



SIOFA | APSOI

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

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# 2024 Annual National Report- Seychelles

Delegation of Seychelles

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<b>Distribution</b>	Public <input checked="" type="checkbox"/> Restricted <sup>1</sup> <input type="checkbox"/> Closed session document <sup>2</sup> <input type="checkbox"/>
<b>Abstract</b>	<p>This report summarizes the fishing activity by Seychelles flagged vessels authorized by the Seychelles Government to operate in the Southern Indian Ocean Fisheries Agreement (SIOFA) Area for 2023. Two fishing vessels were licensed to undertake exploratory harvesting of sea cucumber in the Joint Management Area (JMA). A total of 64 fishing days was undertaken by the two vessels whereby a total of 16.18 tonnes of sea cucumbers was landed.</p>

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<sup>2</sup> Documents available only to members invited to closed sessions.

**Recommendations**

It is recommended that the Scientific Committee:

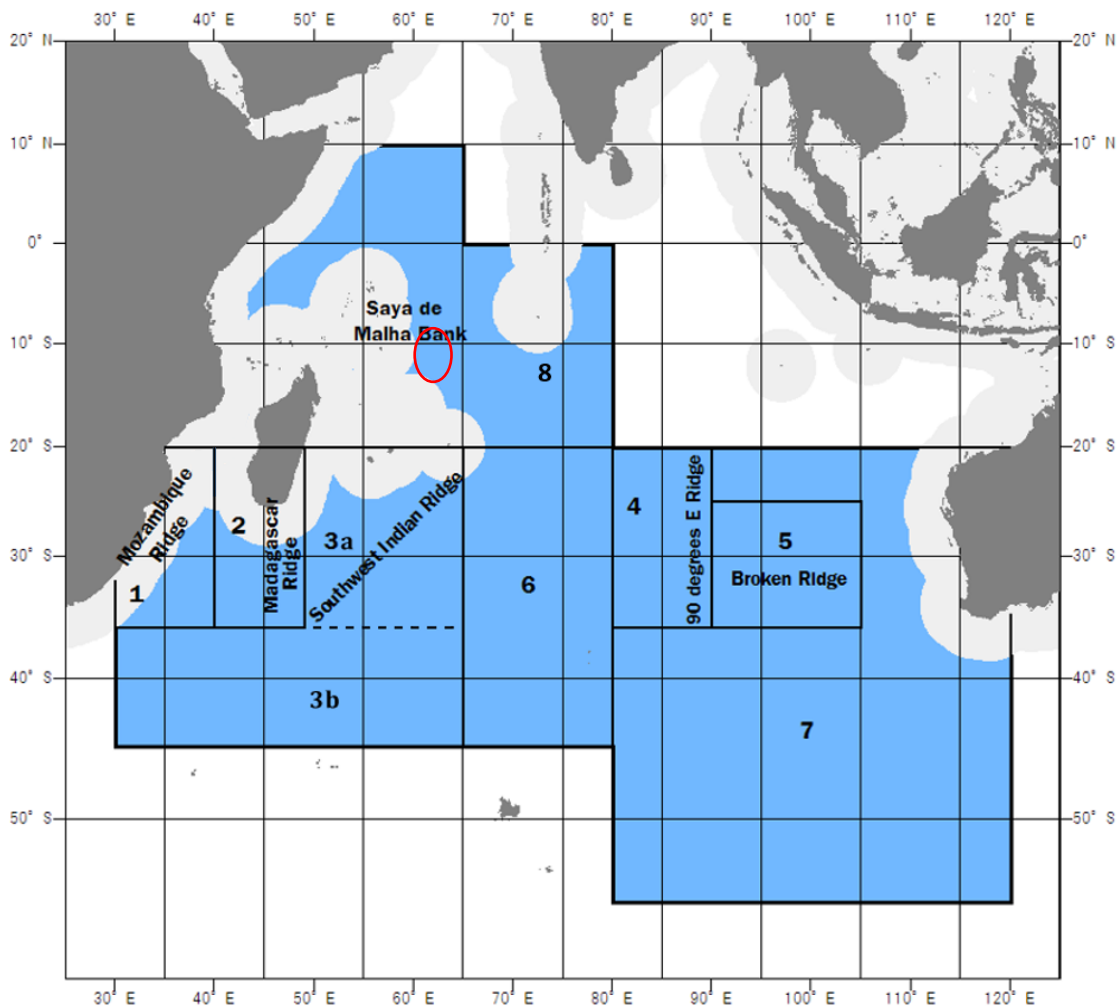
- Notes the national report provided by Seychelles

