

NPFC-2025-COM09-OP07

## FAO Deep-sea Fisheries Project (2022–2027)

### Update to the North Pacific Fisheries Commission

## **Background**

The "Deep-sea Fisheries under the Ecosystem Approach" (DSF) project is one of five projects in the GEF-7 ABNJ Common Oceans Program "Global Sustainable Fisheries Management and Biodiversity Conservation in the Areas Beyond National Jurisdiction (ABNJ)". 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. The DSF Project is implemented by FAO and executed by the General Fisheries Commission for the Mediterranean (GFCM). The Programme, and the DSF Project, are scheduled to run for five years from 2022 to 2027.

The DSF project focuses on four key areas of work:

- Component 1- Governance strengthening and implementing regulatory frameworks
- Component 2 Strengthening effective management of DSF
- Component 3 Improving understanding and management of cross-sectoral interactions with DSF
- Component 4 Knowledge management, communication and monitoring and evaluation

The DSF project is being delivered in collaboration with project partners, which include: the General Fisheries Commission for the Mediterranean (GFCM), the Northwest Atlantic Fisheries Organization (NAFO), the North East Atlantic Fisheries Commission (NEAFC), the North Pacific Fisheries Commission (NPFC), the South East Atlantic Fisheries Organisation (SEAFO), the Southern Indian Ocean Fisheries Agreement (SIOFA), the South Pacific Regional Fisheries Management Organisation (SPRFMO), the International Council for the Exploration of the Sea (ICES), the Southern Indian Ocean Deepsea Fishers Association (SIODFA), the International Coalition of Fisheries Associations (ICFA) and the National Oceanic and Atmospheric Administration (NOAA) of the United States of America.

The NPFC has been cooperating with FAO and its ABNJ project since the beginning of the Commission and has contributed to this project as one of the project partners. Second phase of the project was launched in 2022, and NPFC provided a co-financing (in-kind contribution) partnership letter (30 September 2021) to join the project.

This information note aims to highlight project initiatives of relevance to the NPFC Commission meeting.

#### Key Achievements 2022-2024

#### 1. Review of the implementation of the DSF Guidelines

The DSF Project, in collaboration with a panel of experts, has reviewed the implementation of the International Guidelines for the Management of Deep-sea Fisheries in the High Seas (DSF Guidelines) 15 years after its adoption. The review found that the DSF Guidelines has been primarily directed towards the protection of VMEs, resulting in a complete change in the way bottom fisheries are managed. RFMOs have adopted closures to protect areas known or likely to have VMEs, designated

bottom fishing areas where bottom fishing has occurred and can continue to take place, required strict protocols to be followed if bottom fishing is planned outside of this area, and introduced "encounter protocols" to protect any newly identified VMEs. Less progress has been made on the sustainable management of many DSF stocks, with a generally low uptake of the recommended actions of the DSF Guidelines to adopt measures necessary to ensure their sustainability. In particular, the recommended adoption of fishery-specific, long-term management plans have generally not been implemented.

The document can be downloaded at: https://openknowledge.fao.org/handle/20.500.14283/cd0243en

# 2. E-learning Course "Strengthening deep-sea fisheries management in areas beyond national jurisdiction"

The DSF Project has produced an introductory e-learning course on the management of DSF in the ABNJ to provide a free, easily accessible tool to support learning on this topic.

The e-learning course encompasses five comprehensive modules, including:

- An introduction to deep sea fisheries, their biological characteristics, current status of stocks, and challenges in their management in the ABNJ.
- An overview of the international policy and legal framework for the management of DSF.
- The role of RFMOs in the management of DSF, explaining the process of their creation, structure, functions, and mandates in the management of DSF in the ABNJ.
- National-level policy and legal considerations, describing key measures included in national policy and legal framework for the sustainable management of DSF and enumerating the steps necessary to establish effective policy and legal framework at a national level.
- The role of monitoring, control and surveillance (MCS) and enforcement mechanisms to achieve conservation and sustainable use of deep-sea fisheries.

The course takes approximately 2.5 hours to complete, and upon the subsequent completion of a short, knowledge-based exam, participants receive a certificate of competency.

The free, online course can be accessed at: <u>https://elearning.fao.org/course/view.php?id=1117</u>

# **3.** Workshop on the Application of the Precautionary Approach to the Management of DSF stocks

The DSF Project convened a virtual workshop to take stock of the application of the precautionary approach (PA) to the management of DSF stocks, and to explore the steps necessary to advance on the development of PA frameworks and/or long-term management plans/harvest strategies for these stocks.

The workshop took place virtually on 15 October 2024, and it was conducted through two identical sessions, one from 07:00-09:30 and the other from 14:00-16:30 CEST, to accommodate different time zones. There was a total of 87 participants across the two sessions. All partner RFMOs and their Secretariats, as well as the academic, non-governmental and private sector community were represented at the workshop. The report of this workshop can be viewed in document NPFC-2025-COM09-OP08.

