



MarinTrust Standard V2

By-product Fishery Assessment *OMN01 Skipjack Tuna in FAO Areas 51 & 57 (Indian Ocean Skipjack Tuna)*

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 Areas 51 & 57
	Country of origin of the product:	Oman
	Stock:	Indian Ocean Skipjack Tuna
Date	May 2024	
Report Code	OMN01	
Assessor	Sam Peacock	
Country of origin of the product - PASS	Oman	
Country of origin of the product - FAIL	None	

Application details and summary of the assessment outcome			
Company Name(s): International Sea Food Company SAOC			
Country: Oman			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Sam Peacock	Jose Peiro Crespo	0.2	Initial
Assessment Period	May 2024 – May 2025		

Scope Details	
Main Species	Skipjack tuna, <i>Katsuwonus pelamis</i>
Stock	Indian Ocean Skipjack Tuna
Fishery Location	FAO Areas 51 & 57
Management Authority (Country/ State)	Indian Ocean Tuna Commission (IOTC)
Gear Type(s)	Purse seine (free and associated schools), longline, handline, gillnet, and pole-and-line.
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	Approve

Table 2. Assessment Determination

Assessment Determination
<p>Skipjack tuna has been categorised by the IUCN as Least Concern, and it does not appear in the CITES appendices. Skipjack in the Indian Ocean is managed relative to reference points and undergoes regular stock assessment, and was therefore assessed under Category C.</p> <p>The most recent stock assessment for Indian Ocean Skipjack was carried out in 2023, utilised all commercial catch data, and concluded that stock biomass is currently above both the target and limit reference points. Therefore, the byproduct should be approved for use as a raw material.</p>
Fishery Assessment Peer Review Comments
<p>The by-product fishery under assessment is the skipjack tuna (<i>Katsuwonus pelamis</i>) purse seine (free and associated schools), longline, handline, gillnet, and pole-and-line in FAO Areas 51, 57 (Indian Ocean). The species is classified as LC by the IUCN. The stock is managed relative to biomass-based reference points and therefore it is assessed as a category C species.</p> <p>The most recent stock assessment for the species was conducted by the IOCT in 2023 and concluded that the stock biomass was above the target reference point and therefore, the limit reference points. It passes category C.</p> <p>The peer review supports the auditor’s recommendation to pass the skipjack tuna caught with purse seine (free and associated schools), longline, handline, gillnet, and pole-and-line in FAO Areas 51 and 57 under the Marin Trust IFFO RS v2.0 by-fishery standard for the production of fishmeal and fish oil.</p>
Notes for On-site Auditor

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 Skipjack	Yes	C	Least Concern ³	No

¹ <https://www.iucnredlist.org/>

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

³ <https://www.iucnredlist.org/species/170310/46644566>

CATEGORY C SPECIES

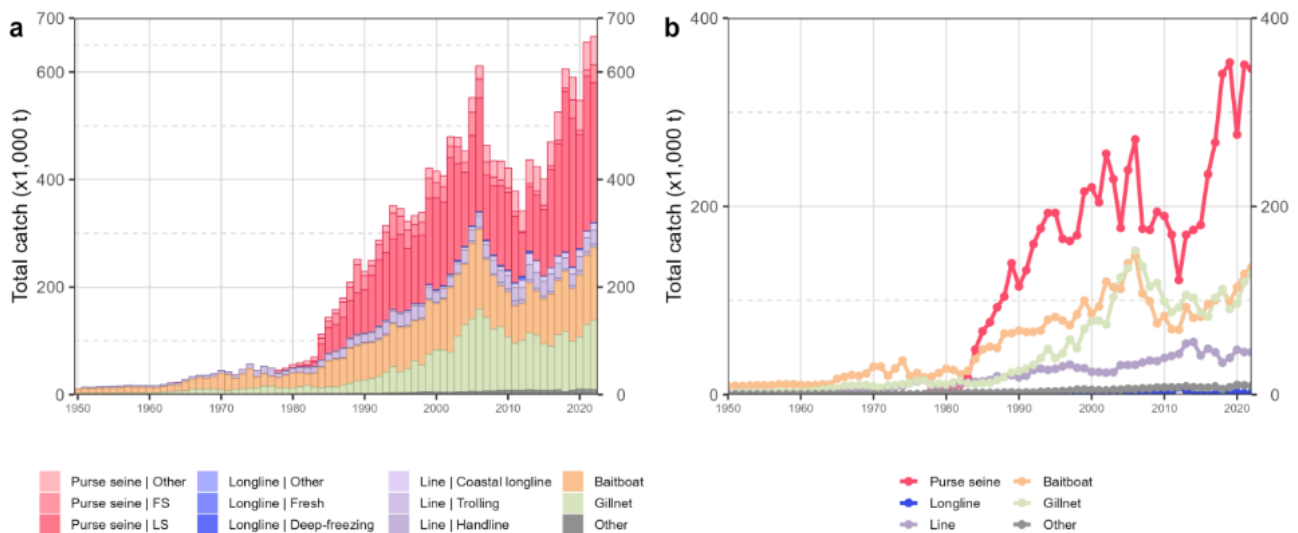
In a by-product assessment, Category C species are those which are subject to a species-specific management regime and are usually targeted species in fisheries for human consumption.

