



MarinTrust Standard V2

By-product Fishery Assessment Report Template

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:	Indian oil sardine (<i>Sardinella longiceps</i>)
	Geographical area:	FAO Areas 51, 57 Indian Ocean
	Country of origin of the product:	Thailand
	Stock:	Indian Ocean
Date	16/11/2021	
Report Code	BP222	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Thailand	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name: Golden Prize			
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	To November 2021		

Scope Details	
Main Species	Indian oil sardine (<i>Sardinella longiceps</i>)
Stock	Indian Ocean
Fishery Location	FAO Areas 51, 57 Indian Ocean
Management Authority (Country/ State)	Department of Fisheries Thailand and international entities
Gear Type(s)	Purse seine and pelagic trawls
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's recommendation of approval
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 Marin Trust raw material. Indian oil sardine (<i>Sardinella Longiceps</i>), do not appear as Endangered or Critically Endangered on IUCN’s Red List, nor do they appear in CITES appendices; therefore, Indian Oil Sardine in FAO 51 and 57 is eligible for approval for use as MarinTrust by-product raw material.</p> <p>There is a fishery management framework at the national level (Thailand) although this is not applied specifically to Indian oil sardine. Fisheries management in Thailand general is supported by data collection and stock assessment, but stock-specific research is extremely limited. There is no evidence of any specific management measures for Indian oil sardine in FAO 51 or 57 (Indian Ocean) such as catch limits or TAC, and reference points are not defined. Therefore, following Marin Trust criteria, the stock is classified as Category D.</p> <p>Due to the lack of scientific information on the status of the stock, a risk-assessment style approach was taken. The fishery was assessed using the risk-based Productivity, Susceptibility Analysis (PSA) approach as per Marin Trust v 2.0 procedures for Category D species.</p> <p>Table D1 (PSA) has achieved a PASS therefore, the average for the PSA risk rating results in the species passing D1.</p> <p>Therefore, Indian Oil Sardine in FAO Areas 51 and 57 is APPROVED by the assessor in the assessment area for the production of fishmeal and fish oil under the current Marin Trust v 2.0 by-products standard</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified Indian Ocean Indian oil sardine as category D, reference points are undefined to assess status of the stock relative to.</p> <p>With an average productivity score of 1 and an average susceptibility score of 1.75, it does pass D3.</p> <p>Therefore, Indian Ocean Indian oil sardine stock should be 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 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
Indian oil sardine	<i>Sardinella longiceps</i>	Indian Ocean	International and domestically Thailand	D	DD	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	Indian oil sardine (<i>Sardinella longiceps</i>)	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	1.3	1
	Average maximum age (years)	3	1
	Fecundity (eggs/spawning)	Not known	-
	Average maximum size (cm)	23 cm	1
	Average size at maturity (cm)	16.3	1
	Reproductive strategy	Broadcast spawners	1
	Mean trophic level	2.4	1
	Average Productivity Score		1
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	Not scored	Not scored
	Distribution	Throughout region	1
	Habitat	Pelagic	2
	Depth range	20-200m	3
	Selectivity	1 to 2 times mesh size	2
	Post-capture mortality	Most dead / retained	3
	Average Susceptibility Score		1.75
	PSA Risk Rating (From Table D3)		PASS
	Compliance rating		PASS
References			
IUCN Red List https://www.iucnredlist.org/			
CITES http://checklist.cites.org/#/en			
https://www.fishbase.de/Summary/SpeciesSummary.php?ID=1511&AT=indian+oil+sardine			
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		