



MarinTrust Standard V2

By-product Fishery Assessment, VNM14- *Skipjack tuna (Katsuwonus pelamis) in FAO 77*

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Skipjack tuna (<i>Katsuwonus pelamis</i>) in
	Geographical area:	FAO 77 (eastern Pacific, central)
	Country of origin of the product:	Vietnam (flag states: USA, Cook Islands, Tokelau, Fiji, Vanuatu, and Samoa)
	Stock:	Eastern Pacific Ocean (EPO) skipjack tuna
Date	23/08/2024	
Report Code	VNM14	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Vietnam (flag states: USA, Cook Islands, Tokelau, Fiji, Vanuatu, and Samoa)	
Country of origin of the product - FAIL	N/A	

Application details and summary of the assessment outcome			
Company Name(s): Thien Quynh Co. Ltd, Thien Quynh Khanh Hoa Sole Member Limited Liability Company			
Country: Vietnam			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LQRA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Virginia Polonio	Sam Peacock	0.5	Re-approval
Assessment Period	August 2024 - August 2025		

Scope Details	
Main Species	Skipjack tuna (<i>Katsuwonus pelamis</i>)
Stock	FAO 77 (eastern Pacific, central)
Fishery Location	FAO 77 (eastern Pacific, central)
Management Authority (Country/ State)	Inter-American Tropical Tuna Commission (IATTC)
Gear Type(s)	Purse Seine, Longline, and Pole-and-Line ttom Trawl, vertical lines, and pots
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor
Recommendation	APPROVE

Table 2. Assessment Determination

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on IUCN's Red List, or if it appears in the CITES appendices, it cannot be approved for use as Marin trust raw material. Skipjack Tuna (<i>Katsuwonus pelamis</i>) do not appear as Endangered or Critically Endangered on IUCN's Red List, nor do they appear in CITES appendices; therefore, <i>Katsuwonus pelamis</i> is eligible for approval for use as Marin trust by-product raw material.</p> <p>The Eastern Pacific Ocean (EPO) skipjack tuna is managed at the international level by the IATTC through a multiyear conservation plan. IATTC conducts regular stock assessments.</p> <p>The stock of skipjack in the EPO is eligible to being material for MarinTrust. Additionally, this stock is certified in several MSC fisheries and has passed evaluations in this year 2024. In the latest benchmark conducted in 2024, the stock is in the green zone of the Kobe plot and above the estimated biomass limit value.</p> <p>The stock is assessed under category C. Fishery removals are included in the stock assessment, and it PASSES Clause C1.1.</p> <p>The most recent stock assessment for Eastern Pacific Skipjack Tuna showed the reference model estimated that current depletion is above the target reference point ($SBR_{2021}/SBR_{target}=1.77$; range: 0.4 to 3.5), indicating that the stock is not overfished. Most of the sensitivity runs support this conclusion. Current SBR is slightly above the status quo level (average level of 2017-2019) as did over half of the sensitivity runs, it PASSES Clause C1.2.</p> <p>Therefore, Skipjack Tuna (<i>Katsuwonus pelamis</i>) in the EPO is APPROVED for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products.</p>
Fishery Assessment Peer Review Comments
<p>The peer reviewer agrees that this stock is eligible for MarinTrust approval, and that it should be assessed under Category C. The assessor has demonstrated, with references, that the stock is subject to a regular stock assessment which incorporates fishery removals, and that stock biomass is currently above the limit reference point level. For these reasons, the peer reviewer agrees that this byproduct should be re-approved for use as a raw material.</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 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	<i>Katsuwonus pelamis</i>	EPO stock	IATTC	C	Least concern ³	No

¹ [https://www.iucnredlist.org/Katsuwonus pelamis \(Skipjack Tuna\) \(iucnredlist.org\)](https://www.iucnredlist.org/Katsuwonus_pelamis_(Skipjack_Tuna)_iucnredlist.org)

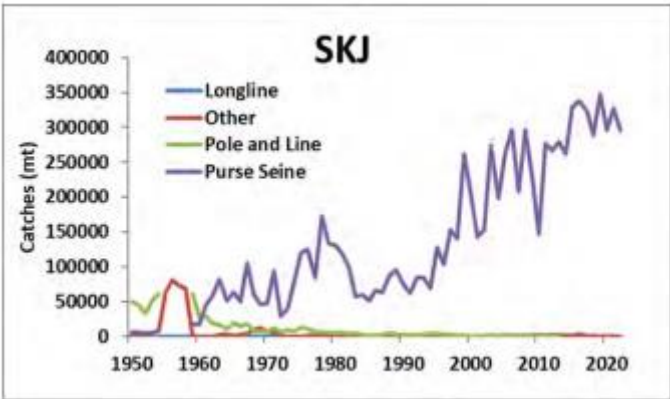
² <https://cites.org/eng/app/appendices.php>

³ Collette, B.B., Boustany, A., Fox, W., Graves, J., Juan Jorda, M. & Restrepo, V. 2021. *Katsuwonus pelamis*. The IUCN Red List of Threatened Species 2021: e.T170310A46644566. <https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T170310A46644566.en>.

