

Mid-term strategy (2017–2020) towards the sustainability of Mediterranean and Black Sea fisheries (Mid-term strategy)

1. INTRODUCTION

The need for a strategy

1. Fishing has a tremendous cultural, social and economic importance in the Mediterranean and the Black Sea, providing an important source of food and livelihood for riparian countries and sustaining the traditions and the way of life of many coastal communities. However, Mediterranean and Black Sea fisheries are currently facing serious challenges, with roughly 90 percent of the scientifically assessed stocks considered to be fished outside safe biological limits, decreasing catches and shrinking fleets at the regional scale.

2. As some of these challenges are also experienced globally and in other regions of the world, a pledge to act to avoid the serious risk of irreversible environmental and socio-economic damage was renewed at the level of the United Nations (UN) and at the regional scale. Against the backdrop of international commitments towards the sustainability of fisheries as a means to support the livelihood of coastal communities in a Blue Growth perspective, existing challenges in the Mediterranean and the Black Sea bring about the need to develop tailor-made actions, taking into account the specificities of the region and the capacities of all actors involved.

3. The mid-term strategy is in line with the mandate of the General Fisheries Commission for the Mediterranean (GFCM) as a regional fisheries management organization (RFMO) having competence over the Mediterranean and the Black Sea. It is indeed fully consistent with the Agreement establishing the General Fisheries Commission for the Mediterranean (GFCM Agreement) as amended in 2014. The mid-term strategy is based on key actions identified by the GFCM subsidiary bodies and intends to capitalize on accomplishments in the region over recent years in the field of stock assessment and fisheries management, marine environment and control, as well as to consolidate efforts pursued within the context of the GFCM Framework Programme (FWP), born in 2013 as a platform to promote sustainable development and cooperation in the Mediterranean and the Black Sea through multiannual and multidonor arrangements.

4. In addition, the mid-term strategy has been discussed with relevant organizations having interest in different aspects of fisheries and marine ecosystems, including observers to the GFCM and organizations that have a memorandum of understanding (MoU) with the GFCM (currently adding up to 14 international organizations). Therefore, the implementation of the mid-term strategy is based on a unique interdisciplinary partnership that provides for a perfect opportunity to enhance cooperation in the region and maximize the probability of success.

Historical background

5. The issue of sustainable fisheries has evolved over the years at the regional and subregional levels, before and after the Venice Ministerial Declaration for the Sustainable Development of Fisheries in the Mediterranean¹. Created in 1949 as a Council under Article XIV of the FAO Constitution, by means of an international agreement, the GFCM was entrusted with the primary responsibility of supporting Mediterranean and Black Sea riparian countries in elaborating common

¹ In 2003, the Ministers of Mediterranean riparian countries met in Venice (Italy) with a view to renewing their commitment to work together towards developing sustainable and responsible fisheries. This commitment was embodied in the Venice Declaration which focused, in particular, on the future work of the GFCM and its role in this endeavour.

rules on exploited fisheries. The GFCM Agreement had been amended three times prior to the Venice Declaration, including in 1997 when new obligations were agreed upon by Contracting Parties, consequently morphing the Council into a Commission endowed with administrative and financial autonomy.

6. With the entry into force of the third amendment to its constitutive Agreement, in 2004, the GFCM was provided with the operational means to step up its work in its area of application. Progress should in fact be measured from 2004 onward, following the Venice Declaration, when the role of its Scientific Advisory Committee on Fisheries (SAC) was reinforced and new subsidiary bodies – such as the Compliance Committee (CoC) and, later, the Working Group on the Black Sea (WGBS), developed as an ad hoc mechanism for scientific work and decision-making for Black Sea riparian States – were created. This allowed to better address the challenges identified. Such challenges include the need to provide timely data and information, to encourage the active participation of scientists in technical work, to revert the overexploitation of main fish stocks, to improve the evaluation and management of fishery resources, to protect marine biodiversity and marine ecosystems from harmful bycatch and discarding practices and to reduce the incidence of illegal, unreported and unregulated (IUU) fishing. Since 2004, some 50 decisions have been taken including binding recommendations underpinning a regional management system consisting of data collection and reporting schemes, assessments and evaluations of commercially exploited stocks, elaboration of management measures, area-based management tools, monitoring, control and surveillance (MCS) instruments and periodical discussions on the implementation of decisions in place.

7. Consistent with the calls by the UN General Assembly and the Committee on Fisheries of the FAO, a performance review was carried out in 2009–2011 to assess the effectiveness of the GFCM, under the stewardship of an ad hoc Task Force that eventually recommended a set of amendments to the GFCM Agreement with the objective of further modernizing the Commission. From an institutional point of view, the legacy of the Venice Declaration is enshrined in the GFCM Agreement, as amended in 2014. The renewed institutional framework of the GFCM is a response to a new generation of challenges currently affecting sustainable fisheries in the region. Its premise is a subregional approach to fisheries management, reinforced by a strong network of partner organizations that collaborate based on several MoU and with the support of the GFCM FWP to carry out the increasing technical activities.

8. The positive impacts of the resolute actions stemming from the GFCM reform will likely play out in the near future. Although the challenges ahead are important, the GFCM nowadays is a modern RFMO with the capability and expertise to take appropriate decisions based on the best available scientific advice and ensure their implementation. In parallel, a number of organizations have made substantial progress in working on several aspects connected to fisheries in the Mediterranean and the Black Sea, placing them among their priorities and thus paving the way for enhanced collaboration and synergies

