



RESPONSIBLE
SUPPLY

IFFO RS
Global Standard for Responsible Supply
of Marine Ingredients

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**Global Standard for
Responsible Supply
of Marine Ingredients**
Fishery Assessment
Methodology and
Template Report V2.0



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Fishery Under Assessment	European Sardine <i>Sardina pilchardus</i> Bay of Biscay
Date	March 2020
Assessor	Jim Daly
Stock Pass	ICES 8 a-b, d
Stock Fail	

Application details and summary of the assessment outcome				
Name: Triplenine				
Address:				
Country: Denmark		Zip:		
Tel. No.:		Fax. No.:		
Email address:		Applicant Code:		
Key Contact:		Title:		
Certification Body Details				
Name of Certification Body:		SAI Global Ltd		
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval	Whole fish/ By-product
Jim Daly	Conor Donnelly	0.5	SURV 2	By-product
Assessment Period	2020			

Scope Details	
Management Authority (Country/State)	EU/Common Fisheries Policy
Main Species	European Sardine <i>Sardina pilchardus</i>
Stock:	ICES 8 a-b, d
Fishery Location	Bay of Biscay
Gear Type(s)	All Compliant gears
Outcome of Assessment	
Peer Review Evaluation	
Recommendation	APPROVE

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 does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it 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:

- 1) ICES 8 a-b, d Bay of Biscay

Fishery removals of the stock are considered in the various stock assessment processes so the stock **PASSES** Clause C1.1.

For Sardine in the assessment area the most recent estimated spawning stock biomass (SSB_{2020} 125,498t) is above Blim (56,300t) and removals are not considered to be negligible therefore, the stock **PASSES** Clause C1.2.

In order to be approved, the stock assessed must pass both Clause C1.1 and C1.2; therefore:

- 1) Sardine is **APPROVED** by SAI Global assessors in the assessment area for the production of fishmeal and fish oil under the current IFFO RS v 2.0 by-products standard.

Peer Review Comments

Notes for On-site Auditor

HOW TO COMPLETE THIS ASSESSMENT REPORT

By-products

The process for completing the template for **by-product raw material** is as follows:

1. ALL ASSESSMENTS: Complete the Species Characterisation table with the names of the by-product species and stocks under assessment. The '% landings' column can be left empty; all by-products are considered as Category C and D.
2. IF THERE ARE CATEGORY C BYPRODUCTS UNDER ASSESSMENT: Complete clause C1 for **each** Category C by-product.
3. IF THERE ARE CATEGORY D BYPRODUCTS UNDER ASSESSMENT: Complete Section D.
4. ALL OTHER SECTIONS CAN BE DELETED. Clauses M1 - M3, F1 - F3, and Sections A and B do not need to be completed for a by-product assessment.

By-product approval is awarded on a species-by-species basis. Each by-product species scoring a pass under the appropriate section may be approved against the IFFO RS Standard.

SPECIES CATEGORISATION

The following table should be completed as fully as the available information permits. Any species representing more than 0.1% of the annual catch should be listed, along with an estimate of the

proportion of the catch each species represents. The species should then be divided into Type 1 and Type 2 as follows:

- **Type 1 Species** can be considered the 'target' or 'main' species in the fishery. They make up the bulk of annual landings and are subjected to a detailed assessment.
- **Type 2 Species** can be considered the 'bycatch' or 'minor' species in the fishery. They make up a small proportion of the annual landings and are subjected to relatively high-level assessment.

Type 1 Species must represent 95% of the total annual catch. Type 2 Species may represent a maximum of 5% of the annual catch (see Appendix B).

Species which make up less than 0.1% of landings do not need to be listed (NOTE: ETP species are considered separately). The table should be extended if more space is needed. Discarded species should be included when known.

The 'stock' column should be used to differentiate when there are multiple biological or management stocks of one species captured by the fishery. The 'management' column should be used to indicate whether there is an adequate management regime specifically aimed at the individual species/stock. In some cases, it will be immediately clear whether there is a species-specific management regime in place (for example, if there is an annual TAC). In less clear circumstances, the rule of thumb should be that if the species meets the minimum requirements of clauses A1-A4, an adequate species-specific management regime is in place.

