

FISHERIES AND AQUACULTURE IN THE DANUBE AND THE BLACK SEA

THU 22 APRIL 2021
11.00 - 13.30 (CEST)

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VIEWS FOR BUILDING  
FORWARD BETTER



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# What is the role of the GFCM in the Black Sea? What do fisheries and aquaculture represent for the Black Sea?

GFCM Objectives – RFMO – Federate efforts of countries towards the **conservation and sustainable use of living marine resources** at all levels (biological, economic, environmental) and the **sustainable development of aquaculture**

Fisheries play an important social and economic role in the Black Sea, and the small-scale fleet dominates activities. BlackSea4Fish works with national fisheries institutes across the region to strengthen the sector's long-term social and environmental sustainability.

### The Black Sea fleet



### Revenue from capture fisheries



### Employment onboard vessels



### Landings from capture fisheries



Food and high quality protein for an increasing population

Employment for men, women and young people



Essential part of the fabric of coastal communities



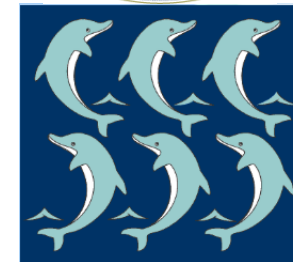
### Liaising with regional bodies and organizations:



Black Sea Economic Cooperation



International Centre for Black Sea Studies



Black Sea Commission



EuroFish



CPMR BALKAN & BLACK SEA COMMISSION



Black Sea Advisory Council

Commission

Bureau  
Chairperson:  
Roland Kristo



Secretariat  
Executive Secretary:  
Abdellah Srour

Scientific Advisory Committee on Fisheries

WORKING GROUP ON THE BLACK SEA

Scientific Advisory Committee on Aquaculture

Compliance Committee

Committee on Administration and Finance

### SGSABS

### BS4F: a cooperative mechanism among scientists within the GFCM

- Increase scientific knowledge
- SSF
- Assess IUU
- Fisheries and environment
- Technical and institutional cooperation
- Subregional technical unit in Bulgaria



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## CPCs' Policy Commitments

- Develop comprehensive **regional governance** involving all stakeholders
- Enhance **data collection and scientific evaluation**
- Establish an **ecosystem-based fisheries management** framework
- Develop a culture of **compliance and eliminate illegal, unreported and unregulated fishing**
- Support **sustainable small-scale fisheries and aquaculture**



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## Outcomes and Progress

- Adoption of Common Regulatory Framework
- Multi-annual Management Plan for Sustainable Turbot Fisheries (increase of FOs)
- Management Measures – (turbot and piked dogfish)
- Closure period for turbot fishing
- Set of minimum standards for bottom-set gillnet fisheries
- Common assessment of stock status of priority species
- Roadmap to fight illegal, unreported and unregulated fishing in the Black Sea
- Establishment of Aquaculture Demonstrative Centres
- Implementation of Regional Plan of Action for sustainable SSF



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# BLACK SEA FISH

The project initiatives target the irregular regional expertise in stock assessment and to improve the technical capacity in the Black Sea:

*Black Sea priority species for which advice should be produced based on a combination of criteria, including socio-economic importance and conservation concern.*

## 2018-2020 Outcomes

- ✓ Data preparation meetings  
Sprat, turbot, anchovy and Rapa whelk
- ✓ Benchmark assessments  
Sprat and turbot
- ✓ Technical workshops on age reading  
Anchovy and Rapa whelk
- ✓ Experimental surveys-at-sea for Rapa whelk
- ✓ Training opportunities for stock assessment
- ✓ Socioeconomic survey
- ✓ Bycatch monitoring programmes Turkey and Ukraine

| BLACK SEA                       |                                                    |
|---------------------------------|----------------------------------------------------|
| Pelagic species                 | European anchovy ( <i>Engraulis encrasicolus</i> ) |
|                                 | European sprat ( <i>Sprattus sprattus</i> )        |
|                                 | Horse mackerel ( <i>Trachurus mediterraneus</i> )  |
| Demersal species                | Turbot ( <i>Scophthalmus maximus</i> )             |
|                                 | Whiting ( <i>Merlangius merlangus</i> )            |
|                                 | Red mullet ( <i>Mullus barbatus</i> )              |
| Non-indigenous species          | Rapa whelk ( <i>Rapana venosa</i> )                |
| Species of conservation concern | Piked dogfish ( <i>Squalus acanthias</i> )         |

