

SCIENTIFIC COMMITTEE NINTH REGULAR SESSION

Majuro, Republic of the Marshall Islands 6-14 August 2014

2014 ANNUAL REPORT TO THE COMMISSION PART 1: INFORMATION ON FISHERIES, RESEARCH AND STATISITICS

Republic of Korea Rev 2 31 October 2014

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Part 1. INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

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Scientific data was provided to the Commission in accordance with the decision YES relating to the provision of scientific data to the Commission by 30 April 2014

1. SUMMARY

Korea has two types of fishing gears, purse seine and longlines, that engage in fishing for tuna and tuna-like species in the WCPFC Convention Area. These fisheries are managed by the Distant Water fisheries Development Act of Korea. Total catch in the WCPFC by the Korean fisheries in 2013 was 250,071 mt, which accounted for 11% lower than the recent 5 years average (2009-2013) and 15% lower than that in 2012. The catch of purse seine fisheries from 27 vessels active was 225,642 mt in 2013, which was 10% lower than those of average recent 5 years and 14% lower than that in 2012. The catch of longline fishery with 125 vessels active was 24,429 mt in 2013, the lowest during 5 recent years as it was 28% and 27% lower than the recent 5 year average and lower than that in 2012. In purse seine fishery, skipjack and yellowfin catches in 2013 were 10% and 34% lower than those of 2012, respectively, but bigeye catch was 87% greater than that of 2012. In longline fishery, bigeye and yellowfin catches in 2013 was 32% and 27% lower than that of 2012, respectively. Purse seine fishing efforts increased from 6,624 sets in 2011 to 7,552 sets in 2013, which was the highest level during the recent 5 years. Longline fishing efforts decreased from 75,715 thousand hooks in 2011 to 62,852 thousand hooks in 2013, which was the lowest level during the recent 5 years. Purse seine fishing efforts in 2013 were concentrated relatively higher on the western area, and longline fishing efforts in 2013 were deployed relatively higher in the eastern area than in previous years. The coverage rates of logsheet in 2013 were 100% for both purse seine and longline.

2. Tabular Annual Fisheries Information

species in the		111011 7 11ca, 200	07-2015			
Year	No. of sets	Total	SKJ	BET	YFT	OTH
2009	7,122	283,278	257,481	135	25,652	10
2010	7,307	277,312	216,026	2,972	58,314	-
2011	6,624	207,702	168,690	2,295	36,717	-
2012	7,337	262,192	210,613	900	50,677	2
2013	7,552	225,642	190,251	1,684	33,697	10

Table 1(a). Annual catch and effort estimates for the Korean purse seine fishery by primary species in the WCPFC Convention Area, 2009-2013

* The catch for 2012 and 2013 are provisional.

Table 1(b). Annual catch and effort estimates for the Korean longline fishery by primary species in the WCPFC Convention Area, 2009-2013

Year	No. of hooks ($\times 10^3$)	Total	ALB	YFT	BET	BFT	SKJ	BLM	BUM	STM	SWO	OTH
2009	69,901	32,370	1,608	10,032	15,231	0	0	571	2,453	54	1,134	1,289
2010	67,007	28,513	1,337	7,644	13,914	51	0	579	1,595	27	786	2,581
2011	75,715	30,736	670	7,881	15,282	0	23	331	1,415	73	1,340	3,723
2012	75,060	33,457	1,264	7,832	18,823	0	14	148	1,486	43	1,267	2,579
2013	62,852	24,429	1,155	5,716	12,818	0	51	90	1,727	90	1,214	1,568

* The catch for 2012 and 2013 are provisional.

Table 1(c). Annual catch of swordfish by the Korean longline fishery in the south of 20° S, 2009-2013

Year CMM-flagged ver south of 20°S			Chartere	d vessels	Other vessels fishing within the CCM's waters south of 20°S					
	Catch (tonnes)	Vessel numbers	Catch (tonnes)	Vessel numbers	Flag	Catch (tonnes)	Vessel numbers			
2009	-	-	-	-	-	-	-			
2010	-	-	-	-	-	-	-			
2011	-	-	-	-	-	-	-			
2012	-	-	-	-	-	_	_			
2013	_	_	-	-	-	_	-			



Fig. 1(a). Historical annual catch for the Korean purse seine fishery by primary species in the WCPFC Convention Area during 1980-2013.



Fig. 1(b). Historical annual catch for the Korean longline fishery by primary species in the WCPFC Convention Area during 1987-2013.