NOTE: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in the CITES appendices, it **cannot** be approved for use as an IFFO RS raw material. This applied to whole fish as well as by-products.

TYPE 1 SPECIES (Representing 95% of the catch or more)

Category A: Species-specific management regime in place.

Category B: No species-specific management regime in place.

TYPE 2 SPECIES (Representing 5% OF THE CATCH OR LESS)

Category C: Species-specific management regime in place.

Category D: No species-specific management regime in place.

Common name	Latin name	Stock	% of landings	Management	Category
Sardine	<i>Sardina pilchardus</i>	ICES 8 a-b, d Bay of Biscay	N/A	EU/Common Fisheries Policy	C

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. 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. A Category C species does not meet the minimum requirements of clause C1 should be re-assessed as a Category D species.

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. 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
C1.1 Evidence This assessment covers Sardine from the ICES 8a, b, d (Figure 1):		

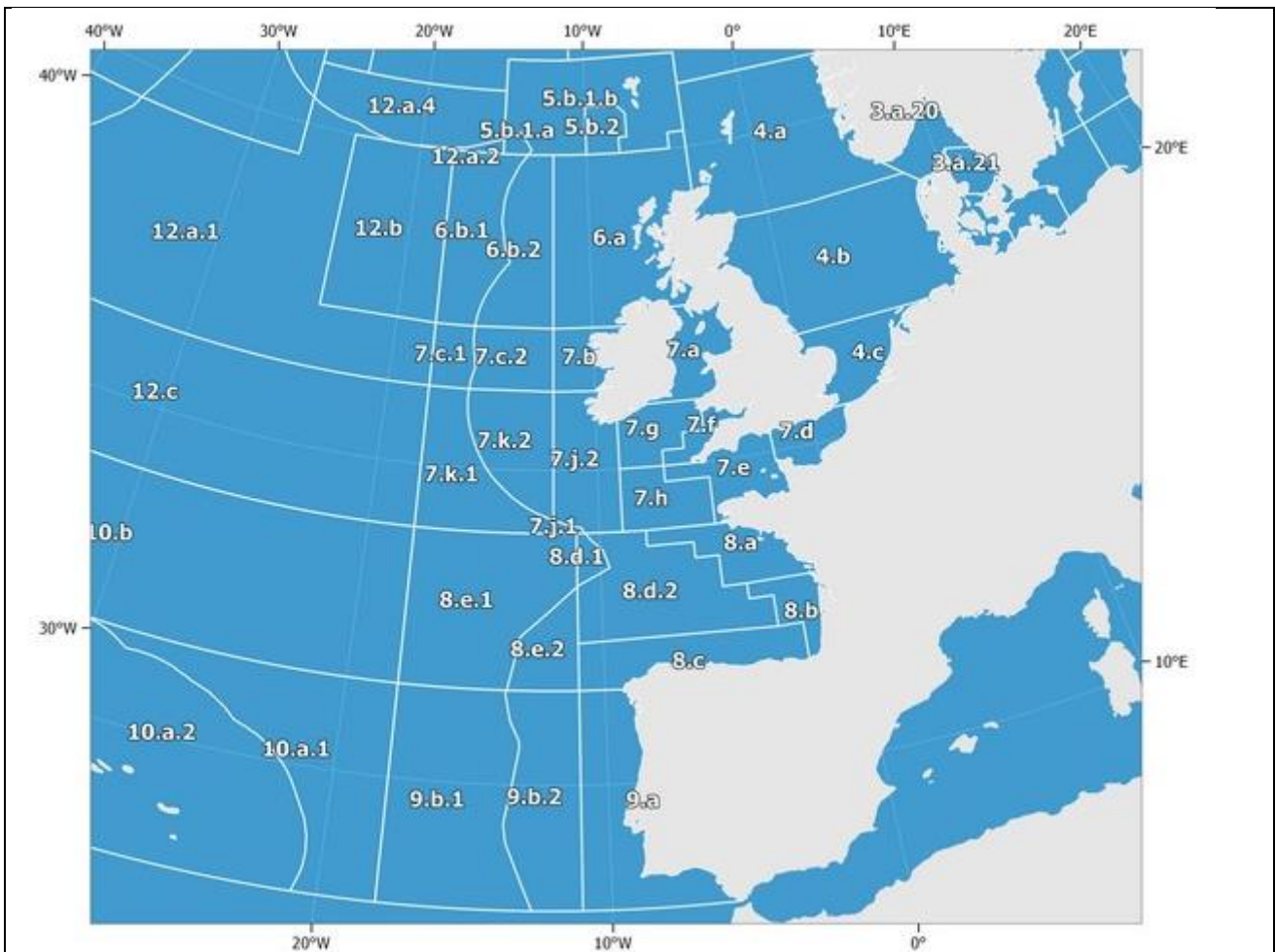


Figure 1: Map of the assessment area (ICES 8a, b, d Bay of Biscay) **R1**

