



**SCIENTIFIC COMMITTEE
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ELECTRONIC MEETING
11-20 August 2020

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

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KIRIBATI

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FOURTEENTH REGULAR SESSION**

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**Ministry of Fisheries and Marine Resources Development
KIRIBATI**

Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 12 July 2020	[YES]
If no, please indicate the reason(s) and intended actions.	

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1 Abstract

Kiribati tuna fisheries comprise mainly of small-scale artisanal fisheries operating small-sized wooden skiff (<7m) inside 12nm, commercial and domestic purse seines, pole and lines and domestic longline. Domestic purse seiners and longlines represent vessels either chartered or operating under joint venture arrangements. Foreign purse seiners from distant water fishing nations continue to access Kiribati's Exclusive Economic Zone (EEZ) under bilateral, regional, and multilateral access arrangements. Support vessels like tanker and reefer carriers also licensed by Kiribati through bilateral fishing agreements.

Annual catch estimates for Kiribati fleets continues to increase from 2015-19. Key tuna species harvested include Skipjack tuna (*Katsuwonus pelamis*) targeted by purse seiners for overseas cannery processing and small-scale artisanal troll fishing for domestic consumption. Higher grade tunas such as Yellowfin (*Thunnus albacores*) and Bigeye (*Thunnus obesus*) were primary species in the longline fishery destined for local processing for overseas export. There is no significant catch of Albacore (*Thunnus alalunga*) tuna although this is not the main fishery.

Kiribati's EEZ remain accessed by foreign and commercial fishing operators from Korea, Chinese-Taipei, Japan and the United States including purse seiners licensed under regional arrangements such as the FSMA. Apart from catcher vessels (purse seine, longline and pole and line) other gears such tankers and reefer carriers also allowed to operate in Kiribati's Exclusive Economic Zone (EEZ) to support fishing operation. Current bilateral access governed under fishing agreement between the Government and respective individual fishing companies or associations and normally run for one year.

Purse seine fishery, in particular, is vital to Kiribati economy for it provides the majority of Government budget annually through the Vessel Day Scheme (VDS). Revenues from transshipment activity have also contributed to the national economy. Closure of the longline fishery in 2017 had no major economic implications on the national economy however, revenue from the purse seine fishery continues to support the national budget on annual basis.

Present longline that remain access to Kiribati's EEZ either owned or chartered by joint venture companies; Kiribati Fish Limited Company (KFL) and Kiritimati Island Fish Limited (KIFL). KFL owns a processing in Betio, Tarawa while KIFL plans to establish operational and processing base in Kiritimati Island which is an ideal location given concentration of the longline fishery in the Line area. On the contrary, the pole and line fishery has not been insignificant in terms of vessel number and economic contribution however it remains vital to the employment sector, in particular crewing and seafaring.

Kiribati has 46 vessels active in the Convention Area in 2019 consisting of 24 longline and 22 purse seiners. Tuna is central for Kiribati livelihood and economic backbone of the Government therefore sustainable management of the resource is vital for the nation.

2 Tabular Annual Fisheries Information

This report provides annual catch estimates of tuna, non-target species and bycatch caught by Kiribati vessels for the period 2015-19. Refer to appended Tables and Figures.

3 Background

Kiribati has no major commercial fisheries for highly migratory species in the WCPO apart from domestic small-scale artisanal and troll fishery. Management of key tuna species were regulated under national laws, regulations, and policies including management and conservation measures adopted at the regional and Commission level.

3.1 Pole and Line

The only commercial fishery in the country was the pole and line developed by the Government of Kiribati back in the 1980s. The domestic company Te Mautari Limited (TML) is a wholly government – owned company established to develop a national pole-and-line fishery. The company plagued with technical and economic difficulties resulting from a wide range of geographical, management and development challenges such as isolation, infrastructural limitation and variability in resource abundance. Efforts exerted on revitalizing the company performance however the company eventually wind up its operations in the late 1990s.

3.2 Longline

Kiribati's EEZ is famous for longline fishing targeting premium grade tunas. Longline operators in the past were mainly foreign operators licensed under bilateral access arrangements the majority of which were mostly Asian countries such as Japan, Korea, China and Chinese-Taipei. Longline fishing is concentrated mostly in the Phoenix and Line group in the east compared to the Gilbert area in the west. Closure of the fishery by Kiribati in 2017 ceased operation of longline companies except KFL chartered vessels. The closure impacted vessel number however insignificant economic impact on Government revenue.

3.3 Purse seine

Kiribati is yet to have the capacity to own and operate purse seine fishery to harvest and export tuna overseas. The Kiribati Government through the Ministry of Fisheries and Marine Resource Development (MFMRD) established joint venture companies and charter arrangement with fishing partners aiming to develop the national tuna industry in future. Countries that currently have joint venture and charter arrangement with the Government of Kiribati are Korea and China. Like the rest of PNA membership, Kiribati regulate purse seine fishing in its waters through the Vessel Day Scheme - the scheme that apply across all bilateral fishing agreements.

3.4 Troll and Vertical Hand Line

Artisanal fishery forms part of tuna fishery and comprises mostly of local fishermen catching tuna mainly for locally sale and domestic consumption. Common fishing methods used in this fishery are trolling targeting Skipjack tuna and vertical hand lining for Bigeye and Yellowfin. Boats used in this fisheries are typically wooden small skiff (usually <7 meters) powered by a 15-40 HP outboard engines. The estimated number of artisanal boats based on the 2015 artisanal fisheries survey estimates is 1,911.

4 Flag State Reporting

This section reports national fleets in the Convention Area by gear type, trends in terms of fishing patterns, effort, targeted species and trends in vessel size composition.

4.1 Kiribati vessels

Kiribati operates longline and purse seine fishery through joint venture and charter arrangement. There was one pole and line vessel flag under Kiribati in 2015 established under

a bilateral arrangement however the vessel shortly deregistered due to change in licensing arrangement with the owner of vessel.

4.1.1 Kiribati Longline

Longline fleet number observed a significant increase from 14 in 2015 to 24 in 2019. This is mainly due to addition of vessels between 51-500GRT+ size category to the fleet. The increase largely attributed to additional longlines chartered by a newly established company - Kiritimati Island Fish Limited (KIFL). Longlines number was lowest in 2017 of less than 10 vessels. This relates to reduction in vessel with size range between 200GRT-500GRT+.

Table 1. Kiribati Longline fleet active inside the Convention Area, 2015-19.