Fig. 2. Historical annual vessel numbers for the Korean tuna fisheries by gear in the WCPFC Convention Area during 1980-2013.

Table 2. Number of Korean vessels by gear and size, active in the WCPFC Convent	ion Area,
2009-2013	

					GR	Г class b	y gear			
Year			Longlin	ie				Purse se	eine	
	Total	0-50	51-200	201-500	500+	Total	0-500	501-1,000	1,001-1,500	1,500+
2009	111	-	-	111	-	27	-	13	11	3
2010	122	-	-	122	-	28	-	13	12	3
2011	124	-	-	124	-	28	-	12	11	5
2012	126	-	-	126	-	28	-	12	11	5
2013	125	-	1	124	-	27	-	12	10	5



Fig. 3(a). Annual catch and effort distributions of target species by the Korean purse seine fishery active in the WCPFC Convention Area, 2009-2013.



Fig. 3(b). Annual catch and effort distributions of target species by the Korean longline fishery active in the Pacific Ocean, 2009-2013.

	Catch by species										
Year	Whale	Leatherback	Olive ridley	Loggerhead	Other marine						
	shark	turtle	turtle	turtle	turtles						
2013	33	1	1	10	30						

Table 3. Annual estimated catch of species of special interest (seabird, turtle and marine mammals) by the Korean purse seine fishery in the WCPFC Convention Area, 2013

Table 4. Annual estimated catch of key sharks by the Korean longline fishery in the WPCFC Convention Area, 2011-2013

		Catch by key shark species											
Year	Blue	Thresher	Hammerhead	Mako	Silky	Oceanic	Others						
	shark	sharks	sharks	sharks	shark	whitetip shark	Oulers						
2011	9	1	< 0.1	-	-	-	1,047						
2012	68	33	4	6	4	1	640						
2013	194	98	21	17	33	-	688						

Table 5. Estimated annual coverage of operational catch/effort and observer data for the Korean fisheries by gear, active in the WCPFC Convention Area, 2011-2013

Year	Gear	Logsheet coverage (%)	Observer coverage (%)
2011	Purse seine	100	100
2011	Longline	90	>5
2012	Purse seine	100	100
2012	Longline	85	>5
2013	Purse seine	100	100
2013	Longline	100	7

3. Background

About 58 year-old Korean distant water tuna longline fishery that stepped up the first fishing in the Indian Ocean in 1957, has explored the Pacific Ocean since 1958 and the Atlantic Ocean since 1967. The high seas and the waters within coastal states in the South Pacific Ocean have been the main fishing grounds for Korean longline fishery. There was a change in the longline fishing operation types. Longline vessels used foreign ports for fishing base near the fishing grounds from the beginning but they has gradually equipped with deep freezing facilities and used home ports for fishing base since 1972. All longline vessels have based domestic ports since 1999. This change gave advantages in exporting the products to Japanese markets and others. In domestic markets, tuna sashimi demands have been increasing year by year.

The Korean purse seine fishery was initiated by accessing into the Eastern Pacific fishing ground with 3 vessels in 1971. Helicopter-aided mass operations were introduced in 1979 for

the first time, and the number of active vessels was the highest of 39 in 1990 and 27-28 in recent years. Most of the catches are supplied to the packers for domestic consumption, and the remainders are being exported to foreign canneries.

These fisheries are managed by the Distant Water Fisheries Development Act put into effect on the 4 February, 2008, and the Act was revised for improving the data collection on 5 December, 2012. Currently, over 90% of Korean catch of tuna and tuna-like species has occurred in the western and central Pacific ocean (WCPO) area.

4. Flag State Reporting

4.1. Annual catch and effort

Annual catch and effort for Korean tuna fisheries by gear and primary species are shown in Table 1 and Fig. 1. The average of total catch in the WCPO by Koran tuna fisheries was 281,127 mt in recent 5 years (2009-2013). Total catch in 2013 was 250,071 mt, which accounted for 11% and 15% lower than those of average for 5 recent years and 2012, respectively.

The average catch of purse seine fishery was 251,225 mt during 5 recent years (2009-2013). The purse seine catch in 2013 was 225,642 mt from 27 vessels active, which was 10% and 14% lower than those of average for 5 recent years and 2012, respectively. In purse seine fishery, skipjack, bigeye and yellowfin catches in 2013 were 190,251 mt, 1,684 mt and 33,697 mt, respectively. The catches of skipjack and yellowfin were 10% and 34% lower than those of 2012, respectively, but bigeye was 87% greater than that of 2012. Purse seine fishing efforts ranged from 6,600 to 7,500 sets during 5 recent years and increased from 6,624 sets in 2011 to 7,552 sets in 2013, which was the highest level during 5 recent years.

