



**SCIENTIFIC COMMITTEE
THIRTEENTH REGULAR SESSION**

**Rarotonga, Cook Islands
9 – 17 August 2017**

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

**WCPFC-SC13-AR/CCM-04
Rev 1 (12 July 2017)**

COOK ISLANDS



Ministry of Marine Resources
GOVERNMENT OF THE COOK ISLANDS

WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION

Thirteenth Regular Session of the Scientific Committee

August 9 – 17, 2017

Rarotonga, Cook Islands

COOK ISLANDS

Annual Fisheries Report

Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 April 2017.	YES
---	------------

CONTENTS

1.	Abstract	4
2.	Background	5
3.	Flag State Reporting	5
3.1.	Catch and Effort Trends	5
3.2.	Catch and Effort Spatial Distribution	10
3.3.	Licensing and Fleet Structure	12
4.	Coastal State Reporting	12
4.1.	Catch and Effort Trends	12
5.	Socio-economic Factors	16
6.	Future prospects of the fishery	16
7.	Research and Statistics	17
7.1.	Status of tuna fishery data collection	17
	a) Logsheet collection and verification	17
	b) Observer Program	17
	c) Port Sampling Program	18
7.2.	Research Activities	18
	Appendix 1	
	CMM Reporting Summary Table	19

1. Abstract

The 2016 Cook Islands National Fleet consisted of fourteen longline and four bunker vessels operating within the WCPFC Convention Area, south of the equator. Overall fishing effort in number of hooks decreased by 15% since 2015 despite the total catch of primary species¹ (1,862 mt) was consistent with 2015 catch levels. Albacore accounted for 66% (1,265 mt) of the total longline catch within the Convention Area, followed by Yellowfin at 16% (314 mt) and Bigeye at 10% (183 mt). All National Fleet longline catch estimates are total catch estimates based on available data.

No vessels carried out Marlin specific targeting and all catches of Marlin species were taken as by-catch in the Albacore longline fishery. Blue Marlin was the most frequently caught billfish species in 2016. 108 mt of catch was reported in the artisanal fishery which extends across all 12 inhabited islands of the Cook Islands. Yellowfin tuna is the dominant catch of the artisanal fishery and is typically caught by trolling, hand lining and spearfishing. Artisanal fishery data is un-raised and based on reported catch only.

In 2016 the Cook Islands authorised two Korean purse seine vessels in addition to the US Multilateral Treaty to operate within its Exclusive Economic Zone. The total purse seine catch estimate in the Cook Islands EEZ (CK EEZ) was 6,898 mt. The Cook Islands has declared a purse seine limit for its EEZ of 1,250 days.

The retention of any shark or shark parts within the Cook Islands EEZ is prohibited. Minimal shark retention is therefore taken by flagged vessels fishing in areas beyond national jurisdiction, with the exception of Silky sharks and Oceanic White Tip sharks where retention is prohibited.

¹ Primary species for longline gear is described as Albacore, Yellowfin, Bigeye, Pacific Bluefin and Skipjack tuna, Black Marlin, Blue Marlin, and Striped Marlin and Swordfish

2. Background

In 2016, the Cook Islands fishery consisted of longline fishing vessels targeting tuna and tuna-like species. There is a significant artisanal fishery operating from each of the 12 inhabited islands and a historical troll fishery that existed in the mid 2000's. The majority of the longline fishing activity is concentrated in the Northern Cook Islands waters, north of 15°S. Some longline fishing also occurs in other areas of national jurisdiction within the WCPFC-CA. Historically, purse seine fishing was conducted in the CK EEZ by US Treaty vessels only. Recently, in 2015, the Cook Islands entered into a number of purse seine bilateral agreements with Korea and New Zealand and this was the first year that purse seine fishing occurred outside the scope of the US Multilateral Treaty. A Fisheries Partnership Agreement was made with the European Union (EU) which subsequently resulted in the authorisation of EU purse seine vessels to fish in Cook Islands waters from January 2017.

Albacore tuna is the primary target species for Cook Island flagged longline vessels fishing in the WCPFC-CA. These vessels are typically based out of foreign ports in Pago Pago and Apia. Catches are mostly unloaded directly to the canneries. They may also unload by-catch species in Apia, and in the Cook Islands for the domestic market, or export via local Cook Island agents.

Three small locally based vessels operate out of Rarotonga and target a range of species, catering mainly for the local market with some exports to Japan, New Zealand and the USA. These vessels are below 80 GRT and typically operate within 100nm of Rarotonga.

As of December 2012, the entire CK EEZ was declared a shark sanctuary, prohibiting the targeting or retention of any shark species.

3. FLAG STATE REPORTING

3.1 Catch and Effort Trends

Total longline effort in the WCPFC-CA is approximately 5.4 million hooks (Table 1a), with approximately 4.2 million hooks of effort attributed to the CK EEZ (Table 1b). The total 2016 National Fleet catch of tuna and billfish within the Convention Area has decreased from previous years and is below the 2012-2015 average (Figure 1). The peak in total catch and effort during 2012 is attributed to the 17 additional chartered longline vessels introduced for a Bigeye and Swordfish Exploratory Program (Figure 1). The majority of Cook Islands fleet catches are taken within the CK EEZ with only 19% taken beyond this area in 2016 (Table 1b).

Albacore remains the primary catch species of the Cook Islands National Fleet within the WCPFC-CA, comprising 66% of the total catch in 2016, representing a 5% increase in Albacore catch composition since 2015. Yellowfin tuna catch composition decreased by 3% from 2015 to 2016, and Bigeye catch composition remained steady at 8% of the total National Fleet catch (Table 1a).