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		Indian Ocean Skipjack Tuna	
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.	PASS
	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.	PASS
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.

The stock assessment conducted by the Indian Ocean Tuna Commission (IOTC) takes all fishery removals into account. The most recent assessment was conducted in 2023. Landings in recent years were reported as a total catch in 2022 of 666,408t, and an average catch 2018-2022 of 613,061t (IOTC 2023). Full catch datasets, including catch and effort by month, species, gear, and vessels flag, and size-frequency datasets, are made available on the IOTC website (IOTC 2023a).



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 Indian Ocean skipjack tuna during 1950-2022 (IOTC 2023)

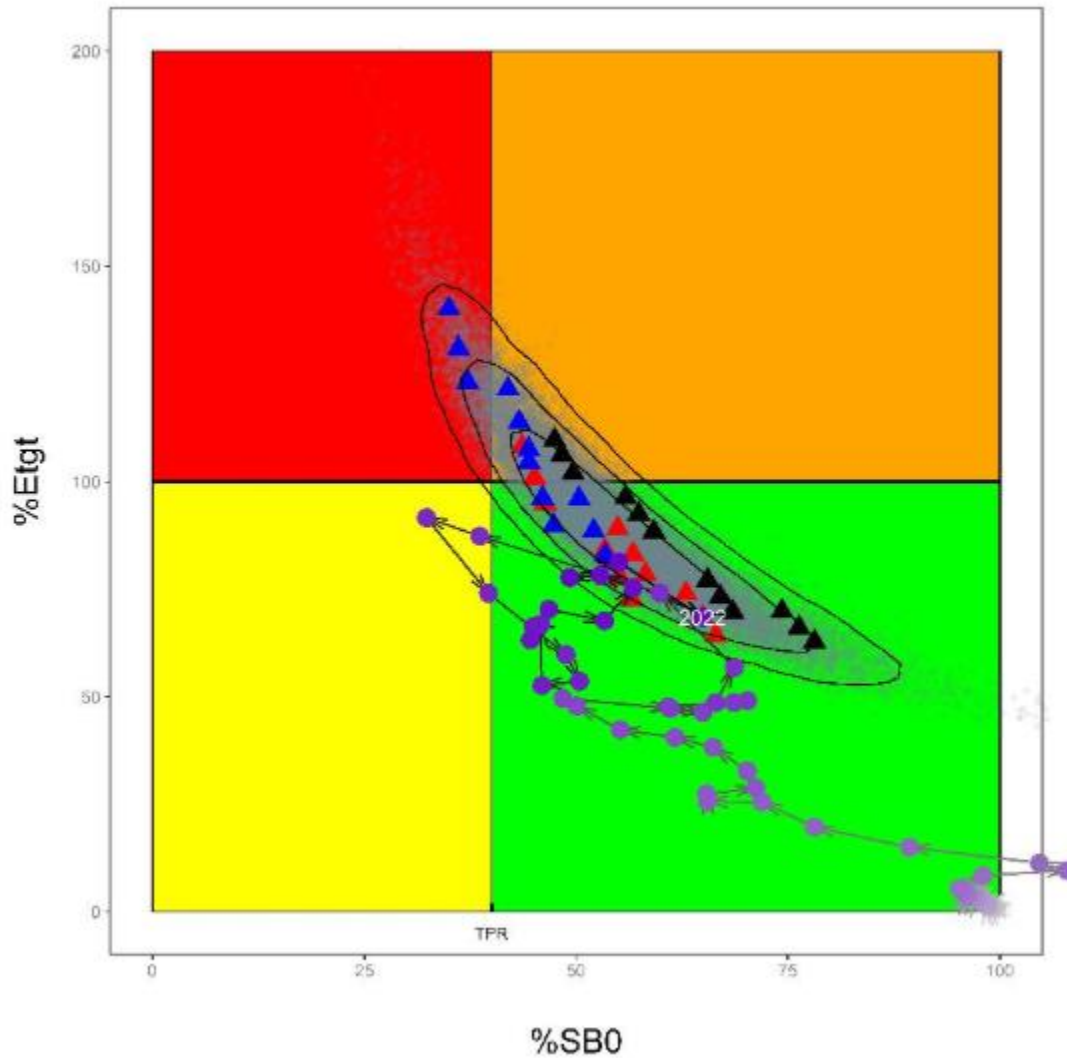
Fishery removals of skipjack tuna are incorporated into the stock assessment process and therefore C1.1 is met.

