

MarinTrust RS V2.0



BYPRODUCT FISHERY ASSESSMENT TEMPLATE REPORT

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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 71 Western Central Pacific
	Country of origin of the product:	Vietnam
	Stock:	Western Central Pacific Ocean skipjack
Date	October 2020	
Report Code	151-2020	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Vietnam	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: Vietnam		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body: SAI Global			
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Virginia Polonio	Geraldine Criquet	0.5	SURV2
Assessment Period	October 2020		

Scope Details	
Main Species	Skipjack tuna (<i>Katsuwonus pelamis</i>)
Stock	Western Central Pacific Ocean skipjack
Fishery Location	FAO 71
Management Authority (Country/ State)	International level: Western and Central Pacific Fisheries Commission (WCPFC) National: Vietnam Directorate of Fisheries and Ministry of Agriculture and Rural Development.
Gear Type(s)	Purse seine, pole and line and longline
Outcome of Assessment	
Peer Review Evaluation	Agree with determination
Recommendation	APPROVED

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 IFFO RS 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, skipjack is eligible for approval for use as IFFO RS by-product raw material.</p> <p>One stock forms part of this assessment:</p> <ol style="list-style-type: none"> 1) Skipjack tuna (<i>Katsuwonus pelamis</i>) in the Western Central Pacific Ocean <p>Skipjack tuna in the Western and Central Pacific Ocean (WCPO) is considered a single stock for assessment purposes (Rice et al. 2014). The stock in WCPO is managed at the international level by the Western and Central Pacific Fisheries Commission (WCPFC). Regular assessments of target tuna and tuna-like species are conducted. Therefore, the status of the stocks is known and regularly monitored. Therefore, it is assessed under Clause C.</p> <p>Fishery removals of the stock are included in the stock assessment process so the stock PASSES Clause C1.1. Further, the stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point so the stock complex PASSES Clause C1.2.</p> <p>In order to be approved, the stock assessed must pass all Clauses in category C. as it is the case for this fishery. Hence, Skipjack tuna in the Western Central Pacific Ocean is APPROVED by SAI Global assessors in the assessment area for the production of fishmeal and fish oil under the current IFFO RS v 2.0 by-products standard.</p>
Peer Review Comments
<p>The species has been correctly categorised as Category C. The skipjack stock in the WCPO is internationally managed by the WCPFC.</p> <p>Fisheries removals from the stock are included in the stock assessment. The most recent stock assessment (2019) shows that the stock is neither overfished nor overfishing is occurring.</p> <p>Agree with the determination that the fishery PASSES.</p>
Notes for On-site Auditor
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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 Redlist Category

Byproduct 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.

Byproduct 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>	Western Central Pacific Ocean skipjack	The Western & Central Pacific Fisheries Commission (WCPFC) and Vietnam Directorate of Fisheries	C	LC	No

¹ <https://www.iucnredlist.org/>

² <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 may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

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.	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.

In the 2019 last stock assessment, catches from different gear types were included. Purse seine catch (1,408,110 mt) was comparable to both 2015 and the 2011-2015 average. Pole and line catch (151,441 mt) was a 1% decrease from 2015 and an 11% decrease from 2011-2015 average. Catches by other fisheries (251,470 mt) were 2% higher than in 2015 and 26% higher than 2011-2015 average.

