



MarinTrust Standard V2

By-product Fishery Assessment

ESP08 European pilchard in GFCM GSA 7

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	European pilchard, <i>Sardina pilchardus</i>
	Geographical area:	FAO 37
	Country of origin of the product:	Spain, Portugal
	Stock:	GFCM GSA 7
Date	May 2023	
Report Code	ESP08	
Assessor	Sam Peacock	
Country of origin of the product - PASS	Spain, Portugal	
Country of origin of the product - FAIL	None	

Application details and summary of the assessment outcome			
Company Name(s): Sarval Bio-Industries Noroeste S.A.U. S.A.U: Arteixo			
Country:			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Sam Peacock	Jose Peiro Crespo	0.2	Surveillance 1
Assessment Period	May 2023 – May 2024		

Scope Details	
Main Species	European pilchard, <i>Sardina pilchardus</i>
Stock	GFCM GSA 7
Fishery Location	FAO 37
Management Authority (Country/ State)	GFCM
Gear Type(s)	Purse seine & pelagic trawl
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	Pass

Table 2. Assessment Determination

Assessment Determination
<p>European pilchard has been categorised by the IUCN as Near Threatened and does not appear in the CITES appendices. Pilchard in General Fisheries Commission for the Mediterranean (GFCM) GSA 7 is managed relative to established reference points, and was assessed under Category C.</p> <p>European pilchard in GSA 7 is subject to regular stock assessments which take into account fishery removals and acoustic survey results. The most recent assessment was carried out in 2022 and concluded that stock biomass is around 3 times larger than the target reference point. Therefore the byproduct continues to meet the MT requirements and should remain approved for use as a raw material.</p>
Fishery Assessment Peer Review Comments
<p>The by-product fishery under assessment is the European pilchard (<i>Sardina pilchardus</i>) caught using purse seine and pelagic trawls in the Mediterranean Geographical Subarea - GFCM GSA 7 (Gulf of Lion). European pilchard in the area is managed relative to biomass-based reference points and it is under category C.</p> <p>The most recent stock assessment indicated that the biomass is over the target and limit reference points. Therefore, it passes category C.</p> <p>The peer review supports the auditor’s recommendation to pass the GFCM GSA 7 European pilchard purse seine & pelagic trawl 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 ¹	CITES Appendix 1 ²
European pilchard	<i>Sardina pilchardus</i>	GFCM GSA 7	Yes	C	Near Threatened ³	No

