Food and Agriculture Organization of the United Nations

Indian Ocean Tuna Commission
Commission des Thons de l'Ocean Indien
iotc ctoi

APPENDIX 3
EXECUTIVE SUMMARY: SKIPJACK TUNA (2026)

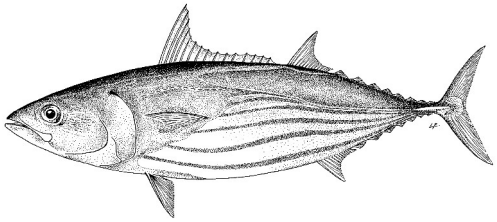

Table 1. Status of skipjack tuna (*Katsuwonus pelamis*) in the Indian Ocean

Area[1]	**Indicators**		**2025 stock status determination**[3]
Indian Ocean	Catch 2025 (t)	735,134[2]	**92.1 % ***
	Mean annual catch 2021-2025 (t)	671,307	
	$F_{40\%SB0}$ [4] (90% CI)	0.5 (0.41–0.6)	
	SB_0 (1000 t) (90% CI)	2 376 (1,816–2,865)	
	SB_{2025} (1000 t) (90% CI)	1 099 (805-1522)	
	SB_{2025} / SB_0 (90% CI)	0.5 (0.29–0.71)	
	SB_{2025} / $SB_{40\%SB0}$ (90% CI)	1.25 (0.71–1.77)	
	SB_{2025} / SB_{MSY} (90% CI)	2.20 (1.28–3.64)	
	F_{2025} / F_{MSY} (90% CI)	0.59 (0.37–1.01)	
	F_{2025} / $F_{40\%SSB0}$ (90% CI)	1.09 (0.79–1.77)	
	MSY (1000 t) (90% CI)	570 (505-683)	

[1]Boundaries for the Indian Ocean stock assessment are defined as the IOTC area of competence
[2] Proportion of 2025 catch fully or partially estimated by IOTC Secretariat: 0.2 %
[3]2025 is the final year that data were available for this assessment
[4] $F_{40\%SB0}$ is the equilibrium annual exploitation rate (F_{targ}) associated with the stock at B_{targ}, and is a key control parameter in the skipjack harvest control rule as stipulated in Resolution 21/03. Note that Resolution 23/03 did not specify the exploitation rate associated with the stock at B_{lim}
*Estimated probability that the stock is in the respective quadrant of the Kobe plot (defined in resolution 21/03 and shown below), derived from the confidence intervals associated with the current stock status

Table 2. Probability of stock status with respect to each of four quadrants of the Kobe plot. Percentages are calculated as the proportion of model terminal values that fall within each quadrant with model weights taken into account, as defined in resolution 21/03

	Stock overfished (SB_{2025} / SB_{MSY}<1)	Stock not overfished (SB_{2025} / SB_{MSY}≥ 1)
Stock subject to overfishing (F_{2025} / F_{MSY} ≥ 1)	1.6 %	6.3 %
Stock not subject to overfishing (F_{2025} / F_{MSY} ≤ 1)	0 %	92.1 %
Not assessed / Uncertain / Unknown		

INDIAN OCEAN STOCK – MANAGEMENT ADVICE

Stock status. A new stock assessment was carried out for skipjack tuna in 2026 and so the advice is based on the 2026 assessment using Stock Synthesis with data up to the end of 2025. An ensemble of 48 models was used to generate stock status. Forty-seven models converged. The agreed stock status from the 2026 stock assessment model is the same as the previous assessment (2023) despite the high catches recorded in the period 2022-2025, which exceeded the catch limits established in 2020 for this period.

The final assessment indicates that:

i) The stock is above the adopted target for this stock (40% SB_0). Current spawning biomass relative to unexploited levels is estimated at 50%.
ii) The probability of the stock being above SB_{MSY} and below F_{MSY} at the same time is estimated to be 92.1 % (see KOBE plot).
iii) All the models in the ensemble estimate that the SB_{2025} is above the limit reference point (20 % SB_0) in 2025.

Based on the weight-of-evidence available in 2026, the skipjack tuna stock is determined to be **not overfished** and **not subject to overfishing**.

