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MoP-10-INFO-13

FAO Deep Sea Fisheries (DSF) Project

Overview of activities and their relevance to SIOFA

Food and Agriculture Organization of the United Nations (FAO)

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Abstract	<p>The FAO Deep-Sea Fisheries (DSF) Project (2022-2027) follows on from the ABNJ Deep-Sea Project (2014-2019).</p> <p>The project is global in scope and will collaborate with and support regional activities that lead to the project's objective: 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.</p> <p>The purpose of this paper is to provide an overview of the DSF Project, and in particular, to highlight 2022-2023 past activities and 2023-2024 upcoming activities relevant to SIOFA.</p>

¹ Restricted documents may contain confidential information. Please do not distribute restricted documents in any form without the explicit permission of the SIOFA Secretariat and the data owner(s)/provider(s).

² Documents available only to members invited to closed sessions.



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Southern Indian Ocean Fisheries Agreement
Accord relatif aux Pêches dans le Sud de l'Océan Indien

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Background

The FAO Deep-Sea Fisheries (DSF) Project (2022-2027) follows on from the ABNJ Deep-Sea Project (2014-2019). Information papers on this project have been submitted to different SIOFA annual meetings starting in 2020 and have culminated in SIOFA to contribute to project activities.

Aims

The purpose of this paper is to provide an overview of the DSF Project, and in particular, to highlight 2022-2023 past activities and 2023-2024 upcoming activities relevant to SIOFA.

FAO Common Oceans programme and DSF project

The Common Oceans Program is a global partnership funded by the Global Environmental Facility (GEF), promoting sustainable fisheries and conservation of marine biodiversity in areas beyond national jurisdiction (ABNJ). Led by the Food and Agriculture Organization of the United Nations (FAO), the Program brings together the United Nations Development Program (UNDP) and United Nations Environment Programme (UNEP), regional fisheries management organizations, intergovernmental organizations, the private sector, civil society and academia. The first phase of the Common Oceans Program took place from 2014-2019 with a budget of USD 50 million, and USD 223 million in co-financing.

The second phase of the Program was endorsed at the GEFs 58th Council meeting with a budget of USD 26.7 million, and over USD 310 million in co-financing from 65 partners. It was launched in July 2022 with an inception workshop, and its projects are due to start implementation in succeeding months and be completed by 2027.

There are five child projects of the Common Oceans programme:

- Sustainable management of tuna fisheries and biodiversity conservation in the areas beyond national jurisdiction (Tuna Fisheries Project)
- Deep-sea Fisheries under the Ecosystem Approach (Deep-sea Fisheries Project)
- Building and Enhancing Sectoral and Cross-Sectoral Capacity to Support Sustainable Resource Use and Biodiversity Conservation in Areas Beyond National Jurisdiction (Cross-Sectoral Capacity Project)
- Strengthening the stewardship of an economically and biologically significant high seas area – the Sargasso Sea (Sargasso Sea Project)
- Global Coordination Project



The following sections of this paper will focus on the Deep-sea Fisheries Project (DSF project) and its activities.

DSF Project Activities

The DSF project aims to ensure that DSF in the areas beyond national jurisdiction (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 technical work of the DSF project is organized around three main components representing broad areas of work.

- Component 1 concerns the uptake of international instruments. Under this component, the project will assess regional and national legal and regulatory gaps in uptake of international obligations related to fisheries management, and provide training in compliance and enforcement.
- Component 2 concerns the scientific aspects of DSF management. Under this component, the project will aim to
 - o strengthen decision-making in RFMOs, through increasing the application of the ecosystem-approach to fisheries and the precautionary approach, increasing the engagement of industry, and establishing a platform for sharing new and innovative approaches and technologies.
 - o Improve the advice supporting science-based management, through developing ecosystem and stock productivity models, providing support for catch recording and scientific advice on data-limited stocks, and assessing the economic dimensions of DSF.
 - o Quantifying, assessing and managing DSF impacts on biodiversity, through assessing the impacts of DSF on deepwater sharks and proposing mitigation measures, and identifying vulnerable marine ecosystems and understanding gear-specific significant adverse impacts on them.