The average catch of longline fishery was 29,901 mt during recent 5 years (2009-2013). The longline catch in 2013 was 24,429 mt from 125 vessels active, the lowest during 5 recent years, which was 28% and 27% lower than those of average for 5 recent years and 2012, respectively. In longline fishery, the catches of bigeye and yellowfin in 2013, which are target species by the Korean tuna longline fishery, were 32 % and 27% lower than those of 2012, respectively. Longline fishing efforts ranged from 62,000 to 75,000 thousand hooks and decreased from 75,715 thousand hooks in 2011 to 62,852 thousand hooks in 2013, which was the lowest level during 5 recent years.

In 2013, no swordfish was caught by the Korean tuna longline vessels in the south of 20° S (Table 1(c)).

4.2. Fleet structure

The number of vessels active by gear and size is presented in Fig. 2 and Table 2. The number of purse seine vessels, once peaked at 39 in 1990, reduced to 28 in 1996 and has been maintained around 26-28 since then to recent years. It was 27 in 2013, of which 12 vessels were of 501-1,000 class, 10 vessels of 1,001-1,500 class and 5 vessels of over 1,500 class. The number of longline vessels reduced from 220 in 1991 to 108 in 2008, and slightly

increased to 125 in 2013, of which 1 vessel was of 51-200 class and 124 vessels of 201-500 class.

4.3. Fishing patterns

The distributions of catch and effort of target species by gear are shown in Fig. 3. Korean tuna purse seine fishery has generally been operating throughout the year in the tropical area of the WCPO between 140°E-180°E and from time to time extended to the east subject to oceanographic conditions. Purse seine fishing efforts in 2010 and 2011 were concentrated on the western areas, while were concentrated relatively higher on the central areas and extended to the east in 2009 and 2012. In 2013, the effort distributions shifted to the western areas. Longline fishery efforts were normally higher in both the central and the eastern areas. In 2013, the efforts were relatively higher in the eastern area than other years. It was comparable to 2009 and 2010 when the efforts were higher in the central area than the eastern area.

4.4. Annual estimated catches of species of special interest

The species of special interest (seabird, turtle and marine mammal) caught incidentally by purse seine fishery in 2013 are presented in Table 3. The data were compiled from logsheet recorded by captain onboard. The number by species was 33 for whale shark, 1 leatherback turtle, 1 olive ridley turtle, 10 loggerhead turtles and 30 other marine turtles, respectively. All these bycaught species were released promptly. There were no bycatch of marine turtle, seabird and marine mammal from longline operation in 2013.

4.5. Annual estimated catches of non-target, associated and dependent

The shark species caught incidentally by longline fishery are presented in Table 4. These data were compiled from logsheet recorded by captain onboard. As key shark species, the catches in 2013 were 194 mt for blue shark, thresher sharks 98 mt, hammerhead sharks 21 mt, mako sharks 17 mt, silky shark 33 mt and other sharks 688 mt, respectively.

4.6. Estimated annual coverage of catch and effort and observer data

Estimated annual coverages of logsheet (catch and effort data) and observer data are shown in Table 5. The coverage of logsheet data in 2013 was 100% for both purse seine and longline. The observer coverage in 2013 was 100% for purse seine and 7% for longline.

5. Coastal State Reporting

N/A

6. Onshore developments

Korea consistently promotes investment plans on land facility in the coastal states where its distant waters fleets are operating.

7. Future Prospects of the fishery

The fleet power of purse seine and longline is expected to keep the current level, and production seems to be affected by fisheries resources trend in the oceans, conservation and management measures of RFMOs and permission policy of the coastal states. Meanwhile recognizing that demand at international and domestic market is increasing on production caught from responsible and sustainable fishing activity, Korea strives to strengthen on MCS, scientific survey and education relating to by-catch for fishermen.

