

GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN



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

Start date: January 2013

Execution: GFCM Secretariat

Participation: GFCM Members

Total cost: 2,5 millions € per year

Donor: Multi donor support on a multi-annual basis

EXECUTIVE SUMMARY

Background

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 (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 GFCM Framework Programme

The purpose of this document is to present the "First GFCM Framework Programme (2013-2018) in support to Task Force Activities", hereafter called FWP. The 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 potentially involve partner organizations.

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 to be 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, 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 governance.

Against the background of the work of the Task Force aimed at modernizing the institutional and legal framework of the Commission, the FWP will primarily pursue better 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 is preparing the work of the "UN Conference on Sustainable Development" that will be held in Rio de Janeiro from 4 to 6 June 2012 (Rio + 20). This conference is expected to result in renewed political commitment to the economic, social and environmental pillars of sustainable development and the GFCM therefore attaches great importance to it. Hence, while pursuing these two overarching objectives within the remit of the Mediterranean and the Black Sea, the FWP will address at a regional level those priorities which are relevant in the context of 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 on the Mediterranean and the Black Sea, etc.

FWP structure and methodology

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:

- 1) supporting institutional and technical cooperation in the Southern Mediterranean and in the Black Sea;
- 2) strengthening the capacity of national institutions in the field of data collection and supporting the establishment of regional databases and information systems;
- 3) enhancing the development of artisanal fisheries in the GFCM Area;
- 4) promoting the role of aquaculture for food security and economic growth;
- 5) improving governance in the GFCM Area through an integrated maritime approach.

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 carried out by GFCM Members 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 GFCM Members want 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) since the choice of the work packages to be launched under the work programmes will rest with GFCM Members, in consultation with the GFCM Secretariat).

Aside from specific and expected outputs and outcomes for each of the five work programmes, the FWP is, *inter alia*, expected to:

- promote the use of best 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 an effective implementation of conservation measures in place to ensure sustainable development and management of their fishing activities, including those carried out by small scale fisheries;
- contribute to incorporate the 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 the priorities of GFCM Members whilst carrying out multi-annual work packages under identified work programmes;
- 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 relevant organizations through a five-year time frame.

The way forward

For the past sixty years, GFCM has been promoting partnerships that established effective management cooperation for marine capture fisheries and aquaculture in the Mediterranean and the Black Sea. The GFCM is now moving towards a new legal and institutional framework thanks to its *ad hoc* Task Force. The FWP has consequently been prepared in support of the activities that are linked to the GFCM Task Force which will require action from the Commission in many respects to bring about a much needed modernization of the GFCM.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACCOBAMS Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea an Contiguous Atlantic Area				
AdriaMed	Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea			
AZA	Allocated Zone for Aquaculture			
CAF	F Committee on Administration and Finance (of GFCM)			
CAQ	Committee on Aquaculture (of GFCM)			
CCRF	Code of Conduct for Responsible Fisheries			
CoC	Compliance Committee (of GFCM)			
COFI	FAO Committee on Fisheries			
CopeMed	Coordination to Support Fisheries Management in the Western and Central			
EAA Ecosystem Approach to Aquaculture				
EAF Ecosystem Approach to Fisheries				
EastMed Scientific and Institutional Cooperation to Support Responsible Fisheries in Mediterranean				
EQS	Environmental Quality Standard			
EU	European Union			
FAO	Food and Agriculture Organization of the United Nations			
FWP	GFCM Framework Programme			
GFCM General Fisheries Commission for the Mediterranean				
GPS	Global Positioning System			
ICZM Integrated Coastal Zone Management				
IS	Information System			
IUCN	International Union for Conservation of Nature			
IUU	Illegal, Unreported and Unregulated fishing			
LME	Large Marine Ecosystem			
MAP	Mediterranean Action Plan			
MCS	Monitoring Control and Surveillance			
MedFisis	Fishery Statistics and Information System in the Mediterranean			
MedSudMed	Assessment and Monitoring of the Fishery Resources and the Ecosystems in the Straits of Sicily			
MPA	Marine Protected Area			
RFMO	Regional Fisheries Management Organization			
SIPAM	Information System for the Promotion of Aquaculture			
TACs	Total Allowable Catches			
UN	United Nations			
UNEP	United Nations Environment Programme			
VMS	Vessel Monitoring System			