- Component 3 concerns cross-sectoral interactions with DSF. Under this component, the project will identify the interactions between DSF and other sectors operating in the deep-sea, and develop a framework to better mitigate and manage cross-sector interactions with DSF.
- Component 4 concerns project management, knowledge management and communications, and monitoring and evaluation.

2022-2023 activities relevant to SIOFA

Review of the implementation of the DSF Guidelines

The Science Officer participated in a DSF expert review of the implementation of the deep-sea fisheries guidelines. This revision was conducted during a meeting at the NEAFC Headquarters (London, UK) from 29 November–2 December 2022. The meeting focused on how different RFMOs have implemented the *FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas* and involved experts engaged different RFMOs, as well as FAO experts. The main output of this meeting will be a technical paper to be published by FAO.

Inception Workshop

The Science Officer also participated in the project inception workshop, which was held from 24-26 January 2023 at FAO HQ in Rome, Italy. During the inception workshop, the workplan and the budget of the project were discussed and ultimately approved. These are summarised in the table included as Annex A of this paper and the inception workshop report has been submitted as paper [MoP-10-INFO-07](#) (restricted).

Workshop on Deepwater Sharks

The DSF Project contributed to the Workshop on Deepwater Sharks in SIOFA, held in Tenerife, Spain, from 20-21 March, through working paper [WSDWS-2023-04](#). The working paper described the current global catches and adopted measures for deepwater sharks by deep-sea RFMOs in the Pacific, Atlantic, Mediterranean, and Indian Oceans. It highlighted that discarded sharks, which are not landed, are poorly recorded in most regions; that few measures are in place that actually reduce incidental shark mortality; and that the DSF Project will support SIOFA and other regions to improve deepwater shark assessments, with a focus on discarded species. Concretely, workshop participants noted that the project could develop a more practical species identification guide for deepwater sharks in SIOFA, and recommended that the SC review the guide when it is completed,

Eighth Meeting of the Science Committee

The DSF Project participated in the Eighth Meeting of the SC, where the SC welcomed FAO's development of a more practical species identification guide for deepwater sharks under the DSF Project and looked forward to reviewing the guide when it is completed. The project also informed the SC that the DSF Project will work with observers globally and in collaboration with International Council for the Exploration of the Sea (ICES) to record data for data-limited species and share these

data with SIOFA. Additionally, the Science Officer presented the information paper [SC-08-INFO-06](#), which updated the SC on SIOFA contributions to the DSF project.

First Extraordinary Meeting of the Scientific Committee

Finally, the DSF project participated in the First Extraordinary Meeting of the Scientific Committee.

Activity highlights for 2023-2024 with potential relevance to SIOFA

The following activities are planned for 2023-2024, and may be of interest to SIOFA and its CPs:

- Review of the alignment of RFMO CMMS related to DSF with duties and responsibilities outlined in international instruments: the project will identify and make recommendations on the measures that would require strengthening in order to improve the management of DSF, and in particular, data-limited DSF stocks in the ABNJ. Follow-up activities may include virtual or in-person meetings or workshops, as well as training, as required.
- Development of deepwater shark identification guides, including for the SIOFA convention area
- Data collection and assessment of selected seamount stocks in the ABNJ, including alfonsino for the SIOFA convention area
- Production and dissemination of an e-learning course on DSF and their management
- Organization of a symposium on the ecosystem approach to fisheries management, and its concrete application to DSF
- Development of a publication on methods used to identify known or likely vulnerable marine ecosystems (VMEs)

The DSF Project recalls the expressed commitment of SIOFA and its CPs to the DSF project and seeks continued support for the effective delivery of activities for the 2023-2024 intersessional period.

Annex A - Deep-Sea Fisheries under the Ecosystem Approach Project 2023 Annual Workplan and Budget

OUTCOME 1.1 – Wider adoption, enforcement and compliance of international obligations relating to sustainable fisheries (stocks and impacts)

