



Food and Agriculture  
Organization of the  
United Nations



General Fisheries  
Commission for  
the Mediterranean

## Scientific Advisory Committee on Aquaculture (CAQ)

### Technical Advisory Group on Innovation and Technology

#### Workshop on climate change, resilient aquaculture and mitigation strategies

11 February 2024, Oran, Algeria

Draft concept note

#### BACKGROUND

Aquaculture has experienced significant growth in the Mediterranean and the Black Sea over the past decades, playing a vital role in meeting the increasing demand for aquatic food products. This growth has positively contributed to food security, employment and economic development in the region, establishing aquaculture as a strategic sector for sustainable development within the GFCM 2030 Strategy and the Blue Transformation framework of FAO.

Several factors have fuelled this growth, including advancements in fish feeding, disease control and the widespread adoption of technologies in both marine and land-based aquaculture. Political commitments, coupled with national and international cooperation, as well as substantial investments from public and private sectors, have further propelled the sector's development. Opening new market opportunities have also played a pivotal role in sustaining this growth.

The industry anticipates continued expansion in the future, prompting a comprehensive assessment of recent advancements in aquaculture. This evaluation aims to foster collaboration, share knowledge horizontally and identify areas of cooperation on cross-cutting topics. One of the most prevalent topics requiring closer cooperation is climate change, a concern shared by all Mediterranean and Black Sea countries.

In response to this need, the Technical Advisory Group on Innovation and Technology for Aquaculture was established during the forty-fifth session of the General Fisheries Commission for the Mediterranean (GFCM) and the reorganization of the Scientific Advisory Committee on Aquaculture (CAQ). The Group's purpose is to invigorate exchanges and support the CAQ with concrete proposals.

In alignment with this initiative, the Workshop on advancing climate-resilient and sustainable aquaculture in the Mediterranean addresses the urgent need to confront the challenges posed by climate change. It tackles environmental sustainability issues, with a specific focus on reducing carbon emissions and plastic use in aquaculture in line with Resolution GFCM/46/2023/7 on decarbonization and sustainable feed production in aquaculture, Resolution GFCM/46/2023/8 on the reduction of plastic use and best management of waste in aquaculture and Resolution GFCM/46/2023/9 on climate-resilient aquaculture, adopted by the GFCM at its forty-sixth Session. This workshop aims to bring together diverse stakeholders

to discuss and strategize on innovative solutions, ultimately enhancing climate resilience, promoting sustainable practices, and contributing to the overall decarbonization and reduced plastic footprint of the aquaculture sector in the Mediterranean.

This workshop serves as a pivotal platform for consultation on priority topics, leveraging the expertise and collaborative efforts of key stakeholders to propel the aquaculture sector towards a more sustainable and resilient future.

## **OBJECTIVES**

**1. Knowledge sharing for sustainable practices:** foster the exchange of knowledge and experiences regarding the impact of climate change on aquaculture in the Mediterranean, with a specific emphasis on decarbonization and reducing plastic use in the sector.

**2. Innovation and solutions for climate resilience:** explore innovative tools, technologies and strategies geared not only towards mitigating and adapting to climate change challenges in aquaculture, but also promoting decarbonization and the reduction of plastic use within the sector.

**3. Showcasing resilient farming practices:** discuss and showcase climate-resilient aquaculture farming systems, incorporating models and best practices that contribute to both environmental sustainability and the reduction of carbon emissions and plastic footprint.

**4. Stakeholder collaboration:** promote collaborative efforts among diverse stakeholders, including fish farmers, scientists, industry experts and policymakers, to collectively address the challenges posed by climate change, focusing on sustainable practices, decarbonization and the reduction of plastic use in aquaculture.

## **EXPECTED OUTPUTS**

The workshop, through the contribution of invited expert speakers, panellists and the active participation of the attendees will lead to:

- development of a comprehensive roadmap outlining actionable steps for achieving climate-resilient, decarbonized and low-plastic-impact aquaculture in the Mediterranean;
- increased awareness of sustainable practices, innovative technologies and effective strategies for mitigating climate change impacts;
- collaboration among diverse stakeholders, including aquaculture practitioners, scientists, policymakers and industry representatives;
- identification and dissemination of best practices derived from case studies and discussions on climate-smart technologies, decarbonization strategies and plastic use reduction within aquaculture operations; and
- formulation of actionable policy recommendations that align with the goals of decarbonization and reduced plastic use in aquaculture, as well as with the principles contained in Resolution GFCM/46/2023/7, Resolution GFCM/46/2023/8 and Resolution GFCM/46/2023/9.

## **PARTICIPANTS**

Participants will be able to join from all over the region, although this workshop will generally target:

- farmers and farmer associations;
- researchers working on climate change and aquaculture; and
- government representatives.

**LANGUAGE**

The workshop will be in English with interpretation in French.

**ORGANIZATION OF THE WORKSHOP**

The workshop is being organized by the GFCM in collaboration with the Algerian Ministry of Fisheries and Fisheries Production.

The final agenda with the selected experts and keynote speakers will be distributed in advance. Participants will be invited to provide information prior to the meeting and to actively participate in the discussions.