



**SCIENTIFIC COMMITTEE
FOURTH REGULAR SESSION**

11-22 August 2008
Port Moresby, Papua New Guinea

**ANNUAL REPORT – PART 1
INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS**

WCPFC-SC4-AR PART 1/WP-14 (Rev)

KIRIBATI

Kiribati Fisheries Annual Report

Part I

WCPFC 4th Scientific Committee Meeting

**Port Moresby, Papua New Guinea,
10th – 22nd August 2008**

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Resources Development**

1. INFORMATION ON FISHERIES

1.1 Annual Fisheries Information

Tuna, fish species is very important to I-Kiribati. The government of Kiribati heavily relies on revenue from access fees and continues to receive substantial amount of access fees from foreign fishing companies that fish for tuna in Kiribati EEZ. Annually, royalty from fishing supplement around 40% to government budget. Tuna continues to shape the social and economic aspiration of the country and therefore the sustainable management and development of the resource is essential and crucial to every I-Kiribati.

1.1.1 Annual Catches

Domestic fleet

Table 1 depicts the number of active fishing vessels flagged in Kiribati. Kiribati has only one purse seine that came into existence since 1994 when a joint venture company KAO¹ was formed between Kiribati government and Otoshiro fishing company based in Japan. The vessel currently operates in the region under the FSM Fishing Arrangement.

Kiribati operates one small longline fishing vessel but the vessel fishing operations is restricted to research activities. In late 2004, the vessel ceased her operations due to lack of operational fund.

Beginning of 2007 saw a significant number of support foreign vessels flying Kiribati flag for the first time. These vessels comprise of; 16 fish carriers and 2 tanker vessels. We are optimistic that the number will increase in the coming years.

Table 1. Summary of Kiribati flag vessels active in the WCPFC Area, 2003-2007

Year	Purse Seine	Longline	Fish Carrier	Tanker
2003	1	1		
2004	1	1		
2005	1			
2006	1			
2007	1		16	2

Domestic catch

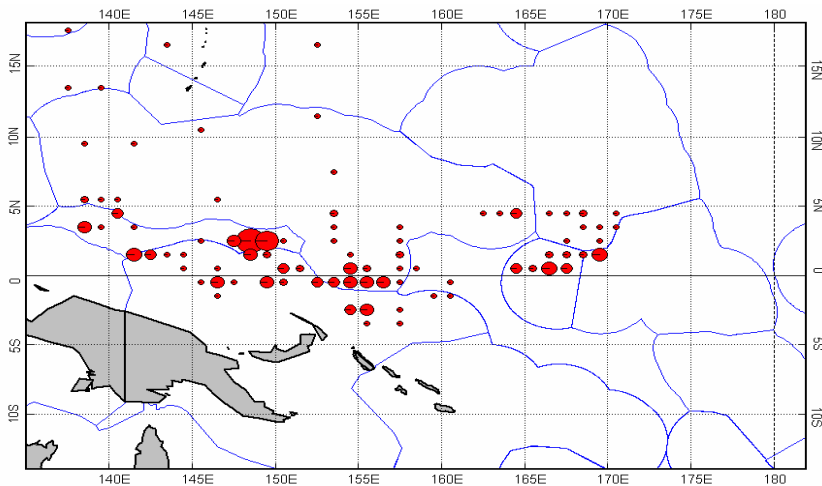
KAO No. 1 spent most of its fishing operations around Papua New Guinea, Federated States of Micronesia and adjacent high seas therefore there is very limited fishing effort in Kiribati waters and KAO catch in Kiribati only represents around 5% to 7%. Most of her catches were destined to Japan and Philippines and this is one of the reasons why the vessel spent most of her fishing efforts west of Kiribati.

