MarinTrust Standard V2

By-product Fishery Assessment

ESP32 – Skipjack tuna in FAO Areas 51 & 57 (Indian Ocean)

MarinTrust Programme
Unit C, Printworks
22 Amelia Street
London
SE17 3BZ
E: standards@marin-trust.com
T: +44 2039 780 819

Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Skipjack tuna (*Katsuwonus pelamis*)
	Geographical area:	FAO Area 51 & 57
	Country of origin of the product:	El Salvador, Ecuador, Spain, Panama, Portugal
	Stock:	Indian Ocean skipjack tuna
Date	December 2023	
Report Code	ESP32	
Assessor	Sam Peacock	
Country of origin of the product - PASS	Spain (El Salvador, Ecuador, Panama, Portugal)	
Country of origin of the product - FAIL	n/a	

Application details and summary of the assessment outcome			
Company Name(s): Sarval Bio-industries Noroeste; S.A.U: Arteixo			
Country:			
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	Surveillance 1
Assessment Period	December 2023 – December 2024		

Scope Details	
Main Species	Skipjack tuna (*Katsuwonus pelamis*)
Stock	Indian Ocean skipjack tuna
Fishery Location	FAO Area 51 & 57
Management Authority (Country/ State)	Indian Ocean Tuna Commission (IOTC)
Gear Type(s)	Purse seine, pole and line, gillnets
Outcome of Assessment	
Peer Review Evaluation	Approve byproduct
Recommendation	Approve byproduct

Table 2. Assessment Determination

Assessment Determination
Skipjack tuna has been categorised by the IUCN as Least Concern, and does not appear in the CITES appendices. Skipjack in the Indian Ocean is managed by the IOTC relative to target and limit reference points, and was therefore assessed under Category C. The most recent stock assessment was conducted in 2020; an updated assessment was due to be carried out in 2023, but does not appear to be available yet. The 2020 assessment incorporated international catch data and CPUE indices, and concluded that there was a very high probability that skipjack biomass was above both the limit and target reference points. This byproduct meets the MT requirements and should be approved for use as a raw material.
Fishery Assessment Peer Review Comments
The by-product fishery under assessment is the Skipjack tuna (*Katsuwonus pelamis*) longline, pole and line and gillnets in FAO Areas 51 and 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. The most recent stock assessment conducted in 2020 by the IOTC indicated that was a very high probability that skipjack biomass was above both the limit and target reference points. Therefore, it passes category C. The peer review supports the auditor's recommendation to pass the Indian Ocean Skipjack tuna longline, pole and line and gillnet fisheries (FAO Areas 51 and 57) under the Marin Trust IFFO RS v2.0 by-fishery standard for the production of fishmeal and fish oil.
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 an 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	*Katsuwonus pelamis*	Indian Ocean skipjack tuna	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**	
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.

