



RESPONSIBLE
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IFFO RS
Global Standard for Responsible Supply
of Marine Ingredients

IFFO RS Limited

T: +44 (0) 2030 539 195
E: Standards@iffors.com
W: www.iffors.com

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



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



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Fishery Under Assessment	Pacific Chub mackerel <i>Scomber japonicus</i> FAO 77 Pacific Eastern Central
Date	January 2020
Assessor	Jim Daly

Application details and summary of the assessment outcome				
Name: Sardinas de Sonora				
Address:				
Country: Mexico		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	Vito Romito	0.5	SURV 2	By-product
Assessment Period	2019			

Scope Details		
Management Authority (Country/State)	Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food SAGARPA	
Main Species	Pacific Chub mackerel <i>Scomber japonicus</i>	
Stock:	FAO 77	
Fishery Location	Pacific Eastern Central	
Gear Type(s)	Purse Seine	
Outcome of Assessment		
Overall Outcomes:	Outcome	Clause(s) failed
Pacific Chub mackerel <i>Scomber japonicus</i>	PASS	NONE
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. Pacific Chub mackerel *Scomber japonicus* does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it appear in CITES appendices; therefore, Pacific Chub mackerel *Scomber japonicus* is eligible for approval for use as IFFO RS by-product raw material.

One stock forms part of this assessment:

1) Pacific Eastern Central

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

For Pacific Chub mackerel the most recent estimated spawning stock biomass (SSB) is above Blim 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) Pacific Chub mackerel 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

Chub mackerel in the Gulf of California is assessed and fishery removals are included in the stock assessment process. Kobe plots show positive results in terms of exploitation and current state of the population, with all years indicating that estimated biomass is above BMSY and average fishing mortality rate remains below FMSY. The Reviewer agrees that Pacific Chub mackerel be approved in the assessment area for the production of fishmeal and fish oil under the current IFFO RS v 2.0 by-products standard.

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
Pacific Chub mackerel	<i>Scomber japonicus</i>	Pacific Eastern Central	N/A	SAGARPA	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		Pacific Chub mackerel <i>Scomber japonicus</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:			See above
C1.1 Evidence			
This assessment includes the area outlined in Figure 1:			

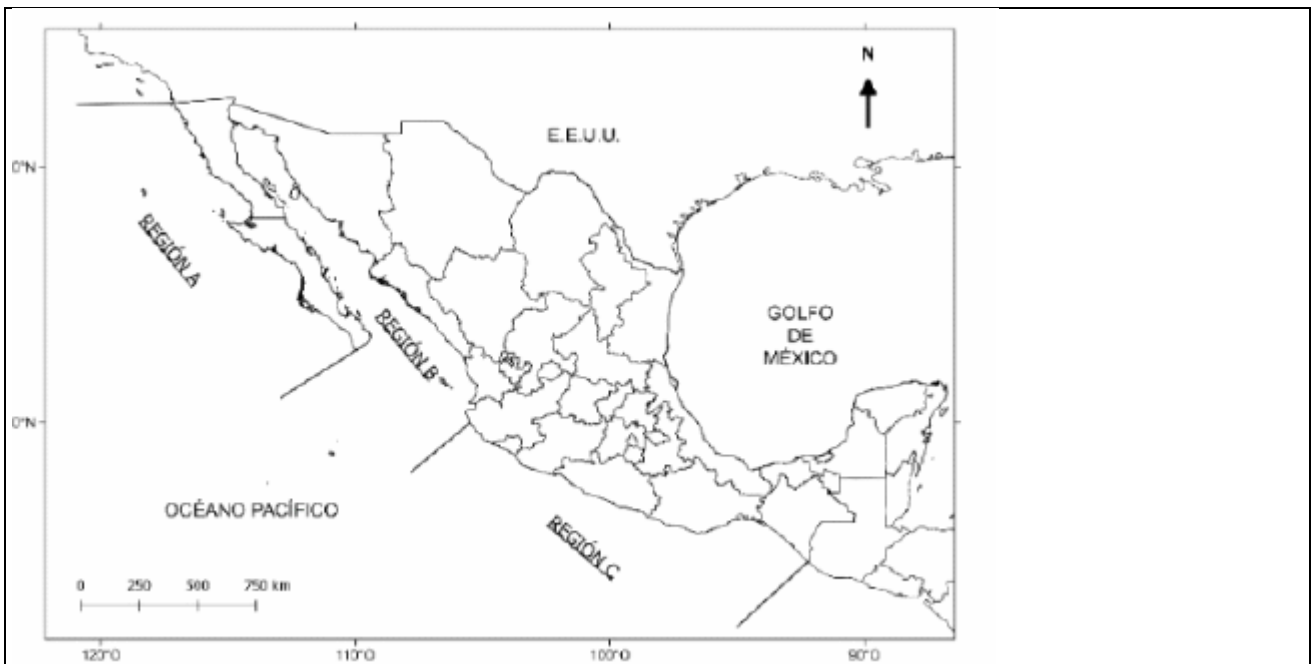


Figure 1: Operating regions for the Mexican small pelagic fleet: Region A: Baja California Region B Gulf and Coastal States Sinaloa-Nayarit Region C North of Jalisco to Chiapas (Border with Guatemala). **R1**

Data on catch and effort is collected from the official 'Aviso de Arribo' or landing notification form provided and collated by regional offices of CONAPESCA (National Commission on Aquaculture and Fisheries). Data are processed and analysed by INAPESCA (National Fisheries Institute) and results presented in official reports of fishery catch and effort.

