



**GENERAL FISHERIES COMMISSION FOR
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COMMISSION GÉNÉRALE DES PÊCHES
POUR LA MÉDITERRANÉE**



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First GFCM Framework Programme (2013-2018) in support of Task Force Activities (FWP)

Programme SUMMARY

Duration:	5 years
Preliminary phase:	July 2011
Start date:	January 2013
Execution:	GFCM Secretariat
Participation:	Members of the Organization/International organizations/ stakeholders
Donor:	Multi donor support on a multi-annual basis

Abstract

The marine ecosystems of the Mediterranean and the Black Sea are of paramount importance for the industry, economy and food production of coastal States as well as for the protection of coastal zones from adverse climate conditions and the survival of many marine species. In order to respond to current stresses to these ecosystems, with particular reference to the need for a more rational exploitation of marine living resources and the aim of tackling emerging issues in both marine capture fisheries and aquaculture in the Mediterranean and the Black Sea, the General Fisheries Commission of the Mediterranean (hereafter called, **GFCM**) is planning to contribute to the pursuance of an increasingly integrated approach to maritime policy. To this end, a fully-encompassing view is essential for the Mediterranean and the Black Sea - including at sub-regional level - to shed light on the interaction between the regional marine environment and its living resources on one side, and the economies and societies of coastal States on the other. Given the complexity inherent in such a task, a medium-term and flexible timeframe should be envisaged for its execution. To this end, the GFCM is launching its first programme aimed at constructing a regional and holistic vision of the management of marine capture fisheries and aquaculture. This programme is a tool that will make the GFCM more functional, whilst providing adequate support to the activities launched under the GFCM Task Force aimed at modernizing the legal and institutional framework of the Commission.

The “*First GFCM Framework Programme (2013-2018) in support to Task Force Activities*”, hereafter called **FWP**, will represent the foundation of a continuous process ensuring that fisheries and aquaculture play a key role in the sustainable development of the Mediterranean and the Black Sea from an economic, a social and an environmental point of view. In fact, the FWP has been envisaged as a platform that will promote sustainable development and cooperation in the Mediterranean and the Black Sea through multi-annual and multi-donor arrangements. It will also strengthen intra-institutional cooperation and coordination in matters relating to marine capture fisheries and aquaculture at regional level through the implementation of a series of work packages that will involve partner organizations on the basis of Memoranda of Understanding adopted at the 36th Session of the GFCM (Marrakech, May 2012).

The proposed structure for the FWP is expected to facilitate, vis-à-vis GFCM Members, the integration of knowledge, skills and processes relating to marine capture fisheries and aquaculture. As various FAO Regional Projects in the GFCM Area are already providing technical assistance to GFCM Members, it is worth underlining that the work packages identified under the FWP will have to be regarded as complementary to ongoing activities. Therefore, the FWP has to be intended as a much needed tool to exploit commonalities and build upon synergies between, *inter alia*, the GFCM and (i) partner organizations that have a sectoral competence on the Mediterranean and the Black Sea/on fisheries and aquaculture related matters, and (ii) FAO Regional Projects. Thus, within the remit of the FWP there will be opportunities to optimize the use of resources and avoid duplications in accordance with the current need for an efficient environmental governance.

Against the background of the work of the GFCM Task Force established to modernize the institutional and legal framework of the Commission, the FWP will primarily pursue improved sustainable development and cooperation in the Mediterranean and the Black Sea. As it is known, both sustainable development and cooperation are critical fields of action at this moment when the international community has just renewed its political commitment in these fields during the “UN Conference on Sustainable Development” (Rio de Janeiro, June 2012, hereafter called **Rio + 20**). The FWP will in fact address at a regional level those priorities highlighted by the Rio + 20, including food

security, poverty alleviation, resource supply shortage, lack of intra-institutional coordination among existing organizations, combined impacts of human activities and climate change.

In addition to a general background where the rationale for intervention of the FWP is explained, including in relation to the importance of marine capture fisheries and aquaculture to foster sustainable development and cooperation in the Mediterranean and the Black Sea, this document presents a bulk of work programmes too. The work programmes that have been identified to operationalize the FWP correspond to the following five thematic areas:

- I) Improving governance and fisheries management in the GFCM Area consistent with an integrated maritime approach;
- II) Strengthening the capacity of national institutions in the field of data collection and supporting the establishment of regional databases and information systems;
- III) Promoting the role of aquaculture for food security and economic growth;
- IV) Enhancing the development of artisanal fisheries. Assessing the status of recreational fisheries;
- V) Supporting institutional and technical cooperation in the Southern Mediterranean and in the Black Sea.

Although each work programme will necessarily have to be developed autonomously from the others, the FWP will support a consolidated vision in the sense that the consideration of each work programme will feed into a wider process of elaboration of information. Because of this, the FWP will represent a platform where actions relating to marine capture fisheries and aquaculture can be encompassed to contribute to achieve focused results. Each work programme identified in the document will be addressed through medium-term work packages that will be launched in response to those priorities that have to be addressed. Together considered, these work packages will fit into the work programme they are related to and will in turn shape its content (in this document wide-ranging information is provided only for the work programme, i.e. general background, current issues, rationale for intervention and objective, whereas work packages are listed in the attached table and broken down under “Main proposed outputs for 2013-2018” and “Main proposed activities for the first and second year of the FWP”).

Aside from specific goals under each of the five work programmes, the FWP is, *inter alia*, expected to:

- promote the use of better scientific knowledge to support the establishment of long term management plans for the Mediterranean and Black Sea fisheries;
- strengthen the capacity of the national institutions in given GFCM sub-region (Southern Mediterranean and Black Sea) to allow for an effective implementation of conservation measures in place underpinning sustainable development and management of their fishing activities, including those carried out by small scale fisheries;
- contribute to incorporate the three pillars of sustainable development in the Mediterranean and the Black Sea, having regard both to the works of the Commission for Sustainable Development (which in 2014 is expected to consider oceans) and the Mediterranean Commission for Sustainable Development;
- account for most immediate priorities whilst carrying out short term work packages under identified work programmes for five years;
- facilitate the consolidation of results and the examination of progress by means of a review strategy that could also facilitate the elaboration of GFCM recommendations, national laws and joint policies with partner organizations.

