



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Pacific saury , <i>Cololabis Saira</i>
	Geographical area:	FAO 61 Pacific Northwest
	Country of origin of the product:	Japan
	Stock:	North Pacific Ocean
Date	18/05/2021	
Report Code	BP16	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Japan	
Country of origin of the product - FAIL		

Application details and summary of the assessment outcome			
Name: T.C. UNION AGROTECH CO., LTD.			
Address:			
Country: Thailand		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 2
Assessment Period	2021		

Scope Details	
Main Species	Pacific saury , <i>Cololabis Saira</i>
Stock	North Pacific Ocean
Fishery Location	Pacific, northwest (FAO Major Fishing Area 61)
Management Authority (Country/ State)	North Pacific Fisheries Commission
Gear Type(s)	Stick-held dip net as per NPFC SSCPS06 report
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's recommendation
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 MarinTrust raw material. Pacific saury (<i>Cololabis saira</i>) does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it appear in CITES appendices; therefore, Pacific saury (<i>Cololabis saira</i>) is eligible for approval for use as Marintrust by-product raw material</p> <p>Pacific saury (<i>Cololabis saira</i>) has been harvested by China, Japan, Korea, Russia, and Chinese Taipei. These vessels mainly use stick-held dip nets or lift nets catch Pacific saury. While Japanese and Russian vessels operate mainly within their EEZs, Chinese, Korean, and Chinese Taipei vessels operate mainly in the high seas of the North Pacific. There is a fishery management framework at national levels, applied specifically to Pacific Saury.</p> <p>Fisheries management in general is supported by data collection and stock assessment, and species-specific research is carried out by the Small Scientific Committee of the North Pacific Fisheries Commission (NPFC). An assessment was undertaken in November 2020. Therefore, the species has a species-specific management plan and it has been assessed under category C.</p> <p>Catches are reported by each country member and the CPUE are also included in the stock assessment models. Therefore, Fishery removals of the species in the fishery under assessment are included in the stock assessment process and the stock PASSES Clause C 1.1.</p> <p>The B-ratio (=B/Bmsy) has shown that the species is below limits and biomass is decreasing in recent years. The species is considered, in its most recent stock assessment, to have a biomass below the limit reference point (or proxy). However, the client is based in Thailand, catches come from Japan and they are not negligible, and it was reported 21,618 tonnes from Japan, being the third country reporting catches. Therefore, removals are not negligible, and the stock FAILS Clause C1.2.</p> <p>As per guidance the stock has been assessed under category D. With and Average Productivity Score of 1.33 and an Average Susceptibility Score of 1.66, the stock has passed the PSA analysis.</p> <p>In order to approve the stock needs to achieve a pass in Table D3; as it is the case, Pacific saury (<i>Cololabis saira</i>) in FAO area 61 is APPROVED by the assessor for the production of fishmeal and fish oil under the current Marin Trust v.2.0 by-product Standard.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified Pacific saury stock as category C, reference points are defined to assess the stock status relative to.</p> <p>The most recent stock assessment concluded that the stock is below the limit reference point. Moreover, removals are not considered negligible. Therefore, the fishery fails clause C1.2.</p> <p>As per guidelines, the stock was further assessed under category D.</p>

A PSA was performed. With an average productivity score of 1.33 and an average susceptibility score of 1.6, the stock passes Table D3.

Therefore, the peer reviewer agrees with the assessor's determination that the fishery passes Table D3 and Pacific saury is thus approved.

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

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
Pacific saury	<i>Cololabis Saira</i>	North Pacific Ocean Pacific, northwest (FAO Major Fishing Area 61)	NPFC	C, D	Not listed	Not listed

¹ <https://www.iucnredlist.org/>

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

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment.

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		Pacific saury (<i>Cololabis saira</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.	FAIL

Clause outcome: FAIL

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.

Catches for each member country are included in the stock assessment and reported periodically. Russian EEZ catches are not presented though. The figure below shows the catches presented in the last stock assessment of 2020.

