



MarinTrust Standard V2

By-product Fishery Assessment

SLV10 Skipjack Tuna in FAO Areas 51 (Indian Ocean, Western) and 57 (Indian Ocean, Eastern)

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 Major Fishing Areas: 51 Indian Ocean, Western 57 Indian Ocean, Eastern
	Country of origin of the product:	El Salvador
	Stock:	Indian Ocean skipjack
Date	March 2023	
Report Code	SLV10	
Assessor	Sam Dignan	
Country of origin of the product - PASS	El Salvador	
Country of origin of the product - FAIL	None	

Application details and summary of the assessment outcome			
Company Name(s): Calvo Conservas El Salvador SA de CV			
Country: El Salvador			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Sam Dignan	Sam Peacock	0.2	Surveillance 1
Assessment Period	To April 2023		

Scope Details	
Main Species	Skipjack tuna (<i>Katsuwonus pelamis</i>)
Stock	Indian Ocean skipjack
Fishery Location	FAO Major Fishing Areas: 51 Indian Ocean, Western 57 Indian Ocean, Eastern
Management Authority (Country/ State)	Indian Ocean Tuna Commission (IOTC)
Gear Type(s)	Longline, pole and line, purse seine
Outcome of Assessment	
Peer Review Evaluation	Agree with recommendation
Recommendation	PASS

Table 2. Assessment Determination

Assessment Determination
<p>Skipjack tuna has been categorised by the IUCN as a species of Least Concern and does not appear in the CITES appendices.</p> <p>The areas covered by this assessment (FAO Major Fishing Areas 51 (Indian Ocean, Western) and 57 (Indian Ocean, Eastern) include a single skipjack tuna stock (Indian Ocean skipjack).</p> <p>Indian Ocean tuna stocks are managed by the relevant RFMO (Regional Fisheries Management Organisation) the Indian Ocean Tuna Commission (IOTC) where stocks are assessed by the IOTC Scientific Committee (SC), which makes recommendations to the IOTC.</p> <p>The stock is currently managed to interim limit ($0.2 \cdot SSB_0$ and $F_{0.2SSB_0}$) and target ($0.4 \cdot SSB_0$ and $F_{0.4SSB_0}$) reference points and as such are assessed under Category C.</p> <p>The most recent stock assessment of Indian Ocean skipjack was conducted in 2020 with data up to 2019 where results indicated:</p> <ol style="list-style-type: none"> $F_{current}/F_{MSY}$ is estimated to be 0.48 (80% CI: 0.35 – 0.81), meaning overfishing was not occurring. $SSB_{current}/SSB_{MSY} = 1.99$ (80% CI: 1.47 – 2.63) meaning the stock was not in an overfished state. <p>As the stock is estimated above the defined interim biomass limit reference point, the by-product meets the MT requirements and should be approved for use as a raw material.</p>
Fishery Assessment Peer Review Comments
<p>Skipjack tuna has been correctly identified as eligible for MT byproduct approval, and has been assessed under Category C. The most recent stock assessment was carried out in 2020 and concluded that stock biomass was substantially larger than the limit reference point level at that time. The peer reviewer agrees that this byproduct should be approved for use as a raw material in MT-certified marine ingredients.</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	Yes	C	Least Concern ³	No

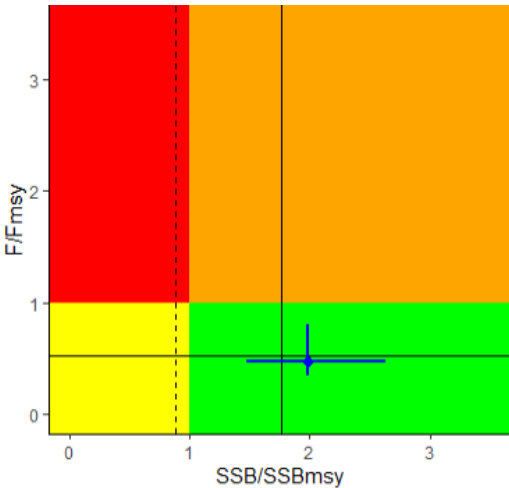
¹ <https://www.iucnredlist.org/>

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		Skipjack tuna (Indian Ocean stock)	
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
<p>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. Catches are not negligible and amounted to 650,331 mt in 2021, a 20% increase from 2022. Catch data are available and are included in the stock assessment process such that C1.1 is met.</p> <p>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 of Indian Ocean skipjack was conducted in 2020 with data up to 2019 where results indicated:</p> <ol style="list-style-type: none"> $F_{current}/F_{MSY}$ is estimated to be 0.48 (80% CI: 0.35 – 0.81), meaning overfishing was not occurring. $SSB_{current}/SSB_{MSY} = 1.99$ (80% CI: 1.47 – 2.63) meaning the stock was not in an overfished state. The median estimate of MSY is estimated to be 601,000 mt (80% CI: 500,100 mt – 767,000 mt), meaning 2021 catches (~650,000 mt) were above this level. <p>Overall, the stock is considered, in its most recent stock assessment, to have a biomass above the defined interim limit reference point such that C1.2 is met.</p>			
		<p>Figure 1. Latest estimate of SSB/SSB_{MSY} and F/F_{MSY} for Indian Ocean skipjack (blue dot, with range (80% CIs) indicated by bars). Solid black lines represent interim target reference points and black dashed lines represent interim limit reference points.</p>	
<p>References See skipjack tuna status summary at: https://iotc.org/science/status-summary-species-tuna-and-tuna-species-under-iotc-mandate-well-other-species-impacted-iotc.</p> <p>ISSF (2023). Status of the world fisheries for tuna. Mar. 2023. ISSF Technical Report 2023-01. International Seafood Sustainability Foundation, Pittsburgh, PA, USA: https://www.iss-foundation.org/downloads/33297/?tmstv=1683106711.</p>			
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		
	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	