Fishery Overview There has been a substantial increase within the fishery dependent abundance indices in recent years: the CPUE from the Maldives pole-and-line (PL) fishery increased by 23 % from 2020 to 2025, however the floating object associated purse seine fishery (PSLS) only increased by 9 % between 2020 and 2025.

The Skipjack Harvest Control Rule (HCR; Resolution 16/02) was first applied in 2017, resulting in a recommended catch limit of 470,029 t for 2018–2020. It was run again in 2020 to provide a catch limit of 513,572 t for 2021–2023, and in 2023 to recommend a catch limit of 628,606 t for 2024–2026. In 2024, IOTC adopted a Management Procedure (MP) for skipjack tuna (Resolution 24/07). The MP replaces the previously adopted HCR for skipjack tuna. The MP was run in 2025 which recommended a TAC of 565,745t for 2027-2029. In 2025, the Commission also adopted Resolution 25/03, which allocates the TAC to major skipjack harvesting countries according to specified rules and provides provisions for the administration of catch limits

Total catches in 2025 (732,675 t) were 104,069 t (16.5 %) greater than the catch limit for the skipjack calculated by the HCR for the period 2024–2026 (628,606 t). In 2025, catch was well above MSY (570,000 t). The estimated increase in stock abundance despite catches exceeding the recommended limits may have been driven by an increase in recent recruitment. In models which included just the Maldive pole-and-line index, recruitment was estimated to be above the long-term average in recent years. However, in models including just the PSLS index, recruitment was estimated to be similar to the long-term average, therefore there is some conflict in terms of knowledge of current recruitment trends.

Environmental conditions (such as sea surface productivity (chlorophyll-a)) are believed to significantly influence the recruitment of skipjack tuna and can produce high variability in recruitment levels between years. The high recruitment anomalies estimated in 2022 and 2025 by the Maldives pole-and-line index appear to be supported by the strong increasingly positive phase of sea surface productivity which began from a below average level in 2015. Climate model predictions in 2022 suggested that the positive productivity phase will end by the start of 2024 resulting in a period of lower productivity. Indeed, 2024 did show lower than average recruitment, however there was an increase in estimated recruitment in 2025.

There is also some uncertainty in the stock assessment due to the potential caveats of using PL and PSLS CPUE as indices of basin-level abundance and uncertainty in stock productivity parameters of skipjack tuna (e.g., steepness and growth, natural mortality). The model runs within the grid incorporate a wide range of stock status (SB_{2025} / SB_0) with estimates of depletion ranging from 29 – 71 %.

Management Procedure. Skipjack tuna is currently subject to a Total Allowable Catch (TAC) of 628,606 t for 2024–2026. This TAC was determined by applying the skipjack Harvest Control Rule (HCR) as prescribed in Resolution 21/03 in 2023. The current TAC has been distributed to CPCs that account for highest skipjack catches according to the rules specified in Resolution 25/03. In May 2024, the Commission adopted a management procedure (MP) for Indian Ocean skipjack tuna under Resolution 24/07, replacing the previous HCR. This MP was applied in 2025 to determine the recommended TAC for skipjack for 2027–2029. As required by Resolution 24/07, a review of evidence for exceptional circumstances was conducted following the adopted guidelines (IOTC-2021-SC24-R Appendix 6A). The evaluation concluded that there were no exceptional circumstances requiring further research or management action regarding the TAC calculated by the MP.

Management advice. The application of the skipjack tuna management procedure as per Resolution 24/03 generated an annual TAC of 565,745 t for 2027–2029. The 2026 stock assessment estimated higher recruitment deviates in recent years. Higher recruitment within the population could be due to skipjack life history characteristics and favorable environmental conditions. The stock level was also estimated to be above the target reference point. As environmental conditions along with ocean productivity can vary substantially inter-annually, and skipjack recruitment responds quickly to such variability, it is important that the Commission ensures that catches of skipjack do not exceed the TAC. In addition, the SC recognizes the potential impact on other associated stocks (bigeye tuna and yellowfin tuna) of exceeding the TAC of skipjack tuna.

