Western and Central Pacific Fisheries Commission

SCIENTIFIC COMMITTEE
TWENTY-FIRST REGULAR SESSION

Nuku'alofa, Tonga
13 – 21 August 2025

ANNUAL REPORT TO THE COMMISSION
PART 1: INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

WCPFC-SC21-AR/CCM-25
3 July 2025

TONGA

Ministry of Fisheries

GOVERNMENT OF THE KINGDOM OF TONGA

The Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean

Scientific Committee

Twenty First Regular Session

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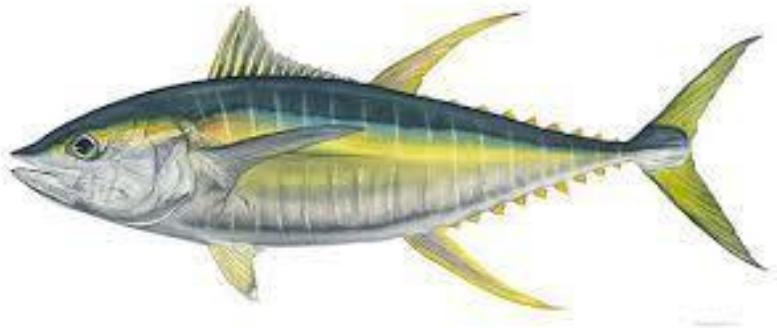
TONGA ANNUAL REPORT TO THE COMMISSION

PART 1: INFORMATION ON FISHERIES, RESEARCH AND STATISTICS



Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by **30th April 2025**	**YES**

1.0 ABSTRACT

Tonga maintains a tuna fishery comprising both National (Flag State) and Foreign longline fleets (Coastal state). In 2024, the total catch for tuna and tuna-like species within Tonga Exclusive Economic Zone (EEZ) was 2,090 metric tons (mt), representing a significant 27% decline compared to the 2023 catch of 2,646 metric tons (mt).

The National fleet, consisting of four longline vessels operating exclusively within Tongan waters and recorded a total of 239 metric tons for primary tuna species in 2024. This mark a 28.5% reduction from 307 metric tons reported in 2023. The overall estimated catch for all species by the National fleet in 2024 was 309 metric tons, refelcting a decrease of 16.5% from the 2023 catch of 360 metric tons.

The Foreign fleet, comprising of eight (8) licensed longline vessels, reported an estimated catch of 1,781 metric tons in 2024, representing a 28% decline from the 2023 total of 2,286 metric tons.

While the overall catch in 2024 declined, this trend was accompanied by a notable shifts in fishery dynamics. Both National and Foreign fleets experienced reduced catches, primarily attributed to a decline in the number of active vessels which in turn reduced the number of trips and number of fishing days.

Yellowfin tuna was the most prominent species in the national fleet's catch, accounting for 131.9 mt, followed by mahimahi among non-target species at 47 mt. These fiqures indicate that yellowfin and Bigeye tuna were primarily targeted for the fresh fish market.

The foreign fleet catch was dominated by Albacore tuna, totaling 1,062 metric tons. In accordance with the terms and conditions of the tuna fishing licenses, it is prohibited to target any shark species in Tonga. The observer data has reported no interactions with Species of Special Interest (e.g. turtles, marine mammals, and seabirds) in Tonga's longline fishery.

The adverse impacts of climate change have been reflected in the reduced catch rates particulary for the National fleet. Nonetheless, the Minsitry of Fisheries has continued to implement effective management strategies to safeguard the sustainability and resilience fo the sector.

Tonga does not operate any purse seine fisheries, and therefore several WCPFC measures relating to purse seine fisheries do not apply. However, as a precautionary measure, Tonga has established an effort limit for purse seine fishing within its EEZ, set at 150-200 days per calendar year. No purse seine activity was recorded in Tongan waters in 2024.

Tonga has established its National Observer Program and an active domestic port sampling program for highly migratory species. These initiatives work in close collaboration with the Oceanic Fisheries Program (OFP) of the Secretariat of the Pacific Communities (SPC) to collect and analyse data on the status of tuna resources in the Tonga EEZ.

Table 1. Annual catch and effort (hooks) estimate for the Tonga longline vessels, by primary species, for the WCPFC Convention Area, 2020 – 2024.

WCPFC Key Species	2020		2021		2022		2023		2024	
	MT	%	MT	%	MT	%	MT	%	MT	%
ALBACORE	13	6%	10	4%	52	14%	34.0	9.0%	16.6	7.3%
BIGEYE TUNA	10	4%	15	5%	24	7%	14.0	4.8%	11.0	4.8%
PACIFIC BLUEFIN TUNA	0	0%	0	0%	0.0	0%	0.0	0.1%	0.1	0.0%
SKIPJACK TUNA	3	1%	2	0%	2	1%	1.0	0.2%	9.4	1.9%
YELLOWFIN TUNA	155	67%	208	70%	215	58%	166.0	56.0%	131.9	57.1%
BLACK MARLIN	2	1%	0	0%	0.1	0%	0.5	0.2%	1.6	0.0%
BLUE MARLIN	21	9%	41	14%	45	12%	50.7	17.5%	37.6	16.3%
STRIPED MARLIN	4	2%	10	3%	19	5%	25.6	8.8%	14.3	6.2%
SWORDFISH	16	7%	9	3%	11	3%	7.3	2.5%	13.5	5.0%
BLUE SHARK	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
SILKY SHARK	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
HAMMERHEAD SHARKS	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
MAKO SHARKS	7	3%	3	1%	21	1%	8.0	0.9%	3.0	1.3%
OCEANIC WHITETIP SHARK	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
PORBEABLE / SALMON SHARK	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
WHALE SHARK	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
THRESHER SHARKS	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
Total catch	231		298		389		307		239	
Total effort (hhks)	7774		6645		8646		11714		7942	

