



MarinTrust Standard V2

By-product Fishery Assessment

MUS04 - Skipjack tuna in FAO Areas 51 and 57

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Skipjack tuna (<i>Katsuwonus pelamis</i>)
	Geographical area:	FAO 51 & 57 Indian Ocean, Western and Eastern
	Country of origin of the product:	Mauritius (flag country)
	Stock:	Skipjack tuna, FAO 51 & 57 Indian Ocean, Western and Eastern
Date	January 2024	
Report Code	MUS04	
Assessor	Jose Peiro Crespo	
Country of origin of the product - PASS	Mauritius	
Country of origin of the product - FAIL	n/a	

Application details and summary of the assessment outcome			
Company Name(s): Riche Terre			
Country:			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:			
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Jose Peiro Crespo	Sam Peacock	0.2	Initial
Assessment Period	January 2024- January 2025		

Scope Details	
Main Species	Skipjack tuna (<i>Katsuwonus pelamis</i>)
Stock	Indian Ocean skipjack tuna
Fishery Location	FAO 51 & 57 Indian Ocean, Western and Eastern
Management Authority (Country/ State)	Indian Ocean Tuna Commission (IOTC)
Gear Type(s)	
Outcome of Assessment	
Peer Review Evaluation	Agree with assessment outcome
Recommendation	Approve

Table 2. Assessment Determination

Assessment Determination
<p>Skipjack tuna (<i>Katsuwonus pelamis</i>) meets the eligibility criteria for approval as Marin Trust by-product raw material, as it is not categorized as Endangered or Critically Endangered on the Union for Conservation of Nature's Red List (IUCN) and it does not appear in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) appendices.</p> <p>For the purpose of assessment and management, a singular stock of skipjack tuna is found in the Indian Ocean. The stock is managed by the Indian Ocean Tuna Commission (IOTC) relative to target and limit reference points, and therefore it is assessed under category C. The stock was last assessed in 2020 (and updated in 2022). Fishery removals of the species in the fishery were considered during the stock assessment process. According to that stock assessment, the biomass of the skipjack tuna stock in the Indian Ocean is considered to be significantly higher than the limit reference point. As a result, the fishery effectively complies with clauses C1.1 and C1.2.</p> <p>Consequently, skipjack tuna (<i>Katsuwonus pelamis</i>) caught in FAO areas 51 and 57 is granted approval for the production of fishmeal and fish oil, adhering to the existing MarinTrust v2.3 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>This byproduct meets the pre-requisites for MT approval, having been categorized by the IUCN as Least Concern and not appearing in the CITES appendices. The assessor has correctly determined that the byproduct should be assessed under Category C. The stock is subjected to regular, robust stock assessments, and the most recent assessment determined that stock biomass is highly likely to be above the limit reference point level. The peer reviewer agrees with the conclusion that the byproduct should be approved for use as a raw material.</p>
Notes for On-site Auditor
Empty space for notes

Species Categorisation

NB: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in CITES Appendix 1, it **cannot** be approved for use as a MarinTrust raw material.

IUCN Red list Category

By-product material from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for the following categories shall immediately fail the assessment;

- EXTINCT (E) AND EXTINCT IN THE WILD (EW)
- CRITICALLY ENDANGERED (CR) facing an extremely high risk of extinction in the wild.
- ENDANGERED (EN) facing a very high risk of extinction in the wild.

By-product material may be used from the following categories provided that all clauses in the MarinTrust standard are passed.

- VULNERABLE (VU) facing a high risk of extinction in the wild.
- NEAR THREATENED (NT) does not qualify for above now, but is close or is likely to qualify for, a threatened category in the near future.
- LEAST CONCERN (LC) Widespread and abundant.
- DATA DEFICIENT (DD) and NOT EVALUATED (NE)

Table 3 Species Categorisation Table

Common name	Latin name	Stock	Management	Category	IUCN Red List Category ¹	CITES Appendix 1 ²
Skipjack tuna	<i>Katsuwonus pelamis</i>	Indian Ocean	Yes, IOTC	C	<u>LC</u> (Least concern)	No

¹ <https://www.iucnredlist.org/>

² <https://cites.org/eng/app/appendices.php>

CATEGORY C SPECIES

In a by-product assessment, Category C species are those which are subject to a species-specific management regime and are usually targeted species in fisheries for human consumption.

Clause C1 should be completed for each Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it should be assessed as a Category D species instead.

Species Name		Skipjack tuna (<i>Katsuwonus pelamis</i>)	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Yes
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Yes
Clause outcome:			Pass

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.