International context

9. At the UN Sustainable Development Summit 2015 (New York, 25–27 September), world leaders adopted the 2030 Agenda for Sustainable Development, which includes a set of 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by 2030. The SDG 14 – entitled “Conserve and sustainably use the oceans, seas and marine resources for sustainable development” – builds upon the provisions of numerous legal instruments that have been adopted to ensure the conservation and sustainable use of the marine environment and its resources – e.g. the United Nations Convention on the Law of the Sea (UNCLOS), the FAO Code of Conduct for Responsible Fisheries and the United Nations Fish Stocks Agreement – and advocates for healthy and resilient marine ecosystems based on multiple elements. Similar relevance in the context of sustainable fisheries can be attributed to the Aichi Biodiversity Targets (ABT), in particular Target 6 which concerns fisheries. The SDG 14 and ABT 6 can therefore be regarded as embodying comprehensive strategies calling for phased action at all levels of governance, including at the regional level. The SDG 14 in particular offers substantial guidance as to how challenges to the sustainability of fisheries should be tackled, including the following, which are particularly relevant to

the sustainability of Mediterranean and Black Sea fisheries:

SDG 14	
Target 14.2	by 2020 , sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
Target 14.4	by 2020 , effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
Target 14.5	by 2020 , conserve at least 10 percent of coastal and marine areas, consistent with national and international law and based on the best available scientific information
Target 14.7	by 2030 , increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
Target 14.7.a	increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries
Target 14.7.b	provide access for small-scale artisanal fishers to marine resources and markets
Target 14.7.c	enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources

10. As a UN specialized agency, the FAO already contributes to the global implementation of the SDGs through a strategic framework, of which Strategic Objective 2 specifically aims to increase and improve the provision of goods and services from fisheries in a sustainable manner, addressing in particular multi-sectoral approaches for ecosystem management, capacity building, governance frameworks and the like.

11. In order to support the achievement of UN targets, as well as the international obligations stemming therefrom, including the FAO Strategic Objectives, the mid-term strategy towards the sustainability of Mediterranean and Black Sea fisheries has been elaborated.

12. The mid-term strategy will have an external dimension in that progress in implementing SDG 14 and ABT 6 through the regional targets, outputs and actions foreseen therein will be reported to international fora where the achievement of globally agreed goals is being monitored. As a regional body having a competence relevant to the implementation of SDG 14 and ABT 6, the GFCM is expected to provide information on the Mediterranean and Black Sea through, *inter alia*, the submission of reports and participation in meetings.

Regional context

13. The geopolitical situation in the Mediterranean and the Black Sea is currently complex. As of late, the Mediterranean has been experiencing significant instability due to ongoing conflicts and political turmoil in the region which, in turn, has exacerbated the problem of migration across the sea. At the same time, the existing gap in the level of development between the different subregions of the Mediterranean remains a top priority on the regional agenda. Similar considerations apply to the case of the Black Sea although different issues are at stake, including weaker fisheries governance resulting *inter alia* from the fact that not all six riparian countries are members of a same institutional arrangement such as the GFCM. In light of the special characteristics of the Mediterranean and Black Sea, it is all the more imperative to ensure a sound strategy is in place to promote the region's sustainable development. The fisheries sector, in particular, has an important role to play in such a strategy, as it is crucial to livelihood protection, food security and sustainable long-term development in the Mediterranean and Black Sea.

14. The GFCM's recently released assessment *The state of Mediterranean and the Black Sea fisheries* (SoMFi 2016) highlights the impact of fisheries, and in particular the small-scale fisheries sector, within the region. Indeed, 80 percent of the region's fisheries are small-scale fisheries,

underlining the role of fisheries in sustaining the region's coastal communities. Although the value generated from the first sale of fish products from Mediterranean and Black Sea fisheries may seem relatively small compared with other sectors (representing less than 1 percent of regional GDP), the sector's ability to target some of the region's most economically vulnerable coastal communities makes it a key player in any sustainable development strategy. In fact, the value at first sale as a percentage of GDP is six times greater in the developing countries of the southern Mediterranean than in the wealthier northern Mediterranean countries. Furthermore, exports of fish products from this region represent over 10 percent of total global exports, indicating significant secondary impacts of this sector on the wider economy.

15. Likewise, around a quarter of a million people are directly employed onboard fishing vessels in this region; yet the number of people dependent on the fishing sector for their livelihoods increases exponentially when considering the families supported by the region's fishers and those employed in related sectors, such as fish processing, vessel maintenance and tourism. Furthermore, around 60 percent of fishing employment is found in the developing countries of the southern and eastern Mediterranean, meaning that the majority of the jobs provided by this sector are located precisely where jobs are needed.

16. Taken together, these factors endorse the potential of the fishing sector to play an instrumental role in the sustainable development of the Mediterranean and Black Sea region and, in particular, its most vulnerable coastal communities. To this end, reliable data on the status and trends on stocks and fisheries is needed, so that management plans embracing the ecological, economic and social aspects are adopted to ensure the sustainability of fisheries. Building on the success of the SDGs in drawing the attention of the international community to the role of fisheries in sustainable development, a regional strategy which adapts such principles to the Mediterranean and Black Sea context is of paramount importance to address current challenges in this area.

2. NATURE AND SCOPE

17. The proposed mid-term strategy is linked to SDG 14 and the FAO Strategic Objective 2. As this strategy stems from existing international and regional legal instruments, it does not create any new obligations on GFCM Contracting Parties and Cooperating non-Contracting Parties (CPCs). On the other hand, it purports to define a course of instrumental action to further progress in the development of sustainable fisheries at the regional level. It is programmatic and multiannual in nature and provides guidance for the strategic priorities in the 2017–2020 period, identifying key actions that complement, when needed, the regular work carried out by the different organizations in relation to fisheries. The mid-term strategy addresses three main pillars of the work of the GFCM, as the RFMO in the area,: i) the scientific and technical work of the SAC and its subregional committees in the Mediterranean Sea and of the WGBS in the Black Sea, each of them carrying out core functions towards the provision of scientific advice for the Commission in light of relevant biological, social and economic parameters; ii) the decisions taken by the Commission in relation to capture fisheries, including all industrial, small-scale and recreational fisheries, and iii) the thorough assessment of the implementation of adopted management measures by CPCs, including efforts to fight against IUU fishing through the enhancement of MCS, as overseen by the CoC.