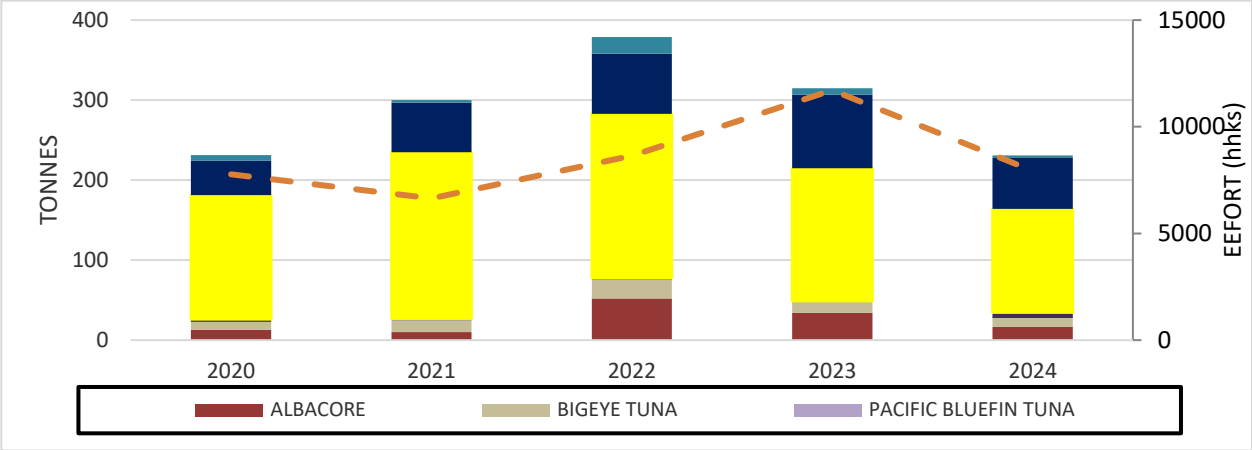


Figure 1: Historical annual Catch (mt) and Effort (no. of hooks), by primary species, for the Tongan longliners (National Fleets) were active in the WCPFC Convention Area for the years 2020 to 2024.

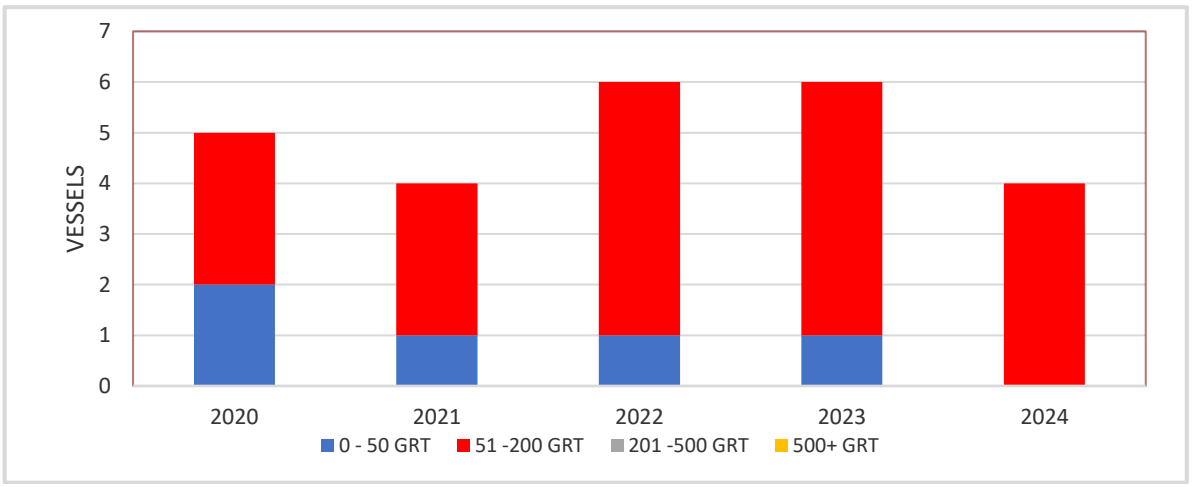


Figure 2: Historical annual longline vessels number for Tonga for the WCPFC Convention Area, 2020– 2024.

Table 2. Number of active fishing vessels in tuna fisheries in the WCPFC Convention Area by gear and size class.

Gear	**LONGLINE**
Fleet	National Fleets

Vessel category	2020		2021		2022		2023		2024	
	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 50 GRT	2	40%	1	25%	1	17%	1	17%	0	0%
51 -200 GRT	3	60%	3	75%	5	83%	5	83%	4	100%
201 -500 GRT	0	0%	0	0%	0	0%	0	0%	0	0%
500+ GRT	0	0%	0	0%	0	0%	0	0%	0	0%
Total	5	100%	4	100%	6	100%	6	100%	4	100%

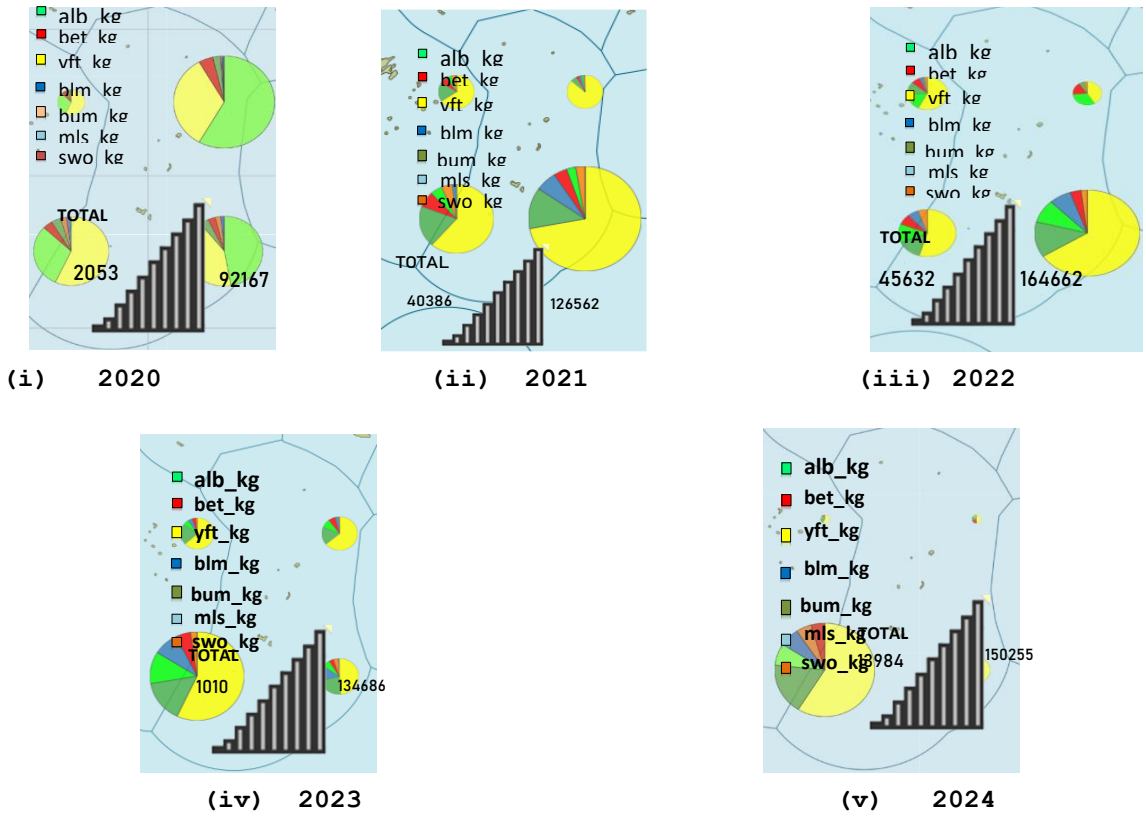


Figure 3a (i-v). Annual distribution of Longline National Fleet catches by target tuna species (in kilograms) in the WCPF Convention Area from 2020 to 2024.