The Cook Islands artisanal fleet operates from each of the 12 inhabited islands. Yellowfin tuna is the main pelagic target species of the artisanal fishery with more than 77 mt of Yellowfin tuna caught in 2016 (Table 1a). Trolling, handlining, and spearfishing are the most common fishing methods used by artisanal fishers. There is currently no mandate for artisanal fishers to provide catch and effort data, therefore all artisanal data is un-raised and based only on reported catches from each of the 12 inhabited islands.

From June 2017, the Ministry of Marine Resources (MMR) announced a fuel subsidy program for artisanal fisherman activity. The rationale for this subsidy is the increasing costs of fishing reported by artisanal fisherman and the impacts this has on food security and local communities. The subsidy is partially funded by the Government of the Cook Islands and the European Union through the Sustainable Partnership Agreement (SPA) fund. While logsheet data collection has improved, there has been a lack of fishing logsheet submissions supplied to MMR. Due to the geographic location of some islands, particularly in the northern group, the transportation of logsheets to Rarotonga for processing into the artisanal database is ineffective. There are data gaps in terms of understanding the fishing effort within the Cook Islands artisanal fisheries. Such information is vital to establish total catch, catch-effort and as a means to determine fuel subsidy allocations. MMR anticipates improved coverage in artisanal data collections with the introduction of E-Reporting initiatives such as the Pacific Community (SPC) 'Tails' application, which synchronises artisanal catch data to the database automatically from mobile devices. A significant outcome of this is that the technology can operate with limited internet connectivity and provides a solution to the problems of geographic isolation that is experienced on many islands.

Wahoo is the dominant catch species out of the non-target tuna species of the longline fishery. Wahoo catches total 33 mt in 2016 and was the second most frequently caught species (Table 2) in the artisanal fishery.

Table 1a. Annual catch in metric tonnes (mt) and effort estimates for the National Fleet by gear (LL = longline; TL = Troll; AT = Artisanal) and primary species in the WCPFC Convention Area, 2012 – 2016. Longline catch estimates are raised using VMS data and nominal artisanal catches are not raised.

Year	Gear	Effort	ALB	BET	YFT	SKJ	PBF	BLM	BUM	MLS	SWO
2012	LL	156,684 Hhks	2,757	1624	693	308	0	37	93	28	140
2013	LL	62,244 Hhks	1,354	208	346	40	0	11	35	12	16
2014	LL	53,644 Hhks	1,186	184	504	137	0	11	30	19	14
	TL	9,200 Hk Hrs	21	0	0	0	0	0	0	0	0
	AT	32,349 Hrs	2.54	0.28	116	15.67	0	0.2	6.85	0	0.14
2015	LL	61,826 Hhks	1,167	151	339	86	0	15	36	19	18
	AT	18,713 Hrs	1.27	0.32	92.2	11.33	0	0	0.8	0	0
2016	LL	54,382 Hhks	1,265	183	314	37	1	16	43	19	23
	AT	14,965 Hrs	6.79	0.07	76.75	6.79	0	0	0.38	0.07	0.09

Table 1b. Annual catch estimates in metric tonnes for the National Fleet by gear and primary species within and beyond national jurisdiction in 2016. Operational logsheet data is raised using VMS data. Nominal artisanal data is not raised.

Area	Gear	Effort	ALB	BET	YFT	SKJ	PBF	BLM	BUM	MLS	SWO
CK EEZ	LL	41,971 Hhks	928.6	81.2	188	22	1	16	16	15	17
	AT	18,713 Hrs	1.27	0.32	92.2	11.33	0	0	0.8	0	0
Beyond CK EEZ	LL	12,411 Hhks	336.4	101.8	126	15	0	0	27	4	6