In the most recent assessment conducted in 2020 (and updated in 2022), fisheries removals of the species were considered. In 2021, skipjack tuna catches in the Indian Ocean totalled approximately 655,100 tonnes, marking a 20% increase from 2020. The primary methods of capture were purse seine (54%), pole-and-line (19%), and gillnets (18%). Although pole-and-line, purse seine, and gillnet catches had been on a declining trend since the mid-2000s, there has been an upward trajectory since 2012, particularly for purse seine, **C1.1. is met.**

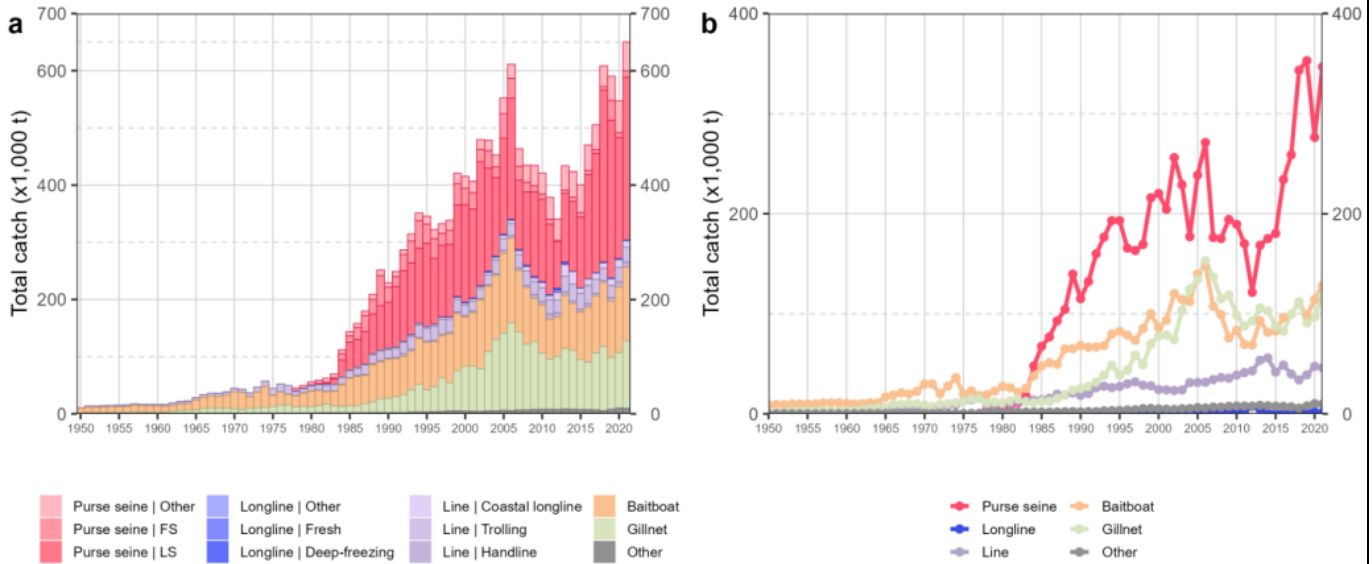


Figure 1. Annual time series of (a) cumulative nominal catches (metric tonnes; t) by fishery and (b) individual nominal catches (metric tonnes; t) by fishery group for skipjack tuna during 1950–2021. FS = free-swimming schools; LS = schools associated with drifting floating objects. Purse seine | Other: coastal purse seine, purse seine of unknown association type, ring net; Longline | Other: swordfish and sharks-targeted longlines; Other: all remaining fishing gears, Catches of skipjack tuna in the IO from 1950 to 2021, by gear type (IOTC 2022)

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

For this stock the limit reference point (Interim limit reference points) and target reference point (interim limit and target reference points) are $0.2 \times \text{SSB}_0$ and $F_{0.2\text{SSB}_0}$ and $0.4 \times \text{SSB}_0$ and $F_{0.4\text{SSB}_0}$ respectively (Resolutions 21/03 and 15/10). The most recent stock assessment indicated that the value of $\text{SSB}_{2019}/\text{SSB}_0$ is 0.45, which is above the SSB target and limit. The 2020 stock assessment

CATEGORY C SPECIES

concluded that the stock biomass was above SB_{MSY} “with very high probability”, and that “over the history of the fishery, biomass has been well above the adopted limit reference point ($0.2 \cdot SB_0$)” (60.4% of probability of being in the green quadrant of the Kobe plot) (IOTC 2022), **C1.2 is met**.