The following key points should also be noted:

- **Reference points**: Commission in 2016 agreed to *Resolution 16/02 on harvest control rules for skipjack tuna in the IOTC area of competence (superseded by Resolution 21/03)*.
- **Biomass**: Current spawning biomass was considered to be above the target reference point of 40% of SB_0, and above the limit reference point of $0.2*SB_0$ as per Resolution 16/02 (**Fig. 3**).
- **Main fisheries (mean annual catch 2021-2025):** skipjack tuna are caught using purse seine (52.9%), followed by baitboat (18.7%) and gillnet (18.3%). The remaining catches taken with other gears contributed to 10.1% of the total catches in recent years(**Fig. 1**).
  Main fleets (mean annual catch 2021-2025): the majority of skipjack tuna catches are attributed to vessels flagged to Indonesia (21.2%) followed by Maldives (17%) and EU (Spain) (12.4%). The 32 other fleets catching skipjack tuna contributed to 49.4% of the total catch in recent years (**Fig. 2**).

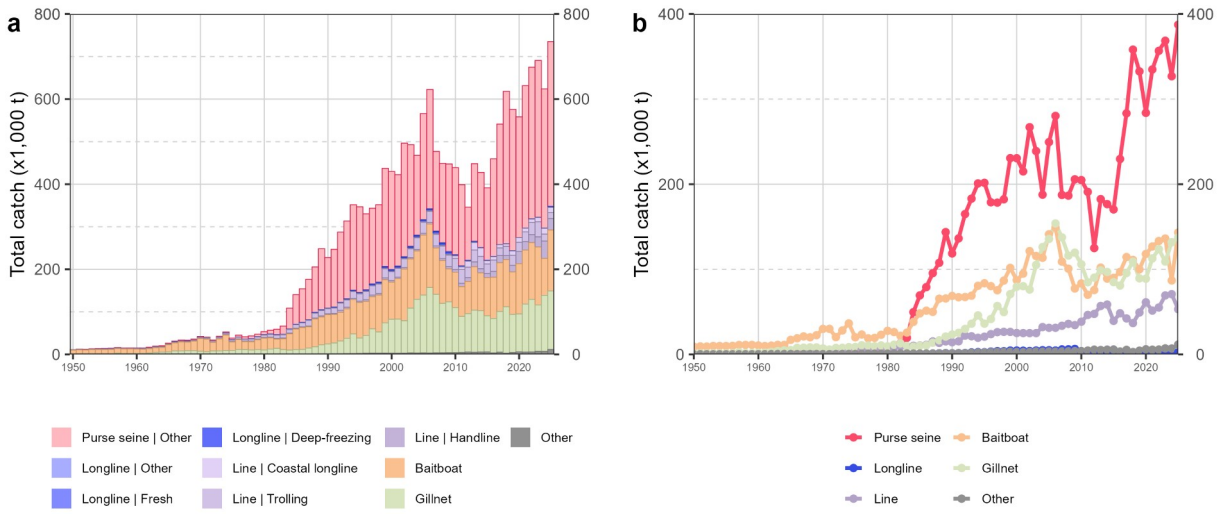

Fig. 1. Annual time series of (a) cumulative retained catches (metric tonnes; t) by fishery and (b) individual retained catches (metric tonnes; t) by fishery group for skipjack tuna during 1950-2025. Purse seine | Other: coastal purse seine, large-scale purse seine, and ring net; Longline | Other: swordfish and sharks-targeted longlines; Other: all remaining fishing gears

