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Committee

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## ABNJ Deep Seas Project – Update

*Relates to agenda item: 6, 7, 8 and 9*

Working paper  info paper



Food and Agriculture Organization

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### Abstract

This information paper provides the SIOFA SC with an update on the Sustainable Fisheries Management and Biodiversity Conservation of Deep Sea Living Resources in Areas Beyond National Jurisdiction Project (ABNJ Deep Seas Project).

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# ABNJ Deep Seas Project

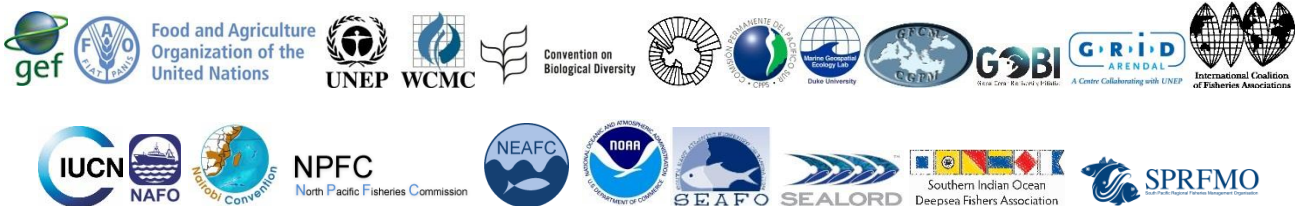
Sustainable Fisheries Management and Biodiversity Conservation of Deep Sea Living Resources

in Areas Beyond National Jurisdiction

## PROJECT UPDATE

To the  
Southern Indian Ocean Fisheries Agreement  
Meeting of the Scientific Committee  
21-24 March 2016

Fremantle, Australia



## **About the ABNJ Deep Sea Project**

The “Sustainable Fisheries Management and Biodiversity Conservation of Deep Sea Living Resources in Areas Beyond National Jurisdiction Project (ABNJ Deep Seas Project for short) is a five year project designed to enhance sustainability in the use of deep-sea living resources and biodiversity conservation in the ABNJ through the systematic application of an ecosystem approach.

This project has four major components:

- 1: Strengthening policy and legal frameworks for sustainable fisheries and biodiversity conservation in the ABNJ deep seas;
- 2: Reducing adverse impacts on VMEs and enhanced conservation and management of components of EBSAs;
- 3: Improving planning and adaptive management for deep sea fisheries in ABNJ; and
- 4: Development and testing of methods for area-based planning.

The ABNJ Deep Seas Project started in September 2015 and is one of four projects under the Common Oceans Programme. Components 1, 2, and 3 are led by the Food and Agriculture Organization of the United Nations (FAO), and Component 4 is led by the United Nations Environment Programme (UNEP) through the World Conservation and Monitoring Centre (UNEP-WCMC).

The project is also an integral part of the FAO Programme on Deep-sea fisheries and its suite of projects supported by various donors, and some of the ABNJ Deep Seas project activities are implemented with the financial contribution from these baseline projects.

## **How is the project relevant to SIOFA**

The ABNJ Deep Seas project brings together a range of partners working on deep-sea fisheries and conservation issues in the ABNJ globally. The partnership includes amongst other regional organizations responsible for the management of deep-sea fisheries, Regional Seas Programmes, fishing industry partners and international organizations. SIOFA’s neighboring management organizations, CCAMLR, SPRFMO and SEAFO are active partners in the Project.

The southern Indian Ocean is one of the focal areas for the ABNJ Deep Seas Project, and the Project would very much welcome SIOFA to become an active member in the partnership.

Fishing industry partners operating in the SIOFA area such as the Southern Ocean Deep Seas Fishers Association (SIODFA) and the Sealord Group also contribute to the partnership. It is estimated that SIODFA activities associated with the ABNJ Deep Seas Project will contribute an estimated USD 20 million of project co-financing. And the Sealord Group will contribute an additional USD 14 million of project co-financing through a range of ongoing scientific activities including: its seabed mapping, genetic mapping of elasmobranchs; use of multi-frequency acoustics to count fish, stock discrimination work, and shark programme; and ship time for testing of new technologies and tools.

