



MarinTrust Standard V2

By-product Fishery Assessment

Report Template

Thailand Yellowfin Tuna

FAO Areas 51 and 57

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 51 and 57, Western and Eastern Indian Ocean
	Flag country:	Thailand
	Stock:	Indian Ocean yellowfin tuna
Date	25 /07/2022	
Report Code	BP091	
Assessor	Heri	
Flag country - PASS	Thailand	
Flag country - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): Golden Prize Canning co (IFFO190), IFFO RS 178 Asian Alliance International, 213 S.P.A International Food Group Co, 206 Sirisaengarumpee Co, IFFO170 South East Asian Packaging and Canning, IFFO151 T.C Union Agrotech.Co, 161 TCF Co, 197 Thai Union Ingredients Co			
Country:			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Heri	Kate Morris	0,5	Surveillance
Assessment Period	To July 2022		

Scope Details	
Main Species	Yellowfin tuna (<i>Thunnus albacares</i>)
Stock	Yellowfin tuna in the Indian Ocean
Fishery Location	FAO fishing areas 51 (Indian Ocean, Western) and 57 (Indian Ocean, Eastern)
Management Authority (Country/ State)	Indian Ocean Tuna Commission (IOTC) and relevant National authorities of Thailand
Gear Type(s)	All gears
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	

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 does not appear as Endangered or Critically Endangered on IUCN’s Red List, nor does it appear in CITES appendices; therefore, product originating from this fishery is eligible for approval for use as Marin Trust by-product raw material.</p> <p>For assessment and management purposes, one discrete stock of yellowfin is recognised in the Indian Ocean; therefore, this assessment covers one stock (i.e. yellowfin tuna in the Indian Ocean) when fished within FAO fishing areas 51 and 57.</p> <p>Fishery removals from the stock are considered in the IOTC stock assessment processes such that the stock achieves a PASS against Clause C1.1.</p> <p>In addition, the most recent stock assessment shows the biomass to be above relevant limit reference points defined by management such that the stock achieves a PASS against C1.2.</p> <p>In order to be approved, stocks assessed must pass both Clause C1.1 and C1.2; therefore, as this is the case here, by-product covered by this report is APPROVED for the production of fishmeal and fish oil under the current Marin Trust v 2.0 by-product standard.</p>
Fishery Assessment Peer Review Comments
<p>The by-product fishery under assessment here is the Indian Ocean (IO) Yellowfin tuna (<i>Thunnus albacares</i>) fishery, targeted by Thai fishing vessels in FAO 51 and 57. IO Yellowfin tuna is managed by Thailand’s government according to bi-lateral agreements and the IOTC management plan. Yellowfin tuna is correctly classified by the auditor as category C species and the C1 scoring table has been completed by the auditor with sufficient evidence to support their final determination. The fishery under assessment passes C1 scoring.</p> <p>The peer review supports the auditor’s recommendation to approve this fishery under the Marin Trust IFFO RS v2.0 by-product standard for the production of fishmeal and fish oil.</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 a MarinTrust raw material. material¹ If the IUCN assessment was completed more than 5 years prior to the time of the assessment please refer to the most recent stock assessment, ICES advice², current national legislation or international binding agreements.