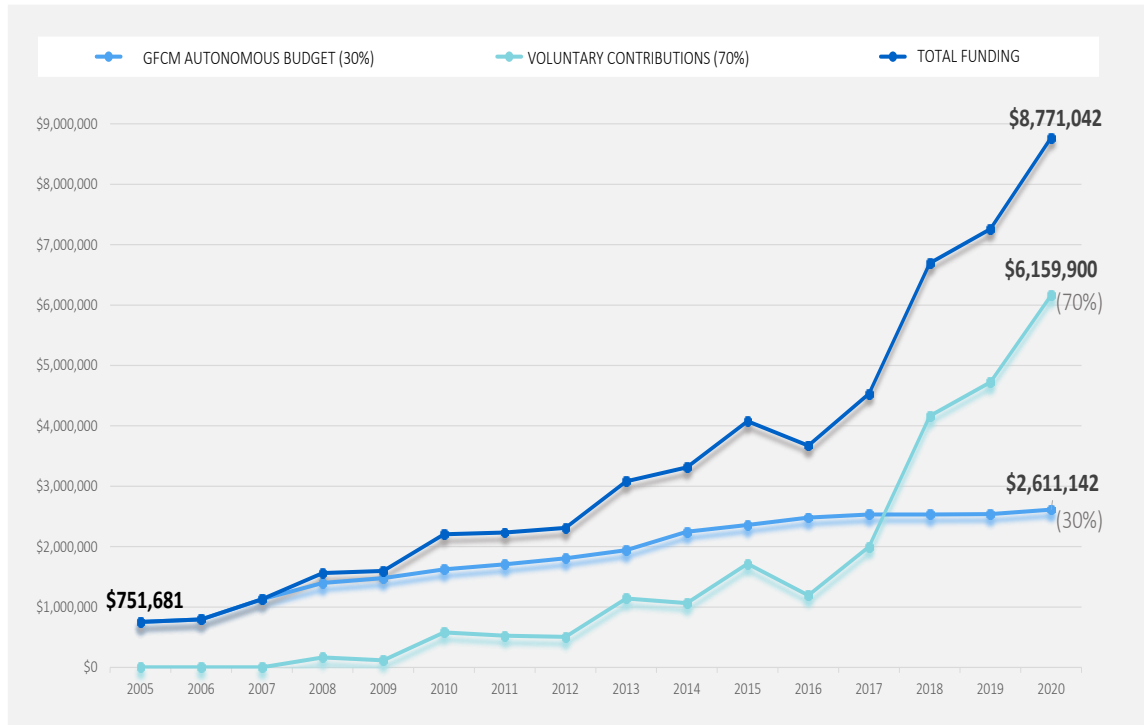


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## Increase in funding



## Success stories

- **BlackSea4Fish project** is providing crucial support to countries to perform the technical work needed to fulfil the requirements of recommendations (e.g. Rapa whelk research programme)
- **Turbot multiannual management plan** with the establishment of a whole-of-Black Sea Total Allowable Catch and a mechanism to determine country quotas
- **Aquaculture Demonstration Centres**



European  
Commission



GLOBAL  
ENVIRONMENT  
FUND



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## GFCM Mid-Term Strategy 2017-2020 towards the sustainability of MED and BS Fisheries Achievements

### Fisheries

- More productive and sustainable;
- Marine environment and ecosystem conservation fostered
- Livelihoods and food security supported

### Aquaculture

- Efficient and regulatory framework promoted;
- Market oriented production supported;
- Ecosystem protection supported while ensuring animal and human health





