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NINETEENTH REGULAR SESSION**

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

WCPFC-SC19-AR/CCM-26

TUVALU



**FISHERIES DEPARTMENT
MINISTRY OF FISHERIES AND TRADE
GOVERNMENT OF TUVALU**



ANNUAL REPORT TO THE WESTERN CENTRAL PACIFIC FISHERIES 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 the 30 th April 2023.	YES
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1.0 ABSTRACT

Tuna catches in Tuvalu's EEZ are caught mostly by Purse seine and Longline fishing methods. The fight against Covid-19 is slowly coming to an end, after closing borders to neighboring countries for more than two years. Tuvalu is adapted to its borders re-opening to neighboring countries and a new normal was in practice for the last two months of the year 2022. The Tuvalu Fisheries Department continues to manage and monitor all the fishing activities in Tuvalu EEZ. These fishing activities are mostly carried out by our bilateral partners under access agreements and regional arrangements under the FSMA and US Treaty.

Tuvalu Purse Seiner flag vessels' total catch in the WCPFC Convention Area for 2022 was calculated at 41,117mt. The highest catch of these target species was skipjack (SKJ) which accounted for 35,609mt (87%) in total, with 5,150mt (12%) of yellowfin tuna species (YFT) and 358mt (1%) for bigeye tuna species (BET).

Tuvalu longline flag vessel's catch total in 2022 was estimated at 2.739mt, this includes Target species and Other Species. Yellowfin (YFT) tuna species accounted for the highest of the Target Species catch of 0.482 (18%), Albacore tuna (ALB) of 0.150mt (5%), bigeye tuna (BET) of 0.08mt (3%), and 0.02mt (1%) for skipjack tuna species (SKJ). There were also other species retained by the vessel and accounted 2mt (73%) of all the catches. These were the lowest records in comparison with previous years, due to the vessel breaking down in mid-January and not operating again during the year.

The Fisheries department issued a total of 133 fishing licenses for the year 2022. When compared to 2021, there is a slight difference in the number due to some fishing fleets not renewing their access agreements due to financial difficulties. The licensed fishing vessels, consisted of 93 purse seiners, 23 longliners, 1 pole and line, 6 fish carriers and 10 bunker vessels licensed to fish in Tuvalu's EEZ. These totals do not include licenses issued under regional arrangements which permit fishing in the Tuvalu EEZ.

The total catch of tuna from Purse seine fleets that fished in Tuvalu's EEZ in 2022 were divided amongst each target species as follows: SKJ-54,093mt (92%), YFT-4,309mt (7%) and BET-520mt (1%). These estimates added up to the sum of 58,922mt taken by the Purse seine fleet from inside Tuvalu's EEZ. The Longline fleet also managed to continue operating within Tuvalu's EEZ. The total estimate for Longline catch is also separated by each target species, ALB-452mt (44%), YFT-368mt (35%), BET-147mt (14%) and there were also other species, OTH-74mt (7%) caught by these Longliners within the Tuvalu EEZ. There were 1041mt in total of Longline catches caught within Tuvalu's EEZ for 2022.

Tuvalu's observer programme (TVOB) started to deploy observers back onboard fishing vessels during the last two months of the year 2022. It was also the first time for Tuvaluan Observers to work and monitor onboard Reefer Carriers since the start of the Programme. Observers are mainly placed on Purse seiners (100% observer coverage) with plans to deploy more observers on other Vessel gear types. There were 74 active observers since the opening of borders and the programme is expecting to recruit more Observers in the future.

2.0 BACKGROUND

Tuvalu flag vessels used two types of fishing method within the WCPO convention Area for the year 2022. These flag vessels consist of seven active vessels that fished - six purse seiners and one longliner. Despite Covid-19 with all the challenges faced by Tuvalu, this has started to come back to normal during the last two months of the year 2022.

All fishing operations carried out by foreign fishing vessels within the Tuvalu Exclusive Economic Zone are managed and monitored by the Tuvalu Fisheries Department in accordance with their access agreements.

In 2022, the Tuvalu Purse Seine fishing effort and catch were spread across the PNA group's EEZs, including PNG, FSM, Solomon Island, Nauru, Marshall Island, Kiribati EEZ including (Phoenix and Kiritimati), Tokelau, and Tuvalu. There was also fishing in the High Seas Pocket 1 and 2, likewise the Eastern High Seas. The most fish caught were mostly of the skipjack variety for Tuvalu Flag Purse seine vessels. Tuvalu's only longliner fished for a few days in January, but was otherwise not active during the year.

3.0 FLAG STATE REPORTING

3.1 DOMESTIC FLEET

Tuvalu had seven flagged vessels permitted to fish in the WCPO Area in 2022 under their registration on the WCPFC RFV. One longliner and six purse seiners were registered. The tables 1 & 2 below show the number of purse seiner and longliner flagged vessels over the last five years, broken down by size category.

Table 1. Numbers of Tuvalu Flagged Purse Seiner vessels and size category, active in the WCPFC Convention Area for 2018-2022. Source TUFMAN 2

Years	00-500 GRT	501-1000 GRT	1001-1500 GRT	1500+ GRT	Total Vessels
2018	0	0	0	1	1
2019	0	0	0	1	1
2020	0	1	0	2	3
2021	0	2	1	3	6
2022	0	2	1	3	6

Table 2. Numbers of Tuvalu Flagged Long Liner vessels and size category, active in the WCPFC Convention Area for 2018-2022. Source TUFMAN 2

Years	00-50 GRT	51-200 GRT	201-500 GRT	500+ GRT	Total Vessels
2018	0	2	0	0	2
2019	0	1	0	0	1
2020	0	1	0	0	1
2021	0	1	0	0	1
2022	0	1	0	0	1

