MarinTrust RS V2.0

BYPRODUCT FISHERY ASSESSMENT
TEMPLATE REPORT

MarinTrust Ltd, Unit C, Printworks, 22 Amelia Street, London, SE17 3BZ, United Kingdom

TABLE 1 APPLICATION DETAILS AND SUMMARY OF THE ASSESSMENT OUTCOME

Fishery Under Assessment	**Species:**	European Sardine, *Sardina pilchardus*
	Geographical area:	FAO Area 27 Atlantic Northeast
	Country of origin of the product:	UK & Ireland
	Stock:	ICES subareas 7
Date		November 2020
Report Code		2020-131
Assessor		Virginia Polonio
Country of origin of the product - PASS		UK & Ireland
Country of origin of the product - FAIL		NA

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: UK & Ireland		**Zip:**	
Tel. No.:		**Fax. No.:**	
Email address:		**Applicant Code:**	
Key Contact:		**Title:**	
Certification Body Details			
Name of Certification Body: SAI Global			
Assessor	**Peer Reviewer**	**Assessment Days**	**Initial/Surveillance/ Re-approval**
Virginia Polonio	Geraldine Criquet	0.5	SURV 2
Assessment Period	November 2020		

Scope Details	
Main Species	European Sardine, *Sardina pilchardus*
Stock	ICES subarea 7
Fishery Location	FAO 27 Atlantic Northeast
Management Authority (Country/ State)	European Union, CEFAS and DAFM
Gear Type(s)	Seines and pelagic trawls
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor's determination
Recommendation	APPROVED

TABLE 2. ASSESSMENT DETERMINATION

Assessment Determination
If any species is categorised as Endangered or Critically Endangered on IUCN's Red List, or if it appears in the CITES appendices, it cannot be approved for use as IFFO RS raw material. Sardine (*Sardina pilchardus*) do not appear as Endangered or Critically Endangered on IUCN's Red List, nor do they appear in CITES appendices; therefore, Sardine is eligible for approval for use as IFFO RS by-product raw material. One stock forms part of this assessment: ▪ ICES Subarea 7 ICES is not aware of any agreed precautionary management plan for sardine in this area. Further, ICES cannot provide catch advice for this stock because of lack of reliable landings data. The level of discarding is unknown, and probably quite variable. 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. Consequently, the stock has been assessed under Category D. The compliance rating for PSA has achieved a PASS. Hence, Sardine (*Sardina pilchardus*) in ICES Subarea 7 is **APPROVED** by SAI Global assessors for the production of fishmeal and fish oil under the current IFFO RS v 2.0 by-products standard

Peer Review Comments
The assessor correctly classified sardine in ICES Subarea 7 as category D. A PSA was performed. With an average productivity score of 1.15 and an average susceptibility score of 2, it passes the PSA. Therefore, the peer reviewer agrees with the assessor's determination that the fishery passes the PSA and is thus approved.

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 Redlist Category

Byproduct 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.

Byproduct 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 Sardine	*Sardina pilchardus*	ICES subarea 7	EU, CEFAS and DAFM	D	LC	No