## **Project Management**

The project has a project management unit with a project manager (Chris O’Brien) and project assistant (Anna Wall) based in FAO, Rome, Italy; and an area based planning specialist (Hannah Thomas), based in UNEP-WCMC Cambridge, UK,

## **About this report**

This report includes information on the current status of the Project and upcoming activities that are relevant to SIOFA.

## Project activities to-date

- **The 2016 work plan has been endorsed** by the Project Steering Committee in December 2015.
- **A guide for the implementation of international legal and policy instruments related to deep-sea fisheries and biodiversity conservation in the ABNJ.** The guide, intended for deep-sea stakeholders, will focus on the international obligations relating to deep-sea fisheries and biodiversity conservation. Work so far has included a review and analysis of current policy and legal instruments and will lead to the identification of the challenges in the implementation of current management requirements, and highlight the best practices currently applied around the world. The review and implementation guide is expected to be available in early 2016.
- **Review of current practices and processes for VMEs:** A review of current practices by region relating to VMEs is underway. Part of this work included an international workshop to review draft overviews of regional chapters (March 2015, Swakopmund, Namibia). The draft chapters are now being reviewed and will be published in early 2016.

The current practices for identification and management of VMEs publication will include a chapter on the Southern Indian Ocean.

- **Updating the VME Portal and DataBase:** The Vulnerable Marine Ecosystems (VME) Portal and DataBase were launched in December 2014 and updated in December 2015 ([www.fao.org/in-action/vulnerable-marine-ecosystems/en/](http://www.fao.org/in-action/vulnerable-marine-ecosystems/en/)). The VME Portal provides general information on VMEs, including sections for relevant publications and international instruments, links to VME-related tools and terminology, and the VME DataBase containing information on VME-related measures in ABNJ for each regional fisheries body. The database and website serve as information sharing platform as well as an awareness building tool.

SIOFA will be welcome to contribute to the VME database. Content includes any new or modified measures on fishing with bottom contact gears (including fishing footprints, encounter protocols, new VME indicator species), VME areas, and new reports (from the Commission or Scientific Committee) with VME relevant information. Training and assistance is available through FAO.

- **Identification tools for deep-sea cartilaginous fishes:** two species catalogues and an onboard user friendly identification guide for sharks, rays and chimaeras are available for the Indian Ocean (<http://www.fao.org/publications/card/en/c/2e9e70f8-15dc-5ea9-8955-70f59855b59a/>). Training in the use of these tools was provided regional scientists in 2014.

SIOFA are invited to make use of these guides and provide feedback for future improvements

- **Best practices in VME encounter protocols and impact assessments:** A workshop was held in May 2015 in collaboration with the Norwegian Institute of Marine Research (IMR) to facilitate the sharing of best practices and effective solutions on VME encounter protocols and impact

assessments. Participants included managers, scientists, the fishing industry and NGO's. Key messages on the challenges faced by the stakeholders in practicing these methods and ways forward were identified, and a technical document containing these is being finalized.

- **A workshop on VMEs in the Indian Ocean took place in Flic en Flac, Mauritius, on 25–27 July 2012:** The workshop aimed to raise awareness and build capacity on VMEs and associated management issues in the Indian Ocean region. The Workshop discussed the VME concept within the framework of the FAO Deep-sea Guidelines and looked at examples of different management methodologies and options for VMEs and how these processes can be facilitated (<http://www.fao.org/3/a-i3311e.pdf>).

## Up-coming project activities

- **2<sup>nd</sup> edition of the *Worldwide Review of Bottom Fisheries in the High Seas (WWR)*:** The *Worldwide Review of Bottom Fisheries in the High Seas* (FAO, 2009) will be updated and expanded in 2015 / 2016. The last review covered deep-sea fisheries for the period 2003-2006 using information acquired from a questionnaire circulated to some 40 countries and regional bodies. The updated review will address information gaps identified in the last review and will describe progress made on monitoring of data-poor deep-sea stocks, and benefits from updated stock assessment for key species.

