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

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KIRIBATI

SCIENTIFIC COMMITTEE
FOURTEENTH REGULAR SESSION

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PART 1: INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS

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 2021**	[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 longline fleets continues to increase from 2016-20 whilst drop is notable by Kiribati purse seine fleets in 2020. Key tuna species harvested include Skipjack tuna (*Katsuowonus 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 are 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 significant in terms of vessel number and economic contribution however it remains vital to the employment sector, in particular crewing and seafaring.

Kiribati has 72 vessels active in the Convention Area in 2020 consisting of 47 longline and 25 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 2016-2020. 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 regulates 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 fishery 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. Estimates for this important fishery in recent years are very approximate due to various challenges in acquiring sufficient and representative compiling data.

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 17 in 2016 to 47 in 2020. 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, 2016-20.

Vessel category	2016		2017		2018		2019		2020	
	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 50 GRT	0	0%	0	0%	1	11%	1	4%	1	2%
51 -200 GRT	5	29%	1	14%	7	78%	10	42%	9	19%
201 -500 GRT	9	53%	6	86%	1	11%	8	33%	20	43%
500+ GRT	3	18%	0	0%	0	0%	5	21%	17	36%
Total	17		7		9		24		47	
N/A	0		0		0		0		0	

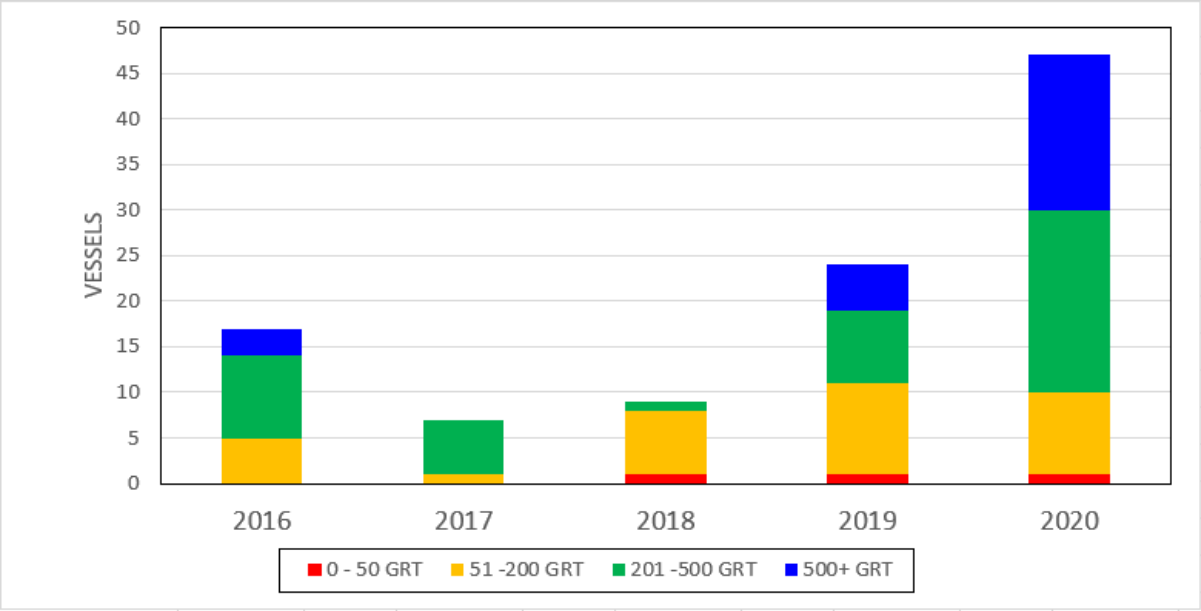

Figure 1. Depiction of Kiribati Longline Fleet by Size Category, 2016-20.

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 the years 2018, 2019 and 2020. After 2017, the majority of the purse seine fleets 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, 2016-20.

Vessel category	2016		2017		2018		2019		2020	
	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 500 GRT	0	0%	0	0%	0	0%	0	0%	0	0%
501 -1000 GRT	2	7%	0	0%	0	0%	0	0%	0	0%
1001 -1500 GRT	15	56%	7	37%	9	43%	9	41%	11	44%
1500+ GRT	10	37%	12	63%	12	57%	13	59%	14	56%
Total	27		19		21		22		25	
N/A	0		0		0		0		0	