¹ Kiribati and Otoshiro Fishing Company

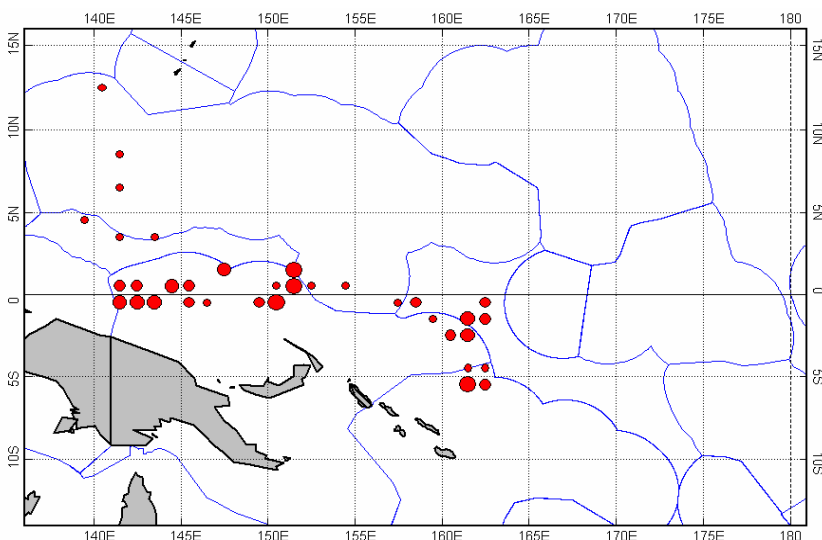
Table 2. Annual catch and effort estimates for the Kiribati purse-seine fleet, by species in the WCPFC Convention Area, 2003-2007. (Source : Raised logsheet data; Data for 2005-2007 are unraised and provisional, but coverage is "HIGH" but "LOW" in 2007)

Year	Effort			Catch (metric tonnes)				
	Days Fishing & Searching	UnAss. Sets	Assoc. sets	SKJ	YFT	BET	OTH	TOTAL
2003	163	68	71	3,625	1,126	84	0	4,835
2004	189	44	98	3,817	651	132	0	4,600
2005	175	65	107	4,990	1,720	395	0	7,105
2006	193	84	70	3,369	1,138	158	0	4,665
2007	78	20	32	1,664	295	61	0	2,020

Fishing effort for KAO No. 1 is depicted below. In 2006, KAO fishing effort is widely spread out between 170°E and 140°E, however in 2007 fishing effort shifted further west.



KAO No. 1 Fishing effort in 2006



KAO No. 1 Fishing effort in 2007

Foreign fleets

Since 1978, Kiribati EEZ has been one of the major fishing grounds for foreign fleets fishing for tuna and tuna like species. Overtime fishing fleets expanded in number, in capacity as well as in their efficiency to catch. Table 3 depicted a summary of foreign fishing fleet licensed to fish in Kiribati EEZ from 2003-2007.

Table 3. Number of foreign vessels licensed to fish in the Kiribati EEZ by year, flag and gear type in 2003-2007

Country	Gear	2003	2004	2005	2006	2007
Japan	LL	18	15	6	1	0
	PS	34	34	34	34	34
	PL	19	21	3	3	6
S. Korea	LL	168	137	121	93	94
	PS	24	24	27	28	28
	BU	3	3	3	3	3
Taiwan	LL	29	54	30	40	52
	PS	29	34	26	26	29
	BU	1	1	1	1	1
Vanuatu	LL	1	3	2	6	5
	PS	5	5	6	5	5
China	LL	1	2	1	2	7
	PS	6	5	6	5	5
FSM Arrangements	PS	30	30	32	26	26
US Treaty	PS	26	16	14	11	27
N.Zealand	PS	4	3	3	3	4
PNG	PS			2		
Philippines	PS	1				
Singapore	BU	7	2	4	2	3
Panama	BU			1	2	2
	PS					1
Ecuador	PS			1		6
El Salvador	PS			1		2
<u>Spain/EU[1]</u>	LL	0	8	11	5	2
	PS	2	3	2	4	4
Total	LL	217	219	171	147	160
	PS	161	154	154	142	171
	PL	19	21	3	3	6
	BU	11	6	9	8	9
Overall total		408	400	337	300	346

Foreign catch

The three main gears used by foreign fishing nations in Kiribati are longline, purse seine and pole and line. Purse seine catch significantly contributed to the overall total catch in Kiribati followed by longline. Japan is the only country that operates pole and line fishing vessels. It

contributes small catch to the overall total catch each year. Summary of catches for the purse seine, longline and pole and line vessels are depicted in Table 4, Table 5 and Table 6 respectively.