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> in FAO 77 – EPO 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.	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.			
<p>The latest stock assessment for skipjack tuna in the Eastern Pacific Ocean (EPO) was conducted in 2024. This benchmark assessment incorporated advanced methodologies and new datasets, including absolute biomass estimates from tagging data¹. The assessment used the Stock Synthesis model (v3.30.22.beta), an integrated age-structured model, and covered the period from 2006 to 2023. This benchmark reflects major advancements in the assessment methodologies and incorporates new data sets, including an updated index of relative abundance based on recently developed echosounder buoy data, and an absolute biomass estimate derived from the tagging data collected under the Regional Tuna Tagging Program in the EPO. Data to support the stock assessment is derived from commercial catches: relative catches in weight, relative catch per set and relative average length of catch.</p>			
			
<p>Figure 1. EPO-7. Catches of skipjack tuna in the EPO from 1950 to 2022, by gear type (ISSF 2024 through IATTC report from 2024)</p> <p>Therefore, clause C1.1 is met.</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.			
<p>The results of the last benchmark conducted in 2024 showed that the reference model (marked in red in the figure below) and most sensitivity models estimate that the spawning biomass (SB) is currently above the target proxy of 30% of the unexploited SB under dSBR, and this is statistically significant. Only one sensitivity model, which excludes the ECHO index (marked in black in the figure below), estimates that the stock is not significantly above the target proxy.</p>			

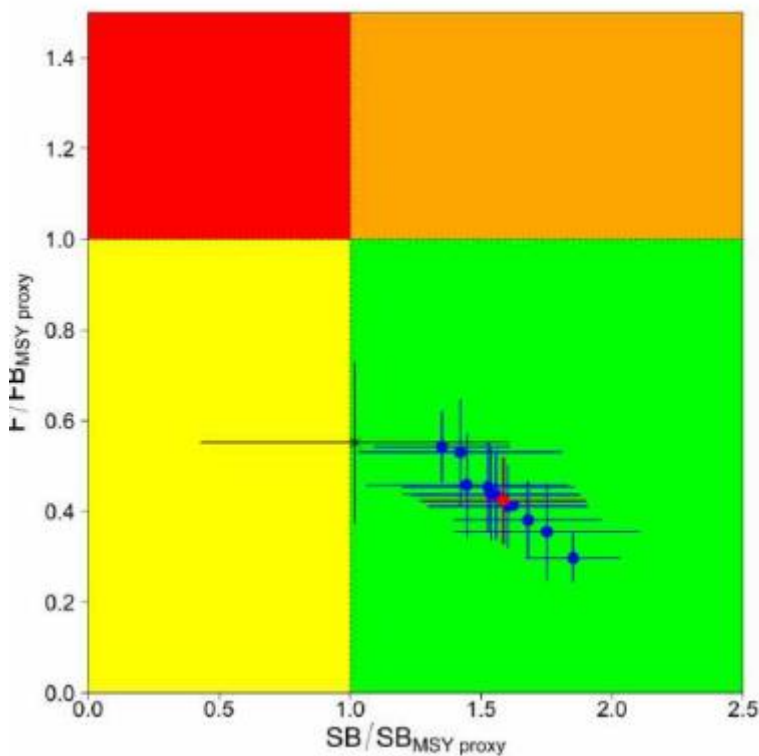


Figure 2. Kobe plot represents the different simulations conducted in the benchmark of 2024 for Skipjack EPO stock. Source: The reference model estimated that current depletion is above the target reference point ($SBR_{2021}/SBR_{target}=1.77$; range: 0.4 to 3.5), indicating that the stock is not overfished. Most of the sensitivity runs support this conclusion. Current SBR is slightly above the status quo level (average level of 2017-2019) as did over half of the sensitivity runs and therefore C1.2 is met.

References

IATTC 2024. Rujia Bi, Mark N. Maunder, Haikun Xu, Carolina Minte-Vera, Juan Valero, and Alexandre Aires-da-Silva. Stock assessment of skipjack tuna in the eastern Pacific Ocean: 2024 benchmark assessment. [SAC-11-07 EN Yellowfin tuna benchmark assessment 2019 \(iattc.org\)](#)
[SAC-15-PRES SKJ-benchmark-assessment.pdf \(iattc.org\)](#)
 Mark N. Maunder, Haikun Xu, Carolina Minte-Vera, Juan L. Valero, Cleridy E. Lennert-Cody, and Alexandre Aires-da-Silva. Document sac-13-07. Skipjack tuna in the eastern Pacific Ocean, 2021: interim assessment. [SAC-13-07 Skipjack interim assessment 2022 \(iattc.org\)](#)
 ISSF Technical Report – 2024-02 [Status of the Stocks - International Seafood Sustainability Foundation \(iss-foundation.org\)](#)

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

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		
<i>Standard clauses 1.3.2.2</i> taken.			

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:			
<p>Evidence</p> <p>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.</p> <p>D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.</p>			
References			
Links			
MarinTrust Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	