8. Status of tuna fishery data collection systems

8.1. Logsheet data collection and verification

Tuna catch statistics of Korea are obtained from two sources of data reporting. Korea Overseas Fisheries Association (KOSFA) collects total catches by gear and species from the Korean tuna industries, which are used as Korea's official total catch. National Fisheries Research and Development Institute (NFRDI) collects logsheet data from vessels filled out by captain onboard. In accordance with data reporting and submission requirement by the RFMOs, necessary improvements have been continuously made in logbook coverage, accuracy and monthly reporting through cross-checking between NFRDI and KOSFA. To improve fisheries database and data cross-checking, the NFRDI and the Ministry is developing a program being able to monitor the state of being submitted from fishing vessel in real time and to manage/cross-check the data. The Distant-water Fisheries Act obliges fishers to report the catch statistics to NFRDI every month in the electronic format. This measure was taken by revision of the Act put into effect from December 2012.

8.2. Observer programme

The scientific observer program of distant-water fisheries of Korea was started in 2002. National Fisheries Research and Development Institute (NFRDI) is responsible for implementing and developing the program. The basic requirement for observers is college graduated with the major field of nature science or fisheries high school graduated with at least 1-year experience on board and certificate of qualification to deck officer. Candidate for observer who have passed the paper review (including medical check) and oral interview have to take training programs for 3 weeks. Observer training programs include basic safety training for seafaring, operations of navigation devices, biological information training for target and non-target species and data collecting/reporting method for fishing activities. During the training program they have two kinds of test. First is the test for a technical term of fisheries and biology, and the other is the test for species identification. The person who scored 70% overall in the two tests and attended 100% of the course timetable can be qualified for a scientific observer and deployed on board. Korea has a total of 26 scientific observers at present.

8.3. Port sampling programme

In Korea, there are 4 domestic landing ports for tunas caught in WCPO, which are Busan, Masan, Tonyeong and Mokpo, all located along the southern coast of Korea, nearby the landing port, there are 5 canneries owned by 4 companies in which about 100,000 tons of tunas from WCPO are landing.

The National Fisheries Research and Development Institute (NFRDI) used to conduct biological sampling in the domestic cannery of Dongwon industry from 1997 to 2006. A preliminary study for species identification from the catch of purse seine was conducted in a cannery of Korea in April 2011.

8.4. Unloading/Transhipment

In accordance with Article 13 of the Distant Water Fisheries Development Act, all distant waster fishermen shall comply with procedures and regulations established by Regional Fisheries Management Organizations. Therefore, all transhipments by Korean vessels fishing all high migratory fish stocks covered by the WCPFC Convention take place in accordance with WCPFC CMM 2009-06. Also, vessel operators are encouraged to assist the WCPFC ROP observers in having full access to both the unloading and the receiving vessels to verify that the transhipped quantities of fish are consistent with other information available to observers. After the completion of transhipment, the transhipment declaration is subject to verification against fishing vessel's monthly catch report, logsheets and observer reports (if available). The information on the transhipment of Korean fleets is summarized in Table 6.

9. Research activities covering target and non-target species

Study on the fishing characteristics of Korean tuna purse seine fisheries has been carried out to establish management plan of FADs, and have a plan to conduct a sea trial on FADs in next year. And a sea trial on circle hooks is planned to conduct to mitigate bycatch of sea turtle in the Korean tuna longline fisheries. Table 6. Information on the transhipment of Korean fleets in 2013

A. Amount of fish transshipped by longliners

(1) Amount of Transshipped fish

Unit : Kg Transshipment of catches in WCPFC area Transshipment of catches outside of WCPFC area Species Total Bigeye 5,752,371 3,645,170 9,397,541 2,937,755 Yellowfin 368,389 3,306,144 130,406 172,875 Skipjack 42,469 Albacore 693,365 177,020 870,385 Swordfish 496,258 461,630 957,888 Striped marlin 37,732 26,561 64,293 822,708 Shark 574,081 248,627 Shark fin 21,512 9,342 30,854 Others 1,178,023 444,949 1,622,972 11,821,503 Total 5,424,157 17,245,660

