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PART 1: INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS

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KIRIBATI

Annual Report to the Commission
Part 1: Information on Fisheries, Research and Statistics
Western and Central Pacific Ocean Fisheries Commission (WCPFC)
2011

1. SUMMARY

Tuna fishery in Kiribati composed of foreign fishing fleets licensed to fish tuna in the country's EEZ and the artisanal fishery, important in providing food security for the local people.

The major gear types used to fish tuna in Kiribati's waters are purse-seining and pole and lining which mainly target skipjack and yellowfin tuna. Longlining is also employed by foreign fleets, targeting bigeye tuna. The artisanal boats, often less than 7 meters in length are fish within the vicinity of the 12nm of the islands of Kiribati. These small boats used trolling and handlining to catch shallower tuna species like skipjack and yellowfin.

In 2010, Kiribati licensed a total of 527 foreign fishing vessels including supporting vessels like reefer carriers and tankers. The fees of these foreign fishing vessels contributed to 44% of the total revenue and it is largely responsible for subsidizing the Government budget that year.

Kiribati have flagged vessels active within the WCPFC area. The number of national fleets increased from 1 in 2008 to 8 in 2010 due to an incessantly influx of foreign fishing vessels changing flagged to Kiribati. Consequently the total catches of Kiribati's fleet improved to over 25000mt that is five times bigger than the average catch for the last 13 years (1994-2008).

Tuna remain the most important resources to Kiribati and therefore the sustainable development and management of the resource is critical for the Country. Kiribati is keen to work in collaboration with other nations to ensure for the sustainable management of this resource.

2. BACKGROUND

The Kiribati Exclusive Economic Zone (EEZ) is located in the Western Central Pacific Ocean, with 33 islands and covering approximately 3.5 million km² of ocean within 167°W–146°E and 8°N–14°S. It is comprises of three groups of islands the Gilbert region in the west, the Phoenix region in the centre and the Line Islands in the east.

Tuna is economically the most important fish in Kiribati waters, where four tuna species are commercially fished by foreign fishing vessels that are licensed to fish by the Government. These include skipjack tuna, K*atsuwonus pelamis*; albacore tuna, *Thunnus alalunga*; yellowfin tuna (YFT), *T. albacares*; and bigeye tuna (BET), *T. obesus*. Tuna-fishing licensing fees represent the highest source of government revenue and are responsible for subsidizing the government budget. In 2010, licensing fees contributed to 44% of the national revenue.

With limited capacity to harvest its own tuna resource, Kiribati engaged in join-ventured fishing operation with other foreign fishing companies. The two purse-seine fishing vessels engaged in this JV fishing company currently fish under the FSM arrangement.

The artisanal fishery which comprises of small skiffs or crafts, usually less than 7 meters also form an important part of the tuna fishery in Kiribati. Such fishery catches a certain amount of the resource which mostly for local consumption. Vertical hand-lining and trolling are often used by the artisanal fisherman to harvest tuna mainly in the vicinity of the 33 islands of Kiribati. The tuna harvested mainly for subsistence use but extra catch usually sold locally.

3. FLAG STATE REPORTING

3.1 Kiribati's Flagged Vessels

The number of national fleets active within the Western Central Pacific Fisheries Commission area continued to increase since 2008 due to an incessantly influx of foreign fishing vessels changing flagged to Kiribati. In 2010, Kiribati registered on the WCPFC's vessels register a total of 8 fishing vessels and 30 supporting vessels. These includes; 6 purse-seines, 1 pole-line, 1 longline, 21 reefer carriers and 9 Bunkering vessels. The number of Kiribati's fleets has increased in 2010 by 37% compared to the 2009 record and 50% to that recorded in 2008.

The number of artisanal boats in 2010 was based on the result of the 2008 artisanal survey since there are no surveys conducted in 2009 and 2010.

Table 1 below provides the number of Kiribati's fishing vessels active within the Commission area for the last 5 years.

Gear	LONGLINE				
Size class (GRT)	2006	2007	2008	2009	2010
0-10					
10-50					
50-200			3	0	1
200-500					
500+					
Gear	PURSE-SEINE				
Size class (GRT)	2006	2007	2008	2009	2010
0-500					
500-1,000					
1,000-1,500	1	1	1	3	4
1,500+				1	2
Gear	POLE and LINE				
Size class (GRT)	2006	2007	2008	2009	2010
0-10					
10-50					
50-200					
200-500				1	1
500+					
Gear	ARTISANAL TROLL				
Length (m)	2006	2007	2008	2009	2010
> 7	??	4895	4766	4766	4766

Source: TUFMAN v5.03

3.2 Annual Catches in the WCPFC Convention area

3.2.1 Longline Fishery

Kiribati longline fleet, Teraka no.1 commenced fishing within the WCPFC area since October 2010. The vessel mainly fish within the eastern highseas and the cooks as it mostly target albacore tuna. In 2010 the total tuna catches is 73.265 mt (Table 2). Albacore as the target species comprised 90% of the total catch. Bigeye tuna and yellowfin tuna constituted the remained 10% of the catches.

