MarinTrust Standard V2

By-product Fishery Assessment

Yellowfin tuna (Thunnus albacares) in FAO 51 & 57, Indian Ocean

MarinTrust Programme
Unit C, Printworks
22 Amelia Street
London
SE17 3BZ
E: standards@marin-trust.com
T: +44 2039 780 819

Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Yellowfin tuna (*Thunnus albacares*)
	Geographical area:	FAO 51 & 57, Indian Ocean
	Country of origin of the product:	Seychelles (flag state(s): Seychelles, South Africa)
	Stock:	Indian Ocean yellowfin tuna
Date	8 August 2023	
Report Code	USA13	
Assessor	Matthew Jew	
Country of origin of the product - PASS	Seychelles (flag state(s): Seychelles, South Africa)	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): The Scoular Company - Indian Ocean Tuna Ltd (ID preserved)			
Country: USA			
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	Ivan Mateo	0.5	Surveillance 1
Assessment Period	Up to August 2023		

Scope Details	
Main Species	Yellowfin tuna (*Thunnus albacares*)
Stock	Indian Ocean yellowfin tuna
Fishery Location	FAO 51 & 57, Indian Ocean
Management Authority (Country/ State)	Indian Ocean Tuna Commission (IOTC)
Gear Type(s)	Longline, baitboat, purse seine
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's assessment
Recommendation	APPROVED

Table 2. Assessment Determination

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 Marin trust raw material. Yellowfin tuna (*Thunnus albacares*) does not appear as Endangered or Critically Endangered on IUCN's Red List, and does not appear in CITES appendices; therefore, *Thunnus albacares* is eligible for approval for use as Marin trust by-product raw material. 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. Fishery removals are included in the stock assessment and it PASSES Clause C1.1. In addition, the most recent stock assessment shows the biomass to be above the interim limit reference point of 0.4*SBMSY. Thus, the stock is considered, in its most recent stock assessment, to have biomass above the limit reference point, it PASSES Clause C1.2. Therefore, yellowfin tuna in the Atlantic Ocean is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products.
Fishery Assessment Peer Review Comments
The assessor correctly classified yellowfin tuna in the Atlantic Ocean in 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 well above the limit reference point. Therefore, yellowfin tuna in the Atlantic Ocean passes both C1.1 and C1.2 and therefore yellowfin tuna in the Atlantic Ocean is approved
Notes for On-site Auditor
N/A

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]
Yellowfin tuna	*Thunnus albacares*	Indian Ocean yellowfin tuna	IOTC	C	LC	No

[1] https://www.iucnredlist.org/species/21857/46624561
[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 (*Thunnus albacares*)**
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.

According to UNCLOS (1982) which has been ratified by Indonesia through Act No. 17 Year 1985, highly migratory species are managed by international or regional agreement, in this case is tuna Regional Fisheries Management Organization (tRFMO). The development of harvest strategies for Yellowfin tuna is consistent with Indonesia's rights and obligations as a member of the Indian Ocean Tuna Commission (IOTC).

The stock assessment conducted by IOTC takes all fishery removals into account. The most recent assessment was conducted in 2021, using data from 1950-2020 and it was based on the model developed in 2018 with a series of revisions that were noted during the Working Party on Tropical Tunas - WPTT in 2018, 2019 and 2020 (IOTC, 2022). In the most recent session of IOTC - WPTT (May-June 2023), the Commission noted the Terms of Reference and Workplan endorsed by the Scientific Committee for an external Peer review process for the yellowfin tuna stock assessment [IOTC–WPTT25(DP), 2023].

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.

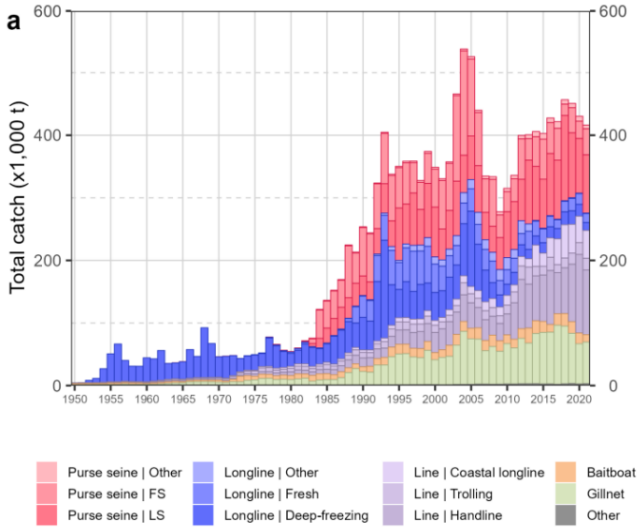

Figure 1. Yellowfin tuna total catch 1950 – 2021 by main fishing gear group. Source: IOTC 2022.