Unit : Kg

		Location of Transshipment : WCPFC Area														
Species		In-po	ort Transship	ment			At-sea transshipment in EEZ				At-sea transshipment in high seas					
	G.G	Dress	Round	Other	Sub-total	G.G	Dress	Round	Other	Sub-total	G.G	Dress	Round	Other	Sub-total	Total
Bigeye	1,567,973	34,666	-	-	1,602,639	2,905,397	-	-	-	2,905,397	74,282	-	-	-	74,282	4,582,318
Yellowfin	1,487,689	34,135	-	-	1,521,824	1,087,523	-	-	-	1,087,523	29,883	-	-	-	29,883	2,639,230
Skipjack	-	-	36,854	-	36,854	-	-	52,467	-	52,467	-	-	6,682	-	6,682	96,003
Albacore	-	-	369,654	-	369,654	-	-	231,644	-	231,644	-	-	26,550	-	26,550	627,848
Swordfish	-	96,722	-	-	96,722	7,299	282,163	-	-	289,462	-	8,077	-	-	8,077	394,261
Striped marlin	10,307	-	-	-	10,307	15,623	2,267	-	-	17,890	1,334	-	-	-	1,334	29,531
Shark	-	211,697	4,870	-	216,567	8,000	242,507	-	-	250,507	-	30,046	-	-	30,046	497,120

Shark fin	-	-	140	7,973	8,113	-	-	-	9,219	9,219	-	-	-	1,036	1,036	18,368
Others	-	314,607	2,959	163,103	480,669	-	388,834	8,599	95,500	492,933	-	18,773	1,358	-	20,131	993,733
total	3,065,969	691,827	414,477	171,076	4,343,349	4,023,842	915,771	292,710	104,719	5,337,042	105,499	56,896	34,590	1,036	198,021	9,878,412

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Unit		IN 2
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					location of Trans	sshipment : outsic	le of WCPFC Are	ea			
Species		In-	port Transshipm	ent			A	t-sea transshipme.	nt		Total
	G.G	Dress	Round	Other	Sub-total	G.G	Dress	Round	Other	Sub-total	Total
Bigeye	1,130,105	-	-	-	1,130,105	3,565,118	120,000	-	-	3,685,118	4,815,223
Yellowfin	217,256	-	-	-	217,256	434,658	15,000	-	-	449,658	666,914
Skipjack	-	-	3,452	-	3,452	-	-	73,420	-	73,420	76,872
Albacore	-	-	60,497	-	60,497	-	-	182,040	-	182,040	242,537
Swordfish	-	111,901	-	-	111,901	-	451,726	-	-	451,726	563,627
Striped Marlin	10,386	-	-	-	10,386	21,125	3,251	-	-	24,376	34,762
Shark	-	97,817	-	-	97,817	-	227,771	-	-	227,771	325,588
Shark fin	-	-	-	3,237	3,237	-	-	-	9,249	9,249	12,486
Others	-	118,247	-	62,086	180,333	-	369,559	358	78,989	448,906	629,239
Total	1,357,747	327,965	63,949	65,323	1,814,984	4,020,901	1,187,307	255,818	88,238	5,552,264	7,367,248

(2) Number of transhipments

Number of Treese	inment by leastion of establish	Number of transshipment by location of transshipment							
Number of Transsn	ipment by location of catches		WCPFC	Outside of WCPFC area					
Catches in WCPFC area	Catches outside of WCPFC area	In port	EEZ	High seas	In port	At sea			
90	41	31	43	1	8	42			

B. Purse seiners transshipment

(1) Amount of transhipped fish

Species	Ttranshipment of catches in WCPFC area	Transhipment of catches outside of WCPFC area	Total
Bigeye	1,456,300	-	1,456,300
Yellowfin	37,455,528	-	37,455,528
Skipjack	186,027,720	-	186,027,720
Albacore	-	-	-
Swordfish	-	-	-
Striped mrlin	-	-	-
Shark	-	-	-
Shark fin	-	-	-
Others	-	-	-
Total	224,939,548	-	224,939,548

Unit : Kg

Unit : Kg

	location of Transhipment : WCPFC Area											
Species		In-port tra	insshipment		At-	-sea transhi	ipment in E	EEZ	At-sea	ı transhipı	nent in hig	gh seas
-	G.G	Dress	Round	Other	G.G	Dress	Round	Other	G.G	Dress	Round	Other
Bigeye	-	-	1,456,300	-	-	-	-	-	-	-	-	-
Yellowfin	-	-	37,455,528	-	-	-	-	-	-	-	-	-
Skipjack	-	-	186,027,720	-	-	-	-	-	-	-	-	-
Albacore	-	-	-	-	-	-	-	-	-	-	-	-
Swordfish	-	-	-	-	-	-	-	-	-	-	-	-
Striped marlin	-	-	-	-	-	-	-	-	-	-	-	-
Shark	-	-	-	-	-	-	-	-	-	-	-	-
Shark fin	-	-	-	-	-	-	-	-	-	-	-	-