3.2 CATCH DATA

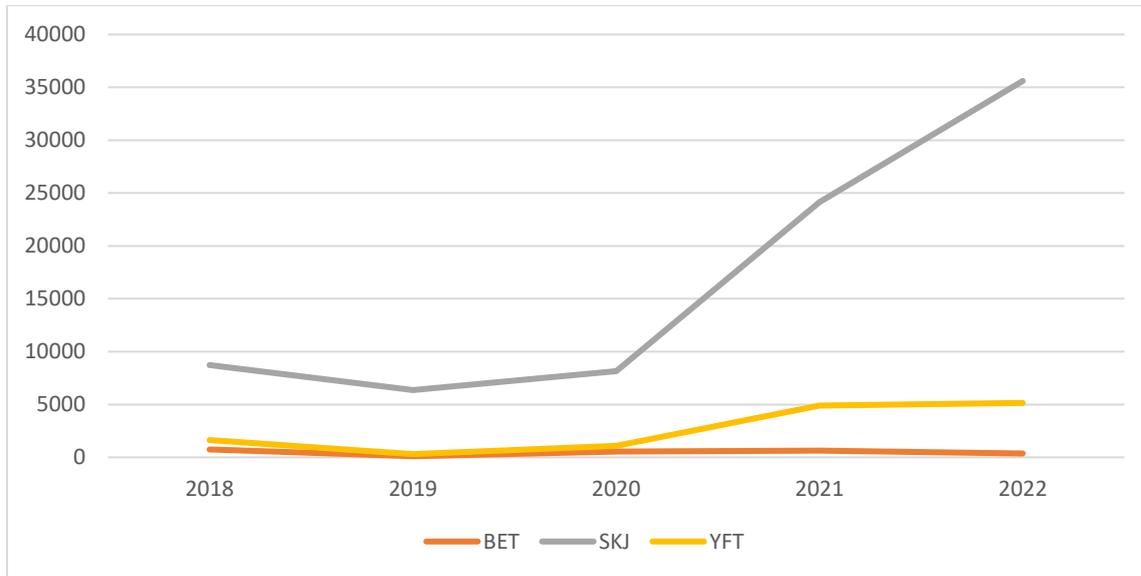
3.2.1 Purse Seine

Tuvalu-flagged Purse Seiner vessel's catch for 2022 was calculated to be 41,117mt (Table 3 & Figure 1) as shown below. It can be seen that there was an increase in catch from 2019 to 2022. The reason for this is the increase in the number of Flag vessels from 1 to 3 at the end of 2020 and six by mid-2021. The highest catch by species was skipjack (SKJ) which accounted for 35,609mt (87%) of the total, 5,150mt (12%) of yellow fin tuna (YFT) and 358mt (1%) for bigeye tuna (BET). For the discards catch for 2022 were 338mt. For more details on discarded see Tuvalu ACEs for record of discards.

Table 3: Catches of Tuvalu-flagged Purse Seine in the WCPO Area from 2018-2022 in MT. Source: TUFMAN 2

Years	BET	SKJ	YFT	Total
2018	746	8721	1619	11086
2019	107	6364	304	6775
2020	547	8160	1095	9802
2021	626	24124	4889	29639
2022	358	35609	5150	41117

Figure 1. Chart of annual catches of target species for Tuvalu Purse Seiner for the WCPO Area over the past five years (2018-2022). Source: TUFMAN 2



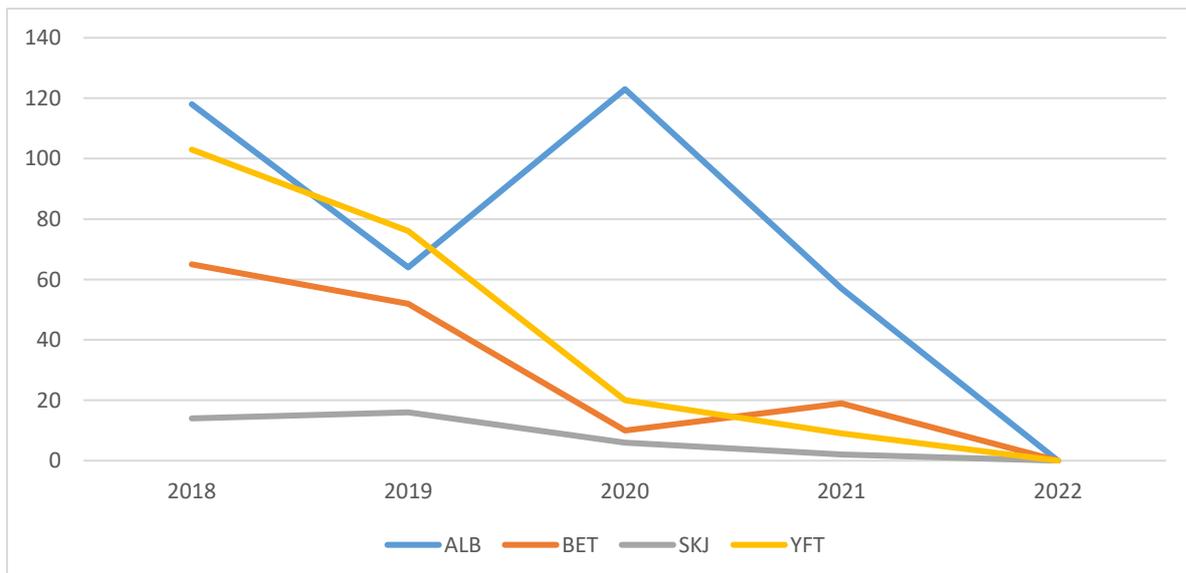
3.2.2 Longline

The Tuvalu’s longline vessel’s catch total in 2022 was 2.739mt as shown on (Table 4 & Figure 2). The decrease in the catch was due to the low effort, since the FV Pakasoa was in dock and maintenance throughout the year 2022 and these were the lowest records compared to previous years. The Pakasoa managed to make only 1 trip for 2022, when the vessel departed port on the 10th January, 2022 and returned to port on the 27th January 2022 after breaking down at sea. Yellowfin tuna species accounted for the highest catch of 0.482mt (18%), Albacore tuna (ALB) of 0.150mt (5%), Bigeye tuna (BET) of 0.087mt (3%) and 0.020mt (1%) for skipjack tuna species (SKJ). Other species had taken the first place for the most catch during the trip with the total of 2mt (73%) of all retained catch. For the discards catch for 2022 were 68mt. For more details on discarded see Tuvalu ACEs for record of discards.

