



MarinTrust Standard V2

By-product Fishery Assessment

ZAF04 - Japanese Pilchard

(Sardinops sagax melanostictus)

in FAO 61 (Japanese Pacific Ocean stock)

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Japanese pilchard (<i>Sardinops sagax melanostictus</i>)
	Geographical area:	FAO 61, northwest Pacific
	Country of origin of the product:	South Africa (Flag state: Thailand)
	Stock:	Japanese sardine Pacific stock
Date	April 2024	
Report Code	ZAF04	
Assessor	Ana Elisa Almeida Ayres	
Country of origin of the product - PASS	South Africa (Flag state: Thailand)	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): West Point Processors, St Helena Bay (Lucky Star Ltd), Amawandle Pelagic (Pty) Ltd			
Country: South Africa (Flag state: Thailand)			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		Global Certification Trust/NSF	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval
Ana Elisa Almeida Ayres	Matthew Jew	0.5	Initial
Assessment Period	April 2024 – April 2025		

Scope Details	
Main Species	Japanese pilchard (<i>Sardinops sagax melanostictus</i>)
Stock	Japanese sardine Pacific stock
Fishery Location	FAO 61, northwest Pacific
Management Authority (Country/ State)	Ministry of Agriculture, Forestry, and Fisheries (Japan), North Pacific Fisheries Commission - NPFC
Gear Type(s)	Not provided by client, but NPFC Members usually use purse seines, pelagic trawling, set nets and dip nets)
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's recommendations
Recommendation	APPROVED

Table 2. Assessment Determination

Assessment Determination
<p>Japanese pilchard is also known as Japanese sardine or South American pilchard and is widely referred to via the binomial name <i>Sardinops sagax</i>. 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 MarinTrust raw material. Japanese pilchard (<i>Sardinops sagax melanostictus</i>) is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, Japanese pilchard (<i>Sardinops sagax melanostictus</i>) is eligible for approval for use as MarinTrust by-product raw material.</p> <p>The Japanese pilchard/sardine Pacific stock is distributed within the North Pacific Fisheries Commission - NPFC Convention Area, yet currently, there is no stock assessment for Japanese Sardine conducted by NPFC for this region. The most recent stock assessment published for this stock was carried out in 2020 by the Fisheries Stock Assessment Center, Fisheries Resources Institute, Japan Fisheries Research and Education Agency, however, several results from the upcoming 2023 stock assessment were presented during the 8th Scientific Committee Meeting held in December 2023.</p> <p>As the Japanese pilchard/sardine Pacific stock is subject to regular stock assessment and managed relative to established reference points, it was assessed under Category C. Fishery removals of the species in the fishery under assessment are included in the stock assessment process, thus it passed C.1.1. The species is considered to have a biomass above the limit reference point, it passed C.1.2.</p> <p>Therefore, Japanese pilchard (<i>Sardinops sagax melanostictus</i>) from Japanese sardine Pacific stock in FAO 61, northwest Pacific is APPROVED 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 Japanese pilchard (<i>Sardinops sagax melanostictus</i>) from Japanese sardine Pacific stock as Category C, the stock is subject to a specific management regime and reference points (or proxies) are defined.</p> <p>Fishery removals are considered in the stock assessment process. The most recent stock assessment shows that the stock is above SSB_{MSY} and therefore also above a biomass limit reference point. Thus, the stock has biomass above the limit reference point, it passes Category C.</p> <p>Japanese pilchard (<i>Sardinops sagax melanostictus</i>) from Japanese sardine Pacific stock passes both clauses (C1.1 and 1.2) and therefore should be approved under the MarinTrust Standard v.2.3.</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 ¹	CITES Appendix 1 ²
Japanese pilchard	<i>Sardinops sagax melanostictus</i>	Japanese sardine Pacific stock	Yes	C	LC ³	No

¹ <https://www.iucnredlist.org/>

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

³ <https://www.iucnredlist.org/species/183347/143831586>

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		Japanese pilchard (<i>Sardinops sagax melanostictus</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.