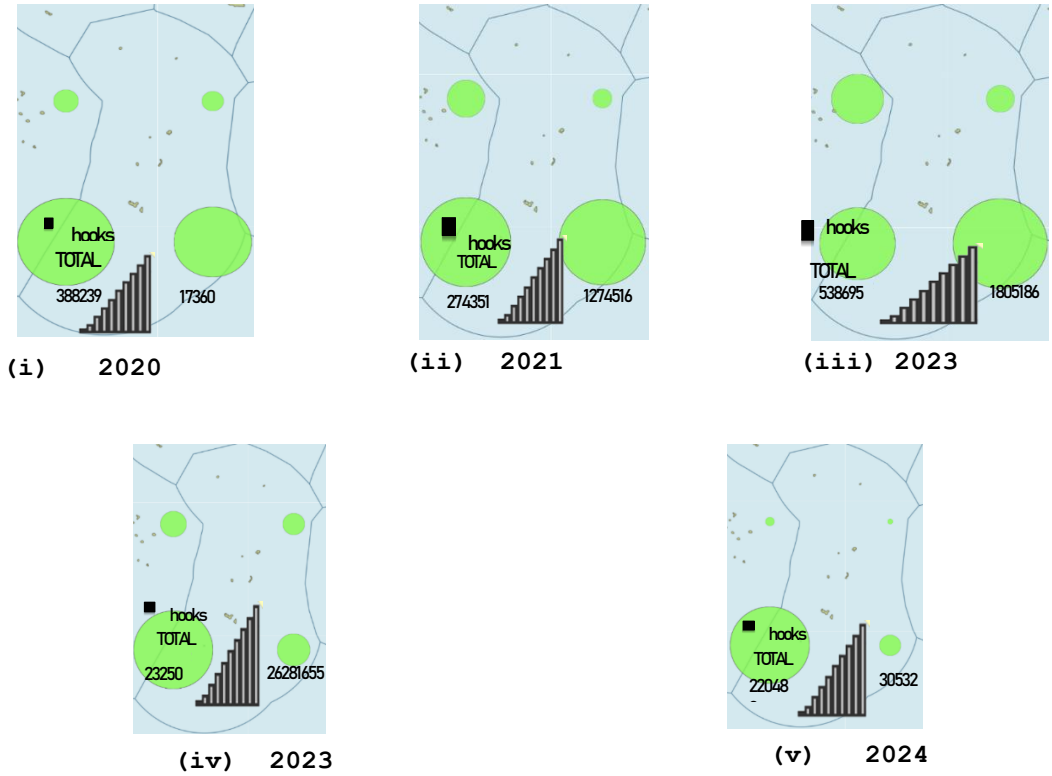


Figure 3b (i-v): Annual distribution of Longline National Fleet effort (in hooks) in the WCPF Convention Area from 2020 to 2024.

Table 3: Annual RETAINED catch by key species in the WCPFC Convention Area for 2020 – 2024.

WCPFC Key Species	2020		2021		2022		2023		2024	
	MT	%	MT	%	MT	%	MT	%	MT	%
ALBACORE	13	6%	10	4%	52	14%	34.0	9.0%	16.6	7.3%
BIGEYE TUNA	10	4%	15	5%	24	7%	14.0	4.8%	11.0	4.8%
PACIFIC BLUEFIN TUNA	0	0%	0	0%	0.0	0%	0.0	0.1%	0.1	0.0%
SKIPJACK TUNA	3	1%	2	0%	2	1%	1.0	0.2%	9.4	1.9%
YELLOWFIN TUNA	155	67%	208	70%	215	58%	166.0	56.0%	131.9	57.1%
BLACK MARLIN	2	1%	0	0%	0.1	0%	0.5	0.2%	1.6	0.0%
BLUE MARLIN	21	9%	41	14%	45	12%	50.7	17.5%	37.6	16.3%
STRIPED MARLIN	4	2%	10	3%	19	5%	25.6	8.8%	14.3	6.2%
SWORDFISH	16	7%	9	3%	11	3%	7.3	2.5%	13.5	5.0%
BLUE SHARK	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
SILKY SHARK	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
HAMMERHEAD SHARKS	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
MAKO SHARKS	7	3%	3	1%	21	1%	8.0	0.9%	3.0	1.3%
OCEANIC WHITETIP SHARK	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
PORBEABLE / SALMON SHARK	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
WHALE SHARK	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
THRESHER SHARKS	0	0%	0	0%	0	0%	0.0	0.0%	0.0	0.0%
Total catch	231		298		389		307		239	
Total effort (hhks)	7774		6645		8646		11714		7942	

Table 4: Annual DISCARDED catch by key species in the WCPFC Convention Area for 2020 – 2024.

WCPFC Key Species	2020		2021		2022		2023		2024	
	MT	%	MT	%	MT	%	MT	%	MT	%
ALBACORE	0	0%	0.0	0%	0	0%	0.5	3%	0.0	0%
BIGEYE TUNA	0	0%	0.0	0%	0	0%	0.0	0%	0.1	1%
PACIFIC BLUEFIN TUNA	0	0%	0.0	0%	0	0%	0.0	0%	0.0	0%
SKIPJACK TUNA	0	0%	0.0	0%	0	0%	0.0	0%	0.5	4%
YELLOWFIN TUNA	0.2	64%	0.0	0%	0	0%	2.4	15%	1.8	14%
BLACK MARLIN	0	0%	0.0	0%	0	0%	0.0	0%	0.0	0%
BLUE MARLIN	0	0%	0.0	0%	0	0%	5.0	33%	0.4	3%
STRIPED MARLIN	0	0%	0.0	0%	0	0%	2.2	14%	0.3	2%
SWORDFISH	0.1	36%	0.0	0%	0	0%	0.0	0%	1.7	12%
BLUE SHARK	0	0%	0.3	69%	0	0%	2.3	15%	2.8	21%
SILKY SHARK	0	0%	0.1	14%	0	0%	0.0	0%	2.0	15%
HAMMERHEAD SHARKS	0	0%	0.0	0%	0	0%	0.0	0%	0.0	0%
MAKO SHARKS	0	0%	0.0	0%	0	0%	0.0	0%	3.9	29%
OCEANIC WHITETIP SHARK	0	0%	0.1	17%	0	0%	2.9	19%	0.0	0%
PORBEABLE / SALMON SHARK	0	0%	0.0	0%	0	0%	0.0	0%	0.0	0%
WHALE SHARK	0	0%	0.0	0%	0	0%	0.0	0%	0.0	0%
THRESHER SHARKS	0	0%	0.0	0%	0	0%	0.2	1%	0.0	0%
Total	0.3		0.4		0		15.33		13.5	

Table 5. Annual estimated catches (mt) of non-target, associated and dependent species by the Tongan Longliners (National Fleets) in the WCPFC Convention Area for 2020 to 2024.