Table 2: Annual catch (mt) in the WCPFC Convention area for Kiribati's Longline fleet for 2006-2010

Gear	LONGLINE				
Species	2006	2007	2008	2009	2010
YELLOWFIN			7		3.859
BIGEYE			44		3.288
SKIPJACK			0		0
ALBACORE			0		65.708
OTHERS			2		.410

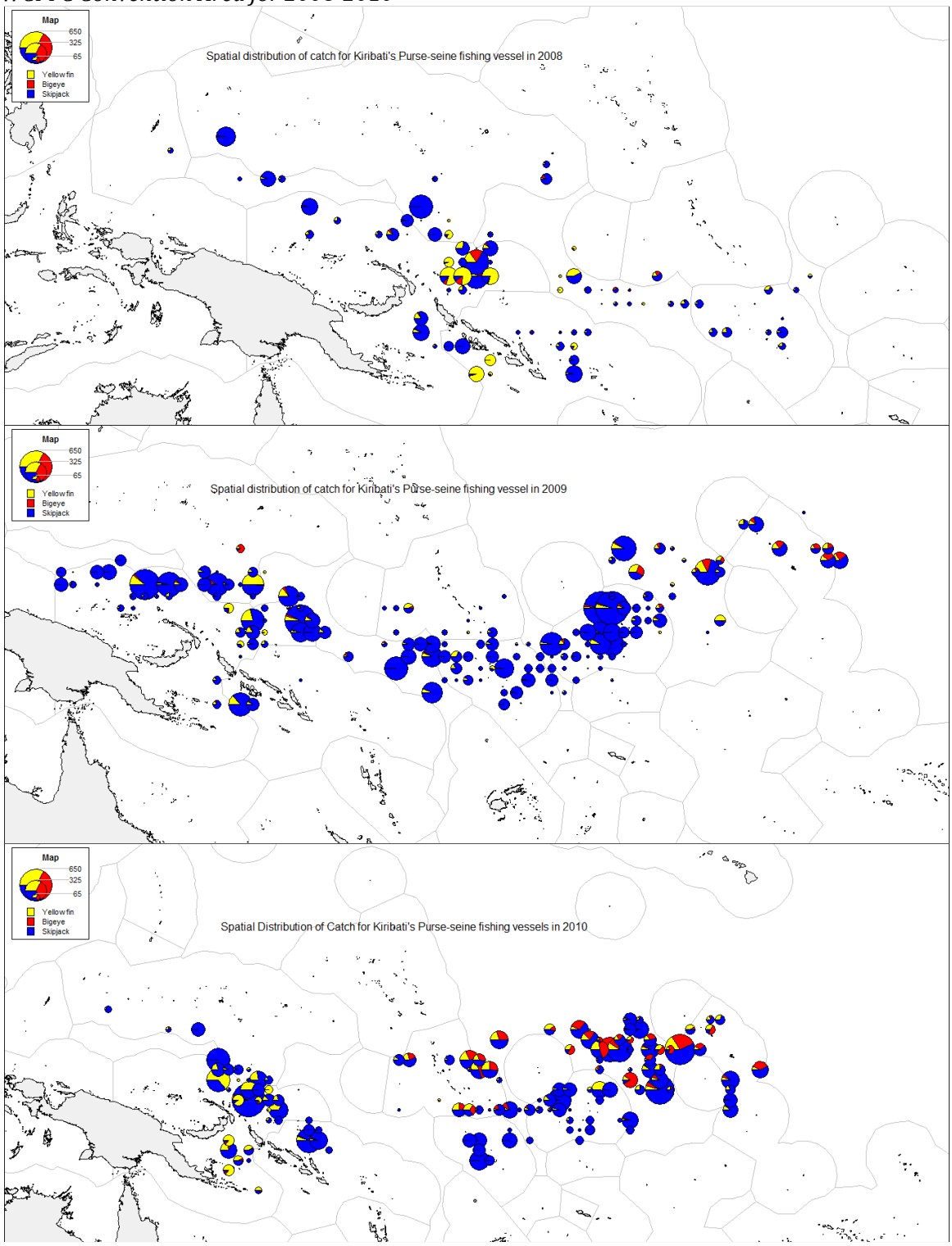
Source: TUFMAN v5.03

3.2.2 Purse-Seine Fishery

The spatial distribution of tuna catches for Kiribati's fishing vessels for the last 3 years is shown in Figure 1. There is a clear distinction in the pattern of catches distribution as in 2008, the majority of the catch is taken from west of Kiribati generally in PNG, Solomon and FSM. On the contrary, higher catches observed east toward Kiribati but mostly in the phoenix and line groups in 2009 and 2010. The eastern shift in the distribution of catch is strongly influenced by the west to east movement of skipjack's habitat during El Nino that is experienced in mid 2009 to first half of 2010.