1. BACKGROUND

1.1 Introduction

Consistent with article III (e) and (g) of the GFCM constitutive Agreement, endowing to the Commission the function and the responsibility of encouraging cooperative projects and promoting programmes, the GFCM Secretariat has launched its first FWP to effectively respond to the following internal and external needs, developments and challenges occurring outside and within the GFCM:

(i) marine capture fisheries is underperforming in both economic and social terms at a global level. Therefore efforts are now underway to develop more effective governance frameworks for better fisheries exploitation and conservation within the context of sustainable development, internationally and regionally. After the Rio + 20 follow up actions are now expected in many fora as recently underlined by the communication of the UN Secretary General “The Oceans Compact”. A green/blue economy and the enhancement of institutional mechanisms for sustainable development will likely be the main focus areas of these actions. Promoting sustainable development through the empowerment of international organizations performing functions relating to its pillars (i.e. economic, social and environmental) will be necessary;

(ii) the GFCM is in the process of improving and modernizing its own legal and institutional framework through a Task Force established in 2011 to follow up on the recommendations of a performance review. Despite the current commitment of the GFCM to marine capture fisheries and aquaculture, a necessity for developing a more integrated strategy in support of these sectors, consistent with principles and approaches enshrined in modern international fisheries instruments, exists;

(iii) among the priorities identified by the GFCM Task Force there is that of raising extra budgetary funds for the Commission to prove functional in discharging its duties. In this context the GFCM will have to support mechanisms that will allow GFCM Members to participate in the selection of means and modalities relating to, *inter alia*, technical assistance they might require. It is particularly in this connection, the FWP is expected to significantly contribute to render the GFCM more functional.

1.2 Sustainable Development and Cooperation in the Mediterranean and the Black Sea

The GFCM, being part of the UN system, is directly concerned by the outcomes of the Rio + 20. Suffices to recall that 20 years ago the UN Conference on Environment and Development, also held in Rio de Janeiro, led to the adoption of the 1995 UN Fish Stocks Agreement, an instrument that has revolutionized the functions of RFMOs. And two years after the adoption of the UN Fish Stocks Agreement, namely in 1997, the GFCM amended its constitutive Agreement so that the Commission could more adequately respond to emerging challenges to marine capture fisheries and aquaculture. Since the 1997 amendment new challenges, threats and opportunities have emerged thought. As a result, the GFCM has exponentially increased the range of its activities over the years in order to meet the demands of its 24 Members. There is hence a need to bring the GFCM legal and institutional framework in line with, *inter alia*, the activities that are performed by the Commission on annual basis as evolved over its practice. Coincidentally, this need is felt in a moment when the international community has renewed its commitment to sustainable development.

Sustainable development requires enhanced efforts by States and international organizations to reach (i) economic, (ii) social and (iii) environmental objectives. As far as the GFCM is concerned, and bearing in mind the outcomes of the Rio + 20, it could be affirmed that:

- (i) economic growth is expected to occur in the years to come in developing countries GFCM Members, particularly in emerging economies, and no reduction is expected in the current consumption and exploitation of marine living resources in the Mediterranean and the Black Sea. Therefore, there will be a need to ensure an increasingly sustainable use of these resources, including reducing the stress from marine capture fisheries through the further promotion of sustainable aquaculture;
- (ii) poverty eradication and food security are directly linked to the social pillar of sustainable development. Giving greater consideration to social issues in the remit of the GFCM Area would mean, *inter alia*, ensuring that marine capture fisheries and aquaculture lead to the creation of more work opportunities in the Mediterranean and the Black Sea, for both men and women. The importance of any such endeavor would be crucial in those GFCM Members where opportunities for employment could have a positive effect on reducing migration, contemporaneously contributing to reinforce social stability. To a certain extent, greater consideration of social issues would hence enable the Commission to better take into account the importance of the human component which defines the very complexity of the GFCM Area;
- (iii) environmental pressures and impacts of human activities on the Mediterranean and the Black Sea are likely to be exacerbated by many factors in the foreseeable future, including marine traffic (roughly 1/3 of global marine traffic occurs within the GFCM Area) and urbanization (half of the coastline of the Mediterranean Sea has become artificial). This situation does not concern solely the conservation of marine living resources through better regulation of GFCM fisheries and the aquaculture sector: issues such as climate change must be necessarily taken into account if the GFCM is to actively play a role in promoting globally-valid strategic adaptation and mitigation measures for both marine capture fisheries and aquaculture against the background of a changing climate and environment.

However, as recently recognized in Rio, the institutions working on the environment [and the GFCM falls within this category] are frequently described as the weakest of the three pillars of sustainable development. While the adoption of a large number of multilateral environmental agreements has resulted in broad coverage, it has arguably also spread thin the limited financial and human resources and resulted in inadequate coordination. In response, efforts are currently focused on bringing about greater coordination between multilateral environmental agreements through joint administrative support and thematic clustering. Arguably, for the GFCM to address these problems

two main actions will be required. The first is to bring about better environmental governance through the adoption of an integrated approach to marine capture fisheries and aquaculture within the context of a modernized regulatory framework. It is for this purpose that the GFCM Task Force was established, as already noted. In addition to providing a tool for modernizing the GFCM legal and institutional framework, the GFCM Task Force has also brought about a participatory, transparent and democratic approach that aims at ensuring a direct participation in the very process that will retrofit the mandate of GFCM to current challenges posed by marine capture fisheries and aquaculture.

The second action, complementary to the first, revolves around cooperation: in light of the diverse membership of the GFCM, sustainable development calls for actions that can bring GFCM Members closer to each other. This is also the case of marine capture fisheries and aquaculture as corroborated by the momentum for an integrated approach. It is thus foreseen that under the umbrella of the FWP, and as relevant within the remit of identified work, specific initiatives will be carried out by the GFCM together with FAO regional projects and other partner organizations, which include, but are not limited to, the United Nations Environment Programme-Mediterranean Action Plan (UNEP-MAP), the Black Sea Commission, the International Council for the Exploration of the Sea (ICES), the International Union for Conservation of Nature (IUCN), the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), EUROFISH, RAC-MED and the Mediterranean Marine Protected Areas Managers Network (MedPAN).

To foster its vision, and consistent with the respective goals and the actions of the UN and the FAO, the FWP will be therefore:

- (i) based on recent and future developments at international level, including the outcomes of the Rio + 20 and other relevant international/regional conferences/meetings, such as those relating to the Barcelona System;
- (ii) developed in accordance with provisions in relevant international and regional agreements, present and future GFCM recommendations/resolutions and decisions adopted by conferences/meetings of States Parties to relevant international organizations that could have a bearing on the works of the GFCM;
- (iii) fed by the specific needs of GFCM Members in order to be carried out within the GFCM objectives, mandate and programme of work, bearing in mind the ongoing process to improve and modernize the GFCM legal and institutional framework under the lead of the Task Force.

Clearly, the two entry points of the FWP to sustainable development and cooperation will be marine capture fisheries and aquaculture, which both play a crucial role in providing important sources of food and employment for coastal communities in the GFCM Area. Further indications are provided below for both under separate headings.

1.3 Marine capture fisheries

The Mediterranean and the Black Sea encompass an area of about 3 million km², roughly 0.5% of the world's surface. Since ancient times, marine capture fisheries have played a central role in the Mediterranean and the Black Sea where industrial, semi-industrial and artisanal exploitation patterns currently coexist. Marine capture fisheries in the GFCM Area depend on and are shaped by the specificities of the region, bordered by, *inter alia*, 22 Members. Due to its geographical position in the temperate zone of the Northern hemisphere, this region is characterized by a marked seasonal cycle, where extreme values of temperature are not usually found. From a biological standpoint, the said specificities include the absence of large mono-specific fish stocks - unlike wide areas of the open oceans - and the presence of a large variety of taxa, including benthic species and large pelagics. From the social and economic point of view, the annual production of roughly 1,5 million tonnes in the GFCM Area offers different employment opportunities to several hundreds of thousand people all

over the region. Different types of fishing gear are used: bottom trawls, gill nets, trammel nets, drags and bottom-longlines, etc.

