



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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<b>Fishery Under Assessment</b>	<b>Chub mackerel (<i>Scomber japonicus</i>) FAO 61</b>
<b>Date</b>	<b>June 2019</b>
<b>Assessor</b>	<b>Jim Daly</b>

Application details and summary of the assessment outcome				
<b>Name:</b> Kushiro High-Meal				
<b>Address:</b>				
<b>Country:</b> Japan		<b>Zip:</b>		
<b>Tel. No.:</b>		<b>Fax. No.:</b>		
<b>Email address:</b>		<b>Applicant Code</b>		
<b>Key Contact:</b>		<b>Title:</b>		
Certification Body Details				
<b>Name of Certification Body:</b>		SAI Global Ltd		
Assessor Name	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval	Whole fish/ By-product
Jim Daly	Virginia Polonio	0.5	Initial	By-product
<b>Assessment Period</b>		2018-2019		

Scope Details	
<b>Management Authority (Country/State)</b>	Japan
<b>Main Species</b>	Chub mackerel ( <i>Scomber japonicus</i> )
<b>Fishery Location</b>	FAO 61 Pacific Northwest
<b>Gear Type(s)</b>	Purse seine
Outcome of Assessment	
<b>Overall Outcome</b>	Pass
<b>Clauses Failed</b>	None
<b>Peer Review Evaluation</b>	APPROVE
<b>Recommendation</b>	PASS

Assessment Determination
<p>The Japan stock is assessed as category C, and although information is slightly outdated, there are indications of improvement in the spawning stock biomass (SSB). Fishery removals of the species in the fishery under assessment are included in the stock assessment process. For this stock catches are decreasing due to fishing effort also decreasing; this is allowing stock biomass recovery. The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy),</p> <p>The assessment team recommends the approval of this by-product against IFFO –RS v 2.0 standard.</p>
Peer Review Comments
Notes for On-site Auditor

Note: This table should be completed for whole fish assessments only.

### Species-Specific Results

Category	Species	% landings	Outcome (Pass/Fail)	
Category A			A1	
			A2	
			A3	
			A4	
Category B				
Category C	Chub mackerel	<i>Scomber japonicus</i>	PASS	

[List all Category A and B species. List approximate total %age of landings which are Category C and D species; these do not need to be individually named here]

## HOW TO COMPLETE THIS ASSESSMENT REPORT

This assessment template uses a modular approach to assessing fisheries against the IFFO RS standard.

### Whole Fish

The process for completing the template for a **whole fish** assessment is as follows:

1. ALL ASSESSMENTS: Complete the Species Characterisation table, to determine which categories of species are present in the fishery.
2. ALL ASSESSMENTS: Complete clauses M1, M2, M3: Management.
3. IF THERE ARE CATEGORY A SPECIES IN THE FISHERY: Complete clauses A1, A2, A3, A4 for **each** Category A species.
4. IF THERE ARE CATEGORY B SPECIES IN THE FISHERY: Complete the Section B risk assessment for **each** Category B species.
5. IF THERE ARE CATEGORY C SPECIES IN THE FISHERY: Complete clause C1 for **each** Category C species.
6. IF THERE ARE CATEGORY D SPECIES IN THE FISHERY: Complete Section D.
7. ALL ASSESSMENTS: Complete clauses F1, F2, F3: Further Impacts.

A fishery must score a pass in **all applicable clauses** before approval may be recommended. To achieve a pass in a clause, the fishery/species must meet **all** of the minimum requirements.