Table 4. Catches of Tuvalu-flagged long liners in the WCPO Area from 2018-2022 in MT. Source: TUFMAN 2

Years	ALB	BET	SKJ	YFT	OTH	Total
2018	118	65	14	103	17	317
2019	64	52	16	76	12	220
2020	123	10	6	20	4	163
2021	57	19	2	9	3	90
2022	0.150	0.087	0.020	0.482	2	2.739

Figure 2. Chart of annual catches of target species for Tuvalu Longliners for the WCPO Area over the past five years (2018-2022). Source: TUFMAN 2

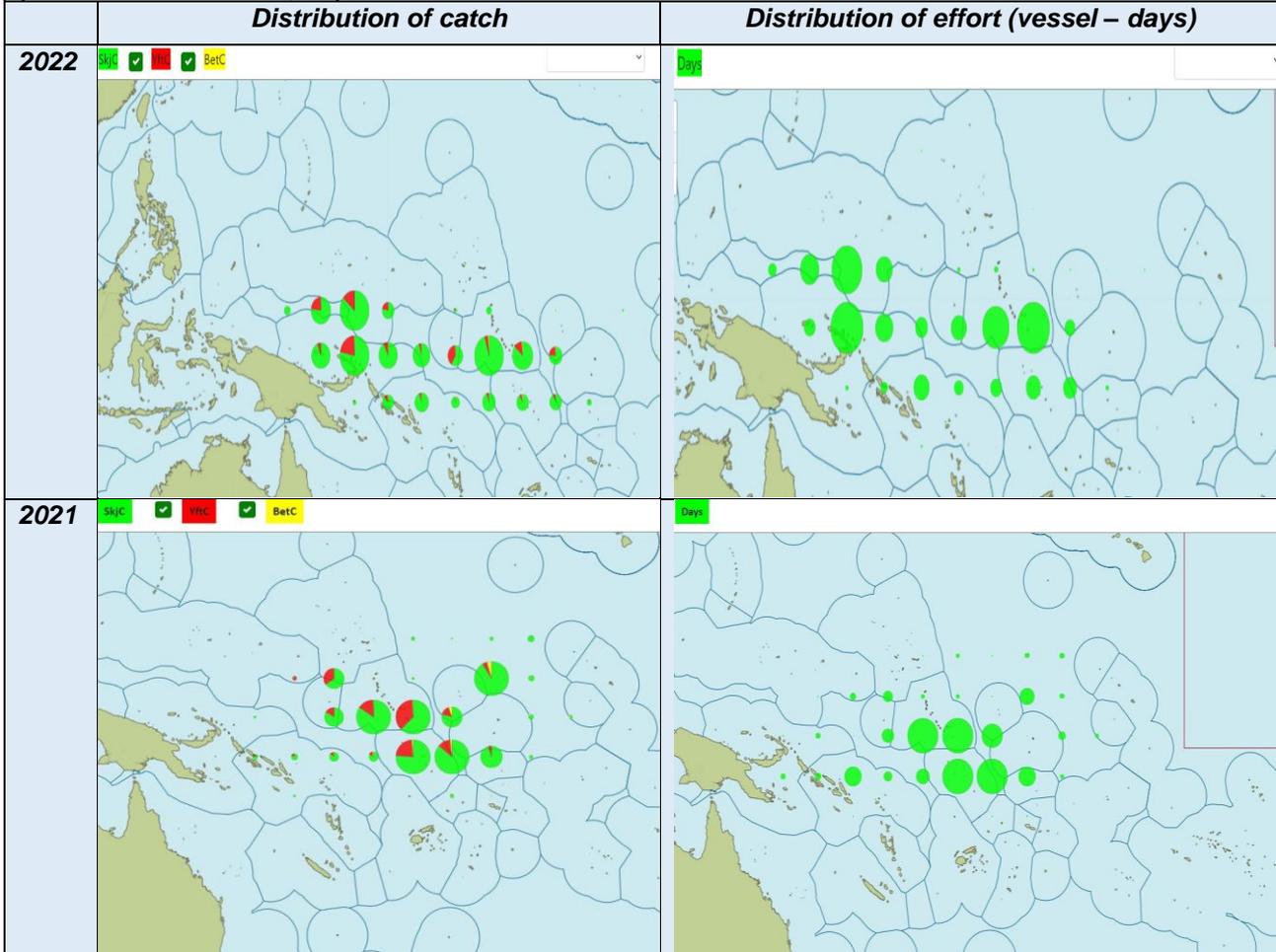


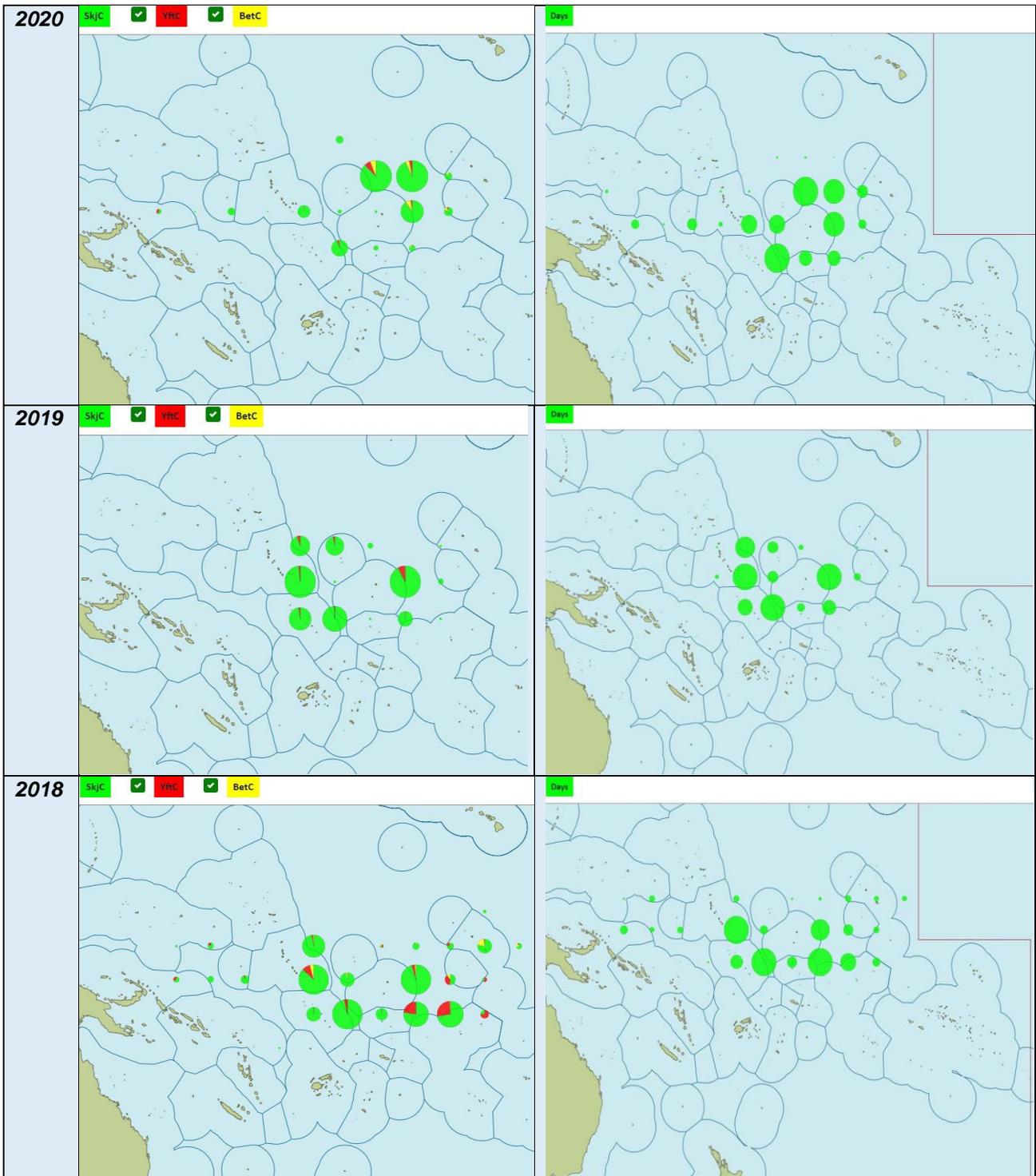
3.3 FISHING PATTERN AND DISTRIBUTION

3.3.1 Catch and Effort Distribution for Tuvalu flagged purse seiners

In 2022, the fishing effort and catch for purse seine were dispersed throughout PNA group's EEZs including PNG, FSM, Solomon Islands, Nauru, Marshall Islands, Kiribati EEZ including Phoenix and Kiritimati, Tokelau, and Tuvalu. There was also fishing in the Eastern High Seas. The most abundant species caught was skipjack tuna (Figure 3).

Figure 3: Tuvalu National Purse Seiner fleet operations within WCPO area in the past 5 years. (Source :Tufman II-8b, 9b)

