



MarinTrust Standard V2

By-product Fishery Assessment

Report Template

Japanese pilchard (*Sardinops sagax*) FAO 61

MarinTrust Programme

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: standards@marin-trust.com

T: +44 2039 780 819

Table 1. Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Japanese pilchard (<i>Sardinops sagax</i>)
	Geographical area:	FAO 61, Pacific, Northwest
	Country of origin of the product:	Thailand
	Stock:	Japanese Pacific Ocean stock and Tsushima warm current stock
Date	October 2024	
Report Code	THA28	
Assessor	Sam Dignan	
Country of origin of the product - PASS	Thailand	
Country of origin of the product - FAIL	Not applicable	

Application details and summary of the assessment outcome			
Company Name(s): TC Union Agrotech Co. Ltd, Golden Prize Canning			
Country:			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Sam Dignan		0.2	Surveillance 1
Assessment Period	To December 2025		

Scope Details	
Main Species	Japanese pilchard (<i>Sardinops sagax</i>)
Stock	Japanese Pacific Ocean stock and Tsushima warm current stock
Fishery Location	FAO 61, Pacific, Northwest
Management Authority (Country/ State)	Thailand
Gear Type(s)	Purse seine, nets
Outcome of Assessment	
Peer Review Evaluation	
Recommendation	PASS

Table 2. Assessment Determination

Assessment Determination
<p><i>Sardinops sagax</i> has a huge number of common names, including Japanese pilchard, with an extensive list of such names being available of FishBase – Common names of <i>Sardinops sagax</i>.</p> <p>The species has been categorised by the IUCN as a species of Least Concern and does not appear in the CITES appendices.</p> <p>The FishSource profile applicable to the stock and fishery under assessment is Pacific sardine - Japanese Pacific; however some elements of it are quite out of date.</p> <p>Two stocks of <i>S. sagax</i> are currently identified the area under assessment (waters around Japan in FAO 61, Pacific, Northwest) based on observed spawning times and areas:</p> <ol style="list-style-type: none"> 1. Pacific Ocean stock. <ol style="list-style-type: none"> a. Spawns November to June from Shikoku to the Kanto region. 2. Tsushima Warm Current stock. <ol style="list-style-type: none"> a. Spawns January to June from around Nagasaki to Toyama prefecture. <p>While assessed separately, the stocks are essentially managed together with a single combined TAC set for the two stocks. As managed stocks, both are assessed against Category C.</p> <p>In both cases, fishery removals are non-negligible but are included in the stock assessment process and the stocks are considered, in their most recent stock assessments, to have a biomass' above their respective limit reference points; therefore, both stocks meet relevant MT requirements and should be approved for continuing use as an approved raw material.</p>
Fishery Assessment Peer Review Comments
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 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</i>	Japanese Pacific Ocean stock	Yes	C	LC	No
		Tsushima warm current stock	Yes	C		

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 should be assessed as a Category D species instead.

Species Name		Japanese pilchard (<i>Sardinops sagax</i>) – Japanese Pacific Ocean stock	
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
<p>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.</p> <p>Japanese pilchard in the Japanese Pacific Ocean is subject to regular stock assessment by the Japan Fisheries Research and Education Agency (FRA) the most recently available of which is from August 2024 (FRA 2024³). The stock assessment utilises catch data to perform an analytical assessment with fishery removals being included in the stock assessment process.</p> <p>Catch volume increased in the late 1970s and remained at an extremely high level of over 2.5 million mt in the 1980s before dropping sharply in the 1990s and remained at an extremely low level in the 2000s. In the 2010s, they began to increase, and Japan's catch in 2023 was 577,000 mt. In recent years, catches by foreign vessels have been increasing, with Russia catching 544,000 mt and China 233,000 mt in 2023.</p> <p>Catches are not negligible, with Japan's catch amounting to 577,000 mt in 2023. Overall, catch data are available and included in the stock assessment process such that C1.1 is met.</p>			
<p>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.</p> <p>The most recent stock assessment of the stock indicated that, while Spawning Biomass (SB) has been below SB_{MSY} and fishing mortality (F) above F_{MSY} many times in the time series, with a decrease in fishing pressure in recent years Spawning Biomass has increased and since 2018 has exceeded SB_{MSY}.</p>			

³ FRA 2024. Fish stock assessment by species - Sardine (Pacific stock): http://abchan.fra.go.jp/wpt/wp-content/uploads/2024/08/simple_2024_01.pdf (in Japanese)

The current management target is $SB_{MSY} = 1.187$ million tons with limit and prohibited fishing level reference points of $0.6 SB_{MSY}$ (487,000 mt) and $0.1 SB_{MSY}$ (69,000 mt) respectively. SB_{2023} was estimated at 2.791 million mt comfortably above the relevant management limit.