In a situation characterized by the continuous decline in catches, also due to the incidence of illegal, unreported and unregulated (IUU) fishing, most production from marine capture fisheries in the GFCM Area is used for human consumption. Consequently, fish products are sold at relatively high prices, thus maintaining steady the economic importance of the sector in the Mediterranean and the Black Sea. A more rational exploitation of marine capture fisheries, including via the introduction of economic incentives to the sector, could result in the creation of more and stable employment opportunities with evident benefits for local economies. However, as the environment in the GFCM Area is menaced by increased levels of pollution from human made activities, any new policy to be developed should be as integrated and ecosystem driven as possible. This means that the conservation of marine ecosystems and the sustainable use of its resources have to be jointly taken into consideration.

At present, there seems to be significant scope to tackle existing economic, social and environmental constraints to marine capture fisheries in the GFCM Area, including at sub-regional level to better account for the specificities of the GFCM. At the same time, marine capture fisheries and aquaculture could positively contribute to the consideration of a number of existing economic, social and environmental issues that the region is facing (i.e. political instabilities, good governance, rebuilding of local economies, coastal degradation, etc.). With specific regard to marine capture fisheries, broad interventions could be envisaged in relation to the pillars of sustainable development, possibly by improving cooperation and promoting synergies with partner organizations and FAO Regional Projects.

The FWP would provide the GFCM with a unique opportunity to contribute to sustainable development as follows: from a social and economic perspective, the proposed work programmes under the FWP could significantly enhance economic growth and address unemployment, consistent *inter alia* with the Millennium Development Goals; from an environmental perspective on the other hand, the proposed work programmes under the FWP could enable the GFCM to play a more proactive role in the context of the Barcelona Convention and its Protocols. These broad interventions are however only two examples and do not aim at accounting for the detailed activities that could be planned as part of the work packages under each proposed work programme, consistent with the structure and the methodology of the FWP. Still, they reveal that scope would also exist, while undertaking the FWP, to provide assistance to GFCM Members in the elaboration of national legislation relating to marine capture fisheries with a view in particular of harmonizing, as appropriate, existing instruments with international law as well as with the GFCM body of law.

1.4 Aquaculture

The relevance of sustainable development in aquaculture within the GFCM Members has been stressed by the progressive decline of wild fish stocks as well as by the conflicting - both new and old - uses of marine spaces in the GFCM Area. Aquaculture should hence be considered within a broader strategic context, also because since the '70s world aquaculture has been the fastest growing livestock agricultural production sector, with an average annual growth rate of 8.8%. Aquaculture in marine and brackish environment in the Mediterranean and Black Sea is mainly characterized by the production of fish and mollusks. According to FishStat and SIPAM data, total aquaculture production in GFCM Members for marine and brackish aquaculture species (excluding aquatic plants, freshwater aquaculture and marine and brackish aquaculture from Atlantic areas), increased from about 460 000 tonnes in 1998 to around 1 180 000 tonnes in 2010, with an average annual growth rate of 11%. At present the aquaculture industry consists of various segments, depending on the rearing system, the farming environment and the cultured species and in the GFCM Area marine aquaculture production is mainly focused on high value species. This is one of the reasons that has drawn the attention in the past of States other than GFCM Members that launched projects on aquaculture in the GFCM Area.

Commonalities with the sister organization European Inland Fisheries and Aquaculture Advisory Commission would hence to be examined within the FWP.

Despite undoubted success, the industry has faced cycles of alternate positive and negative phases. The foreseen future for Mediterranean and Black Sea aquaculture is still in a positive trend with its great diversity in terms of technology, systems, production, and markets. This expansion however, has been raising several country-specific concerns encompassing economic, environmental and social aspects which could put at stake the sustainability of the sector. In this regard, and bearing in mind specific differences reflecting cultural, social, economical and legislative aspects which are peculiar to each GFCM sub-region, these concerns need to be properly addressed in order to respond effectively to the sustainability challenges of aquaculture in the GFCM Area. As it was recently noted in GFCM document GFCM:CAQ/VII/2011/2 *“increasing the understanding of the present situation of the aquaculture sector in the Mediterranean and Black Sea is essential to formulate recommendations for its sustainable development”*.

The main constraints to sustainable aquaculture in the GFCM Area have already been identified and include, but are not limited to, timely provision of statistics on marine aquaculture, market data availability, production, research and development issues, interaction of aquaculture with the environment and with the other activities in coastal zones and the need for harmonized national legislations. These and other constraints must all be addressed for the purpose of better sustainability. The ultimate challenge for the FWP is hence to generate innovations that will assure a reliable supply of animal protein and healthy food with specific nutritional values, while protecting the environment and improving the quality of life of farmers and fishermen. Consequently, the proposed work programme under the FWP will revolve around the principle of sustainability which has to be incorporated in all phases of research and development (i.e. from planning to reporting) in aquaculture. Dissemination of information (including environmental education related to sustainable aquaculture) for aquaculture practitioners, farmers, fishermen, producers' organizations and the general public will also be enhanced as the FWP intends to promote a balanced public opinion.

In order to improve harmonization between aquaculture development, environmental conservation and the economic need and requirements of national markets, the setting of appropriate standards will be required to ensure equal terms of competition within the GFCM Area. In this connection, and to promote the sustainability of Mediterranean and Black Sea aquaculture, a regional Ministerial Conference within the framework of the GFCM could be planned (tentatively for the year 2013 so to follow up on the Third Ministerial Conference for the “Sustainable Development of Fisheries in the Mediterranean” held in 2003 at Venice ten years thereafter, bearing in mind that at Venice aquaculture was not addressed). The FWP would be both instrumental to the organization of and directly linked to the outcomes of the said conference.

1.5 GFCM Framework Programme structure and methodology

Structure

The FWP will be run by the GFCM Secretariat. In light of its overarching approach, the FWP will be divided into the following five broad work programmes, each addressing specific topics relating to marine capture fisheries and aquaculture:

- 1) Improving governance and fisheries management in the GFCM Area consistent with an integrated maritime approach;
- 2) Strengthening the capacity of national institutions in the field of data collection and supporting the establishment of regional databases and information systems;
- 3) Promoting the role of aquaculture for food security and economic growth;

- 4) Enhancing the development of artisanal fisheries. Assessing the status of recreational fisheries;
- 5) Supporting institutional and technical cooperation in the Southern Mediterranean and in the Black Sea.