The stock assessment (annual) is an analytical assessment (Stock Synthesis Model 3) that uses catches in both model and forecast. Input data includes data from commercial catches (international landings; ages, length frequencies from catch sampling). Three survey indices are also used, including historical data from PELGAS (acoustic biomass, 2000-2019) surveys.

Discard and bycatch data are not included as they are considered negligible. This stock was last benchmarked in 2019 by WGHANSA (Working Group on Southern Horse Mackerel, Anchovy, and Sardine)

C1.2 Evidence

Spawning-stock biomass (SSB₂₀₂₀ 125,498t) has been relatively stable since 2012 and is above MSY Btrigger (78,700t) and Blim (56,300t) in 2019 (**Figure 2**);

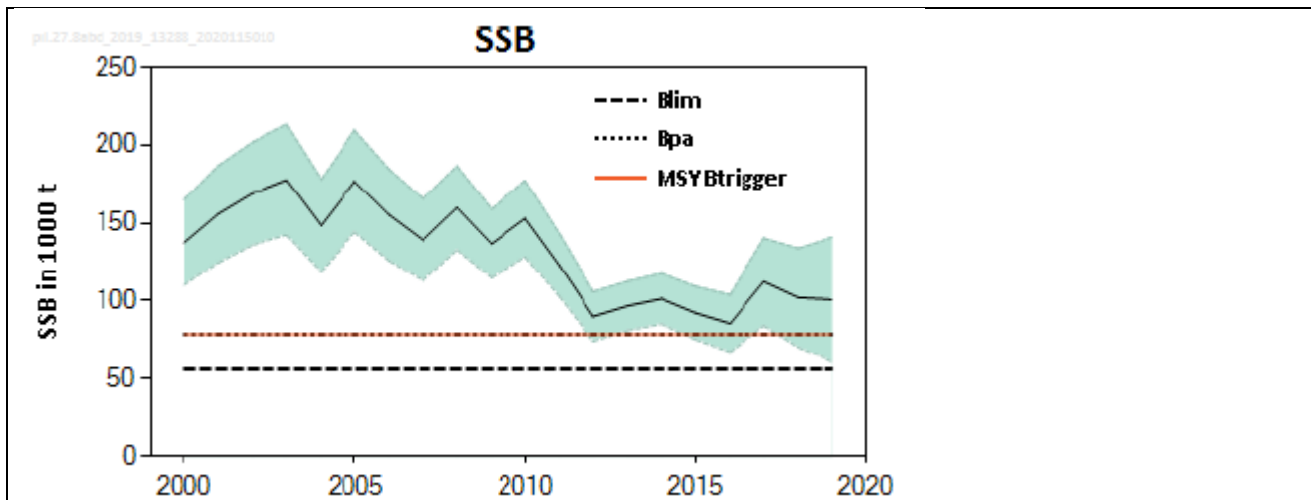


Figure 2: Sardine in divisions 8.a–b and 8.d. SSB are estimated at the beginning of the year. 95% confidence limits are indicated for SSB. **R2**

References

R1 FAO Major Fishing Areas ATLANTIC, NORTHEAST (Major Fishing Area 27)

<http://www.fao.org/fishery/area/Area27/en>

R2 Sardine (*Sardina pilchardus*) in divisions 8.a-b and 8.d (Bay of Biscay)

<http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2019/2019/pil.27.8abd.pdf>

R3 ICES. 2019a. Working Group on Southern Horse Mackerel, Anchovy and Sardine (WGHANSA). ICES Scientific Reports, 1:34. 441 pp. <http://doi.org/10.17895/ices.pub.4983>.

Standard clauses 1.3.2.2