# MarinTrust Standard V2

# By-product Fishery Assessment

## *Thailand Pacific Chub Mackerel in FAO 61 Pacific Northwest*

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# Table 1 Application details and summary of the assessment outcome

| | | |
|---|---|---|
| Fishery Under Assessment | Species: | Pacific Chub Mackerel (*Scomber japonicus*) |
| | Geographical area: | FA0 61 Pacific Northwest |
| | Country of origin of the product: | Thailand (Flag Country) |
| | Stock: | Pacific Northwest |
| Date | May 2022 | |
| Report Code | THA12 | |
| Assessor | Ivan Mateo | |
| Country of origin of the product - PASS | Thailand (Flag Country) | |
| Country of origin of the product - FAIL | NA | |

| Application details and summary of the assessment outcome | | | |
|---|---|---|---|
| Company Name(s): | | | |
| Country: Thailand | | | |
| Email address: | | Applicant Code: | |
| Certification Body Details | | | |
| Name of Certification Body: | | Global Trust Certification | |
| Assessor | Peer Reviewer | Assessment Days | Initial/Surveillance/ Re-approval |
| Ivan Mateo | Vito Romito | 0.5 | Surveillance 2 |
| Assessment Period | To May 2022 | | |

| Scope Details | |
|---|---|
| Main Species | Pacific Chub Mackerel (*Scomber japonicus*) |
| Stock | Thailand/International waters |
| Fishery Location | FA0 61 Pacific Northwest |
| Management Authority (Country/ State) | International |
| Gear Type(s) | Pelagic trawl |
| Outcome of Assessment | |
| Peer Review Evaluation | Approve |
| Recommendation | Approve |

# 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 IFFO RS raw material. Pacific chub mackerel (*Scomber japonicus*) does not appear as Endangered or Critically Endangered on the IUCN Red List, nor does it appear in the CITES appendices; and is therefore eligible for approval for use as IFFO- RS raw material.<br><br>Pacific chub mackerel in Thailand is not subject to a species-specific research and management regime sufficient to pass a Category C assessment.<br><br>The comparative lack of scientific information on the status of the Pacific chub mackerel population in the assessment area means that a risk-assessment style approach must be taken. The fishery was assessed using the risk-based Productivity, Susceptibility Analysis (PSA) as per IFFO-RS v 2.2 procedures for Category D species.<br><br>The species has passed this risk-based assessment (Table D3) and is **APPROVED** in the assessment area by the assessor for the production of fishmeal and fish oil under the IFFO-RS v 2.2 by-products standard. |
| **Fishery Assessment Peer Review Comments** |
| The assessor has correctly categorise the stock as Category D due to lack of stock specific stock assessment information and reference point. Accordingly, the fishery was assessed using the risk-based Productivity, Susceptibility Analysis (PSA) as per IFFO-RS v 2.2 procedures for Category D species, and passed.<br><br>Hence, Pacific chub mackerel (*Scomber japonicus*) shall be APPROVED for the production of fishmeal and fish oil under the IFFO-RS v 2.2 by-products standard. |
| **Notes for On-site Auditor** |
| None. |

# 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] |
|---|---|---|---|---|---|---|
| Pacific chub mackerel | *Scomber japonicus* | FA0 61 Pacific Northwest | International | D | LC | No |

[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** | **Pacific chub mackerel** | |
|---|---|---|
| **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. | No 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. | No Pass |
| | **Clause outcome:** | No 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**.

Pacific chub mackerel in Thailand is not subject to a species-specific research and management regime sufficient to pass a Category C assessment. There was no information on landings from Thailand.
The comparative lack of scientific information on the status of the Pacific chub mackerel population in the assessment area means that a risk-assessment style approach must be taken.

**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.**

Pacific chub mackerel in Thailand is not subject to a species-specific research and management regime sufficient to pass a Category C assessment.
The comparative lack of scientific information on the status of the Pacific chub mackerel population in the assessment area means that a risk-assessment style approach must be taken. The stock was assessed as category D.

**References**

| **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 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 chub mackerel | |
|---|---|---|---|
| | **Productivity Attribute** | **Value** | **Score** |
| | Average age at maturity (years) | 2 years | 2 |
| | Average maximum age (years) | 7.9 years | 1 |
| | Fecundity (eggs/spawning) | 135,962 eggs | 1 |
| | Average maximum size (cm) | 38.1 | 1 |
| | Average size at maturity (cm) | 22 cm | 1 |
| | Reproductive strategy | Open water egg scatterer | 1 |
| | Mean trophic level | 3.4 | 3 |
| | | **Average Productivity Score** | **1.42** |
| | **Susceptibility Attribute** | **Value** | **Score** |
| | Availability (area overlap) | 30%. The stock occurs in a large geographical area. | 2 |
| | Encounterability (the position of the stock/species within the water column relative to the fishing gear) | Pelagic | 1 |
| | Selectivity of gear type | 1 to 2 times mesh size | 2 |
| | Post-capture mortality | Mostly dead/retained. | 3 |
| | | **Average Susceptibility Score** | **2** |
| | | **PSA Risk Rating (From Table D3)** | **Pass** |
| | | **Compliance rating** | **Pass** |
| | **Further justification for susceptibility scoring (where relevant)**<br>*For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision* | | |

**References**

Froese, R. and D. Pauly. Editors. 2022. FishBase. World Wide Web electronic publication www.fishbase.org, version (02/2022).

*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 |