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 mackerel (*Rastrelliger kanagurta*)
	Geographical area:	FAO Areas 51 and 57 Western and eastern Indian Ocean
	Country of origin of the product:	Thailand
	Stock:	FAO Areas 51 and 57 Western and eastern Indian Ocean
Date	13/12/2021	
Report Code	BP241	
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: South East Asian Packaging and Canning Ltd 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	Vito Romito	0.5	Surveillance 2
Assessment Period	To December 2021		

Scope Details	
Main Species	Indian mackerel (*Rastrelliger Kanagurta*)
Stock	Western and eastern Indian Ocean
Fishery Location	FAO Areas 51 and 57 Indian Ocean
Management Authority (Country/ State)	Thailand Department of Fisheries
Gear Type(s)	Purse seine and nets
Outcome of Assessment	
Peer Review Evaluation	Approved
Recommendation	**APPROVED**

Table 2. Assessment Determination

Assessment Determination
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 Marin Trust raw material. Indian mackerel (*Rastrelliger kanagurta*) does not appear as Endangered or Critically Endangered on the IUCN Red List, nor does it appear in the CITES appendices; therefore, Indian mackerel is eligible for approval for use as Marin Trust raw material.   The stock is not subject to research and management measures are not in place. Therefore, following Marin Trust criteria, the stock is classified as Category D.   Given the lack of scientific information on the status of the stock, a risk-assessment approach was taken. The fishery was assessed using the risk-based Productivity, Susceptibility Analysis (PSA) as per Marin Trust v 2.0 procedures for Category D species. The species has passed this risk-based assessment (Table D3).   Indian mackerel (*Rastrelliger Kanagurta*) in Western and Eastern Indian Ocean is **APPROVED** for the production of fishmeal and fish oil under the Marin Trust v 2.0 by-products standard
Fishery Assessment Peer Review Comments
Due to the lack of management and assessment the species is correctly assessed using the PSA tool in the category D requirements. The Peer Reviewer agrees with the PSA score and that Indian mackerel (*Rastrelliger Kanagurta*) in Western and Eastern Indian Ocean should be **APPROVED** for the production of fishmeal and fish oil under the Marin Trust v 2.0 by-products standard.
Notes for On-site Auditor

Marine Ingredients Certifications Ltd (09357209) | Doc FISH1- Issued February 2021 – Version 2.1 | Approved by Libby Woodhatch
Controlled Copy- No unauthorised copying or alteration permitted

© Marine Ingredients Certifications Ltd., for authorised use only

Page 3 of 8

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 mackerel	*Rastrelliger Kanagurta*	Western and eastern Indian Ocean FAO 51 and 57	Thailand Department of Fisheries	D	LC	No

---

[1] https://www.iucnredlist.org/
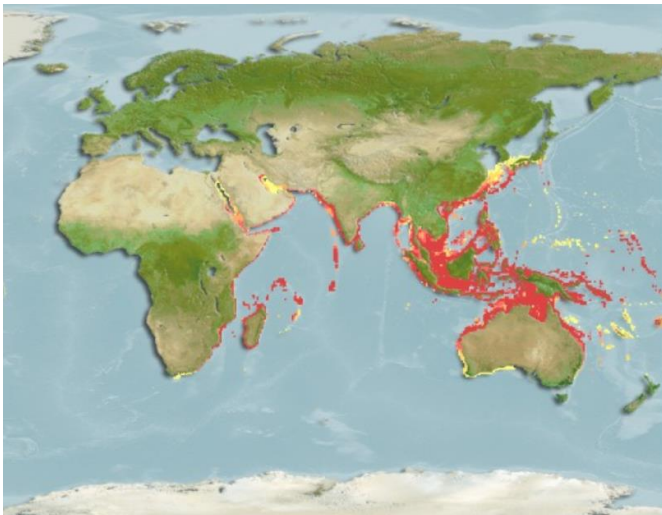[2] https://cites.org/eng/app/appendices.php

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**	Indian mackerel (*Rastrelliger Kanagurta*)	
	Productivity Attribute	**Value**	**Score**
	Average age at maturity (years)	2.5	2
	Average maximum age (years)	4	1
	Fecundity (eggs/spawning)	Not known	-
	Average maximum size (cm)	25 cm	1
	Average size at maturity (cm)	19.9	1
	Reproductive strategy	Broadcast spawner	1
	Mean trophic level	3.2	2
		Average Productivity Score	**1.33**
	Susceptibility Attribute	**Value**	**Score**
	Overlap of adult species range with fishery	50% of stock in area fished	2
	Distribution	Throughout region	1
	Habitat	Moderately likely to encounter gear	2
	Depth range	20-90m	3
	Selectivity	Species 1 -2 times mesh size	2
	Post-capture mortality	Most dead or retained	3
		Average Susceptibility Score	**2.1**
		PSA Risk Rating (From Table D3)	**PASS**
		Compliance rating	**PASS**

References

Productivity attributes:

Fishbase. Rastrelliger kanagurta, Indian mackerel : fisheries, gamefish, bait (fishbase.se)

*Figure 1. Distribution maps for *Rastrelliger kanagurta* (Indian mackerel), with modelled year 2050 native range map based on IPCC RCP8.5 emissions scenario. www.aquamaps.org, version 10/2019.

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

Marine Ingredients Certifications Ltd (09357209) | Doc FISH1- Issued February 2021 – Version 2.1 | Approved by Libby Woodhatch

Controlled Copy- No unauthorised copying or alteration permitted

© Marine Ingredients Certifications Ltd., for authorised use only

Page 2 of 8

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