Furthermore, it is observed that the composition of bigeye tuna increases toward the eastern waters (phoenix and line groups) in 2009 and 2010. This may due to the fact that deeper set was made in those regions or the habitat of bigeye tuna in the east was shallower during those two years and therefore easier to be reached by purse-seine sets.

Figure 1: Annual Distribution of target species catch for Kiribati Purse-seine fleet active in the WCPFC Convention Area for 2008-2010



Source: MFMRD Tufman database 2010

Table 3: Annual Catch (mt) in the WCPFC Convention area for Kiribati's Purse-Seine fleets for 2006-2010

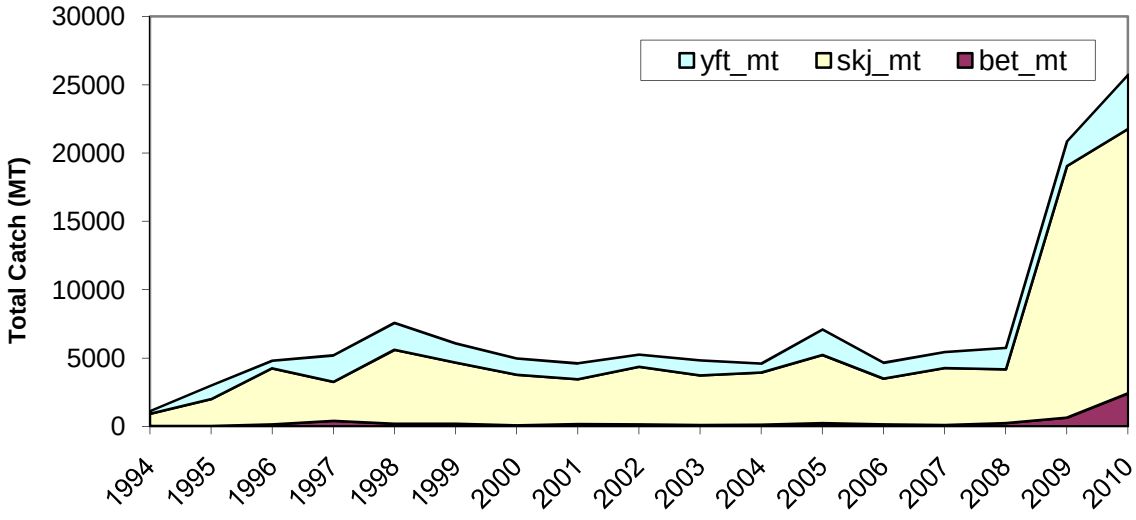
Gear	PURSE-SEINE				
Species	2006	2007	2008	2009	2010
SKIPJACK	3367	4178	3937.4	18429.6	19362
YELLOWFIN	1157	1169	1569.8	1798.84	3966
BIGEYE	139	103	248.7	647.12	2419

Source: TUFMAN v5.03

On average, the Kiribati's purse-seine catches maintained below 8000 mt for the period, 1995-2008. The steady catch during that period (1995-2008) was due to the fact that Kiribati owned only one purse-seine fleet, namely Kao no.1 (Fig.2). Nevertheless a dramatic increase in the catch of over 20,000 mt (Table 3) noted since 2009. Such increment in the observed catches was attributed to an increase in the number of Kiribati's purse-seine fleet from 1 vessel in 2008 to 5 vessels in 2009. In 2010, 3 additional PS fleets reflagged to Kiribati and thus further improved the total catches to over 25000mt that is five times bigger than the average catch for the last 13 years (1994-2008) (Fig.3).