Non-Target Species	2020	2021	2022	2023	2024
WAHOO	5	5	5	5	5
SAILFISH (INDO-PACIFIC)	6	7	7	10	10.3
DOLPHIN FISH	38	19	91	51	47
OPAH/MOONFISH	0	0	0.2	0	0
OTHERS	5	3	8	5	7.3
Total	**54**	**34**	**112**	**71**	**69.6**

2.0 BACKGROUND

Commercial fisheries for high migratory species, particularly tuna, began in Tonga in the early 1970s with the acquisition of second-hand longliners and a skipjack vessel from Japan. These vessels were used to target tuna species in the waters surrounding Tonga.

In the early 1980s, the Tongan government investigated the commercial viability of tuna longlining. As part of this study, a new longliner called F.V. Lofa was donated by the Government of Japan to assess the potential of longlining as a fishing method in Tonga.

In 1991, the Tongan government established a semi-government company called Sea Star Fishing Co Ltd to operate the F.V. Lofa commercially, marking a significant step in the development of Tonga's commercial fishing industry.

During the early 1990s, the US Aid/Tonga Fisheries project conducted tests to evaluate the viability of medium-sized vessels for longlining, focusing on targeting fresh fish for the sashimi market, aiming to explore new opportunities and markets for Tonga's fishing industry.

Following these developments, domestic fleets in Tonga that targeted fresh tuna experienced a notable increase in the late 1990s which continued, reaching its peak in the early 2000s. The expansion of the domestic fleet and the focus on capturing fresh tuna reflected the growing demand for high-quality seafood, particularly in markets that valued sashimi-grade fish.

Tonga, as a small island developing state, is an active member of the Western and Central Pacific Fisheries Commission (WCPFC) and has been working on enhancing its Tuna fishery capacities, emphasizing strengthening its capabilities in developing and domesticating its Tuna fishery.

Currently, the Tuna fishery in Tonga primarily involves longline fishing vessels specifically targeting tuna and tuna-like species, operating within Tonga's Exclusive Economic Zone (EEZ) extending up to 200 nautical miles from the country's coastline.

Tonga also has a small artisanal fleet with small fishing vessels and game fishing vessels using trolling fishing methods, primarily engaged in recreational or small-scale commercial fishing activities. While most fishing activity occurs within Tonga's EEZ, foreign-flagged vessels can access the high seas adjacent to Tonga's waters with a permit from their respective flag states. Tonga had only one flagged vessel license for high seas fishing in 2024.

Tonga's Exclusive Economic Zone (EEZ) covers an area of approximately 700,000 square kilometers. The total catches from Tonga’s EEZ have shown a similar trend to fishing efforts. In 2023, the total catches by Tonga's national fleets from the EEZ amounted to 360 metric tons, which dropped to 309 metric tons in 2024, attributed to factors including, engine technical problems during fishing trips, very low catch rates due to the impact of climate change and the decrease in number of fishing vessels so as the number of fishing days.

Tonga also has a significant game-fishing sector, separate from commercial longline fleets, with minor interactions between the two.

In 2024, the Ministry, with assistance from the Japanese Trust Fund, maintained the TAILS data collection to cover all of Tonga’s Island groups, achieving 100% coverage. Including Tuna artisanal data in Tonga’s Annual Catch Estimates enhances the ability to monitor and regulate artisanal tuna fisheries and also contributes to regional and global efforts to conserve marine resources.

As of 2024, there were three active certified debriefers and fourteen active Observers involved in the Observer Programme in Tonga. The observer coverage onboard foreign vessels was 84%, indicating the majority had observers present, while domestic vessel coverage was 16% for 2024.

Tonga was actively fulfilling its obligations towards the Commission's Conservation and Management Measures (CMM) and Resolutions by monitoring, implementing these measures, and reporting back to the Commission.

The Tonga Ministry of Fisheries is closely working with the Oceanic Fisheries Program (OFP) of SPC to assess the status of tuna stock in the Tonga EEZ in relation to the entire stock in the Western and Central Pacific Ocean (WCPO). This assessment is crucial for effective fisheries management.

Tonga's tuna fishing industry is facing significant challenges as global disruptions and the effects of climate change continue to escalate. During 2024, a combination of technical failures, low catch rates and a drop in the number of active fishing vessels led to a sharp decline in the national fleets overall catch. The situation highlights the growing vulnerability of the country's fisheries sector to external pressures.

However, Tonga's resilience is evident in its unwavering commitment to the development and promotion of sustainable fisheries. Despite the setbacks, Tonga continues to prioritize informed management decisions and effective measures to ensure the long-term viability of its fisheries resources. By doing so, Tonga not only safeguards the livelihoods of its people but also contributes to global efforts towards sustainable development and conservation of marine resources, ensuring that its fisheries remain a cornerstone of its economy and culture for generations to come.

3.0 FLAG STATE REPORTING

3.1 Status of the Fishery

3.1.1 Total annual catch by primary species

In 2024, the total fishing effort in the WCPFC Area was approximately 7,942 hundred hooks, marking a 47% decrease from the previous year's effort of 11,704 hundred hooks. This decrease is solely attributed to the Tonga Exclusive Economic Zone (EEZ).

The estimated catch for primary species in 2024 was 239 metric tons (mt), reflecting a 28.5.% decrease from the previous year.

In 2024, yellowfin tuna made up 57% of the total catch of the main tuna species, followed by albacore at 7.3% and bigeye at 4.8% and skipjack at 3%. Blue marlin accounted for 16% of the total catch of primary species for billfish, while striped marlin made up 6% and swordfish 5%. For shark species, catch and retained were dominated by Mako sharks with 1.3%, while other shark species such as blue sharks, silky and oceanic whitetips were caught but released.

Fiqure 4 presents the annual CPUE (kg/100hks) for the main tuna species targeted by the Tongan Longliners from 2020 to 2024. Albacore CPUE remained stable through 2022, with a slight increase that year, followed by a decrease in 2023 and stabilization in 2024. This indicates relatively consistent catch efficiency overall, with a minor fluctuations. Bigeye tuna CPUE showed a steady trend throughout the reporting period, indicating stable catch rates. In contrast, yellowfin tuna CPUE has been on a declining trend since 2021, largerly due to environmental factors such as El Nino and La Nina event, which have affected both the abundance and availability of the species. However, a modest improvement was observed in 2024.

