



MarinTrust Standard V2

By-product Fishery Assessment *Yellowfin tuna (Thunnus albacares) in FAO 34 (eastern central Atlantic Ocean)*

MarinTrust Programme

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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 34 (Western Central Atlantic Ocean)
	Country of origin of the product:	Thailand (Flag countries: Senegal, Ghana, Liberia)
	Stock:	Yellowfin tuna in FAO 34 (eastern central Atlantic Ocean)
Date	26 July 2023	
Report Code	THA41	
Assessor	Ana Elisa Almeida Ayres	
Country of origin of the product - PASS	Thailand (Flag countries: Senegal, Ghana, Liberia)	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): Chotiwat Manufacturing Public Co. Ltd, TCF Co. Ltd.			
Country: Thailand			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		NSF	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Ana Elisa Almeida Ayres	Matthew Jew	0.5	Initial
Assessment Period	Up to July 2023		

Scope Details	
Main Species	Yellowfin tuna (<i>Thunnus albacares</i>)
Stock	Yellowfin tuna in FAO 34
Fishery Location	FAO 34 (eastern Central Atlantic Ocean)
Management Authority (Country/ State)	International Commission for the Conservation of Atlantic Tunas – ICCAT
Gear Type(s)	Longline, baitboat, purse seine
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's recommendation
Recommendation	APPROVED

Table 2. Assessment Determination

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on Union for Conservation of Nature's Red List of Threatened Species - IUCN's Red List, or if it appears in the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES appendices, it cannot be approved for use as Marin Trust raw material. <i>Thunnus albacares</i> - Yellowfin tuna is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, <i>Thunnus albacares</i> - Yellowfin is eligible for approval for use as Marin Trust by-product raw material.</p> <p>Thailand is not directly responsible for landings from the relevant stock, but it is reported to be one of the world's largest exporters countries of prepared or preserved tuna and it imports raw tuna materials from various nations across the globe, including from fleets operating in Atlantic Ocean. Tunas are highly migratory species managed by International Commission for the Conservation of Atlantic Tunas – ICCAT. Senegal, Ghana, Liberia are contracting Parties of ICCAT and Thailand cooperates with it.</p> <p>For assessment and management purposes, one discrete stock of yellowfin is recognised in the Atlantic Ocean; therefore, this assessment covers one stock (i.e. yellowfin tuna in the Atlantic Ocean) when fished within Food and Agriculture Organization of the United Nations - FAO fishing area 34.</p> <p>Fishery removals of the stock are considered in the stock assessment process, so the stock PASSES Clause C1.1. Stock biomass is considered to be above B_{MSY}, thus it PASSES Clause C1.2.</p> <p>Therefore, <i>Thunnus albacares</i> - Yellowfin tuna in FAO 34 – Thailand is APPROVED for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified yellowfin tuna (<i>Thunnus albacares</i>) in FAO 34 as Category C, the stock is subject to a specific management regime by ICCAT and reference points are defined.</p> <p>Fishery removals are considered in the stock assessment process. The most recent stock assessment shows that the stock is not overfished, nor currently experiencing overfishing. The stock is believed to be above B_{MSY} despite the lower end of the confidence interval being $0.75 * B_{MSY}$. Therefore, the stock is considered to have biomass above the limit reference point (or proxy).</p> <p>Yellowfin tuna (<i>Thunnus albacares</i>) in FAO 34 passes both clauses (C1.1 and C1.2) and therefore should be approved under the MarinTrust Standard v.2.</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>	Yellowfin tuna in Atlantic Ocean	ICCAT	C	Least Concern	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
<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>Thailand is not directly responsible for landings from the relevant stock, but it is reported to be one of the world's largest exporters countries of prepared or preserved tuna and it imports raw tuna materials from various nations across the globe, including from fleets operating in Atlantic Ocean. Tunas are highly migratory species managed by International Commission for the Conservation of Atlantic Tunas – ICCAT. Senegal, Ghana, Liberia are contracting Parties of ICCAT and Thailand cooperates with it.</p> <p>The most recent stock assessment of Yellowfin tuna in Atlantic Ocean was carried out in 2019 (ICCAT, 2019). Although a proportion of the 2018 catch reports were incomplete, an average of the catch over the previous three years (2015-17) was used as a proxy for estimate 42% of the total catch (ICCAT, 2019). Four models were used for developing the management advice and one of the estimates provided by the models was the historical fishing mortality relative to fishing mortality consistent with achieving maximum sustainable yield - F_{MSY}. Overall, the models estimate that the fishing mortality in 2018 was near the F_{MSY}.</p> <p>There is an overall Total allowable Catches (TACs) for yellow tuna established by ICCAT since 2012 of 110,000 tonnes, unallocated by country [Rec. 11-01 (reiterated in Rec. 16-01)]. Although catches are above the TAC from 2014 to 2020, the stock is considered not to be overfished, no overfishing is occurring, and, according to the Report of the First Intersessional Meeting of Panel 1 in 2023 (March 20023), TAC shall remain in place until changed based on scientific advice (ICCAT Secretariat, 2023).</p> <p>Fishery removals are incorporated into the stock assessment process, the fishery achieves a PASS against 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>According to (ICCAT, 2019), the ratio of spawning biomass SSB_{2018}/SSB_{MSY} is estimated at 1.17 (range 0.75-1.62). This indicates that the stock in 2018 was not overfished. Overall the models estimate that the fishing mortality in 2018 was near the fishing mortality that would produce MSY.</p>			