### 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
Chub mackerel,	<i>Scomber japonicus</i>	Japan	NA	Japan	C

## CATEGORY C SPECIES

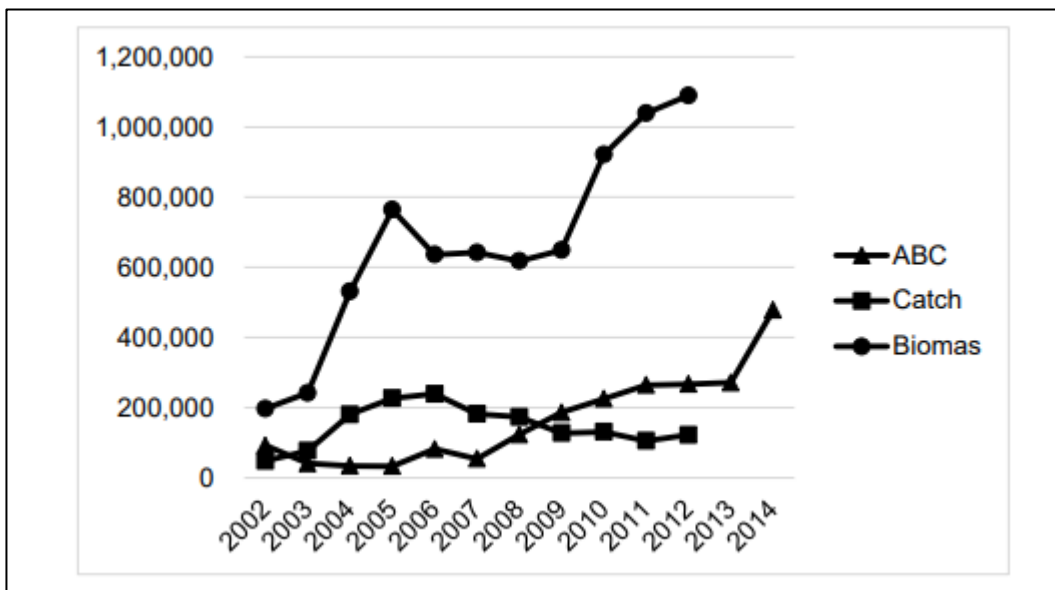
In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment. In a by-product assessment, 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		Chub Mackerel - Japan Stock FAO 61	
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
			<b>Clause outcome: Pass</b>
<b>Evidence</b>			
<b>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.</b>			
Fishery removals of chub mackerel are included in the stock assessment process in Japan. The stock assessment is split into two different stocks units: Japan and the Tsushima Current. Data are reported to FPA and surveys conducted annually. Chub Mackerel is part of 8 pelagic species assessed in a multi-species management system controlled by TAC therefore total catches are reported and considered in the studies. Consequently, the assessment team concludes that C1.1 is met.			
<b>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.</b>			
Stock biomass decreased from 4-6 million tons during the early and mid-1970's to less than one million tons in the 1990's. This decline was probably caused from overfishing and decreased reproductive success corresponding to regime shifts in the late 1970's and 1980's.			
The management system decided to keep the spawning stock biomass (SSB) above 0.45 million tons, because 1) no recruitment failures were observed above this level and 2) this SSB can be attained by preserving dominant year classes until their maturation (age-3).			
Figure 1 shows current status of the biomass, TAC and the reported catch. The catch is decreasing due to fishing effort also decreasing and that is allowing stock biomass recovery.			

The biomass of the chub mackerel Pacific stock is slightly higher than Blimit, and 80% of this stock is harvested by the purse seine fishery in the North Pacific region. This stock has been managed under the TAC system and a strict licensing system. The biomass of pelagic species including the chub mackerel Pacific stock has fluctuated over time.

There is a new multi-species system that should include current TAC system and licensing system, and the TAC for chub mackerel Pacific stock should be a separate TAC, instead of a mackerel species' collective TAC. However, the information available state that the trends in biomass index are increasing and therefore the assessment team concludes that C1.2 is met.



**Figure 1.** ABC, total catch and biomass trends over the years of *Scomber Japonicus* stock in Pacific waters. Source: FPA R1

**References**

**R1** Fisheries Research Agency Japan (2013). The population sizes of the Pacific stocks of Japanese sardine (*Sardinops melanostictus*) and chub mackerel (*Scomber japonicus*).

<https://www.fra.affrc.go.jp/english/press/2013/20130625.html>

**R2** Fishsource Chub Mackerel: Japanese Pacific Coast:

[https://www.fishsource.org/stock\\_page/759](https://www.fishsource.org/stock_page/759)

**R3** Wataru Tanoue. Thesis. Japan's Total Allowable Catch Systems in Fishery Resource Management.

Master Thesis of Marine Affairs, School of Marine and Environmental Affairs, University of Washington. 128 pp.

[https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/34012/Tanoue\\_washington\\_02500\\_14735.pdf?sequence=1](https://digital.lib.washington.edu/researchworks/bitstream/handle/1773/34012/Tanoue_washington_02500_14735.pdf?sequence=1)

Standard clauses 1.3.2.2