

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:	Pacific Chub Mackerel, <i>Scomber japonicus</i>
	Geographical area:	FAO Area 87 Pacific, Southeast
	Country of origin of the product:	Chile
	Stock:	Regions XV, I, II of EZZ Chile
Date	January 2021	
Report Code	BP 3	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Chile	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: Chile		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body: Global Trust Certification			
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Virginia Polonio	Geraldine Criquet	0.5	Surveillance
Assessment Period	January 2021		

Scope Details	
Main Species	Pacific chub mackerel, <i>Scomber japonicus</i>
Stock	Regions XV, I, II of EZZ Chile
Fishery Location	FAO Area 87 Pacific, Southeast
Management Authority (Country/ State)	MINECON Chile
Gear Type(s)	Pelagic trawl, purse seine
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor's recommendation.
Recommendation	APPROVED

TABLE 2. ASSESSMENT DETERMINATION

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in the CITES appendices, it cannot be approved for use as IFFO RS raw material. Pacific Chub mackerel does not appear as Endangered or Critically Endangered on the IUCN Red List, nor does it appear in CITES appendices, therefore Pacific Chub mackerel is eligible for approval for use as MarinTrust raw material.</p> <p>The species is not subject to a species-specific research and management regime sufficient to pass a Category C assessment. In Chile there is no information on stock status. The lack of scientific information on the status of the stock in the assessment area resulted in that a risk-assessment style approach was taken. The fishery was assessed using the risk-based Productivity, Susceptibility Analysis (PSA) as per requirements v 2.0 procedures for Category D species.</p> <p>The species has passed this risk-based assessment (Table D3). Pacific Chub mackerel is approved by the assessor for the production of fishmeal and fish oil under the MarinTrust v 2.0 by-products standard.</p>
Peer Review Comments
<p>The assessor correctly classified the Pacific chub mackerel in Chile Regions XV, I, II as category D.</p> <p>A PSA was performed. With an average productivity score of 1.57 and an average susceptibility score of 2.25, the stock passes the risk-based assessment.</p> <p>Therefore, the peer reviewer agrees with the assessor's determination that the fishery passes Table D3 and is thus approved.</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 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
Pacific Chub Mackerel	<i>Scomber japonicus</i>	Regions XV, I, II of EZZ Chile. FAO Area 87 Pacific, Southeast	MINECON	D	LC	No

¹ <https://www.iucnredlist.org/>

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

CATEGORY D SPECIES

Category D species are those which make up less than 5% of landings and 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	Pacific Chub Mackerel, <i>Scomber japonicus</i>	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	2.0	2
	Average maximum age (years)	7.9	1
	Fecundity (eggs/spawning)	135,962 [86,616-213,422]	1
	Average maximum size (cm)	64.0	2
	Average size at maturity (cm)	22.0	1
	Reproductive strategy	Non guarders: open water/substratum egg scatterers	1
	Mean trophic level	3.4	3
	Average Productivity Score		1.57
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	50% of the stocks occurs in area fished (Figure 1)	3
	Distribution	Not scored when overlap scored (table D2)	Not scored
	Habitat	Coastal pelagic	Not scored
	Depth range	50-200m	1
	Selectivity	Up to 4m in length	3
	Post-capture mortality	Tow 0.5 to 3 hours	2
	Average Susceptibility Score		2.25
	PSA Risk Rating (From Table D3)		PASS
	Compliance rating		PASS

References



Figure 1. Distribution maps for *Scomber japonicus* (Chub mackerel), with modelled year 2050 native range map based on IPCC RCP8.5 emissions scenario. www.aquamaps.org, version 10/201

Scarponi, P., G. Coro, and P. Pagano. A collection of Aquamaps native layers in NetCDF format. Data in brief 17 (2018): 292-296.

Fishbase Life History Data on *Scomber japonicus* Chub mackerel

<https://www.fishbase.de/summary/Scomber-japonicus.html>

https://www.fishsource.org/stock_page/1647

Collette, B., Acero, A., Canales Ramirez, C., Cardenas, G., Carpenter, K.E., Chang, S.-K., Di Natale, A., Fox, W., Guzman-Mora, A., Juan Jorda, M., Miyabe, N., Montano Cruz, R., Nelson, R., Salas, E., Schaefer, K., Serra, R., Sun, C., Uozumi, Y., Wang, S., Wu, J. & Yeh, S. 2011. *Scomber japonicus*. The IUCN Red List of Threatened Species 2011: e.T170306A6737373. <https://dx.doi.org/10.2305/IUCN.UK.2011-2.RLTS.T170306A6737373.en>.

Standard clauses 1.3.2.2

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	Low productivity/ High risk	Medium productivity/ Medium risk	High productivity/ Low risk
	Score 3	Score 2	Score 1
Average age at maturity (years)	>4	2 to 4	<2
Average maximum age (years)	>30	10 to 30	<10
Fecundity (eggs/spawning)	<1 000	1 000 to 10 000	>10 000
Average maximum size (cm)	>150	60 to 150	<60
Average size at maturity (cm)	>150	30 to 150	<30
Reproductive strategy	Live bearer, mouth brooder or significant parental investment	Demersal spawner "berried"	Broadcast spawner
Mean trophic level	>3.25	2.5–3.25	<2.5

Susceptibility attributes		High susceptibility/ High risk	Medium susceptibility/ Medium risk	Low susceptibility/ Low risk
		Score 3	Score 2	Score 1
Availability	1) Overlap of adult species range with fishery	>50% of stock occurs in the area fished	Between 25% and 50% of the stock occurs in the area fished	<25% of stock occurs in the area fished
	2) Distribution	Only in the country/ fishery	Limited range in the region	Throughout region/ global distribution
Encounterability	1) Habitat	Habitat preference of species make it highly likely to encounter trawl gear (e.g. demersal, muddy/sandy bottom)	Habitat preference of species make it moderately likely to encounter trawl gear (e.g. rocky bottom/reefs)	Depth or distribution of species make it unlikely to encounter trawl gear (e.g. epi-pelagic or meso-pelagic)
	2) Depth range	High overlap with trawl fishing gear (20 to 60 m depth)	Medium overlap with trawl fishing gear (10 to 20 m depth)	Low overlap with trawl fishing gear (0 to 10 m, >70 m depth)
Selectivity		Species >2 times mesh size or up to 4 m length	Species 1 to 2 times mesh size or 4 to 5 m length	Species <mesh size or >5 m length
Post capture mortality		Most dead or retained Trawl tow >3 hours	Alive after net hauled Trawl tow 0.5 to 3 hours	Released alive Trawl tow <0.5 hours

Note: Availability 2 is only used when there is no information for Availability 1; the most conservative score between Encounterability 1 and 2 is used.

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	

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 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