



## MarinTrust Standard V2

### By-product Fishery Assessment

# *ZAF02 – European pilchard in FAO Area 34 – South Zone (Zone C)*

**MarinTrust Programme**

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: [standards@marin-trust.com](mailto:standards@marin-trust.com)

T: +44 2039 780 819

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

Fishery Under Assessment	Species:	European sardine ( <i>Sardina pilchardus</i> )
	Geographical area:	FAO Area 34, Eastern Central Atlantic
	Country of origin of the product:	Morocco, Mauritania
	Stock:	Northwest Africa, Zone C (South)
Date	June 2023	
Report Code	ZAF02	
Assessor	Sam Peacock	
Country of origin of the product - PASS	Morocco, Mauritania	
Country of origin of the product - FAIL	n/a	

Application details and summary of the assessment outcome			
Company Name(s): Amawandle Pelagic, West Point Processors; Lucky Star Ltd; Pioneer Fishing Pty Ltd			
Country: South Africa			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Sam Peacock	Kare Morris	0.2	Surveillance 2
Assessment Period	June 2023 – June 2024		

Scope Details	
Main Species	European sardine ( <i>Sardina pilchardus</i> )
Stock	Northwest Africa, Zone C (South)
Fishery Location	FAO Area 34, Eastern Central Atlantic
Management Authority (Country/ State)	Fishery Committee for the Eastern Central Atlantic (CECAF), Morocco, Mauritania
Gear Type(s)	Purse seine and pelagic trawl
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	Pass

## Table 2. Assessment Determination

Assessment Determination
<p>European sardine has been categorised by the IUCN as Least Concern and does not appear in the CITES appendices. Although sardine in Zone C is usually managed relative to reference points, the most recent stock assessment determined that the current stock status could not be estimated due to the lack of an appropriate abundance indicator. Additionally, the most recent stock assessment appears to remain the one conducted in 2019 and is therefore likely to be out of date for a short-lived species such as European pilchard. For these reasons, a Category D assessment was deemed the most appropriate.</p> <p>European sardine was awarded a productivity score of 1.14 and a susceptibility score of 2.0, leading to the stock achieving a Pass rating on Table D3. Sardine from Zones C should be approved for use as an MT raw material</p>
Fishery Assessment Peer Review Comments
<p>The by-product fishery under assessment here is the European sardine (<i>Sardina pilchardus</i>) fishery, pursued by vessels in FAO fishing area 34, Zone C. European sardine is not managed by international or state regulations. Therefore, for this Marin Trust assessment, the European sardine stock is scored against Category D. 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, European sardine 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 a 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 <sup>1</sup>	CITES Appendix 1 <sup>2</sup>
European sardine	<i>Sardina pilchardus</i>	Northwest Africa, Zones C (South)	No <sup>3</sup>	D	Least Concern <sup>4</sup>	No