Chub mackerel has been included in acoustic surveys, but results have not been included in stock assessments for this species. Under the Management Plan for Small Pelagics Pacific Chub mackerel is classified as an "actively" managed species. The control rule for actively managed species uses a harvest rate constrained between 5 and 25% of estimated SSB, over a cut-off of minimum biomass.

C1.2

Evidence

Using a biomass dynamics model Nevarez-Martínez et al. calculated biological reference points for Chub mackerel. The biomass dynamics model pools catch of chub mackerel and indicates that, for the period studies, recorded catches are far below estimated BMSY:

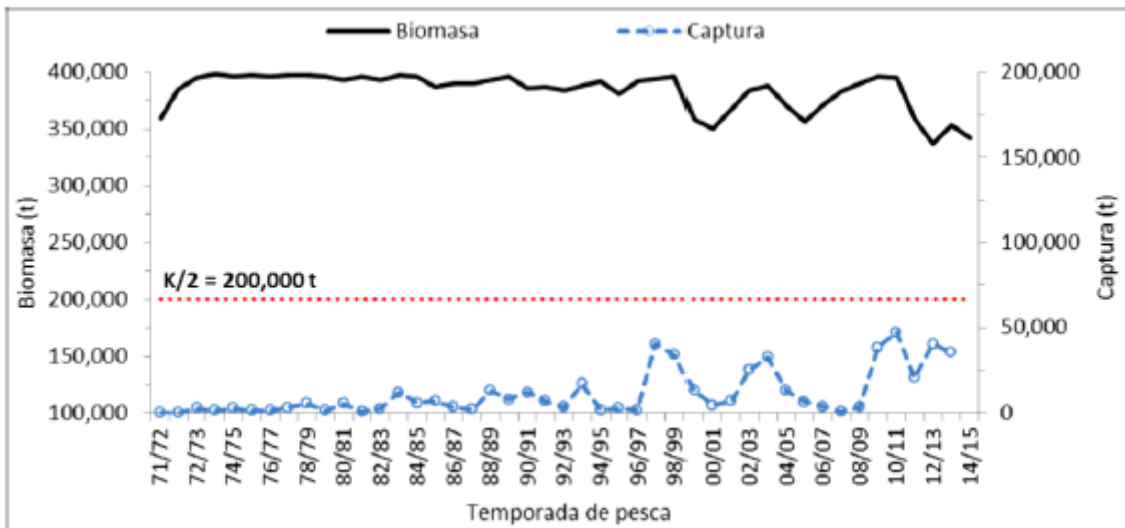


Figure 2 Biomass trajectories of chub mackerel in the Gulf of California. Reproduced from Nevarez-Martinez et al **R2 Blue circles catch data Red line BMSY Black line Biomass**

Kobe plots show positive results in terms of exploitation and current state of the population, with all years indicating that estimated biomass is above BMSY and average fishing mortality rate remains below FMSY:

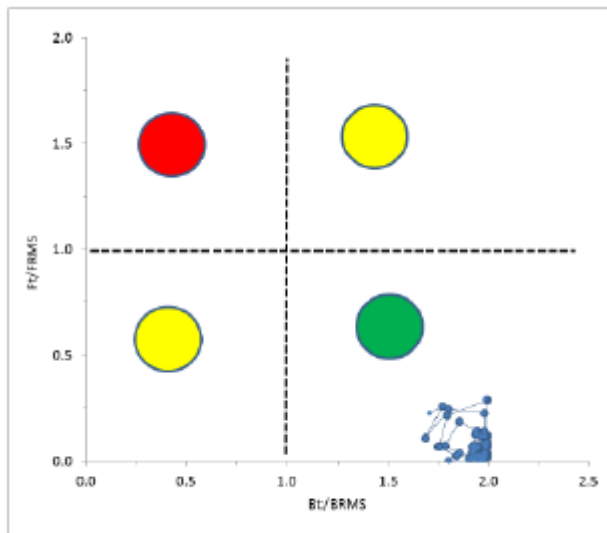


Figure 3: Kobe plots with stock status of mackerel (*Scomber japonicus*) in Gulf of California **R2**

References

R1 NORMA Oficial Mexicana NOM-003-SAG/PESC-2018 http://brioagropecuario.com/wp-content/uploads/2019/03/2019_03_12_MAT_sader.pdf

R2 SCS Global Services (2018): MSC FULL ASSESSMENT

PUBLIC CERTIFICATION REPORT Southern Gulf of California Thread Herring Fishery, Sinaloa & Nayarit, Mexico 264pp <https://fisheries.msc.org/en/fisheries/southern-gulf-of-california-thread-herring/@@assessments>

Standard clauses 1.3.2.

