



BYPRODUCT FISHERY ASSESSMENT TEMPLATE REPORT

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TABLE 1 APPLICATION DETAILS AND SUMMARY OF THE ASSESSMENT OUTCOME

	Species:South Pacific Hake (Merlucc gayi) Ecuador		
	Geographical area: FAO Area 87 Pacific Southea		
Fishery Under Assessment	Country of origin of the product:	Ecuador	
	Stock:	South Pacific hake	
Date	February 2021		
Report Code	230-2020		
Assessor	Virginia Polonio		
Country of origin of the product - PASS	Ecuador		
Country of origin of the product - FAIL	NA		

NI A L		ssessment outcome		
Name: Productos pesqu	ueros S.A Produpes.			
Address:				
Country: Ecuador		Zip:		
Tel. No.:		Fax. No.:		
Email address:		Applicant Code:		
Key Contact:		Title:		
Certification Body Details	5			
Name of Certification	ו Body:	Global Trust Certific	ation	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval	
Virginia Polonio	Geraldine Criquet	0.5	Surveillance 1	
Assessment Period	February 2021			

Scope Details				
Main Species	South Pacific Hake (<i>Merluccius gayi</i>)			
Stock	South Pacific hake			
Fishery Location	FAO 87 Pacific Southeast			
Management Authority (Country/ State)	Peru and Ecuador			
Gear Type(s)	Purse seine			
Outcome of Assessment				
Peer Review Evaluation	Agree with the assessor's recommendation			
Recommendation	APPROVED			





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 MARINTRUST raw material. South Pacific hake (*Merluccius gayi*) does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it appear in CITES appendices; therefore, South Pacific hake (*Merluccius gayi*) is eligible for approval for use as MARINTRUST byproduct raw material.

One stock forms part of this assessment, South Pacific hake (*Merluccius gayi*) latitudinal distribution extends from northern Ecuador (010N) to central Peru (140S). Peru's IMARPE undertake annual stock assessments which include the shared stock with Ecuador. There are specific management measures and reference points are defined for the stock. Therefore, the species has been assessed under Category C.

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

The most recent estimated spawning stock biomass (SSB) is above Blim and 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, South Pacific hake (*Merluccius gayi*) in FAO 87 is **APPROVED** by the assessor for the production of fishmeal and fish oil under the current MARINTRUST v 2.0 by-products standard.

Peer Review Comments

The assessor correctly classified South Pacific hake stock as category C, the stock is managed and reference points are defined to assess the stock status against.

Fishery removals from the stock are considered in the stock assessment process. The most recent stock assessment shows that the stock is considered to have a biomass above the limit reference point.

South Pacific hake stock passes both C1.1 and C1.2 and is therefore approved.

Notes for On-site Auditor



SPECIES CATEGORISATION

<u>NB</u>: 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
South Pacific Hake	Merluccius gayi	South Pacific hake FAO 87	IMARPE (Peru)/ PRODUCE (Ecuador)	С	LC	No

¹ <u>https://www.iucnredlist.org/</u>

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



CATEGORY C SPECIES

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. 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.

Spe	Species Name South Pacific Hake, Merluccius gayi			
C1	Category C Stock Status - Minimum Requirements			
CI	C1.1		the fishery under assessment are included in the stock dered by scientific authorities to be negligible.	PASS
1	C1.2	· · · · · ·	ost recent stock assessment, to have a biomass above the limit novals by the fishery under assessment are considered by ble.	PASS
			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.

Two annual survey cruises are conducted solely by IMARPE, and at least two complementary surveys are run with the help of trawl fleets for verification purposes. IMARPE uses swept area and acoustic methods for stock assessments. For the 2019 assessment the eXtended Survivor Analysis (XSA, based on VPA) was the principal method used to assess the stock through modelling. Data on capture by age and number of individuals (by year) was used to generate abundance indices.

Therefore, the 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 model applied in the last stock of 2020 was XSA. The estimated average biomass through the application by 2020 was 426, 565 tonnes, of which 375 264 tonnes (age group 2+) corresponds to the exploitable biomass. The 2020 stock assessment has shown lightly differences related to the previous stock assessment from 2019 due to the mean biomass included in recent years, with a slightly lower value estimated for the 2018, but within the confidence interval of the estimated average biomass (Figure 1).

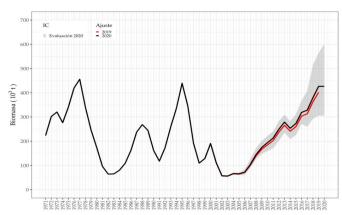


Figure 1. Estimation of SSB performed by XSA model for 2020 stock assessment for South pacific hake. Source: OFICIO N° 492-2020-IMARPE/PE.