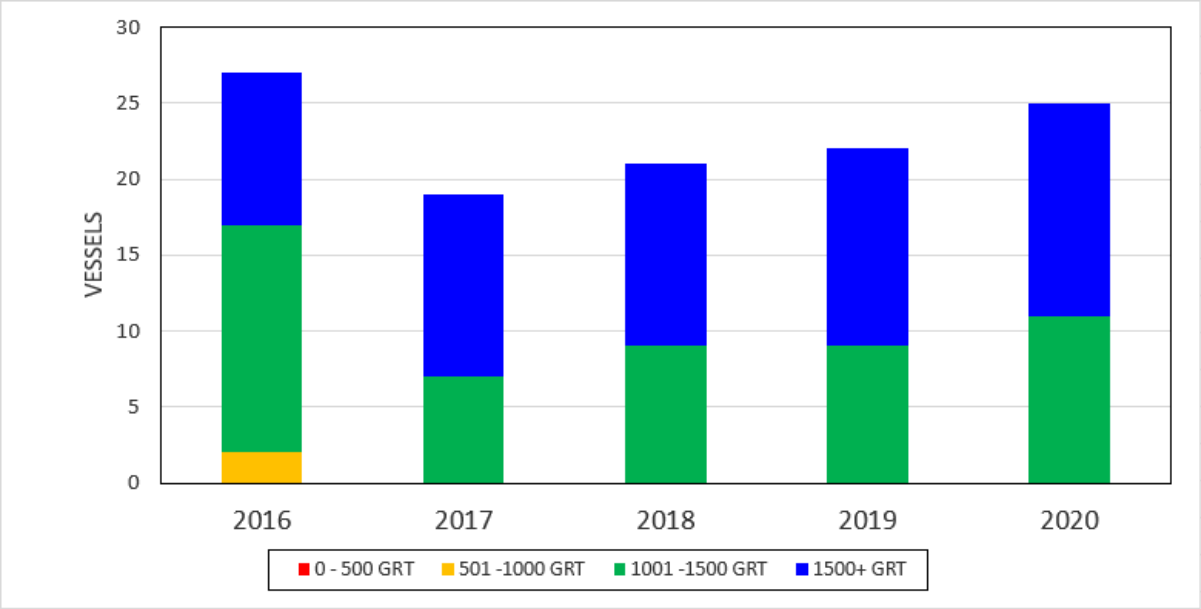

Figure 2. Depiction of Kiribati Purse seine Fleet by Size Category, 2016-20.

4.1.3 Kiribati Pole and Line

Kiribati had no pole and line vessel active in the WCPO after 2016 as depicted in Table 3 and Figure 3.

Table 3. Kiribati Pole and Line fleet active inside the Convention Area, 2016-20.

Vessel category	2016		2017		2018		2019		2020	
	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 50 GRT	0		0		0		0		0	
51 -150 GRT	0		0		0		0		0	
150+ -GRT	0		0		0		0		0	
Unknown	0		0		0		0		0	
Total	0		0		0		0		0	

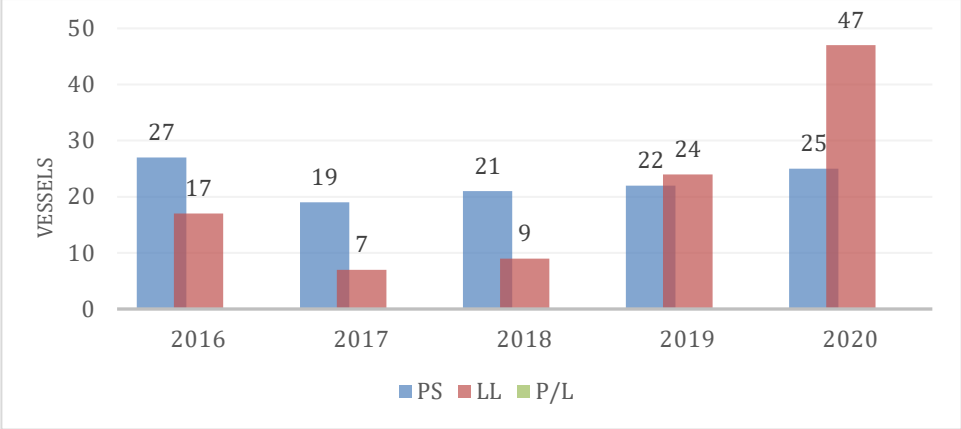

Figure 3. Depiction of Kiribati Fleet Active in the WCPO by Gear Type from 2016-20.

The total number of vessels registered under Kiribati and active in the WCPO in 2020 was 72 representing a 56% increase from 2019 total. 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 after 2017 is observed due to the addition of KIFL vessel to the national fleet, longline in particular. Absence of pole and line vessels activity in the WCPO observed for the years 2016 to 2020.

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 2016-2020) to 5,130mt in 2020. Catch in 2020 also shows a sharp expansion in longline catch since 2016 and higher than the 5-year average (2,718mt).

Table 4. Annual catch by Kiribati Longline fleet inside the Convention Area by Species, 2016-20.

WCPFC Key Species	2016		2017		2018		2019		2020		2020 Discard	
	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
ALBACORE	510	27%	691	41%	340	28%	1,131	31%	1,884	37%	0	0%
BIGEYE TUNA	603	32%	287	17%	423	34%	1,292	35%	1,570	31%	99	57%
PACIFIC BLUEFIN TUNA	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
SKIPJACK TUNA	21	1%	56	3%	15	1%	144	4%	35	1%	0	0%
YELLOWFIN TUNA	610	32%	359	22%	220	18%	862	23%	1,279	25%	73	42%
BLACK MARLIN	40	2%	0	0%	2	0%	77	2%	72	1%	0	0%
BLUE MARLIN	30	2%	0	0%	28	2%	22	1%	89	2%	0	0%
STRIPED MARLIN	2	0%	95	6%	2	0%	18	0%	20	0%	0	0%
SWORDFISH	30	2%	54	3%	21	2%	122	3%	180	4%	0	0%
BLUE SHARK	30	2%	10	1%	34	3%	2	0%	1	0%	1	1%
SILKY SHARK	10	1%	114	7%	141	11%	0	0%	0	0%	0	0%
HAMMERHEAD SHARKS	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
MAKO SHARKS	0	0%	0	0%	4	0%	0	0%	0	0%	0	0%
OCEANIC WHITETIP SHARK	3	0%	0	0%	0	0%	0	0%	0	0%	0	0%
PORBEABLE / SALMON SHARK	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
WHALE SHARK	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
THRESHER SHARKS	0	0%	0	0%	0	0%	8	0%	0	0%	0	0%
Total	1,889		1,666		1,230		3,678		5,130		173	

Rapid increase in the longline fleet (see Figure 4) contributed largely to increase in catch in this fishery. Catch composition in 2020 consists mainly of Bigeye (31%), Albacore (37%) and Yellowfin (25%) while the rest split between species of Marlin and Swordfish. Although Albacore is not the main fishery it is still caught by the fishery.