18. The mid-term strategy does not apply to aquaculture as this increasingly important sector has distinctive requirements that need to be addressed specifically. A dedicated Task Force within the framework of the GFCM is currently developing a strategy for the sustainable development of Mediterranean and Black Sea aquaculture.

3. GUIDING PRINCIPLES

19. The implementation of the proposed mid-term strategy towards the sustainability of Mediterranean and Black Sea fisheries will be guided by the following select principles which are in

place at the FAO level:

Best available knowledge: The provision of advice, including on the status and trends of stocks and fisheries, should be based on the best available knowledge, including scientific advice and relevant information emanating from a variety of sources and stakeholders. Efforts to collect all information available shall be ensured, and standards for assuring the quality of information should be applied wherever and whenever practicable and appropriate within SAC and WGBS;

Objectivity and transparency: The collection, analysis and dissemination of information on the status and trends of fisheries, ecosystems and marine environment should contribute to the transparent provision of the best scientific evidence available, while respecting any confidentiality requirements. Uncertainty associated with information on status and trends should be expressed, without detracting from the application of the precautionary approach, when data and information are incomplete. Information on activities towards the fight against IUU fishing should be made available, respecting confidentiality requirements;

Timeliness: The collection, analysis and dissemination of information on the status and trends of fisheries, ecosystems and marine environment, as well as information on IUU fishing, should be provided in as timely a manner as possible;

Participation and cooperation: The collection, analysis and dissemination of information on the status and trends of fisheries, ecosystems and marine environment, as well as information on IUU fishing, should account for all relevant participants in the preparation, analysis and presentation of scientific advice and conclusions. Relevant participants may include, *inter alia*, representatives of CPCs and other riparian states, relevant international, non-governmental and civil society organizations. The existing cooperative network established through the adoption of MoU would be relied upon, having regard to the cross-sectoral nature of the strategy;

Adaptability: The collection, analysis and dissemination of information on the status and trends of fisheries, ecosystems and marine environment, as well as information on IUU fishing, should be adaptive enough to permit adjustments, as necessary, to ensure their effective support of fisheries management based on the most recent scientific advice available.

4. OBJECTIVE AND TARGETS

20. The overall objective of the mid-term strategy is to improve, by 2020, the sustainability of Mediterranean and Black Sea fisheries, by achieving five targets and related outputs and actions.

TARGET 1: REVERSE THE DECLINING TREND OF FISH STOCKS THROUGH STRENGTHENED SCIENTIFIC ADVICE IN SUPPORT OF MANAGEMENT

It is recognized that, with only 40 percent of the landings in the GFCM area of application coming from stocks for which scientific advice is provided to the Commission, and with an even smaller percentage of the landings coming from fisheries that are subject to comprehensive management plans, there is a need to improve the coverage of advice on the status of stocks and to increase the percentage of landings coming from fisheries regulated by specific multiannual management plans.

It is also recognized that, whenever possible, the advice provided to the GFCM as the international body in charge of adopting binding recommendations for the region should address all relevant aspects needed for decision making, including past and current socio-economic characteristics of the fisheries, as well as the potential socio-economic impacts of alternative management measures. Furthermore, when this information is lacking or scarce, precautionary measures should be advised so that, based on the precautionary approach, the Commission can still efficiently take decisions to regulate fisheries.

It is agreed that, consistently with SDG Targets 14.2, 14.4 and 14.7, commitment is needed to implement, by 2020, actions to increase the existing scientific and socio-economic knowledge in support of fisheries management, and to adopt necessary decisions to reverse the current overexploitation rates, reducing the percentage of stocks outside biologically safe limits, through the achievement of the following:

Output 1.1: Enhanced knowledge and expertise on Mediterranean and Black Sea fisheries

Mediterranean and Black Sea riparian states have systems in place for the collection of fisheries data and information and its subsequent submission in line with specific binding recommendations. The GFCM in particular receives such information through dedicated data calls, national reports to its technical subsidiary bodies and through ad hoc questionnaires. The GFCM Data Collection Reference Framework (DCRF) organizes the different data calls and provides indications and tools on how to collect and submit data to the GFCM, with a view to creating a more rational and efficient database in support of decision making. Furthermore, regional workshops and working groups on a variety of topics, including stock assessment, and dedicated conferences such as the Regional Conference “Building a future for sustainable small-scale fisheries in the Mediterranean and the Black Sea” (SSF Conference) have provided experts with fora in which information could be exchanged and incorporated into the advice from the subsidiary bodies to the Commission. However, this information is still fragmented and unbalanced between different subregions and aspects such as socio-economic characteristics of fisheries are still not well understood and incorporated in the advice.

This output will require the compilation of data and information on different fisheries-related issues, including through the implementation of the DCRF, as well as the execution of a number of actions as listed below:

- a. The creation of a **GFCM Forum on Fisheries Science (GFCM FishForum)**, expected to act as a hub for collecting in a more comprehensive manner experiences and scientific information/data on aspects related to fisheries, from stock assessment to socio-economic issues and anthropogenic effects on fisheries and ecosystems. Among other results, the GFCM FishForum should support stock assessment-related work, the compilation of existing knowledge on the status of stocks and discussion on harmonized ways to provide advice on stocks and fisheries, the creation of a database with comprehensive and reliable fisheries data and the establishment of a network of experts and research institutions covering different domains of fisheries science. The Forum will be organized around the following thematic clusters: stock assessment, socio-economic aspects, small-scale and recreational fisheries, bycatch and discards, IUU fishing, fishing technology, interactions between fisheries and marine ecosystems, stakeholders and regional/subregional platforms.
- b. The realization of **regional surveys at sea**, including acoustic surveys for pelagic species as well as trawl surveys for demersal fisheries. These joint surveys, carried out in the context of FAO, are expected to provide information on a large number of species over large areas and to serve as tuning indices for assessment purposes, as well as provide validation on the advice on the status of the main commercial stocks.
- c. The compilation of **catalogues of fishing activities** by geographical subarea, also for small-scale and recreational fisheries, and including information on fishing gear and fishing operations, description of fishing areas as well as target and bycatch species. This catalogue is expected to provide a comprehensive summary of fishing activities in the Mediterranean and the Black Sea, as well as updated estimates of fishing capacity by fleet segment and subregion.