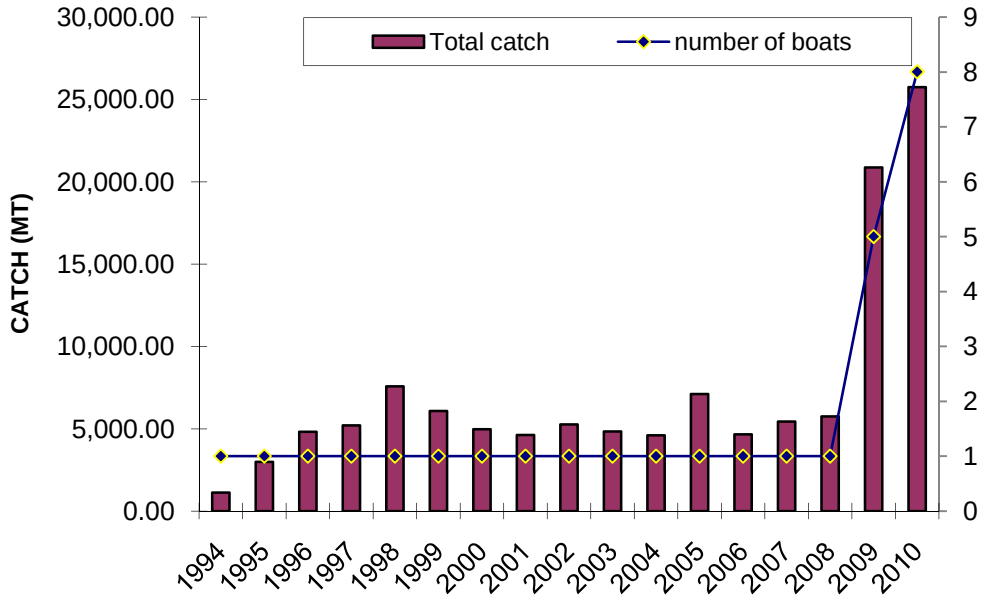
Skipjack tuna which is the main target tuna species constitute 75% of the total catch in 2010. Yellowfin and bigeye tuna represent only 15% and 9% of the total catch respectively (Fig 2).

Figure 2: Historical Annual Catch Estimate for Kiribati Purse-Seine Vessels



Source: MFMRD TUFMAN database, 2010

FIG. 3: ANNUAL CATCH AND NUMBER OF KIRIBATI'S PS VESSELS



Source: TUFMAN v5.03
CES v8.8.2 by SPC, April 2010

3.2.3 Pole & Line Fishery

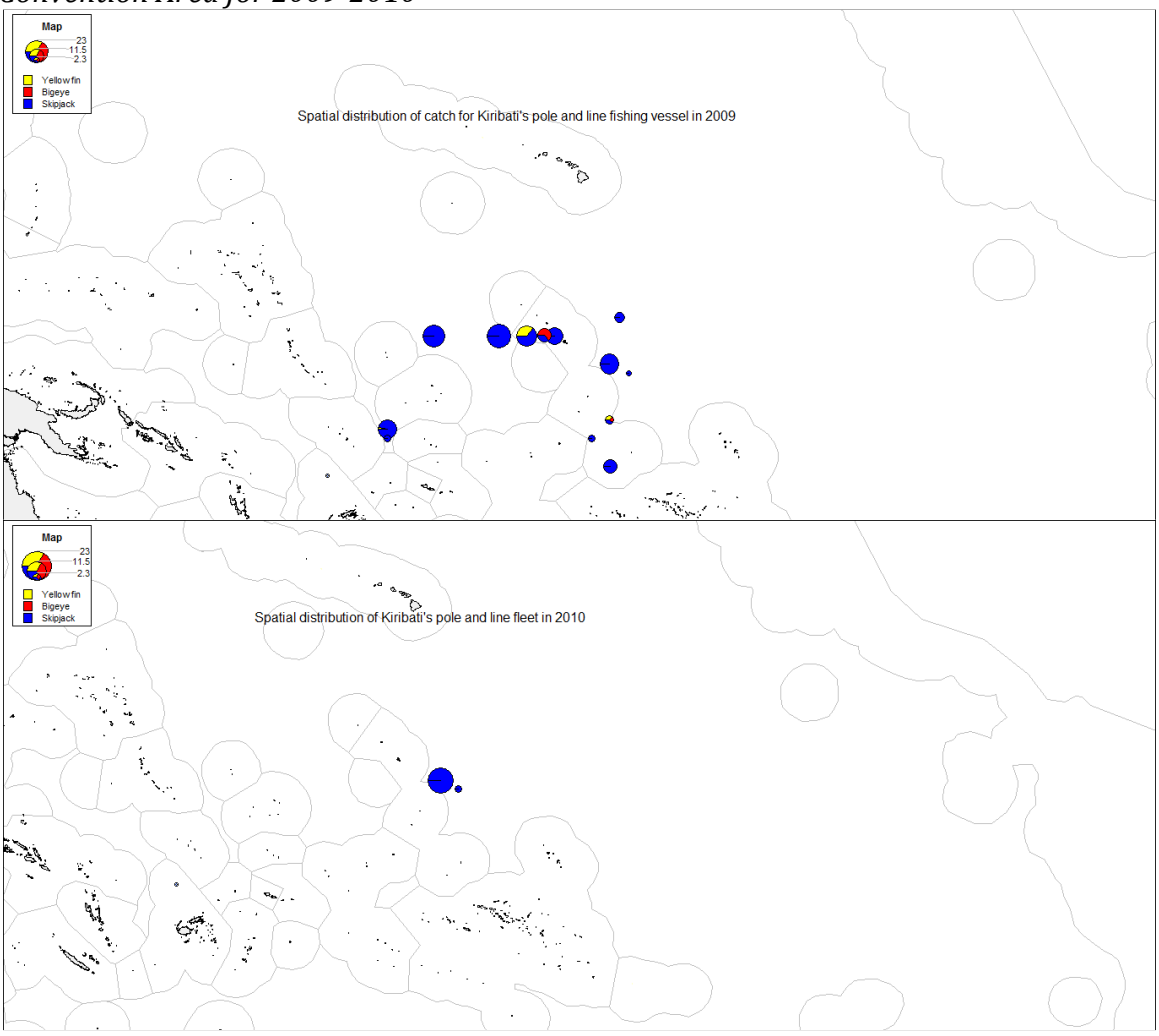
Kiribati's pole-line vessel, Akawa, which commenced fishing in 2009 fished mainly within the Kiribati's EEZ but to a greater extend, the Line Islands and the high seas (Fig 4).