1. INTRODUCTION

1.1 Background

Consistent with article III (e) and (g) of the General Fisheries Commission for the Mediterranean (GFCM) constitutive Agreement, endowing to the Commission the function and the responsibility of encouraging cooperative projects and promoting programmes, the GFCM Secretariat intends to launch its first GFCM Framework Programme (FWP). Such an initiative aims at effectively responding 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. It suffices to recall, in this regard, that the international community will gather in June 2012 at the United Nations (UN) Conference on Sustainable Development that will take place in Rio de Janeiro (Rio + 20). A green/blue economy and the enhancement of institutional mechanisms for sustainable development will be the main focus areas of Rio + 20 to the extent that the conference is expected to have major implications for fisheries. Rio + 20 will not only build upon the outcomes of previous UN conferences that focused on sustainable development, but more importantly will offer a unique opportunity to secure renewed political commitment, including regarding the conservation of marine living resources and their sustainable use. More precisely, Rio + 20 will inter alia look into present implementation gaps in international law as well as into emerging challenges that might require the development of new regulatory frameworks and policies, including at regional level. In doing so, the conference will also provide indications to strengthen the legal and institutional framework for sustainable development so that existing international organizations performing functions relating to its pillars (i.e. economic, social and environmental) will be better placed in promoting green/blue economy and alleviating poverty;
- (ii) the GFCM is in the process of improving and modernizing its own legal and institutional framework through its ad hoc Task Force which was established to follow up on the recommendations made by the Panel of experts that carried out the review of GFCM performances. 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 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 further enable the process of modernization of its legal and institutional framework in a manner that will allow GFCM Members to participate in the selection of means and modalities relating to the technical assistance they might require. In this connection, the FWP is expected to significantly contribute to render the GFCM more functional.

Under the umbrella of the FWP, the GFCM Secretariat - bearing in mind ongoing relevant developments, needs and challenges mentioned above - will endeavor to involve Members from the very beginning of the formulation of a set of work programmes and the work packages for their implementation.

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

The GFCM, being part of the UN system, is directly concerned both with the preparatory works for Rio + 20 and by the conference itself. The outcomes of Rio + 20 in particular are expected to have a significant bearing on the GFCM in light of recent history: 20 years ago the UN Conference on Environment and Development, also held in Rio de Janeiro, decided to convene a two-year round of consultations that resulted in the adoption of the 1995 UN Fish Stocks Agreement, an instrument that has revolutionized the functions of Regional Fisheries Management Organizations (RFMOs). Two years after the adoption of the UN Fish Stocks Agreement 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. Thus, there is already a relevant precedent whereby the GFCM acted on the outcomes of a UN conference relating to sustainable development to strengthen its legal and institutional framework.

However, since the 1997 amendment of the GFCM constitutive agreement, new challenges, threats and opportunities have emerged. 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. Such a task is made particularly difficult by the fact that, unlike a number of other RFMOs, the GFCM is to facilitate cooperation between industrialized and developing States within its membership, trying to ensure the even implementation of its adopted recommendations and resolutions. Thus, there is presently a need to bring - through the Task Force - the GFCM legal and institutional framework in line with, *inter alia*, the activities that are performed by the Commission on annual basis. At the same time though, there is also a need to back up the intersessional work of the GFCM with a functional and flexible framework in support of the Task Force and, consequently, of the activities that are performed by the Commission on annual basis. Without such a framework the GFCM might not be able to fully contribute to sustainable development through marine capture fisheries and aquaculture.

Sustainable development requires enhanced commitment by States and international organizations to (i) economic, (ii) social and (iii) environmental objectives. With regard to the GFCM the incidence of this commitment, which justifies the launching of the FWP, could be cursorily described as follows:

- (i) economic growth is expected to occur in the years to come in developing countries 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 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 the report by the UN Secretary General (UN doc. A/Conf.216/PC/7 of 22/12/2010): "the institutions for the environment [and the GFCM falls within this category] are frequently described as the weakest of the three pillars. 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 also focused on bringing about greater coordination between multilateral environmental agreements through joint administrative support and thematic clustering." Arguably, for the GFCM to address the problems identified in the above excerpt of the report of the UN Secretary General - and consequently enhance the focus on the pillars of sustainable development - two actions will be required. The first is the need for better governance in adopting an integrated approach to marine capture fisheries and aquaculture and a modernized and harmonized regulatory framework. It is for this purpose that the Task Force was established, as already noted. In addition to providing a tool for modernizing the GFCM legal and institutional framework, the 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. Consequently, the undertaking of the FWP is to be regarded as the chosen complementary initiative to the Task Force: carried out in parallel to its works, the FWP could provide a sought-after practical solution to significantly empower the Commission in promoting sustainable development and cooperation in its area of competence. In light of the commonalities between the Task Force and the FWP, the same approach that characterizes the works of the former should be also applied to the latter. In this connection, participation by all GFCM relevant actors could be made inter alia easier by the use of the existing electronic online platform throughout the envisaged medium term (i.e. 2013-2018) for the FWP. It is also 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 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 and the Mediterranean Marine Protected Areas Managers Network (MedPAN).