OUTPUT	END PROJECT TARGETS	5 YEAR PLAN	YEAR 1 (2023) ACTIVITIES	MAIN PARTNERS
<p>OUTPUT 1.1.1 - Gaps in regional obligations to (i) manage fish stocks and (ii) reduce fisheries impacts on biodiversity identified (updated) and corrective measures proposed</p> <p>* Including instruments dealing with gender and decent work (moved from Output 2.2.3)</p>	<p>(i) one report published on the gaps in uptake of international obligations by RFMOs relevant to the management of data-limited fish stocks and bycatch species (including but not limited to deepwater sharks and VMEs), as well as gender issues and decent work conditions, in the ABNJ, (ii) workshop on the gaps in uptake of international obligations for the management of DSF in the ABNJ being discussed, and recommendations taken up, by RFMOs</p>	<p>2023: Participatory desktop study 2024: Virtual workshop. 2025-2027: Follow-up work with RFMOs</p> <p>Results will feed into Output 1.1.2</p>	<p>Develop data collection framework/approach for study, conduct data collection, analyse/assess data, review preliminary results (through virtual workshop), conduct additional data collection, as needed, write up draft report</p>	<p>All partner RFMOs</p>
<p>OUTPUT 1.1.2 – Measures to address national legal and regulatory gaps in international legally binding and voluntary instruments including FAO voluntary guidelines related to fisheries management</p>	<p>(i) Self-assessment and e-learning package developed and submitted to RFMOs for distribution to their contacting parties; (ii) 20 government officials (12 men, 8 women) from contracting parties have completed self-assessment and e-learning package; (iii) Report on gender gaps in relevant national</p>	<p>2020-2022: <i>Publication of Stepwise Guide³ and work on draft e-learning package</i></p> <p>2023: work on Output 1.1.1; definition of scope of work 2024: Develop first draft self-assessment questionnaire, Present draft questionnaire to</p>	<p>2023: Define/refine scope and methodology of activity which may include a brief study to profile DSF activities globally (countries/fleet characteristics/applicable regulations); consult partners on proposed approach; begin activities accordingly</p>	<p>Selected countries (TBD)</p>

³ <https://www.fao.org/3/ca5628en/ca5628en.pdf>

OUTPUT	END PROJECT TARGETS	5 YEAR PLAN	YEAR 1 (2023) ACTIVITIES	MAIN PARTNERS
* Including instruments dealing with gender and decent work (moved from Output 2.2.3)	legislations identified through the self-assessment	partners (via webinar), Review questionnaire based on comments received 2025-2027: Support, training and other follow-up activities		
OUTPUT 1.1.3 – Gaps in existing capacity to strengthen compliance and enforcement identified and training provided * Including instruments dealing with gender and decent work (moved from Output 2.2.3)	(i) Identification of training required and training material developed; (ii) at least 50 people (30 men/20 women) trained in 3 regions	2023: Work on Outputs 1.1.1 and 1.1.2 2024: Select countries and identify training needs based on scoping work from Outputs 1.1.1 and 1.1.2 2025-2027: Ongoing training/capacity development activities	No activities	Selected countries (TBD)

OUTCOME 2.1 – Effective decision-making strengthened to increase sustainability and reduce impacts

OUTPUT	END PROJECT TARGETS ¹	5 YEAR PLAN ²	YEAR 1 (2023) ACTIVITIES	MAIN PARTNERS
OUTPUT 2.1.1 - Frameworks to improve science-management interface and exchange strengthened	(i) Two workshops held and draft precautionary approach (PA) and ecosystem approach to fisheries (EAF) frameworks developed that identifies the scope and responsibilities for implementation by RFMOs, (ii) Two RFMOs using an improved and standardized framework for PA and EAF as the basis for their application of PA and EAF	Activity 1: Strengthen communication frameworks between management and science committees: 2023: Desktop study 2024: Feedback from partners 2025-2026: Follow-up by partners and possible implementation of changes in communications methods	Consultant to conduct desktop study, including interviews with partners where necessary; prepare for virtual workshop with partners to gather input into draft report. Consultant to write draft report and share with partners. Desktop study (together with Activity 1)	RFMOs ICES Industry (Possible collaboration with Tuna project)