Vessel category	2015		2016		2017		2018		2019	
	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 50 GRT	0	0%	0	0%	0	0%	1	11%	1	4%
51 -200 GRT	1	7%	5	29%	1	14%	7	78%	10	42%
201 -500 GRT	8	57%	9	53%	6	86%	1	11%	8	33%
500+ GRT	5	36%	3	18%	0	0%	0	0%	5	21%
Total	14		17		7		9		24	

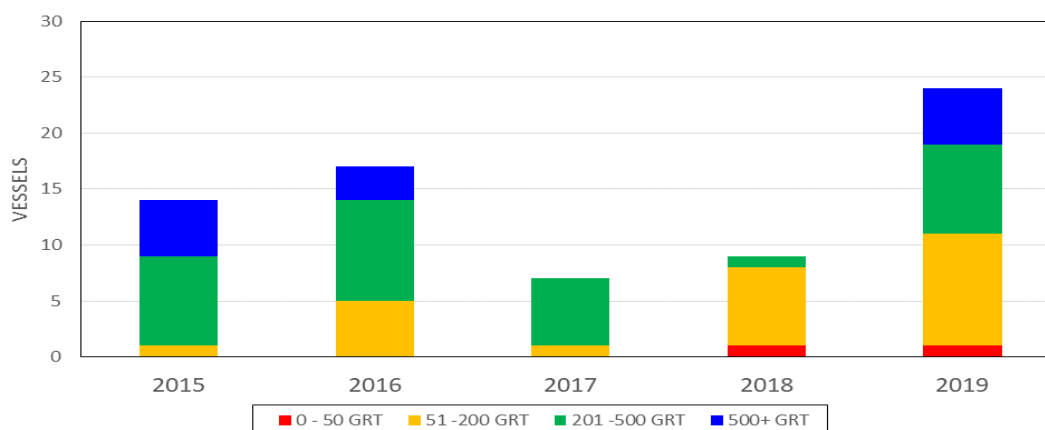


Figure 1. Depiction of Kiribati Longline Fleet by Size Category, 2015-19.

4.1.2 Kiribati Purse Seine

Purse seine fleet number was highest in 2016 (27) after which it dropped to 19 the following year. Gradual increase observed for 2018 and 2019. After 2017, the majority of the purse seine fleet between sizes ranging 1,000GRT to 1,500GRT gradually increased while no increase for vessel size less than 1,000GRT after 2016. The current purse seine fleet consists mainly of vessel with 1,000GRT and above.

Table 2. Kiribati Purse seine fleet active inside Convention Area, 2015-19.

Vessel category	2015		2016		2017		2018		2019	
	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 500 GRT	0	0%	0	0%	0	0%	0	0%	0	0%
501 -1000 GRT	3	14%	2	7%	0	0%	0	0%	0	0%
1001 -1500 GRT	10	48%	15	56%	7	37%	9	43%	9	41%
1500+ GRT	8	38%	10	37%	12	63%	12	57%	13	59%
Total	21		27		19		21		22	

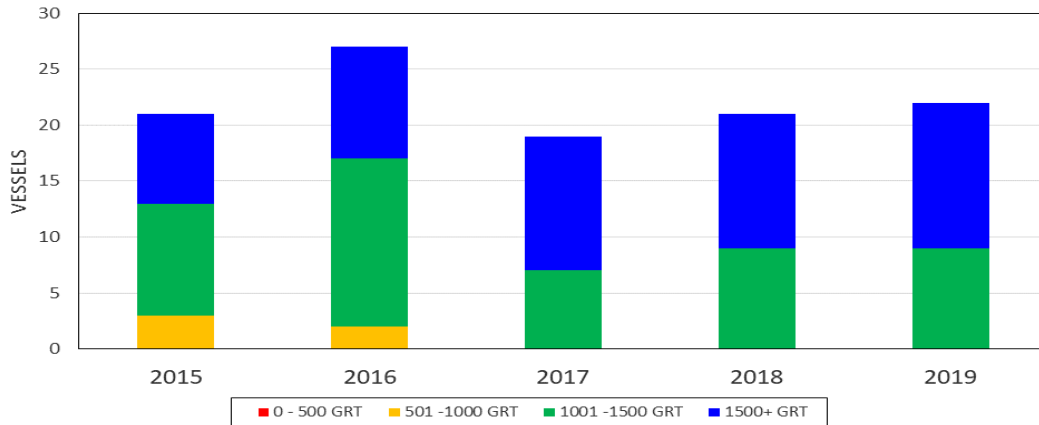


Figure 2. Depiction of Kiribati Purse seine Fleet by Size Category, 2015-19.

4.1.3 Kiribati Pole and Line

Kiribati had no pole and line vessel active in the WCPO after 2015 as depicted in Table 3 and Figure 3.

Table 3. Kiribati Pole and Line fleet active inside the Convention Area, 2015-19.

Vessel category	2015		2016		2017		2018		2019	
	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 50 GRT	0	0%	0		0		0		0	
51 -150 GRT	0	0%	0		0		0		0	
150+ GRT	1	100%	0		0		0		0	
Unknown	0	0%	0		0		0		0	
Total	1		0		0		0		0	

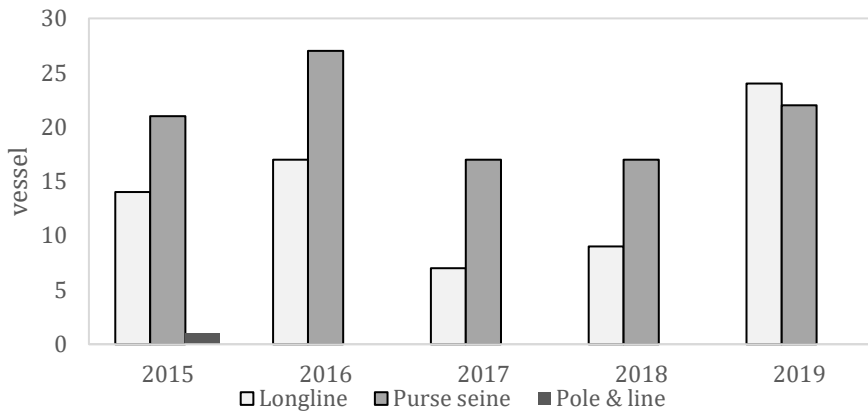


Figure 3. Depiction of Kiribati Fleet Active in the WCPO by Gear Type from 2015-19.

The total number of vessels registered under Kiribati and active in the WCPO in 2019 was 46 representing a 77% increase from 2018 total but lower than 2016. Total fleet number dropped dramatically by more than 40% in 2017 – the period which saw a significant drop in number of foreign longline vessels after closure of the longline fishery. Recent increase in vessel number, particularly in 2019, largely due to the addition of KIFL vessel to the national fleet, longline in particular. Again note the absence of pole and line vessels after 2015.

4.2 Annual Flag State Catch in WCPFC Convention Area

This section discusses annual catch estimates for Kiribati vessels by gear and target species.

4.2.1 Longline Fishery

Overall catch in the longline fishery observed a substantial increase from 1,230mt in 2018 (the lowest from 2015-2019) to 3,678mt in 2019. Catch in 2019 also shows a sharp expansion in longline catch since 2015 and higher than the 5-year average (2,030mt).