¹ <https://www.iucnredlist.org/>

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

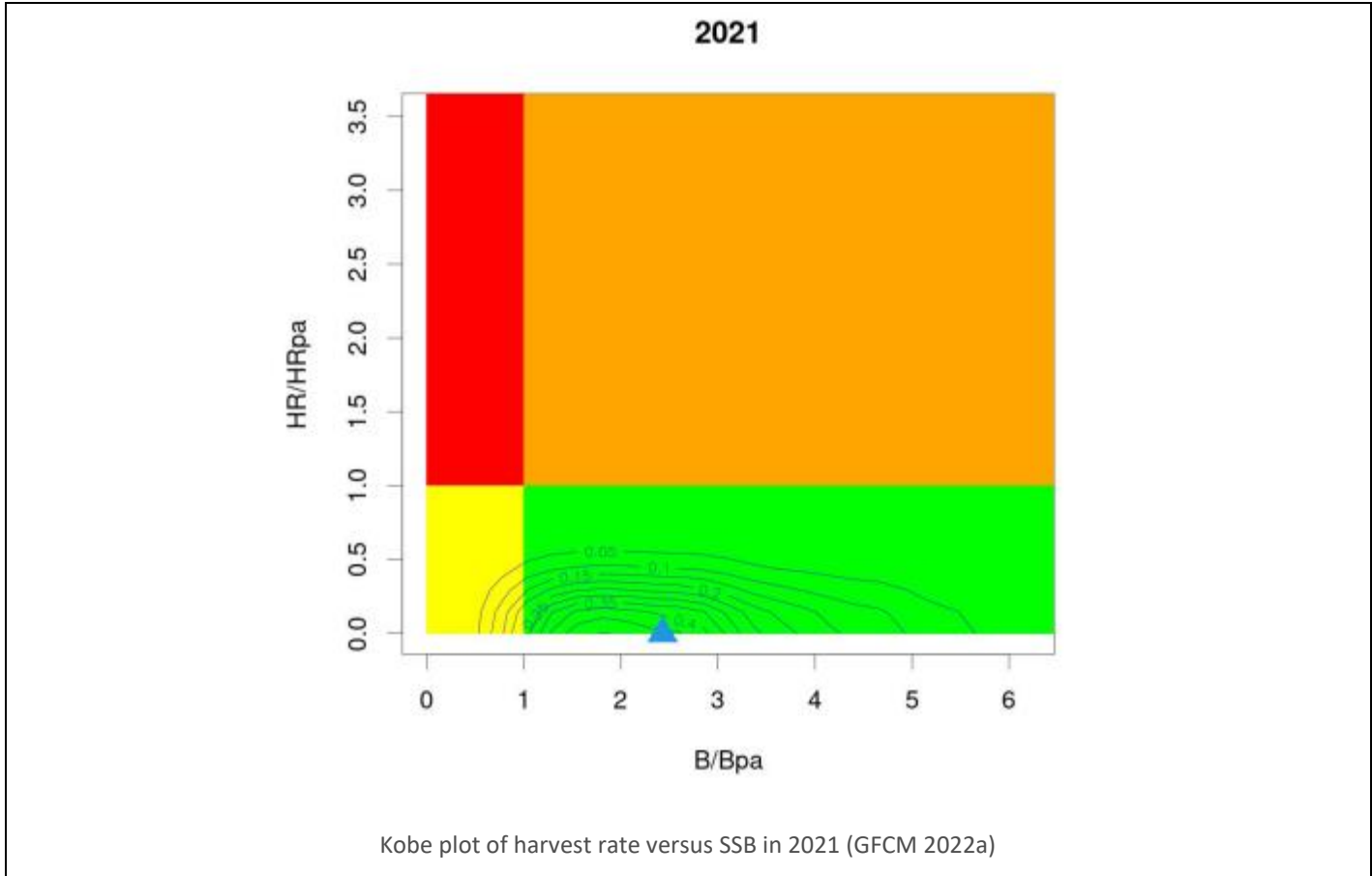
³ <https://www.iucnredlist.org/species/198580/45075369>

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		European pilchard	
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.	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.	PASS
			Clause outcome: PASS
<p>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.</p> <p>European pilchard in GFCM GSA 7 was subjected to a stock assessment using a two-stage biomass model (GFCM 2022). The assessment incorporated catch data, growth and maturity estimates, and the results of acoustic surveys (GFCM 2022a). The stock assessment report does not contain any major concerns relating to uncertainty in the assessment outcomes. Overall, there is a reliable stock assessment process in place, and C1.1 is met.</p> <p>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.</p> <p>The most recent stock assessment concluded that biomass was 3.41 times larger than the target reference point B_{pa} (GFCM 2022). The stock assessment report states that harvest rate has been extremely low since 2010, and concludes “the joint probability of SSB being higher than [target reference point] SSB_{pa} and Harvest Rate (HR) lower than HR_{pa} is 0.96”. There is a very high probability that SSB is currently above the target reference point, and therefore any potential limit reference point, and C1.2 is met.</p>			



References

GFCM (2022). GFCM Report of the 23rd Session of the Scientific Advisory Committee on Fisheries, June 2022: <https://www.fao.org/3/cc3109en/cc3109en.pdf>

GFCM (2022a). Stock Assessment Form Small Pelagics: *Sardina pilchardus* in GSA07, 2022. https://gfcmsitestorage.blob.core.windows.net/website/5.Data/SAFs/SmallPelagics/2021/SAF_PIL_7_RefY2021.pdf

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	n/a		
	Productivity Attribute	Value	Score	
	Average age at maturity (years)			
	Average maximum age (years)			
	Fecundity (eggs/spawning)			
	Average maximum size (cm)			
	Average size at maturity (cm)			
	Reproductive strategy			
	Mean trophic level			
	Average Productivity Score			
	Susceptibility Attribute	Value	Score	
	Availability (area overlap)			
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)			
	Selectivity of gear type			
	Post-capture mortality			
	Average Susceptibility Score			
	PSA Risk Rating (From Table D3)			
	Compliance rating			
	Further justification for susceptibility scoring (where relevant)			
	<i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i>			
References				
<i>Standard clauses 1.3.2.2</i>				

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			
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	