All information gathered through this output is expected to feed into the process of the provision of advice (see Outputs 1.2 and 1.3) and will also be summarized among others in the next issues of the report on *The State of Mediterranean and Black Sea Fisheries (SoMFi)*, expected to be delivered biennially under the framework of this strategy (in 2018 and 2020).

Output 1.2: Socio-economic information and analysis incorporated into scientific and management advice

In recent years, GFCM subsidiary bodies have made efforts to integrate available socio-economic analysis into the advice provided to the Commission through dedicated workshops on bioeconomic assessment of management measures. Despite data limitations, attempts have been made to review existing methodologies to perform management strategy evaluation (MSE) simulations and to assess the economic, social and biological implications of alternative management scenarios for certain stocks. However, the quality and quantity of available socio-economic data are still limited and work is needed to harmonize methodologies for socio-economic analysis, including on the definition of adequate indicators that could be used across the region, so as to further integrate socio-economic data into management advice. Furthermore, information on socioeconomic characteristics should facilitate an analysis of profitability and therefore the integration of dedicated measures for the valorization of fish products into management measures (see Output 1.3). In order to achieve this output, the following actions should be executed within the mid-term strategy:

- a. The definition of socio-economic indicators and the completion of **a comprehensive regional survey on the socio-economic characteristics of fisheries** in the Mediterranean and the Black Sea. This survey is expected to help overcome a main barrier to the integration of socio-economic data in management advice by providing accurate, timely and complete socio-economic baseline data on the region's fisheries.
- b. The **incorporation of socio-economic information** into the assessment of the state of main commercial fisheries and the provision of advice on the comparative impacts of alternative management scenarios.

Output 1.3: Enhanced science-based GFCM regulations on fisheries management

In recent years, relevant GFCM subsidiary bodies have improved their advice, both in terms of scope (e.g. covering aspects ranging from red coral to artificial reefs to the status of stocks and fisheries) and coverage (e.g. improving subregional coverage and increasing the percentage of the landings for which advice on stock status is given) and cooperation has been enhanced with relevant partner organizations towards an increased scientific base. At the same time, and following the adoption of the GFCM Guidelines on precautionary conservation measures pending the development and adoption of GFCM multiannual management plans for relevant fisheries at the subregional level in the GFCM area¹, the GFCM has advanced towards the regulation of fisheries in its area of application, with the adoption of a comprehensive management plan for small pelagic fisheries in the Adriatic Sea and demersal trawlers in the Strait of Sicily, and with an incipient management plan for turbot gillnet fisheries in the Black Sea.

However, advice in support of management measures still focuses on a limited number of topics and still addresses a small percentage of exploited stocks, marine populations, ecosystems and areas. In some cases, existing advice at the national level (e.g. assessment of national stocks) is not presented to the GFCM subsidiary bodies and therefore is not taken into account in the provision of advice. In other cases, information is scarce or lacking, and no scientific advice is provided. Furthermore, scientific advice is not always immediately incorporated into recommendations and, as a result, only a very small percentage of the landings come from fisheries regulated by comprehensive management plans.

Technical work for the improvement of the advice on cases with limited information (data-limited stock assessment methods) as well as technical work in support of the establishment of new management plans (e.g. for small pelagic fisheries in the western Mediterranean, deep-water shrimp in the central-eastern Mediterranean, anchovy in the Black Sea or European eel in the Mediterranean Sea) is already underway within the GFCM. Output 1.2, coupled with the work towards the estimation of IUU activity (see Output 3.3), will also support better decision making through the incorporation of

¹ OTH-GFCM/37/2013/1

socio-economic information, including aspects of valorization of fish products, as well as information on the impact of IUU.

In order to achieve this output, the following actions should be carried out within the mid-term strategy:

- a. The implementation of a dedicated **approach for the provision of advice to the GFCM by its subsidiary bodies**. Such an approach envisions action for stocks/fisheries where information on stocks/fisheries is either fragmented or not made available, and stocks/fisheries for which a validated scientific advice exists. In the former situation, immediate actions to collect the required information and make it available should be launched, while at the same time precautionary advice should be issued. On the other hand, when a validated scientific advice exists, the advice should include indications on the effect of alternative management measures on both the stocks and the fisheries, including on socio-economic aspects. Within this approach, and without prejudice to addressing additional species, the GFCM agreed on a list of priority commercial species by subregion for which an advice should be produced:

	Western Mediterranean	Central Mediterranean	Adriatic Sea	Eastern Mediterranean	Black Sea	
Pelagic species	<i>Engraulis encrasicolus</i>	<i>Engraulis encrasicolus</i>	<i>Engraulis encrasicolus</i>	<i>Engraulis encrasicolus</i>	<i>Engraulis encrasicolus</i>	<i>Trachurus mediterraneus</i>
	<i>Sardina pilchardus</i>	<i>Sardina pilchardus</i>	<i>Sardina pilchardus</i>	<i>Sardinella aurita</i>	<i>Sprattus sprattus</i>	<i>Sarda sarda</i>
Demersal species	<i>Parapenaeus longirostris</i>	<i>Parapenaeus longirostris</i>	<i>Mullus barbatus</i>	<i>Mullus barbatus</i>	<i>Merlangius merlangus</i>	<i>Psetta maxima</i>
	<i>Merluccius merluccius</i>	<i>Merluccius merluccius</i>	<i>Merluccius merluccius</i>	<i>Saurida lessepsianus</i>		<i>Mullus barbatus</i>
	<i>Pagellus bogaraveo</i>					
Species of conservation concern	<i>Anguilla anguilla</i>				<i>Squalus acanthias</i>	
	<i>Corallium rubrum</i>					
Invasive species	<i>Pterois miles</i>				<i>Rapana venosa</i>	
	<i>Lagocephalus sceleratus</i>					

- b. [The **operationalization of the Review Panel**, as established by GFCM (Rule XVI of the GFCM Rules of Procedure) to review the scientific advice formulated by its subsidiary bodies and provide conclusions to support the decision-making process.]
- c. The **revision of existing management plans / development of new management plans**, based on the technical advice provided by the subsidiary bodies, with the objective of addressing the main commercial fisheries as well as those fisheries that rely on or show a strong interaction with resources in need of urgent action.