Table 4. Annual catch by Kiribati Longline fleet inside the Convention Area by Species, 2015-19.

WCPFC Key Species	2015		2016		2017		2018		2019		2019 Discard	
	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
ALBACORE	358	20%	510	27%	691	44%	340	28%	1,131	31%	6	2%
BIGEYE TUNA	556	31%	603	32%	287	18%	423	34%	1,292	35%	153	52%
PACIFIC BLUEFIN TUNA	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
SKIPJACK TUNA	8	0%	21	1%	56	4%	15	1%	144	4%	0	0%
YELLOWFIN TUNA	405	23%	610	32%	359	23%	220	18%	862	23%	114	39%
BLACK MARLIN	405	23%	40	2%	0	0%	2	0%	77	2%	0	0%
BLUE MARLIN	27	2%	30	2%	0	0%	28	2%	22	1%	2	1%
STRIPED MARLIN	0	0%	2	0%	15	1%	2	0%	18	0%	0	0%
SWORDFISH	9	1%	30	2%	54	3%	21	2%	122	3%	17	6%
BLUE SHARK	0	0%	30	2%	10	1%	34	3%	2	0%	0	0%
SILKY SHARK	0	0%	10	1%	114	7%	141	11%	0	0%	0	0%
HAMMERHEAD SHARKS	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
MAKO SHARKS	0	0%	0	0%	0	0%	4	0%	0	0%	0	0%
OCEANIC WHITETIP SHARK	0	0%	3	0%	0	0%	0	0%	0	0%	0	0%
PORBEABLE / SALMON SHARK	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%
THRESHER SHARKS	0	0%	0	0%	0	0%	0	0%	8	0%	0	0%
Total	1,768		1,889		1,586		1,230		3,678		292	

Rapid increase in the longline fleet (see Figure 1) contributed largely to increase in catch in this fishery. Catch composition in 2019 consists mainly of Bigeye (35%), Albacore (31%) and Yellowfin (23%) while the rest split between species of Marlin and Swordfish. Although Albacore is not the main fishery it is still caught by the fishery.

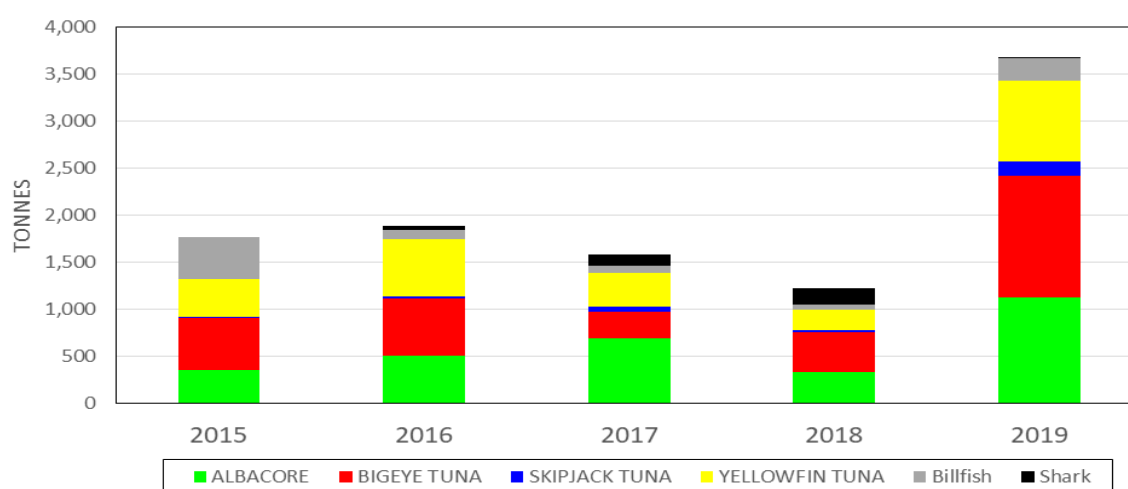


Figure 4. Depiction of catch by Kiribati longline fleet inside the Convention Area by Species, 2015-19.

4.2.2 Pole and Line Fishery

Catch for pole and line fishery is mainly Skipjack and Yellowfin however catch for this fishery is lowest compared to purse seine and longline. No catch after 2015 for there was no pole and line vessel licensed after 2015.

Table 5. Annual catch by Kiribati Pole and Line inside the Convention Area by Species, 2015-19.

Species	2014	2015	2016	2017	2018
Yellowfin	13.00	13.00	0.00	0.00	0.00
Bigeye	0.00	0.00	0.00	0.00	0.00
Skipjack	240.00	240.00	0.00	0.00	0.00
others	0.00	0.00	0.00	0.00	0.00
Total	253.00	253.00	0.00	0.00	0.00

4.2.3 Purse Seine Fishery

Catch in the purse seine fishery saw similar upward trend from 136,000mt in 2015 to slightly over 202,000mt in 2019, however unlike the longline catch annual increase for purse seine shows a gentle slope after 2017. Catch between 2018 and 2019 represents an 8% increase compared to a 23% from 2017 to 2018 with the only slump by 7% in 2017 to the 2016 level while 2015 level was the lowest in the record. The majority of catch is mostly Skipjack as it accounts for more than 80% on average since 2015 and 89% in 2019.

Table 6. Annual catch by Kiribati Purse seine inside the Convention Area by Species, 2015-19.

WCPFC Key Species	2015		2016		2017		2018		2019		2019 Discard	
	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
ALBACORE	0	0%	0	0%	0	0%	0	0%	5	0%	0	0%
BIGEYE TUNA	2,852	2%	8,045	5%	7,152	5%	9,484	5%	4,199	2%	34	2%
PACIFIC BLUEFIN TUNA	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
SKIPJACK TUNA	117,882	86%	132,451	81%	118,119	78%	155,543	83%	181,021	89%	1,738	88%
YELLOWFIN TUNA	15,963	12%	22,994	14%	26,867	18%	23,365	12%	17,064	8%	104	5%
BLACK MARLIN	21	0%	6	0%	8	0%	1	0%	3	0%	8	0%
BLUE MARLIN	51	0%	20	0%	4	0%	9	0%	0	0%	23	1%
STRIPED MARLIN	0	0%	10	0%	10	0%	0	0%	0	0%	5	0%
SWORDFISH	0	0%	2	0%	1	0%	0	0%	0	0%	0	0%
BLUE SHARK	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
SILKY SHARK	0	0%	0	0%	0	0%	1	0%	0	0%	56	3%
HAMMERHEAD SHARKS	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%
MAKO SHARKS	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
OCEANIC WHITETIP SHARK	0	0%	0	0%	0	0%	0	0%	0	0%	3	0%
PORBEABLE / SALMON SHARK	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
WHALE SHARK	0	0%	0	0%	0	0%	0	0%	0	0%	1	0%
THRESHER SHARKS	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	136,769		163,528		152,161		188,403		202,292		1,973	

Yellowfin and Bigeye are two other important species in the purse seine fishery. There were also record of non-targeted species such as Black Marlin, Blue Marlin, Striped Marlin, Silky shark, Hammerhead, Oceanic Whitetip and Whale shark caught by the fishery. Average catch from 2015-2019 is 169,505mt and around 2,000mt of Skipjack discarded last year.