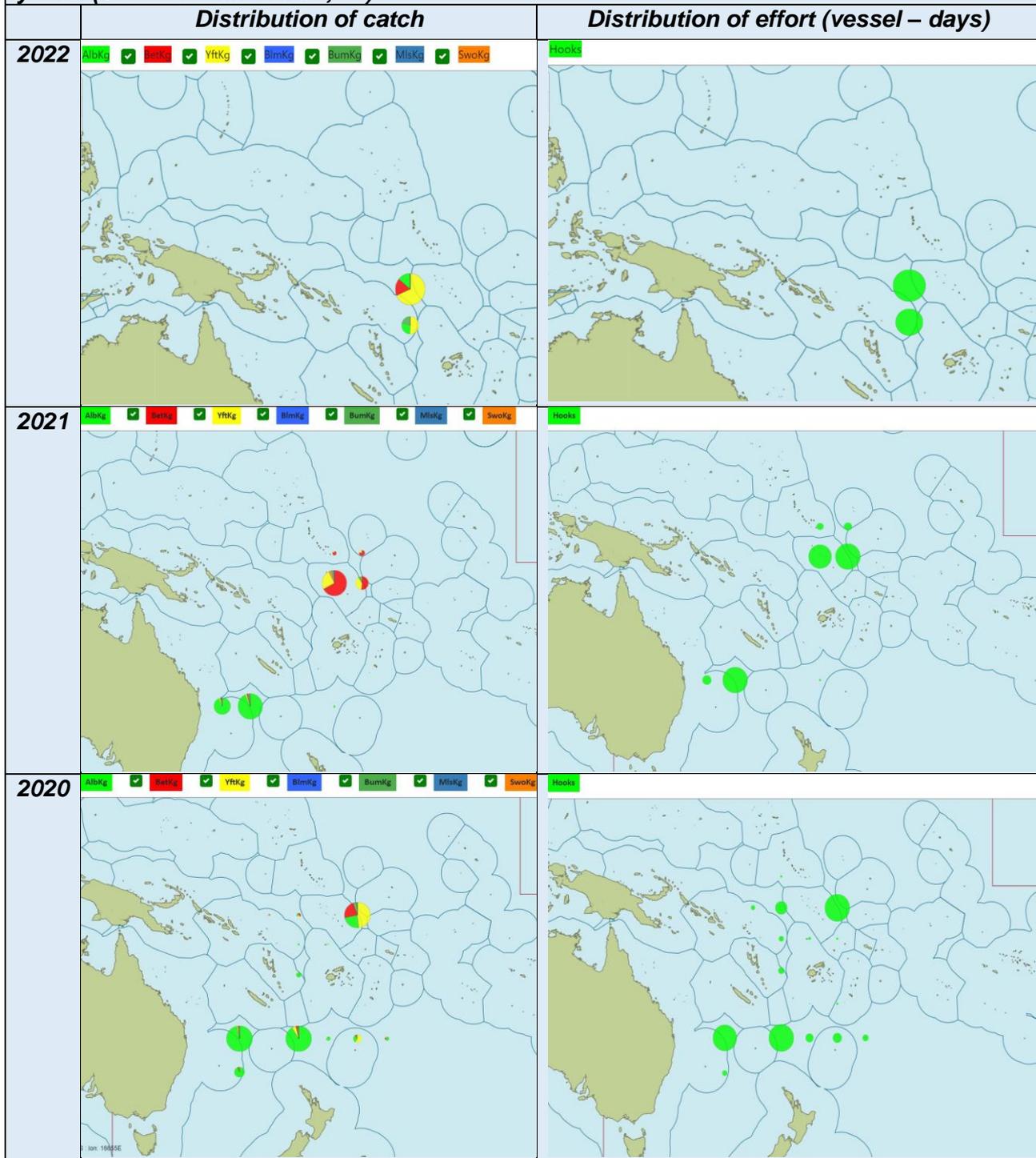


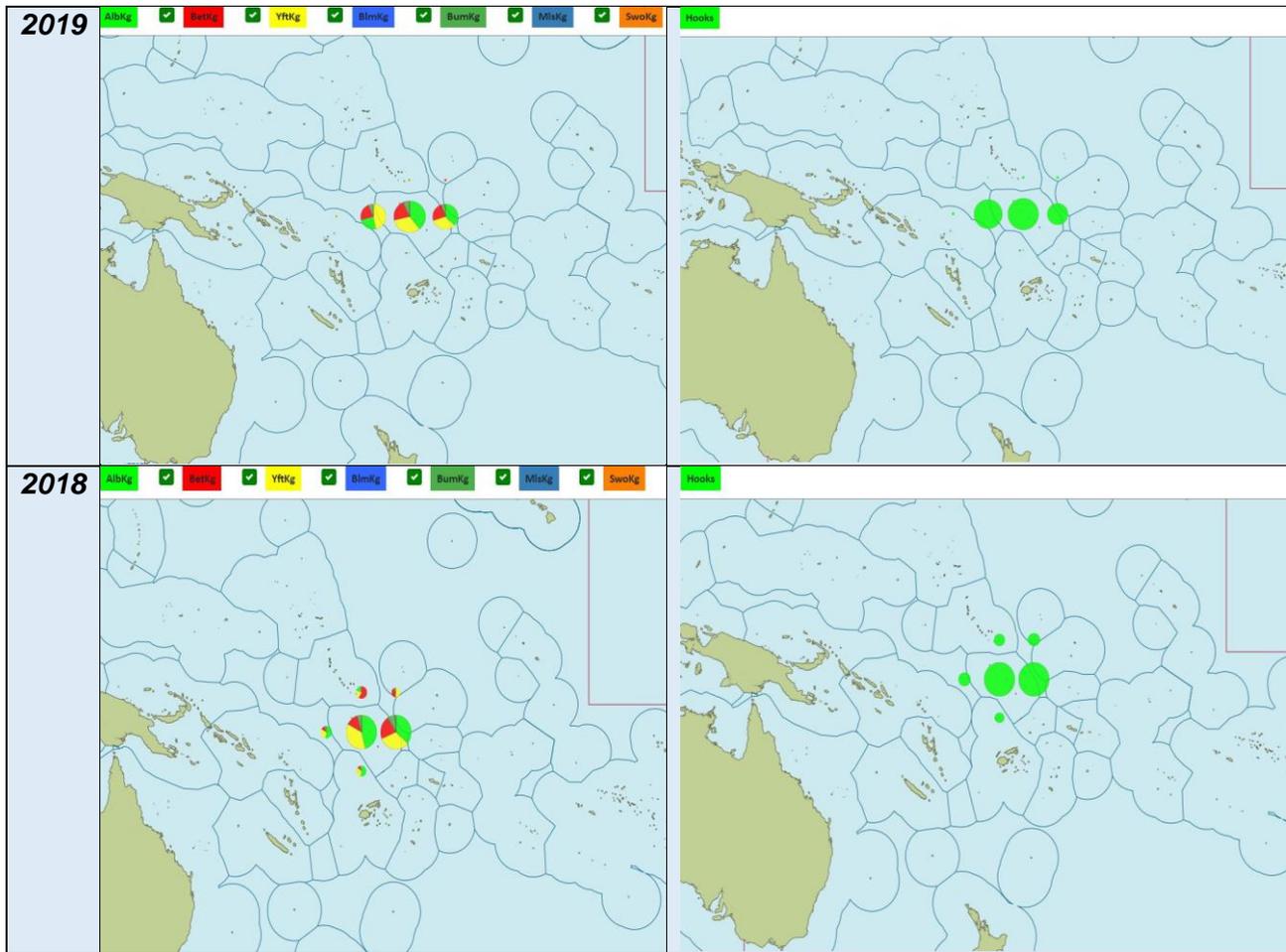


3.3.2 Catch and Effort Distribution for Longliners

The fishing catch and effort for longline vessels shows activities were carried out inside the High Seas Pocket number 2 in 2022. (Figure 4).

Figure 4: Tuvalu National Long liner fleet operations within WCPO area in the past 5 years. (Source: Tufman II-8a, 9a)





3.3.3 ARTISANAL FISHERIES

Information is still being collected on catches of target species of bigeye, yellowfin, and skipjack tuna, all of which were taken using handline troll fishing, as part of the small-scale artisanal tuna data collection initiative. They were gathered through this initiative by data collectors from in Funafuti and outer islands, and were overseen by the Coastal Fisheries Section. Since 2017 data has been gathered, but there are still no accurate figures for total catch, which is estimated at a few hundred tonnes. Analysis of creel data carried out by TFD in 2022 indicated that tuna comprises 59% of the artisanal and subsistence catch by weight, and its importance is increasing.

3.4 SPECIES OF SPECIAL INTEREST

The observer data is not yet available and interactions with sharks, cetaceans and turtles are derived from logsheet data.

3.5 NON-TARGET ASSOCIATED OR DIFFERENT SPECIES

The annual estimates of non-target species caught by vessels flying the Tuvalu flag are provided in Table 5. It shows that there were 34mt catches for the year 2022 according to Purse Seine data for non-target species, although longline catches were no catch (Table 5).

Table 5: Annual raised catch estimates (mt) of non-target, associated or dependent species for Tuvalu flagged vessels in the WCPFC Convention Area. (Source: Tuvalu ACE – wcpfc.int/ace-by-fleet)

YEAR	BLM	BUM	MLS	SWO	BSH	FAL	HAM	MAK	OCS	TOTAL
Purse seine										
2022	7	15	0	0	0	12	0	0	0	34
2021	0	3	0	0	0	13	0	0	0	16
2020	3	0	0	0	0	0	0	0	0	3
2019	2	0	0	0	0	0	0	0	0	2
2018	0	7	1	0	0	2	0	0	1	11
Longline										
2022	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	10	0	0	0	0	10
2020	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	3	1	0	0	2	6
2018	0	0	0	0	1	3	0	8	0	12