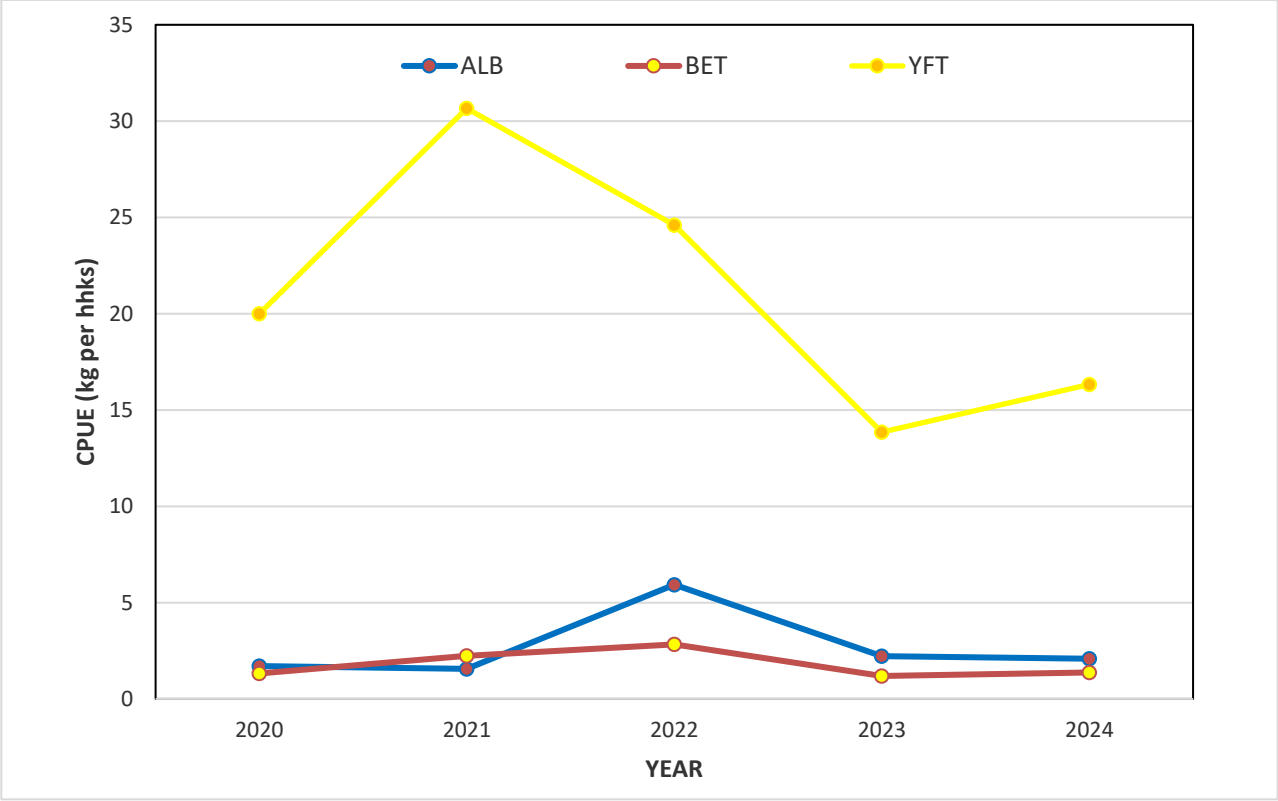


Figure 4. CPUE (kg per 100 hooks) of main tuna species for Tonga longliners were active in the WCPF Convention Area for the years 2020 to 2024

3.1.2 Annual catch estimates of non-target, by-catch associated, and dependent species

The estimated total catch of non-target associated and dependent species for the national longline fleets provided in Table 5, shows the species composition of the catch by weight in 2024. Dolphin fish (*Mahimahi*) had the highest catch by weight, totalling 47 mt, Sailfish had a catch of 10.3 mt and Wahoo had a catch of 5 mt respectively. Mako sharks were the most dominant shark species caught by the national fleets within WCPF-CA, with 3 mt retained (Table 3). The information in Table 4 indicates that there was no retention record for other key shark species.

By-catches data were obtained from log sheets, observer records, and port sampling. Observer records play a crucial role in estimating the yields of less valuable species that are less likely to be retained or recorded. These records provide valuable insights into the catch composition beyond what is reported or recorded. Observer reports have indicated high retention rates for target tunas, including those that are discarded due to various conditions. This suggests that the recorded catches for target tunas may not fully reflect the actual yields as some are discarded but still accounted for in the observer records.

Species such as Wahoo, Mahimahi and billfishes have high retention rates, indicating their value in the fishery, especially for the local market. The high retention rates suggest that a significant portion of these species caught is retained and utilized rather than discarded.

Based on available data, no interaction of Tonga-flagged longliners with Species of Special Conservation Interest (e.g., Marine turtles, marine mammals and sea birds) was recorded by observers (*Appendix 1*). Tonga National longline also employed measures such as using circle hooks and fish baits with less squid bait to reduce sea turtle mortality in their operations.

3.2 Fishing Patterns – National Fleets in the WCPF Convention Area

Figures 3a & 3b illustrate the annual catch and effort distribution pattern for the national longline fleets over the past five years in the WCPF Convention Area. In 2024, more than 80% of the catch and effort of the National longline fleet were widely distributed in the southern parts of the Tonga EEZ.

3.3 Fleet Structure

In 2024, the Tonga National fleet consisted of four (4) domestically based longline vessels that operate within the WCPF-CA. These are Tonga-flagged vessels authorized to fish within the Tonga EEZ only.

4.0 COASTAL STATE REPORTING

In 2024, eight (8) foreign-flagged longline vessels with valid licensed to fish in Tonga EEZ a decrease from nine vessels in 2023 (Tables 6 and 7). According to our Tuna Development and Management Plan 2022 – 2026, the number of foreign longline fishing vessels licensed to fish at any given time does not exceed fifteen (15).

Table 6. A number of foreign longline vessels with valid licenses to fish in the Tonga EEZ by year and size category (GRT).

Gear	Longline				
Fleets	FFV				
Source	Number of Licenses vessel (RIMF2 License)				
Size Category(GRT)	2020	2021	2022	2023	2024
0 - 100MT	10	6	5	5	4
101 - 200MT	3	4	4	4	4
201+	0	0	0	0	0
Total	13	10	9	9	8

Table 7. Number of foreign longline vessels with valid licenses to fish in the Tonga EEZ by flag and year.

Year	Flag			Total
	CHINA	CH-TAIPEI	FIJI	
2020	0	7	5	12
2021	0	5	5	10
2022	0	5	4	9
2023	0	5	4	9
2024	0	4	4	8

The annual catch for foreign-flagged vessels in 2024 is given in Table 8 and is similar in species composition of the catches to Tonga National fleets. Therefore, those catches by foreign vessels contributed to the Tonga National Catch of tuna and tuna-like species within Tonga's jurisdiction waters. The total catch for 2024 was 1,781 mt, a decrease of 28 % from the 2,286 mt in 2023.