The Japanese pilchard/sardine Pacific stock is distributed within the North Pacific Fisheries Commission - NPFC Convention Area, yet currently, there is no stock assessment for Japanese Sardine conducted by NPFC for this region. The most recent stock assessment published for this stock was carried out in 2020 by the Fisheries Stock Assessment Center, Fisheries Resources Institute, Japan Fisheries Research and Education Agency (FRA, 2020). However, several results from the upcoming 2023 stock assessment were presented during the 8th Scientific Committee Meeting held in December 2023. Stock assessments typically utilize catch data along with life history characteristics sampled from the catch. According to Scientific Committee (2023), the 2023 stock assessment employed tuned Virtual Population Analysis (VPA) and MSY-based reference points (Furuichi et al., in press), incorporating foreign catches from China and Russia, along with certain assumptions about the age composition of these catches. Most recent data of catches of Japanese pilchard/sardine Pacific stock is presented in Figure 1 below.

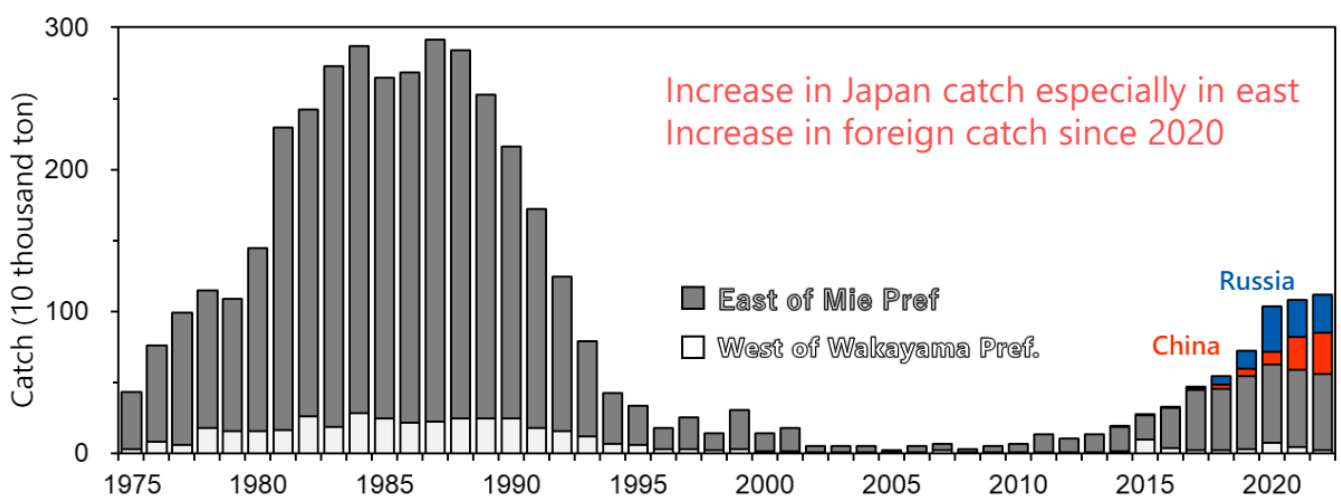


Figure 1. Catches of Japanese pilchard/sardine Pacific stock presented in 8th Scientific Committee Meeting (NPFC, 2023).

Fishery removals of the species in the fishery under assessment are included in the stock assessment process. C.1.1 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.

Recruitment, biomass, and spawning stock biomass (SSB) have shown a steady upward trend since 2010 (Figure 2). Over the past five years (2018-2022), SSB has consistently exceeded SSB_{msy}, which is estimated at 1.19 million ton (NPFC, 2023). In 2022, estimated total biomass was 4.91 million ton and SSB was 2.41 million ton (NPFC, 2023). However, fishing mortality (F) has been on the rise during this period, surpassing F_{msy} levels.