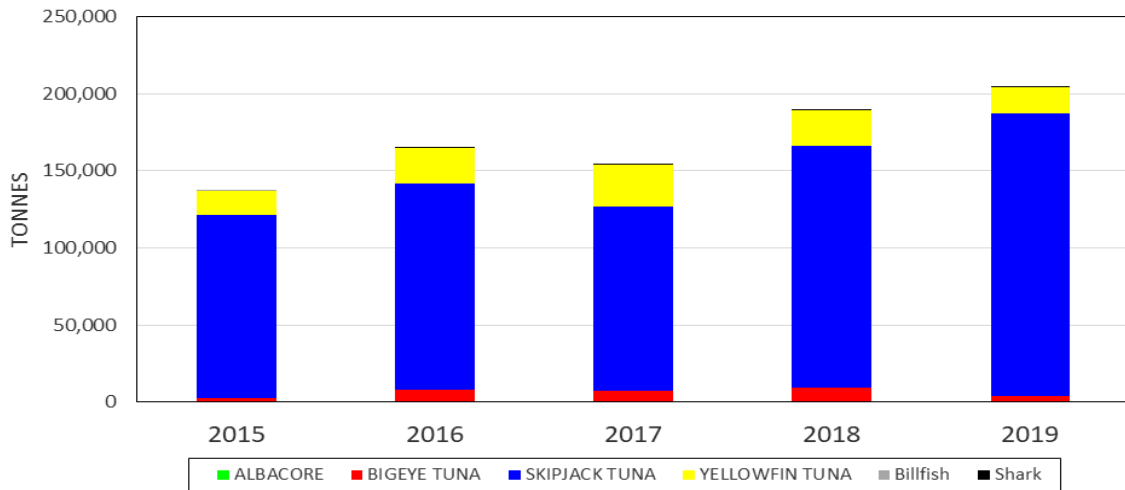


Figure 5. Depiction of catch by Kiribati Purse seine inside the Convention Area by Species, 2015-19.

4.2.4 Artisanal Fishery

Catch from artisanal fishermen supplied the majority of household consumption and most of small-scale domestic markets. Due to incomplete information on artisanal fishermen data for this fishery are estimates and carried over from previous year therefore should not be similar each year.

Important species caught in this fishery were mainly Skipjack and Yellowfin. Main gear used in this fishery are small wooden skiff boats powered by outboard motorized engine of less than 100HP. Usage of fiber-glass and aluminium boats is notable among local fishermen and this may relate to cost variation between materials used in the construction of these skiffs. However, the use of wooden skiff is preferred by local fishermen.

Table 7. Annual catch by Artisanal fishery by species, 2015-19.

WCPFC Key Species	2015		2016		2017		2018		2019	
	MT	%	MT	%	MT	%	MT	%	MT	%
ALBACORE	0	0%	0	0%	0	0%	0	0%	0	0%
BIGEYE TUNA	0	0%	0	0%	0	0%	0	0%	0	0%
PACIFIC BLUEFIN TUNA	0	0%	0	0%	0	0%	0	0%	0	0%
SKIPJACK TUNA	2,190	50%	2,190	50%	2,190	50%	2,190	50%	2,190	50%
YELLOWFIN TUNA	2,169	50%	2,169	50%	2,169	50%	2,169	50%	2,169	50%
BLACK MARLIN	0	0%	0	0%	0	0%	0	0%	0	0%
BLUE MARLIN	0	0%	0	0%	0	0%	0	0%	0	0%
STRIPED MARLIN	0	0%	0	0%	0	0%	0	0%	0	0%
SWORDFISH	0	0%	0	0%	0	0%	0	0%	0	0%
BLUE SHARK	0	0%	0	0%	0	0%	0	0%	0	0%
SILKY SHARK	0	0%	0	0%	0	0%	0	0%	0	0%
HAMMERHEAD SHARKS	0	0%	0	0%	0	0%	0	0%	0	0%
MAKO SHARKS	0	0%	0	0%	0	0%	0	0%	0	0%
OCEANIC WHITETIP SHARK	0	0%	0	0%	0	0%	0	0%	0	0%
PORBEABLE / SALMON SHARK	0	0%	0	0%	0	0%	0	0%	0	0%
WHALE SHARK	0	0%	0	0%	0	0%	0	0%	0	0%
THRESHER SHARKS	0	0%	0	0%	0	0%	0	0%	0	0%
Total	4,359		4,359		4,359		4,359		4,359	

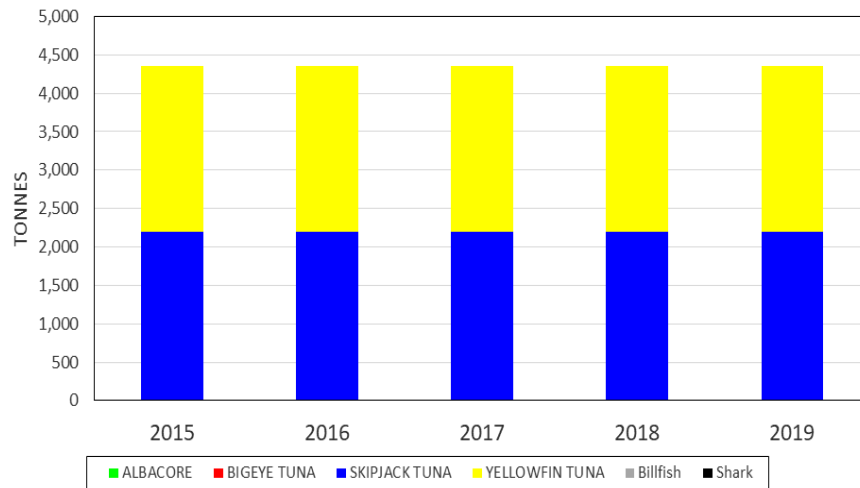


Figure 6. Depiction of catch by Artisanal fishery by Species, 2015-19.

4.2.5 Catch and Effort Distribution for Kiribati Vessels

Figure 7 and 8 illustrates effort distribution by Kiribati purse seines and longlines across the WCPO including species and catch size composition.

