



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: standards@marin-trust.com

T: +44 2039 780 819

Table 1 Application details and summary of the assessment outcome

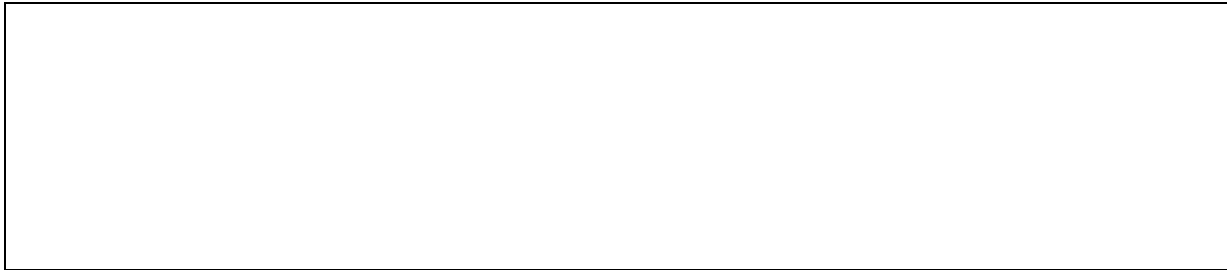
Fishery Under Assessment	Species:	Sardine (<i>Sardina pilchardus</i>)
	Geographical area:	FAO Area 27 North Atlantic, ICES divisions 8.a–b and 8.d
	Country of origin of the product:	Spain and Portugal
	Stock:	Bay of Biscay (ICES divisions 8.a–b and 8.d) sardine stock
Date	26/05/2021	
Report Code	BP83	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Spain and Portugal	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: Spain and Portugal		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval
Virginia Polonio	Geraldine Criquet	0.5	Re-approval
Assessment Period	To May 2021		

Scope Details	
Main Species	Sardine (<i>Sardina pilchardus</i>)
Stock	Bay of Biscay (ICES divisions 8.a–b and 8.d) sardine stock
Fishery Location	FAO Area 27 North Atlantic, ICES divisions 8.a–b and 8.d
Management Authority (Country/ State)	EU/Common Fisheries Policy and Spain & Portugal management authority
Gear Type(s)	Purse seine and pelagic trawl
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor’s recommendation
Recommendation	APPROVED

Table 2. Assessment Determination

Assessment Determination
<p>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 (<i>Sardina pilchardus</i>) do not appear as Endangered or Critically Endangered on IUCN’s Red List, nor do they appear in CITES appendices; therefore, Sardine in Ices 8 a-b and 8d is eligible for approval for use as Marin Trust by-product raw material.</p> <p>One stock forms part of this assessment:</p> <ol style="list-style-type: none"> ICES divisions 8.a–b and 8.d (Bay of Biscay) <p>A precautionary approach is implemented for the stock. An interbenchmark was conducted during 2019 and the assessment was upgraded to category 1 (ICES, 2019b). The changes to the model settings reduced the retrospective pattern, but there is still a tendency to overestimate biomass and underestimate fishing mortality. The stock has species-specific management plan and therefore it has been assessed under Category C.</p> <p>Fishery removals of the stock are included in the stock assessment process so the stock PASSES Clause C1.1. Further, the stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point so the stock PASSES Clause C1.2.</p> <p>Consequently, Sardine (<i>Sardina pilchardus</i>) in ICES divisions 8.a–b and 8.d (Bay of Biscay) is APPROVED by the assessors for the production of fishmeal and fish oil under the current Marin Trust v 2.0 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified Bay of Biscay sardine as category C, reference points are defined to assess the stock status relative to.</p> <p>Fishery removals are included in the stock assessment process so the stock PASSES Clause C1.1. The stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point so the stock PASSES Clause C1.2.</p> <p>Therefore, the peer reviewer agrees with the assessor’s determination that the fishery passes both Clauses C1.1 and C1.2, so Bay of Biscay (ICES divisions 8.a–b and 8.d) sardine is thus approved.</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 Redlist 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
Sardine	<i>Sardina pilchardus</i>	ICES in divisions 8.a–b and 8.d (Bay of Biscay)	EU/Common Fisheries Policy and Spain & Portugal management authority	C	LC	NO

¹ <https://www.iucnredlist.org/>

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

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment.

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 may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

Species Name		Sardine (<i>Sardina pilchardus</i>)	
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.	Yes
	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.	Yes
Clause outcome:			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.

Commercial catches (international landings; ages and length frequencies from catch sampling) are included in the stock assessment. Three survey indices: PELGAS (acoustic biomass, 2000-2019), BIOMAN (egg counts, 2000-2019), and DEPM Triennial survey (2011, 2014, 2017) are also used to define the stock status. Age composition in the PELGAS survey is included in the models and Discards and discarding and bycatch are considered negligible therefore they are not included.

Catches in 1000 tonnes by year are shown in the figure below.