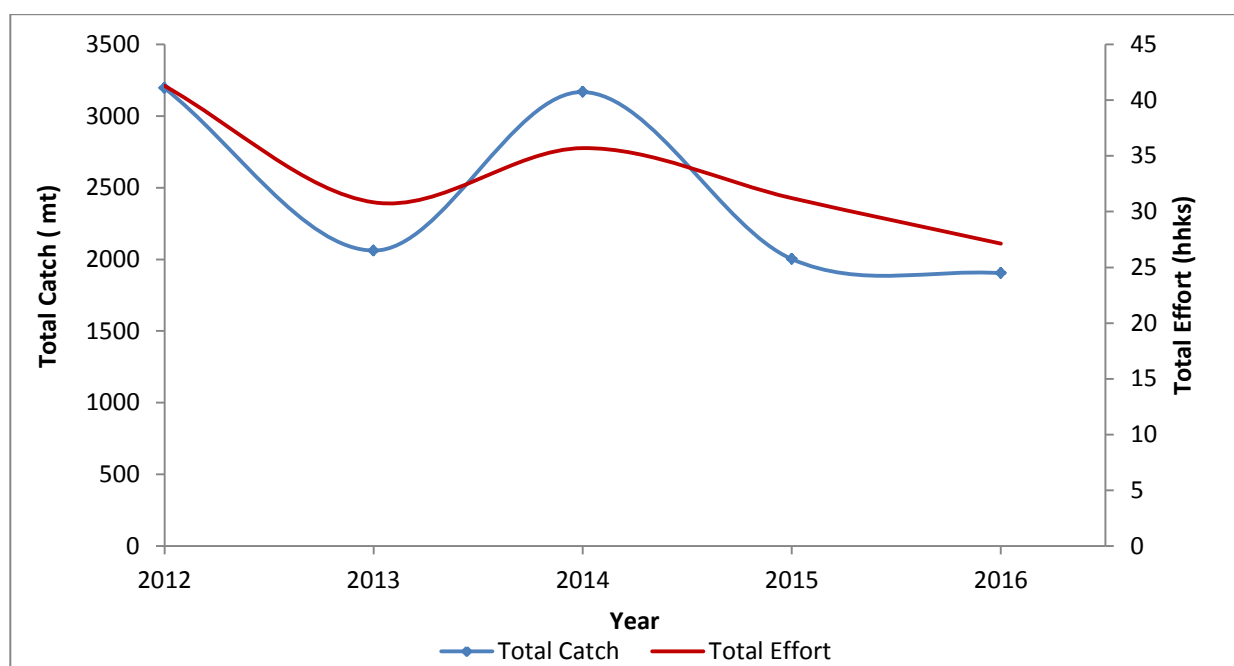


Figure 1. Historical total annual catch estimates for the National Longline Fleet for the WCPFC Convention Area, 2011 – 2016.

Table 1c. Annual un-raised catch estimates in metric tonnes for the National Longline Fleet, by primary species and broad ocean area for 2016.

Area	Year	ALB	BET	YFT	SKJ	PBF	BUM	BLM	MLS	SWO
1. WCPFC Convention Area	2012	2,967.19	1,603.35	713.10	310.97	1.25	95.44	29.43	36.352	124.383
	2013	1,341.04	200.20	337.83	38.74	0.09	33.47	13.33	11	17.578
	2014	1,186.20	184.15	504.95	137.90	0.37	30.93	11.33	19.55	14.91
	2015	1,167	151	339	86	0	15	36	19	18
	2016	962	123	229	31	1	22	14	16	17
2. WCPFC Convention Area (Sth of Equator)	2012	2,967.19	1,603.35	713.10	310.97	1.25	95.44	29.43	36.352	124.383
	2013	1,341.04	200.20	337.83	38.74	0.09	33.47	13.33	11	17.578
	2014	1,186.20	184.15	504.95	137.90	0.37	30.93	11.33	19.55	14.91
	2015	1,167	151	339	86	0	15	36	19	18
	2016	961	112	224	31	1	19	21	16	16
3. WCPFC Convention Area (Nth of Equator)	2012	0.735	56.371	4.515	0	0.024	2.672	0	0.446	5.852
	2013	-	-	-	-	-	-	-	-	-
	2014	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-
	2016	0.3	10.5	3.9	0.1	0	1.2	0	0.1	0.3

4. WCPO Area	2012	2,967.19	1,603.35	713.10	310.97	1.25	95.44	29.43	36.352	124.383
	2013	1,341.04	200.20	337.83	38.74	0.09	33.47	13.33	11	17.578
	2014	1,186.20	184.15	504.95	137.90	0.37	30.93	11.33	19.55	14.91
	2015	1,167	151	339	86	0	15	36	19	18
	2016	962	123	229	31	1	22	14	16	17
5. North Pacific Ocean	2012	0.735	56.371	4.515	0	0.024	2.672	0	0.446	5.852
	2013	-	-	-	-	-	-	-	-	-
	2014	-	-	-	-	-	-	-	-	-
	2015	-	-	-	-	-	-	-	-	-
	2016	0.3	10.5	3.9	0.1	0	1.2	0	0.1	0.3
6. South Pacific Ocean	2012	2,967.19	1,603.35	713.10	310.97	1.25	95.44	29.43	36.352	124.383
	2013	1,341.04	200.20	337.83	38.74	0.09	33.47	13.33	11	17.578
	2014	1,186.20	184.15	504.95	137.90	0.37	30.93	11.33	19.55	14.91
	2015	1,167	151	339	86	0	15	36	19	18
	961	112	224	31	1	19	21	16	16	16

Table 2. Annual catch estimates in metric tonnes for the National Fleet in the WCPFC Convention Area for non-target and by-catch species (including key shark species²) for 2016. Shark estimates are raised using logsheet catch estimates; nominal artisanal catches are not raised.

Gear	SSP	SFA	DOL	LAG	OIL	WAH	BSH	FAL	OCS	MAK	THR	SPZ	RHN
LL	36	0	18	4	0	40	1829	53	513	93	12	0	0
Artisanal	0.012	0.05	3.308	0.12	0.05	8.51	0	0	0	0	0	0	0

² Key species include BSH, FAL, OCS, MAK, THR, SPZ, and RHN. Shark species are recorded by catch numbers
WCPFC Part 1 Annual Report 2017 – Cook Islands

3.2 Catch and Effort Spatial Distribution

In 2016, around 77% of all National Fleet longline fishing effort took place within the CK EEZ. There was a 12% decrease in in-zone fishing effort of the National Fleet compared to 2015. This was attributed to one longliner deregistering and low catch rates during 2016. In-zone effort from the National Fleet is quite distinct between the northern and southern group fisheries, delineated at 15°S. There is a prominent band of fishing effort from the north-west and central northern regions of the CK EEZ with increased Yellowfin and Albacore catches west of Pukapuka. This pattern is typically attributed to the fact that most Cook Island flagged vessels operate out of Pago Pago, American Samoa, conducting shorter, more frequent trips to the CK EEZ and therefore reducing operational costs. Approximately 11% of the total National Fleet fishing catch was taken within Tokelauan waters and a further 12% in Samoan waters. A small amount of effort around Rarotonga is ascribed by a small domestic fleet that operates out of Avatiu (Figure 3a, 3b, 3c).

The 2016 annual catch and effort distribution (Figure 3a) follows a similar spatial trend to that of 2015 (Figure 3b), with the most effort being concentrated between the CK EEZ and the American Samoa EEZ. The majority of catch remains in the northern region of the Cook Islands EEZ, with notable increase in Albacore catch from 2014-2016 and increased Bigeye and Yellowfin Tuna from the locally domestic fleet operating dominantly south of Rarotonga (Figure 3a, 3b).