Tables 4. Annual catches by foreign purse seine fleets in the Kiribati EEZ, by flag and species, 2003 – 2007 (**Source** : Raised logsheet data collected by Kiribati MFMRD; 2007 data are provisional)

Fleet	Year	Days	CATCH (metric tonnes)				TOTAL
			SKJ	YFT	BET	OTH	
China	2003	5	0	0	0	0	0
	2004	51	563	0	0	0	563
	2005	287	5,138	774	44	0	5,956
	2006	178	3,488	0	0	0	3,488
	2007	6	235	30	0	0	265
Spain	2003						
	2004	209	3,479	1,196	842	0	5,517
	2005	18	784	79	202	0	1,065
	2006						
	2007	1	0	0	0	0	0
FSM Arrangement	2003	908	19,448	2,161	379	0	21,988
	2004	1,094	33,372	2,756	566	0	36,694
	2005	1,254	40,875	6,650	683	0	48,209
	2006	1,206	32,967	4,798	142	0	37,906
	2007	1,313	34,213	5,287	689	12	40,201
Japan	2003	779	8,810	2,910	66	0	11,786
	2004	327	5,351	769	87	0	6,208
	2005	229	3,933	683	66	0	4,682
	2006	387	9,522	1,127	65	0	10,714
	2007	53	1,638	145	0	12	1,795
Korea	2003	235	3,376	417	13	0	3,806
	2004	88	456	30	2	0	488
	2005	1,329	41,404	5,400	177	0	46,981
	2006	1,908	54,589	10,706	796	0	66,091
	2007	1,439	46,710	10,475	5	1	57,191
New Zealand	2003	246	4,976	941	109	0	6,025
	2004	357	4,310	1,559	516	0	6,384
	2005	250	5,352	1,377	196	0	6,924
	2006	247	4,917	714	285	0	5,916
	2007	198	6,472	675	214	1	7,363
Chinese Taipei	2003	503	10,339	1,511	139	0	11,989
	2004	465	11,436	559	26	0	12,020
	2005	717	17,190	2,481	196	0	19,868
	2006	598	12,500	772	38	0	13,310
	2007	447	10,272	1,525	203	1	12,001
USA	2003	865	13,840	2,169	483	0	16,491
	2004	1,238	12,932	4,464	1,550	0	18,945
	2005	1,262	22,768	9,002	3,109	0	34,879
	2006	666	15,466	2,180	1,126	0	18,771
	2007	499	12,219	2,069	300	0	14,588
Vanuatu	2003	294	7,276	1,211	215	0	8,702
	2004	430	12,833	341	28	0	13,202
	2005	846	31,277	6,345	494	0	38,116
	2006	298	9,472	1,344	101	0	10,917
	2007	327	8,341	1,278	37	1	9,657
TOTAL EEZ	2003	3,833	68,063	11,320	1,405	0	80,788
	2004	4,258	84,732	11,673	3,616	0	100,022
	2005	6,192	168,721	32,792	5,167	0	206,680
	2006	5,488	142,920	21,641	2,553	0	167,114
	2007	4,283	120,100	21,484	1,448	28	143,060

Tables 5. Annual catches by foreign longline fleets in the Kiribati EEZ, by flag and species,
2003 – 2007 (**Source:** Raised logsheet data collected by Kiribati MFMRD, 2007 data are provisional)

