

Contribution of the European Union to the 17th round of Informal Consultations of the State Parties to the UN Fish Stocks Agreement (ICSP-17)

Sustainable fisheries management in the face of climate change

Sustainable fisheries management and climate change in an international context

Sustainable aquatic food systems have a vast potential in delivering healthy and nutritious food contributing to dietary improvements and meeting the UN Sustainable Development Goals (SDGs). Fisheries and certain types of aquaculture can highly contribute to this objective considering that their high biological diversity, the greater efficiency of their production systems and their lower greenhouse gas emissions and water footprint than terrestrial production systems place them at the forefront of food production with a low environmental and climate footprint. The Food and Agriculture Organisation (FAO) refers to the fact that aquatic foods are more accessible to many vulnerable communities, while supporting the lives and livelihoods of those communities that depend on fisheries and aquaculture.

Climate change affects marine biodiversity, fish and other aquatic organisms and their ecosystems and is likely to impact fish stocks in various ways, such as by triggering changes in distribution, abundance etc. The European Union will continue to promote the inclusion of climate change and biodiversity considerations into policy decision making, while taking into account relevant socio-economic aspects to support the development of climate-resilient fisheries management systems. In such a challenging context, the production and consumption of food, including aquatic food must be adapted. Only effectively managed aquatic resources can contribute to sustainable food systems worldwide. To this end, the EU is exploring ways to improve our understanding of the interactions between climate and fisheries and aquaculture, including via nature-based solutions and ecosystem-based approaches considering sea basins specificities.

At regional level, the EU will continue to advocate for further integrating ecosystem, climate change, and biodiversity considerations in the work of Regional Fisheries Management Organisations (RFMOs) and other relevant bodies and instruments dealing with the conservation and management of marine living resources, and in particular in the scientific work underpinning the management decisions. Supporting the scientific bodies of these organisations to provide climate-related scientific information aiming at supporting climate resilient fisheries management systems constitutes a key priority for the EU. This is reflected in the resources that the EU is already providing and will continue to provide at regional level for the development of ecosystem modelling, climate indicators, climate change projections, etc., in connexion with the management of fisheries resources.

RFMOs have already started creating the scientific foundation that will allow predicting and anticipating the effects of climate change in the different oceanic basins regulated by RFMOs to support the development of fisheries management frameworks that are robust to climate related stressors and effects of climate change.

RFMOs have already undertaken work that might be relevant also in the context of the climate change discussions. It is therefore important to avoid duplication of work and resources and undertake a stock taking exercise in all RFMOs to identify knowledge, data and existing processes that can contribute to informing on and addressing climate change impacts in fisheries. This could also contribute to identify key gaps and needs for future work that will provide the science base for developing climate robust fisheries management systems.

A key area for capturing climate change considerations is related to the development of Management Procedures (MPs) and Management Strategy Evaluation (MSE) frameworks for key fish stocks that are robust to uncertainties including those introduced or exacerbated by climate change. In this regard, the EU will promote the development of dedicated robustness tests, which could provide meaningful proxies for designing future MPs that are resilient to stressors driven by climate change. This will of course require dedicated dialogues between managers, scientists, and stakeholders to ensure that the design is fit for purpose.

The EU will also promote stronger collaboration between RFMOs to discuss shared challenges, best practices, optimise available resources, and identify potential areas for joint initiatives aiming at mitigating and adapting to climate change effects on fisheries.

At international level, the EU and its Member States are fully committed to achieve the FAO Code of Conduct for Responsible Fisheries, to support the international efforts to improve effective fisheries management, including based on the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication, to fight Illegal, Unreported and Unregulated (IUU) fishing, and to promote sustainable aquaculture. The EU also supports developing countries in this endeavour and is a member of the UN Forum on Sustainability Standard Aquatic/Blue Food Coalition. The EU is also actively promoting sustainable and responsible fisheries, through many fora, for example, the annual UN General Assembly Sustainable Fisheries Resolution, and the periodical review of the United Nations Fish Stocks Agreement, as well as other events such as the Our Ocean Conferences. The UN Ocean Conference in 2025 will be particularly important in this respect.

Furthermore, given that the deep sea is considered to be a natural carbon capture and sequestration system, its protection through the Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ Agreement) and the International Seabed Authority's (ISA) negotiations on developing a mining code are highly important.

As climate change is one of the main drivers of biodiversity loss and degradation of ecosystems, the EU's priority for the BBNJ Agreement's implementation once it will have entered into force should be to link climate change and biodiversity concerns, in particular through the establishment of Marine Protected Areas (MPAs). They represent a critical tool in the fight against climate change. They help maintain ecosystems services, including carbon uptake and storage.¹ In the context of the ISA, the European Commission advocates that the exploitation of marine minerals in the Area should not start until scientific gaps are properly filled, no harmful effects arise from mining and the necessary provisions in the exploitation regulations for the effective protection of the marine environment are in place.

Sustainable fisheries management and climate change in a European context

While it is obvious that climate change affects the world as a whole, it is also fair and accurate to emphasise that climate change particularly impacts the European continent since Europe is identified as being the fastest warming continent.² Aware of the climate crisis and emergency that the world is facing, the European Union has put in place a series of instruments to limit climate change and its consequences on ecosystems and human populations.