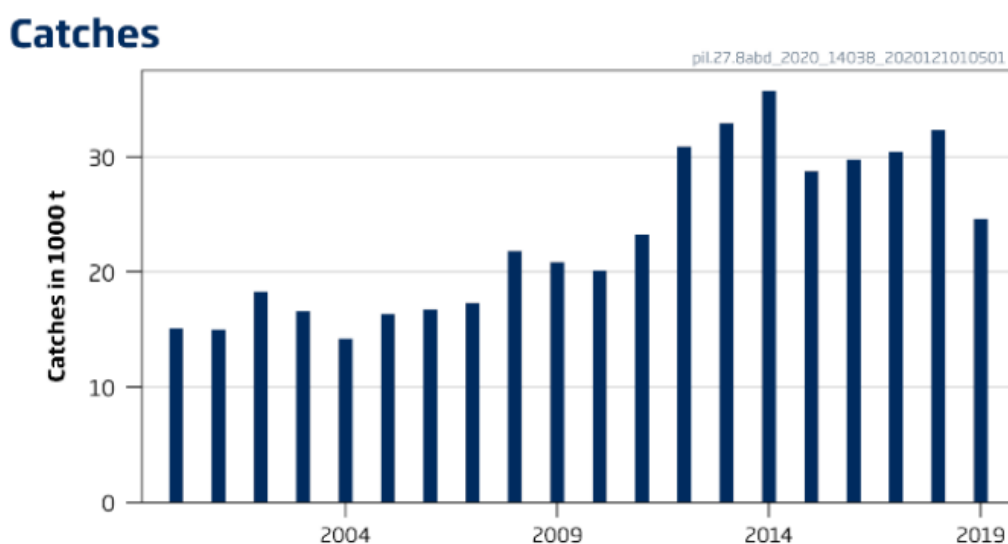


Figure 1. Catches of Sardine in divisions 8.a–b and 8.d. Source: ICES 2020

Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process and it **PASSES** clause C1.1.

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.

The spawning–stock biomass (SSB) has been relatively stable since 2012 and is above MSY Btrigger in 2020. Fishing mortality has been above FMSY since 2015. Recruitment is estimated to be above the average in the time-series in 2020 (Figure 2).

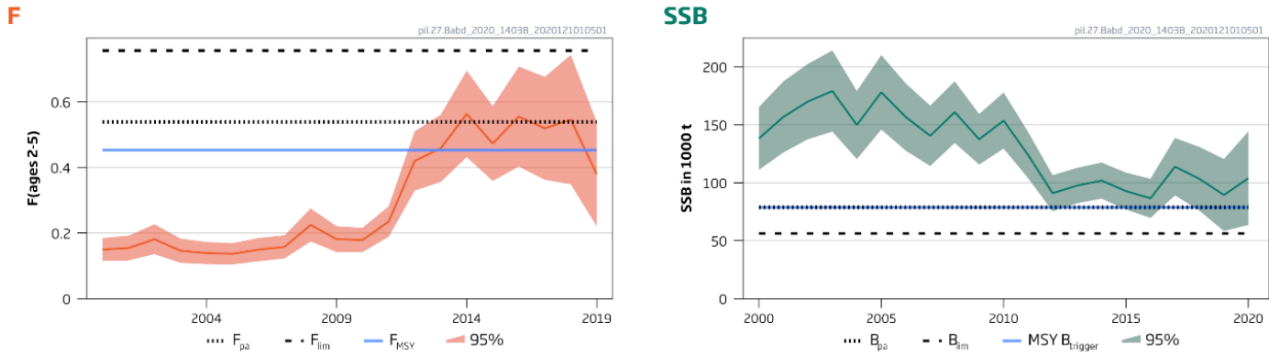


Figure 2. Sardine in divisions 8.a–b and 8.d. Summary of the stock assessment. Left: fishing mortality. Right: SSB. Source: ICES 2020.

ICES assess that fishing pressure on the stock is below FMSY and below Fpa and Flim; spawning-stock size is above MSY Btrigger, Bpa, and Blim.

Table 1. Sardine in divisions 8.a–b and 8.d. State of the stock and fishery relative to reference points. Source: ICES 2020.

	Fishing pressure			Stock size			
		2017	2018	2019	2018	2019	2020
Maximum sustainable yield	F_{MSY}	✘	✘	✔ Below	MSY	✔	✔ Above trigger
Precautionary approach	F_{pa}, F_{lim}	✔	○	✔ Harvested sustainably	B_{pa}, B_{lim}	✔	✔ Full reproductive capacity
Management plan	F_{MGT}	—	—	— Not applicable	B_{MGT}	—	— Not applicable

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy) and it **PASSES** clause C1.2.

References

ICES. 2020. Sardine (*Sardina pilchardus*) in divisions 8.a-b and 8.d (Bay of Biscay). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, pil.27.8abd. <https://doi.org/10.17895/ices.advice.5906>

ICES. 2019. Sardine (*Sardina pilchardus*) in divisions 8.a–b and 8.d (Bay of Biscay). In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, pil.27.8abd. <https://doi.org/10.17895/ices.advice.5764>

Links

MARINTRUST Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01