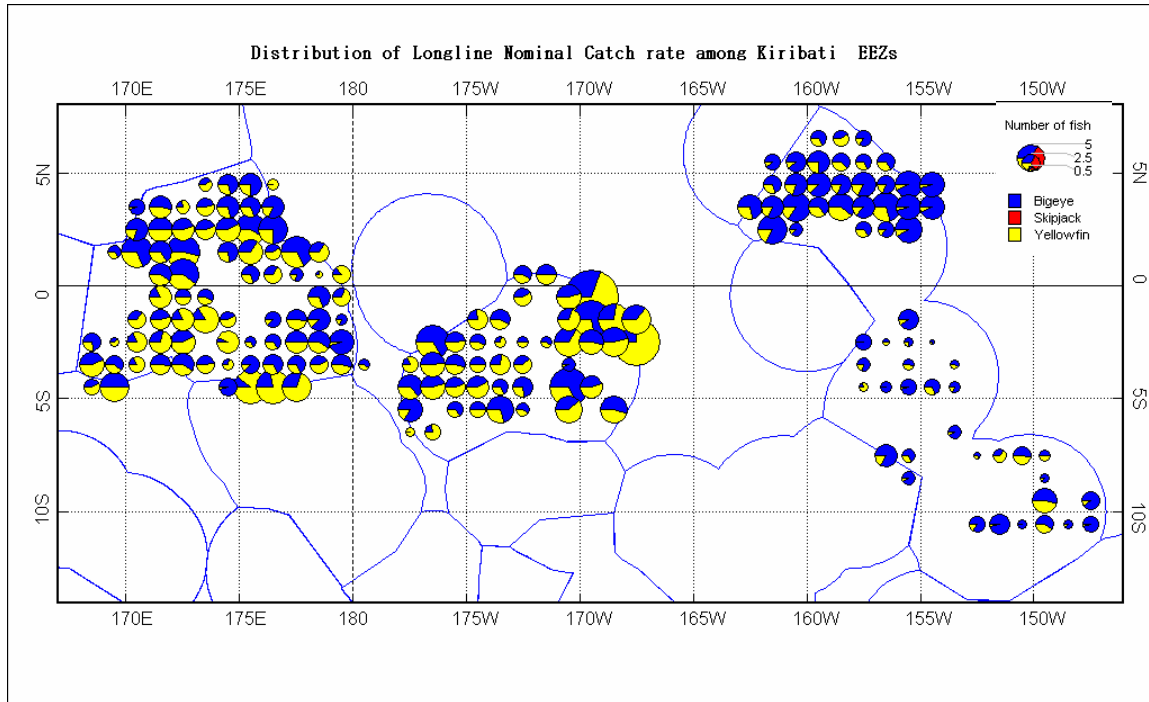
Tuna Catch (metric tonnes)				
Fleet	Year	YFT	BET	TOTAL
China	2003	64	161	225
	2004	328	838	1,166
	2005	52	83	135
	2006	0	0	0
	2007	21	25	46
Japan	2003	177	354	531
	2004	274	767	1,041
	2005	55	56	111
	2006	10	0	10
	2007	0	0	0
Korea	2003	2,016	2,642	4,658
	2004	3,531	3,825	7,356
	2005	1,118	1,846	2,965
	2006	1,863	2,664	4,528
	2007	1,610	2,228	3,838
Chinese Taipei	2003	1,081	2,511	3,592
	2004	5,456	12,041	17,497
	2005	1,686	4,880	6,566
	2006	853	4,501	5,353
	2007	0	0	0
Vanuatu	2003	62	35	97
	2004	200	443	643
	2005	97	352	449
	2006	118	796	913
	2007	0	0	0
TOTAL EEZ	2003	3,400	5,704	9,104
	2004	9,788	17,914	27,702
	2005	3,009	7,217	10,226
	2006	2,843	7,961	10,805
	2007	1,630	2,253	3,883

Tables 6. Annual catches by foreign pole and line vessels in the Kiribati EEZ, by flag and species,
2003 – 2007 (**Source :** Unraised logsheet data collected by Kiribati MFMRD)

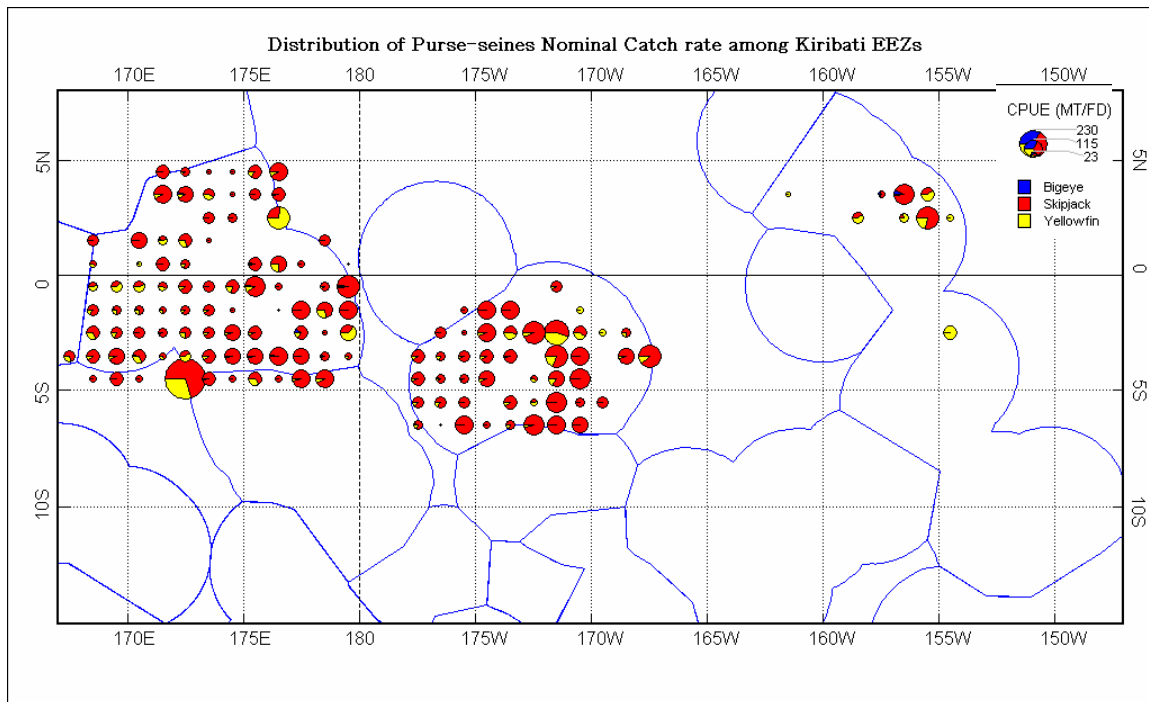
Catch (metric tonnes)						
Fleet	YEAR	SKJ	YFT	BET	OTH	TOTAL
Japan	2003	233	5	0	2	240
	2004	614	12.5	0	14	640.5
	2005	0	0	0	0	0
	2006	0	0	0	0	0
	2007	0	0	0	0	0