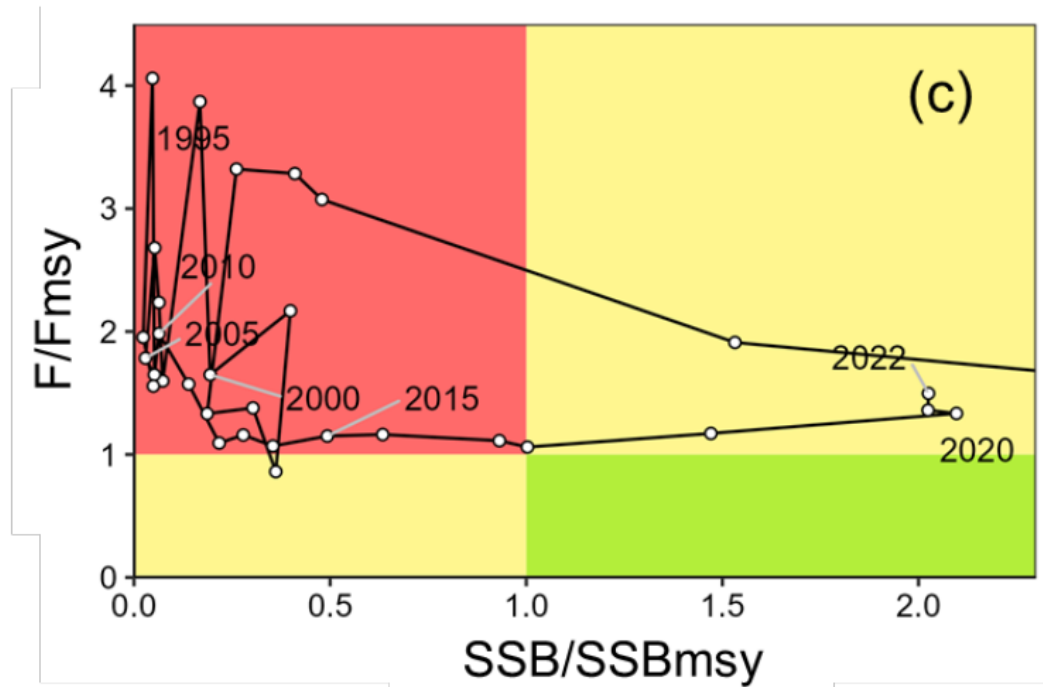


Figure 2. Kobe plot indicating historical and current status of Japanese pilchard/sardine in relation to MSY-based reference points provided by Scientific Committee (2023), reprinted from Japan’s domestic stock assessment of Japanese pilchard/sardine (Furuichi et al. in press).

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point . C.1.2 is met.

References

FRA (2020). Stock Assessment of Japanese Sardine Pacific Stock in 2020, Japan Fisheries Research and Education Agency (FRA). http://www.fra.affrc.go.jp/shigen_hyoka/peer_review/2020/23.pdf

Furuichi, S., Yukami, R., Kamimura, Y., Nishijima, S., Watanabe, R., Isu, S., & Higashiguchi, K. (in press) Stock assessment and evaluation for Japanese Sardine Pacific stock (fiscal year 2023). In Marine Fisheries Stock Assessment and Evaluation for Japanese Waters (fiscal year 2023/2024). Japan Fisheries Agency and Fisheries Research and Education Agency of Japan. Tokyo, 51pp. (will be published at <https://abchan.fra.go.jp/hyouka/doc2023/>)

NPFC. 2023. Domestic Stock Assessment of Japanese Sardine in Japan. https://www.npfc.int/system/files/2023-12/NPFC-2023-SC08-IP04%20JapaneseStockAssessment_JapaneseSardine.pdf

Scientific Committee. 2023. 8th Meeting Report. NPFC-2023-SC08-Final Report. 291 pp. <https://www.npfc.int/sites/default/files/2024-03/SC08%20Report.pdf>

Links

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