Follow-up activities planned under the project will include:

- (i) the development of a publication on the application of the PA to the management of DSF stocks, which will highlight good practices and emphasize the need for the adoption of long-term management plans for key DSF stocks;
- (ii) supporting training in the application of management strategy evaluations and/or harvest strategies, where requested.

# 4. Supporting RFMOs with newly adopted climate change resolutions

The NPFC adopted a resolution on climate change at its 7<sup>th</sup> Commission meeting (NPFC, 2023). This recognized the importance of climate change in the North Pacific and its potential impacts on resources and related ecosystems in the Convention Area. Similar resolutions have been recently adopted by NAFO for the northwest Atlantic, NEAFC for the northeast Atlantic, and by SPRFMO for the South Pacific (NEAFC 2023; NAFO, 2023; SPRFMO, 2023).

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.

For NPFC, Dr Joel Rice conducted the review, and his <u>report</u> and <u>key recommendations</u> were presented to NPFC SC9 in December 2024.

A follow-up workshop will likely 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. Shark identification key

NPFC adopted CMM 2023-14 on sharks (shark, skate, ray, or chimaera), which entered into force in July 2023, and which requires that fishing vessels record, and maintain a record of, any shark catch in the Convention Area, to the extent possible by species, in their logbook on board the fishing vessel, and that Commission Members annually report all shark catches, to the extent possible by species, from their fishing vessels to the Secretariat. Effective implementation of this CMM requires accurate identification of sharks.

At the 8<sup>th</sup> meeting of the Scientific Committee, the DSF project offered to provide support to NPFC in the development of a shark identification key, which would include both pelagic and demersal species. This was to support the existing NPFC guide "The Field Guide for Identifications of Fishes of the Emperor Seamount Chain Captured by Bottom Fisheries" produced in 2024 (Hoshino et al., 2024).

The DSF Project presented an overview of preliminary identification keys for deepwater sharks and a review of deepwater shark species known or likely to occur within the NPFC Convention Area (NPFC-2024-SC09-OP05) to NPFC SC9 in December 2024. Follow-up work will include working on a new style of digital id key, and producing a pelagic shark identification key.

## Upcoming activities 2025-2026

## 1. Workshop on assessing the 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-SHARKS).

Ongoing work in the DSF Project is focused on:

- a) reviewing catch reporting requirements for shark catches by RFMOs
- b) evaluating the data arising from the implementation of those catch reporting requirements

c) reviewing the potential factors that might generate differences in the reported shark catches between RFMOs

Preliminary analysis of the information gathered from partner RFMOs suggests that the level of reporting on deepwater shark catches is highly variable among RFMOs, both with respect to quantity and quality. Based on these results, the DSF Project is developing a proposal for a workshop on deepwater sharks, **to be held in July 2025**, which will address key issues related to data collection, reporting quantity and resolution, reporting formats and ecological risk assessments.

## 2. Assessing data-limited stocks and monitoring rapid change

The lack of information on reliable trends in stock biomass for many DSF stocks makes the application of adaptive management very difficult, but there is a need to develop mechanisms for precautionary management in the absence of full scientific assessments. It is particularly challenging to assess rapidly changing fisheries. There are three types of fisheries where rapid changes may occur:

- In an existing fishery (potentially as a need to change TACs or to close the fishery),
- In closed fisheries (as a requirement for re-opening the fishery), and
- In new/exploratory fisheries (that lack a catch and effort history).

The DSF Project will partner with ICES to examine data-collection requirements and assessment methods that will determine the status of the selected data-limited stocks and if their populations are "rapidly" increasing or declining.

A two-pronged approach will be taken to improve the assessment of data-limited and rapidly changing stocks, both being coordinated by ICES. The first activity will be to collaboratively identify appropriate assessment methodologies for selected fisheries, and the second will be to review data collection requirements needed to undertake these assessments. This will be compared with the type, quality and quantity of information currently collected.

Activities to be undertaken by ICES in collaboration with DSF Project partners:

- Activity 1: Review and develop assessment methodologies,
- Activity 2: Identify data collection needs to support the various assessment methodologies

Assessment biologists from different regions will discuss and share their assessments and datacollection needs with each other to develop improved methods. This will be facilitated by an ICES consultant and in cooperation with various ICES working groups, as required.

#### This activity will likely begin in Q3 2025.

# 3. Workshop on cross-sectoral interactions with DSF

The DSF Project is working on improving the integration of cross-sectoral activities to maintain biodiversity and resource sustainability. Under this work, the Project will organize a workshop **in late Q4 2025** that will gather key sectors and stakeholders active in the ABNJ to consider a number of theoretical case studies and explore how these could be addressed from a cross-sectoral cooperation perspective.

The workshop will address:

- the perceived interactions and cross-sectoral impacts
- the science/methodology that would be required to measure these impacts
- the institutional processes that would need to be put in place to address these impacts, and
- the cross-sectoral cooperation mechanism required