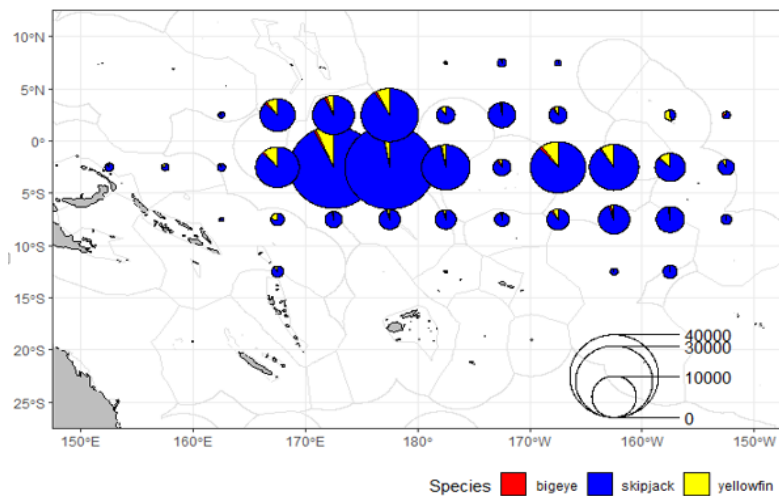


Figure 7. Effort distribution of Kiribati Purse seine inside the Convention Area, 2015-19.

Purse seine effort spanned across the equatorial region covering the three zones of Kiribati between 5°N and 10°S and 160°E to 150°W and 5°N and 10°S. The majority of catch is taken in the Gilbert group compared to the Phoenix and Line group. Catch is mainly Skipjack and Yellowfin tuna species.

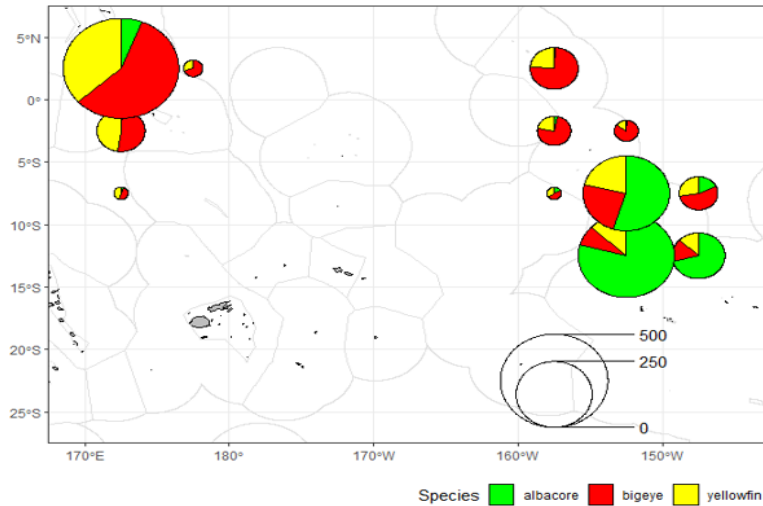


Figure 8. Effort Distribution of Kiribati Longline inside the Convention Area, 2015-19.

On the contrary, longline effort extended southward covering areas between 5°N and 15°S and 170°E and 145°W. Catch consists mainly of Bigeye, Yellowfin and Albacore however as stated earlier the latter is not the main fishery in Kiribati caught mostly in the southern Line Islands. Longline fishery effort is concentrated in the east while there is also significant catch in the Gilbert area.

5 Coastal State Reporting

The highest number of vessel licensed by Kiribati was 534 in 2016 which was a 16% increase from 2015. Subsequent years (2017 & 2018) saw a huge cut in vessel number particularly in 2017 when licensed vessel dropped substantially by 41% compared to 4% reduction in 2018. Last year saw recovery in vessel licensed by 23% compared to 2018.

Table 8. Annual vessels licensed by Kiribati, 2015-19

Year	Bunker	Carrier	Longline	Other	Pole and Line	Purse seiner	Total
2015	19	67	173	1	0	199	459
2016	16	74	219	0	0	225	534
2017	14	62	14	0	1	222	313
2018	12	65	12	1	0	212	302
2019	13	89	51	0	1	216	370

The majority of distant water fishing nations currently fishing inside Kiribati's EEZ came from Korea, Japan, Chinese-Taipei and the United States include domestic vessels operating under the FSMA arrangement. Fishing activities are managed under bilateral access arrangements, licence conditions, national laws and regulations, regional and international requirements for licensing.

In terms of gear, the Government permitted licensing of five main gears namely; purse seine, longline, pole-and-line including supporting vessels like tankers and reefer carriers. Although tankers and carriers are not catcher vessels they were defined as fishing vessels under the

Fisheries Act 2010. The terms and conditions to manage access and activities of these fisheries vary between gears.

Japanese pole and line fishery is the only operator in this fishery inside Kiribati’s EEZ through access agreement. However, their presence in the region and worldwide appears contracted in recent years.

5.1 Licensed Vessel by Gear

Kiribati fisheries is predominantly purse seine by gear type for it accounts to around 60% on average for vessel licensed from 2015-19. The number of purse seiners licensed annually is more than 200. The bulk of which comes from Korea, Chinese-Taipei, Japan and the United States.

Longline vessels dropped remarkably in 2017 due to closure of the fishery by Kiribati. The result saw mass exodus of longline vessels from Kiribati’s EEZ from 219 (2017) to just 14 the year after. Last year saw sign of recovery in this fishery however note the increase confined to charter longline operating under locally owned companies, KFL and KIFL. Rapid recovery in this fishery depends entirely on resumption of the fishery by the Government and in particular the affordable benchmark price of a day under the PNA Longline VDS.

Supporting vessels such as tankers and carriers have not fluctuated much since 2015. The number of tankers has been consistent on average around 14 vessels while the carriers slightly increased to around 90 vessels at the end of 2019 compared to 65 licensed in 2018. The majority of reefer carriers registered under Panama flag.

Presence of the pole and line fishery continue to diminish the same trend observed in other waters. Their presence in Kiribati’ EEZ is only limited to 1 vessel in 2017 and 2019. There also research vessels (other) chartered by SPC to conduct stock assessment and tuna tagging inside Kiribati’ EEZ issued with licence by Kiribati authority. Overall trend shows a gradual increase in licensed vessels and the longline is responsible for much of the fluctuation in vessel number between 2017 and 2019.