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 $0.4*SB_{MSY}$ (IOTC, 2022; Figure 2).

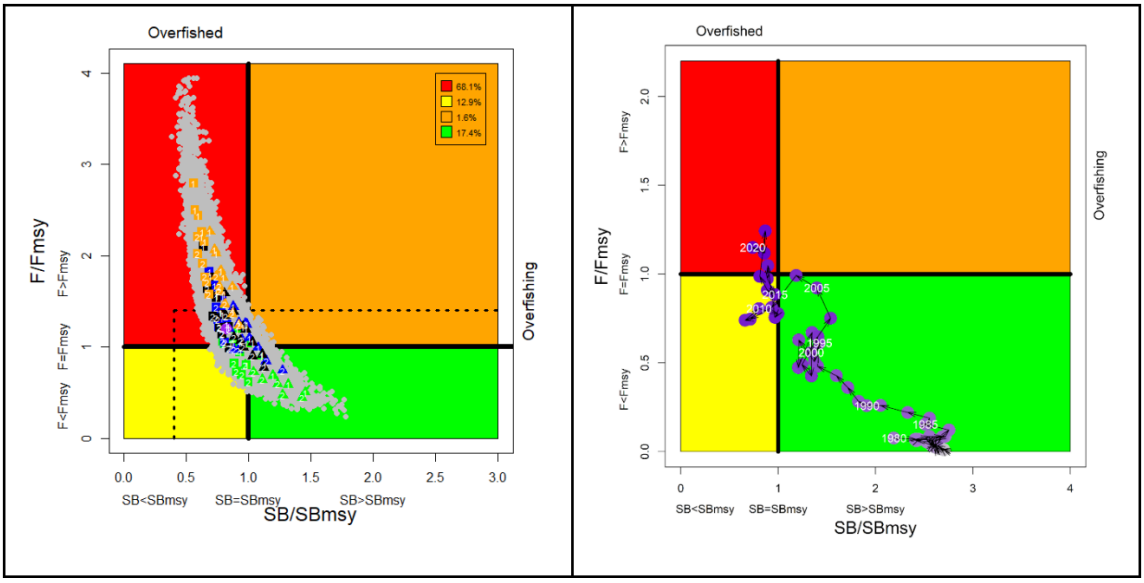

Figure 2. Yellowfin tuna SS3 Kobe plot. Left: Stock status trajectories of B/B_{MSY} and F/F_{MSY}. Purple dot represents the base model and grey dots represent uncertainty from individual models. Colored symbols represent maximum posterior density estimates from individuals models. Right: Stock trajectory from the base model.
Source: IOTC, 2022.

In response to Indian Ocean yellowfin tuna falling below the target reference point, the IOTC has put in place an interim plan for rebuilding the stock (IOTC, 2021). The rebuilding plan limits and reduces total catch by all member states, requiring a 21% reduction in total catch relative to 2014 from most members. The plan also requires member states to reduce the efficiency of fishing effort by phasing out supply vessels and gillnet gears. IOTC (2022), revealed catches in 2021 reduced by 3% compared to the 2020 level.

The Indonesian fisheries ministry published IN June 2023 its harvest strategy paper showing that it will progressively cut its tuna catch volume by 10% of the 2021 level over the course of three years (KKP, 2023).

During most recent session of IOTC-WPTT (May-June 2023), the Scientific Committee pointed that "*some of the fisheries subject to catch reductions have achieved a decrease in catches in 2020 in accordance with the levels of reductions specified in the Resolution; however, these reductions were offset by increases in the catches of yellowfin tuna by some CPCs, including some that were subject to limitations*" [IOTC–WPTT25(DP), 2023]. The Commission noted that different fishing gears and fleets have differing impacts on the yellowfin tuna population and requested a fisheries impact assessment to determine the individual gear/fleet effects on the yellowfin tuna stock status, and productivity.

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

IOTC–WPTT25(DP). 2023. Report of the 25th Session of the IOTC Working Party on Tropical Tunas, Data Preparatory Meeting. Online, 31-May – 02 June 2023. IOTC–2023–WPTT25(DP)–R[E]: 24 pp. https://iotc.org/documents/WPTT/2501/RE

KKP. 2023. Strategi Permanfaatan Perikanan Tuna Tropis di Perairan Kepulauan Indonesia. Kementerian Kelautan Dan Perikanan. https://drive.google.com/file/d/1p_ptn_efMuiYMGRGdJ33U7o-7kfDxMTw/view

IOTC. 2021. Compendium of Active Conservation and Management Measures for the Indian Ocean Tuna Commission (17 December 2021). https://www.iotc.org/cmms

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