## Description of fisheries

The Seychelles flagged vessels operating in the SIOFA convention area consists of mostly purse seiners and longliners that targets tuna and tuna-like species and are therefore operating in the Indian Ocean Tuna Commission Tuna (IOTC) area of competence. However, in June 2023, two fishing vessels were licensed to undertake exploratory harvesting of sea cucumber in the Joint Management Area (JMA), an Extended Continental Shelf (ECS) area of about 396 000 km<sup>2</sup> of which Seychelles and Mauritius share joint jurisdiction (Table 1). The fishing operation consisted of diving using Scuba gear to collect sea cucumbers by hand. The fishing activities was concentrated on the Saya de Malha Bank (SIOFA Sub-area 8) (Fig. 1)

**Table 1:** Fleet composition (number of vessels by gear type and size and how this has changed by year).

Year	Vessels that actively fished
	Diving
2023	2



**Fig.1:** SIOFA Statistical areas defined in the National Report Guideline (SIOFA, 2021) and approximate locations of Seychelles exploratory sea cucumber harvesting (red circle).

Between September to December 2023, a total of 64 fishing days was undertaken by the two vessels (Table 2). Throughout this period a total of 16.18 tonnes of sea cucumbers was landed (Table 3). Note that the weight of sea cucumbers was collected from gutted sea cucumbers preserved in salt.

**Table 2:** Summary table of diving effort (days fished).

Year	Sub-areas for reporting catch and effort data								
	1	2	3.a	3.b	4	5	6	7	8
2023									64

**Table 3:** Summary table of diving catches (tonnes)

Year	Sub-areas for reporting catch and effort data								
	1	2	3.a	3.b	4	5	6	7	8
2023									16.18

## Catch, effort and CPUE summaries

Table 4 shows the annual catch of the main species caught during the exploratory trips. The most dominant species caught is White teatfish (*Holothuria fuscogilva*) with a total of 15.42 tonnes. This represents 96% of the total landed catch. The other species caught is Flower teatfish (*Holothuria spp.* Type “Pentard”) with a total of 0.76 tonnes. The Catch per Unit of Effort (CPUE) was 252 kg/fishing day.

**Table 4:** Catch (tonnes) by species for main target, bycatch, associated and dependent species (R-retained and D-discarded)

Year	White teatfish		Flower teatfish		Total	
	R	D	R	D	R	D
2023	15.42		0.76		16.18	

## Fisheries data collection and research activities

### (1) Fishery data collection (logbook)

Data collection for the exploratory sea cucumber fishery is undertaken through paper logbooks which are provided to skippers during the departure inspection. The logbooks are filled by skippers at sea and it is used to record catch and effort data after each dive operation undertaken. The catch recorded is in number of sea cucumber pieces.

### (2) Landings inspections

Landings data which is collected by Port Control Officers during landing inspection when the catch is being unloaded. Landings recorded is in total number of sea cucumber pieces and total weight by species.

Table 5 shows the tempo-spatial resolution of the data for the sea cucumber exploratory fishery (logbook).

### (3) Research activities

No research activities were undertaken in the SIOFA area of competence in 2023.

**Table 5:** Details on the scales and resolutions of the fishery data collection for trawl fishery.

Sea cucumber exploratory fishery data collection items				
Year	tow / set <i>(individual or some aggregation)</i>	Time scale <i>(set-tow hauling time, daily, etc.)</i>	Spatial scale <i>(tow/set exact position or grid, please provide grid resolution)</i>	Species details <i>(any aggregation or species grouping)</i>
2023	Each dive	Diving time (minutes)	Exact location	Recorded by species

## VME Thresholds

The exploratory sea cucumber fishery operated without impacting Vulnerable Marine Ecosystems (VME).

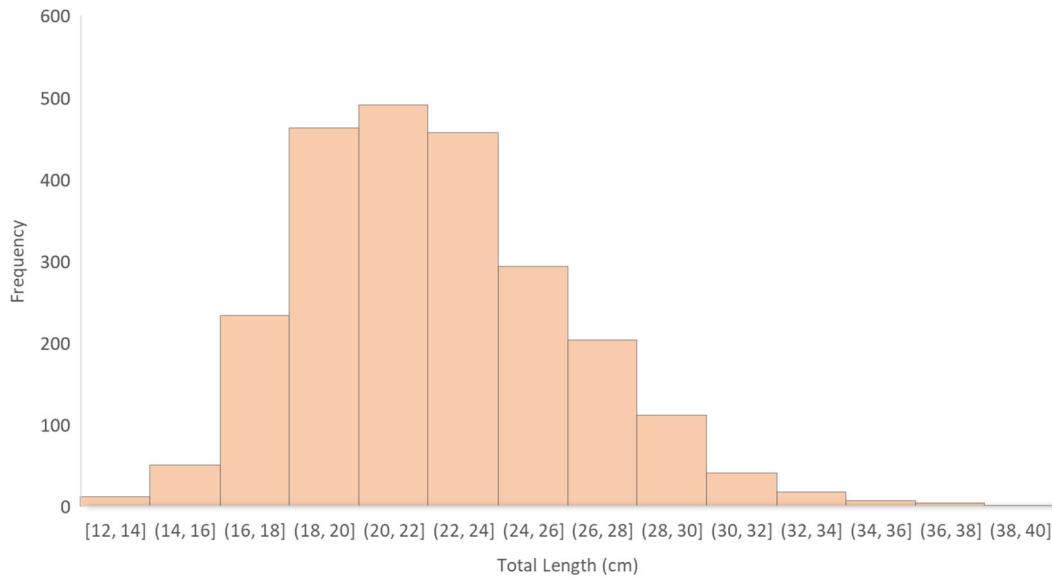
## Biological sampling and length/age composition of catches