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

<sup>2</sup> <https://cites.org/eng/app/appendices.php>

<sup>3</sup> See Assessment Determination

<sup>4</sup> <https://www.iucnredlist.org/species/198580/15542481>

## 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.

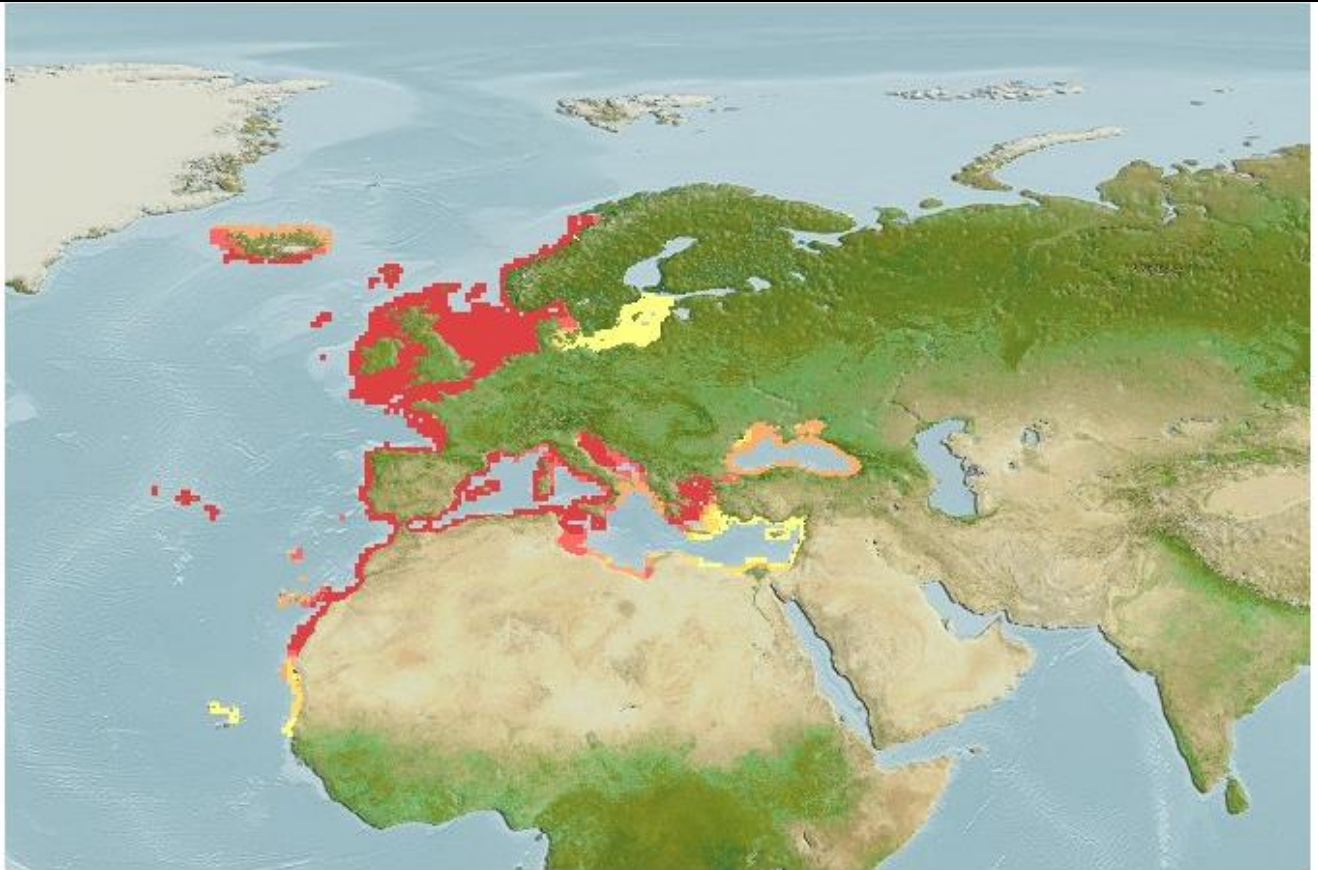
Clause C1 should be completed for each Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it should be assessed as a Category D species instead.

Species Name		n/a	
<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.	
	<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.	
			<b>Clause outcome:</b>
<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>			
<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>			
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.

<b>D1</b>	<b>Species Name</b>	<b>European pilchard</b>	
	<b>Productivity Attribute</b>	<b>Value</b>	<b>Score</b>
	Average age at maturity (years)	2 years	1
	Average maximum age (years)	7 years	1
	Fecundity (eggs/spawning)	156,525	1
	Average maximum size (cm)	27.5cm	1
	Average size at maturity (cm)	11.8cm	1
	Reproductive strategy	Broadcast spawner	1
	Mean trophic level	3.1	2
	<b>Average Productivity Score</b>		<b>1.14</b>
	<b>Susceptibility Attribute</b>	<b>Value</b>	<b>Score</b>
	Availability (area overlap)	<10% overlap	1
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	Targeted	3
	Selectivity of gear type	Undersized individuals rarely caught	1
	Post-capture mortality	Retained	3
	<b>Average Susceptibility Score</b>		<b>2</b>
	<b>PSA Risk Rating (From Table D3)</b>		<b>PASS</b>
	<b>Compliance rating</b>		<b>PASS</b>
	<b>Further justification for susceptibility scoring (where relevant)</b>		
	<i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i>		



Computer-generated distribution map for European sardine (Fishbase, <https://www.fishbase.se/summary/sardina-pilchardus.html>).

**References**

Fishbase, European pilchard. <https://www.fishbase.se/summary/sardina-pilchardus.html>

*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

D4 Species Name		n/a	
<b>Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements</b>			
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.		
			<b>Outcome:</b>
<b>Evidence</b>			
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.			
<b>References</b>			
<b>Links</b>			
MarinTrust Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	