The total catch for Akawa reached over 150 mt in 2009 and declined to only 19 mt in 2010 (Table 4). The dropped in the catch as reported in 2010 can be attributed to the delay in logsheet submission by the company.

Table 4: Annual Catch (mt) in the WCPFC Convention area for Kiribati's Pole & Line fleet for 2006-2010

Gear	POLE and LINE				
Species	2006	2007	2008	2009	2010
YELLOWFIN				9.5	0
BIGEYE				8	0
SKIPJACK				141.5	19
OTHERS				0	0

Figure 4: Distribution of fishing effort for Kiribati Pole-line fleet active in the WCPFC Convention Area for 2009-2010



Source: MFMRD TUFMAN database, 2010

3.2.4 Artisanal Fishery

The artisanal fishery uses boat of not more that 7 meters with 30-40 HP outboard engines to catch tuna. Both trolling and handlining employed within the 12nm of the islands to fish for tuna. The estimated tuna catches for the artisanal boats in the following table still based on the result of the 2008 artisanal fisheries survey as no survey made in 2009 and 2010 (Table 5).

*Source: TUFMAN database

Table 5: Annual Catch (mt) in the WCPFC Convention area for Kiribati's fleet for 2006-2010

Gear	ARTISANAL TROLL				
Species	2006	2007	2008	2009	2010
SKIPJACK	940	8223	8238.08	8438.08	8438.08
YELLOWFIN	1120	4347	4328.8	4528.8	4528.8
BIGEYE	0	0	0	0	0

3.3 Reported Bycatch of Purse-seine Fishing Vessels

The table below displays the by-catch species reported by observers onboard of Kiribati's purse-seine fishing vessels active within the WCPFC area.

Table 6: Encounters of Species of special interest on the Kiribati purse seine fleet in the WCPFC Convention Area , 2007-2009 (source: Observer data. 2007: 2 trips; 2008 2 trips; 2009 4 trips)

		Catch estimates (MT)		
		2007	**2008**	**2009**
Category	**Species**	**MT**	**MT**	**MT**
Target Tuna	Skipjack	5,032	1,906	15,366
	Yellowfin	327	3,671	4,469
	Bigeye	91	179	1,041
Billfish	Blue marlin	1.1	0.0	1.0
	Black marlin	0.0	0.7	0.8
	Other Billfish	0.5	0.0	0.0
Sharks and Rays	Blue shark	0.0	0.0	0.0
	Mako sharks	0.1	0.0	0.1
	Oceanic whitetip shark	0.0	0.0	1.9
	Silky shark	4.6	5.4	2.1
	Other sharks and rays	0.0	0.0	0.0
Other finfish	Bullet/Frigate tunas	0.0	0.0	0.0
	Kawakawa	0.0	0.0	0.0
	Rainbow Runner	2.2	11.3	9.0
	Wahoo	0.1	0.5	0.0
	Common dolphinfish	0.0	1.1	4.6
	Triggerfish	2.3	0.5	0.0
	Barracudas	0.0	0.0	0.0
	Escolars	0.0	0.0	0.0
	Lanctfishes	0.0	0.0	0.0
	Ocean sunfish	0.0	0.0	0.0
	Oilfish	0.0	0.0	0.0
	Opah	0.0	0.0	0.0
	Pomfrets	0.0	0.0	0.0
	Small baitfish	1.0	0.0	0.0
	Other fish	0.6	0.0	0.9
	Total Target tuna	5,450	5,756	20,876
	Total billfish	2	1	2
	Total sharks and rays	5	5	4
	Total finfish	6	13	14
	Total non-target	12	19	20
		0.2272%	0.3368%	0.0975%

4 COASTAL STATE REPORTING

4.1 Licensed Foreign Fleets

Kiribati licensed foreign fishing vessels from China, Korea, Japan, New Zealand, Spain, Chinese Taipei, EU, Tuvalu and the Cook islands to operate within its EEZ. The licensed vessels include purse-seiners, longliners, pole and line, bunkering vessels and reefer carriers.