With regard to the vision of the FWP it is proposed that it will have to be necessarily informed by the pillars of sustainable development so to be forward-looking. While relying on the importance of marine capture fisheries and aquaculture for the Mediterranean and the Black Sea, the FWP will thus not overlook the need for strategies to promote employment, growth, food security and conservation of marine living resources and biodiversity. 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 preparatory works and the outcomes of 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. Several different types of fishing gear are used: bottom trawls, gill nets, trammel nets, drags and bottom-longlines, etc.

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.

In a situation characterized by the continuous decline in catches, also due to 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. At the same time, marine capture fisheries and aquaculture could contribute to address 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 other international organizations that have a competence over the Mediterranean and the Black Sea.

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 (the Barcelona System). 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 to be identified 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 Members in

the elaboration of national legislation relating to marine capture fisheries with a view in particular of harmonizing, as appropriate, existing instruments 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 areas 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 of Members 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.

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 Mediterranean and Black Sea 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 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. In this respect, the FWP will be committed to further sustainability in aquaculture and, in turn, to sustainable development. Consequently, the proposed work programmes under the FWP which are relevant for aquaculture, will revolve around the principle of sustainability. The broad intervention will thus be that of incorporating sustainability in all phases of research and development (i.e. from planning to reporting) in aquaculture. Work packages to be identified on the other hand, should address cross-commodity, multidisciplinary and multisectoral problems, aquaculture planning and coastal site selection within Allocated Zone for Aquaculture (AZA), coastal wetlands, sustainable indicators, monitoring of environmental quality standards (EQS), marketing including promotion of aquaculture certification and ecolabelling to foster export-oriented productions, animal health, food safety, legislation and policy.

This implies that, in undertaking the FWP, the GFCM will have to strengthen cooperation with institutions at different levels in order to effectively distribute the work and avoid duplications. 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 is 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 directly linked to the outcomes of the said conference to the extent that it would attempt to transpose them into practical actions within the framework of work packages to be identified, for that very purpose.

1.5 GFCM Framework Programme structure and methodology

Structure

The FWP is expected to support GFCM activities relating to the work of the Task Force as well as emerging national and regional issues of relevance. Once approved by the Commission, 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) supporting institutional and technical cooperation in the Southern Mediterranean and in the Black Sea;
- 2) strengthening the capacity of national institutions in the field of data collection and supporting the establishment of regional databases and information systems;
- 3) enhancing the development of artisanal fisheries in the GFCM Area;
- 4) promoting the role of aquaculture for food security and economic growth;
- 5) improving governance in the GFCM Area through an integrated maritime approach.

The proposed categorization is arbitrary and hence does not imply a different degree of importance in the listing of the identified work programmes. As the FWP is meant to be an integrated tool, the work programmes above are listed in a manner that presents it as flowing. More generally speaking, for each work programme specific *ad hoc* and output oriented work packages will be defined. These work packages will be identified and implemented by the GFCM Secretariat, in close collaboration with interested GFCM Members, institutional coordinators and donors that might express interest in them. The work packages under each work programme shall be comprised of two different phases: the first phase to implement main activities and the second to consolidate achievements.

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 outputs of the work packages and, more in general, the achievements of each work programme will be eventually subject to assessment and review via an appropriate results-oriented monitoring and evaluation system. The expected outcomes and specific outputs of the five work programmes are illustrated in the following table:

No	Work Programme	Outcome	Output
1	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.
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	Enhancing the development of artisanal fisheries in the GFCM Area	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
4	Promoting the role of aquaculture for food security and economic growth	Steady positive trend of aquaculture development in the GFCM area	Potential of aquaculture to respond to the needs for food security and economic growth by its Members while being less reliant on marine capture fisheries acknowledged and supported
5	Improving governance in the GFCM Area through 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)

Funding and Human resources

The implementation of the FWP would require an estimated total budget of 2 500 000 Euros per year which would cover administrative costs as well as the implementation of activities under each work package. The FWP will be supported by *ad hoc* funding mechanisms (e.g. through multilateral trustfunds settings) and the funds will be equally distributed among each work programme. Each work package will be developed through an outline containing the necessary information pertaining to the operationalization of the work package including, but not limited to, the activities and the resource persons that will be needed for its implementation and a budget breakdown.