TARGET 2: SUPPORT LIVELIHOODS FOR COASTAL COMMUNITIES THROUGH SUSTAINABLE SMALL-SCALE FISHERIES

It is recognized that small-scale fisheries play an important role in providing income and ensuring food security, particularly within economically vulnerable coastal communities. Therefore concerted action should be taken to support this sector.

It is recognized that the data available to measure the extent and impact of small-scale fishing activity are limited and can vary widely from country to country. Due to these data limitations, small-scale

fisheries tend to be undervalued, potentially leading to their marginalisation in the decision-making process.

It is also recognized that States should be responsible for collecting complete, timely and accurate socio-economic data on the impact of small-scale fishing and for developing coherent policies to ensure resource and market access for small-scale fishers. Support will be provided within the mid-term strategy to enhance the coordination of efforts and to harmonize existing measures to support the small-scale fishing sector.

It is agreed that commitment is needed, by 2020, to support livelihoods within sustainable small-scale fisheries, consistent with SDG Target 14.b and 14.7, through the realisation of the following:

Output 2.1: Robust and timely information on the impacts of small-scale fisheries and recreational fisheries on living marine resources and on their interactions with other human activities in coastal communities

In recent years, work has been carried out to better understand the importance of small-scale fisheries in the Mediterranean and the Black Sea. Preliminary analyses have shown that these fisheries are the predominant sector in the region (accounting for 80 percent of the region's fishing fleet, 60 percent of all on-vessel fishing labour and approximately 25 percent of the total landing value from the region's capture fisheries), highlighting the crucial role that these fisheries must play in any strategy to sustainably manage the region's living marine resources. As discussed in depth at the First Regional Symposium on sustainable small-scale fisheries (27–30 November 2013, Malta) and the subsequent SSF Conference (7–9 March 2016, Algeria), due to the delicate socio-economic role these fisheries play in providing livelihoods for hundreds of thousands of people in the region's coastal communities, concerted efforts are needed to support this sector. The importance of producing an accurate, timely and comprehensive socio-economic description of small-scale fisheries, and their interactions with other sectors such as recreational fisheries, have been identified as a crucial first step towards mitigating detrimental socio-economic impacts of efforts to manage the region's marine resources. However, despite similarities between small-scale fisheries and recreational fisheries, the latter deserve a specific action. Socio-economic indicators are needed to inform policy interventions that will help to maximize economic and social benefit, while minimizing environmental and ecological impacts. This output will require the execution of a number of actions as listed below:

- a. The implementation of a **regional survey on small-scale fisheries**. This survey is expected to provide a snapshot of the ecological, social and economic impacts of small-scale fisheries in the Mediterranean and Black Sea and at the same time improve the capacity to collect relevant data on small-scale fisheries as requested through the DCRF. Information on the different gear used in SSF will be collected as part of the catalogue of fishing activities (Target 1) with a view to better linking SSF to the different fishing activities in coastal areas.
- b. The establishment of a **permanent Working Group on Small-Scale and Recreational Fisheries**. This working group is expected to foster knowledge-sharing platforms among the region's small-scale and recreational fishers for the dissemination of best practices and the sharing of information, to oversee the completion of the regional survey on small-scale fisheries and to coordinate efforts among CPCs and relevant organizations.
- c. The assessment of the impacts of **recreational fisheries** and the consideration of best management measures to regulate these activities.

The information gathered through these actions should result in an **estimate of the economic impact of small-scale fisheries** on coastal communities and their interactions with related sectors, as well as inform the development of **indicators to monitor the socio-economic status of small-scale fisheries** and the management of recreational fisheries.

Output 2.2: FAO Small-Scale Fisheries Guidelines tailored to the specificities of the Mediterranean and the Black Sea

The FAO *Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication* (SSF Guidelines) constitute an important tool for supporting actions to secure sustainable small-scale fisheries and support livelihoods in coastal communities. These guidelines take a holistic approach, among others, promoting the importance of tenure rights, livelihood diversification, market access, decent working conditions and the engagement of women and marginalized groups, as crucial elements towards improving socio-economic conditions and strengthening small-scale coastal fishing communities. This output will require a holistic approach to supporting the region's small-scale fisheries, including by carrying out the following actions:

- a. The development of **national plans of action for the implementation of the SSF Guidelines** is expected to provide roadmaps for bolstering valorization, commercialization and livelihoods in small-scale fisheries and coastal communities in a way that adapts to the specific needs at the regional, subregional and national levels.
- b. The establishment of **a regional platform to engage and promote dialogue among small-scale fishing associations** in the Mediterranean and the Black Sea. This platform is expected to build on and reinforce existing subregional and national platforms in order to provide a participatory mechanism for knowledge-sharing, collaboration, stakeholder involvement, and the dissemination of best practices.
- c. The **endorsement of the principle of decent work**, as defined by the Work in Fishing Convention (C188) of the International Labour Organization (ILO), so as to promote, without compromising environmental sustainability, the improvement of socio-economic conditions within small-scale fisheries and the promotion of livelihood diversification.
- d. The organization of **a high-level meeting** in collaboration with strategic partners, including the Mediterranean Initiative of the World Wildlife Fund (WWF), to generate political will in small-scale fisheries within a Blue Growth context.