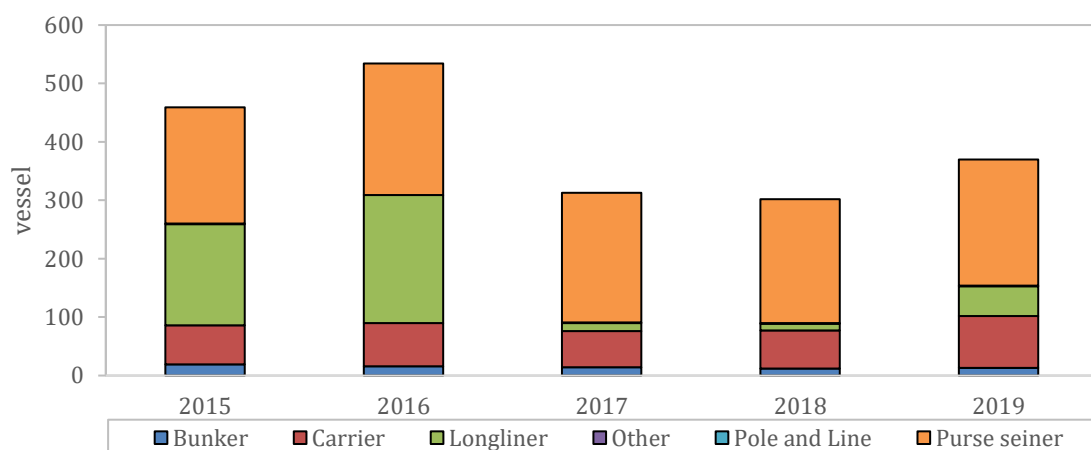


Figure 9. Depiction of annual licensed vessel by gear type, 2015-19.

5.2 Catch by Flag

Figure 10 illustrates annual catch by major fishing fleets inside Kiribati EEZ for the period 2015-19. Apart from catch by national fleet, other major fishing fleet include Korea, Chinese-Taipei and the United States. Total catch by most fleets was high in 2015 and 2019.

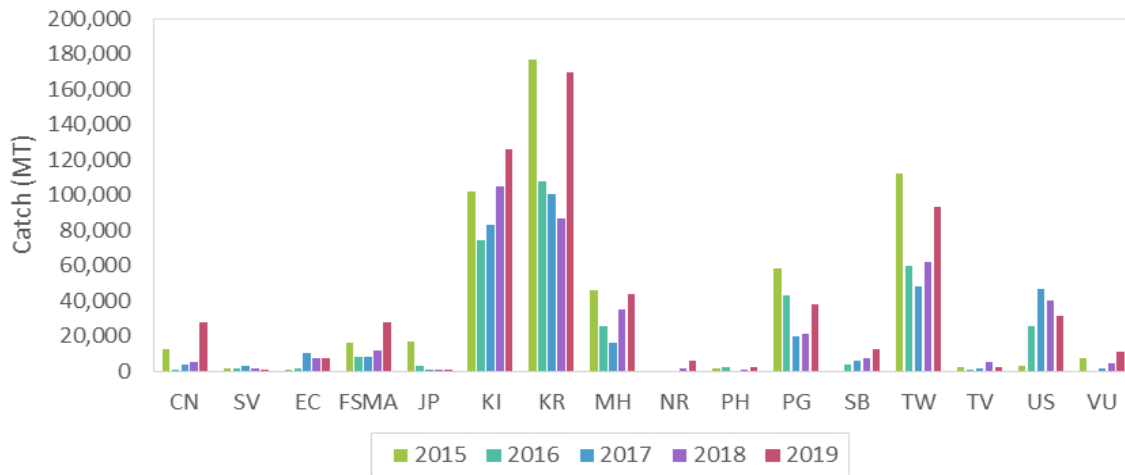


Figure 10. Depiction of annual catch by major fleet inside Kiribati EEZ, 2015-19.

Closure of Kiribati longline fishery to distant water fishing nations commenced in 2017 the result of which greatly impacted longline catch and effort in Kiribati’s EEZ for proceeding years. KFL chartered vessels were exempted from this arrangement to continue fish for this fishery to supply the processing plant.

Fishing activities of licensed vessels is regulated through access agreements and licence conditions specific to each particular gear. This applies to all licensed foreign and domestic vessels however domestic vessels and charter vessels have exceptional arrangements with the Government of Kiribati such as access to the domestic fishing zone (DFZ) closed to vessels licensed under bilateral agreements, FAD exemptions and other concessions. Apart from these all vessels prohibited for conducting transshipment in High Seas, fish in closed areas such as the Phoenix Islands Protected Area (PIPA) and ban on fishing certain species, in particular shark under the Shark Regulation.

Like other licensed vessels effort distribution by flag vessels is heavily influenced by variations in climatic conditions and spatial distribution of stock in waters of national jurisdiction and areas where they hold a licence. Main target species for purse seiners are skipjack while chartered longline vessels target yellowfin tuna – the raw material required by the KFL. Other fish also caught as bycatch species.

6 Socio-economic factors

Recent domestication of a tuna industry has changed the way Kiribati negotiate access and licensed fishing vessels in its waters. This is exemplified by exit of DWFN longline after closure of the longline fishery for foreign vessels in 2017 and exemptions granted to joint venture vessels to fish inside Kiribati domestic fishing zones.

7 Disposal of Catch

Transshipment in port is compulsory for all licensed purse seiners. This allows monitoring of catch transshipped, provides for deterring IUU fishing in areas where the transshipping vessel fished and provide direct and indirect benefits from transshipment activity. While it is mandatory for purse seine vessel to transship in port, longlines were exempted to conduct transship outside port. This is aimed to minimize operational cost to KFL and to constantly supply the processing plant with tuna raw materials.

Under special access arrangements some companies required to land a certain portion of their catch to the KFL. These catches come in fresh (usually from longlines) and frozen from purse seiners. Landing volumes were processed and exported as fresh and frozen products (loins and fillets) to overseas markets. KFL holds commercial landing data and its major export markets include Japan, United States, EU, New Zealand, Australia, Vietnam, Hong Kong and Philippines. Under grade tunas including bycatch species sold locally for domestic consumption at cheaper prices.

8 Onshore Development

8.1 Processing Plant

KFL is the sole fishing company who has a processing establishment in the country. KFL is the joint venture entity established between the Government of Kiribati, Golden Ocean (Fiji) and Zhejiang Ocean Family (China). Established in 2010 the company operates mainly on longline fishery targeting overseas market in fresh and loin products. The company operates from its headquarters in Betio, Tarawa and has contributed to employment of locals in the plant. Historical employment record obtained from KFL showed an increase trend from 55 staff in 2013 to 251 in 2019.

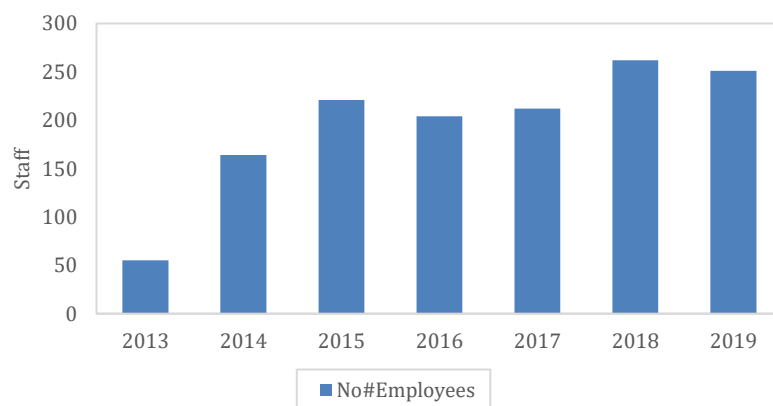


Figure 11. KFL staff and employment record, 2013-19.