In 2010 a total of 413 foreign fishing vessels and 114 supporting vessels licensed to operate in Kiribati's water. The number of licensed vessels dropped by 3% in compared to the 2009 record. It is apparent that in the last five years, the highest number of licensed vessels obtained in 2009. The major reason for such an increase in the number of licensed vessels may directed related to the movement of skipjack's favorable habitat into Kiribati's waters, during El Nino period which initiated in mid 2009. Table 7 provides a summary of license issued for the last five years 2006-2010.

Table 7: Bilateral Licensed Fishing Vessels for 2006-2010

Gear	2006	2007	2008	2009	2010
BU	9	11	9	20	23
LL	188	184	186	233	244
PL	2	7	25	25	24
PS	154	157	178	192	145
RC	0	0	27	74	91
TOTAL	353	359	425	544	527

4.2 Annual Catches of Foreign Purse-Seine Fishing Vessels in Kiribati

The licensed foreign purse-seine fleets harvested a total of 237,572mt of tuna from Kiribati's water in 2010. It is apparent that the catch in 2010 has reduced by 34% in relation to the 2009 figure but meliorated by 5% with respect to the 2008 record. Late submission in the logsheet may be the reason for such different as it is expected that more catch reports still need to be submitted. By comparison between fleets, the US boats contributed the major catch of 27% followed by the Korean fleets composing 22% of the total harvested catch. Other fishing nations like China, Taiwan, Japan, Spain etc comprised the remained 41%. It is known from the VMS record that US boats spend more days fishing in Kiribati in 2010 and therefore catch the most compared to other fishing nations.

Countries which experienced a substantial declined in the catch in 2010 relative to the 2009 catches includes; China, Japan, Korea, US, New Zealand, Vanuatu and Taiwan and those under the FSM arrangement. Part of the reason for the depressed

in catch in 2010 may be related to onset of La Nina in mid 2010 which shifted the skipjack tuna habitat toward the western Pacific, toward PNG and Solomon waters.

The tuna species composition of catches in Kiribati includes; Skipjack tuna that represent 83% of the total catch for 2010 as it is mainly targeted by these fleets. Yellowfin tuna formed 13% whereas Bigeye tuna and others constituted only 4% of the entire catch. The table below highlighted the purse-seine catch by tuna species and by country for the 2006 to 2010.

Tables 8: Annual catches by foreign purse seine fleets in the Kiribati EEZ, by flag and species, 2006 – 2010

			CATCH (metric tonnes)			
Flag	**Year**	**days**	**SKJ**	**YFT**	**BET**	**TOTAL**
	2006	179	3,490	0	1	3,492
	2007	8	321	33	10	364
	2008	159	1,186	2,241	89	3,516
	2009	119	1,800	89	18	1,907
CN	2010	89	1,073	130	76	1,280
	2006					
	2007	207	4,616	683	1,844	7,143
	2008	350	14,637	1,674	3,920	20,230
	2009	104	2,451	351	542	3,344
EC	2010	167	3,640	773	1,596	6,009
	2006					
	2007	90	1,906	987	1,240	4,133
	2008	269	12,420	2,260	2,628	17,308
	2009	460	9,522	1,837	1,447	12,806
ES	2010	350	11,281	2,286	2,150	15,717
	2006	1,178	34,921	2,866	1,392	39,179
	2007	1,072	35,371	5,791	1,332	42,495
	2008	955	18,768	9,101	507	28,375
	2009	1,415	46,198	3,072	1,199	50,469
FA	2010	1,655	43,590	7,128	2,365	53,084
	2006	387	9,501	1,137	246	10,884
	2007	63	1,918	150	17	2,085
	2008	189	1,411	3,593	74	5,078
	2009	100	2,303	543	154	3,000
JP	2010	61	1080	101	20.5	1201.5
	2006	1,885	53,747	10,620	991	65,358
	2007	1,448	45,589	11,451	602	57,642
	2008	1,570	38,958	26,068	1,150	66,177
	2009	2,063	85,925	5,902	858	92,685
KR	2010	1,406	41,140	11,486	787	53,413
	2006	247	4,927	716	341	5,984
	2007	239	7,474	865	271	8,611
	2008	135	2,395	1,281	207	3,883
	2009	204	6,284	199	48	6,530
NZ	2010	127	4,874	234	35	5,144
SV	2006					