Table 8. **Annual foreign Longline catch and effort estimates by foreign-flagged vessels licensed to fish with Tonga EEZ (national waters) in 2024.**

Flag	YY	GEAR	SPECIES_WT (mt)															
			ALB	YFT	BET	SKJ	BUM	BLM	MLS	SWO	SFA	DOL	FAL	BSH	OCS	MAK	HAM	OTH	Total
FJ	2024	LL	754	317	27	25	24	11	9	4	2	4	0	0	0	0	0	24	1200
TW	2024	LL	307	175	11	10	17	0	4	3	3	2	0	15	0	1	0	32	581
Grand Total			1062	492	39	35	41	11	13	7	5	6	0	15	0	1	0	55	1781

4.0 SOCIO-ECONOMIC FACTOR

Tuna export from Tonga continued in 2024, although the industry continued to encounter significant challenges as a result of the COVID-19 pandemic. The tuna fleets remained the primary contributors to the country's fish exports compared to other fisheries such as the snapper fishery and aquarium trade.

In 2024, Tonga exported 1,481.2 mt in 2024 a significant decrease of 37% compared to the 2,031.4 mt exported in 2023. This decline was primarily attributed to a reduced number of operating vessels and lower catch rates.

The estimated FOB revenue generated from fish exported during 2024 was TOP 7,525,963.00, representing a 43% decrease from the TOP 10,745,705.00 recorded in 2023. This drop in revenue was directly linked to the decline in tuna export volumes.

Despite the focus on tuna exports, the local market continues to play a vital role in providing fish for domestic consumption, ensuring that the population maintains access to this important food source.

Licensing of fishing vessels both domestic and foreign and renting of resources from landing and export catches continues to add additional revenue for the domestic fisheries sector. This indicates that fisheries activities, including collaborations with foreign vessels, provide economic benefits beyond export revenue alone. It is a 100% unloads by Foreign vessels catches at Nuku'alofa port in Tonga. The catches are then repacked into shipping containers for export to overseas

markets. However, a portion of the catch is sold in the local market and retail stores, ensuring that the local population has access to fresh fish.

Despite the challenges posed by the COVID-19 crisis, the tuna industry in Tonga remained an important sector for fish exports, generating revenue and contributing to the domestic fisheries sector.

5.0 DISPOSAL OF CATCH

5.1 Marketing

Tonga regulates that all longline vessels licensed to fish in Tonga water shall be 100% discharged in a designated port before being disposed to their respective market destination, whether overseas or domestic market. This facilitates proper monitoring and control of the fishery, as all catches are accounted for in a centralized location. After unloading, the exported fish is repacked into cargo containers and sent to overseas markets. On the other hand, the local fish is sold in Tonga to cater for domestic consumption. Since its launch in 2017, the fish-selling initiative between the Ministry and foregin vessel agencies aimed at making fish more affordable for local consumers has remained ongoing. The primary objective of this initiative is to promote higher fish consumption among the local population as part of a healthy diet and to combat non-communicable diseases (NCDS). By loweing fish prices through the program, the Ministry has successful encourage locals to increase their fish intake, benefiting from its rich nutrients such as omega-3 fatty acids. This intitiave not only seek to enhance public health outcomes but also strengthens partnerships with foreign agencies to ensure a consistent supply of fish for the local market.

Tonga's main export markets for its fresh, chilled tuna (Yellowfin and Bigeye) were Honolulu, US (Los Angeles) and Japan, with fewer to New Zealand and Australia markets. The frozen tuna, tuna-like species with other bycatch, were exported to Fiji, American Samoa, Taiwan and Vietnam. In addition, fresh, chilled albacore and some bycatches (frozen and new) are sold locally.

Figure 5 describes the leading market destination of tuna longline catches exported from Tonga in 2024. Frozen fish dominates the total export volume from catches landed by foreign longline

vessels. The largest share of this export volume went to Fiji at 44%, followed by American Samoa at 21%, Taiwan at 20 %, and Vietnam at 11%.

Fresh and chilled tuna exports contribute a smaller portion with 2% exported to Honolulu, followed by US with 1%, Japan at 0.5%, Australia at 0.2% and New Zeland with 0.1%.

Among the individual species, Albacore tuna dominates the exports accounting for 60% of the total volume. Yellowfin follow with 31%, Bigeye, Dolphin fish with 2% each, Shark and Skipjack make up 1% each, while Swordfish and others contributes less than 1%.

