



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	South Pacific Hake (<i>Merluccius gayi</i>)
	Geographical area:	FAO Area 87 Pacific Southeast
	Country of origin of the product:	Ecuador
	Stock:	South Pacific hake
Date	December 2021	
Report Code	BP250	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Ecuador	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name: Productos pesqueros S.A Produpes.			
Address:			
Country: Ecuador		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	Vito Romito	0.5	Surveillance 2
Assessment Period	To December 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	Approved
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 MARINTRUST raw material. South Pacific hake (<i>Merluccius gayi</i>) does not appear as Endangered or Critically Endangered on IUCN’s Red List, nor does it appear in CITES appendices; therefore, South Pacific hake is eligible for approval for use as MARINTRUST byproduct raw material.</p> <p>One stock forms part of this assessment. South Pacific hake (<i>Merluccius gayi</i>) 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.</p> <p>Fishery removals of the stock is considered in the various stock assessment processes so the stock PASSES Clause C1.1.</p> <p>The most recent estimated spawning stock biomass (SSB) is above Blim and therefore, the stock PASSES Clause C1.2.</p> <p>In order to be approved, the stock assessed must pass both Clause C1.1 and C1.2; therefore, South Pacific hake (<i>Merluccius gayi</i>) 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.</p>
Fishery Assessment Peer Review Comments
<p>Pacific hake has been correctly assessed under clause C. Stock removals are clearly taken into account in the stock assessment process. Estimation of spawning stock biomass performed by XSA model as part of the 2020 stock assessment for South pacific hake indicated that the stock is above Blim and at the highest historical point. Accordingly, the stock passes both Clause C1.1 and C1.2; therefore, South Pacific hake (<i>Merluccius gayi</i>) in FAO 87 is fit to be approved for the production of fishmeal and fish oil under the current MARINTRUST v 2.0 by-products standard.</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 Red list 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
South Pacific Hake	<i>Merluccius gayi</i>	South Pacific hake FAO 87	IMARPE (Peru)/ PRODUCE (Ecuador)	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 should be assessed as a Category D species instead.

Species Name		South Pacific Hake, <i>Merluccius gayi</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
<p>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.</p> <p>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. However last year due to COVID-19 the expedition could not take place and the best data available have been used to estimate the biomass for this stock. IMARPE uses swept area and acoustic methods for stock assessments. For the 2021 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.</p> <p>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</p>			
<p>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.</p> <p>The model applied in the last stock of 2021 was XSA. The estimated average biomass through the application by 2021 was set up 447,829 t, of which 398,368 t tonnes (age group 2+) corresponds to the exploitable biomass. (Figure 1).</p>			

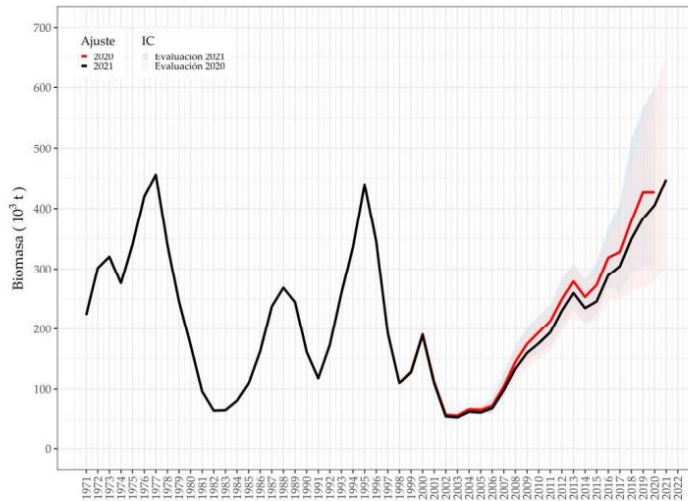


Figura 4. Biomasa media (toneladas) de merluza estimada por el XSA

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

As in previous stock assessment, the exploitation rate defined to ensure the level of SSB within the reference points was calculated between 0.15 and 0.18 (figure 2)

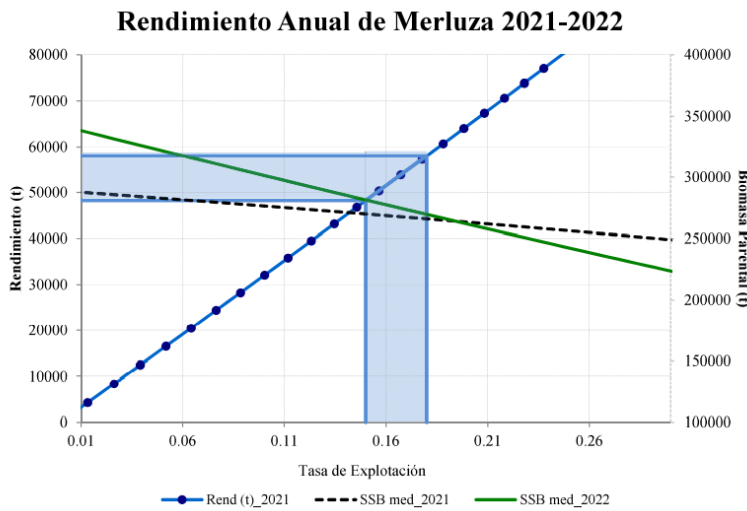


Figure 2. Exploitation rate projections for year 2021-2022 for South Pacific hake. Source: OFICIO N° 547-2021-IMARPE/PCD

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 2021-2022”.
<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