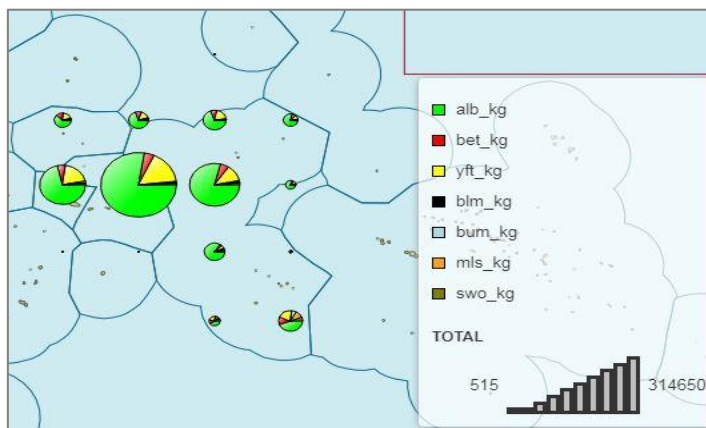


Figure 3a. Catch distribution (1 x 1) of key tuna species for the National Longline Fleet within the WCPFC-CA 2016.

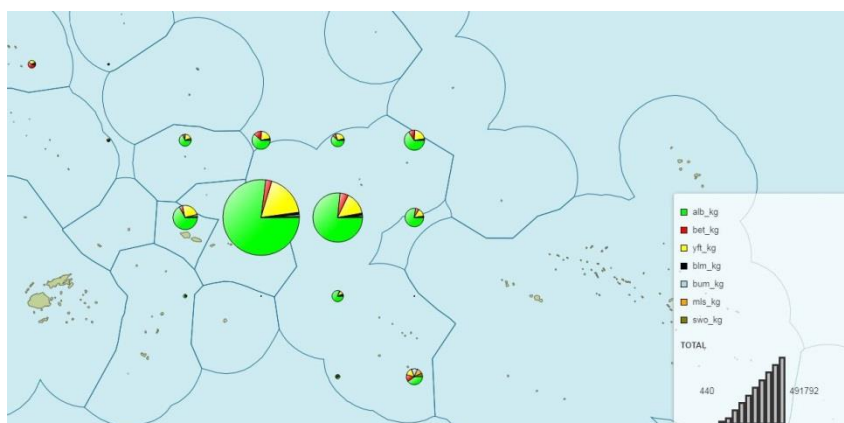


Figure 3b. Catch distribution (1 x 1) of key tuna species for the National Longline Fleet within the WCPFC-CA 2015.

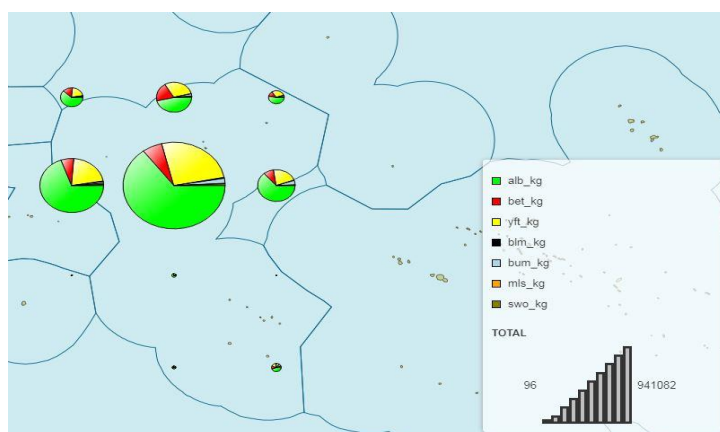


Figure 3c. Catch distribution (1 x 1) of tuna species for the National Longline Fleet within the WCPFC-CA 2014.

3.3 Licencing and Fleet Structure

In 2016, the Cook Islands National fleet consisted of 14 longline vessels and four bunker vessels operating within the WCPFC-CA. 11 of the 14 flagged longline vessels were active and authorised to fish within the Convention Area. Among these, three domestically based vessels were licenced to fish within national jurisdiction only. Twelve vessels were authorised to fish both within the CK EEZ and the high seas (though rarely fished beyond the waters of national jurisdiction) and an additional two longline vessels were authorised to fish on the high seas and were licenced in both Samoa and Tokelau. The majority of the National Fleet vessels were between 51 and 200 GRT (Table 3). All National Fleet vessels licenced to fish in-zone are prohibited to fish within 12 nm (territorial seas) of all islands and 24 nm of Rarotonga. Purse seine vessels are prohibited to fish within 24 nm of all islands and 48 nm of Rarotonga. A total of 292 registered artisanal vessels actively fished throughout the Cook Islands in 2016. As of December 2016, the Cook Islands commercial longline fishery was limited to a maximum of 50 authorised vessels within the CK EEZ.

Table 3. Number of National Fleet vessels by gear, size and authorised area, active within the WCPFC Convention Area 2011-2016.

Year	00-50 GRT		51-200 GRT		201-500 GRT	500+ GRT		Total
	LL	Artisanal	LL	Troll	LL	LL	Bunker	
2012	2	286	19		3	0		24
2013	2	358	19		3	0		24
2014	0	420	12	1	1	0		14
2015	0	315	10		1	1	3	15
2016	0	292	10	2	1	0	4	15

4. COASTAL STATE REPORTING

4.1 Catch and Effort Trends

The Cook Islands purse seine fishery has been limited to 1,250 fishing days as well as 30,000 mt of Skipjack catch limit as notified to the WCPFC in any consecutive 4 quarter period. Foreign flagged longline vessel catch within the CK EEZ totalled 4,681 mt (Table 4), comprising 81% of the total catch. Cook Island flagged vessels accounted for the remaining 19% of the total catch (Figure 4a). Albacore comprised 53% of the foreign flagged catch composition, followed by Yellowfin tuna (27%) and Bigeye (11%) (Figure 4b).