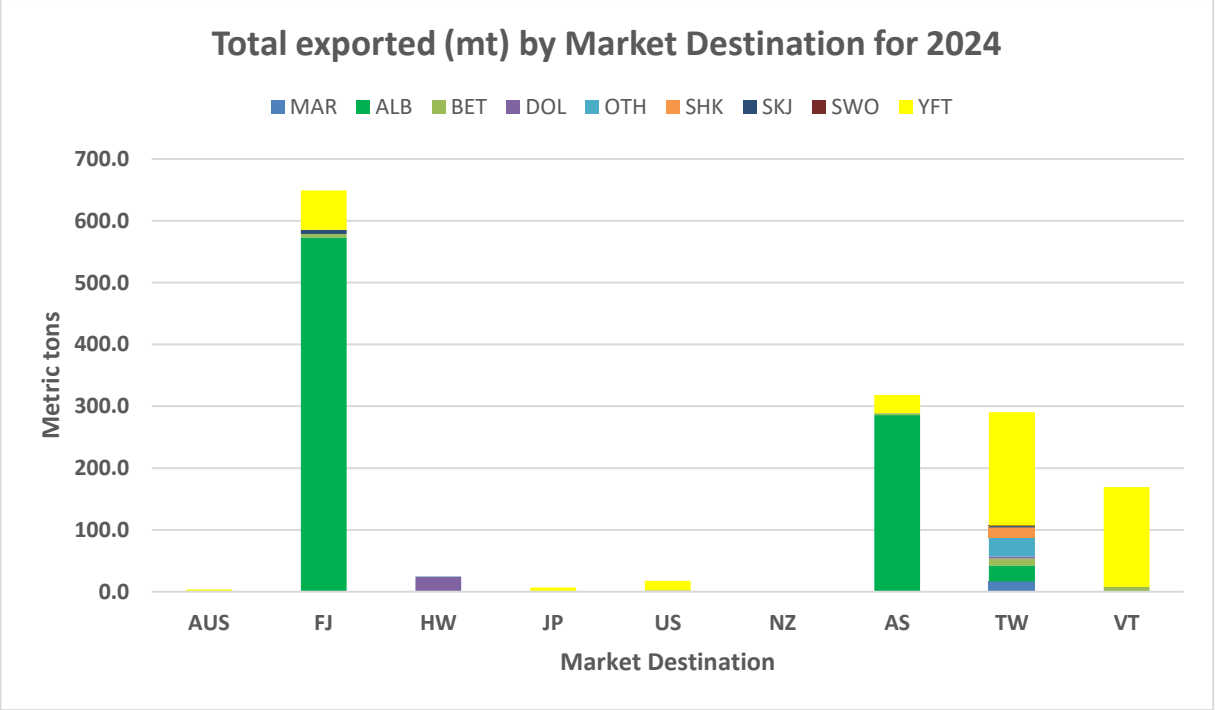


Figure 5. Longline catch (MT) export and Destinations for Tonga, 2024

6.0 ONSHORE DEVELOPMENT AND FUTURE PROSPECTS OF FISHERY

Climate change, declining catch rates, and unstable oceanographic conditions have significantly threatened the sustainability of tuna species today, casting uncertainty over the future of Tonga's longline fishery. Nevertheless, despite these challenges, Tonga is aspiring to expand its longline fishing capacity within its Exclusive Economic Zone (EEZ) from twenty (20) to thirty (30) vessels,

with a requirement that at least fifteen (15) of these vessels must be locally owned. Additionally, Tonga is also aims to secure access to other oceanic fishing grounds, including waters belonging to neighboring states. (Tonga Tuna Management & Development Plan 2022-2026).

Unfortuantely, high opeating costs and inadequate infrastructure have hindered the further development of the local fleet.

In 2024, there were only one domestic tuna fishing companies operating in Tonga, the Pacific Sunrise Fishing Company.

The ability of Tonga's domestic fleets to export fresh, chilled tuna to premium sashimi markets despite the challenges posed by the COVID-19 pandemic and climate change is a testament to the resilience and adaptability of the country's fisheries sector. The focus on high-quality tuna targeted for premium consumption in markets such as Japan, the US, and New Zealand underscores Tonga as a producer of one of the top quality seafood products.

Moreover, the role played by domestic fleets in employing local people, both in vessel renewal and in the processing and retailing of tuna, is vital for the local economy. This not only contributes to economic growth but also ensures the continued availability of employment opportunities within the fisheries sector, thereby supporting livelihoods and sustaining local communities.

The significant decrease in overall catch by Tonga's domestic fleets in 2024, amounting to 309 metric tons and representing a 16.5% decrease compared to 360 metric tons catches in 2023, is indeed concerning. The attributed cause, the impact of climate change leading to lower catch rates along with the decline in the number of active vessels during the year, underscores the vulnerability of fisheries to environmental factors.

The collaboration between the National Fisheries Council (NFC), the Ministry of Fisheries and other stakeholders plays a crucial role in the development of various fisheries in Tonga, including the Tuna fishery. Together, they work towards addressing different challenges and improving infrastructure and equipment within the fisheries sector. This includes the establishment of

fisheries harvest and packing facilities that provide low fees for fishers. These infrastructure developments aim to enhance the efficiency and effectiveness of fish handling, processing and distribution. Through infrastructure development, equipment improvement and encouragement of domestic vessel operations, they aim to create a favourable environment for the future development of fisheries including the tuna fishery.

The Regional Tuna Data and Stock Assessment workshops are workshops annually conducted by SPC for its member countries. Both workshops play a crucial role in strengthening the scientific capabilities of member countries in monitoring and managing their tuna fisheries. The workshops improve member countries' scientific tuna monitoring and data management capacity and satisfy their data reporting obligations to the Western and Central Pacific Fisheries Commission (WCPFC).

Through the presentation of stock assessment models such as MULTIFAN-CL, Seapodym, along with the introduction of Harvest Control Strategies and Management Procedure, participants acquire essesntial knowledge and analystical tools to support evidence-based decision-making in the sustainable management of tuna fisheries.

TUFMAN-2 and its recent developments have revolutionized data collection and reporting processes in Tonga's fisheries sector. The e-Reporting tool, facilitated through applications such as ONBOARD, ONSHORE, OLLO and TAILS, enables the electronic submission of datasheets from sea captains, port samplers, and artisanal data collectors. Tonga in 2024 maintained full implementation (100%) of Electronic Reporting in all its national and foreign fleets. This means that sea captains and port samplers can electronically submit data sheets through the designated applications. TAILS is an important component of data collection in Tonga's artisanal fisheries and in 2024, TAILS implementation covers all the island groups. Tonga expresses gratitude to the Oceanic Fisheries Programme of the Pacific Community (SPC) for developing excellent ER applications, including ONBOARD, ONSHORE, TAILS and OLLO. These applications have played a crucial role in streamlining data collection processes and enabling timely submissions, even during the COVID-19 restrictions. The use of these ER applications has been instrumental in ensuring the timely and efficient collection of data.

Overall, the implementation of TUFMAN-2 and its associated ER applications has significantly enhanced data collection and reporting capabilities in Tonga's fisheries sector. The use of these tools has improved the efficiency, accuracy, and accessibility of data, supporting evidence-based decision-making and contributing to the sustainable management of fisheries resources.

7.0 RESEARCH ACTIVITIES AND STATUS OF TUNA FISHERY DATA COLLECTION

7.1 Logsheets and Unloading data collection

In 2024, Tonga continued to utilize the expanded SPC/FFA Regional Longline Logsheets (2016) format for data collection in its fisheries sector. This standardized format ensures consistency in data collection practices. Tonga remains committed to achieving 100% coverage of logsheets, unloading, and port sampling data from both national and foreign vessel licenses to fish in our EEZ. This comprehensive coverage enables better monitoring and assessment of fishing activities.

The implementation of electronic reporting (ER) applications developed by SPC OFP has significantly improved the efficiency of Tonga's offshore data collection. Future more, ER applications have also contributed to capacity-building efforts among sea captains and observers. Through the use of these tools, sea captains and observers have been able to enhance their understanding of data collection protocols and improve their ability to submit accurate and timely data.

7.2 Observer Programme

The Tonga National Observer Programme (TOOB) continues to deploy observers onboard domestic and foreign longline vessels operating within Tonga's EEZ. These observers serve as independent observers to collect valuable information about fishing operations and activities on board these vessels. Currently, there are three certified debriefers and fourteen Observers within the program. These individuals are responsible for conducting debriefing sessions with observers and ensuring the accurate collection and reporting of data.

