.</p>
<p>Output 4</p> <p>Fishery Administrators fully involved in the Project activities and continuously updated on the Project achievements and constraints.</p>	<p>Activities</p> <p>Activity 4.1 By the end of the present phase activities such as database updating and running should be the responsibility of the fishery Administrators in the member Countries. Sampling activities and evaluation surveys should be phased out and responsibility for the planning and carrying out of these activities should lay with the national institutes and Administrations. Training and institutional building should be continued and intensified. Particular attention should be given to the participation of fishery Administrators in the planning and implementation of the Project phasing-out process.</p> <p>Activity 4.2 Transitional consultative meetings should group high-level top administrators, research institute directors and representatives of the industries from the member countries. The Project results in the various fields of its activity should be discussed and options for common management policies prepared by the Project reviewed. Adjustment and revisions of priorities should also be agreed on by scientific, political and professional authorities represented at these meetings.</p> <p>Activity 4.3 A document on the fishery legislation in the Adriatic area including some aspects on the harmonisation will be prepared for consideration by the authorities concerned in the member countries in a consultation or <i>ad hoc</i> meeting.</p> <p>Activity 4.4 Continue to provide support to member Countries in drawing up registers of fishing vessels in line with the provisions of the "Agreement to Promote Compliance with the International Conservation and Management Measures by Fishing Vessels in the High Seas" and the "Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks".</p>	<p>Involvement of fisheries Administrations in the Project activities</p> <p>Semestral consultative meetings will be organised during the period October 2004 – October 2005 grouping fishery Administrators, representatives of research institutions and the fishery industry</p>

Annex F

List of Documents

FAO AdriaMed: CC/06/01	Provisional Agenda
FAO AdriaMed: CC/06/02	Report on Intersessional Activities
FAO AdriaMed: CC/06/03	Report on the Major Scientific Achievements of FAO AdriaMed
FAO AdriaMed: CC/06/info 1	Provisional list of participants
FAO AdriaMed: CC/06/info 2	Report of the Fifth Meeting of the AdriaMed Coordination Committee (GCP/RER/010/ITA/TD-10)
FAO AdriaMed: CC/06/info 3	Report of the AdriaMed Seminar on Fishing Capacity in the Adriatic Sea (GCP/RER/010/ITA/TD-13)
FAO AdriaMed: CC/06/info 4 GCP/RER/010/ITA-OP13	Sardine (<i>Sardina pilchardus</i> , Walb.) stock assessment in the Adriatic Sea: 1975-2003
FAO AdriaMed: CC/06/info 5 GCP/RER/010/ITA-OP14	Anchovy (<i>Engraulis encrasicolus</i> , L.) stock assessment in the Adriatic Sea: 1975-2003
FAO AdriaMed: CC/06/info 6 GCP/RER/010/ITA-OP15	AdriaMed Social Survey of Albanian Marine Fisheries-Preliminary Results
FAO AdriaMed: CC/06/info 7 GCP/RER/010/ITA-OP16	Aspects of Fish Markets in the Adriatic Sea
FAO AdriaMed: CC/06/info 8 GCP/RER/010/ITA-OP17	Genetic stock structure analysis revealed single population units in the shared stocks of Adriatic demersal species
FAO AdriaMed: CC/06/info 9	Report of AdriaMed Expert Consultation on the Interaction between Aquaculture and Capture Fisheries
FAO AdriaMed: CC/06/info 10	AdriaMed Review of Adriatic Sea Fisheries Legislation
FAO AdriaMed: CC/06/info 11	Report of the AdriaMed Technical Consultation on Small Scale Fisheries
FAO AdriaMed: CC/06/info 12	Report on AdriaMed ASFA activities
FAO AdriaMed: CC/06/info 13	List of Documents



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