



## MarinTrust Standard V2

# By-product Fishery Assessment

## *Skipjack Tuna - *Katsuwonus pelamis* in FAO 41*

### 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 41 – Southwest Atlantic
	Country of origin of the product:	Thailand Flag countries: Curacao
	Stock:	Skipjack tuna ( <i>Katsuwonus pelamis</i> ) in FAO 41 – Southwest Atlantic
Date	17 August 2023	
Report Code	THA55	
Assessor	Ana Elisa Almeida Ayres	
Country of origin of the product - PASS	Thailand	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): TC Union Agrotech Co Ltd			
Country: Thailand			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		NSF	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Ana Elisa Almeida Ayres	Matthew Jew	0.5	Initial
Assessment Period	Up to August 2023		

Scope Details	
Main Species	Skipjack tuna ( <i>Katsuwonus pelamis</i> )
Stock	Skipjack tuna ( <i>Katsuwonus pelamis</i> ) in FAO 41 – Southwest Atlantic
Fishery Location	FAO 41 – Southwest Atlantic
Management Authority (Country/ State)	International Commission for the Conservation of Atlantic Tunas (ICCAT)
Gear Type(s)	Longline, Baitboat, Purse Seine
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor’s recommendation
Recommendation	PASS

## Table 2. Assessment Determination

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on Union for Conservation of Nature's Red List of Threatened Species - IUCN's Red List, or if it appears in the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES appendices, it cannot be approved for use as Marin Trust raw material. Skipjack tuna (<i>Katsuwonus pelamis</i>) is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, skipjack tuna (<i>Katsuwonus pelamis</i>) is eligible for approval for use as Marin Trust by-product raw material.</p> <p>For assessment and management purposes, one discrete stock of Skipjack tuna is recognised in Western Atlantic Ocean, when fished within Food and Agriculture Organization of the United Nations - FAO fishing area 41 – Southwest Atlantic.</p> <p>Fishery removals of the stock are considered in the International Commission for the Conservation of Atlantic Tunas – ICCAT stock assessment process and the latest assessment of stock status considers the stock being above the limit reference points, so the stock PASSES Clauses C1.1 and C1.2.</p> <p>Therefore, skipjack tuna (<i>Katsuwonus pelamis</i>) in FAO 41 – Southwest Atlantic is <b>APPROVED</b> for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified the skipjack tuna in the western Atlantic Ocean under category C, as the stock is managed and reference points are defined to assess the stock status against.</p> <p>Fishery removals from the stock are considered in the stock assessment process, and the most recent stock assessment shows that the stock is considered to have a biomass well above the limit reference point: the fishery passes both clauses C1.1 and C1.2.</p> <p>Therefore, the skipjack tuna in the western Atlantic Ocean is <b>APPROVED</b> for the production of fishmeal and fish oil under the current MarinTrust V2.3 by-products standards.</p>
Notes for On-site Auditor
N/A

## 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 <sup>1</sup>	CITES Appendix 1 <sup>2</sup>
Skipjack tuna	<i>Katsuwonus pelamis</i>	<i>Katsuwonus pelamis</i> - Skipjack tuna in 41 – Southwest Atlantic	ICCAT	C	LC	No

<sup>1</sup> <https://www.iucnredlist.org/>

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

## CATEGORY C SPECIES

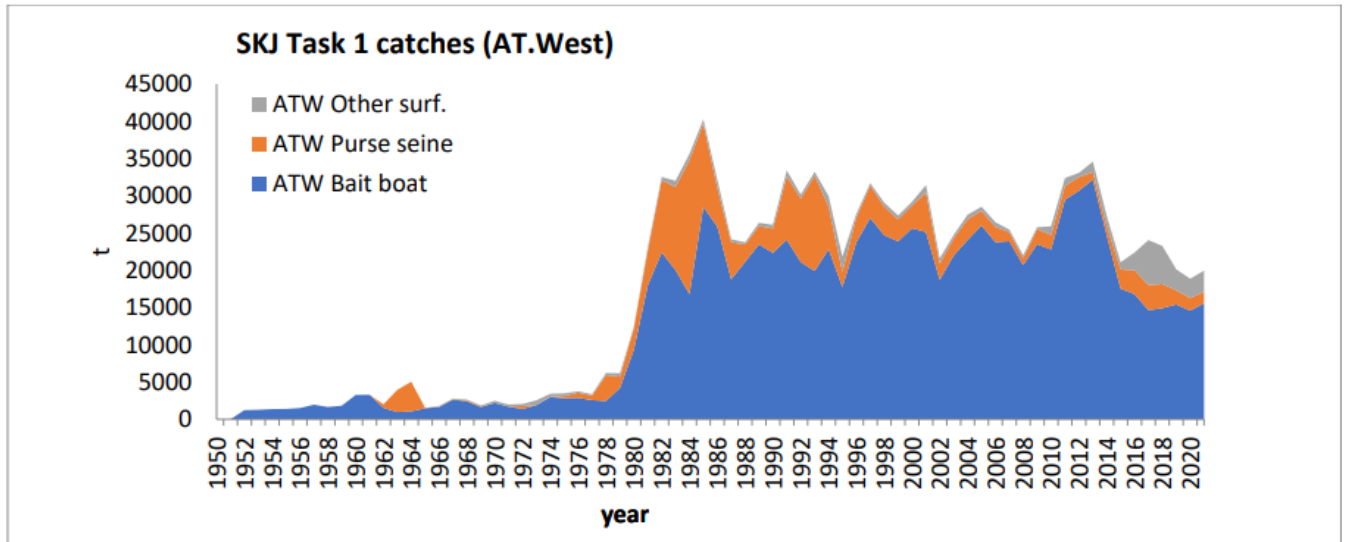
In a by-product assessment, Category C species are those which are subject to a species-specific management regime and are usually targeted species in fisheries for human consumption.