The 2nd edition of the *Worldwide Review of Bottom Fisheries in the High Seas* will include a chapter on the Indian Ocean and we ask for the support of SIOFA to identify and provide appropriate information to this chapter.

- **Global reviews and best practices for the assessment and management of key deep-sea species:** Following on from the Alfonsino (*Beryx* spp.) Workshop in 2012 and subsequent global review, a similar workshop and review of orange roughy (*Hoplostethus atlanticus*) will be undertaken in 2016. This work will commence with a workshop in 7-9 June 2016, in New Zealand.

Scientists with expertise in orange roughy experts in the southern Indian Ocean region will be invited to this meeting.

- **Identification guides for vulnerable deep-sea species:** Support the to the development of identification guides and other identification products to assist in the implementation of fisheries management measures and reporting obligations (e.g. by-catch requirements, recording of catches, and to improve scientific assessments) will be continued. User-friendly guides will be developed for use on board vessels by observers, scientists and non-scientific personnel. Following on from the first guides for deep-sea cartilaginous fishes of the Indian Ocean and the South East Atlantic, work has started to develop a catalogue and a field guide on deep-sea cartilaginous fishes in the South Pacific. Experts have also developed a species list for deep-sea sponges in the Atlantic and the Mediterranean, and provided suggestions on the way forward for the development of appropriate identification material. Currently an expanded group including experts from the Indian ocean, are discussing options for posters and other tools to be finalised by June 2016. Similar work has been initiated on identification tools for corals. Training workshops on the use of these deep-sea species guides will be conducted in the future.

SIOFA is invited to nominate experts who can contribute to the sponge and coral discussions, and to provide comments to the proposed options for the Indian ocean.

- **A manual on collection of data on deep-sea species** is being produced and will be published by early 2016. This will supplement existing observer manuals and will be useful for those vessels operating in areas without RFMO technical support or without full observer coverage on data collection to meet new data collection requirements. The manual is written for a variety of users such as observers, scientists and non-scientists.
- **An electronic application for reporting on board observations from deep-sea fisheries vessels** is currently being developed by FAO and an interested group of RFMOs. This application – SmartForms – will include an initial set of forms for VME reporting requirements or other vulnerable species such as sharks. This will be tested by the RFMOs interested in deploying the application. SmartForms will include a variety of implementation options including: an iMarine integrated version; a version that forwards data directly to e.g. an RFMO backend bypassing iMarine; or a vessel operated offline system. Several components will be developed and can be used to customize the application. These include a forms designer for fisheries observations based on simple templates; and an application manager that manages your users and application settings. A reporting component will also be added.

SIODFA and Sealord have expressed their interest in testing these application. Other vessels operating in the SIOFA region are also invited to trial or provide feedback on the utility of the applications.

- **An electronic application for submitting voluntary information on biodiversity elements.** This application will be an optional application of the SmartForms and is intended to collect information on species of interest (e.g. marine mammals, seabirds, etc.) onboard fishing vessels to facilitate partnerships between industry and the global biodiversity community. FAO will facilitate partnerships with NGOs that compile global observations maps of species of interest to develop collaborative programs with the fishing industry.
- **Research surveys in the Indian Ocean:** From June to August 2015, the RV Dr Fridtjof Nansen undertook a trans-Indian Ocean Survey from Indonesia to South Africa. During the second leg of this trip, from Mauritius to South Africa, the crew tested a video grab system for sampling benthic habitats; however, due to bad weather, the results were limited. Under the new EAF Nansen Programme, cruises in the southern Indian Ocean region may be possible in the future.
- **The Second Project Steering Committee (PSC) meeting** is planned for 7-8 February 2017 in Cambridge, England.

A representative from SIOFA will be invited to the next ABNJ Deep Seas Project Steering Committee meeting.