Distribution of fishing efforts

The distribution on nominal catch efforts in 2007 for longline and purse seine fishing vessels in Kiribati three fishing zones is depicted below.



Longline fishing efforts



Purse seine fishing efforts

2. Research and Statistics

2.1 Summary of unloading (transshipment)

Unloading or transshipment in Kiribati was conducted in three designated ports namely; Betio port in Tarawa, Canton port in the Phoenix Group and Christmas port in the Line Group. Korea is the dominant fleet conducting transshipment in Kiribati. Most of the catches were destined primarily to Bangkok.

Summary of purse seine and fish carriers unloading engaged are provided in the Tables 7 (a) and (b). Table 7 (c) summarizes the unloadings conducted by Korean longline fishing vessels in Kiribati EEZ and at high seas.

Table 7 (a). Summary of unloading, 2003-2007

Year	Carrier	Purse seine	Total (mt)
2003	1	1	730
2004	3	4	2,741
2005	36	75	93,158
2006	27	66	48,703
2007	40	83	81,805

Table 7 (b). Annual unloading (mt) by ports in 2003-2007

Year	Tarawa	Phoenix	Christmas	Total
2003	730			730
2004	2,741			2,741
2005	53,119	6,305	33,734	93,158
2006	71,753			48,703
2007	79,066		2,739	81,805

In 2007 Korean longline fishing association conducted for the first time a trial transshipment which involves the placement of Kiribati Fisheries Observers on refrigerated carrier vessels simply to monitor all transshipment activities which involves collecting of fisheries catch data transshipped in Kiribati EEZ and also at high seas. Summary of transshipments is provided in Table 8.

Table 8. Annual at sea unloadings (mt) by Korean longline vessels

Year	EEZ	High seas	Total
2003			
2004			
2005			
2006			
2007	818.35	269.77	1,088.11

Observer and Port Sampling Programs

Around 15 fisheries observers are currently active and available for placement for national observer program however, only 3 observers are eligible for regional observer program. Around 5 Observers were stationed at Christmas and are mainly engaged to board Korean longline fishing vessels. The rest of the Observers are stationed on Tarawa to board purse seine fishing vessels.

In 2007 a total of 21 fisheries observer placements were made on Korean, Japanese and Taiwanese fishing vessels. Purse seine observer coverage was 20% based on fishing days and for longline fishery, observer coverage is very low since only 3 Korean longline vessels are required to be boarded each year.

There is a need to conduct another observer training course in order to have sufficient number of certified fisheries observers and to allow Kiribati to meet its national and regional observer obligations.

Port sampling for 2006 and 2007 was carried out by our fisheries observers with the assistance of fisheries staff. All port sampling data are sent to SPC for analysis.

Climate change and oceanography

The early 2000s saw the significant changes in the weather conditions around Kiribati and adjacent waters. The occurrence of El Nino phenomenon which normally occurring at an interval of 4-7 years before the next El Nino could take place seems no longer the case. This weather phenomenon which normally associated with productive fishing ground conducive for purse seines in Kiribati waters and adjacent high seas seems to be occurring more frequently and this is why purse seining in Kiribati is becoming an annual event these days.