



MarinTrust Standard V2

By-product Fishery Assessment *Yellowfin tuna (Thunnus albacares) in FAO 51*

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Yellowfin tuna (<i>Thunnus albacares</i>)
	Geographical area:	FAO area 51, western Indian Ocean
	Country of origin of the product:	Ecuador (flag state(s): Spain)
	Stock:	Yellowfin tuna in the Indian Ocean
Date	8 June 2023	
Report Code	ECU16	
Assessor	Matthew Jew	
Country of origin of the product - PASS	Ecuador (flag state(s): Spain)	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): Negocios Industriales Real Nirsa SA			
Country: Ecuador			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Matthew Jew	Léa Lebechnech	0.5	Initial
Assessment Period	Up to June 2023		

Scope Details	
Main Species	Yellowfin tuna (<i>Thunnus albacares</i>)
Stock	Yellowfin tuna in the Indian Ocean
Fishery Location	FAO area 51, western Indian Ocean
Management Authority (Country/ State)	IOTC
Gear Type(s)	Longline, baitboat, purse seine
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor's determination
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 Marin trust raw material. Yellowfin tuna (<i>Thunnus albacares</i>) does not appear as Endangered or Critically Endangered on IUCN’s Red List, and does not appear in CITES appendices; therefore, <i>Thunnus albacares</i> is eligible for approval for use as Marin trust by-product raw material.</p> <p>The most recent stock assessment for Indian Ocean yellowfin tuna was conducted in 2021. The assessment considers yellowfin tuna in the Indian Ocean (which includes FAO Area 51 & 57) to be a single stock and this is the only stock under assessment. The stock is subject to a specific management regime, therefore it was assessed under Category C.</p> <p>Fishery removals are included in the stock assessment and it PASSES Clause C1.1. The stock is considered, in its most recent stock assessment, to have biomass above the limit reference point, it PASSES Clause C1.2.</p> <p>Therefore, yellowfin tuna in the Atlantic Ocean is APPROVED for the production of fishmeal and fish oil under the current MarinTrust v2.0 by-products.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified the Indian Ocean yellowfin tuna as category C, as the stock is managed and reference points are defined to assess the stock status against.</p> <p>Fishery removals from the stock are considered in the stock assessment process, and the most recent stock assessment shows that the stock is considered to have a biomass well above the limit reference point: the fishery passes both clauses C1.1 and C1.2.</p> <p>Therefore the Indian Ocean yellowfin tuna is APPROVED for the production of fishmeal and fish oil under the current MarinTrust V2.0 by-products standards.</p>
Notes for On-site Auditor
<p>N/A</p>

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 a 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
Yellowfin tuna	<i>Thunnus albacares</i>	Indian Ocean yellowfin tuna	IOTC	C	LC	No

¹ <https://www.iucnredlist.org/>

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

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 should be assessed as a Category D species instead.

Species Name		Yellowfin tuna (<i>Thunnus albacares</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**

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.

Fishery removals of the species in the fishery under assessment are included in the stock assessment process via Indian Ocean Tuna Commission (IOTC) processes. The stock was last assessed in 2021 and used a Stock Synthesis (SS3) model which incorporates catch, size frequency, tagging, and CPUE indices in the model and forecast (IOTC, 2022). The total catch series is shown in Figure 1 below.