Apart from the processing plant the company owns machineries such as side-lifters, crane trucks and chiller vehicles to assist production and transportation of fishery products for overseas exportation. The company also offered fisheries related services such as sale of fishing gears, fuel, baits, spare parts and ice to local fishermen.

Expansion of KFL operation and support facilities would increase country export volume in future. Establishment of a new company KIFL will be based in Kiritimati Islands in the Line Group. Although KIFL operating facilities is yet established the company purse seine and longline fleet are currently operating now.

8.2 Longline Vessel Project

The Government purchased three small-scale longline fleets in 2019. These vessels will contribute to tuna production at the domestic level and increase external market accessibility through KFL. These longline vessels are currently trialed by Central Pacific Producers Limited (CPPL) to assess its viability with a long term aim of developing and expanding the longline fishery in future if the project proved economically successful.

9 Future Prospect of the Fishery

The long term objective of the Government is to explore a wider benefits from participation in the value added products for tuna through expansion of opportunities for direct and indirect employment in the fishing industry as well as conditioning licensed vessels to tie access with crewing. However, key to maximization of economic return from tuna fishing and greater protection of high value tuna species including commercially valuable pelagic and coastal fisheries through effective enforcement remains integral for long-term sustainability of the fisheries industry for the nation future prospect. Integration of fisheries management system through a centralized database is essential for monitoring and conservation of fishery resources at all levels.

10 Status of Tuna Fishery Data Collection Systems

10.1 Logsheet Data Collection and Verification

Logsheet data collection and verification is an ongoing activity by fisheries. New recruited compliance officers have improved monitoring activities in line with the Commission requirements and conservation management measures (CMMs). Logsheets can be received either through companies, operators of fishing vessels or through observers. Fishing report and timely data submission requirements enforced through licence conditions. Despite that, an efficient system is gravely needed to address existing gaps in data management including observer reports and transshipment.

10.2 Observer Programme

Observers remain an important tool to monitor and deter IUU fishing. The current arrangement requires 100% placement on purse seiners and 5% for longline vessels. Variance in coverage between these gears reflects the difference between the two gears in terms of operational behavior and working condition on these vessels. By comparison, longlines are more challenging than purse seiners.

National placement cover mostly purse seiners from Korea, Japan, Chinese-Taipei and others. This is in contrast to regional placement on US Treaty vessels and vessels under the FSMA arrangement. These placements administered through the Forum Fisheries Agency (FFA) headquarters in Honiara and PNA office in Majuro respectively. Apart from purse seiners and longlines, Kiribati also extend placement of its observers on tankers and carrier vessels however placement on pole and line vessels is rare. This perhaps due to the dwindling and non-destructive nature of the fishery. For compliance and neutrality purposes, Kiribati fleets are managed through placement of observers from other observer service providers in the region.

10.3 Port Sampling Programme

Kiribati supports SPC port sampling program however due to financial constraints the program ceased in 2014. Another reason is the absence of full time official and counterpart of SPC to take on the job. Observers normally tasked to undertake this job when they are not onboard.

This proved ineffective when observers are not available. All data retrieved from port sampling activities were sent to SPC.

10.4 Unloading / Transshipment

The majority of transshipment activities conducted in port carried out between licensed fishing vessels and carrier boats. Transshipment is high when fishing favors Kiribati waters, particularly during El Niño periods. Since Kiribati does not have a canning factory fish from purse seiners normally transshipped to overseas destinations. In recent years the Government imposed on licensed vessels a requirement to offload a certain portion of high grade tuna species to KFL. This is an additional catch besides catch landed by KFL vessels to ensure sufficient raw materials needed for processing is maintained. All landing and export data currently held at KFL.

11 Research Activities Covering Target and Non-target Species

Being a member to the WCPC, Kiribati is supportive to oceanic research activities and scientific stock assessment through issuance of licence to research vessels to conduct those activities in its EEZ. There was a position of a national tagging officer as a counterpart of SPC on tuna tagging exercise but the post no longer exists now due to lack of specific fund for the post.



ADDENDUM TO ANNUAL REPORT PART 1

Specific information to be provided in Part 1 as required by CMMs¹

26 February 2019

CMM 2019-03 North Pacific Albacore	Some KI vessels fished north of the equator and caught 48.1mt ALB as bycatch.																
	CCM	Area	Fisher y	2002-04		2014		2015		2016		2017		2018		2019	
				Vessel s	days	Vessel s	days	Vessel s	days	Vessel s	days	Vessel s	days	Vessel s	days	Vessel s	days
KI	WCPF C	LL	0	0	21	1562	23	2155	14	1473	0	0	10	761	25	1848	
CMM 2006-04 [South West striped Marlin],Para 4	There was 1 KI vessel that fished in the area (South of 15°S) but no Striped Marlin were caught in 2019.																
CMM 2009-03 [Swordfish],Para8	There was 1 KI flag vessel that fished south of 20°South, but no catch of Swordfish in the area (south 20°S) as bycatch). Kiribati EEZ is located above 20°S. No KI charter vessel fished south of 20 degrees South																
CMM 2009-06 [Transshipment],Para 11 (ANNEX II)																	

¹Reporting requirements requested by CMMs and decisions by the Commission, as of WCPFC14 (Dec 2017)

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 LL=(928.577mt)	All in port	Transshipped inside convention area	All caught in Convention area	SKJ	Frozen	LL(3.157mt)
	All in port	All transshipped inside convention area	All caught in convention area	YFT	Frozen	LL (421.520mt)
	All in port	All transshipped inside convention area	All caught in convention area	BET	Frozen	LL (457.200mt)
	All in port	All transshipped inside convention area	All caught in convention area	ALB	Frozen	LL (46.700mt)
Offloaded PS=(196,108mt)	All in port	All transshipped inside convention area	All caught in Convention area	SKJ	Frozen	PS(175,548mt)
	All in port	All transshipped inside convention area	All caught in Convention area	YFT	Frozen	PS(10,849mt)
	All in port	All transshipped inside convention area	All caught in Convention area	BET	Frozen	PS(1,688mt)
	All in port	All transshipped inside convention area	All caught in Convention area	MIX	Frozen	PS(8,022mt)
Received RC=(11,927mt)	RC	All transshipment in port	Catch in Convention area	SKJ	Frozen	RC(11,438mt)
	RC	All transshipment in port	Catch in convention area	YFT	Frozen	RC(489mt)
	RC	All transshipment in port	Catch in convention area	BET	Frozen	RC(0mt)

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
No. of PS offloaded: 391	Transshipment in Port	All transshipment in inside the convention area	Caught in convention area	PS
No. for LL offloaded: 109	Transshipment in Port	All transshipment inside the convention area	Caught in convention area	LL
Transshipment no: 11	All transhipped in port	All transshipment inside the convention area	Caught in convention area	RC

**CMM 2010-07
[Sharks], Para 4**

The catch summary for shark species 2019 shown in the table below were all based on raised estimated values in accordance with WCPFC Convention and agreed reporting procedures.