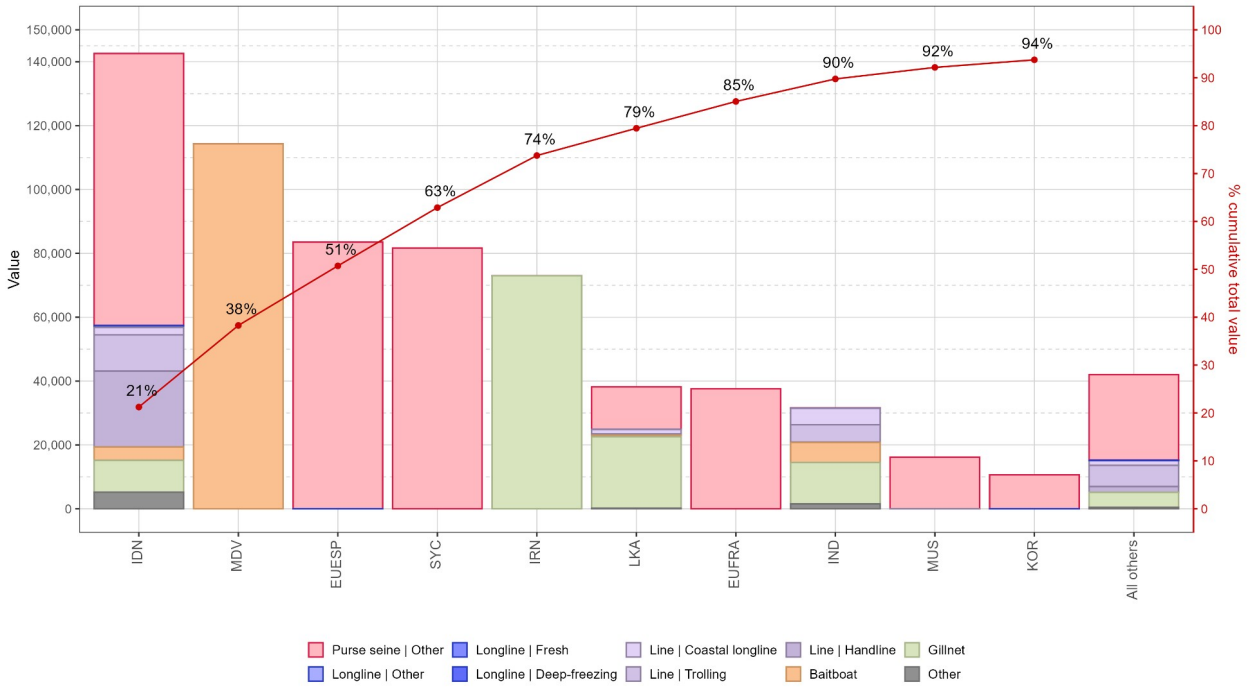

Fig. 2. Mean annual retained catches (metric tonnes; t) of skipjack tuna by fleet and fishery between 2021 and 2025, with indication of cumulative catches by fleet. Purse seine | Other: coastal purse seine, large-scale purse seine, and ring net; Longline | Other: swordfish and sharks-targeted longlines; Other: all remaining fishing gears

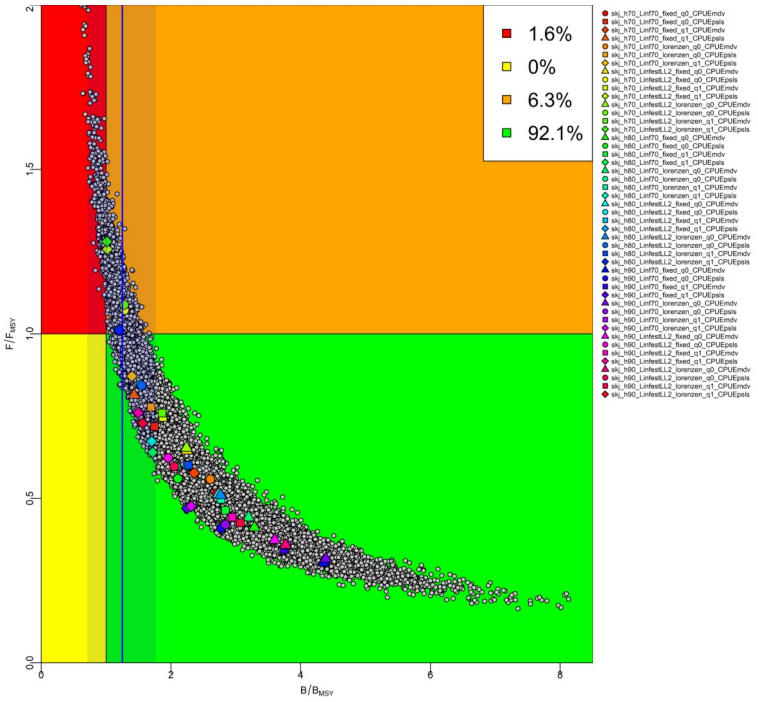

Fig. 3. Skipjack tuna: SS3 Aggregated Indian Ocean assessment Kobe plot of the 2026 uncertainty grid: current stock status, relative to B/B_{MSY} and F/F_{MSY}. The vertical line with shading indicates 40 % of SSB_0. Coloured symbols represent Maximum Posterior Density estimates from individual models. Grey dots represent uncertainty from individual models.