TARGET 3: CURB ILLEGAL UNREPORTED AND UNREGULATED (IUU) FISHING, THROUGH A REGIONAL PLAN OF ACTION

It is recognized that better management of fisheries in the Mediterranean and the Black Sea is undermined by IUU fishing activities and the disregard of common rules. Although the impacts of IUU fishing are currently not assessed and therefore under-represented in the current status of fisheries and trends information, they must be adequately considered in the development of scientific advice for management.

It is stressed that CPCs, in their capacity as flag states, coastal states, port states and market states, have the primary responsibility to ensure respect of common rules by fishing vessels. Support will be provided within the mid-term strategy to enhance coordination of efforts and harmonize existing measures aimed at improving monitoring, control and surveillance.

It is acknowledged that, while the implementation of the two roadmaps to fight IUU fishing in the Mediterranean and the Black Sea adopted by the GFCM has been positive thus far, there is an important need to set political and operational objectives to counter illegal activities, building upon the elements of these roadmaps and reflecting relevant elements in the FAO International Plan of Action against IUU, which is already voluntarily applied in the region. It is also acknowledged that support will be provided for **the organization and celebration of an international day for the fight against IUU fishing**, to be imminently declared by the FAO upon the request of the GFCM.

It is agreed that there is a need to commit to **effectively reducing IUU fishing in the Mediterranean and the Black Sea** by 2020, consistent with SDG Target 14.4, by developing a holistic **regional plan**

of action to fight IUU fishing, to eventually be transposed at the national level and that would among others achieve the following:

Output 3.1: Regular quantification of IUU fishing in the Mediterranean and the Black Sea and harmonization of existing measures to fight against IUU fishing

IUU fishing remains one of the greatest threats to the conservation and sustainable use of fisheries, undermining national and regional management efforts. In 2003, it was calculated that the lower and upper estimates of the total value of IUU fishing worldwide were between US\$10 billion and US\$23 billion annually, representing between 11.06 and 25.91 million tonnes of fish, and there is today a general recognition that the incidence of IUU fishing has not decreased since. Another topical issue relating to IUU fishing is the need to harmonize at the regional level existing measures used to counter illegal activities. In this regard, guidance is not only sought from the Regional Plan of Action to fight IUU fishing but also from an evaluation of relevant national legislations in place which are collected in the GFCM database of national legislations. In order to meet the target of considerably reducing IUU fishing, it will be instrumental to carry out the following actions:

- a. The realization of an **assessment of the quantity, magnitude and characteristics of IUU fishing** in the Mediterranean and the Black Sea. Whereas work is ongoing within the FAO to bring about a common methodology to assess IUU fishing, a tailored approach for the Mediterranean and the Black Sea is needed with a view to supporting the scientific work of the SAC and WGBS.
- b. The evaluation of the adequateness of national legislations relating to IUU fishing adopted by CPCs as contained in the GFCM database of national legislations. As appropriate, this evaluation should lead to the revision of national legislations in view of the harmonization of measures to fight IUU fishing which will be facilitated by the Regional Plan of Action to fight IUU fishing.

Output 3.2: Reinforced inspection procedures in the framework of port State control

The regional system of port state measures in the Mediterranean and the Black Sea should be aligned with the provisions in the FAO Port State Measures Agreement (PSMA). Most importantly, the 5 June 2016 entry into force of the FAO PSMA brings about actions and initiatives to promote port controls worldwide. The GFCM should be involved in the correct implementation of the FAO PSMA, through the adoption of robust port state measures. Efforts will be needed, on the one hand, to support the ratification of the FAO PSMA by states and, on the other hand, to make sure that appropriate conditions are in place to strengthen port State measures (both political, legal and technical). This will entail carrying out several actions within the remit of the GFCM:

- a. The promotion of **training of national inspectors** and, as appropriate, relevant officers, including jointly with other partners and by developing specific online instruments, with a view to launch national actions to better take stock of the needs of each recipient country relating to efficient port controls.
- b. The establishment of a **mutual assistance system** will facilitate exchange of information between flag states and port states via the GFCM Secretariat and that of a **regional information system to exchange port State measures related data** will operationalize port state measures in the GFCM area of application, consistent with the provisions of the FAO PSMA, complementing the ongoing establishment of a regional monitoring and control system.

Output 3.3: Enhanced modular monitoring, control and surveillance (MCS) at the regional level

Since the adoption of the GFCM recommendation on the establishment of a vessel monitoring system (VMS), the Commission has been advancing on the phased development of a regional control system, with a view to enhancing monitoring, control and surveillance capabilities in the Mediterranean and the Black Sea. This system is needed in order to have the same control standards in place across the

Mediterranean and the Black Sea and therefore ensure all CPCs are on par, regardless of whether or not they have a fishing monitoring centre. In this regard, priority will be given to the development of national VMS to verify whether these are consistent with minima requirements in place at the GFCM level. Furthermore, because of the high number of small-scale vessels operating in the Mediterranean and the Black Sea, the system will underpin a modular approach which is responsive to the needs of those CPCs which rely primarily on small-scale vessels. This output will complement control related activities already agreed upon by the GFCM, such as the working group on integrated MCS measures for demersal fisheries in the Strait of Sicily, and will be achieved by carrying out the following action:

- a. The continuation of the operationalization of a **regional VMS and control system**, in order to help monitor adherence to fisheries restricted areas and to underpin GFCM data collection systems by progressively incorporating electronic tools, such as the e-logbook, which could be developed at the regional level. Effort and catches information deriving from this system would support the enhanced assessment of fisheries stocks, identification of fishing grounds and fishing activities, contributing to the achievement of Target 1.

TARGET 4: MINIMIZE AND MITIGATE UNWANTED INTERACTIONS BETWEEN FISHERIES AND MARINE ECOSYSTEMS AND ENVIRONMENT

It is underlined that healthy and productive marine ecosystems are an important means to supporting maximum sustainable yield and facilitating blue growth.

It is recognized that fisheries, as well as other anthropogenic-driven phenomena, such as climate change or the introduction of non-indigenous species, can have potentially negative effects on the marine environment and marine ecosystems.