The proposed categorization is arbitrary and hence does not imply a different degree of importance in the listing of the identified work programmes. Conversely, as the FWP is meant to be an integrated tool, the work programmes above are listed in a manner that presents it as a flowing undertaking. For each work programme specific *ad hoc* and output oriented work packages are indicated in the attached table. These work packages will be implemented by the GFCM Secretariat in close collaboration with interested GFCM Members, institutional coordinators and donors that might express interest in them, partner organizations and FAO Regional Projects. The work packages under each work programme shall be comprised of different phases and will be operated on the short term so that, depending on the results obtained, it will be possible to define follow up activities or terminate the work package. Although they will be implemented starting from January 2013, a preliminary phase is envisaged to jump start the FWP. Depending on the agreements that will be concluded with donors for the implementation of selected work packages, ad hoc project documents will be adopted under the umbrella of the FWP for administrative and budgetary reasons. These documents, which will consist of an abstract, a background, a workplan and a budget, will be negotiated between the GFCM Secretariat and the donor concerned in light of the priorities of the latter. In any case, from a substantial point of view, they will reproduce and further elaborate upon, as appropriate, information contained herein in connection with each and every work programme.

Expected FWP Outputs and Outcomes

The overall goal of the FWP is to improve the sustainable development and regional cooperation in the Mediterranean and the Black Sea through marine capture fisheries and aquaculture. The outcomes and outputs of work programme will be eventually subject to assessment and review via an appropriate results-oriented monitoring and evaluation system. These outcomes and outputs are illustrated in the following table:

No	Work Programme	Outcome	Output
1	Improving governance and fisheries management in the GFCM Area consistent with an integrated maritime approach	Strengthened governance through an integrated maritime approach in the Mediterranean and the Black Sea	Marine capture fisheries and aquaculture are considered together with other human activities having an impact on them or being affected by them, including through the application of relevant policies (Ecosystem Approach to Fisheries and Ecosystem Approach to Aquaculture) and the use of existing tools (Marine Protected Areas and artificial reefs)
2	Strengthening the capacity of national institutions in the field of data collection and supporting the establishment of regional databases and information systems	Strengthened fisheries and aquaculture data and information mechanisms in support of regional fisheries governance by GFCM	An operational, region-wide, compatible and integrated data collection and information system for the Mediterranean and the Black Sea developed
3	Promoting the role of aquaculture for food security	Steady positive trend of aquaculture development in the	Potential of aquaculture to respond to the needs for food security and

No	Work Programme	Outcome	Output
	and economic growth	GFCM area	economic growth by its Members while being less reliant on marine capture fisheries acknowledged and supported
4	Enhancing the development of artisanal fisheries. Assessing the status of recreational fisheries	Better management and control of artisanal fisheries to support fisheries-dependent coastal communities relying on these resources	Strategic and programmatic interventions to improve the livelihoods and sustainability of artisanal coastal fishing communities implemented; fishermen's organizations strengthened and co-management regimes in place
5	Supporting institutional and technical cooperation in the Southern Mediterranean and in the Black Sea	Improved socio-economic conditions, coordinated and integrated management of research efforts, policy, use of resources and development of marine capture fisheries and aquaculture in the Southern Mediterranean and the Black Sea	Collaborative mechanisms among coastal States relating to marine capture fisheries and aquaculture in place; and operational and technical measures in support of these sectors in the Southern Mediterranean and the Black Sea adopted.

Funding and Human resources

The implementation of the FWP would require an estimated total budget up to 2 500 000 Euros per year which would cover administrative costs as well as the implementation of activities under each work programme. The FWP will be supported by *ad hoc* funding mechanisms (e.g. through multilateral trust-funds settings) and the funds will be equally distributed among each work programme. Work packages will be developed subject to the availability of resources needed for their implementation. The array of potential donors include GFCM Members, non Members, international organizations and private foundations/entities.

Duration

The FWP will be the long-term operational programme of the GFCM implemented in a series of 5-year cycles. Based on systemic assessment through a results-oriented monitoring and evaluation mechanism, the FWP will be reviewed and revised on a regular basis by the Commission in cooperation with the GFCM Members.

2. WORK PROGRAMMES

I. Improving governance and fisheries management in the GFCM Area consistent with an integrated maritime approach

General background

Due to increasing stresses on marine ecosystems and marine biodiversity (including on the high seas) resulting from many human activities, the need for better environmental governance has been repeatedly recognized at both international and regional level. This is justified by several reasons, including the emergence of the concept of marine spatial planning as a result of increasingly emerging conflicts in the use of marine spaces. In this very context policies such as the Ecosystem Approach to

Fisheries and management tools such as Marine Protected Areas and artificial reefs are regarded as key measures contributing to this demand for governance. This is because they are exceedingly useful for the recovery of overexploited and depleted stocks as well as for the conservation of marine ecosystems and biodiversity, while being helpful in zoning coastal areas at the same time, thus reducing conflicting interests among users. At the same time, opportunities exist to expand intra-institutional coordination with various partner organizations and with FAO Regional Projects. If made use of, these opportunities would contribute to a more efficient environmental governance of the GFCM Area by exploiting synergies and avoiding duplications.

Current issues

Pressures for human activities more lucrative than marine capture fisheries and aquaculture in coastal zone areas have become particularly acute in the Mediterranean and the Black Sea where the semi-enclosed nature of these seas requires the development of marine spatial planning for the whole region. As a result, and owing to the fact that a portion of the GFCM Area is high seas, legal considerations are to be accounted for when regulating activities occurring beyond national jurisdictions. This work programme could hence represent a much needed opportunity to integrate policies relating to marine capture fisheries and aquaculture with other relevant policies. One of the main issues to be addressed by this work programme is that of giving prominence to a sub-regional approach capable of considering tailored solutions, such as the adoption of multiannual management plans, in the GFCM Area.

Rationale for intervention

To improve governance in the GFCM Area the understanding of the relationships between environmental and socio-economic issues is necessary. This work programme should hence involve all main users of marine spaces in the GFCM Area, beginning with fishermen and aquaculture farmers. An efficient way to do this is to build upon the cooperative framework established between the GFCM and partner organizations on the basis of provisions in adopted Memoranda of Understanding. Similarly, ongoing cooperation with FAO Regional Projects is expected to be reinforced by this work programme. Better cooperation will enable, at a later stage, to distinguish users of marine spaces in the GFCM Area according to, *inter alia*, socio-economic interactions and environmental impacts. It is foreseen that a participatory approach will make this work programme legitimate to the extent that consensus-based decisions for management can be adopted under the work packages identified, including in connection with the elaboration of multiannual management plans. As a result, it will be possible to elicit better compliance with regulations in place.

Objective

The overall objective of this work programme is to support a goal-setting process to improve environmental governance through an integrated maritime approach while targeting relevant social, economic and environmental objectives involving stakeholders and local communities.