For the exploratory sea cucumber fishery, length frequency sampling is undertaken when the vessels are offloading their catch during the inspection period. For the initial trip the target was 30 pieces sampled per species, as multiple species were expected from the catch, however since the vessels were landing only 2 species the target was changed to 10% of the total catch. Tables 6 provides a summary of the number of sea cucumber species sampled in 2023.

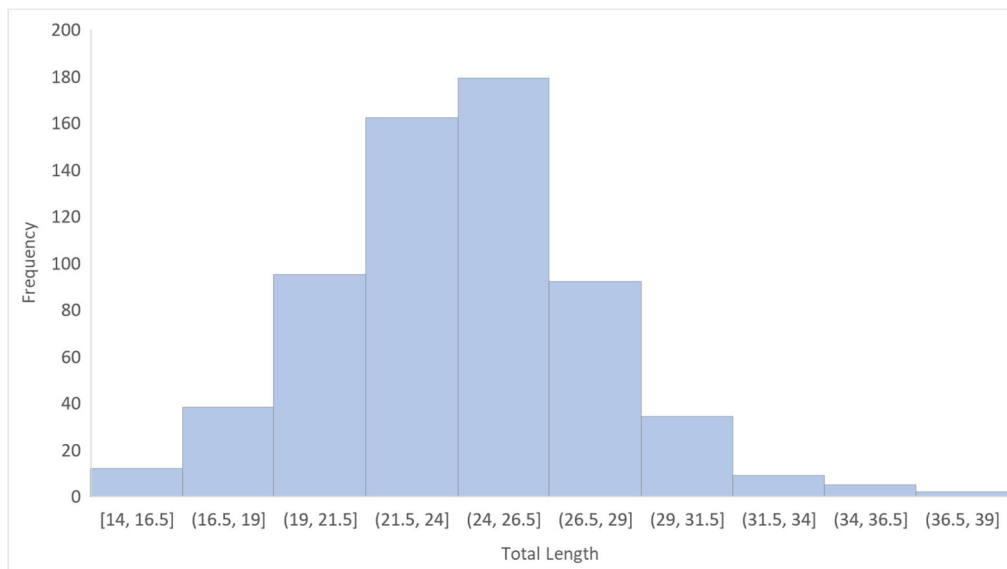
**Table 6:** Summary numbers of sea cucumbers sampled per species and year.

	Years
Species (FAO code)	2023
HFF	L/F: 2189
HFN (Pentard)	L/F: 529

Figure 2 illustrates the length frequency of White teatfish sampled in 2023, while Figure 3 depicts the length frequency of Flower teatfish sampled.



**Fig.2:** Length frequency distribution of White teatfish sampled



**Fig.3:** Length frequency distribution of Flower teatfish sampled

## Description of data verification mechanism

The sea cucumber fishery exploratory fishing data are verified by the Seychelles Fishing Authority (SFA). The fishing locations are verified through Vessel Monitoring System (VMS). The landings are verified by Port Control Officers from the SFA during landing inspections when the catch is being unloaded.

## Summary of observer and port sampling programs

No observer programmes are in place for the exploratory sea cucumber fishery. Length frequency sampling is undertaken when the vessels land their catches (see section above on biological sampling).

In contrast for the Seychelles flagged purse seine fishing fleet, an observer programme is in place. Moreover, for the purse seine and small-scale longline fishery fleet, port sampling is a routine and

ongoing activity. Conversely, the distant water industrial longline fleet does not land in Port Victoria, therefore, there are no port sampling programmes for those vessels. Nevertheless, a self-sampling initiative is underway, wherein the crew records size frequency data, which is then transmitted to the Seychelles Fishing Authority. Size frequency data for all the fleets are submitted to the IOTC secretariat on an annual basis (Assan et al., 2023).

## References

Assan C., Socrate E., Jean J., Lucas J., Lucas J.A., Auguste K. and Lucas V. 2023. Seychelles National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2023. Indian Ocean Tuna Commission