

### Focus on aquaculture

# Key facts on Black Sea aquaculture

- 1. The Black Sea region hosts a diverse range of freshwater and marine aquaculture activities.
- 2. Aquaculture has strong potential to be a pillar of sustainable blue growth in the Black Sea region.
- 3. The Common Maritime Agenda and its research and innovation component (the Strategic Research and Innovation Agenda), fully support the aquaculture sector, notably through priority areas such as product development and innovation, in line with the General Fisheries Commission for the Mediterranean (GFCM) 2030 Strategy for sustainable fisheries and aquaculture in the Mediterranean and the Black Sea.

### Aquaculture products: Transforming tradition with new processes

Different bays and estuaries in the Black Sea are breeding grounds for mollusks and fish.

- Aquaculture in the Black Sea concerns a wide range of species from bivalves to marine and freshwater fish, providing income to thousands of families living along a coastline of over 4000 km. VIDED
- 2. **Oyster farming** is developing intensively. Farms often import juvenile oysters, to grow them to commercial size.
- 3. Technological innovation and business incubators are spawning new aquaculture ideas and businesses; such as <u>BBSEA</u> or <u>UP-BLUE Georgia</u>.
- 4. **Maritime Spatial Planning** supports the development of Black Sea aquaculture, with projects such as <u>MARSPLAN-BS-II, PlanCoast or Black Sea CONNECT.</u>

Euronews OCEAN Season 3 Episode 8 -Blue opportunities in the Black Sea (e.g. aquaculture)



# Aquaculture challenges: A growing demand calling for environmental monitoring & sustainability strategies

- Growing production: "Between 2001 and 2018, aquaculture production in the Black Sea countries rose from 203 tonnes in 2001 to 565 tonnes, representing 179% increase, with an average annual growth rate of 5.9%]<sup>1</sup>".
- 2. **Risks:** production in Mediterranean and Black Sea countries is expected to exceed 4 600 000 tonnes in 2020-2030, a growth rate which must be made compatible with environmental sustainability.
- 3. The General Fisheries Commission for the Mediterranean adopted its 2030 Strategy for sustainable fisheries and aquaculture in the Mediterranean and the Black Sea in 2021, fully in line with CMA and SRIA objectives.

#### Focus on the GFCM 2030 Strategy's Aquaculture Targets

A strategy with four key objectives for the Black Sea

- 1. Promoting efficient governance in support of responsible investment.
- 2. Promoting practices that support aquaculture industry sustainability.
- 3. Improving perceptions of aquaculture.
- 4. Maximising technology and information systems.

**GF(M 2030 STRATEGY** FOR SUSTAINABLE FISHERIES AND AQUACULTURE IN THE MEDITERRANEAN AND THE BLACK SEA

1 Massa, F., et al.. (2021). Black Sea Aquaculture: Legacy, Challenges & Future Opportunities. Aquaculture Studies, 21, 181-220. https://doi.org/10.4194/2618-6381-v21\_4\_05





### Focus on aquaculture

# **Clusters and Cooperation**

Black Sea Aquaculture triggers cooperation, new activity clusters, events and EU funded projects such as:

AQUAlity: Multi-sensor automated water quality monitoring and control system for continuous use in recirculation aquaculture systems. Topic: Marine aquaculture Total budget: 2.753.966 € EU Contribution: 2.092.550 € Funding type: 7th Framework Programme for Research and Technological Development (FP7)



More details

available here

#### Feeding the World, Restoring the Oceans **Topic:** Marine aquaculture

**Ocean Reef Tower Oases:** 

Total budget: 71.429 € EU Contribution: 50.000 € Funding type: Horizon 2020 Partner countries: Bulgaria





**Partner countries:** Denmark (coordinator) and Black Sea countries (partner): Romania and Turkey

# Skills and training

### Aquaculture Demonstrative Centres (ADC) – FAO GFCM

In 2017, Aquaculture Demonstration Centers (ADCs) were respectively established at the National Institute for Marine Research and Development (NIMRD) Grigore Antipa in Constanta, Romania and the Central Fisheries Research Institute (CFRI) in Trabzon, Turkey. Their objectives are to:

- 1. Research and develop aquaculture techniques and technologies
- 2. Showcase best practices in aquaculture
- Train specialists from local and national administrations, academia and the private sector





#### TO GO FURTHER:

- EU Strategic guidelines for a more sustainable and competitive EU aquaculture for the period 2021 to 2030
- Black Sea Common Maritime Agenda Blue Entrepreneurship Support workshop

### **ADC Online**

Showcasing best practices in aquaculture

Free online courses on techniques and technologies in aquaculture

### THEMATIC AREAS

- Shellfish environment and pathologies
- Turbot aquaculture and restocking
- Recirculating aquaculture systems



Paticipants from academia, the private sector and local and national administrations

Developed in collaboration with the GFCM Aquaculture Demostrative Centres in Romania and Turkey



Supported by the