II. Strengthening the capacity of national institutions in the field of data collection and supporting the establishment of regional databases and information systems

General background

Within the remit of the GFCM, data have always been used as the basis for the elaboration of policies. For this very purpose, various types of data have been employed. In addition, sound policy-making in marine capture fisheries requires data on stocks, fleets, vessels activities, biology, economic, monitoring, control and surveillance, etc. Data and information are also necessary for the promotion of sustainable aquaculture, as well as to support GFCM Members in the study of sustainable aquaculture practices and guidelines to be developed. Whereas the GFCM has the

responsibility and competence to oversee the full spectrum of statistical tasks, including data collection, quality control, processing, analysis and management together with the dissemination of statistical reports and publications, its mandate to develop and manage regional databases and information systems has been challenged by the availability of data, due in particular to a north-south gap in the GFCM membership. The GFCM has already considered the elaboration of a strategy that could ultimately enable the establishment and the consolidation of a long-term data collection system in the GFCM Area. Nonetheless, clear mapping of the current GFCM Members' data/information provisions would be beneficial for the GFCM to enable the formulation of even more effective data collection frameworks for management measure formulation purposes. Consistent with the goal of sustainable development, technical assistance should be provided to GFCM Members, in particular developing country GFCM Members, to improve their interaction with the GFCM Secretariat and ensure both timely and correct submission of data (in terms of validity and integrity) and to facilitate decision-making processes at national and regional levels.

Current issues

Over the last few years, the GFCM Secretariat has built up an Information System for collecting, processing and managing data/information on marine capture fisheries and aquaculture aiming at providing Members with efficient tools in support of the rational management of resources. All the nine components of the existing GFCM data collection framework (namely SIPAM, Dolphin Fish, IUU, Red Coral, Registered Ports, STATLANT 37A, Task 1, VMS and Vessel Records, were designed, released, implemented and maintained in support of relevant GFCM decisions. At the 12th session of the Sub-Committees of SAC (Rome, 23-26 January 2012) it was recommended that the STATLANT 37A reporting form is used until the completion of Task 1, whose revision has also been agreed upon. With regard to FAO-STATLANT 47A (capture fisheries) on the other hand, the GFCM Secretariat has taken over the responsibilities related to its management and to the data processing from the FAO Fisheries and Aquaculture Department, Statistics and Information. The GFCM data collection system, as supplemented by data from direct research and surveys, has been hence conceived of as a pillar for management. However, although submission protocols for the different data reporting requirements have been already established, and they are to be used by GFCM Members to lodge data with the GFCM Secretariat, data submission originators often cope with diverse technological/human constraints. As a result, there is a lack of a unique, streamlined data submission workflow at present. This has led in most cases to the implementation of multiple data reporting formats to address these unbalanced factors. At the same time, the flow of information from GFCM Members to the GFCM Secretariat depends on the figures of deployed personnel at national level, as well as to their qualifications.

Rationale for intervention

Some GFCM Members have already requested technical assistance from the GFCM to overcome the difficulties that they are facing in complying with current data submission requirements. In addition, and with regard to VMS data, this work programme could facilitate the possible development of other tools that could assist GFCM Members in monitoring, control and carry out surveillance related activities, such as the use of the Global Positioning System. In light of this, and considering that the sources of data and information are the GFCM Members themselves, it is evident that such technical assistance could play a major role in the achievement of sustainable development. Consequently, support must be readily available, with all the human and financial resources necessary, and reasonably synchronized with national needs and regional requirements and commitments. At present, and more generally speaking, the statistical and data collection frameworks of the GFCM are well defined and a statistics/information systems unit within the GFCM Secretariat is already in place. Thus, this work programme focuses in providing technical assistance to GFCM Members, their decision makers and managers at both national and sub-regional levels. The rationale for such intervention is based on past experience by the GFCM Secretariat which actively participated in the implementation of FAO Regional Projects linked to data (e.g. CopeMed, MedFisis, EastMed, AdriaMed, MedSudMed). Consequently, this work programme will also concern data availability and

data collection related responsibilities, consistent with the objective of strengthening synergies with these FAO Regional Projects.

Objective

The overall objective of this work programme is to facilitate the development of a region-wide, compatible and integrated data collection and information system for the Mediterranean and the Black Sea based on enhanced and standardized national fishery statistics systems. During the first stage of the work programme, an assessment of the current situation in terms of (i) compliance level, (ii) difficulties faced by GFCM Members and (iii) availability of data at national level will be carried out. The information system would be developed at a subsequent stage.

III. Promoting the role of aquaculture for food security and economic growth

General background

Aquaculture has been on GFCM's agenda since its early years of activities until, to cope with the increasing importance of the sector, in 1995 the CAQ was established to enhance the sustainable development and responsible management of aquaculture. In order for GFCM to assist its Members in fully exploiting the potential of aquaculture, various issues will have to be addressed, including competition for the use of coastal zones, environmental impacts of aquaculture activities, lack of specific legislation frameworks, consumers' perception of product quality and market competition among GFCM Members and imported products. Because aquaculture represents a viable alternative to marine capture fisheries in providing sources of food, and to a greater extent a pillar of sustainable fisheries, the need for innovative tools for harmonizing, monitoring and guiding this sector are urgently needed.

Current issues

It is widely recognized that shared fishery resources, coastal aquaculture and other activities which commonly straddle the boundary between land and sea, need an integrated approach. The traditional lack of sectoral integration (i.e. planning and implementation) could lead, *inter alia*, to competition and conflicts over marine spaces and uses among concerned people in the coastal zone. In addition, aquaculture may be seriously affected by water quality and habitat degradation caused by other human activities and may affect the environment and the interests of other users as a result of its impacts (e.g. a poorly sited or planned aquaculture may result in negative feed-back, bad public image of its environmental impact and self pollution).

Rationale for intervention

Since the GFCM mandate in dealing with and managing marine capture fisheries and aquaculture gives the GFCM a comparative advantage to be a key stakeholder in the region, this work programme would be endowed with strong legitimacy and representation as features of all its work packages. At present, the GFCM is already implementing several regional marine capture fisheries and aquaculture projects through:

- i) indicators for Sustainable Development of Aquaculture and Guidelines for their use in the Mediterranean – InDAM;
- ii) development of site selection and carrying capacity guidelines for Mediterranean aquaculture within aquaculture appropriate areas – SHoCMed; and
- iii) Mediterranean coastal lagoons management: interactions between aquaculture and marine capture fisheries – LaMed (component 2)

These projects provide a convenient platform to build upon results achieved thus far. Still, there is room to make stakeholders' participation more effective. To this end work packages identified under

this work programme will focus on improving site selection by setting up of allocated zones for aquaculture, assessing aquaculture regulatory framework and licensing procedures, promoting national capacity building on marine aquaculture, assessing the production capacity and potential for improvement, promoting new farming technologies and species and harmonizing monitor of environmental data related to aquaculture.

Objective

The overall objective of this work programme is to support the development of sustainable aquaculture for food security and economic growth with particular reference to coastal communities. This work programme will be also linked to a tentative Ministerial Conference on aquaculture in the Mediterranean and Black Sea which could be scheduled for 2013. Within this overall objective, one of the goals to be implemented will be the protection of the environment and common heritage in coastal lagoons through sustainable aquaculture and rational fisheries management, with a wider use of the territory.