The US Fleet dominated the purse seine fishing vessels recording 66% of the overall purse seine catch, followed by Korea (30%), Kiribati (4%) and New Zealand (<1%) (Figure 4c). Foreign flagged purse seine vessel catch totalled 6,898 mt (Table 4). The catch was dominated by Skipjack tuna, comprising 96% of the total purse seine catch (Figure 4d).

Table 4. Annual catch estimates in metric tonnes for all licensed foreign vessels by gear within the Cook Islands EEZ, for tuna and billfish species in 2016. Operational logsheet data was raised using VMS data, with 72% logsheet coverage for foreign flagged longline vessels and 76% logsheet coverage for foreign purse seine vessels.

Foreign Vessels	Gear	Effort	ALB	BET	YFT	SKJ	PBF	BLM	BUM	MLS	SWO	Total (inc OTH)
CK EEZ	LL	135,867 Hhks	2,651	357	711	40	2	3	186	3	45	3,998
	PS	353 days	0	88	442	6368	0	0	0	0	0	6,898

A total of 64 foreign flagged vessels were licenced and authorised to operate within the CK EEZ during 2016, comprising of 33 longliners and 34 purse seiners (Table 5). Foreign flagged fishing in 2016 was undertaken by two Chinese longline companies, one Federated State of Micronesia Longline Company, two Korean purse seine companies and a US purse seine company.