It is agreed that, by 2020, consistent with SDG Targets 14.1, 14.2 and 14.5, necessary measures will be taken to minimize and mitigate negative impacts of fisheries on marine biodiversity and ecosystems, especially in relation to vulnerable species and ecosystems, as well as to mitigate negative anthropogenic effects on fisheries, in close coordination with partner organizations. These measures should be implemented by achieving the following outputs:

Output 4.1: Reduced bycatch rates in Mediterranean and Black Sea fisheries

Bycatch is considered as one of the most important threats to the profitability and sustainability of fisheries and, as such, it is considered to be one of the major concerns for most RFMOs and other fisheries management bodies. In the Mediterranean and the Black Sea, based on the analysis presented in SoMFi 2016, discard rates vary between areas and fishing gear, but can reach up to 20 percent of the total catch. In order to address this threat and to take into account previous concerns raised, this output will require the execution of the actions as listed below:

- a. The implementation of a **bycatch monitoring programme**, including through the use of observers onboard commercial fishing vessels. This programme is expected to obtain representative data on the discard component of total bycatch in Mediterranean and Black Sea fisheries, as well as information on the incidental catch of vulnerable species that could occur during sampled fishing operations, with a view to facilitating the adoption of required management measures towards the reduction of bycatch rates.
- b. The development and launch of a fully encompassing **communication mechanism** to educate fishers on the negative impacts of bycatch on fisheries productivity and on marine ecosystems. This activity entails, among others, the publication of infographics, cards and posters. Ecolabelling and certificates for fishers who ensure their commitment in fishing according to sustainable practices in the Mediterranean and the Black Sea should also be envisaged.
- c. The implementation of **effective management measures to improve the selectivity of fisheries**, including the possibility to use artificial reefs to protect fish essential habitats (e.g. nursery areas) as well as the implementation of more selective fishing gear.

- d. The proposition of measures to reduce catches of vulnerable species when appropriate, by entrusting the SAC with this task.
- e. The identification and implementation of **mitigation measures to address the interaction between cetaceans and fishing gear**.

Output 4.2: Healthier marine ecosystems and more productive fisheries

The GFCM was a pioneer in adopting, in 2005, a binding recommendation on the protection of seabeds below 1 000 meters depth from trawling, as a measure to minimize the impact of these fisheries on deep-sea ecosystems. Moreover, in 2006, the GFCM adopted a specific area-based management tool, the fisheries restricted areas (FRAs), to protect vulnerable marine ecosystems (VMEs) in the region. Furthermore, the Joint Cooperation Strategy on Spatial-based Protection and Management Measures for Marine Biodiversity has been elaborated among the Secretariats of the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), the GFCM, the Mediterranean Programme of the International Union for Conservation of Nature (IUCN-Med), the UNEP/MAP through its Regional Activity Centre for Specially Protected Areas (RAC/SPA) and in collaboration with the Network of Managers of Marine Protected Areas in the Mediterranean (MedPAN) , which will focus on the identification of priority spatial areas at regional scale for the implementation of protection measures, in order to maximize the potential benefits of such measures.

Specific actions towards the protection of Mediterranean populations of red coral (*Corallium rubrum*) have also been developed, and, within the context of the MoU between the GFCM and the United Nations Environment Programme – Mediterranean Action Plan (UNEP-MAP), a number of indicators for good environmental status (GES) of exploited marine populations have been established. In addition, within the same MoU, work towards the implementation of the Mediterranean Regional Plan on Marine Litter has been initiated. Finally, SAC subsidiary bodies have highlighted the potential combined effects of climate change and other direct and indirect anthropogenic impacts such as the introduction of non-indigenous species (often referred to as “alien species”) in the Mediterranean and the Black Sea, stressing the need to launch dedicated actions to better understand such phenomena so as to better mitigate their effects.

To achieve Output 4.2, coordination will be guaranteed between relevant regional organizations so to ensure:

- a. The promotion of the **identification and establishment of new FRAs** to protect priority areas within ecologically or biologically significant marine areas (EBSAs), VMEs, etc. from harmful fishing activities, and the implementation of monitoring and control systems to ensure the efficiency of these spatial measures, also in relation to Target 3. This action should aim to achieve at least the protection of 10% of the coastal and marine areas, as expressed in Aichi Target 11. The CPCs should be closely involved in the definition of new FRAs.
- b. The adoption of a comprehensive **regional management plan for red coral**, based on previous technical work carried out in the context of the GFCM subsidiary bodies, including relevant GFCM guidelines, and updated advice as provided within Output 1.3.
- c. The creation of an **adaptation strategy to cope with potential effects of invasive species and climate change on fisheries**. Such a strategy should be based on the results of an evaluation of the potential ecological and socio-economic effects of climate change and of the introduction of non-indigenous species on Mediterranean and Black Sea fisheries.
- d. The creation of an **adaptation strategy to cope with potential effect of marine litter on fisheries**, as well as the implementation of fisheries management measures aimed to minimize the production of litter from fishing activities (e.g. abandoned fish gear), in line with existing Mediterranean regional management plan on marine litter.

TARGET 5: ENHANCE CAPACITY BUILDING AND COOPERATION

It is urged that CPCs, relevant intergovernmental and non-governmental organizations and concerned stakeholders enhance cooperation to promote sustainable development and blue growth in the Mediterranean and the Black Sea.

It is acknowledged that fulfilling the objective of the mid-term strategy through the proposed actions both requires and promotes increased scientific and technical cooperation throughout the region. Particular efforts will be needed for the Black Sea, given that not all riparian countries are currently contracting parties to the GFCM.