The exploitation rate defined to ensure the level of SSB within the reference points was calculated between 0.15 and 0.18 (figure 2)



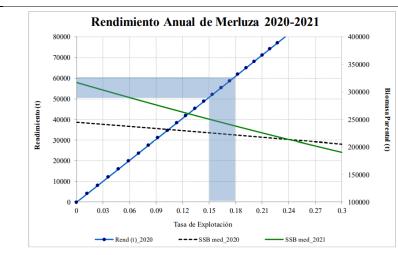


Figure 2. Exploitation rate projections for year 2020-2021 for South pacific hake. Source: OFICIO N° 492-2020-IMARPE/PE

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

References

OFICIO N° 492-2020-IMARPE/PE. Informe "Análisis del estado poblacional de la merluza peruana (*Merluccius gayi peruanus*) y proyecciones de pesca julio 2020-junio 2021".

http://www.imarpe.gob.pe/imarpe/servicios/informes

https://www.fishsource.org/stock_page/851

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

Fishery Assessment TEMPLATE April 2020



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.



Appendix B: From MARINTRUST Standard V2.0 Annex 2: Fish By-product Assessment Methodology

Definition of a Fish By-product

A by-product is a useful and marketable product that is not the primary product being produced. A marketable by-product is from a process that can technically not be avoided. This includes materials that may be traditionally defined as waste such as industrial scrap that is subsequently used as a raw material in a different manufacturing process.

"Fish By-products" refers to commodities that are manufactured from fish, including shellfish, and crustaceans in a form that is different than conventional foods and which are intended for human consumption (either directly or as a food ingredient). Fish By-products include, but are not limited to:

- By-products derived from fish, including fish cartilage, fish oils, and fish proteins; and
- By-products derived from the carapaces of crustaceans; but do not include marine plants or marine plant products.

(Canadian Food Inspection Agency Definition)

In addition, a whole fish which is rejected on an intrinsic quality ground e.g. does not meet the specification for human consumption due to physical damage or the quality is substandard. These whole fish shall in these cases be classified as a by-product from the human consumption fishery, and can be used for marine ingredients production.

A whole catch of fish that is rejected by a fish processing factory on economic grounds is not considered to be a fish by-product. This fish can only be used for marine ingredients production if the fishery has been assessed and approved under the requirements of the IFFO Responsible Sourcing Standard.

Why utilise Fish By-products?

FAO Code of Conduct for Responsible Fisheries

General Principles Article 6

6.7 The harvesting, handling, processing and distribution of fish and fishery products should be carried out in a manner which will maintain the nutritional value, quality and safety of the products, reduce waste and minimize negative impacts on the environment.

Responsible fish utilisation Article 11.1

11.1.8 States should encourage those involved in fish processing, distribution and marketing to reduce post-harvest losses and waste.

Benefits of Including Fish By-Products in the MARINTRUST Standard:

1. Improved fish resource utilisation

- 2. Reduction in waste for nutritional value
- 3. 35% of fish by-products are currently used to make quality fishmeal and oil
- 4. Excellent Economic return
- 5. Better compliance with FAO Code of Conduct for Responsible Fisheries

What Fish By-products cannot be used?



1. IUCN

Fishery By-products shall Not be taken from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for certain categories;

- 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.

Fish By-product material may be used from the vulnerable category, but it shall incur a fishery surveillance conducted by the certification body prior to it being included in the scope of this standard.

• VULNERABLE (VU) facing a high risk of extinction in the wild.

The Fish By-product material from these species will be acceptable for use in the scope of this standard;

- 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.

Fish By-product material may be used from the following category, but it shall incur a fishery surveillance prior to it being included in the scope of this standard;

• DATA DEFICIENT (DD) and NOT EVALUATED (NE)

The fishery surveillance conducted by the certification body will review the following areas:

Stock Assessment

- From a recognised Institution
- Fisheries are recognised as legal
- Fisheries do not contradict scientific opinion

2. FAO Code of Conduct for Responsible Fisheries

In addition the Fish By-products shall not come from fisheries that do not comply with the following criteria;

1. Fisheries should prohibit dynamiting, poisoning and other comparable destructive fishing practices.

2. Fishery material shall not be from IUU fishing activity nor sourced from vessels officially listed as engaging in illegal, unreported and unregulated (IUU) fishing activity.

Sources of Information

- **1.** Food Standards Agency
- 2. Canadian Food Inspection Agency
- 3. DEFRA
- 4. GAA Feed mill BAP standard
- 5. EU Commission
- 6. IUCN