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SC13 - Obs 07 Update on the activities of the FAO Deep-sea Fisheries Under an Ecosystem Approach Project (2022–2027)

FAO DSF Project

Update on Activities of the

FAO Deep-sea Fisheries Under an Ecosystem Approach Project (2022–2027)

Introduction

The "Deep-sea Fisheries (DSF) under an Ecosystem Approach" project is one of five child projects of the Global Environmental Facility funded Common Oceans Program Phase II (2022-2027). The DSF Project is implemented by FAO and executed by the General Fisheries Commission for the Mediterranean (GFCM), in collaboration with co-financing partners, which include the seven regional fisheries management organizations (RFMOs) responsible for the management of deep-sea fisheries stocks in areas beyond national jurisdiction (ABNJ)¹, as well as other international and national organizations². The objective of the project is to ensure that DSF in the ABNJ are managed under an ecosystem approach that maintains demersal fish stocks at levels capable of maximizing their sustainable yields and minimizing impacts on biodiversity, with a focus on data-limited stocks, deepwater sharks and vulnerable marine ecosystems. SPRFMO is one of the seven partner RFMOs of the project.

Across each of the project partner RFMOs the relative amount of catch taken in deep-sea fisheries is often a small proportion of the overall annual catches in those RFMOs. However, the relative catch levels do not necessarily provide a suitable metric to compare the ecosystem impacts of different fisheries, particularly given the life-history characteristics of both target and non-target species taken in deep-sea fisheries.

This paper describes the work of the DSF project of relevance to SPRFMO. The SC is invited to consider and support the following proposed DSF Project actions and to nominate relevant experts to facilitate engagement, where relevant:

- 1. The Ecosystem Approach to Fisheries Management
- 2. Review of the status of deep-sea fish stocks
- 3. Assessment of data-limited DSF stocks
- 4. Climate change
- 5. Impacts of deep-sea fisheries on deepwater sharks
- 6. Deep-sea fisheries industry engagement
- 7. VME identification methodology guide

¹ General Fisheries Commission for the Mediterranean (GFCM), North East Atlantic Fisheries Commission (NEAFC), Northwest Atlantic Fisheries Organization (NAFO), North Pacific Fisheries Commission (NPFC), South East Atlantic Fisheries Organization (SEAFO), Southern Indian Ocean Fisheries Agreement (SIOFA) and South Pacific Regional Fisheries Management Organization (SPRFMO)

² International Council for the Exploration of the Sea (ICES), Southern Indian Ocean Deepsea Fishers Association (SIODFA), International Coalition of Fisheries Association (ICFA), and the National Oceanic and Atmospheric Administration (NOAA) of the United States of America

1. The Ecosystem Approach to Fisheries Management

The DSF Project, in collaboration with the Northwest Atlantic Fisheries Organization (NAFO) and the International Council for the Exploration of the Sea (ICES), organized a Symposium on the Ecosystem Approach to Fisheries Management (EAFM), held from 11 - 13 March 2025 at FAO headquarters in Rome, Italy. The Symposium focused on the implementation of the ecological components of EAFM, including retained species, non-retained (discarded) species, and ecosystem considerations. The Symposium was webcast, with interpretation provided in French and Spanish. The agenda, presentations, and recordings of the Symposium can be viewed at: https://eafm-symposium.nafo.int/. The report will be available soon and a follow-up online workshop to discuss future steps is planned for early 2026.

2. Review of the status of deep-sea fish stocks

FAO published the *Review of the State of World Marine Fishery Resources 2025*³, which was undertaken on a stock-by-stock basis in which the status of the ABNJ was considered separately. The status of deep-sea fish stocks was produced by the DSF Project and reviewed by relevant RFMO experts prior to publication. The DSF project will contribute to FAO's 2026 biennial publication on the *State of World Fisheries and Aquaculture* (SOFIA). SPRFMO's stock assessment experts will be invited to contribute and review the upcoming stock status assessments for FAO's 2026 publication.

3. Assessment of data-limited DSF stocks

The DSF Project will partner with ICES to examine data-collection requirements and assessment methods for selected data-limited stocks in the ABNJ. Activities will include collaboratively identifying appropriate assessment methodologies for selected fisheries, and reviewing data collection requirements needed to undertake these assessments.

The scope of the work will include demersal and small pelagic species of finfish that have a distribution predominantly in the ABNJ. Focus fish groups will be (a) alfonsino, pelagic armourhead and orange roughy, (b) toothfish and sablefish, and (c) various small pelagic species such as the mackerels, chub mackerels and saury.