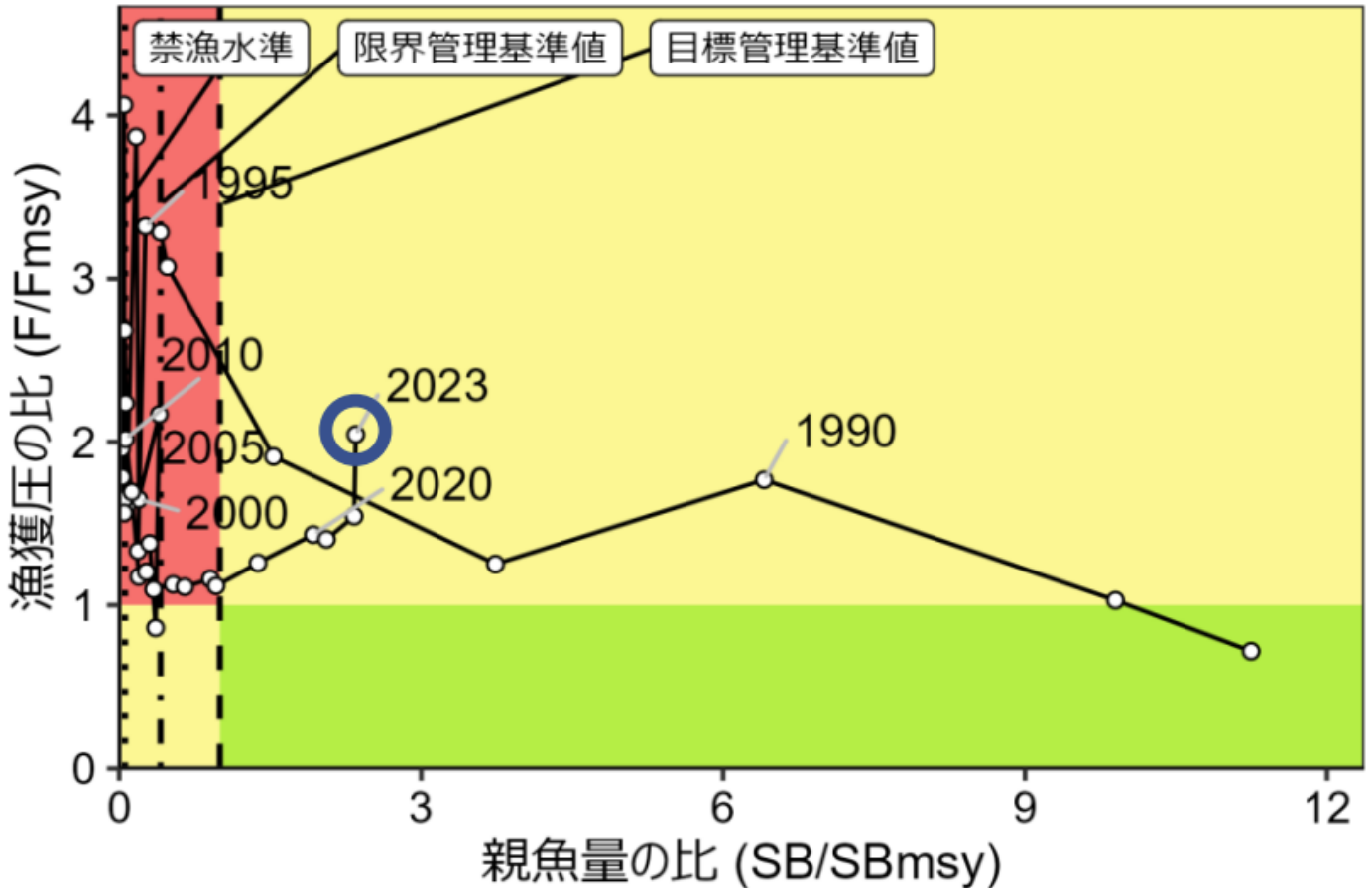


Figure 1. Latest estimate of SSB/SSB_{MSY} and F/F_{MSY} for the stock.

Overall, biomass in the most recent stock assessment was estimated to be above the limit reference point such that **C1.2 is met**.

References

FRA 2024. Fish stock assessment by species - Sardine (Pacific stock): http://abchan.fra.go.jp/wpt/wp-content/uploads/2024/08/simple_2024_01.pdf (in Japanese)

Links

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

Species Name		Japanese pilchard (<i>Sardinops sagax</i>) – Tsushima warm current stock	
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.			
<p>Japanese pilchard in the Japanese Pacific Ocean is subject to regular stock assessment by the Japan Fisheries Research and Education Agency (FRA) the most recently available of which is from August 2024 (FRA 2024⁴). The stock assessment utilises catch data to perform an analytical assessment with fishery removals being included in the stock assessment process.</p> <p>Catch volume has increased since the 1970s exceeding 1 million mt in the period 1983 – 1991 before rapidly decreasing to just 1,000 mt in 2001. Since 2011, it has fluctuated between 9,000 mt and 85,000 mt and is expected to reach 116,000 mt in 2023.</p> <p>Catches are not negligible, with catches expected to read 116,00 mt in 2023. Overall, catch data are available and included in the stock assessment process such that C1.1 is met.</p>			
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.			
<p>The most recent stock assessment of the stock indicated that, Spawning Biomass (SB) has been below SB_{MSY} and many times in the time series and was below again in 2023. Fishing pressure (F) has been below F_{MSY} in recent years.</p> <p>The current management target is $SB_{MSY} = 1.093$ million tons with limit and prohibited fishing level reference points of $0.6 SB_{MSY}$ (465,000 mt) and $0.1 SB_{MSY}$ (66,000 mt) respectively. SB_{2023} was estimated at 642,000 mt comfortably above the relevant management limit.</p>			