ATLANTIC YELLOWFIN TUNA SUMMARY

Estimates	Mean (90% confidence intervals)
Maximum Sustainable Yield (MSY)	121,298 t (90,428 - 267,350 t) ¹
2018 Yield	135,689 t
Relative Biomass ² : B_{2018} / B_{MSY}	1.17 (0.75 - 1.62)
Relative Fishing Mortality: F_{2018} / F_{MSY}	0.96 (0.56 - 1.50)
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2018 Total Biomass ³	729,436 t
Stock Status (2018)	Overfished: No ⁴ Overfishing: No ⁵

[Rec. 16-01]

- No fishing with natural or artificial floating objects during January and February in the area encompassed by the African coast, 20° W, 5°N and 4°S.
- TAC of 110,000 t (since Rec. 11-01).
- Specific authorization to fish for tropical tunas for vessels 20 meters or greater
- Specific limits of number of longline and/or purse seine boats for a number of fleets
- Specific limits on FADs, non-entangling FADs required

1) Minimum and maximum values of 90%LCI and 90%UCI among all runs by the Stock Synthesis, JABBA, and MPB
 2) SSB (Stock Synthesis) or exploited biomass (production models)
 3) Mean of the central estimates of the SS, JABBA and MPB models
 4) (24% probability of overfished status)
 5) (43% probability of overfishing taking place)

Figure 1. Source: ICCAT (2019).

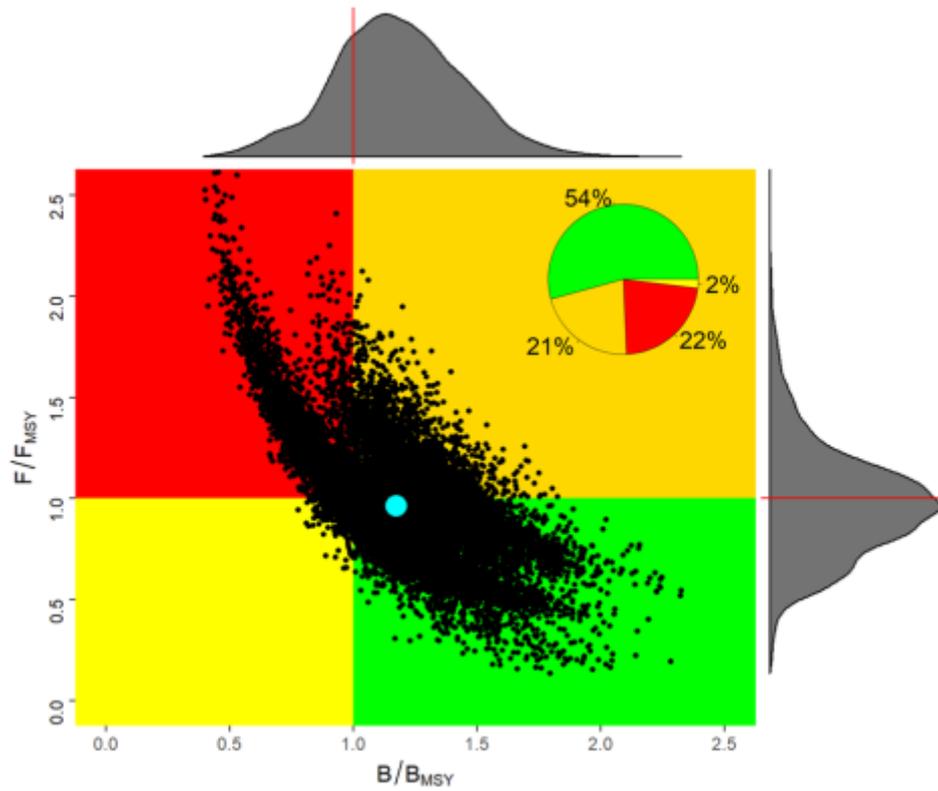


Figure 2. Kobe plot estimated from the combination of Stock Synthesis, JABBA and MPB model runs chosen to develop the management advice (ICCAT, 2019).

Despite ICCAT’s not employing an explicit limit reference point in managing this stock, given that stock biomass is considered to be above B_{MSY} , it can correspondingly be considered to be above any nominal limit reference point (or proxy); therefore, the fishery achieves a **PASS against C1.2**.

References

ICCAT. 2019. Yellowfin tuna Summary report 2019. https://www.iccat.int/Documents/SCRS/ExecSum/YFT_ENG.pdf
 ICCAT Secretariat. 2023. Report of the First Intersessional Meeting of Panel 1. Hybrid, Lisbon, Portugal, 27-31 March 2023. https://www.iccat.int/Documents/Meetings/Docs/2023/REPORTS/2023_PA1_MAR_ENG.pdf

Links

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