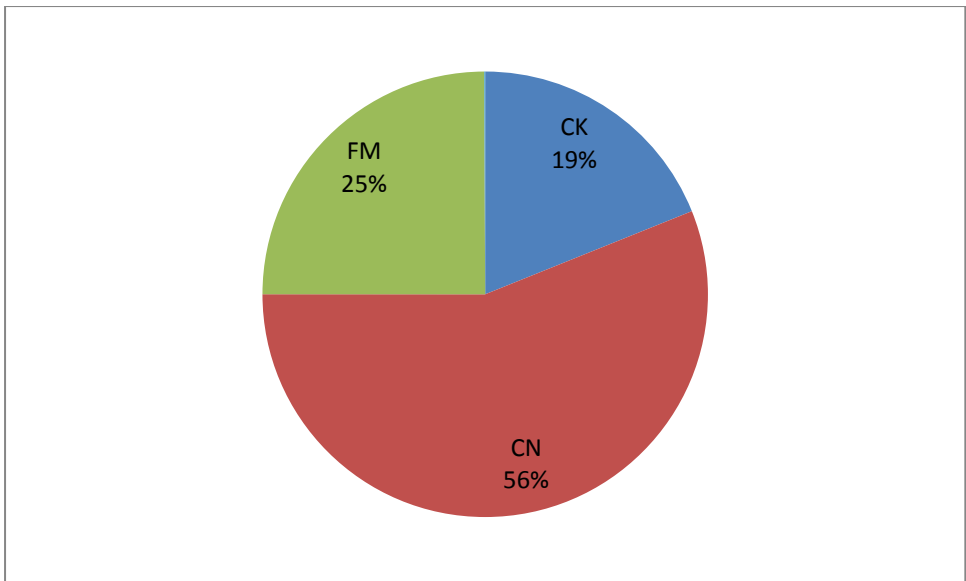


Figure 4a Longline catch by flagged vessels within the CK EEZ

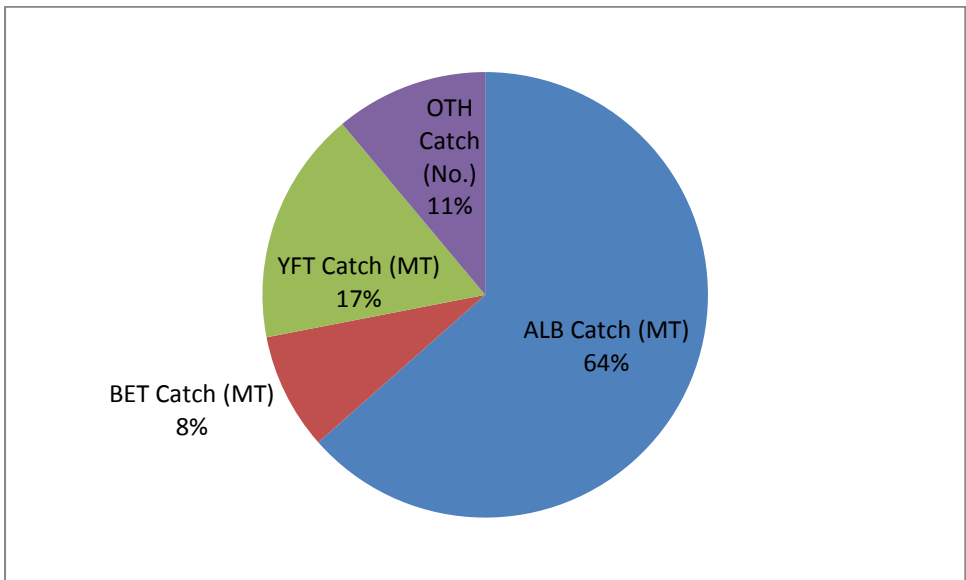


Figure 4b Longline catch by species

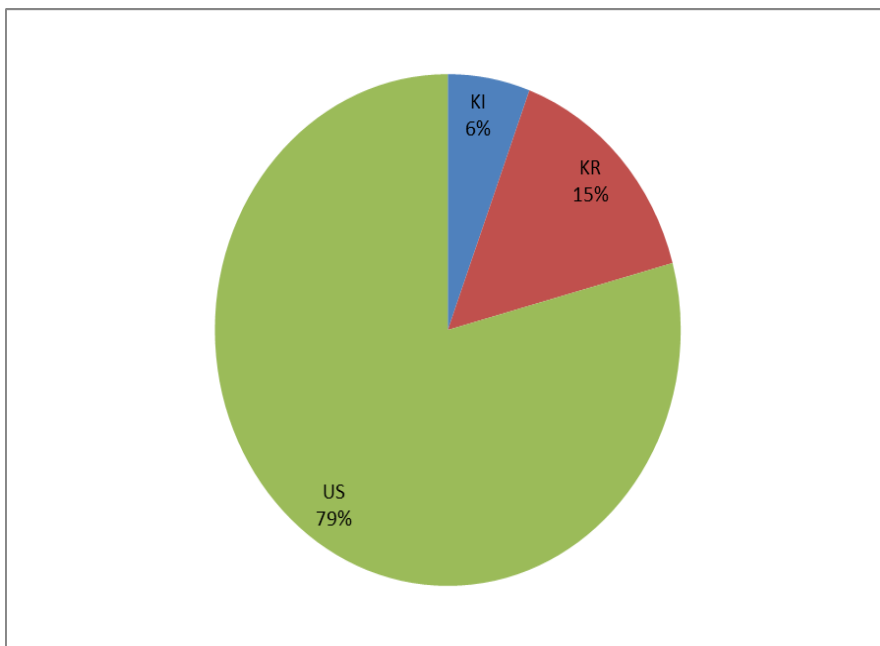


Figure 4c Purse seine catch by flagged vessels within the CK EEZ

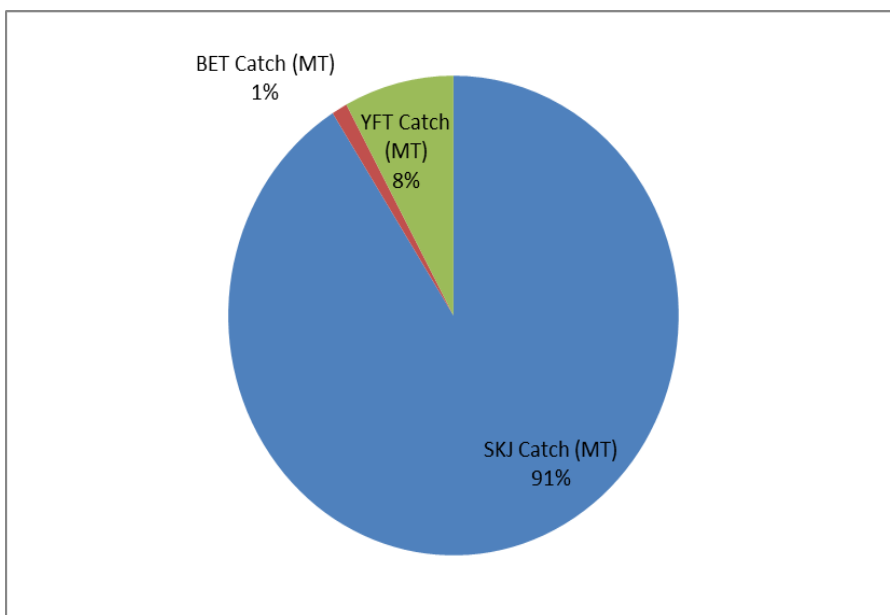


Figure 4d Purse seine catch by species

Table 5. Number of active foreign flagged vessels by gear authorised to operate within the Cook Islands EEZ by size in 2016.

GRT Range	Longline	Carrier	Bunker	Purse seine	Total
0-10	-	-	-	-	-
10-50	-	-	-	-	-
50-200	12	-	-	-	12
200-500	21	-	-	-	21
500+	-	-	-	34	34
Total	33	-	-	34	67

5. Socio-economic Factors

High operating costs out of Rarotonga continue to hinder domestic industry growth. Only three small scale domestic fresh fish vessels operate out of and unload to local markets in Rarotonga. Some Chinese flagged vessels continue to operate out of Pago Pago but unload to shipping containers in the port of Rarotonga. Here, catches are transhipped from vessel to shipping container then shipped back to American Samoa. The local economy benefits from the purchase of fuel, temporary labour to assist with unloading, purchase of provisions and associated port fees. These vessels are also permitted to seasonally sell frozen by-catch to local businesses. This activity allows MMR to conduct routine port side boarding, inspections and port sampling of catches

6. Future Prospects of the Fishery

Since 2015, MMR has been exploring new mechanisms for introducing a quota management system (QMS) that is applicable to Albacore and Bigeye in the longline fishery. A number of technical workshops, supported by FFA and SPC, were conducted in 2014 to develop a QMS for the Cook Islands. In 2015 steps were made to begin aligning all fishing licences to the calendar year (Jan 1st – Dec 31st) in anticipation of the QMS. A new Marine Resources Bill has been developed and is set to be tabled in Parliament in the coming months. This Bill outlines new regulations for the longline fishery which have already been passed by Executive Cabinet in December 2016. These regulations are accompanied by a Fishery Plan. As of 1 January 2017, the QMS system has come in effect with a total allowable catch set at 9,750 mt for Albacore and 3,500 mt for Bigeye tuna fisheries within Cook Islands waters.

