

SERAWG-04-10

4th Meeting of the Stock and Ecological Risks Assessment (SERAWG3)
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Scoping Study on The Saya de Malha Bank Fisheries (ToR1)

Relate to agenda item: 7.1

Working paper Info paper

Restricted

MRAG Consultant Report

Executive Summary

The Saya de Malha Bank is the world's largest submerged ocean bank, covering an area of approximately 41,000 km². The Saya de Malha Bank is a highly productive ecosystem and is thought to contain among the most extensive seagrass areas in the world, interspersed coral reefs. As such, Saya de Malha is likely an important biodiversity hotspot which may be highly sensitive to the impacts of fishing. The Saya de Malha Bank falls within the Southern Indian Ocean Fisheries Agreement's (SIOFA's) area of competence but has thus far received limited attention in terms of fisheries research and management. This report aims to collate available information on contemporary and historical fishing activities on the Saya de Malha Bank, and seeks to provide advice and recommendations on future work to fill priority information gaps.

Information on fisheries, species abundance, species biology, resources analyses, and management measures were collated from SIOFA's Scientific Committee Meetings, Meetings of the Parties, and fisheries database, as well as peer-reviewed literature, grey literature, AIS data from Global Fishing Watch, species biological data from FishBase, and R/V Dr Fridtof Nansen survey data. The study considered fishing activities of SIOFA's Contracting Parties, cooperating non-Contracting Parties, participating fishing entities, signatories, and any third party for which information was available and relevant to the Saya de Malha Bank area.

Thailand, operating primarily trawl fisheries, and Mauritius are likely the most important fishing nations on the Saya de Malha Bank, with the Comoros also actively fishing but at a much lower intensity. Through use of Global Fishing Watch and unpublished data held MRAG this report also demonstrates that Sri Lanka and to a much lesser extent (and more sporadically) Indian flagged vessels also operate on Saya de Malha Bank, neither nation is actively engaged with SIOFA. Other nations fishing within or directly adjacent to the Saya de Malha Bank include China, Chinese Taipei, Japan, Korea, Malaysia, and Seychelles. While these fisheries are likely targeting tuna and tuna-like species they have the potential to impact SIOFA-relevant species on the Bank and should therefore be considered of potential relevance to the Bank's management. At present, only Thailand and Comoros report their catches on or over the Saya de Malha Bank to SIOFA, with catch per unit effort data is only available for Thailand from 2020. Mauritius also collects catch per unit effort data but this is only publicly available until 2011. Biological information for species, required for effective fisheries management, on the Saya de Malha Bank is similarly restricted. Of the 131 species having been reported from catches on the Saya de Malha Bank, only the sky emperor (*Lethrinus mahsena*) has received direct attention. As an interim measure, this scoping study has compiled available biological information for these same species from other parts of their distributional range to provide a suitable foundation for species and fisheries management on Saya de Malha.

There are currently no SIOFA management measures that are specific to the fisheries on Saya de Malha Bank, though a number of general measures are of relevance. However, aspects of existing measures, currently not applied to shallow water species or areas, could provide a foundation for future development. Independently, Mauritius applies a quota-based system to its fisheries on the Bank seems to have been effective, facilitating a consistent CPUE for target species at least until 2011, after which data is no longer publicly available.

This study demonstrates a clear need for SIOFA to foster engagement and improve cooperation between itself and the key contracting and non-contracting parties of Mauritius, Comoros, Sri Lanka and India where possible. Further, efforts should be made to improve the understanding of gear use, target species, fishing effort, and CPUE in the ongoing fisheries operations on Saya de Malha. This understanding will be critical in underpinning effective management actions and informed decision-making for Saya de Malha. Research on biological information for Saya de Malha species is required but is of lower priority given the availability of biological parameters from other areas in their distributional ranges.