¹ IPCC, 2019: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate

² [European Climate Risk Assessment](#), 2024

Although the European Green Deal constitutes the framework instrument, it has been largely detailed and completed by numerous others among which the EU Biodiversity Strategy for 2030, the European Climate Law, and the Nature Restoration Law. This is without mentioning the recently adopted Communication on Managing climate risks - protecting people and prosperity, which recalls that *“to ensure sustainable fisheries in a changing climate, the synergies between the common fisheries policy and environmental legislation, as put forward in the Fisheries and Oceans Pact, should be fully exploited to ensure food security and livelihoods for fishers and coastal communities.”*³

From a fisheries and aquaculture perspective, environmental changes induced by climate change will bring greater variability and uncertainties to marine ecosystems and fish stocks. Therefore, addressing the challenges of climate change should pursue the two following objectives:

1. adapting the fishery and aquaculture sectors, as well as the overall governance and management, to changes in climatic and environmental conditions, and
2. reducing greenhouse gas emissions and the environmental footprint from the fishery and aquaculture sectors, to mitigate the magnitude of climate change.

On these aspects, the Common Fisheries Policy (CFP) already provides some tools to support the sector in adapting to climate change and improve the climate resilience of the EU food production system.

The CFP provides management tools for climate-proofing fisheries management to improve ecosystem resilience, especially by reducing fishing pressure and governing EU fleets. The reduction of exploitation rates to those just needed to catch the highest long-term yields, as well as the minimisation of the impact of fishing activities on species and habitats in line with the objectives of the EU Biodiversity Strategy, are key to achieve healthy, climate resilient and adaptive marine ecosystems. Where fishing activities have been brought at or below the maximum sustainable yield (MSY) level, stocks have increased; catches and incomes are improving; and impacts on the marine environment have decreased. These are real, tangible achievements, which the EU has set out in the 2023 Annual Communication on the common fisheries policy.

The CFP also provides tools to assist adaptation in response to shifts in stock distribution and adverse climate impacts by means of science-based management strategies, flexible quota management and targeted structural support.

Furthermore, the European Commission launched two studies in recent years, which addressed the resilience of the CFP and EU fisheries to climate change impacts,⁴ and the resilience of the EU postharvest value chain to climate change.⁵ Among the conclusions was that EU fisheries management, faced with unpredictable changes that will affect many levels of fisheries, will need to be more adaptive and flexible. This requires solid scientific advice to base such management, detect and anticipate climate shocks and sudden changes in the ecosystem.

Environmental and climate elements are already being incorporated into scientific assessments and are part of the total allowable catches/fishing opportunities setting process, and scientists are continuously improving these assessments to make them more robust. The European Commission aims to strengthen ecosystem-based approaches to fisheries management, which will help to further include wider environmental and climatic elements into scientific assessments. Although there is clear evidence that science and scientific advice are advancing to include these elements, two studies on

³ [Managing climate risks: protecting people and prosperity - European Commission \(europa.eu\)](#)

⁴ [Climate change and the common fisheries policy - Publications Office of the EU \(europa.eu\)](#)

⁵ [Adapting postharvest activities in the value chain of fisheries and aquaculture to the effects of climate change and mitigating their climate footprint through the reduction of greenhouse gas emissions - Publications Office of the EU \(europa.eu\)](#)

the ecosystem approach to fisheries management⁶ commissioned by the European Commission underline that it remains necessary to better address “holistic ecosystem” challenges, such as the need to consider ecosystem variability, anthropogenic (e.g., pollution) and environmental changes, and notably those related to climate change.

The above may also allow for early detection of climate-induced changes and shocks or shifts in stock productivity that can affect the resilience of fish stocks. It will also allow for a better adaptation of management measures in line with the state of the stocks and marine ecosystems.

The funding instrument attached to the CFP, the European Maritime, Fisheries and Aquaculture Fund (EMFAF), can also support the fisheries and aquaculture sector in the transition towards climate resilience. In particular, the EMFAF can help protect and restore marine biodiversity and ecosystems to achieve a good environmental status of marine waters (e.g., by creating and managing marine protected areas, implementing the spatial protection measures established by the Marine Strategy Framework Directive, or protecting species in line with the Habitats Directive).

The EMFAF also helps fisheries and aquaculture adapt to the consequences of climate change, for example, by funding the collection of scientific data to better understand how climate change affects fisheries management, notably as regards the impact of fish stocks migration and invasive species or helping aquaculture to become more resilient to climate change. This is happening, for instance, by diversifying production to species more resilient to climate change, managing unforeseen diseases/parasites stemming from changes in temperature ranges, strengthening resilience to extreme events, droughts, and other variable conditions.

Finally, the EMFAF supports local partnerships through community-led local development to empower communities to tap into the opportunities offered by the blue economy and improve their resilience to future climate impacts.

⁶ [The implementation of ecosystem-based approaches applied to fisheries management under the CFP - Publications Office of the EU \(europa.eu\)](#)