7. Research and Statistics

7.1 Status of Tuna Fishery Data Collection Systems

a) Logsheet data collection and verification

Full (100%) logsheet coverage was achieved for the National longline fleet in 2016. Most logsheets were received as original copies via post after the completion of a fishing trip; or, received in electronic format via email either weekly or after the completion of a fishing trip (scanned). Unloading forms were received by all foreign flagged vessels; however, some enforcement was still required for the National Fleet when submitting additional data. Four National Fleet vessels participated in electronic reporting trials using the SPC eTUNALog software since 2015. These trials continue to be effective for the two domestic vessels using the program in Rarotonga. In May 2016 the e-reporting application 'On-Board' developed by SPC was placed on one domestic vessel, trials continue which has received positive responses from fishing crews. MMR aims to achieve 100% electronic monitoring and reporting by 2019, implementing resources such as the 'on-board' and 'Tails' applications to achieve this.

Domestic vessels undertake short trips (< 1 week) and so the MMR is able to provide feedback and training more regularly. The two trial vessels operating out of Pago Pago spend longer at sea and are consequently more difficult to provide timely feedback. The SPC OFP also rolled out the implementation of TUFMAN2 to the Cook Islands in December 2015. This has further improved the data collection, validation and sharing capacity of the Cook Islands. TUFMAN2 has also supported the eTUNALog and On-Board trials.

b) Observer Programme

The Cook Islands National Observer Program has diminished in recent years, as observer at sea days have reduced from 898 days in 2013 to below 600 days in 2015-16. In 2016 there were 3 Non-Cook Island observers, 2 of which were based out of Apia and 1 in Rarotonga. However, an MOU was signed in June 2016 between MMR and the fisheries department of Tonga to utilise their observers. Current observer numbers following this MOU is 15. A total of 165 observed sea days were achieved on Cook Island flagged vessels in 2016, within the WPCFA-CA with an overall coverage of approximately 7.7% (Table 6). The submission of observer reports in June 2016 was not complete due to operational complications. Work is continuing to resolve this issue.

Table 6. Estimated annual coverage of operational catch and effort, port sampling and observer data for the National Fleet, active in the WCPF Convention area for 2012 – 2016.

Year	Operational Catch & Effort	Port Sampling	Observer Data (days at sea)
2012	82.5%	10.4%	5.7%
2013	97%	16%	8.9%
2014	97%	23%	9.8%
2015	100%	35%	12.8%
2016	100%	18%	7.7%

c) Port-side Sampling Programme

All port-side sampling occurs in Rarotonga on the small domestic fresh fish longliners and average 2-3 mt per trip. Approximate coverage of port sampling of the Domestic National Fleet in 2016 was 18% (Table 6). For the purposes of QMS verification, port sampling coverage will need to significantly increase in the foreign ports where our licenced vessels choose to unload, namely Pago Pago, Apia, Suva and Papeete. A port-side E-monitoring program is currently being investigated for ports in Rarotonga and Aitutaki for the installation of CCTV cameras used to monitor vessel activity.

7.2 Research Activities

No major research activities were carried out during 2016.

Appendix 1

CMM Reporting 2016

CMM Reference	Description	Response																								
CMM 05-03	North Pacific Albacore	<p>One Cook Island flagged vessel fished north of the equator in 2016 with a reported catch of 0.308 mt.</p> <p>18 vessels days were recorded and an average of 3,800 hooks was used per set. Observer data for this trip is unavailable.</p> <p>This vessel has been deregistered from the Cook Islands vessel registry.</p> <p>The 6 monthly reporting required under CMM 05-03 was submitted late as data was unavailable at the time of the report submission deadline.</p>																								
CMM 06-04	South West Pacific Striped Marlin	<p>Striped Marlin is not targeted by Cook Islands flagged vessels. All catches of MLS were reported as by-catch in the albacore longline fishery.</p> <p>10 Cook Island flagged vessels caught 222 MLS, totalling 14.3mt in the Convention Area south of 15°S.</p>																								
CMM 09-03	Swordfish	<p>The Cook Islands have no vessels targeting swordfish; all catch of swordfish are taken as by-catch.</p> <p>Three vessels flagged to the Cook Islands caught 142 Swordfish totalling 8.53mt in the Convention Area South of 20°S.</p>																								
CMM 09-06	Transhipments	<p>NOT APPLICABLE</p> <p>Vessels flagged to CK did not conduct any transshipment activities within the Convention Area.</p>																								
CMM 10-07	Sharks	<p>After the establishment of a shark sanctuary in late 2012, the retention of shark by any vessel in the Cook Islands EEZ is prohibited. However, some shark retention may arise from CK flagged vessels fishing on the high seas or in other areas of national jurisdiction. The total number of retained sharks caught by longliners as stated in the observer report is 0. Observer data coverage on CK flagged LL vessels in 2016 was 7.7%. Due to operational events with one of the observers in June 2016, Apia, submission of observer reports was not obtained. Investigations continue in retrieving these reports.</p> <table border="1"> <thead> <tr> <th colspan="4">Source: Observer Data – 7.7% coverage</th> </tr> <tr> <th>Species</th> <th>Number</th> <th>Retained</th> <th>Discarded</th> </tr> </thead> <tbody> <tr> <td>LONG FINNED MAKO SHARK</td> <td></td> <td></td> <td></td> </tr> <tr> <td>COOKIE CUTTER SHARK</td> <td></td> <td></td> <td></td> </tr> <tr> <td>BIGEYE THRESHER SHARK</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DEVIL MANTA RAY (Mobula nei)</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Source: Observer Data – 7.7% coverage				Species	Number	Retained	Discarded	LONG FINNED MAKO SHARK				COOKIE CUTTER SHARK				BIGEYE THRESHER SHARK				DEVIL MANTA RAY (Mobula nei)			
Source: Observer Data – 7.7% coverage																										
Species	Number	Retained	Discarded																							
LONG FINNED MAKO SHARK																										
COOKIE CUTTER SHARK																										
BIGEYE THRESHER SHARK																										
DEVIL MANTA RAY (Mobula nei)																										