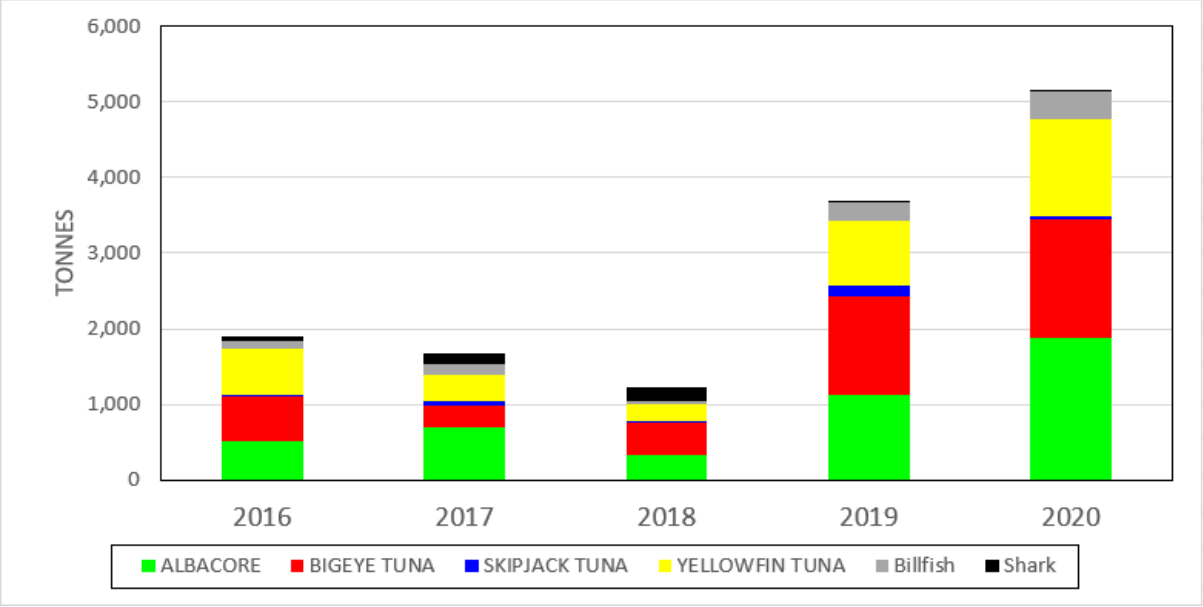

Figure 4. Depiction of catch by Kiribati longline fleet inside the Convention Area by Species, 2016-20.

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, 2014-20.

Species	2014	2015	2016	2017	2018	2019	2020
Yellowfin	13	13	0	0	0	0	0
Bigeye	0	0	0	0	0	0	0
Skipjack	240	240	0	0	0	0	0
others	0	0	0	0	0	0	0
Total	253	253	0	0	0	0	0

4.2.3 Purse Seine Fishery

Catch in the purse seine fishery saw similar upward trend from 165,144mt in 2016 to slightly over 200,605mt in 2020, however unlike the longline catch annual increase for purse seine shows a gentle slope after 2017. Catch between 2018 and 2019 represents a 13% increase compared to a 23% from 2017 to 2018. A slump by 6% was observed for both 2016 to 2017 and in 2019 to 2020 level. The majority of catch is mostly Skipjack as it accounts for more than 80% on average since 2016 and 85% in 2020.

Table 6. Annual catch by Kiribati Purse seine inside the Convention Area by Species, 2016-20.

WCPFC Key Species	2016		2017		2018		2019		2020		2020 Discard	
	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
ALBACORE	0	0%	0	0%	0	0%	5	0%	0	0%	0	0%
BIGEYE TUNA	8,400	5%	6,263	4%	9,806	5%	5,712	3%	3,642	2%	91	5%
PACIFIC BLUEFIN TUNA	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
SKIPJACK TUNA	133,297	81%	122,548	80%	156,185	82%	185,375	87%	169,724	85%	1,239	73%
YELLOWFIN TUNA	23,289	14%	24,823	16%	23,441	12%	23,025	11%	27,010	13%	139	8%
BLACK MARLIN	10	0%	12	0%	7	0%	11	0%	15	0%	13	1%
BLUE MARLIN	34	0%	18	0%	27	0%	23	0%	29	0%	28	2%
STRIPED MARLIN	19	0%	19	0%	5	0%	5	0%	1	0%	1	0%
SWORDFISH	2	0%	1	0%	0	0%	0	0%	0	0%	0	0%
BLUE SHARK	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
SILKY SHARK	91	0%	91	0%	67	0%	57	0%	170	0%	170	10%
HAMMERHEAD SHARKS	0	0%	0	0%	0	0%	1	0%	1	0%	1	0%
MAKO SHARKS	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
OCEANIC WHITETIP SHARK	2	0%	2	0%	1	0%	3	0%	8	0%	8	0%
PORBEABLE / SALMON SHARK	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
WHALE SHARK	0	0%	0	0%	4	0%	1	0%	4	0%	4	0%
THRESHER SHARKS	0	0%	0	0%	0	0%	0	0%	1	0%	1	0%
Total	165,144		153,777		189,543		214,218		200,605		1,695	

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 2016-2020 is 184,657mt and around 1,200mt of Skipjack discarded last year which is 73% from a total discard of 1,695mt.