⁴ FRA 2024. Fish stock assessment by species - Sardine (Tsushima warm current stock): http://abchan.fra.go.jp/wpt/wp-content/uploads/2024/08/simple_2024_01.pdf (in Japanese)

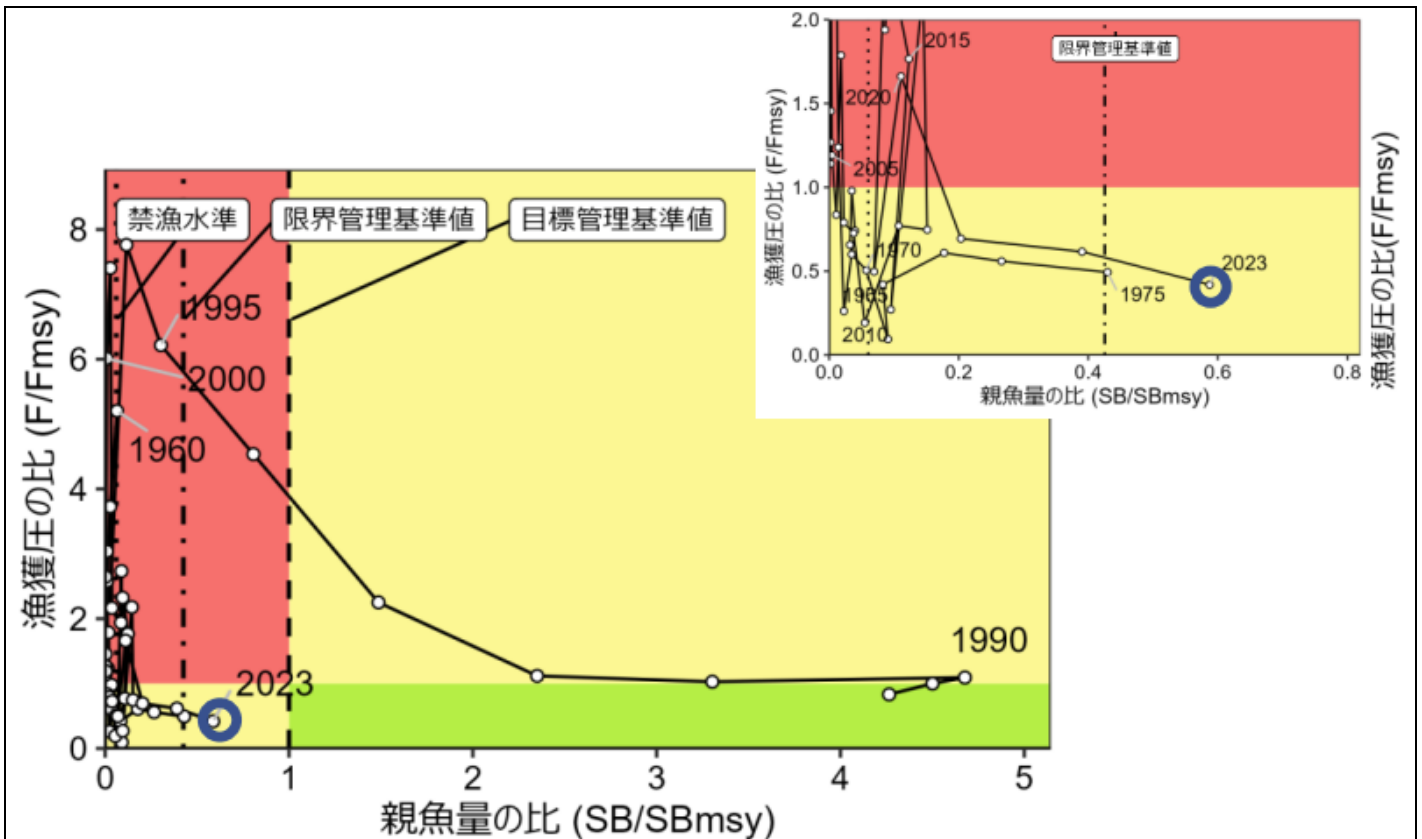


Figure 1. Latest estimate of SSB/SSB_{MSY} and F/F_{MSY} for the stock with zoomed in inset of lower left quadrant.

Overall, biomass in the most recent stock assessment was estimated to be above the limit reference point such that **C1.2 is met**.

References

FRA 2024. Fish stock assessment by species - Sardine (Tsushima warm current stock): http://abchan.fra.go.jp/wpt/wp-content/uploads/2024/08/simple_2024_01.pdf (in Japanese)

Links

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