		SILKY SHARK																																																							
		SILVER TIP SHARK																																																							
		PELAGIC STING-RAY																																																							
		OCEANIC WHITE-TIP SHARK																																																							
		BLUE SHARK																																																							
		SHORT FINNED MAKO SHARK																																																							
		WHALE SHARKS																																																							
		SMOOTH HAMMERHEAD SHARK																																																							
		Total	No reported interactions																																																						
		<p>Longline logsheet coverage for the CK National Fleet was 100%. Logsheet estimates of shark catches and discards/releases are outlined in the table below.</p> <p>Source: Logsheet data – 100% coverage</p> <table border="1"> <thead> <tr> <th>Species</th> <th>Fate</th> <th>Catch (n)</th> <th>Catch (mt)</th> </tr> </thead> <tbody> <tr> <td>MAKO SHARKS</td> <td>Released</td> <td>93</td> <td>0</td> </tr> <tr> <td>PORBEAGLE SHARK</td> <td>RHN</td> <td>0</td> <td>0</td> </tr> <tr> <td>SCALLOPED HAMMERHEAD</td> <td>RHN</td> <td>0</td> <td>0</td> </tr> <tr> <td>THRESHER SHARKS</td> <td>Released</td> <td>12</td> <td>0</td> </tr> <tr> <td>HAMMERHEAD SHARKS</td> <td>Released</td> <td>0</td> <td>0</td> </tr> <tr> <td>OCEANIC WHITE-TIP SHARK</td> <td>Released</td> <td>513</td> <td>0</td> </tr> <tr> <td>BASKING SHARK</td> <td>Released</td> <td>5</td> <td>0</td> </tr> <tr> <td>BLUE SHARK</td> <td>Released</td> <td>1,829</td> <td>0</td> </tr> <tr> <td>PELAGIC STING-RAY</td> <td>Released</td> <td>425</td> <td>0</td> </tr> <tr> <td>SILKY SHARK</td> <td>Released</td> <td>53</td> <td>0</td> </tr> <tr> <td>WHALE SHARKS</td> <td>No reported interactions</td> <td>0</td> <td>0</td> </tr> <tr> <td colspan="2">Total</td> <td>2,930</td> <td>0</td> </tr> </tbody> </table>				Species	Fate	Catch (n)	Catch (mt)	MAKO SHARKS	Released	93	0	PORBEAGLE SHARK	RHN	0	0	SCALLOPED HAMMERHEAD	RHN	0	0	THRESHER SHARKS	Released	12	0	HAMMERHEAD SHARKS	Released	0	0	OCEANIC WHITE-TIP SHARK	Released	513	0	BASKING SHARK	Released	5	0	BLUE SHARK	Released	1,829	0	PELAGIC STING-RAY	Released	425	0	SILKY SHARK	Released	53	0	WHALE SHARKS	No reported interactions	0	0	Total		2,930	0
Species	Fate	Catch (n)	Catch (mt)																																																						
MAKO SHARKS	Released	93	0																																																						
PORBEAGLE SHARK	RHN	0	0																																																						
SCALLOPED HAMMERHEAD	RHN	0	0																																																						
THRESHER SHARKS	Released	12	0																																																						
HAMMERHEAD SHARKS	Released	0	0																																																						
OCEANIC WHITE-TIP SHARK	Released	513	0																																																						
BASKING SHARK	Released	5	0																																																						
BLUE SHARK	Released	1,829	0																																																						
PELAGIC STING-RAY	Released	425	0																																																						
SILKY SHARK	Released	53	0																																																						
WHALE SHARKS	No reported interactions	0	0																																																						
Total		2,930	0																																																						
CMM 11-03	Cetaceans	NOT APPLICABLE The Cook Islands does not have any flagged purse seine vessels.																																																							
CMM 11-04	Oceanic White-Tip Shark	<p>According to logsheet data, 252 oceanic white tip sharks were reported as released. There was 100% logsheet coverage, therefore catch values was not raised.</p> <p>No records of 2016 observer data available. However based on 2015 observer data, 77% of OCS was observed as alive. There is the assumption that 56 OCS were released dead.</p>																																																							
CMM 12-04	Whale Sharks	NOT APPLICABLE The Cook Islands do not have any flagged purse seine vessels.																																																							

CMM 12-07	Seabirds	<p>No seabird interactions were recorded from logsheets or observer data.</p> <p>100% logsheet coverage was observed, 2016 observer data is unavailable.</p>
CMM 13-08	Silky Sharks	<p>According to logsheet data, 53 silky sharks were reported as released. There was 100% logsheet coverage, therefore catch values was not raised.</p> <p>No records of 2016 observer data available. However based on 2015 observer data, 65% of FAL was observed as alive. There is the assumption that 19 FAL were released dead.</p>
Observer Coverage WCPFC11 Decision	Longline	<p>Observer coverage is measured using 'at sea days'. Based on an estimated 2,149 VMS days, and 165 observed days, coverage of the National Fleet in the WCPF-CA for 2016 is 7.7%.</p>
CMM 15-02	South Pacific Albacore	<p>This requirement is covered by the comprehensive operational data that is provided to the WCPFC.</p>