# GFCM Analysis on the impact of Covid-19 on fisheries and aquaculture

|                        | Impact                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contributing factors                                                                                                                                                                                                                                                                        |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fleet and Farms</b> | <ul style="list-style-type: none"> <li>- Up to <b>80% decrease in number of vessels operating</b></li> <li>- Aquaculture farm operations vary greatly</li> </ul>                                                                                                                                                                                                                                                                                 | <p>Physical restrictions</p> <ul style="list-style-type: none"> <li>- Difficulty in complying with social distancing restrictions (particularly on board SSF)</li> </ul>                                                                                                                    |
| <b>Production</b>      | <ul style="list-style-type: none"> <li>- More than <b>75% decrease in production</b> in most countries</li> <li>- Change in target species (away from higher-value species destined to export markets, towards lower value species destined to local markets)</li> </ul>                                                                                                                                                                         | <ul style="list-style-type: none"> <li>- Border closures preventing the transport of product (<b>closure of export markets</b>)</li> </ul>                                                                                                                                                  |
| <b>Market</b>          | <ul style="list-style-type: none"> <li>- An initial <b>20-70% decline in prices</b> (e.g. 50% decrease in price for turbot in Bulgaria)</li> <li>- Decline in prices for capture fisheries has had effect of decreasing ex-farm prices in some cases</li> <li>- <b>30-40% decline in aquaculture farm revenue</b></li> <li>- Certain species more acutely affected (e.g. shellfish, seabass and sea bream) due to restaurant closures</li> </ul> | <p>Major changes in demand:</p> <ul style="list-style-type: none"> <li>- <b>Closure of Ho.Re.Ca sector</b></li> <li>- <b>Changes in consumer preferences</b> towards cheaper/canned products</li> <li>- temporary <b>over-availability</b> of fresh fish leading to <b>waste</b></li> </ul> |





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## OPPORTUNITIES AND NEXT STEPS FOR THE POST-COVID-19 ERA FOR FISHERIES AND AQUACULTURE IN THE BLACK SEA

### **A new GFCM 2021-2030 Strategy for Sustainable Fisheries and Aquaculture in Med and Black Sea- Key Points**

- Expand and deepen cooperation with other RFMOs or other relevant organizations
- Strengthen the implementation of the Subregional Approach, including for capacity development
- Enhance multidisciplinary scientific and Technical advice that also incorporate socio-economic aspects, as a basis for robust decision-making
- Adopt ecosystem-based measures, including FRAs and measures to protect VMEs, taking into account non-fishery related factors such as climate change, pollution, non-indigenous species
- Strengthen compliance and enforcement against IUU fishing by enhancing CoC processes and setting up centralized schemes, including VMS
- Enhance value chain in fishery products and promote responsible aquaculture



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## OPPORTUNITIES AND NEXT STEPS FOR THE POST-COVID-19 ERA FOR FISHERIES AND AQUACULTURE IN THE BLACK SEA

### New GFCM 2021-2030 Strategy - Main Targets

**Fisheries and ecosystems:** healthy seas and productive fisheries

**Compliance and enforcement:** a level playing field to eradicate illegal, unreported and unregulated fishing

**Aquaculture:** a sustainable and resilient sector growing to its full potential

**Livelihoods:** decent employment and engaged fishers towards profitable fisheries

**Capacity development:** technical cooperation, knowledge sharing and efficient partnerships in a subregional perspective

### GFCM 2021-2030 Strategy for sustainable Fisheries and Aquaculture in the Med and Black Sea

- Ad-hoc meeting of the GFCM Heads of Delegations 14 April 2021
- **High-Level Event for the adoption of the new strategy for sustainable fisheries and aquaculture in Med and Black Sea 2021-2030 (June 2021)**
- 2021 GFCM Annual Session

# BLACK SEA 4 FISH

## Next Steps

### OUTPUT 1



aims to increase, through systematic stock assessment of priority species, existing scientific knowledge to support fisheries management and reverse the current overexploitation of Black Sea stocks, limiting the percentage of stocks outside biologically safe limits.