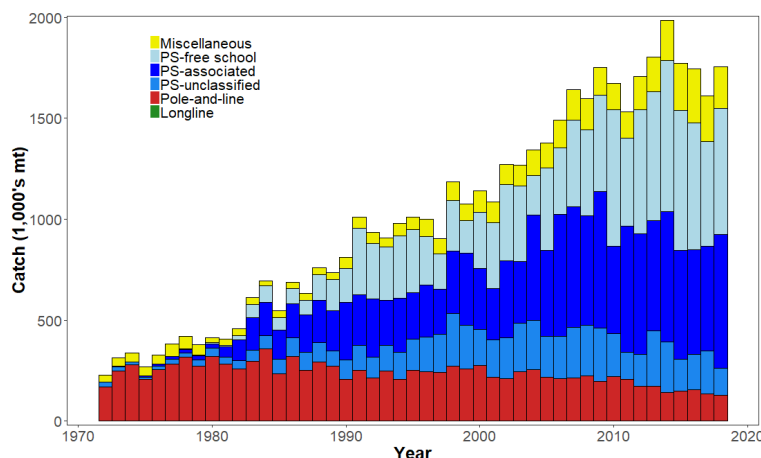


Figure 1. Time series of total annual catch (1000's mt) by fishing gear over the full assessment period. Source: WCPFC (2019).

Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process and the fishery **PASSES** clause C1.1

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 last stock assessment noted that the skipjack stock status continues to show that the stock is currently moderately exploited and the level of fishing mortality is sustainable. The 2019 stock assessment includes additional data and a range of model improvements such as a change to the maturity schedule used in this assessment, with length-at-maturity now larger than in the previous assessment, which has resulted in a reduction in the estimate of potential spawning biomass, relative to the 2016 assessment.

Scientific Committee 15 of the WCPFC noted that the stock was assessed to be above the adopted Limit Reference Point and fished at rates below FMSY with 100% probability. Therefore, the skipjack stock is not overfished, nor subject to overfishing (Figure 2). At the same time, it was also noted that fishing mortality is continuously increasing for both adult and juvenile while the spawning biomass reached the historical lowest level.

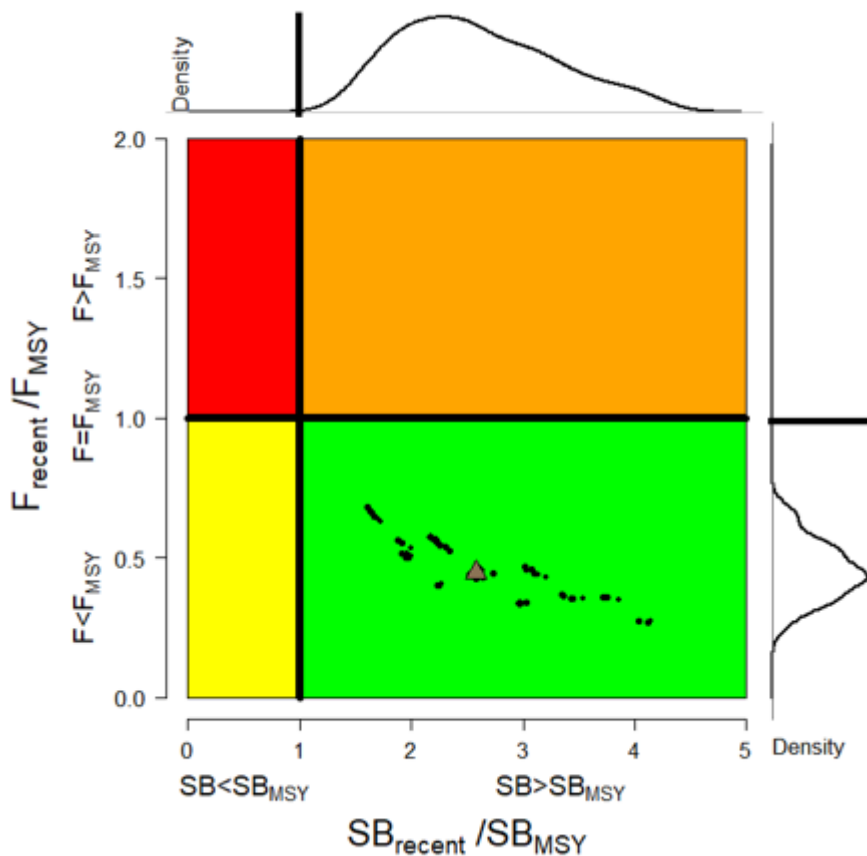


Figure 2. Kobe plot for the recent spawning potential (2015 – 2018) summarizing the results for each of the models in the structural uncertainty grid. The plots represent estimates of stock status in terms of spawning potential depletion and fishing mortality and marginal distributions of each are presented. Brown triangle indicates the median of the estimates. The size of the circle relates to the weight of that particular model run. Source: WCPFC (2019).