In 2024, observer coverage onboard Foreign fishing vessels was 84% and 16% onboard domestic vessels. Observers aim to collect information on various aspects of fishing operations, including fish caught, fish handling techniques, fishing technology, by-catch and discards, and other vessel activities. This comprehensive data collection provides valuable insights for stock assessment and management purposes. Observers ensuring fishing vessels' compliance with fisheries legislation is an integral part of the program. They monitor and report any potential violations or non-compliance with fisheries regulations, contributing to the effective enforcement and management of fisheries resources.

7.3 Port Sampling Programme

The Ministry of Fisheries, and the assistance of the Japanese Trust funds projects in both capacities, continued employing dedicated port samplers to conduct port sampling activities at every licensed Tuna vessel that comes into Nuku'alofa port for unloading. As a result, port sampling coverage remains 100% coverage for 2024. ONSHORE applications developed by SPC OFP greatly assisted our port samplers with the timely submission of the port sampling data from both National and Foreign fishing vessels. The Ministry must maintain this high percentage coverage of port sampling to meet its obligation to the Commission.

The National Observer and Port sampling program warmly extend our sincere gratitude and appreciation to the overseas donors (JTF) and regional organization (FFA, SPC) for their excellent financial and technical support in developing our tuna data collection and analysis as well as providing training to our fisheries staff, observers and data monitors. Your kind assistance in financial and technical support for almost a decade is greatly appreciated. Furthermore, the implementation of both program and the completion of this scientific report would not have been possible if we did not have your support in all approaches.

Malo' aupito

ADDENDUM TO ANNUAL REPORT PART 1

23 March 2023[1]

SECTION A: SPECIFIC INFORMATION TO BE PROVIDED IN ANNUAL REPORT PART 1 AS REQUIRED BY CMMS AND OTHER DECISIONS OF THE COMMISSION.

CMM 2009-03 [Swordfish], Para 8

Year	CCM-flagged* vessels south of the 20S		chartered vessels*		Other vessels fishing within the CCM's waters south of the 20S		
	Catch (tonnes)	Vessel numbers	Catch (tonnes)	Vessel numbers	Flag	Catch (tonnes)	Vessel numbers
2024	10.1	4	-	-	FJ	2.1	4
					TW	2	4

- **All swordfish were caught as bycatch**
- **There are no Tonga-flagged vessels targeting swordfish so the Foreign Fishing Vessels SP_SWO catch.**

Observer coverage (WCPFC 11 decision – para 484(b)

CCM Fleet	Fishery	No. opf Hooks			Days Fished			Days at Sea			No of Trips			See NOTEs
		Total estimated	Observer	%	Total estimated	Observer	%	Total estimated	Observer	%	Total estimated	Observer	%	
Tonga	Local Tuna Fishery	7942	1104	14%	425	70	16%	502	115	23%	114	18	16%	All flagged vessels" observer trips are Non-ROP trips

CMM 2009-06 [Transshipment], Para 11(ANNEX II)

NOT APPLICABLE

NO transhipment activities were undertaken by TO flag or any of its licensed Foreign Fishing Vessel flag occurring in Tonga ports or EEZ

CMM 2011-03 [Impact of PS fishing on cetaceans], Para 5

NOT APPLICABLE

• Tonga does not have purse seine fleets

[1] Reporting requirements requested by CMMs and decisions of the Commission, as of WCPFC19 (Dec 2022). First issued on 23 March 2023. Changes made from Addendum for 2021, include including the new CMM 2022-02 for North Pacific Swordfish and **WCPFC19 Agreed Audit Points.**

CMM 2018-03 [Seabirds] Para 13

Table x: Effort, observed and estimated seabird captures by fishing year for [*CCM*] [South of 30^{0}S; 25^{0}S-30^{0}S; North of 23^{0}N; or 23^{0}N – 25^{0}S[1]]. For each year, the table gives the total number of hooks; the number of observed hooks; observer coverage (the percentage of hooks that were observed); the number of observed captures (both dead and alive); and the capture rate (captures per thousand hooks).

Year	Fishing effort				Observed seabird captures	
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate [2]
2020	5	777400	87639	11.3	0	0
2021	4	664503	122068	18.4	0	0
2022	6	864600	153138	17.7	0	0
2023	6	1171400	52932	5%	0	0
2024	4	794284	106958	13.47%	0	0

1 Insert 'North of 23oN', 'South of 30oS', '25oS-30oS' or '23oN – 250oS'. For CCMs fishing in all areas, provide separate tables for each area.
2 Provide data as captures per one thousand hooks.

Table y: Proportion of mitigation types[1] used by the fleet in [year].

	Combination of Mitigation Measures	Proportion of observed effort using mitigation measures					
		South of 30°S	25°S-30°S	25°S to 23°N	North of 23°N		
Options required south of 25°S	No mitigation measures	0	0	31.9	0		
	TL + NS	0	0	0	0		
	TL + WB	0	0	0	0		
	NS + WB	0	0	0	0		
	TL + WB + NS	0	0	0	0		
	HS	0	0	0	0		
Other options 25°S-30°S	WB	0	0	0	0		
	TL	0	0	0	0		
Other options north of 23^{0}N	SS/BC/WB/DSLS	0	0	0	0		
	SS/BC/WB/(MOD or BDB)	0	0	0	0		
Provide any other combination of mitigation measures here	MOD	0	0	23.6	0		
	NS MOD	0	0	5.6	0		
	NS	0	0	38.9	0		
	Totals (must equal 100%)	0	0	100	0		

[1] TL = tori line, NS = night setting, WB = weighted branch lines, SS = side setting, BC = bird curtain, BDB = blue dyed bait, DSLS = deep setting line shooter, MOD = management of offal discharge, HS = hook-shielding device.

Table z: Number of observed seabird captures in [*CCM*] longline fisheries, 2024, by species and area.

Tonga LL Vessels observed no records of seabird captures.

SECTION B: ADDITIONAL ANNUAL REPORTING REQUIREMENTS THAT COULD BE INCLUDED IN ANNUAL REPORT PART 1, IF NOT OTHERWISE REPORTED ANNUALLY TO WCPFC

CMM 2006-04 [South West striped Marlin], Para 4	2024 – 4LL vessels caught a total of 14.0mt of SW_MLS as bycatch south of 15°S of the Convention area. No flagged vessel target MLS south of 15°S
CMM 2015-02 [South Pacific Albacore] Para 4	Data has been submitted to SPC Addressed through the regular provision of operational catch/effort logsheet data to SPC, who automatically include these data in the WCPFC databases, as per our authorization.
CMM 2019-03 [North Pacific Albacore], Para 3	Not Applicable • Tonga's domestic LL vessel does not fish above the equator. * Note: WCPFC10 clarified that this reporting responsibility lies with the flag State
CMM 2022-02 [North Pacific Swordfish], para 4	Not Applicable • Tonga's domestic LL vessel does not fish above the equator. * Note: WCPFC10 clarified that this reporting responsibility lies with the flag State