### OUTPUT 2



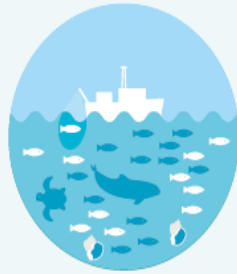
aims to implement actions to enhance and disseminate knowledge on small-scale and recreational fisheries, with a view to supporting livelihoods in small-scale fishing communities, including by promoting decent work.

### OUTPUT 3



aims to assess IUU fishing rates in the Black Sea, and operationalize a modular approach to vessel monitoring systems (VMS) and control systems. This approach will ultimately contribute to the evaluation of the implementation of the RPOA-IUU.

### OUTPUT 4



aims to implement a bycatch monitoring programme to reduce discard rates and incidental catches of vulnerable species, while also working towards strategies for adapting to climate change and dealing with non-indigenous species in the Black Sea.

### OUTPUT 5



aims to promote and disseminate the project results with relevant stakeholders, with a view to increasing participation as well as strengthening technical and institutional cooperation.

### Future considerations and opportunities

- ✓ All-of-Black Sea demersal survey
  - ✓ Improve existing surveys
  - ✓ Extend participation of BS countries
- ✓ Black Sea fish stocks under changing environmental and climatic conditions
  - ✓ Ensure continuation of time series data
  - ✓ Support surveys at sea particularly for small pelagic species
  - ✓ Consider multispecies modelling of fish resources
  - ✓ Implementing mass-balance ecosystem models
- ✓ Stock identification of Black Sea resources
  - ✓ Genetic samplings

# BLACK SEA 4 FISH

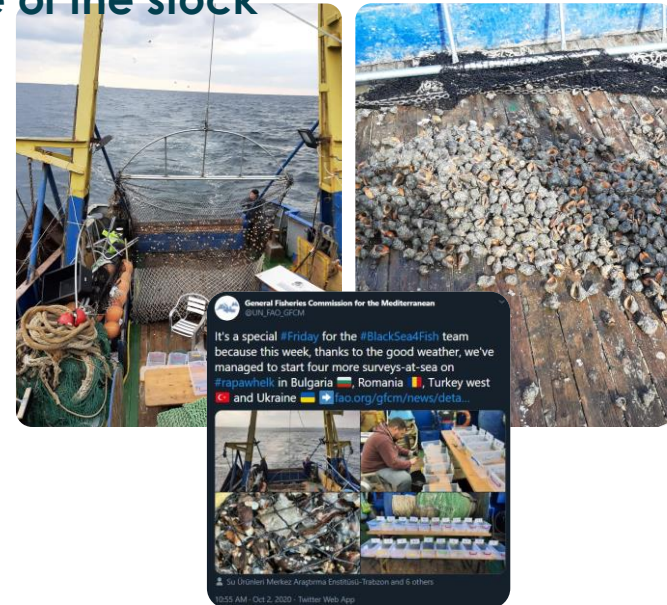
## Key Results and Next Steps

- ✓ Ongoing work for the establishment of **Black Sea scientific database** - gathering experts and knowledge
- ✓ Online expert meetings for Black Sea priority species - Identifying data gaps and needs
- ✓ Online presentations events
  - State-space assessment models (SAM)
  - Rapa whelk survey protocol
  - Multispecies modeling of Black Sea resources (EwE)
  - Biological Reference points
  - Data limited stock assessment models

To strengthen the application of the sub-regional approach through the **GFCM SUBREGIONAL TECHNICAL UNIT** established in Burgas/Bulgaria in 2018 and tasked with the overall identification, planning, implementation and monitoring of GFCM programmes and activities in the Black Sea region, in line with the workplan adopted regularly by the WGBS and the GFCM.