	2007	114	1,576	391	234	2,201
	2008	173	6,593	325	899	7,818
	2009	131	4,249	455	1,299	6,003
	2010	122	3,152	447	688	4,288
	2006					
	2007					
	2008					
	2009	61	2,317	201	1	2,520
TV	2010	59	1,966	33	1	1,999
	2006	600	12,532	772	83	13,387
	2007	447	10,303	1,417	190	11,910
	2008	866	10,816	8,885	544	20,245
	2009	1,210	35,332	2,220	502	38,054
TW	2010	1,067	23,174	2,891	591	26,655
	2006	666	15,466	2,183	1,519	19,168
	2007	680	18,980	3,091	977	23,049
	2008	1,596	26,749	17,513	1,184	45,446
	2009	2,567	80,146	5,244	2,090	87,480
US	2010	2,544	57,797	5,621	1,415	64,832
	2006	304	9,639	1,391	202	11,232
	2007	347	9,471	1,395	220	11,086
	2008	257	4,929	4,303	328	9,559
	2009	264	14,643	493	130	15,266
VU	2010	168	4,835	254	1	5,090
	2006	5,446	144,225	19,684	4,775	168,684
	2007	4,716	137,527	26,253	6,939	170,719
	2008	6,518	138,861	77,245	11,530	227,635
	2009	8,698	291,169	20,605	8,289	320,064
TOTAL	2010	7,756	196,549	31,286	9,738	238,713

Source: Provided by SPC

4.3 Annual Catches of Foreign Longline Fishing Vessels in Kiribati

The catch of foreign longline fleets which are licensed to fish in Kiribati summed up to over 9058 mt in 2010. Such catch noticeably diminished by more than half the total catch in 2009. Almost all countries except Japan demonstrated dramatic decline in reported tuna catch in 2010. The logsheet coverage for the reported catch is less than 40%. Thus it is likely the decrease in longline catch may be attributed to late submission of catch report.

Korean vessels dominate the longline fishery in Kiribati as its catch is the highest among other foreign fishing nations, comprising 68% of the total catch for longline. Korean vessels had been fishing in Kiribati for the past 30 years and very familiar with the fishing area within the Kiribati's EEZ. Other fishing nations such as Taiwan, China and Japan contributed the remained 32% of the described catch for 2010.

Bigeye tuna is preeminently the major catch of longline vessels and form 42% of the 2010 catch. In contrast Yellowfin tuna and others represent the remained 58% of the total catch for that year. The following table highlights the longline catch by country and by species within the Kiribati's water

Tables 9 Annual catches by foreign longline fleets in the Kiribati EEZ, by flag and species, 2006 – 2010

			CATCH (metric tonnes)			
Flag	**Year**	**days**	**ALB**	**BET**	**YFT**	**TOTAL**
CN	2006	0	0	1	1	2
	2007	0	26	21	46	93
	2008	1	12	2	15	30
	2009	78	1,063	313	1,453	2,829
	2010	327	14.007	173.516	37.758	225.281
JP	2006	2	9	11	22	42
	2007					
	2008					
	2009	10	62	52	124	238
	2010	349	20.176	133.574	107.478	261.228
KR	2006	131	2,816	1,958	4,905	9,679
	2007	186	3,935	2,951	7,072	13,958
	2008	124	3,304	1,654	5,081	10,039
	2009	128	2,400	1,366	3,894	7,660
	2010	4871	327.64	2030.50	1428.302	3786.452
TW	2006	14	138	104	257	499
	2007	362	508	170	1,040	1,718
	2008	47	727	173	947	1,847
	2009	41	429	143	613	1,185
	2010	676	53.128	329.344	120.767	503.239
VU	2006	124	572	123	818	1,513
	2007	239	535	117	891	1,543
	2008	67	220	47	335	603
	2009	342	422	78	842	1,341
	2010	404	262	78	744	1,083
Total	2006	271	3,535	2,197	6,003	11,735
	2007	787	5,004	3,259	9,049	17,312
	2008	239	4,263	1,876	6,378	12,519
	2009	599	4,376	1,952	6,926	13,253
	2010	6,278	657	2,611	2,331	5,598

Source: Provided by SPC

4.4 Disposal of catch

The only catch loaded in Kiribati were those caught by Artisanal Fishermen, which usually for subsistence use and extra often sold in the local markets.
Catch for Commercial national tuna fishing fleets and those of the license foreign fleets usually unloaded in overseas ports like Japan, Spain and Pago Pago.

However some of the licensed purse-seine fleets unload their catch to reefer carriers at Kiribati's designated port and some licensed longlines at seas within the EEZ. Accordingly longline fleets were allowed to transship their catch to reefer at sea (within Kiribati's EEZ) in the presence of an observer either onboard the longline fishing vessel or the reefer carrier.