IV. Enhancing the development of artisanal fisheries. Assessing the status of recreational fisheries

General background

Although it is acknowledged that a common and universal accepted definition of artisanal fisheries - also called small-scale fisheries - is still to be agreed upon, both terms have been broadly used to refer to small, often underdeveloped, poor and marginalized fishing communities whose livelihood depends mainly on in-shore fishing activities and the use of small boats coupled with selective low-impact fishing gear. The importance of world artisanal fisheries cannot, however, be underestimated: with a production accounting for more than 45% of the total global catch and more than 100 million fishermen and workers employed, almost half of which are women, small-scale fisheries generate income and significantly contribute to food security and poverty alleviation. Besides, several recent GFCM studies showed that coastal artisanal fisheries support better sustainability and biodiversity conservation: by using more selective gear, artisanal fisheries tend to be more efficient and usually have less impact on resources with smaller by-catch compared to many industrial fisheries. This in turn fosters the recovery of marine stocks, whilst gear selectivity also provides an adaptive diversification of business, hence allowing small-scale fishermen to remain economically profitable over time. Within this context, and since the adoption of GFCM Resolution 15/1980/1 “on the definition of a regional strategy for the management of artisanal fisheries”, the GFCM has been implementing the following key principles related to artisanal fisheries:

- i) the definition of a strategy indicating in particular the role of artisanal fisheries management schemes;
- ii) the establishment of coastal land use plans by type of use;
- iii) the formulation of practical management schemes; and
- iv) the strengthening of links between fishermen, research scientists and administrators by establishing a multi disciplinary platform for discussion and decision.

Current issues

Marginalization and limited access to resources, exclusion of public policy processes and decision making, overfishing, lack of data and data collection capacity, as well as poverty and high vulnerability of fishing communities, are just a few examples of issues that sector is to deal with. In addition, artisanal fishing is still not properly taken into consideration during negotiating processes at a regional level and its interaction with other coastal activities in the same area requires special attention. That is why strengthening small-scale fisheries in the Mediterranean and the Black Sea remains a major challenge of uttermost importance to the GFCM. Issues relating to control in small

scale fishing are also topical in light of the phased development within GFCM of a centralized VMS system. Such a system will have to be modular in nature so that artisanal fishing is also taken into consideration. A different but yet similar issue is that of recreational fishing. In the Mediterranean and the Black Sea the impacts of recreational fishing activities is always overlooked. This should not be equated however to a lack of severity. On the contrary, studies carried out by the GFCM have already shown that recreational fishing has an impact that calls for sound regulation. The FWP intends to come to grips with this issue.

Rationale for intervention

As of the year of its establishment and within its objective of coordinating the efforts of GFCM Members for effective management of fisheries at the regional level, the GFCM has been continuously working on artisanal fisheries. Most notably, after the adoption of the FAO Code of Conduct for Responsible Fisheries in 1995, the GFCM has strived to play a crucial economic and social role within its area of competence, where roughly 45 000 small scale fishing boats currently offer different employment opportunities to several thousands of people. Priorities of GFCM Members will be reconsidered only if the importance of artisanal fisheries for food security and employment is properly recognized, whilst a multi-sectoral approach among fisheries agencies and better institutional cooperation could enhance the information available on small-scale fisheries and lay the foundation for sound management. In light of the need to formalize and improve the management of regional artisanal fisheries this work programme could represent an appropriate solution. More precisely, it would foster, *inter alia*, fishermen's organizations and contribute to consolidate the sustainable management of marine resources. This should be achieved through innovative co-management regimes which would give voice to the most marginalized and would stand as a middle ground between top-down and bottom-up approaches, bringing about the advantages of more participatory processes in fisheries planning and management.

Objective

The overall objective of this work programme would be to steer strategic and programmatic interventions to improve the livelihoods and sustainability of small-scale coastal fishing communities within the GFCM Area, including in support of fishermen's organizations and via the setting up of co-management regimes, while pursuing sustainability of the sector and conservation of biodiversity. For this very purpose, recreational fishing also deserves programmatic actions to be promoted within the FWP.

V. Supporting institutional and technical cooperation in the Southern Mediterranean and in the Black Sea

General background

As it is stated in the Preamble to the GFCM constitutive Agreement, GFCM Members have a common interest in the development and proper utilization of the marine living resources in the Mediterranean and the Black Sea, as well as in connecting waters. Arguably though, the degree of presence and intervention by the GFCM in the Southern Mediterranean and in the Black Sea need to be intensified for several reasons. As far as the Southern Mediterranean is concerned, the Greater Maghreb region and Egypt have recently experienced significant political instability. Consequently, assisting the Greater Maghreb region and Egypt in their efforts at momentous social and economic reforms is of paramount importance for the GFCM. Also, cooperation and support provided by the GFCM could contribute to address, *inter alia*, the migration issues which have been exacerbated by the said political instability. The present state of affairs could prove particularly favourable to the promotion of marine capture fisheries and aquaculture as sectors that can contribute to jobs creation in the Greater Maghreb region and Egypt. With regard to the Black Sea on the other hand, this marine area is used for many human activities ranging from fishing to mineral extraction and marine transport. Human associated

contamination is a huge threat to it to and consequently for the conservation of Black Sea fisheries as well as for the development of aquaculture in the region. The difficulties faced by the management of fisheries in particular, coupled with a general poor coastal zone management, have been hindering sustainable development in the Black Sea, with particular reference to the coastal communities.

Current issues

Bearing in mind the most immediate needs of the Southern Mediterranean and the Black Sea, special attention is *inter alia* needed to:

- i) reduce unemployment, especially for young people;
- ii) facilitate dialogues among all riparian States;
- iii) identifying priority research needs in the fields of fisheries science, fishing technology and coastal aquaculture;
- iv) improving and developing studies related to the stock assessment while strengthening capacity building;
- v) undertaking discussions on strategy options for marine capture fisheries and aquaculture;
- vi) improving interactions between GFCM activities with other activities carried out under relevant international organizations and FAO Regional Projects.

These issues could be all properly addressed through an integrated approach.

Rationale for intervention

In the Southern of Mediterranean, and as far as the GFCM is concerned, there is an established framework of cooperation aimed at fostering sub-regional approaches in fisheries research and management. Suffice to recall the “Coordination to Support Fisheries Management in the Western and Central Mediterranean” (CopeMed) project which has been contributing to the sustainability of marine capture fisheries for more than ten years, taking into consideration environmental, social and economic issues. The importance of cooperation was also recognized within GFCM in connection with the Black Sea: in the 2008 document prepared by the GFCM “Strengthening Cooperation in the Black Sea”, as well as in the 2010 document “Status of GFCM actions on the Black Sea”, some rationale for intervention was provided by referring to the training of field staff, fisheries Information System and statistics (port offices, VMS and information centre) and legal issues. Ultimately, an *ad hoc* Working Group for the Black Sea, which held its first meeting in January 2012, has been set up to zero in on the Black Sea. In light of relevant past experiences this work programme will, to begin with, expand upon those areas of intervention that were already identified and initiate work packages in their support which are complementary to other work packages under the preceding four work programmes.