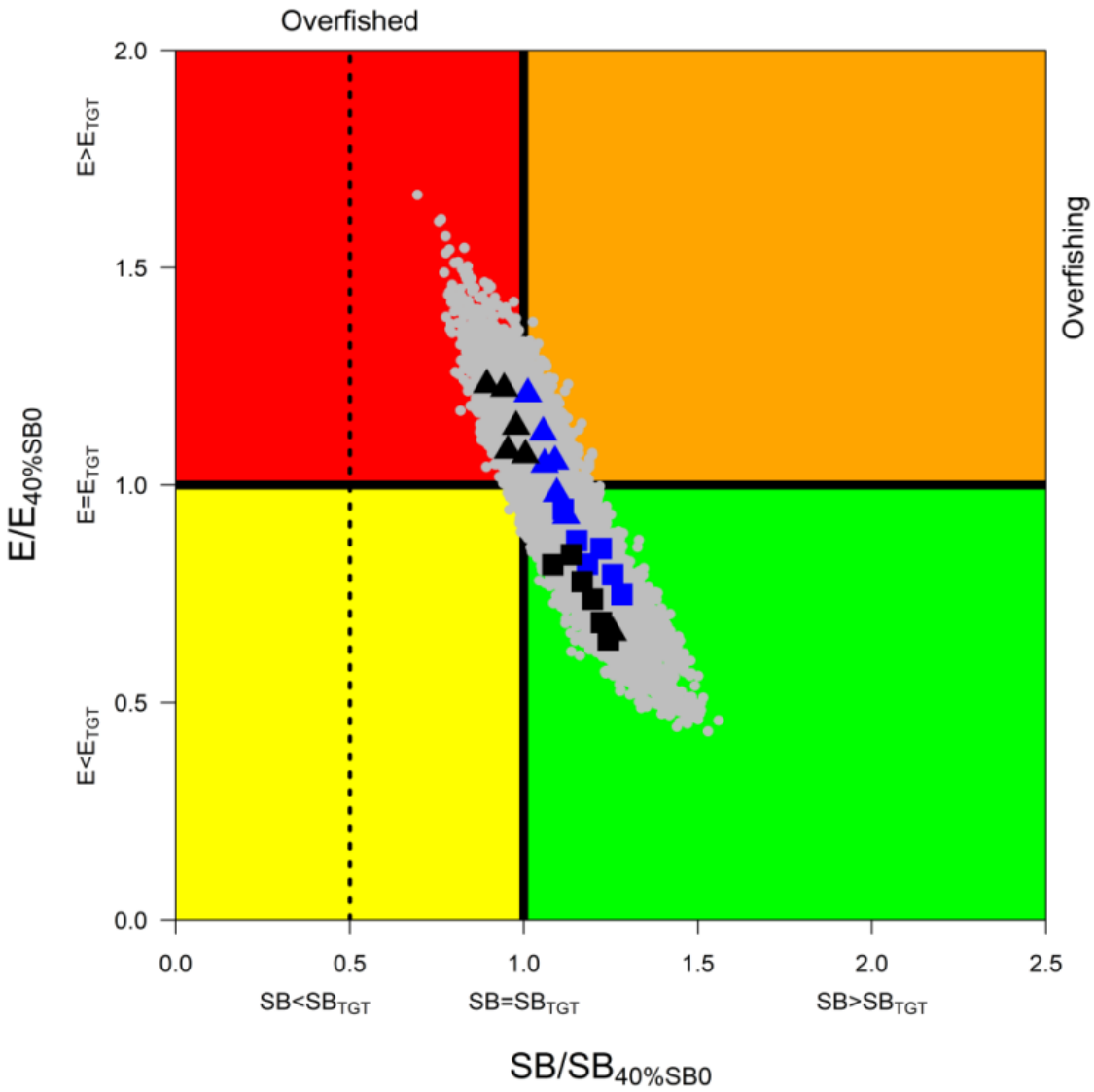
Management advice is published by the IOTC Working Party on Tropical Tunas annually. The most recent stock assessment was conducted in 2020 using data up to 2019, and management advice since then has been based on the 2020 assessment (IOTC 2022). A full updated stock assessment was due to be carried out in 2023, but did not appear to be available at the time of writing. The 2020 assessment incorporated international catch data and CPUE indices, and the results did not differ substantially from the previous assessment (conducted in 2017). The stock assessment report does discuss some potential sources of uncertainty; however the assessor concludes that overall the outcomes are sufficiently reliable for C1.1 to be 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 2020 stock assessment concluded that the stock biomass is 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 ($0.2*SB_0$)" (IOTC 2022). There is clear evidence that the most recent stock assessment concluded that stock biomass was above the limit reference point, and C1.2 is met.

Indian Ocean skipjack tuna, probability of stock status with respect to each of four quadrants of the Kobe plot. Note that the limit reference point SB_{lim} is 20% of the unfished biomass; the stock is considered "overfished" when biomass is less than double this level (i.e. $SB/SB_{40\%B0} < 1$). See the Kobe chart below for an additional illustration (IOTC 2022).

Colour key	Stock overfished ($SB_{2019} / SB_{40\%SB0}<1$)	Stock not overfished ($SB_{2019} / SB_{40\%SB0}\geq 1$)
Stock subject to overfishing ($E_{2019} / E_{40\%SB0}\geq 1$)	19.5%	19.5%
Stock not subject to overfishing ($E_{2019} / E_{40\%SB0}\leq 1$)	0.6%	60.4%
Not assessed / Uncertain		



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 2020)

References

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

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) *For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision*		
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	n/a	
	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