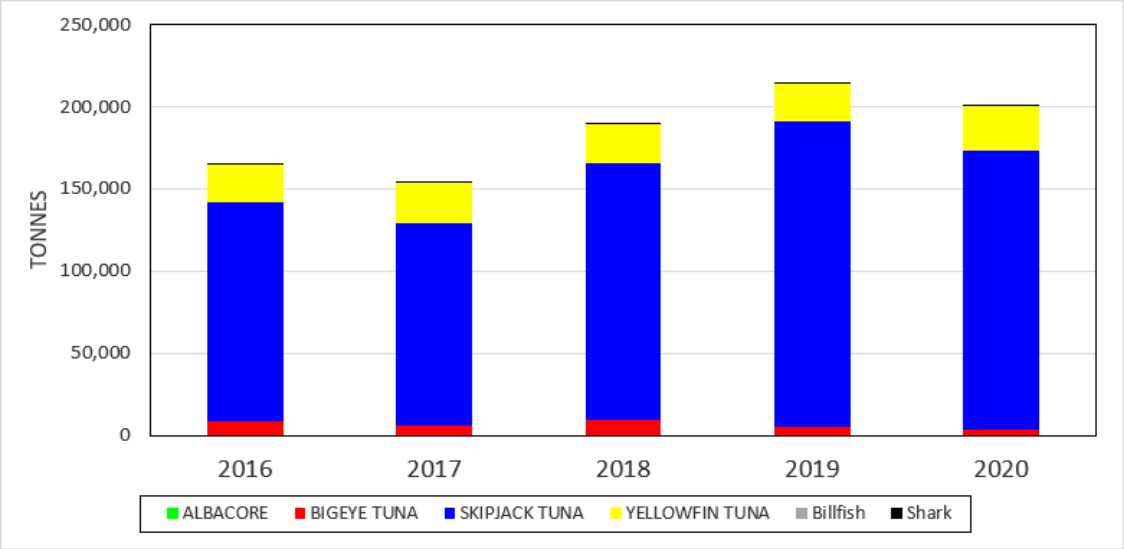

Figure 5. Depiction of catch by Kiribati Purse seine inside the Convention Area by Species, 2016-20.

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 fiberglass 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, 2016-20.

WCPFC Key Species	2016		2017		2018		2019		2020	
	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	

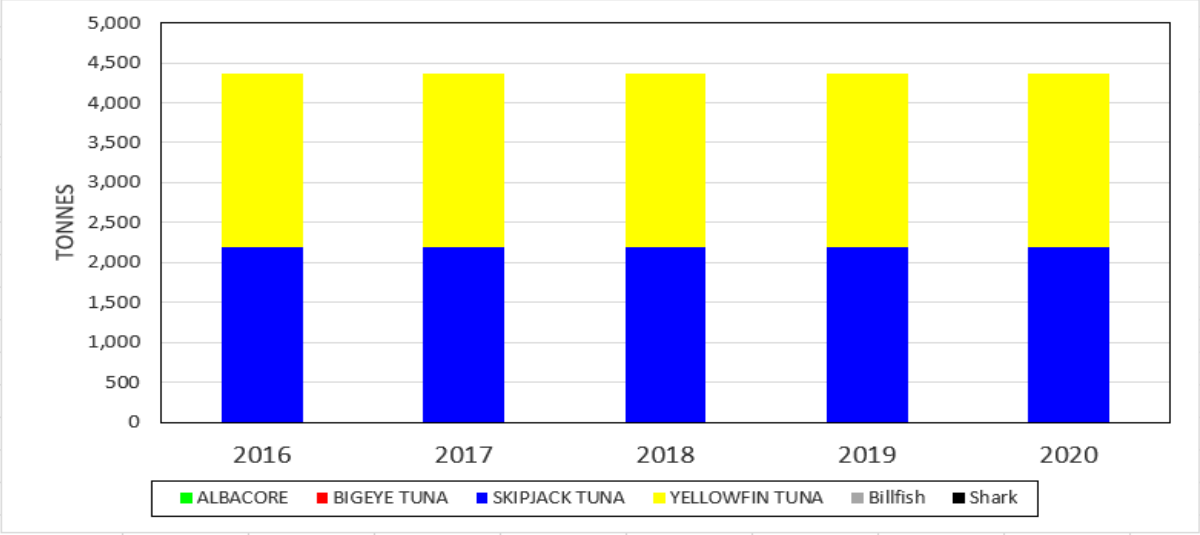

Figure 6. Depiction of catch by Artisanal fishery by Species, 2016-20.

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.

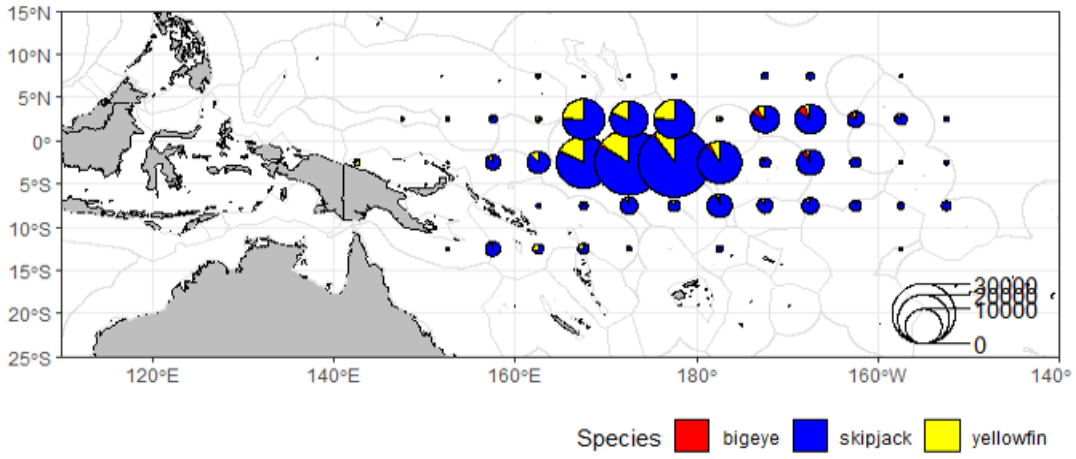

Figure 7. Effort distribution of Kiribati Purse seine inside the Convention Area, 2016-20.