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																										
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.																										
<p>Catch data from each country within IOTC, including Thailand, are reported and available on IOTC websites (IOTC-2022-WPTT24(DP)-DATA03-NC). The latest IOTC scientific meeting report (e.g IOTC-2021-SC24-R_Rev1) concluded that fishing mortality is estimated to be 32% higher than FMSY ($F_{2020}/F_{MSY} = 1.32$). The probability of the stock being in the red Kobe quadrant in 2020 is estimated to be 68%. On the weight-of-evidence available since 2018, the yellowfin tuna stock is determined to remain overfished and subject to overfishing (Figure 1)</p>																										
<table border="1"> <thead> <tr> <th>Area¹</th> <th>Indicator</th> <th>Value</th> <th>Status³</th> </tr> </thead> <tbody> <tr> <td rowspan="8">Indian Ocean</td> <td>Catch in 2020 (t)²</td> <td>430,956</td> <td rowspan="8">68%*</td> </tr> <tr> <td>Average catch 2016-2020 (t)</td> <td>434,235</td> </tr> <tr> <td>MSY (1,000 t) (80% CI)</td> <td>349 (286-412)</td> </tr> <tr> <td>F_{MSY} (80% CI)</td> <td>0.18 (0.15-0.21)</td> </tr> <tr> <td>SB_{MSY} (1,000 t) (80% CI)</td> <td>1,333 (1,018-1,648)</td> </tr> <tr> <td>F₂₀₂₀ / F_{MSY} (80% CI)</td> <td>1.32 (0.68-1.95)</td> </tr> <tr> <td>SB₂₀₂₀ / SB_{MSY} (80% CI)</td> <td>0.87 (0.63-1.10)</td> </tr> <tr> <td>SB₂₀₂₀ / SB₀ (80% CI)</td> <td>0.31 (0.24-0.38)</td> </tr> </tbody> </table>					Area ¹	Indicator	Value	Status ³	Indian Ocean	Catch in 2020 (t) ²	430,956	68%*	Average catch 2016-2020 (t)	434,235	MSY (1,000 t) (80% CI)	349 (286-412)	F _{MSY} (80% CI)	0.18 (0.15-0.21)	SB _{MSY} (1,000 t) (80% CI)	1,333 (1,018-1,648)	F ₂₀₂₀ / F _{MSY} (80% CI)	1.32 (0.68-1.95)	SB ₂₀₂₀ / SB _{MSY} (80% CI)	0.87 (0.63-1.10)	SB ₂₀₂₀ / SB ₀ (80% CI)	0.31 (0.24-0.38)
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<p>¹Boundaries for the Indian Ocean stock assessment are defined as the IOTC area of competence ²Proportion of 2020 catch fully or partially estimated by IOTC Secretariat: 12.5% ³The stock status refers to the most recent years' data used in the assessment conducted in 2021, i.e., 2020</p>																										
<p>Figure 1. Status of Yellowfin Tuna (<i>Thunnus albacares</i>) in the Indian Ocean</p>																										
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<p>The latest IOTC scientific meeting report (IOTC-2021-SC24-R_Rev1) indicates that spawning biomass is considered 13 % below the interim target reference point of SBMSY and above the interim limit reference point of 0.4*SBMSY (Fig. 2).</p>																										

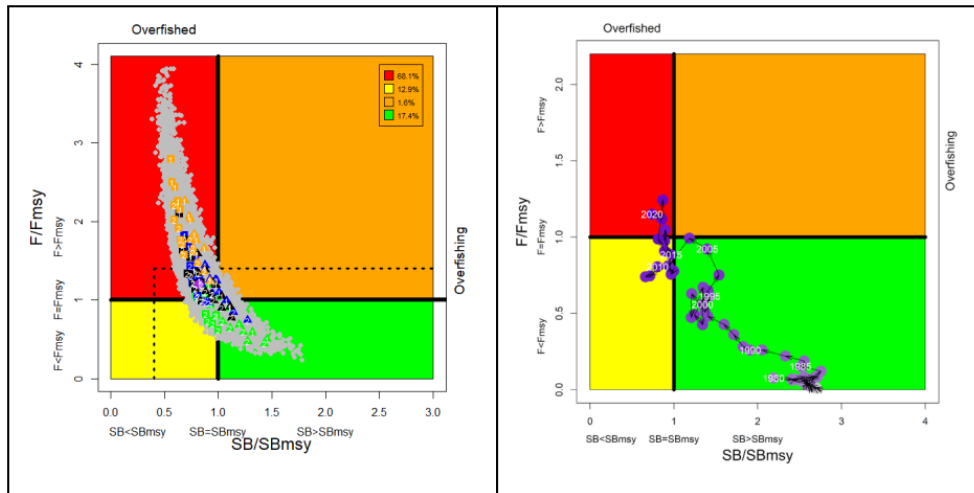


Figure 2. Yellowfin tuna: SS3 Indian Ocean assessment Kobe plot: (left): current stock status, relative to SBMSY (x-axis) and FMSY (y-axis) reference points for the final model options. Coloured symbols represent Maximum posterior density (MPD) estimates from individual models: square and Triangles and represents LL CPUE catchability options q_1 and q_2 respectively; green, blue, black, and orange represents growth and natural mortality option combination G_{base_Mbase} , G_{Dortel_Mbase} , G_{base_Mlow} , and G_{Dortel_Mlow} respectively; 1,2, represents spatial structure option io and sp respectively. The purple dot represents the base model. Grey dots represent uncertainty from individual models. The dashed lines represent limit reference points for IO yellowfin tuna ($SBlim = 0.4 SBMSY$ and $Flim = 1.4 FMSY$); (right) stock trajectory from the base mode

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point

References

- <https://www.iotc.org/documents/SC/24/RE>
- <https://www.iotc.org/WPTT/24DP/Data/03-NC>

Links

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