Gear	WCPFC Key Species	2019 Retained _raised		2019 Discard _raised	
		MT	%	MT	%
PS	BLUE SHARK	0	0	0	0
	SILKY SHARK	0	0	56	0.028383
	HAMMERHEAD SHARKS	0	0	1	0.000507
	MAKO SHARKS	0	0	0	0
	OCEANIC WHITETIP SHARK	0	0	3	0.001521
	PORBEABLE / SALMON SHARK	0	0	0	0
	WHALE SHARK	0	0	1	0.000507
	THRESHER SHARKS	0	0	0	0
LL	BLUE SHARK	2	0.000590667	0	0
	SILKY SHARK	0	0	0	0
	HAMMERHEAD SHARKS	0	0	0	0
	MAKO SHARKS	0	0	0	0
	OCEANIC WHITETIP SHARK	0	0	0	0
	PORBEABLE / SALMON SHARK	0	0	0	0
	WHALE SHARK	0	0	0	0
	THRESHER SHARKS	8	0.00236267	0	0

CMM 2011-03 [Impact of PS fishing on cetaceans], Para 4(fishing master)

Gear	Category	Species	Number	No. Alive	No. Dead
S	MARINE MAMMALS	BOTTLENOSE DOLPHIN	1	1	0
	MARINE MAMMALS	BRYDE'S WHALE	3	3	0

		MARINE MAMMALS	CUVIER'S BEAKED WHALE	1	1	0
		MARINE MAMMALS	FALSE KILLER WHALE	6	6	0
		MARINE MAMMALS	GINKGO-TOOTHED BEAKED WHALE	1	1	0
		MARINE REPTILES	GREEN TURTLE	1	1	0
		MARINE REPTILES	HAWKSBILL TURTLE	2	2	0
		MARINE MAMMALS	HUMPBACK WHALE	3	3	0
		MARINE MAMMALS	INDO-PACIF. BOTTLENOSE DOLPHIN	4	4	0
		MARINE REPTILES	LOGGERHEAD TURTLE	4	3	1
		MARINE REPTILES	OLIVE RIDLEY TURTLE	1	1	0
		MARINE MAMMALS	PANTROPICAL SPOTTED DOLPHIN	5	0	5
		MARINE MAMMALS	ROUGH-TOOTHED DOLPHIN	15	0	15
		MARINE MAMMALS	SHORT-FINNED PILOT WHALE	5	4	0
		WHALE SHARK	WHALE SHARK	12	10	2
	Sourced from TUBS There was 40 Cetaceans have been encircled by Purse Seine nets for 2019					
CMM 2011-04 [Oceanic whitetip sharks], Para 3	The total unraised catch for the oceanic whitetip shark is 110 with raised estimated of 206 and 37.9 released alive.					
CMM 2012-04 [Whale sharks], Para 06(Fishing master)	There were no reported incidents from the master but based on the observer data there were 12 Whale sharks encircled by Purse Seine nets for 2019. (Source of data: Tubs).					

CMM 2013-08 [Silky sharks],Para 3	Total estimated number unraised of Silky Shark is 3223 with raised estimated 6046 and 90.4 released alive.																										
Observer coverage (WCPFC 11 decision – para 484(b))	According to national record, Kiribati attained the required 5% observer coverage on long line vessels. <table border="1" data-bbox="548 475 1728 686"> <thead> <tr> <th rowspan="2">CCM Fleet</th> <th rowspan="2">Fishery</th> <th colspan="3">No. of Trips</th> <th rowspan="2">See NOTES</th> </tr> <tr> <th>Total estimated</th> <th>Observer</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>KIRIBATI</td> <td>Pacific Islands</td> <td>103</td> <td>5</td> <td>5%</td> <td>8, 9</td> </tr> </tbody> </table>							CCM Fleet	Fishery	No. of Trips			See NOTES	Total estimated	Observer	%	KIRIBATI	Pacific Islands	103	5	5%	8, 9					
CCM Fleet	Fishery	No. of Trips			See NOTES																						
		Total estimated	Observer	%																							
KIRIBATI	Pacific Islands	103	5	5%	8, 9																						
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 2017-06 [Seabirds] Para 9	Source: TUBS <table border="1" data-bbox="548 902 2028 1382"> <tr> <td data-bbox="548 902 842 1382"> CMM 2017-06 [Seabirds] Para 9 </td> <td colspan="6" data-bbox="842 902 2028 943"> Effort, observed and estimated seabird by fishing gear summarized below. </td> </tr> <tr> <td data-bbox="842 976 1045 1382" rowspan="2"> Year </td> <td colspan="4" data-bbox="1045 976 1646 1227"> Fishing effort </td> <td colspan="2" data-bbox="1646 976 1948 1227"> Observed seabird captures </td> </tr> <tr> <td data-bbox="1045 1227 1194 1382"> Number of vessels </td> <td data-bbox="1194 1227 1346 1382"> Number of hooks </td> <td data-bbox="1346 1227 1497 1382"> Observed hooks </td> <td data-bbox="1497 1227 1646 1382"> % hooks observed </td> <td data-bbox="1646 1227 1797 1382"> Number </td> <td data-bbox="1797 1227 1948 1382"> Rate </td> </tr> </table>							CMM 2017-06 [Seabirds] Para 9	Effort, observed and estimated seabird by fishing gear summarized below.						Year	Fishing effort				Observed seabird captures		Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate
CMM 2017-06 [Seabirds] Para 9	Effort, observed and estimated seabird by fishing gear summarized below.																										
Year	Fishing effort				Observed seabird captures																						
	Number of vessels	Number of hooks	Observed hooks	% hooks observed	Number	Rate																					

2014	6	3456382	0	0	0	0
2015	14	2981654	213422	7.16	0	0
2016	17	8706968	0	0	0	0
2017	7	9923355	0	0	0	0
2018	9	2856450	29550	1.03	0	0
2019	21	8944948	217532	2.43	0	0

Source: TUBS&Tufman

Proportion of mitigation types used by the fleet.

	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		62.5			
Options required south of 25°S	TL + NS					
	TL + WB					
	NS + WB					
	TL + WB + NS					
	HS					

		Other options 25°S-30°S	WB									
			TL									
		Other options north of 23°N	SS/BC/WB/DS LS									
			SS/BC/WB/(M OD or BDB)									
		Provide any other combination of mitigation measures here	NS		37.5							
			Totals (must equal 100%)		100							