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.

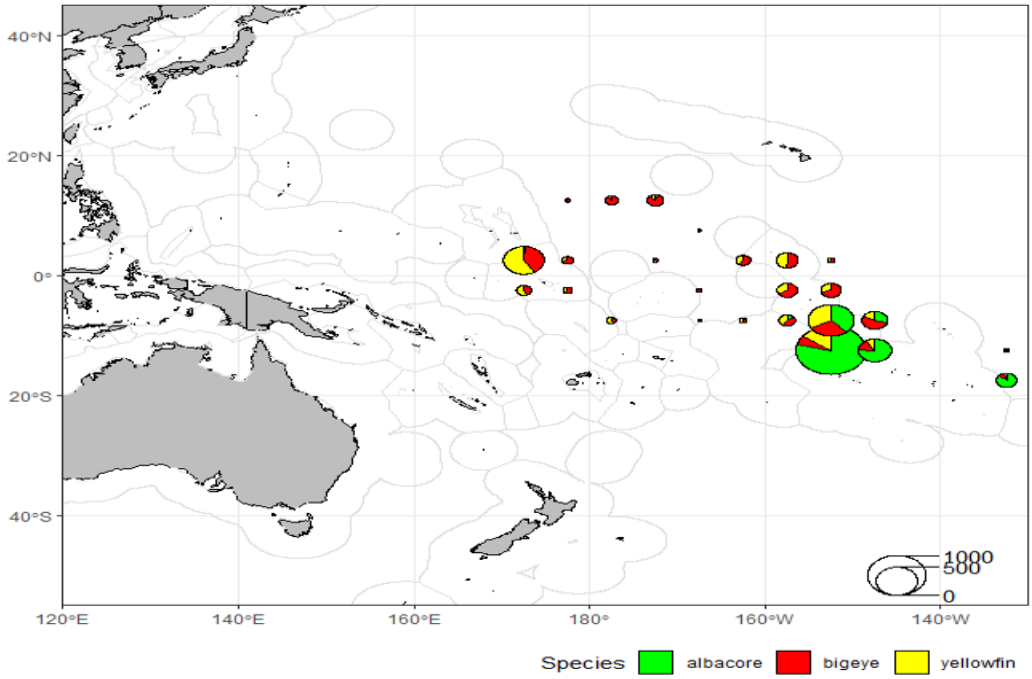

Figure 8. Effort Distribution of Kiribati Longline inside the Convention Area, 2016-20.

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 vessels licensed by Kiribati were 534 in 2016. 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. There is recovery seen in vessel licensed in 2019 by 23% and then a slightly slump by 6% observed last year.

Table 8. Annual vessels licensed by Kiribati, 2016-20

Year	Bunker	Carrier	Longline	Other	Pole and Line	Purse seiner	Total
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
2020	14	78	39	0	0	218	349

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 2016-20. 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 (2016) to just 14 the year after. Year 2019 saw sign of recovery in this fishery however note the increase confined to charter longline operating under locally owned companies, KFL and KIFL. Drop to longline is again noticeable last year following the outbreak of COVID-19 but this is minimal compared to drop observed in 2017. 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 2016. 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 then drop to around 80 in 2020. 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 increase in licensed vessels and the longline is responsible for much of the fluctuations in vessel number between 2017 and 2019.

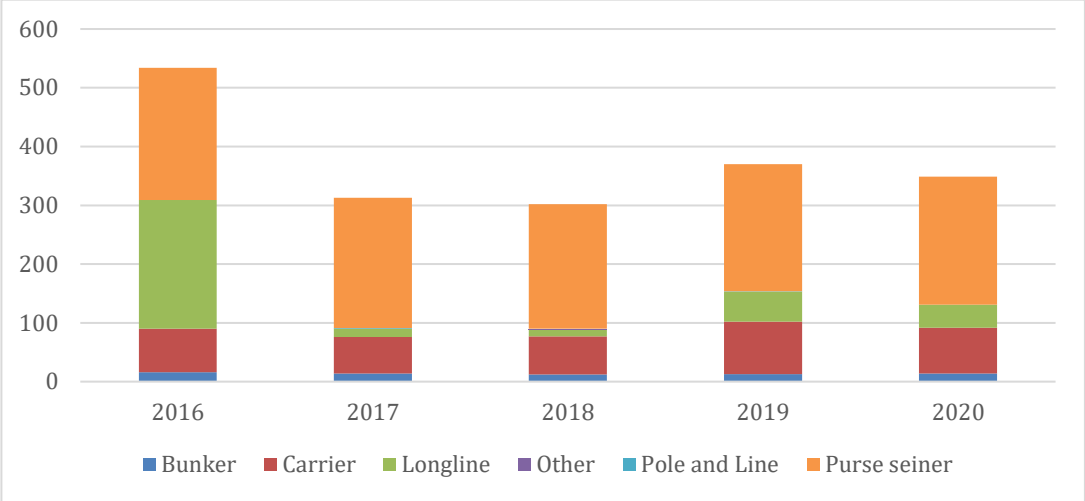

Figure 9. Depiction of annual licensed vessel by gear type, 2016-20.