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
<p><b>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.</b></p> <p>The western skipjack stock was reassessed in 2022 (ICCAT, 2022) and resulted in a similar picture of stock status to the previous (2014) assessment, reiterating that the stocks are in a healthy condition. The stock assessment used Bayesian state-space production model and an integrated statistical assessment model (ICCAT 2022). The stock status estimates from the two approaches agreed with each other.</p> <p>Fishery data from 1952-2020 was used in the assessment and indices of relative abundance used in the assessments were calculated through 2020. The western skipjack landings have shown a slight decrease since 1982, and this has intensified in the</p>			

most recent period of the time series (2013 - 2020) [Figure 1]. The maximum total catch for this stock was observed in 1985 (40,272 t), and the lowest catch since 1985 was reached in 2020 (18,859 t). The median estimated for  $F_{2020}/F_{MSY}$  was 0.41.

The catch advice includes probabilities that overfishing is not occurring ( $F \leq F_{MSY}$ ) and/or stock is not overfished ( $SSB \geq SSB_{MSY}$ ) Future constant catches of 20,000 t, close to the current catch (19,951 t in 2021) are expected to maintain the stock in a not overfished nor undergoing overfishing status.



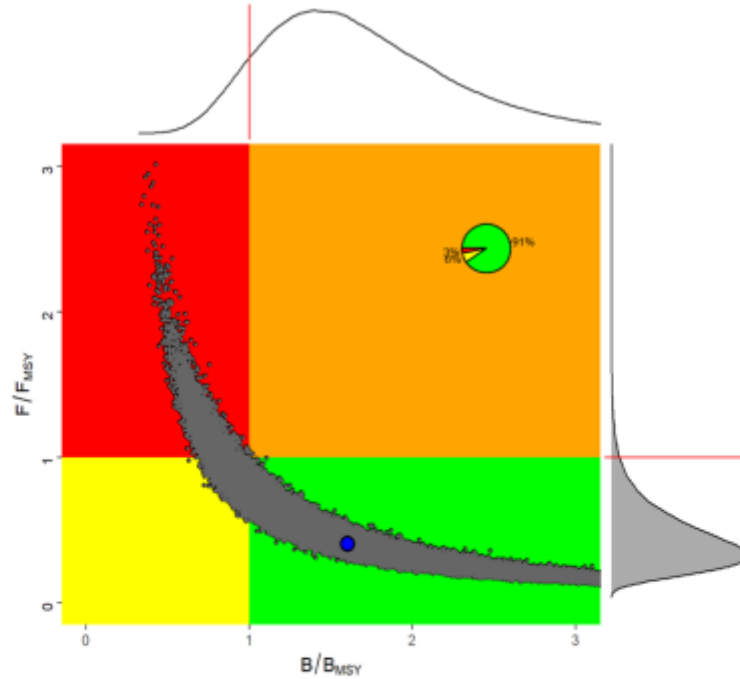
**SKJ-Figure 6.** Skipjack catches in the western Atlantic, by gear (1950-2021). The values for 2021 are preliminary.

FIGURE 1. SOURCE: ICCAT (2022)

Fishery removals 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.

According to ICCAT (2022): “Based on the combined results used to the develop management advice (9 Stock Synthesis deterministic runs), the median estimate of  $SSB_{2020}/SSB_{MSY}$  is 1.60, and the median estimated for  $F_{2020}/F_{MSY}$  is 0.41. The combined results of all runs indicates that the western skipjack stock is estimated to be in healthy condition with 91% probability of being in the green quadrant, and that the stock is not overfished nor undergoing overfishing (SKJFigure 17). There was a relatively low estimated probability that the stock is either overfished (yellow quadrant; 6.2%) or both overfished and undergoing overfishing (red quadrant; 2.9%).” [Figure 2].



**SKJ-Figure 17. W-SKJ** - Kobe phase plot for the 9 Stock Synthesis uncertainty grid runs for the western Atlantic skipjack stock. For each run the benchmarks are calculated from the year-specific selectivity and fleet allocations and based on 200,000 MVLN iterations. The blue point shows the median of 200,000 iterations for  $SSB_{2020}/SSB_{MSY}$  and  $F_{2020}/F_{MSY}$  for the entire set of runs in the grid. Black line with black symbols represents the historical evolution of the median of all runs. Grey points represent the 2020 estimates of relative fishing mortality and relative spawning stock biomass for 2020 for each of the 200,000 iterations. The upper graph represents the smoothed frequency distribution of  $SSB/SSB_{MSY}$  estimates for 2020. The right graph represents the smoothed frequency distribution of  $F/F_{MSY}$  estimates for 2020. The inserted pie graph represents the percentage of each 2020 estimate that fall in each quadrant of the Kobe plot. All SSB showed the values at the end of years.

FIGURE 2. SOURCE: ICAAT (2022).

As it is highly likely that biomass is currently above the target reference point, it is also highly likely to be above any potential limit reference point (or proxy), and **C1.2 is met**.

**References**

ICCAT (2022). Species executive summary, skipjack tuna. [https://www.iccat.int/Documents/SCRS/ExecSum/SKJ\\_ENG.pdf](https://www.iccat.int/Documents/SCRS/ExecSum/SKJ_ENG.pdf)

**Links**

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