## Find out more about the ABNJ Deep Seas Project

- Contact the ABNJ Deep Seas Project Coordinator (Chris O'Brien) on [chris.obrien@fao.org](mailto:chris.obrien@fao.org)
- Visit the ABNJ Programme and the ABNJ Deep-seas Project website: [www.commonoceans.org](http://www.commonoceans.org)

## ABNJ Deep Seas Project activities in the Indian Ocean region (from the Project Document)

Proposed Indian Ocean Activities – ABNJ Deep Seas Project	
<b>Component 1: Policy and legal frameworks for sustainable fisheries and biodiversity conservation in the ABNJ deep seas</b>	
<b>Output 1.1.3.</b>	
<b>Activity 1.1.3.1.</b>	Involvement in a regional capacity development program for improving the understanding of regional legal experts of key elements of a legal framework, including topics such as MCS and engagement in regional and global processes of relevance to DSF and biodiversity conservation in ABNJ.
<b>Output 1.1.4.</b>	
<b>Activity 1.1.4.2.</b>	Potential participation in the model outline for a traceability scheme or capacity assistance with use of traceability schemes for market/trade, eco-labelling, or other market-based measures.
<b>Output 1.2.1.</b>	
<b>Activity 1.2.1.2.</b>	Participate in cross-disciplinary discussions and meetings of crews and skippers, and workshops for exchange between policy makers, administrators, scientists, crews, and skippers to discuss specific topics.
<b>Component 2: Reducing adverse impacts on VMEs and enhancing conservation of components of EBSAs</b>	
<b>Output 2.1.1.</b>	
<b>Activity 2.1.1.1.</b>	Contribute to the collation and consolidation of existing biological and ecological information on Deep Sea Fisheries and biodiversity in support of management processes.
<b>Activity 2.1.1.3.</b>	Contribute to the assessment of potential interactions between deep-sea fisheries and biodiversity.
<b>Activity 2.1.1.4.</b>	Contribute to updating the Southeast Atlantic chapter of the “Worldwide Review of Bottom Fisheries in the High Seas”.
<b>Output 2.1.2.</b>	
<b>Activity 2.1.2.2.</b>	Contribute to the development of specialized applications of the global VME database.

<b>Output 2.1.3.</b>	
<b>Activity 2.1.3.3.</b>	Participate in the development and training for taxonomic ID guides, fishery data collection manuals, and observer/crew training material.
<b>Output 2.1.4.</b>	
<b>Activity 2.1.4.1.</b>	Establishment of partnerships and tools for recording biodiversity information (SmartForms).
<b>Activity 2.1.4.2.</b>	Contribute to a review of regional fisheries management measures on biodiversity conservation, and the development of tools for recording biodiversity.
<b>Activity 2.1.4.3.</b>	Participate in the testing of new techniques for mitigating adverse impacts from Deep Sea Fisheries on ecosystems (including VME issues).
<b>Output 2.2.1.</b>	
<b>Activity 2.2.1.1.</b>	Participation in “twinning” programs (i.e. institutional exchanges or collaboration) for deep sea scientists.
<b>Activity 2.2.1.2.</b>	Support to enhance participation of developing countries in DSF and conservation processes - for example, examine the possibility of supporting training in fish ageing for scientists from developing countries in the Indian Ocean (with SIODFA). .
<b>Output 2.2.2.</b>	
<b>Activity 2.2.2.1.</b>	Carrying out customized training workshops on data collection and the application of VME and EBSA criteria.
<b>Component 3: Improved planning and adaptive management for DSF in the ABNJ</b>	
<b>Output 3.1.1.</b>	
<b>Activity 3.1.1.2.</b>	Contribute to improving knowledge on key deep-sea species and on applied and new methodologies and technologies for studying and assessing these species.
<b>Output 3.1.2.</b>	
<b>Activity 3.1.2.1.</b>	Contribute to the preparation of an EAF baseline report for the selected pilot areas.
<b>Output 3.1.3.</b>	
<b>Activity 3.1.3.1.</b>	Selection/review of objective-based indicators and reference points.



<b>Activity 3.1.3.2.</b>	Contribute to global best practices for the implementation of monitoring programs.
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<b>Output 3.1.4.</b>
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<b>Activity 3.1.4.1.</b>	Contribute to global best practices in MCS and MCS systems.
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