Assessment biologists from different regions have been invited, and are strongly encourage, to engage in this work.

The work will commence in September 2025, at the meeting of the ICES WKLIFE group in the Azores. SPRFMO has been invited to send a representative to attend WKLIFE and to take part in this Project Output.

³ https://openknowledge.fao.org/items/ac6d51bb-5e01-4117-b1c6-cee61d430db0

4. Climate Change

SPRFMO recently adopted a resolution on climate change, and similar resolutions have been adopted by NAFO for the northwest Atlantic, NEAFC for the northeast Atlantic, and by NPFC for the North Pacific. SPRFMO has an active climate change expert group.

The DSF Project has been supporting these RFMOs with their newly adopted resolutions by contracting independent consultants in each region to review the existing and potential modalities for the incorporation of climate change effects into each RFMO's work. The draft consultancy report for SPRFMO has been submitted as a separate document (SC13-Obs08).

A follow-up workshop will be held with all project partner RFMOs to identify and discuss common challenges and opportunities to integrate climate change considerations into the work of RFMOs.

5. Impacts of deep-sea fisheries on deepwater sharks

The DSF Project has a continued focus on reducing impacts on various incidentally caught species, including deepwater sharks (consistent with the definition of sharks in the IPOA-SHARKS⁴).

The DSF Project held a global workshop on deepwater sharks in July 2025 that considered the following four main themes:

Theme 1. Catch Reporting

Theme 2. Reporting formats

Theme 3. Ecological Risk Assessment for deepwater sharks

Theme 4. Fishing for data

The key outcomes of the workshop include a workplan for the

- * Review FAO FishStat capture-production data on deepwater sharks
- * Development of a global ecological risk assessment for deepwater sharks
- * Develop guidance for the use of ASFIS codes for RFMOs
- * Exploration of opportunities for industry engagement in data collection plan
- * Development identification materials for deepwater sharks
- * Prepare an FAO Technical Report on the outcomes and the actions arising from the workshop

During the workshop there was a recognition that attempting to improve fisheries catch data collection for all species of deepwater sharks simultaneously presents a seemingly insurmountable task. Therefore, a candidate species list, based on broad selection criteria and expert review, was identified that could be used to advance work on various aspects on deepwater shark catches in the ABNJ. Twelve of the species in this list occur in the SPRFMO

⁴ the term "shark" is taken to include all species of sharks, skates, rays and chimaeras (Class Chondrichthyes) https://openknowledge.fao.org/server/api/core/bitstreams/2142757f-a36e-41ef-b8db-bd4ac7533fb2/content

Area. The DSF Project is grateful for the nominations from Members of SPRFMO experts received at SC 12 and the welcomes ongoing support for the improved catch reporting of deepwater sharks.

6. Deep-sea Fisheries Industry Engagement

In April 2024, the DSF Project held a workshop entitled "Proactive Contributions from Industry to Sustainable Deep-Sea Fisheries" in Barcelona, Spain that focused on how deep-sea fisheries operators contribute technical and operational knowledge to RFMOs.

The second workshop, in May 2025, built on the good outcomes of the first workshop by allowing an open exchange between the DSF Project and deep-sea fishing operators on a range of key topics and providing a platform for industry experts to exchange insights, address challenges, and propose proactive solutions for sustainable deep-sea fisheries management.

Following the second workshop a Steering Committee of deep-sea fisheries industry representatives are developing terms of reference for a potential global industry network to support sustainable deep-sea fisheries.

7. VME identification methodology guide

The DSF project will draft a publication, in collaboration with its RFMO and industry partners, on the identification of VMEs by commercial fishing vessels to support the implementation of the DSF Guidelines⁵. This will include discussing the obligations for commercial vessels, the history of the identification of VMEs by commercial bottom-fishing vessels, and the methods available to commercial vessels to identify that they may be fishing in a VME.

Requests for support from SPRFMO SC

The SC is invited to support ongoing engagement with DSF Project overall and in particular to support the following actions:

- 1) Provide an expert to take part of the follow-up EAFM workshop
- 2) Nominate experts to engage in the work with ICES on the assessment of data-limited stocks,
- 3) Engage with the review of the uptake of climate change considerations in the work of SPRFMO,
- 4) Provide ongoing support for the improved reporting of catches of deepwater sharks in deep-sea fisheries,
- 5) Support the engagement of deep-sea fisheries industry in the development of a global industry network to support sustainable deep-sea fisheries, and
- 6) Contribute to the VME methods publication.

⁵ https://openknowledge.fao.org/bitstreams/224f4e53-0c34-4680-ad61-18e497763954/download