5.2 Catch by Flag.

Figure 10 illustrates annual catch by major fishing fleets inside Kiribati EEZ for the period 2016-20. 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 2019 but declined in 2020 due in part to a general reduction of the purse seine catch for the WCPFC area, and a move of the main fishery to the west under La Nina conditions.

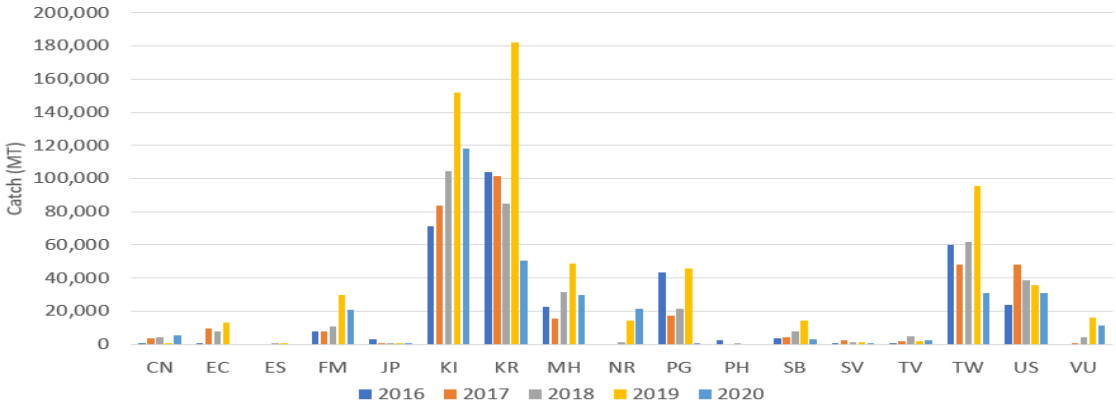

Figure 10. Depiction of annual catch by major fleet inside Kiribati EEZ, 2016-20.

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 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 212 in 2020.

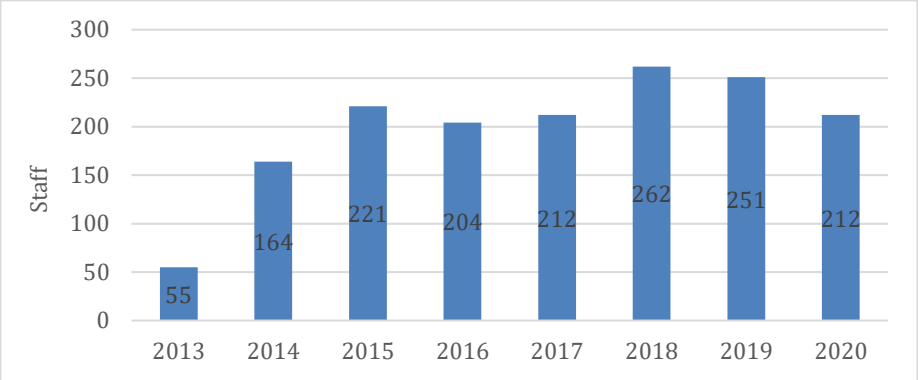

Figure 11. KFL staff and employment record, 2013-20.

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. New company KIFL is 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 benefit 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 officer and VMS Officer 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. At the national level, Observer engagement with monitoring works on board vessels is relaxed until such time COVID-19 is normalized.

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

15 February 2021[1]

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

CMM 2009-03 [Swordfish], Para 8	CCMs shall report to the Commission the total number of vessels that fished for swordfish and the total catch of swordfish for the following: a. vessels flying their flag anywhere in the Convention Area south of 20°S other than vessels operating under charter, lease or other similar mechanism as part of the domestic fishery of another CCM; b. vessels operating under charter, lease or other similar mechanism as part of their domestic fishery south of 20°S; and c. any other vessels fishing within their waters south of 20°S. This information shall be provided in Part 1of each CCM's annual report. Initially, this information will be provided in the template provided at Annex 2 for the period 2000-2009 and then updated annually.

[1] Reporting requirements requested by CMMs and decisions of the Commission, as of WCPFC17 (Dec 2020). First issued on 15 February 2021. Changes made from Addendum for 2020, include separating the annual reporting requirements that specify needing to be included in Annual Report Part 1 (Section A) from those that may be included in Annual Report Part 1 if they are not otherwise provided to WCPFC (Section B). The entry into force of CMM 2019-04 *Conservation and Management Measure for Sharks* for most CCMs in late 2020 and the specified reporting in Section VII, has removed a few annual reporting requirements from this Addendum.

TABLE 1.CMM 2009-03 SWORDFISH, PARA 8 - REF: TUFMAN REPORTING 22.

YEAR	CCM-FLAGGED VESSELS SOUTH OF 20S		CHATTERED VESSELS		OTHER VESSELS FISHING WITHING THE CCM'S WATERS SOUTH OF 20S		
	CATCH IN METRIC TONNES	VESSEL NUMBERS	CATCH IN METRIC TONNES	VESSEL NUMBERS	FLAG	CATCH (TONNES)	VESSEL NUMBERS
2020			2.689	10			

**Note: WCPFC11 confirmed a common understanding that "total catch" in this reporting requirement refers to both targeted and bycatch catches of swordfish.*

**Note: Vessels were confirmed Chattered and notified to the WCPFC in 2020.*

Observer coverage (WCPFC 11 decision – para 484(b)	CCMs are to compile and include in Annual Report Part 1 to be submitted from 2015 onwards, observer coverage for their longline fleet activity in the previous calendar year, noting that revisions can be provided at the annual TCC meeting.