### 2020-2021 surveys-at-sea

- ✓ Launch of Rapa survey-at-sea by six riparian countries in 2020 – to be continued in 2021
- ✓ Ongoing work in SGSABS in 2021 for assessing the stock biomass towards provision of scientific advice on the state of the stock



Continuation and expansion of demersal survey

- turbot
- piked dogfish
- red mullet

- ✓ Continuation of the Hydro-acoustic survey-at-sea for Black Sea anchovy by Turkey and Georgia  
November and December 2021

# GFCM Regional Plan of Action for Small-Scale Fisheries - Prescribes concrete actions to be implemented over ten years (2018–2028)

- **SSF Forum** stems from recommendations within the **Regional Plan of Action for Small-Scale Fisheries in the Mediterranean and the Black Sea** on the need for capacity building initiatives for small-scale fishers in the Mediterranean and Black Sea region.
- Objectives:
  - Share knowledge on select topics
  - Promote best practices
  - Facilitate learning exchanges among fishers in the region

- **WHAT:** a series of **workshops** and **training courses** for small-scale fisheries stakeholders in line with the **main topics of the RPOA-SSF**
- **WHO:** **small-scale fishers** and **fish-workers** active in the sector are encouraged to participate
- **How:** the structure of each workshop varies and may consist of **online learning**, in the **field experience** and **peer-to-peer exchanges**



Scientific research



SSF data collection



SSF management measures



Value chain enhancement



Participatory approach



Capacity building



Decent work and social protection



Strengthening the role of women



Climate & environment

# SSF Forum online courses under preparation

- **Collaboration between small-scale fishers and scientists: a strategy for enhancing research, data collection and fisheries management** – discussions on how fishers and researchers can improve collaboration throughout the process from data collection to project implementation and fisheries management, highlighting success stories
- **Decent work and social protection** - This course will seek to raise awareness about social protection programmes for small-scale fishers, including best practices in improving access in the region
- **Small-scale fishers – guardians of our changing marine environment** - This course will highlight innovative solutions and adaptation strategies to address these challenges. Workshops will showcase solutions fishers have found to improve the selectivity of their catches, reducing bycatch and the incidental catch of vulnerable species; provide opportunities for fishers to share and compare climate change impacts and discuss adaptation strategies

# Aquaculture Activities in 2021

**Aquaculture Demonstrative Centres (ADC) to promote sustainable aquaculture in the Black Sea**

## Nature and functions

- raise the awareness on the aquaculture potentials in BS
- useful tool for local and national administration to assess new projects
- consider the different level of aquaculture development, environmental conditions, and expertise available in the countries

## Target groups and beneficiaries

- private sector; public institutions and other organizations; scientific existing networks...

**2 existing ADCs (in ROM and TUR), ongoing works for expanding the number in the B. Sea**

# Creation of Black Sea Aquaculture Observatory

- a platform to monitor market developments, including innovation and other actions taken by different stakeholders;
- Aimed to provide the critical capacity needed by countries to understand and implement optimized solutions (economic, technical and operational) and to develop capacity at the national level to report on the UN SDGs

## First Meeting of the Black Sea Aquaculture Observatory –31 May 2021 (tbc)

### EXPECTED OUTPUTS

- Agreement on the role of GFCM in the data collection and sharing,
- Knowledge on the current status and challenges of aquaculture
- A consultative road map for the improvement of the market data collection,
- Data and information priorities identified through a participatory approach
- Key priorities and objectives for the definition of an IT platform the Aquaculture Market Observatory for the Black Sea

## “Fisheries and Ecosystem Based Management for the Black Sea” Project (FishEBM-BS)

GEF Council endorsed a FAO/GFCM project to support sustainability in Black Sea fisheries

- start 2021, duration 4 years, executed by GFCM

### Objectives

- to reverse the overexploitation of selected commercial fisheries in the Black Sea
- to ensure that the sector remains profitable, resilient, and environment friendly

The project will identify main issues requiring technical support, upscale regional fisheries networks, as well as promote and disseminate sustainable management practices with a specific focus on small-scale fisheries and value chains and will support Georgia, Turkey and Ukraine



### The GEF Project Components

- Strengthened capacity to manage commercial fisheries, with particular focus on SSF
- Enhanced integration of emerging monitoring, control and surveillance technologies in the fight against IUU fishing
- Integrated ecosystem based management tools and ecosystem approach to fisheries
- Knowledge management and outscaling



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**THANK YOU FOR YOUR ATTENTION**