4.0 COASTAL STATE REPORTING

4.1 FISHING LICENSES

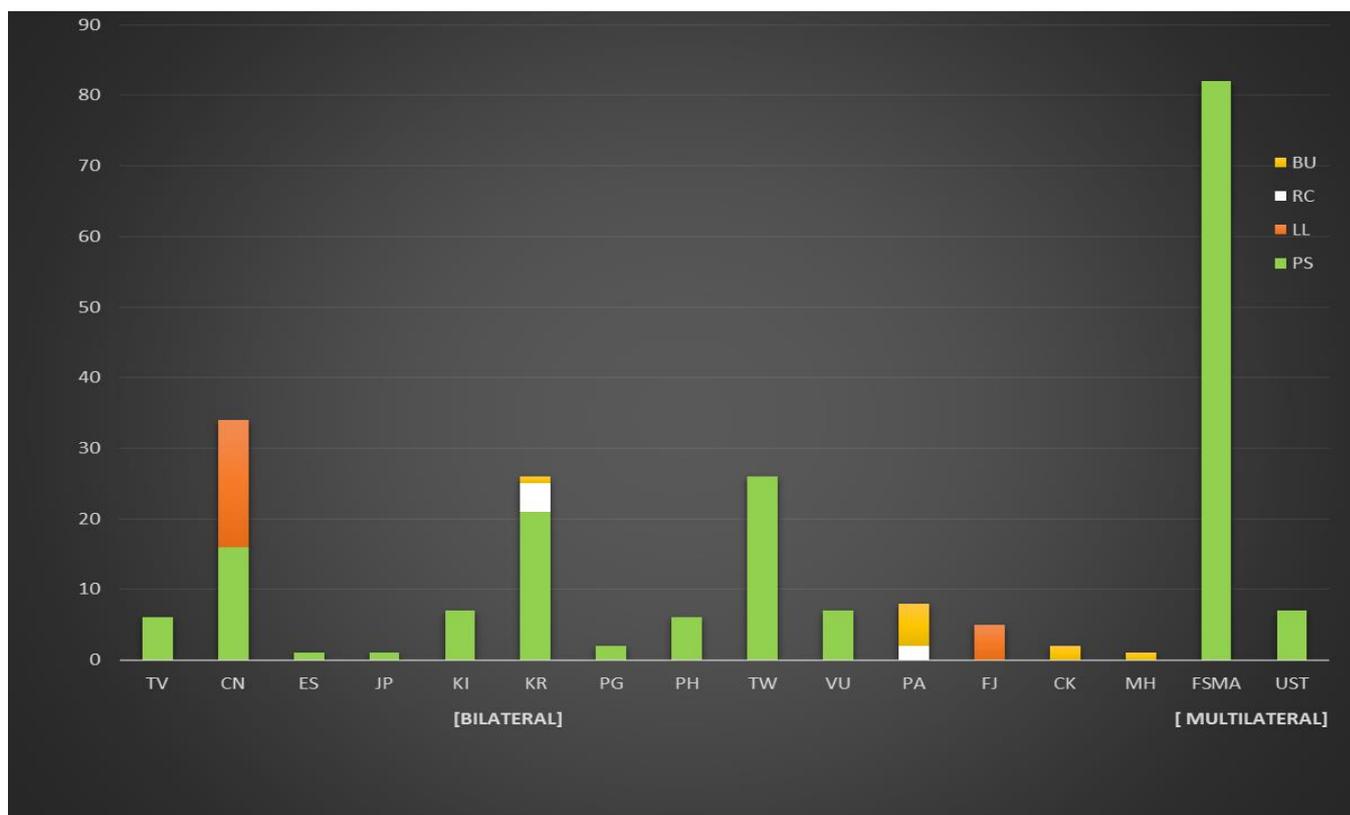
In order to successfully access Tuvalu’s EEZ, the vessel operators have to agree to the terms and conditions and also sign an Access agreement with the Government of Tuvalu; this is an obligation under Tuvalu Laws. The government continued to issue licenses via an online system through FIMS. Fishing permits are issued mostly to bilateral partners in the Philippines, Korea, Taiwan, China, Kiribati and Vanuatu. The Government of Tuvalu continues to grant High seas and Foreign waters fishing permits to its flag vessels for the purpose of fishing in areas beyond our national jurisdiction for our National fleet. In addition, vessels operating under multinational accords like the US Treaty and FSM Arrangement can access Tuvalu’s EEZ for the purpose of fishing operation under their regional access licenses.

The Fisheries department issued a total of 133 fishing licenses for the year 2022, under our bilateral agreements. The Purse Seiners have been the dominant gear type throughout the past four years. The 133 licenses recorded in table 6 for the year 2022, do not include fishing vessels registered by the FSM Arrangement and US Treaty. Bilateral arrangements covered 93 Purse Seine vessels, 23 Longline, 1 Pole and Line, 6 Fish Carriers and 10 Bunker Vessels.

Table 6: Number of licenses issued for fishing in Tuvalu’s EEZ, by flag and gear type from 2018 to 2022. Source: TUFMAN 1 & PNA FIMS.

Years	Longline	Purse seine	Pole & Line	Fish Carrier	Bunker	TOTAL
2018	77	93	0	45	0	215
2019	70	104	14	51	0	239
2020	31	98	16	55	4	204
2021	27	108	12	26	10	183
2022	23	93	1	6	10	133

Figure 5: Annual number of licensed fishing vessels by gear, flag and Regional agreements in 2022.



4.2 CATCHES IN TUVALU’S EEZ

Tuvalu’s Economic Exclusive Zone covers an oceanic area of approximately 749,790 km² with a population of 11,000 people who consistently depend on their coastal and oceanic fishery. The Tuvalu Fisheries Department continues to carefully monitor the inshore and offshore fishery, with the assistance from regional organisations in the Pacific region.

The Purse Seine catches of tuna species in Tuvalu’s EEZ for 2022 were caught mostly by vessels operating under our bilateral and regional arrangements. Skipjack tuna has dominated the catch taken inside our EEZ with Kiribati Flag vessels leading with the most catch. Skipjack tuna is estimated to be around 92% of the total tuna catch, While 7% is Yellowfin tuna and 1% is Bigeye tuna caught by the Purse seine fleet inside Tuvalu’s EEZ.