TABLE 2: OBSERVER COVERAGE (WCPFC 11 decision - para 484(b) - REF: NATIONAL OBSERVER DATA RECORD

CCM FLEET	YEAR	NO OF TRIPS		
		Total estimated	Observer	%
KIRIBATI	2020	0	0	0

Note: There is difficulty with national observers' placement due to COVID-19 pandemic issues.

A sample report format is provided as guidance to assist CCMs with reporting

(WCPFC11 Summary Report Attachment L Table 4)

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

CCMs shall report on all transhipment activities covered by this Measure (including transhipment activities that occur in ports or EEZs) as part of their Annual Report in accordance with the guidelines at Annex II. In doing so, CCMs shall take all reasonable steps to validate and where possible, correct information received from vessels undertaking transhipment using all available information such as catch and effort data, position data, observer reports and port monitoring data.

WCPFC15 Outcome document para 48: The Commission agreed to the TCC14 recommendation that the template provided in TCC14-2018-RP03 Annex 3 be used by all applicable CCMs for their future reporting in Annual Report Part 1, as per CMM 2009-06 paragraph 11 (Attachment O of WCPFC15).

Annex 3 of RP03: Transhipment information to be provided annually by CCMs as required by CMM 2009-06 paragraph 11 in accordance with the guidelines in Annex II of the measure.

Each CCM shall include in Part 1 of its Annual Report to the Commission:

(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 transshipped 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 **<u>LL(30 incoming FVs)</u>**	All in port	Transshipped inside convention area	All caught in Convention are	SKJ	Frozen	LL(0mt)
	All in port	All transshipped inside convention area	All caught in convention area	YFT	Frozen	LL (131.608mt)
	All in port	All transshipped inside convention area	All caught in convention area	BET	Frozen	LL (55.544mt)
	All in port	All transshipped inside convention area	All caught in convention area	OTH	Frozen	LL (1.068mt)

Offloaded **PS(112 incoming FVs)**	All in port	All transshipped inside convention area	All caught in Convention area	SKJ	Frozen	PS(78,789.00mt)
	All in port	All transshipped inside convention area	All caught in Convention area	YFT	Frozen	PS(17,531.11mt)
	All in port	All transshipped inside convention area	All caught in Convention area	BET	Frozen	PS(705.50mt)
	All in port	All transshipped inside convention area	All caught in Convention area	MIX	Frozen	PS(0.19mt)
Received **RC=(18 incoming FVs)**	RC	All transshipment in port	Catch in Convention area	SKJ	Frozen	RC(78,789.0mt)
	RC	All transshipment in port	Catch in convention area	YFT	Frozen	RC(17,531.1mt)
	RC	All transshipment in port	Catch in convention area	BET	Frozen	RC(705.50mt)

(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
Nos of PS offloaded **112PS** **Nos for LL offloaded** **30LL**	Transshipment in Port	All transshipment in inside the convention area	Caught in convention area	PS
	Transshipment in Port	All transshipment inside the convention area	Caught in convention area	LL
Transshipment no **18 RC**	All transshipped in port	All transshipment inside the convention area	Caught in convention area	RC

ANNEX II

TRANSHIPMENT INFORMATION TO BE REPORTED ANNUALLY BY CCMs

Each CCM shall include in Part 1 of its Annual Report to the Commission:

(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 transshipped outside the Convention Area;
   d. caught inside the Convention Area and caught outside the Convention Area;
   e. species;
   f. product form; and
   g. fishing gear used

(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; and
   e. fishing gear.

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

CCMs shall include in their Part 1 Annual Report any instances in which cetaceans have been encircled by the purse seine nets of their flagged vessels, reported under paragraph 2(b).

TABLE 5: CMM 2011-03 PARA 5 - REF: TUBS REPORT 9 & TUFMAN REPORT 29

Date	Latitude	Longitude	Details of the Species	Number of individuals	Status	
23/01/2020	0010.457N	17908.491E	FALSE KILLER WHALE	2	Released	
24/01/2020	0135S	17834E	ROUGH-TOOTHED DOLPHIN	12	Released	
25/01/2020	0041S	17929E	ROUGH-TOOTHED DOLPHIN	5	Released	
02/02/2020	0331.947S	17340.426E	FALSE KILLER WHALE	7	DPA	