In 2010, a total of 68 foreign fleets with only 2 national fleets engaged in unloading of tuna to reefer carriers in Kiribati's waters. Approximately 94,168.82 mt of tuna was transshipped in Kiribati's waters. There is 98% of the total tuna transshipped was actually made by purse-seine fishing vessels to reefer carriers at Kiribati's designated port. The remained 2% of the catch was transshipped at sea by the licensed longline vessels.

Among the 8 nations to conduct transshipment in Kiribati, Korea was the dominant state, having the highest number of vessels engaged and proportion of catch transshipped in Kiribati (Table 10).

Table 10: Summary of Tuna Catch Transshipment in Kiribati in 2010

Unloading of Catch to Reefer Carrier in Kiribati's Port in 2010								
Gear	**Flag state**	**SKJ**	**YFT**	**BET**	**Bait**	**Oth**	**SKJ / YFT**	**Total**
PS	***Panama***	2315	410	35	***0***	***0***	***0***	***2760***
	Tuvalu	996	4					***1000***
	Kiribati	4963	869	1265	***0***	***0***	***0***	***7097***
	Korea	51196.5	12202.6	334.9	***0***	***0***	***0***	***63734***
	Spanish	2370	706	1071	***0***	0.17	***0***	***4147.17***
	Taiwan	1914	215	2	***0***	***0***	***0***	***2131***
	USA	6689.5	368	57.53	***0***	***1.5***	***0***	***7116.53***
	Vanuatu	4003	147	0	***0***	***0***	***0***	***4150***
	total	**74,447.00**	**14,921.60**	**2,765.43**	**0.00**	**1.67**	**0.00**	**92,135.70**
LL	***Korea***	0	109.7714	253		50.83	0	0
	total	***0***	***109.7714***	***253***		***50.83***	***0***	413.6014
Unloading of LL Catch to Reefer Carrier at sea (within Kiribati's EEZ) in 2010								
		SKJ	**YF**	**BET**	**Alb**	**Oth**	**MIXED**	**Total tons**
LL	***Korea***	***0***	231.573	964.838	40.229	318.321	63.670	***1619.52***
	total	***0***	***231.573***	***964.838***	***40.229***	***318.321***	***63.670***	***1619.52***

4.5 Future Prospect of the Fishery in Kiribati

The key priority area for Kiribati is to develop its Tuna Fishery in a sustainable manner which will be achieved by establishing of joint ventured (JV) fishing operation and fish processing with interested foreign companies. In 2010, Kiribati established the second JV fishing operation with Japan engaging one purse-seine vessel namely Tai-Jin 18. There are two fishing vessels currently operated under the JV fishing operation established by the Government of Kiribati.

4.6 Status of tuna fishery data collection system

4.6.1 Logsheet Data Collection

Logsheet submission from Kiribati's national fleets and licensed foreign fishing vessels still not accomplished the required 100% coverage. Higher logsheet coverage of approximately 87% being provided by Kiribati's national fleets and much lower logsheets coverage delivered from foreign fleets licensed to fish in Kiribati's EEZ.

Retrieval of logsheet data from licensed foreign longline vessels by far the major impediment in obtaining good data coverage for licensed fleets. This due to the poor compliance of the fishing masters to submit logsheets in a timely manner coupled with the submission of logsheet which usually made after completion of fishing trips, often take over a year long.

4.6.2 National Observer Program

Kiribati has a total of 90 active observers after recruiting 30 observers in 2010. These observers assist in both the national and regional observer data collection. The major drawback for Kiribati to provide good quality observer data include the lack of qualified observer de-briefers to check the quality of observer data and to brief observers, especially new recruiters prior boarding fishing vessels.

Table 11: Annual observer placement (2006-2010)

Year	*LL*	*PS*	*FFA*	*Total*
2006	4	13	3	20
2007	2	19		21
2008	3	21	2	26
2009	3	46	2	51
2010	0	27	4	31

4.6.3 Unloading/Transshipment Data

Unloading data are collected from two designated ports, Betio port in the Gilbert group and and Christmas port in the Line Islands. At sea transshipments data (within Kiribati's EEZ) for longline vessels often gathered by observers. The transshipments at sea is not permitted when the observer is not present either on the fishing vessel or the reefer carrier.

4.6.4 Port Sampling

Kiribati's port-samplers and observers are responsible for collecting of port sampling data collection. In 2010, all the 68 purse-seine entered betio port are sampled. Data collected scanned and send to SPC for re-processing.

4.6.5 Artisanal fishery data Collection

There was no artisanal survey conducted in 2009 and 2010 due to shortage of staff and limited funding. Fisheries artisanal survey is important in obtaining the background information with regard to tuna fishing by artisanal fisherman.