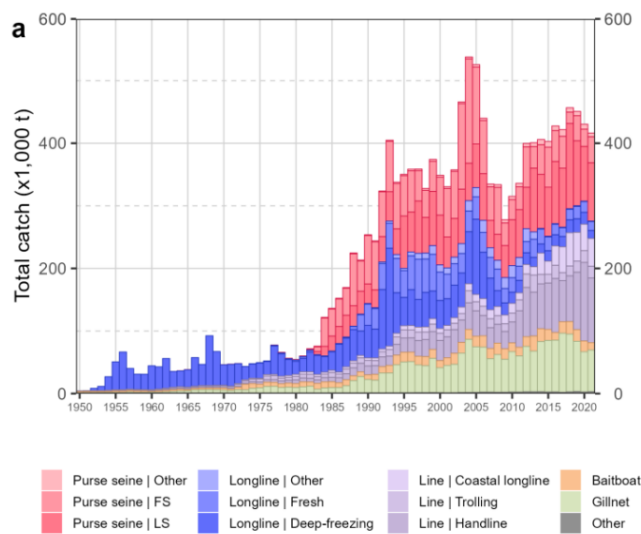


Figure 1. Yellowfin tuna total catch 1950 – 2021 by main fishing gear group. Source: IOTC 2022.

Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process and therefore the stock 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.

Resolution 15/10 was agreed to which defined interim target and limit reference points for the stock. The most current estimates for fishing and biomass are beyond the interim target reference points. 2020 fishing mortality is considered to be 32% above the interim target reference point of F_{MSY} and below the interim limit reference point of $1.4 * F_{MSY}$ (IOTC, 2021; Figure 2). 2020

spawning biomass is considered to be 13% below the interim target reference point of SB_{MSY} and above the interim limit reference point of $0.4 \cdot SB_{MSY}$ (IOTC, 2022; Figure 2).

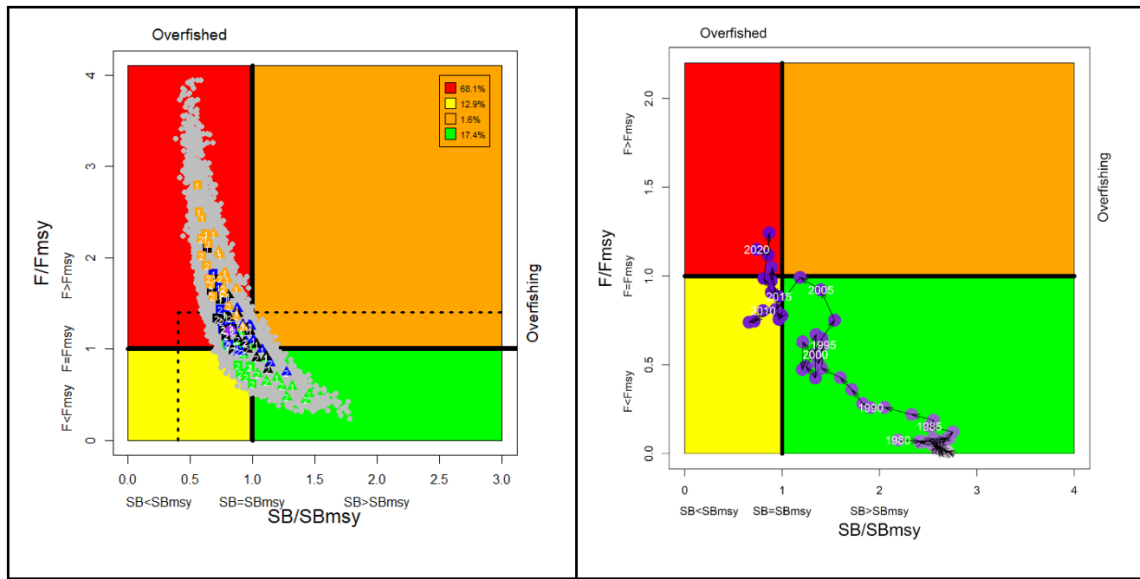


Figure 2. Yellowfin tuna SS3 Kobe plot. Left: Stock status trajectories of B/B_{MSY} and F/F_{MSY} . Purple dot represents the base model and grey dots represent uncertainty from individual models. Colored symbols represent maximum posterior density estimates from individual models. Right: Stock trajectory from the base model.

Source: IOTC, 2022.

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

IOTC. 2022. Executive Summary: Yellowfin Tuna (2022). Indian Ocean Tuna Commission and the Food and Agriculture Organization of the United Nations: https://iotc.org/sites/default/files/content/Stock_status/2022/Yellowfin2022E.pdf

Links

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