It is agreed that commitment is needed, by 2020, in line with SDG 14.7, to help level the playing field for developing countries and to ensure the accrual of socio-economic benefits from the sustainable management of fisheries, by achieving the following:

Output 5.1: Improved national capacity for the management of fisheries resources

In recent years, the CoC has acknowledged that there is strong political willingness to support the work of the GFCM and to routinely carry out the assessment of adopted GFCM decisions. Some CPCs are, however, experiencing some difficulties in meeting their obligations stemming from GFCM decisions and, therefore, capacity-building efforts must be enhanced. In this regard, the GFCM Agreement recognizes, in particular, the needs of developing CPCs. This output will be achieved through the completion of the following actions:

- a. The provision of **capacity building for CPCs**, as obliged by the Commission, when necessary, to assist CPCs in meeting their obligations stemming from relevant GFCM decisions. The provision of technical assistance by the GFCM has been sparse up to now as no clear mechanism existed to govern the provision of technical assistance, including from the identification of needs to the actual support on the ground.
- b. The implementation of a **technical assistance mechanism** to support CPCs in bridging existing gaps. Such a mechanism should be based on recent work carried out by the CoC to thoroughly address the link between national gaps/shortcomings and the implementation of GFCM recommendations. Based on requests for technical assistance received by the GFCM thus far, the main following areas would be, among others, covered by the technical assistance mechanism: i) stock assessment and management plans; ii) data collection, analysis and transmission; iii) elaboration and amendment of national legislations; iv) assessment and development of national VMS and control systems in accordance with GFCM standards; v) the strengthening of port controls and vi) the elaboration and development of case studies on small-scale fisheries.
- c. The launch of a **regional programme for education and training** to lay down the foundation for a new generation of fisheries experts through mid- and long-term specialization curricula, in collaboration with regional and national research/training institutions, which would essentially cover domains such as population dynamics, including stock assessment, fishing technology, socio-economic analysis and fisheries legislation.

Output 5.2: Strengthened fisheries governance in the Black Sea

On the occasion of the 2014 amendment to the GFCM Agreement, the specificities of the Black Sea were recognized when it was decided to establish a specific mechanism to promote cooperation among riparian countries. Over the past decades, many efforts have been made to bring about a concerted approach to the issues and challenges that are faced in the Black Sea. The trend has shifted towards a regional decision-making process which has been promoted through the WGBS since 2011 (the year it was established). The contribution of the WGBS to fisheries governance has been decisive, to the extent that three binding recommendations have been adopted by the GFCM in the years that followed the establishment of the WGBS. Furthermore, a non-binding roadmap to fight IUU fishing in the Black Sea was also adopted. The most crucial element for fisheries governance in

the Black Sea remains cooperation among the riparian countries. Enhanced cooperation has been staunchly pursued by the GFCM, leading to the granting of cooperating non-contracting party status to Georgia and Ukraine in 2015. There is momentum, at present, to build upon ongoing cooperation and further strengthen fisheries governance in the Black Sea. To this end, this output will be achieved through the completion of the following actions:

- a. The organization of a **high-level conference on fisheries governance** in order to examine existing institutional hurdles and provide a forum for riparian countries to provide inputs to the ongoing process of cooperation in the Black Sea. Discussions are needed in particular to ensure full membership of the six riparian countries to the GFCM, in due course.
- b. The launch of the start-up phase of a **regional, scientific and technical cooperation project for the Black Sea**, the BlackSea4Fish project, carried out in the remit of the WGBS. It is expected that this project would operate under the umbrella of the GFCM, with the aim to support the activities of the WGBS, and would contribute to further bridging gaps at the regional level, endowing the WGBS with the necessary support to make sure that its work programme is efficiently implemented.

Output 5.3: Increased cooperation with relevant actors

As part of the same organization, tight collaboration with the FAO Fisheries and Aquaculture Department on issues such as the development and implementation of the SSF Guidelines, the management of marine areas beyond national jurisdiction (ABNJ), the implementation of the FAO PSMA or the Global Record, has been instrumental to align regional actions with global practices and to showcase regional initiatives in reply to international guidelines. The establishment of the FAO regional projects for the Mediterranean, starting with the launch of Copemed in 1996 and followed by MedSudMed, AdriaMed and EastMed, has substantially supported the SAC in the provision of scientific advice, thanks to the technical support and capacity-building activities directly provided to countries over the years.

In addition to the GFCM's ongoing collaboration with relevant FAO departments and projects, at the time of writing, the GFCM has concluded 14 MoU. These instruments have been central to fostering synergies and avoiding duplications. Moreover, several initiatives are being undertaken in the framework of these instruments which are extremely important due to the transversal nature of the areas of cooperation addressed therein. In addition to the governmental cooperation promoted by the GFCM, intra-governmental cooperation with other institutions is also important. This output will be achieved through the following actions:

- a. The **operationalization of existing MoU**, including the launching of joint activities, with a view to avoiding duplications. Where new possibilities arise for new MoU, these should be submitted to the Commission for its consideration and adoption.
- b. In line with the FAO Strategic Objective 2, the **strengthened coordination with the FAO Fisheries and Aquaculture Department and FAO regional projects**, taking into account current challenges and recent changes within the GFCM, including the focus on a subregional approach and the launch of this strategy.

5. IMPLEMENTATION MECHANISMS

21. Consistent with Article 17 of the GFCM Agreement, the capacity of developing CPCs will be duly taken into account in implementing the strategy in order to level the playing field and bridge existing gaps. Technical assistance will be provided where there is a need to build national capacities so that existing commitments can be fulfilled equally. In this respect, the promotion of the “concerted actions” initiative or the signature of bilateral letters of agreement, as already implemented by the GFCM in the past with selected CPCs, should be encouraged.
22. The effective implementation of existing and future fisheries management-related decisions by CPCs is instrumental in reaching the objectives of the mid-term strategy.
23. The GFCM, through its relevant subsidiary bodies, should regularly assess the attainment of the targets during the period of implementation of the strategy, by reviewing the outcomes of specific activities, revising and updating, as appropriate, the expected outputs and providing guidance to reach more effectively agreed objectives.

This strategy is dedicated to the late Mohamed Hadjali Salem, an important member of the GFCM family having twice served as GFCM Chairperson and also as the long-standing coordinator of the SIPAM network. His experience and commitment intelligently led the Commission through delicate times of change.