Table 1. 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 (IOTC 2022)

Colour key	Stock overfished ($SB_{2019} / SB_{40\%SB_0} < 1$)	Stock not overfished ($SB_{2019} / SB_{40\%SB_0} \geq 1$)
Stock subject to overfishing ($E_{2019} / E_{40\%SB_0} \geq 1$)	19.5%	19.5%
Stock not subject to overfishing ($E_{2019} / E_{40\%SB_0} \leq 1$)	0.6%	60.4%
Not assessed / Uncertain		

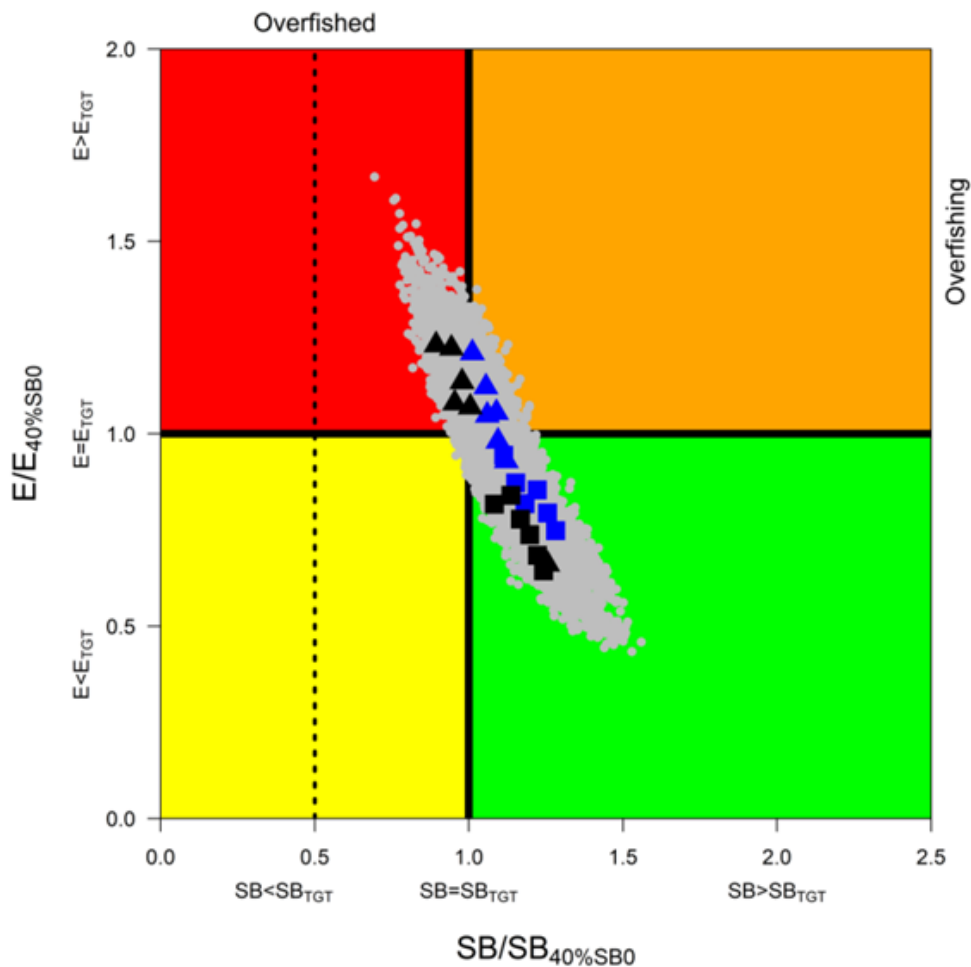


Figure 2. Indian Ocean skipjack tuna, aggregated assessment Kobe plot for the 2020 stock assessment. Symbols and grey dots represent the range of outcomes of the various models. The vertical dashed line indicates the limit reference point – note that no outcomes indicate the stock biomass is below this level (IOTC 2022)

References

International Seafood Sustainability Foundation ISSF 2023-12: Status of the World Fisheries for Tuna. Available at: <https://www.iss-foundation.org/issf-downloads/download-info/issf-2023-12-status-of-the-world-fisheries-for-tuna-november-2023/>

IOTC (2020). Preliminary Indian Ocean skipjack tuna stock assessment 1950-2019 (Stock Synthesis). https://www.iotc.org/sites/default/files/documents/2020/10/IOTC-2020-WPTT22AS-10_Rev1.pdf

IOTC (2022). Skipjack tuna, executive summary. https://iotc.org/sites/default/files/content/Stock_status/2022/Skipjack2022E.pdf

CATEGORY C SPECIES

Links	
MarinTrust Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01