The Longline fleet continued to operate within Tuvalu’s EEZ for the year 2022. Albacore is the dominant species caught within our EEZ with an estimated catch of 452mt (44%), Yellowfin tuna has made up the second most catch taken within our EEZ with an estimate of 368mt (35%). The last of these target tuna species is Bigeye tuna, and it’s catch is estimated to be 147mt (14%). There are also other species taken within the TV EEZ and their catch is estimated to be 74mt (7%). The longline vessels fishing in the EEZ are flagged by Fiji and China.

Figure 6: Total raised catch estimates (mt) in Tuvalu EEZ by flag and species for 2022. Source: TUFMAN 2

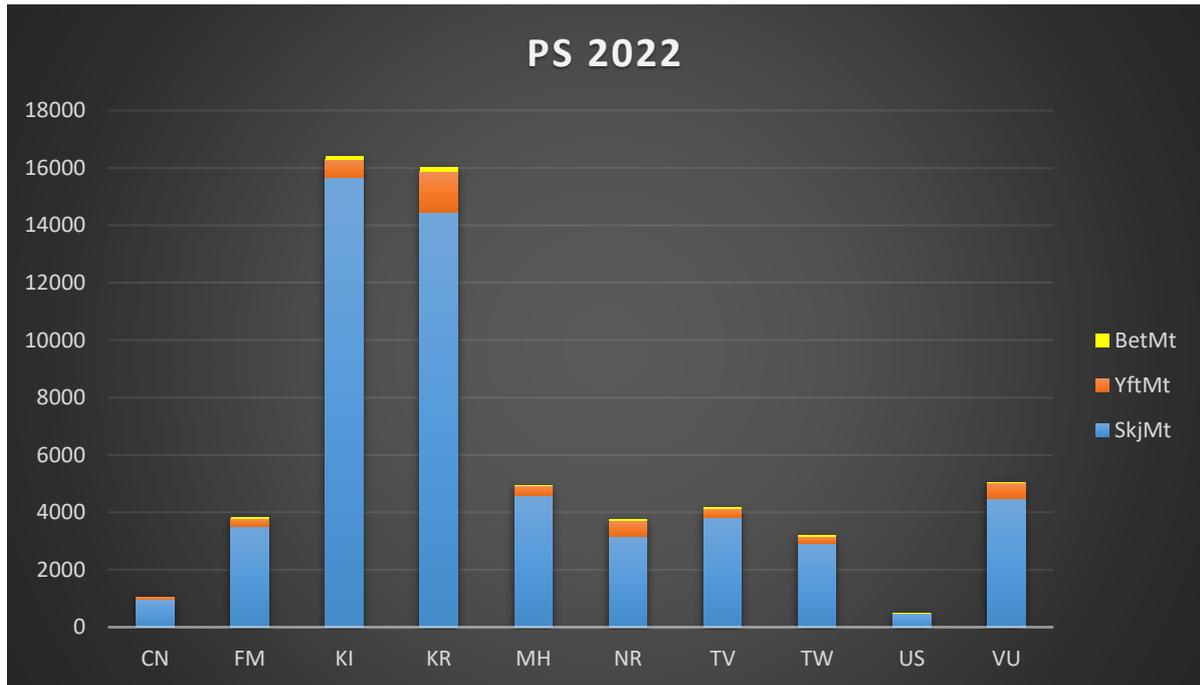
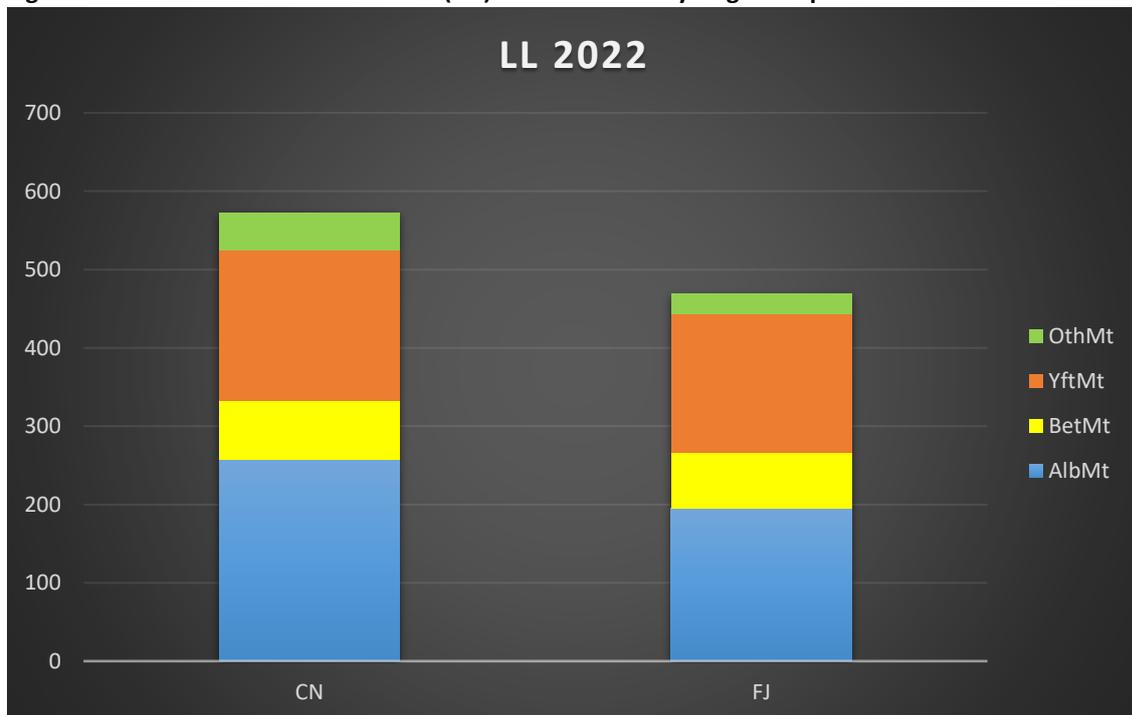


Figure 7: Total raised catch estimates (mt) in Tuvalu EEZ by flag and species for 2022. Source: TUFMAN 2



5.0 SOCIO ECONOMIC FACTORS

The fisheries licensing continues provide fisheries revenue to the Government of Tuvalu annually. This is crucial for sustaining government services, especially those related to health, education, and other areas of government expenditure.