OUTPUT	END PROJECT TARGETS ¹	5 YEAR PLAN ²	YEAR 1 (2023) ACTIVITIES	MAIN PARTNERS
		<p>Activity 2: Support implementation of PA and EAF by dsRFMOs:</p> <p><i>2014-2019: EAF Report by Rick Fletcher from FAO DS Project⁴</i></p> <p>2023: Desktop study 2024: Feedback from partners 2025-2027: Follow-up activities by partners and possible changes in communications methods</p>		<p>RFMO partners ICES NOAA (Industry)</p> <p>(Possible collaboration with Tuna project)</p>
OUTPUT 2.1.2 – Frameworks to improve industry contributions to sustainable DSF	(i) Participatory survey of industry contributions to RFMOs (including mandatory data reporting via CPs) completed and their use documented; (ii) Two RFMOs having developed routines and cooperative partnerships for formal industry contributions (including RFMOs seeking input and views from industry) to the RFMO management, compliance and science process.	2023: Desktop study 2024-2027: Follow-up, plans for increased cooperation and support, annual virtual workshops	Desktop review/interviews with RFMO Secretariats Virtual workshop. Report on current practices and future directions.	Industry RFMOs (Management and Science) ICES (Possible collaboration with Tuna project)
OUTPUT 2.1.3 – Platform for sharing new and innovative technologies for	(i) Web-based platform for sharing technologies operational and supported by	<i>2020: Report of deepwater shark catch recording / New technologies webinar⁵</i>	Develop DGroups interface for knowledge sharing. Concept note for populating DGroups site.	DSF Project to support DGroups site and stimulate interest.

⁴ <https://doi.org/10.4060/cb1509en>

⁵ <https://www.fao.org/3/cb7967en/cb7967en.pdf>; https://www.youtube.com/playlist?list=PLzp5NgJ2-dK5Ke9H5L5-BMYjvZN_opyvj

OUTPUT	END PROJECT TARGETS ¹	5 YEAR PLAN ²	YEAR 1 (2023) ACTIVITIES	MAIN PARTNERS
improved monitoring, reporting and information sharing developed	RFMOs, industry, developers, environmental NGOs and other stakeholders; (ii) 15 new tools on platform, with 3 set up for trialing	2023: Set up web platform; Promote use with partners 2024-2027: Wide-scale promotion among stakeholders; Selection of tools for trialing under Output 2.2.2	Follow-up with interested developers, users, scientists, and managers. Applications for use by observers.	Widest involvement possible, including project partners but extending to all interested practitioners.

OUTCOME 2.2 - Advice supporting science-based fisheries management improved

OUTPUT	END PROJECT TARGETS ¹	5 YEAR PLAN ²	YEAR 1 (2023) ACTIVITIES	MAIN PARTNERS
OUTPUT 2.2.1 – Ecosystem and stock productivity models developed to support scientific advice (including demersal and small pelagic species and climate change effects)	(i) Symposium held with RFMOs to explore the use of ecosystem and productivity models in the management of DSF stocks. RFMOs supporting the collection of information useful in developing these models. (ii) Four RFMOs discussion ecosystem and stock productivity models for producing advice for stock assessment in scientific committee.	2021-2022: <i>Discussions with NAFO as co-organizer</i> 2023: Preparation for symposium 2024: Hold symposium 2025: Publication of proceedings 2026-2027: Follow-up	Consider additional organizing partner. Select steering committee. Participants start preparatory work for presentations. Select venue and distribute programme.	Co-organisers: NAFO, (ICES?) All partners
OUTPUT 2.2.2 – Support provided to RFMOs for improving catch recording (retained and discarded) and scientific advice on data-limited stocks	(i) Four RFMOs supported to improve fit-for-purpose data collection on data-limited stocks, with a focus on alfoncino and armurhead * and orange roughly?	Activity 1: Review and support fit-for-purpose data collection for data-limited fish stocks and provide training and monitoring of observers 2021-2022: <i>Discussions with ICES.</i> 2023: Preparation with ICES and partners	Discussions with ICES and RFMOs to ensure data sharing and collaborative assessment. Agree on ToRs, and develop contract between FAO and ICES.	ICES NAFO, NEAFC, NPFC, SEAFO, SPRFMO, SIOFA