Objective

The overall objective of this work programme is to evaluate and then to address the needs and expectations relating to the sustainable development of marine capture fisheries and aquaculture in the Southern Mediterranean and the Black Sea by supporting institutional and technical cooperation. As the objective is to foster cooperation, all initiatives to underpin such cooperation will be promoted, including with partner organizations and FAO Regional Projects. Other GFCM sub-regions could be also addressed, as appropriate, consistent with the approach of this work programme.

First GFCM Framework Programme (2013-2018) (FWP)

**SUMMARY TABLE WITH “MAIN PROPOSED ACTIONS”
AND “MAIN ACTIVITIES FOR THE FIRST AND SECOND YEAR OF THE FWP”**

Work Programmes	Main proposed outputs for 2013- 2018	Main proposed activities for the first and second year of the FWP
I. Improving governance and fisheries management in the GFCM Area consistent with an integrated maritime approach	<i>A. Development of multiannual management plans in GFCM sub-regions</i>	1. Organization of sub-regional consultations to define a strategy and to design associated protocols to implement the generic management plan Guidelines provided at the 36 th Session of the GFCM in selected case studies within three specific areas (Black sea, Alborán Sea and Straits of Sicily).
		2. Undertake case studies on the implementation of Ecosystem Approach to Fisheries to demonstrate its relevance in multiannual management plans
		3. Elaborating upon possible scenarios for multiannual management plans in GFCM sub-regions
		4. Institutionalization of the sub-regional approach in the GFCM framework to facilitate the development of multiannual management plans
	<i>B. Improving institutional capacity for implementing and monitoring multiannual management plans in GFCM sub-regions</i>	1. Identification of gaps and needs for capacity building, based on the outcomes of I.A
		2. Analysis of the current constrains and opportunities for strengthening participatory approaches to fisheries management, including the establishment of a network of fisheries management practitioners
		3. Assist Members in the implementation of multiannual management plans
	<i>C. Modernization of GFCM legal and institutional framework</i>	1. Preparation of a revised text of the GFCM Agreement, GFCM Rules of Procedure and GFCM Financial Regulations based on the outcomes of the Task Force
		2. Organize an Extraordinary Session of the Commission

Work Programmes	Main proposed outputs for 2013- 2018	Main proposed activities for the first and second year of the FWP
	<i>D. Support to the stock assessment of shared stocks in GFCM sub-regions</i>	1. Building regional databases on relevant parameters to carry out stock assessment
		2. Training in direct and indirect methods for stock assessment, including in data poor situations
		3. Standardization of stock assessment methodologies
		4. Undertake case studies to assess shared stocks
	<i>E. Evaluation of the extent and impacts of IUU fishing and elaboration of strategies to fight it</i>	1. Organize regional workshops to define common methodologies and strategies relating to the extent and associated impacts of IUU fishing by Members and non Members
		2. Based on methodologies and strategies emanating from activity 1 proceed with proper assessment of IUU fishing activities
		3. Elaborate appropriate strategies to fight IUU fishing activities including traceability and market related measures
	<i>F. Development of institutional and technical capacity for Monitoring, Control and Surveillance (MCS)</i>	1. Undertake an analysis of the status at national level with regard to VMS and other MCS tools available to track down vessels engaged in fishing
		2. Provide technical assistance for the even implementation of VMS and other MCS tools available
		3. Develop case studies to address main issues of MCS in artisanal and small scale fisheries
	<i>G. Fostering a integrated maritime approach in the Mediterranean and the Black Sea</i>	1. To carry out socio-economic analysis, taking into consideration the precautionary and ecosystem approaches, to widen the scope of scientific advice at sub-regional level
		2. Develop a Decision Support System based on the results of activity 1
		3. Testing the Decision Support System in activity 2 through the evaluation of integrated management strategies in GFCM sub-regions
	<i>H. Strengthening the existing governance framework</i>	1. Operationalizing Memoranda of Understanding (MoU) with partner organizations and developing synergies with FAO Regional Projects
		2. Launching joint and cross-sectoral initiatives together with the actors identified in activities 1 and 3
		3. Identifying new partners and entering into MoU with them

Work Programmes	Main proposed outputs for 2013- 2018	Main proposed activities for the first and second year of the FWP
	<i>I. Identification and preservation of Vulnerable Marine Ecosystems (VMEs) in the GFCM Area</i>	1. Compilation of relevant information to identify VMEs in the GFCM Area consistent with relevant UN General Assembly resolutions on sustainable fisheries
		2. Organization of workshop(s) to define VMEs, based on the best available scientific information and using existing agreed criteria
		3. Plan strategies for the preservation of VMEs
	<i>J. Establishment and monitoring of Marine Protected Areas (MPAs)</i>	1. Conduct a comparative study on the uses of MPAs with a view to benefit from their multipurpose character in marine biodiversity conservation
		2. Provide guidance and technical assistance on the establishment and implementation of MPAs
		3. Taking into account the outcomes of activities 1 and 2, elaborate plans for the creation of new ARs in the context of an integrated maritime approach (e.g. the feasibility of creating ARs in marine areas where marine renewable technologies are installed)
	<i>K. Uses of Artificial Reefs (ARs) to protect marine ecosystems and their resources</i>	1. Mapping ARs in the GFCM Area and compare existing experiences at national level on their uses
		2. Assessment, through experimental studies, of the uses of ARs, including for the recovery and the sustainability of marine species
		3. Taking into account the outcomes of activities 1 and 2, elaborate plans for the creation of new ARs in the context of an integrated maritime approach (e.g. the feasibility of creating ARs in marine areas where marine renewable technologies are installed)

Work Programmes	Main proposed outputs for 2013- 2018	Main proposed activities for the first and second year of the FWP
II. Strengthening the capacity of national institutions in the field of data collection and supporting the establishment of regional databases and information systems	<i>A. Critical assessment of the GFCM data collection framework</i>	1. Assessment of GFCM data requirements and data submission compliance among GFCM Members
		2. Field visits to National Institutions in charge of Statistical Systems
		3. Elaboration of preliminary work programs to assist GFCM Members in overcoming the difficulties upon request
		4. Consultancies for reviewing GFCM data submission framework, including Task 1
		5. Workshop to validate GFCM data submission framework and to define a Plan of Action to improve member countries' capacities in collecting and submitting relevant fishery data
	<i>B. Ensure mechanisms at national level for data quality control and regularity in collection and submission of fishery data</i>	1. Ensure that each GFCM Members has a statistical and data processing unit which must get involved in processes relating to data reporting
		2. Compilation of information on the fishing fleet structure, composition and national fleet management plans in the GFCM area of competence
		2. Provide technical assistance to GFCM Members upon request on the registry of fishing vessels and on the subsequent catch assessment surveys including by-catch and effort data
	<i>C. Enhance the data processing and analytical power of GFCM secretariat to enable the production and dissemination of periodical publications of the status of fisheries in the Mediterranean and the Black Sea</i>	1. Purchase the most appropriate cost-effective available tools in the fields of Statistical Packages, Decision Support Systems (DSS) and Geographic Information Systems (GIS)
		2. Set up a continuous training and familiarizing program for the staff and country experts