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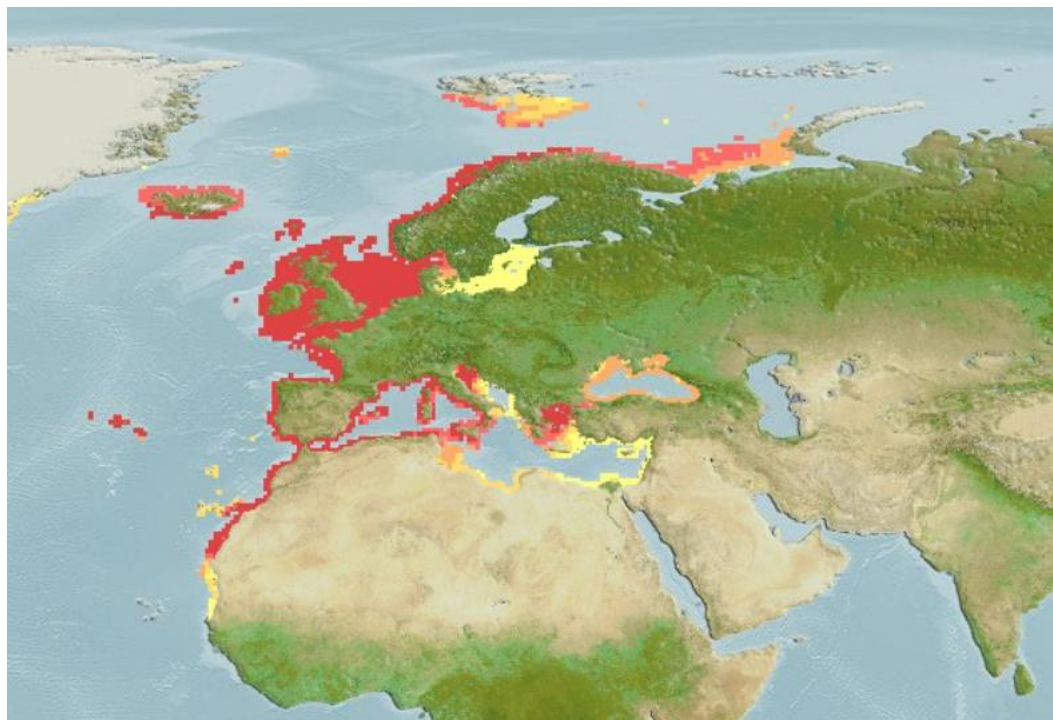[2] https://cites.org/eng/app/appendices.php

CATEGORY D SPECIES

Category D species are those which make up less than 5% of landings and are not subject to a species-specific

D1	Species Name	European Sardine, *Sardina pilchardus*	
Productivity Attribute		**Value**	**Score**
Average age at maturity (years)		1.7	1
Average maximum age (years)		5.9	1
Fecundity (eggs/spawning)		156,525 [50,000-490,000]	1
Average maximum size (cm)		27.5	1
Average size at maturity (cm)		14.8	1
Reproductive strategy		Non-guarders open water/substratum egg scatterers	1
Mean trophic level		3.1	2
		Average Productivity Score	**1.15**
Susceptibility Attribute		**Value**	**Score**
Overlap of adult species range with fishery		NA	
Distribution		Global distribution	1
Habitat		Pelagic	1
Depth range		20-60 m	2
Selectivity		Up to 4 m	3
Post-capture mortality		Retained	3
		Average Susceptibility Score	**2**
		PSA Risk Rating (From Table D3)	**PASS**
		Compliance rating	**PASS**

References

Figure 1. Global distribution of Sardine. Source: Scarponi, P., G. Coro, and P. Pagano. A collection of Aquamaps native layers in NetCDF format. Data in brief 17 (2018): 292-296.

ICES. 2019. Sardine (*Sardina pilchardus*) in Subarea 7 (southern Celtic Seas and the English Channel). In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, pil.27.7. https://doi.org/10.17895/ices.advice.4854.

https://www.fishbase.se/summary/1350

Tous, P., Sidibé, A, Mbye, E., de Morais, L., Camara, Y.H., Adeofe, T.A., Munroe, T., Camara, K., Cissoko, K., Djiman, R., Sagna, A. & Sylla, M. 2015. Sardina pilchardus. The IUCN Red List of Threatened Species 2015: e.T198580A15542481. https://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T198580A15542481.en.

Standard clauses 1.3.2.2

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	Low productivity/ High risk — Score 3	Medium productivity/ Medium risk — Score 2	High productivity/ Low risk — 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 — Score 3	Medium susceptibility/ Medium risk — Score 2	Low susceptibility/ Low risk — 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

SOCIAL CRITERION

In addition to the scored criteria listed above, applicants must commit to ensuring that vessels operating in the fishery adhere to internationally recognised guidance on human rights. They must also commit to ensuring there is no use of enforced or unpaid labour in the fleet(s) operating upon the resource.