



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:	Frigate tuna (<i>Auxis thazard</i>)
	Geographical area:	FAO Area 71 Pacific Western Central
	Country of origin of the product:	Thailand
	Stock:	Western and Central Pacific Ocean frigate tuna
Date	18 January 2022	
Report Code	BP 004	
Assessor	Geraldine Criquet	
Country of origin of the product - PASS	Thailand	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: Thailand		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
Geraldine Criquet	Conor Donnelly	0.5	Surveillance 1
Assessment Period	To January 2022		

Scope Details	
Main Species	Frigate tuna (<i>Auxis thazard</i>)
Stock	Western and Central Pacific Ocean frigate tuna
Fishery Location	FAO Area 71 Pacific Western Central
Management Authority (Country/ State)	Western and Central Pacific Fisheries Commission (WCPFC) / Thailand management authority
Gear Type(s)	Purse seine, pole and line, longline
Peer Review Evaluation	Agree with recommendation
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. Frigate tuna (<i>Auxis Thazard</i>) is neither listed as Endangered or Critically Endangered on IUCN’s Red List, nor listed in CITES appendices; therefore, frigate tuna is eligible for approval for use as Marin Trust by-product raw material.</p> <p>The stock is not subject to a specific management regime and reference points are not defined to assess the stock status against. Therefore, the stock is classified as Category D and a risk-based Productivity, Susceptibility Analysis (PSA) was carried out. The stock passes the PSA.</p> <p>Therefore, frigate tuna in FAO Area 71 Pacific Western Central is APPROVED for the production of fishmeal and fish oil under the current Marin Trust v 2.0 by-products.</p>
Fishery Assessment Peer Review Comments
<p>The stocks has been correctly classified as a Category D and a PSA correctly undertaken which it passes. Consequently, frigate tuna in FAO Area 71 Pacific Western Central should be approved for the production of fishmeal and fish oil under the current Marin Trust v 2.0 by-products.</p>
Notes for On-site Auditor
Empty space for notes

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 Redlist 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
Frigate tuna	<i>Auxis thazard</i>	Frigate tuna in FAO Area 71 Pacific Western Central	Western and Central Pacific Fisheries Commission (WCPFC) / Thailand management authority	D	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		
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.
	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.
		Clause outcome:
<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>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>		
References		
Links		
MARINTRUST Standard clause		1.3.2.2
FAO CCRF		7.5.3
GSSI		D.3.04, D5.01

CATEGORY D SPECIES

Category D species are those which make up less than 5% of landings and are not subject to a species-specific management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-assessment style approach must be taken.

D1	Species Name	Frigate tuna (<i>Auxis thazard</i>)	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	3 years	2
	Average maximum age (years)	5 years	1
	Fecundity (eggs/spawning)	200,000 - 1,060,000	1
	Average maximum size (cm)	65 cm	2
	Average size at maturity (cm)	29.5 cm	1
	Reproductive strategy	Broadcast spawner	1
	Mean trophic level	4.5	3
	Average Productivity Score		1.57
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	No information	Not scored
	Distribution	Throughout region/global distribution	1
	Habitat	Epipelagic	1
	Depth range	Unknown	Not scored
	Selectivity	Species >2 times mesh size	3
	Post-capture mortality	Retained	3
	Average Susceptibility Score		2
	PSA Risk Rating (From Table D3)		PASS
	Compliance rating		PASS
References			
FishBase https://www.fishbase.de/summary/Auxis-thazard.html			
Collette, B., Acero, A., Amorim, A.F., Boustany, A., Canales Ramirez, C., Cardenas, G., Carpenter, K.E., de Oliveira Leite Jr., N., Di Natale, A., Fox, W., Fredou, F.L., Graves, J., Guzman-Mora, A., Viera Hazin, F.H., Juan Jorda, M., Kada, O., Minte Vera, C., Miyabe, N., Montano Cruz, R., Nelson, R., Oxenford, H., Salas, E., Schaefer, K., Serra, R., Sun, C., Teixeira Lessa, R.P., Pires Ferreira Travassos, P.E., Uozumi, Y. & Yanez, E. 2011. <i>Auxis thazard</i> . <i>The IUCN Red List of Threatened Species 2011</i> : e.T170344A6757270. https://dx.doi.org/10.2305/IUCN.UK.2011-2.RLTS.T170344A6757270.en . Accessed on 18 January 2022.			
<i>Standard clauses 1.3.2.2</i>			

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	Low productivity/ High risk	Medium productivity/ Medium risk	High productivity/ Low risk
	Score 3	Score 2	Score 1
Average age at maturity (years)	>4	2 to 4	<2
Average maximum age (years)	>30	10 to 30	<10
Fecundity (eggs/spawning)	<1 000	1 000 to 10 000	>10 000
Average maximum size (cm)	>150	60 to 150	<60
Average size at maturity (cm)	>150	30 to 150	<30
Reproductive strategy	Live bearer, mouth brooder or significant parental investment	Demersal spawner "berried"	Broadcast spawner
Mean trophic level	>3.25	2.5–3.25	<2.5

Susceptibility attributes		High susceptibility/ High risk	Medium susceptibility/ Medium risk	Low susceptibility/ Low risk
		Score 3	Score 2	Score 1
Availability	1) Overlap of adult species range with fishery	>50% of stock occurs in the area fished	Between 25% and 50% of the stock occurs in the area fished	<25% of stock occurs in the area fished
	2) Distribution	Only in the country/ fishery	Limited range in the region	Throughout region/ global distribution
Encounterability	1) Habitat	Habitat preference of species make it highly likely to encounter trawl gear (e.g. demersal, muddy/sandy bottom)	Habitat preference of species make it moderately likely to encounter trawl gear (e.g. rocky bottom/reefs)	Depth or distribution of species make it unlikely to encounter trawl gear (e.g. epi-pelagic or meso-pelagic)
	2) Depth range	High overlap with trawl fishing gear (20 to 60 m depth)	Medium overlap with trawl fishing gear (10 to 20 m depth)	Low overlap with trawl fishing gear (0 to 10 m, >70 m depth)
Selectivity		Species >2 times mesh size or up to 4 m length	Species 1 to 2 times mesh size or 4 to 5 m length	Species <mesh size or >5 m length
Post capture mortality		Most dead or retained Trawl tow >3 hours	Alive after net hauled Trawl tow 0.5 to 3 hours	Released alive Trawl tow <0.5 hours

Note: Availability 2 is only used when there is no information for Availability 1; the most conservative score between Encounterability 1 and 2 is used.

D3		Average Susceptibility Score		
		1 - 1.75	1.76 - 2.24	2.25 - 3
Average Productivity Score	1 - 1.75	PASS	PASS	PASS
	1.76 - 2.24	PASS	PASS	TABLE D4
	2.25 - 3	PASS	TABLE D4	TABLE D4