6.0 DISPOSAL OF CATCH

The Tuvalu Purse Seine vessels transshipped in Tuvalu at a designated transshipment area as specified in the Conditions for Transshipment Order because of the pandemic COVID 19. Transshipment also occurred in the ports of Tarawa, Majuro, Funafuti, Pohnpei, Pagopago, Rabaul, Suva and Busan. The Tuvalu longline vessel continued unloading its catches in the Fiji port of Suva.

7.0 ONSHORE DEVELOPMENTS

The GOT's commercial fishery interests are represented by the National Fisheries Corporation of Tuvalu (NAFICOT), which has undergone reform to conform to the Public Enterprises (Performance and Accountability) Act 2009's requirements. In 2020, the newly appointed Chief Executive Officer and the Financial Officer officially created the NAFICOT management. The NAFICOT started marketing catches of local fishermen at the end of 2022.

8.0 FUTURE PROSPECTS OF THE FISHERY

Despite significant obstacles, Tuvalu currently promotes domestication of its tuna fisheries. However, the ability to place seafarers to work on fishing vessels would be an important step in the development of our resources.

9.0 STATUS OF TUNA FISHERY DATA COLLECTION SYSTEM

9.1 LOGSHEET DATA COLLECTION AND VERIFICATION

Logsheet data are collected weekly by the Tuvalu Fisheries Department, through emails from vessel operators. These logsheets are to be submitted by the vessel operator within 7 working days for Purse Seiners and 14 working days for Longliners after completion of a trip. For vessels offloading in port Funafuti, their logsheets are collected onboard the vessels by our compliance officers and handed over to our data entry officers so that data can be entered accordingly into the Tufman 2 database. These logsheets are verified daily by authorized officers who have access into system. Available data shows that Tuvalu Flagged Purse Seiners' Logsheets have 100% coverage. 100% coverage for Longline Logsheets was also recorded for 2022, although this covered only a few days' fishing.

9.2 OBSERVER PROGRAMME

Even though Covid-19 restriction continued in the early months of the year 2022, the Tuvalu observer programme manage to resume deploying observers back onboard Fishing vessels during the last two months of the year. There were 74 active observers after a long break due to covid-19. The programme managed to make 25 successful Placements, 16 of these placements are under the national observer Programme (TVOB) while the remaining 9 placements were under the PNA Observer Agency (POA). There were 21 observers placed on Purse Seine fishing Vessels and 4 observers were placed to monitor Fish carriers for first time since the beginning of the Tuvalu Observer Programme.

10.0 CMM REPORTING

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	There was no Tuvalu vessel recorded fishing in the Convention Area South of 20°S						
Observer coverage (WCPFC 11 decision – para 484(b))	Due to COVID, no observers were deployed onboard in 2022						
CMM 2009-06 [Transshipment], Para 11 (ANNEX II)	(1) the total quantities, by weight , of highly migratory fish stocks covered by this measure that were transhipped by fishing vessels the CCM is responsible for reporting against, with those quantities broken down by:						
	a) offloaded and received;	b) transhipped in port, transhipped at sea in areas of national jurisdiction, and transhipped beyond areas of national jurisdiction	c) transhipped inside the Convention Area and transhipped outside the Convention Area;	d) caught inside the Convention Area and caught outside the Convention Area;	e) Species	f) Product Form	g) Fishing gear
	Offloaded 45,322MT	In Port Funafuti, Tarawa, Majuro, Pagopago, Pohnpei, Rabaul, Suva, Busan	Inside the Convention Area	Inside the Convention Area	SKJ (39,589MT)	FROZEN	PS
		In Port Funafuti, Tarawa, Majuro, Pagopago, Pohnpei, Rabaul, Suva, Busan	Inside the Convention Area	Inside the Convention Area	BET (394MT)	FROZEN	PS
		In Port Funafuti, Tarawa, Majuro, Pagopago, Pohnpei, Rabaul, Suva, Busan	Inside the Convention Area	Inside the Convention Area	YFT (5339MT)	FROZEN	PS
(2) the number of transhipments involving highly migratory fish stocks covered by this measure by fishing vessels that is responsible for reporting against, broken down by:							

	a) offloaded and received	b) transhipped in port, transhipped at sea in areas of national jurisdiction, and transhipped beyond areas of national jurisdiction	c) transhipped inside the Convention Area and transhipped outside the Convention Area	d) caught inside the Convention Area and caught outside the Convention Area	e) fishing gear
	Offloaded 55	In Port Funafuti, Tarawa, Majuro, Pagopago, Pohnpei, Rabaul, Suva, Busan	Inside the Convention Area	Inside the Convention Area	PS
CMM 2011-03 [Impact of PS fishing on cetaceans], Para 5	There were no recorded interactions or encirclements of cetaceans				
CMM 2018-03 [Seabirds] Para 13	Only one TV flagged LL trip was conducted in 2022 and it fished north of 15 degrees south and south of the equator. An observer was not placed on this vessel and so no mitigation data are available, there were no recorded interactions with birds.				

CMM 2018-03: [Seabirds] Annex 2. Guidelines for reporting templates for Part 1 report

The following tables should be included in the annual Part 1 country reports, summarizing the most recent five years.

Table x: Effort, observed and estimated seabird captures by fishing year for [CCM] [South of 30°S; 25°S-30°S; North of 23°N; or 23°N – 25°S¹]. 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
[year]						
[year]						
[year]						
[previous year e.g. 2017]						
[current year e.g. 2018]						

¹ Insert 'North of 23°N', 'South of 30°S', '25°S-30°S' or '23°N – 25°S'. 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 types¹ 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		
	No mitigation measures						
Options required south of 25°S	TL + NS						
	TL + WB						
	NS + WB						
	TL + WB + NS						
Other options 25°S-30°S	HS						
	WB						
Other options north of 23°N	TL						
	SS/BC/WB/DSLS						
Provide any other combination of mitigation measures here	SS/BC/WB/(MOD or BDB)						
	Totals (must equal 100%)						

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, 2012, by species and area.

Species	South of 30°S	25°S-30°S	North of 23°N	23°N –25°S	Total
---------	---------------	-----------	---------------	------------	-------

E.g. Antipodean albatross					
[species name]					
[species name]					
[species name]					
[species name]					
[species name]					
[species name]					
Total					

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	No Tuvalu flagged vessels fished south of 15 degrees south.
CMM 2015-02 [South Pacific Albacore] Para 4	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	No Tuvalu flagged vessels fished in the CMM area.