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.

The most recent stock assessment was carried out in 2023, as reported in a 2023 stock status report published by the IOTC (IOTC 2023). The stock assessment conclusion states that “The outcome of the 2023 stock assessment model is more optimistic than

the previous assessment (2020) despite the high catches recorded in the period 2021-2022, which exceeded the catch limits established in 2020 for this period” (IOTC 2023).

Biomass was estimated to be around 53% of the unfished level, which is above SB_{MSY} . The IOTC also notes that “Over the history of the fishery, biomass has been well above the adopted limit reference point ($20\%SB_0$)” (IOTC 2023).



Indian Ocean skipjack tuna, Kobe plot of the 2023 stock assessment. Triangles represent outputs from individual models, grey dots represent uncertainty from individual models (IOTC 2023)

The stock is above the target and limit reference point, therefore C1.2 is met.

References

- IOTC (2023). Indian Ocean Skipjack Tuna Stock Status: Executive Summary. https://iotc.org/sites/default/files/content/Stock_status/2023/Skipjack_ES_2023.pdf
- IOTC (2023a). Available datasets. <https://www.iotc.org/data/datasets>

Links

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

CATEGORY D SPECIES

Category D species are those which are not subject to a species-specific management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-assessment style approach must be taken.

D1	Species Name	n/a	
	Productivity Attribute	Value	Score
	Average age at maturity (years)		
	Average maximum age (years)		
	Fecundity (eggs/spawning)		
	Average maximum size (cm)		
	Average size at maturity (cm)		
	Reproductive strategy		
	Mean trophic level		
	Average Productivity Score		
	Susceptibility Attribute	Value	Score
	Availability (area overlap)		
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)		
	Selectivity of gear type		
	Post-capture mortality		
	Average Susceptibility Score		
	PSA Risk Rating (From Table D3)		
	Compliance rating		
	Further justification for susceptibility scoring (where relevant) <i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i>		
	References		
Standard clauses 1.3.2.2			

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	High productivity (Low risk, score = 1)	Medium productivity (medium risk, score = 2)	Low productivity (high risk, score = 3)
Average age at maturity	<5 years	5-15 years	>15 years
Average maximum age	<10 years	10-25 years	>25 years
Fecundity	>20,000 eggs per year	100-20,000 eggs per year	<100 eggs per year
Average maximum size	<100 cm	100-300 cm	>300 cm
Average size at maturity	<40 cm	40-200 cm	>200 cm
Reproductive strategy	Broadcast spawner	Demersal egg layer	Live bearer
Mean Trophic Level	<2.75	2.75-3.25	>3.25

Susceptibility attributes	Low susceptibility (Low risk, score = 1)	Medium susceptibility (medium risk, score = 2)	High susceptibility (high risk, score = 3)
Areal overlap (availability) Overlap of the fishing effort with the species range	<10% overlap	10-30% overlap	>30% overlap
Encounterability The position of the stock/species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low overlap with fishing gear (low encounterability).	Medium overlap with fishing gear.	High overlap with fishing gear (high encounterability). Default score for target species
Selectivity of gear type Potential of the gear to retain species	a Individuals < size at maturity are rarely caught	a Individuals < size at maturity are regularly caught.	a Individuals < size at maturity are frequently caught
	b Individuals < size at maturity can escape or avoid gear.	b Individuals < half the size at maturity can escape or avoid gear.	b Individuals < half the size at maturity are retained by gear.
Post-capture mortality (PCM) The chance that, if captured, a species would be released and that it would be in a condition permitting subsequent survival	Evidence of majority released post-capture and survival.	Evidence of some released post-capture and survival.	Retained species or majority dead when released.

D3		Average Susceptibility Score		
		1 - 1.75	1.76 - 2.24	2.25 - 3
Average Productivity Score	1 - 1.75	PASS	PASS	PASS
	1.76 - 2.24	PASS	PASS	TABLE D4
	2.25 - 3	PASS	TABLE D4	TABLE D4

D4 Species Name			
Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements			
D4.1	The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.		
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		
			Outcome:
Evidence			
D4.1: The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.			
D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.			
References			
Links			
MarinTrust Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	