Duration

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

2. WORK PROGRAMMES

I. 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, 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 though to the extent that environmental issues and the conservation of fisheries as well as the development of aquaculture are issues of great interest for the Black Sea. The difficulties faced by the management of fisheries in particular, coupled with a general poor coastal zone management, have been hindering the sustainable development of the region 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;
- vii) integrate women more into economic life.

These issues could be 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, vessel monitoring system and information centre) and legal issues. In light of relevant past experiences the work programme would, to begin with, expand upon those areas of intervention that were already identified and initiate work packages in their support.

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 competent international organizations and FAO Regional Projects. The pillars of sustainable development imply that the pursuance of the stated objective will adequately reflect social, economic and environmental considerations which are of paramount importance in tackling existing issues relating to the Southern Mediterranean and the Black Sea. Other GFCM sub-regions could be also addressed, as appropriate, consistent with the approach of this work programme.

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 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 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 Members, in particular developing country 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 (IS) 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 GFMC data collection framework (namely SIPAM, Dolphin Fish, IUU, Red Coral, Registered Ports, STATLANT 37A, Task 1, Vessel Monitoring System (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 to management. However, although submission protocols for the different data reporting requirements have been already established, and they are to be used by 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 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 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 Members in monitoring, control and carry out surveillance related activities, such as the use of the Global Positioning System (GPS). In light of this, and considering that the sources of data and information are the 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 should focus in providing technical assistance to 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 several projects linked to data (e.g. CopeMed, MedFisis, EastMed, AdriaMed, MedSudMed), some of which have come to an end. Consequently, this work programme could also concern data availability and data collection related responsibilities, consistent with the objective of strengthening synergies with these 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 of 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 Members and (iii) availability of data at national level will be carried out. The information system would be developed at a subsequent stage.

III. Enhancing the development of artisanal fisheries in the GFCM Area

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 and at the core of its initiatives.

Rationale for intervention

As of the year of its establishment and within its objective of coordinating the efforts of 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 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' organizations and via the setting up of comanagement regimes, while pursuing sustainability of the sector and conservation of biodiversity.

IV. 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 Committee on Aquaculture (CAQ) was established to enhance the sustainable development and responsible management of aquaculture. In order for GFCM to assist Members in fully exploit the potential of aquaculture, various issues will have to be addressed, including competition for the use of coastal zones, environmental impact, lack of specific legislation frameworks, consumers' perception of product quality and market competition among Members and imported products. Because aquaculture represents a viable alternative to marine capture fisheries in providing sources of food, 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 environmental quality 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. 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 further build upon results achieved thus far. Still, there is room to make stakeholders' participation more effective. To this end work packages to be 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. Results and achievements of the GFCM past and ongoing aquaculture projects on aquaculture planning and coastal site selection within allocated zones for aquaculture, coastal wetlands, sustainable indicators, monitoring of environmental quality standards, marketing including promotion of aquaculture certification and ecolabelling to foster export-oriented productions, animal health, food safety, national technical capacity, research, legislation and policy will be consolidated and further developed within this work programme. This work programme will also follow up on the outcomes of the Ministerial Conference on aquaculture in the Mediterranean and Black Sea scheduled to take place in 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.

V. Improving governance in the GFCM Area through 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 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, Ecosystem Approach to Aquaculture and management tools such as Marine Protected Areas and artificial reefs are regarded as key measures contributing to better fisheries 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 international organizations having a sectoral competence in the Mediterranean and the Black Sea. If made use of, these opportunities would contribute to a more efficient 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. Given the need for area based management tools, as highlighted in many international and regional fora, this work programme could represent a much needed opportunity to integrate policies relating to marine capture fisheries and aquaculture with other relevant policies. In light of the fact that fisheries governance requires an integrated maritime approach, to the extent that all human activities linked to to marine capture fisheries and aquaculture are considered under this work programme, there would be room to launch joint initiatives together with those international organizations that have entered/will enter into a memorandum of understanding with GFCM.

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 several international organizations having a sectoral competence in the Mediterranean and the Black Sea. 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 to be identified. As a result, it will be possible to elicit compliance with regulations in place in the Mediterranean and the Black Sea consequently improving governance in the GFCM Area.

Objective

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