Having said that, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy) and the fishery **PASSES** clause C1.2.

Collette, B., Acero, A., Amorim, A.F., Boustany, A., Canales Ramirez, C., Cardenas, G., Carpenter, K.E., de Oliveira Leite Jr., N., Di Natale, A., Fox, W., Fredou, F.L., Graves, J., Guzman-Mora, A., Viera Hazin, F.H., Juan Jorda, M., Kada, O., Minte Vera, C., Miyabe, N., Montano Cruz, R., Nelson, R., Oxenford, H., Salas, E., Schaefer, K., Serra, R., Sun, C., Teixeira Lessa, R.P., Pires Ferreira Travassos, P.E., Uozumi, Y. & Yanez, E. 2011. *Katsuwonus pelamis*. The IUCN Red List of Threatened Species 2011: e.T170310A6739812. <https://dx.doi.org/10.2305/IUCN.UK.2011-2.RLTS.T170310A6739812.en>. Downloaded on 08 October 2020.

SC15-SA-WP-04. Simulation analysis of pole and line CPUE standardization approaches for skipjack tuna in the WCPO. <https://www.wcpfc.int/node/42930>

SC15-SA-WP-05. Stock assessment of skipjack tuna in the western and central Pacific Ocean (Rev.02). <https://www.wcpfc.int/node/42931>

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

SOCIAL CRITERION

In addition to the scored criteria listed above, applicants must commit to ensuring that vessels operating in the fishery adhere to internationally recognised guidance on human rights. They must also commit to ensuring there is no use of enforced or unpaid labour in the fleet(s) operating upon the resource.

Appendix A - Determining Resilience Ratings

The assessment of Category B species described in this assessment report template utilises a resilience rating system suggested by the American Fisheries Society. This approach was chosen because it is also used by FishBase, and so the resilience ratings for many thousands of species are freely available online. As described by FishBase, the following is the process used to arrive at the resilience ratings:

“The American Fisheries Society (AFS) has suggested values for several biological parameters that allow classification of a fish population or species into categories of high, medium, low and very low resilience or productivity (Musick 1999). If no reliable estimate of r_m (see below) is available, the assignment is to the lowest category for which any of the available parameters fits. For each of these categories, AFS has suggested thresholds for decline over the longer of 10 years or three generations. If an observed decline measured in biomass or numbers of mature individuals exceeds the indicated threshold value, the population or species is considered vulnerable to extinction unless explicitly shown otherwise. If one sex strongly limits the reproductive capacity of the species or population, then only the decline in the limiting sex should be considered. We decided to restrict the automatic assignment of resilience categories in the Key Facts page to values of K , t_m and t_{max} and those records of fecundity estimates that referred to minimum number of eggs or pups per female per year, assuming that these were equivalent to average fecundity at first maturity (Musick 1999). Note that many small fishes may spawn several times per year (we exclude these for the time being) and large live bearers such as the coelacanth may have gestation periods of more than one year (we corrected fecundity estimates for those cases reported in the literature). Also, we excluded resilience estimates based on r_m (see below) as we are not yet confident with the reliability of the current method for estimating r_m . If users have independent r_m or fecundity estimates, they can refer to Table 1 for using this information.”