06/02/2020	0022S	17853E	FALSE KILLER WHALE	3	Released	
09/02/2020	0023.919N	17658.843E	FALSE KILLER WHALE	5	DPU	
18/02/2020	0020N	17657E	FALSE KILLER WHALE	2	Released	
19/02/2020	0020.510N	17657.223E	FALSE KILLER WHALE	1	DPA	
10/02/2020	0017.804N	17643.569E	FALSE KILLER WHALE	7	DPU	
01/03/2020	0153.961S	17918.723W	FALSE KILLER WHALE		Released	
04/03/2020	0310.019S	17809.000E	BOTTLENOSE DOLPHIN	6	Released	
07/03/2020	0232.713N	16647.567E	FALSE KILLER WHALE	2	Released	
14/03/2020	0338.999N	17046.019E	FALSE KILLER WHALE	1	Released	
16/03/2020	0141.796S	17046.037E	FALSE KILLER WHALE	2	ICR	
17/03/2020	0103.007S	17150.244E	FALSE KILLER WHALE	9	DPU	
18/03/2020	0108.829S	17135.980E	FALSE KILLER WHALE	10	DPU	
26/01/2020	0041.297S	17929.108E	ROUGH-TOOTHED DOLPHIN	3	DPA	
26/03/2020	0149.637S	16529.792E	FALSE KILLER WHALE	6	DPU	
18/03/2020	0203.027S	16710.561E	MELON-HEADED WHALE	7	DPU	
25/01/2020	0134.806S	17854.421E	ROUGH-TOOTHED DOLPHIN	11	DPD	
07/02/2020	0022.818S	17852.392E	FALSE KILLER WHALE	3	DPD	
08/03/2020	0232.815N	16645.424E	FALSE KILLER WHALE	2	ICR	
24/02/2020	0116.259S	17758.021E	FALSE KILLER WHALE	6	DPU	
26/01/2020	0041.297S	17929.108E	ROUGH-TOOTHED DOLPHIN	2	DPD	
26/02/2020	0225.786S	17348.371E	ROUGH-TOOTHED DOLPHIN	32	DPD	
19/01/2020	1023.670S	16516.002E	SEI WHALE	1	ICR	
02/07/2020	0118.680S	17142.568E	FALSE KILLER WHALE		Released	

	Note that Kiribati Fishing license strongly stressed the safety of the cetaceans in its license condition clause 37 of the Longline which says," The vessel shall release protected species such as dolphins, turtle, sharks and sea birds in a manner that will provide the greatest chance of survival.
CMM 2018-03 [Seabirds] Para 13	CCMs shall annually provide to the Commission, in Part 1 of their annual reports, all available information on interactions with seabirds reported or collected by observers to enable the estimation of seabird mortality in all fisheries to which the Convention applies. (see below for Part 1 reporting template guideline). These reports shall include information on: 1. the proportion of observed effort with specific mitigation measures used; **Observer data for 2020 is not available as no observer placement due to Covid-19, however, Kiribati has strongly supported the CMM 2018-03 by clearly stated in the License Condition clause 49 that all vessels shall comply with all the regulations of the Republic of Kiribati, and strongly stressed in clause 48 of the Longline condition that each vessel shall not permitted to use or to have onboard wire trace as branch lines or leaders while in Kiribati waters**. 2. observed and reported species specific seabird bycatch rates and numbers or statistically rigorous estimates of species-specific seabird interaction rates (for longline, interactions per 1,000 hooks) and total numbers. **There were no data available on the system as no observer placement for 2020.**

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^{o}S; 25^{o}S-30^{o}S; North of 23^{o}N; or 23^{o}N – 25^{o}S[1]]. For each year, the table gives the total number of hooks; the number of observed hooks; observer

coverage (the percentage of hooks that were observed); the number of observed captures (both dead and alive); and the capture rate (captures per thousand hooks).

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

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

	Combination of Mitigation Measures	Proportion of observed effort using mitigation measures					
		South of 30°S	25°S-30°S	25°S to 23°N	North of 23°N		
	No mitigation measures						
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 23^0N	SS/BC/WB/DSLS						
	SS/BC/WB/(MOD or BDB)						

Provide any other combination of mitigation measures here							
	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					

<u>SECTION B:</u> 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

In accordance with paragraph 1, CCMs shall provide information to the Commission, by 1 July 2007, on the number of their vessels that have fished for striped marlin in the Convention area south of 15°S, during the period 2000 – 2004, and in doing so, nominate the maximum number of vessels that shall continue to be permitted to fish for striped marlin in the area south of 15°S. CCMs shall report annually to the Commission the catch levels of their fishing vessels that have taken striped marlin as a bycatch as well as the number and catch levels of vessels fishing for striped marlin in the Convention Area south of 15°S.

CMM 2006-04 SOUTH-WEST STRIPPED MARLIN, PARA 4

Flag	Year	Vessels	Catch (Numbers)	Catch (MT)
KI	2020	15	63	2.872

**catches were caught as by-catch.*

CMM 2015-02

[South Pacific Albacore] Para 4

CCMs shall report annually to the Commission the annual catch levels taken by each of their fishing vessels that has taken South Pacific albacore, as well as the number of vessels actively fishing for South Pacific albacore, in the Convention area south of 20°S. Catch by vessel shall be reported according to the following species groups: albacore tuna, bigeye tuna, yellowfin tuna, swordfish, other billfish, and sharks. Initially this information will be provided for the period 2006-2014 and then updated annually. CCMs are encouraged to provide data from periods prior to these dates.

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

All CCMs shall report annually to the WCPFC Commission all catches of albacore north of the equator and all fishing effort north of the equator in fisheries directed at albacore. The reports for both catch and fishing effort shall be made by gear type. Catches shall be reported in terms of weight. Fishing effort shall be reported in terms of the most relevant measures for a given gear type, including at a minimum for all gear types, the number of vessel-days fished using the template provided in Annex 1.

CMM 2019-03 (NORTH PACIFIC ALBACORE), PARA 3 - REF: DORADO REGIONAL REPORTING 20

Gear	Flag	Year	Vessel Number (NPAC All)	Vessel Days (NPAC All)	Catch (Number) (NPAC All)	Catch (MT) (NPAC All)
L	KI	2020	16	1536	309	6.765

**Note: Catches were caught as by-catch.*

** Note: WCPFC10 clarified that this reporting responsibility lies with the flag State*