



## MarinTrust Standard V2

### By-product Fishery Assessment *Pacific Chub Mackerel, FAO 34*

**MarinTrust Programme**

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**Table 1 Application details and summary of the assessment outcome**

Fishery Under Assessment	Species:	Pacific Chub Mackerel ( <i>Scomber japonicus</i> )
	Geographical area:	FAO 34
	Country of origin of the product:	Morocco
	Stock:	Northwest Africa
Date	January 2023	
Report Code	MAR006	
Assessor	Vineetha Aravind	
Country of origin of the product - PASS	Morocco	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): Nouvelle Ougala			
Country: Morocco			
Email address: lamya.hajji.ougala@gmail.com		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Vineetha Aravind	Kate Morris	0.5	Initial
Assessment Period	Jan 2023-Jan 2024		

Scope Details	
Main Species	Pacific Chub Mackerel ( <i>Scomber japonicus</i> )
Stock	North West Africa
Fishery Location	FAO 34
Management Authority (Country/ State)	Morocco
Gear Type(s)	Purse seine
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	Pass

**Table 2. Assessment Determination**

Assessment Determination
<p>Pacific Chub Mackerel has been categorised as Least Concern by IUCN Red data List and does not appear in CITES appendices. Therefore, it is eligible for approval for use as Marine Trust raw material.</p> <p>Pacific chub mackerel in Morocco is not subject to a species-specific research and management regime and reference points are not defined to assess the stock against Category C.</p> <p>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.</p> <p>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.</p>
Fishery Assessment Peer Review Comments
<p>The by-product fishery under assessment here is the Pacific chub mackerel (<i>Scomber japonicus</i>) fishery, pursued by vessels in FAO fishing area 34. Pacific chub mackerel is managed by the Moroccan government. For this Marin Trust assessment, the Pacific chub mackerel stock was scored against Category D.</p> <p>The species scoring table has been completed by the auditor with sufficient evidence presented to support their final determination.</p> <p>The peer review supports the auditor's recommendation to pass the FAO 34, Pacific chub mackerel stock pursued by the fishery under the Marin Trust IFFO RS v2.0 by-fishery standard for the production of fishmeal and fish oil.</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 € 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 <sup>1</sup>	CITES Appendix 1 <sup>2</sup>
Pacific Chub Mackerel	Pacific Chub Mackerel ( <i>Scomber japonicus</i> )	FAO 34, Northwest Africa	International	D	Least Concern (LC)	No

<sup>1</sup> <https://www.iucnredlist.org/>

<sup>2</sup> <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.

<b>Species Name</b>			
<b>C1</b>	<b>Category C Stock Status - Minimum Requirements</b>		
	<b>C1.1</b>	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
	<b>C1.2</b>	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
<b>Clause outcome:</b>			No
<p><b>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.</b></p> <p><b>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.</b></p>			
<b>References</b>			
<b>Links</b>			
<b>MarinTrust Standard clause</b>		1.3.2.2	
<b>FAO CCRF</b>		7.5.3	
<b>GSSI</b>		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		
	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)	22cm	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	Retained	3
	Average Susceptibility Score		2
	PSA Risk Rating (From Table D3)		Pass
	Compliance rating		Pass
	Further justification for susceptibility scoring (where relevant)		
	According to Table D3, a susceptibility score of 2 and productivity score of 1.42 is pass.		
References			
<div>Froese, R. and D. Pauly. Editors. 2022.FishBase. World Wide Web electronic publication. www.fishbase.org, ( 08/2022 )</div> <div>https://www.fishbase.se/summary/Scomber-japonicus.html</div>			
Standard clauses 1.3.2.2			

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	High productivity (Low risk, score = 1)	Medium productivity (medium risk, score = 2)	Low productivity (high risk, score = 3)
Average age at maturity	<5 years	5-15 years	>15 years
Average maximum age	<10 years	10-25 years	>25 years
Fecundity	>20,000 eggs per year	100-20,000 eggs per year	<100 eggs per year
Average maximum size	<100 cm	100-300 cm	>300 cm
Average size at maturity	<40 cm	40-200 cm	>200 cm
Reproductive strategy	Broadcast spawner	Demersal egg layer	Live bearer
Mean Trophic Level	<2.75	2.75-3.25	>3.25

Susceptibility attributes	Low susceptibility (Low risk, score = 1)	Medium susceptibility (medium risk, score = 2)	High susceptibility (high risk, score = 3)
Areal overlap (availability) Overlap of the fishing effort with the species range	<10% overlap	10-30% overlap	>30% overlap
Encounterability The position of the stock/species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low overlap with fishing gear (low encounterability).	Medium overlap with fishing gear.	High overlap with fishing gear (high encounterability). Default score for target species
Selectivity of gear type Potential of the gear to retain species	a Individuals < size at maturity are rarely caught	a Individuals < size at maturity are regularly caught.	a Individuals < size at maturity are frequently caught
	b Individuals < size at maturity can escape or avoid gear.	b Individuals < half the size at maturity can escape or avoid gear.	b Individuals < half the size at maturity are retained by gear.
Post-capture mortality (PCM) The chance that, if captured, a species would be released and that it would be in a condition permitting subsequent survival	Evidence of majority released post-capture and survival.	Evidence of some released post-capture and survival.	Retained species or majority dead when released.

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

<b>D4</b>	<b>Species Name</b>		
	<b>Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements</b>		
	<b>D4.1</b>	The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.	
	<b>D4.2</b>	There is no substantial evidence that the fishery has a significant negative impact on the species.	
			<b>Outcome:</b>
<b>Evidence</b> <b>D4.1:</b> The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.  <b>D4.2</b> There is no substantial evidence that the fishery has a significant negative impact on the species.			
<b>References</b>			
<b>Links</b>			
<b>MarinTrust Standard clause</b>		1.3.2.2, 4.1.4	
<b>FAO CCRF</b>		7.5.1	
<b>GSSI</b>		D.5.01	