OUTPUT	END PROJECT TARGETS ¹	5 YEAR PLAN ²	YEAR 1 (2023) ACTIVITIES	MAIN PARTNERS
		<p>2024-2025: ICES – data needs and assessments with partners 2025: Support to observers 2026-2027: Follow-up</p> <p>Activity 2: Develop and apply assessment methodologies for data-limited stocks and hold workshop 2023: Selection of data-limited DSF stocks (link to Activity 1) 2024-2025: Develop stock assessment methodology for data-limited stocks and hold workshops to share methodology 2026-2027: Follow-up activities</p> <p>Activity 3: Carry out surveys to support assessments (acoustic survey in Indian Ocean)</p> <p>2023 – Preparation and assess possibility 2024-2027: Conduct cruise</p>	<p>As above</p> <p>Discussions with FAO/IMR Nansen programme</p>	<p>As above</p> <p>FAO/Nansen program SIOFA Industry</p>
<p>OUTPUT 2.2.3 - Selected issues related to the economic dimensions of DSF assessed (including gender and decent work) including losses due to stock B<Bmsy</p>	<p>(i) Value chain analysis identified and method developed, covering all actors supporting the value chain. (ii) One value chain analyzed and results included in an economic analysis of the fishery⁴</p>	<p>2023: Limited planning activities 2024-2025: Data-collection and modelling work 2025-2027: Follow-up</p>	<p>No activities</p>	<p>Two selected RFMO regions Industry</p>

OUTPUT	END PROJECT TARGETS ¹	5 YEAR PLAN ²	YEAR 1 (2023) ACTIVITIES	MAIN PARTNERS
	project's workshop and publication on mapping of DSF by gear type	<p>2023: Finish and publish review</p> <p>Activity 3: Monitor VME status and impacts</p> <p>2024: Consultations with partners</p> <p>2025: Identification of methodologies (publication, workshop, etc)</p> <p>2026-2027: Follow-up activities, publication of report</p> <p>Activity 4: Map DSF by gear type</p> <p><i>2020: World Wide Review of Bottom Fisheries published⁶</i></p> <p>2023: Start planning</p> <p>2024: Workshop(s) and consultations to map DSF by stock and gear</p> <p>2025: Follow-up</p>	<p>No activities</p> <p>Discussions starting with RFMOs about mapping fisheries and stock distributions</p>	<p>Focus regions (TBD)</p> <p>RFMOs</p>

OUTCOME 3.1 – Improved integration of cross-sector activities to maintain biodiversity and resource sustainability

OUTPUT	END PROJECT TARGETS ¹	5 YEAR PLAN ²	YEAR 1 (2023) ACTIVITIES	MAIN PARTNERS
OUTPUT 3.1.1 – Interactions with sustainable DSF from other sectors operating in the deep seas identified and information made available	(i) Workshop with RFMOs and partners undertaken to identify possible current and future opportunities and threats and to discuss methods to identify if the	<p>2023: Planning work with RFMO scientists and other key stakeholders</p> <p>2024: Scoping study and workshop to identify threats to fisheries from</p>	<p>Establish an advisory committee to guide the work of this output.</p> <p>This is a scientific output.</p>	<p>NAFO, NEAFC, SIOFA, NPFC (regions where human activities planned).</p> <p>Other partners</p>

⁶ <https://www.fao.org/3/ca7692en/ca7692en.pdf>

OUTPUT	END PROJECT TARGETS ¹	5 YEAR PLAN ²	YEAR 1 (2023) ACTIVITIES	MAIN PARTNERS
	<p>impacts of such threats are significant; (ii) Three current and future threats from other “sectors” (including changes in fishing technology and biodiversity) to DSF identified and information collected to allow for impact analyses</p>	<p>other sectors and assess potential significant adverse impacts (SAIs) 2025-2027: Consultations with experts, final workshop, publication of report</p>		<p>welcome if contributing.</p>
<p>OUTPUT 3.1.2 - Frameworks to better mitigate and manage cross-sector interactions with DSF developed</p>	<p>(i) Workshop with RFMOs to discuss aspects (opportunities, threats, risks, etc..) requiring cooperation with other sectors held and possible cooperating mechanisms discussed; (ii) Template for cooperating mechanism developed and presented to RFMOs</p>	<p><i>2014-2019: World Conservation Monitoring Centre contributions (mainly EEZs CPPS/SWIOFC)</i></p> <p>2023: High level planning and prep work 2024: Develop draft report on existing mechanisms of cooperation; workshop to discuss report 2025-2027: Yearly virtual workshops</p>	<p>Establish advisory committee; This is a frameworks /management /mitigation output.</p>	<p>FAO ISA IMO UNEP UNDP, etc</p>