Parameter	High	Medium	Low	Very low
Threshold	0.99	0.95	0.85	0.70
r_{max} (1/year)	> 0.5	0.16 - 0.50	0.05 - 0.15	< 0.05
K (1/year)	> 0.3	0.16 - 0.30	0.05 - 0.15	< 0.05
Fecundity (1/year)	> 10,000	100 - 1000	10 - 100	< 10
t_m (years)	< 1	2 - 4	5 - 10	> 10
t_{max} (years)	1 - 3	4 - 10	11 - 30	> 30

[Taken from the FishBase manual, “Estimation of Life-History Key Facts”,
<http://www.fishbase.us/manual/English/key%20facts.htm#resilience>]

Appendix B: From MARINTRUST Standard V2.0 Annex 2: Fish By-product Assessment Methodology

Definition of a Fish By-product

A by-product is a useful and marketable product that is not the primary product being produced. A marketable by-product is from a process that can technically not be avoided. This includes materials that may be traditionally defined as waste such as industrial scrap that is subsequently used as a raw material in a different manufacturing process.

"Fish By-products" refers to commodities that are manufactured from fish, including shellfish, and crustaceans in a form that is different than conventional foods and which are intended for human consumption (either directly or as a food ingredient). Fish By-products include, but are not limited to:

- By-products derived from fish, including fish cartilage, fish oils, and fish proteins; and
- By-products derived from the carapaces of crustaceans; but do not include marine plants or marine plant products.

(Canadian Food Inspection Agency Definition)

In addition, a whole fish which is rejected on an intrinsic quality ground e.g. does not meet the specification for human consumption due to physical damage or the quality is substandard. These whole fish shall in these cases be classified as a by-product from the human consumption fishery, and can be used for marine ingredients production.

A whole catch of fish that is rejected by a fish processing factory on economic grounds is not considered to be a fish by-product. This fish can only be used for marine ingredients production if the fishery has been assessed and approved under the requirements of the IFFO Responsible Sourcing Standard.

Why utilise Fish By-products?

FAO Code of Conduct for Responsible Fisheries

General Principles Article 6

6.7 The harvesting, handling, processing and distribution of fish and fishery products should be carried out in a manner which will maintain the nutritional value, quality and safety of the products, reduce waste and minimize negative impacts on the environment.

Responsible fish utilisation Article 11.1

11.1.8 States should encourage those involved in fish processing, distribution and marketing to reduce post-harvest losses and waste.

Benefits of Including Fish By-Products in the MARINTRUST Standard:

1. Improved fish resource utilisation
2. Reduction in waste for nutritional value
3. 35% of fish by-products are currently used to make quality fishmeal and oil
4. Excellent Economic return

5. Better compliance with FAO Code of Conduct for Responsible Fisheries

What Fish By-products cannot be used?

1. IUCN

Fishery By-products shall Not be taken from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for certain categories;

- 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.

Fish By-product material may be used from the vulnerable category, but it shall incur a fishery surveillance conducted by the certification body prior to it being included in the scope of this standard.

- VULNERABLE (VU) facing a high risk of extinction in the wild.

The Fish By-product material from these species will be acceptable for use in the scope of this standard;

- 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.

Fish By-product material may be used from the following category, but it shall incur a fishery surveillance prior to it being included in the scope of this standard;

- DATA DEFICIENT (DD) and NOT EVALUATED (NE)

The fishery surveillance conducted by the certification body will review the following areas:

Stock Assessment

- From a recognised Institution
- Fisheries are recognised as legal
- Fisheries do not contradict scientific opinion

2. FAO Code of Conduct for Responsible Fisheries

In addition the Fish By-products shall not come from fisheries that do not comply with the following criteria;

1. Fisheries should prohibit dynamiting, poisoning and other comparable destructive fishing practices.
2. Fishery material shall not be from IUU fishing activity nor sourced from vessels officially listed as engaging in illegal, unreported and unregulated (IUU) fishing activity.

Sources of Information

1. Food Standards Agency
2. Canadian Food Inspection Agency
3. DEFRA

4. GAA Feed mill BAP standard
5. EU Commission
6. IUCN