Work Programmes	<i>Main proposed outputs for 2013- 2018</i>	Main proposed activities for the first and second year of the FWP
III. Promoting the role of aquaculture for food security and economic growth	<i>A. Supporting the establishment of Allocation Zones for Aquaculture (AZAs)</i>	1. Compilation on legislations on aquaculture zoning and licensing procedures and identification of gaps
		2. Provide technical assistance to identify suitable zones for the establishment of AZAs
		3. Trainings on the use of Geographic Information System (GIS) and of Environmental Impact Assessment (EIA) for the establishment of AZAs
		4. Pilot studies for the establishment of AZAs
	<i>B. Assessment of the current status and trend of farms and of marketing capability of aquaculture products</i>	1. Carry out a regional census of farms to assess production and production capacity, including main target markets and market segments, with particular reference to offshore aquaculture
		2. Workshop on organizational capacity and role of aquaculture POs and farmers related issues
	<i>C. Enhancing regional and national capacity on quality certification and traceability of aquaculture products</i>	1. Review of legislation and present status on aquaculture certification, food safety and quality product
		2. Workshop on aquaculture certification, traceability and ecolabelling
		3. Technical Assistance to members on aquaculture certification, traceability and ecolabelling

Work Programmes	Main proposed outputs for 2013- 2018	Main proposed activities for the first and second year of the FWP
	<i>D. Improving capacity in veterinary, disease control and biosecurity for aquaculture production</i>	1. Carry out a regional survey to assess veterinary and disease prevention systems, biosecurity and aquatic animal health control
		2. Workshop on veterinary and disease control, biosecurity, aquatic animal health and use of drugs and vaccines
		3. Preparation of guidelines and technical documents to prevent diseases, minimize the risks of pathogen spread and genetic loss, mitigate the impact of invasive alien species, and promote marine restocking programmes
		4. Technical Assistance to members on biosecurity assessments, surveillance, diagnostics, early warning systems and emergency
		5. Preparation of a regional monitoring scheme to control and prevent diseases
	<i>E. Enhancing traditional extensive aquaculture management in coastal lagoons</i>	1. Pilot studies on sustainable management of traditional extensive aquaculture in coastal lagoons
		2. Establishment of a reliable monitoring and data collection system of aquaculture and capture fisheries production from coastal lagoons
		3. Develop management guidelines for coastal lagoons based on models relying on traditional knowledge, biodiversity protection and ecosystem conservation
	<i>F. High Level Conference on Aquaculture (2014)</i>	1. Preparation of a “road map for the organisation of the Conference and related arrangements
		2. Drafting of relevant documents in support to the Conference
		3. Finalization and dissemination of the proceedings of the Conference

Work Programmes	Main proposed outputs for 2013- 2018	Main proposed activities for the first and second year of the FWP
IV. Enhancing the development of artisanal fisheries. Assessing the status of recreational fisheries	<i>A. Assessment of current status and trends in technical and socio-economic conditions of artisanal fisheries in the GFCM Area</i>	1. Design of a survey and methodology for the inventory of the artisanal fishing communities in the GFCM Area
		2. Implementation of the survey
		3. Building up of a database of artisanal fishery communities
	<i>B. Improving knowledge and capacity for securing artisanal fisheries livelihoods and the sustainable use of resources in the context of an integrated maritime approach</i>	1. Carrying out of a regional comparative analysis of the conditions of artisanal fisheries, based on the results of the inventory
		2. Workshop to define a research programme and analytical framework for the execution of detailed case studies on the factors affecting the sustainability of artisanal fisheries
		3. Implementation of case studies
	<i>C. Building capacity for mainstreaming artisanal fisheries co-management for securing artisanal fisheries livelihoods</i>	1. Inventory of co-management experiences and practices in the GFCM Area
		2. Review of national legislations to identify current constraints to enable fisheries co-management
		3. SWOT analysis of the established co-management regimes
		4. Implementation of training courses and follow-up activities addressing the identified needs and/or weaknesses

Work Programmes	Main proposed outputs for 2013- 2018	Main proposed activities for the first and second year of the FWP
	<i>D. Assessment of the overall value of recreational fisheries and main socio-economic issues of concern for their regulation</i>	1. Design of a regional survey to characterize the recreational fisheries activities
		2. Implementation of the survey
		3. Implementation of case studies to evaluate the socio-economic impacts of recreational fisheries
	<i>E. Providing a regulatory framework for recreational fisheries and a harmonized protocol for monitoring and data reporting</i>	1. Review of national legal frameworks, building on and expanding the work previously done by GFCM and partner organizations
		2. Identification of regulatory gaps and needs
		3. Drafting of a Code of Practice for responsible recreational fisheries in the GFCM Area
		4. Development of a common protocol with minimum data reporting requirements on recreational fisheries by Member Countries in support of a regional database

Work Programmes	Main proposed outputs for 2013- 2018	Main proposed activities for the first and second year of the FWP
V. Supporting institutional and technical cooperation in the Southern Mediterranean and in the Black Sea¹	<i>A. Contributing to sustainable development through fisheries and aquaculture</i>	1. Identifying priority research needs in the fields of fisheries science, fishing technology and coastal aquaculture
		2. Reflecting relevant socio-economic considerations (unemployment, food scarcity, migration, etc.) into policies linked to fisheries and aquaculture
		3. Promoting, through the facilitation of dialogue among Members and in relation to fisheries and aquaculture, ad hoc strategies to bridge the gap among the Southern Mediterranean and the Black Sea and other GFCM sub-regions
	<i>B. Building capacity in the Southern Mediterranean and the Black Sea in the fisheries and aquaculture sectors</i>	1. Organizing training at national level for officers operating in the fisheries and aquaculture sectors in identified areas
		2. Facilitating the transfer of technology, where needed, to improve the efficiency in fisheries and aquaculture activities
	<i>C. Continued integration of policies developed at international and regional level into national legislations of Southern Mediterranean and Black Sea Members</i>	1. Support the development of adequate legal frameworks at national level
		2. Provide assistance with regard to relevant developments occurring at international and regional level to improve sustainable development through fisheries and aquaculture
	<i>D. Facilitating the even implementation of GFCM recommendations</i>	1. Conduct a survey to identify gaps relating to the implementation of GFCM recommendations
		2. Organize meetings to define strategies to address identified gaps
		3. Elaborate adequate actions to assist Members in implementing selected GFCM recommendations

¹ Under this work programme - due to its geographical rather than thematic nature - all “Main proposed actions for 2013-2018” and “Main proposed activities for the first year of the FWP” of work programmes I to IV will be developed, as appropriate, in addition to the specific actions and activities presented herewith.