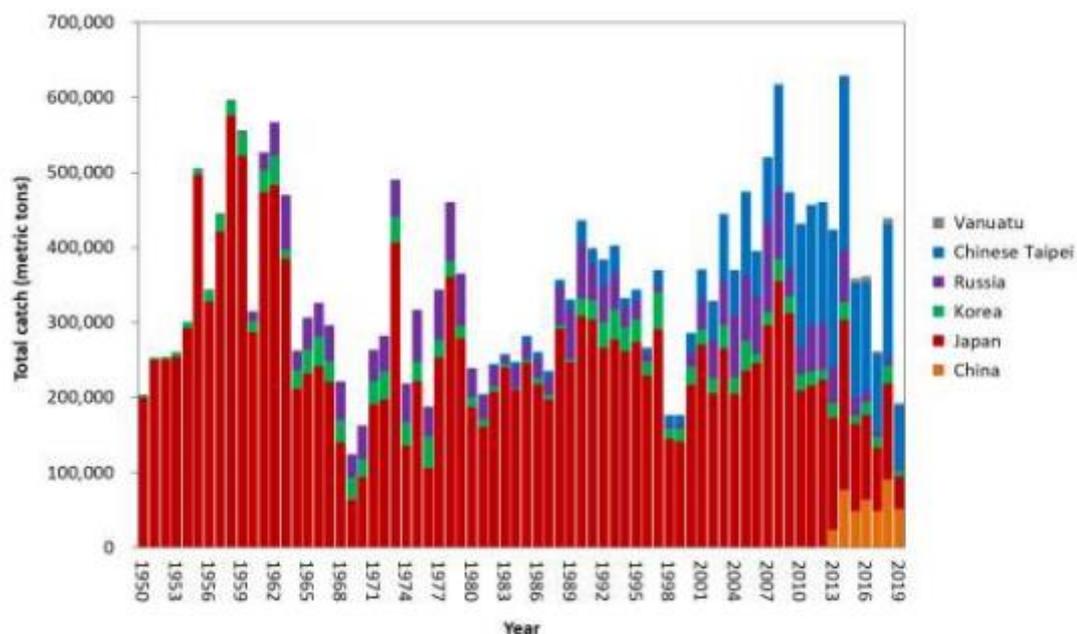


Figure 1. Time series of catch by Member during 1950-2019. The catch data for 1950-1979 and 2019 are shown but not used in stock assessment modeling. Source: NPFC-2020-SSC PS06

Further, the preliminary catches data from each member for 2020 where shown in the table below:

Table 1. Members' Pacific saury catches up to 2020, with preliminary catch statistics as of 14 November 2020. Source: NPFC-2020-SSC PS06

2020 catch of Pacific saury, as of 14 November:

China	Japan	Korea	Russia	Chinese Taipei	Vanuatu	TOTAL
34,386	21,618	4,313	249*	45,433	2,160	108,158

* Only in the Convention Area and does not include the catch in the Russia’s EEZ.

Therefore, Fishery removals of the species in the fishery under assessment are included in the stock assessment process and the stock 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.

All six base case model runs (two scenarios from each of three members) indicate that recent Pacific saury stock size was less than Bmsy. In particular, median estimates from five out of six runs indicate that 2019 Pacific saury biomass was less than Bmsy. Results from all six model runs indicate that average 2017-2019 biomass was less than Bmsy. In majority of base case model comparisons indicate that recent harvest rates for Pacific saury were higher than Fmsy . In particular, median estimates from five runs indicate that the harvest rate during 2019 and average rates during 2017-2019 were higher than Fmsy (Figure 2)

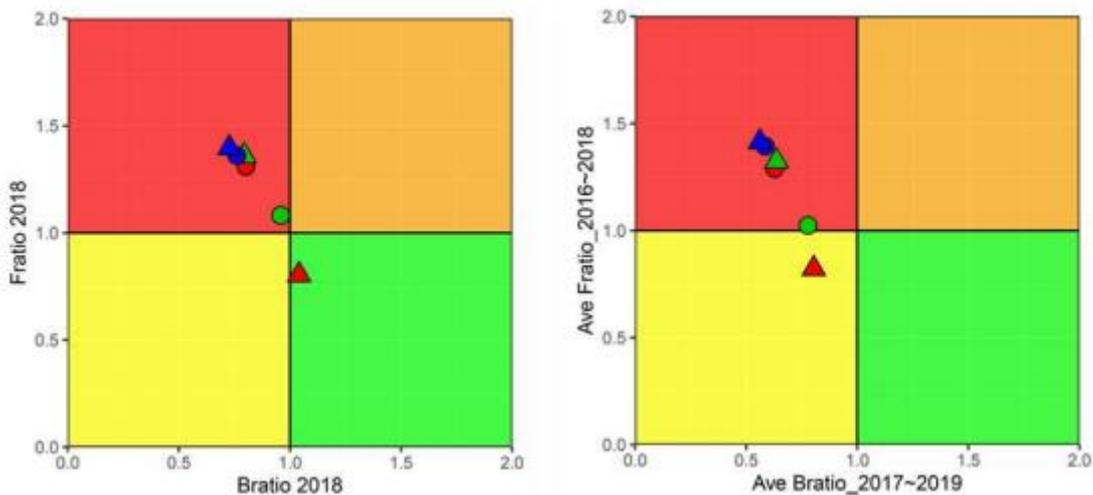


Figure 2. Kobe plots for six runs for NB1 (circle) and NB2 (triangle) by three members’ scientists (red for China, blue for Japan and green for Chinese Taipei).

Following the results, the biomass for the period 2017-2019 is below limits and with a decreasing trend. Removals are not considered negligible as shown in table 1. Therefore, the stock FAILS C1.2

As per guidance, the stock has been assessed under category D.

References

Small Scientific Committee on Pacific Saury. 2020. 6 th Meeting Report. NPFC-2020-SSC PS06- Final Report. 68 pp. (Available at www.npfc.int)

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 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 saury (<i>Cololabis saira</i>)		
	Productivity Attribute	Value	Score	
	Average age at maturity (years)	1.2	1	
	Average maximum age (years)	4.8	1	
	Fecundity (eggs/spawning)	No data	Not scored	
	Average maximum size (cm)	40	1	
	Average size at maturity (cm)	17.9	1	
	Reproductive strategy	Broadcast spawner	1	
	Mean trophic level	3.7	3	
	Average Productivity Score		1.33	
	Susceptibility Attribute	Value	Score	
	Overlap of adult species range with fishery	Not scored	Not scored	
	Distribution	North Pacific: Korea and Japan eastward to Gulf of Alaska and southward to Mexico. Highly migratory species	1	
	Habitat	Pelagic	1	
	Depth range	0-230	1	
	Selectivity	1 or 2 times mesh size	2	
	Post-capture mortality	Most death	3	
	Average Susceptibility Score		1.6	
	PSA Risk Rating (From Table D3)		PASS	
	Compliance rating		PASS	
	References			
	https://www.fishbase.se/Summary/SpeciesSummary.php?ID=303&AT=Pacific%20sauri			
	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		