Others	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	224,939,548	-	-	-	-	-	-	-	-	-

Unit : Kg

	Location of transhipment : Outside of WCPFC area										
Species		In-port tra	nshipment		At-sea tra	nshipment					
	G.G	Dress	Round	Other	G.G	Dress	Round	Other			
Bigeye	-	-	-	-	-	-	-	-			
Yellowfin	-	-	-	-	-	-	-	-			
Skipjack	-	-	-	-	-	-	-	-			
Albacore		-	-	-	-	-	-	-			
Swordfish	-	-	-	-	-	-	-	-			
Striped Marlin	-	-	-	-	-	-	-	-			
Shark	-	-	-	-	-	-	-	-			
Shark fin	-	-	-	-	-	-	-	-			
Others	-	-	-	-	-	-	-	-			
Total	-	-	-	-	_	-	-	-			

(2) Number of transhipments

Number of tranship	ments by location of	Number of transhipments by location of transhipments							
cato	ches		WCPFC area	Outside of WCPFC area					
Catches in WCPFC area	Catches outside of WCPFC area	In port	EEZ	High seas	In port	At sea			
313	-	313	-	-	-	-			

C. Carriers transshipment

(1) Amount

		Location of transshipment : WCPFC area										
Species	Grand total		In	port transshipm	ent			At sea ti	ansshipme	nt in EEZ		
		G.G	Dress	Round	Others	Sub-total	G.G	Dress	Round	Others	Sub-total	
Bigeye	7,769,876	2,434,654	2,085	806,000	-	3,242,739	2,933,690	44,195	-	-	2,977,885	
Yellowfin	16,226,922	1,253,978	8,389	13,566,313	-	14,828,680	1,107,305	47,894	-	-	1,155,199	
Striped marlin	64,750	19,284	65	-	-	19,349	25,905	679	-	-	26,584	
Swordfish	690,632	2,500	218,070	-	-	220,570	3,276	256,682	-	-	259,958	
Blue marlin	859,341	-	308,557	-	-	308,557	0	412,900	-	-	412,900	
White marlin	11,302	-	1,266	-	-	1,266	0	3,527	-	-	3,527	
Alabcore	2,380,741	2,318	-	476,108	-	478,426	3,733	2,793	302,716	-	309,242	
Spearfish	250	-	250	-	-	250	-	-	-	-	-	
Kingfish	2,000	-	2,000	-	-	2,000	-	-	-	-	-	
Oilfish	16,100	-	16,100	-	-	16,100	-	-	-	-	-	
Skipjack	198,430,590	-	-	198,341,098	-	198,341,098	106	195	48,127	-	48,428	
Shark	676,385	-	245,510	-	17,690	263,200	-	272,495	4,597	377	277,469	
Shark fin	24,101	-	-	-	9,419	9,419	-	-	-	10,731	10,731	
Other	15,590,294	-	23,155	13,485,375	199,069	13,707,599	-	40,001	49	169,661	209,711	
Total	242,743,284	3,712,734	825,447	226,674,894	226,178	231,439,253	4,074,015	1,081,361	355,489	180,769	5,691,634	

Unit : Kg

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		Location of the	ransshipment :	WCPFC Area	L	Lo	cation of tran	sshipment : Outs	side of WCPF	C Area		
Species		At sea transshipment in high seas					In port transshipment					
	G.G	Dress	Round	Others	Sub-total	G.G	Dress	Round	Others	Sub-total		
Bigeye	255,942	-	-	-	255,942	-	-	-	-	-		
Yellowfin	27,366	-	-	-	27,366	-	-	-	-	-		
Striped marlin	7,080	1,387	-	-	8,467	-	-	-	-	-		
Swordfish	-	17,517	-	-	17,517	-	-	-	-	-		
Blue marlin	326	8,796	-	267	9,389	-	-	-	-	-		
White marlin	-	-	-	-	-	-	-	-	-	-		
Albacore	244,901	-	313,377	962,973	1,521,251	-	-	-	-	-		
Spearfish	-	-	-	-	-	-	-	-	-	-		
Kingfish	-	-	-	-	-	-	-	-	-	-		
Oilfish	-	-	-	-	-	-	-	-	-	-		
Skipjack	-	-	-	-	-	-	-	-	-	-		
Shark	18,078	9,420	-	4,992	32,490	-	-	-	-	-		
Shark fin	-	-	-	-	-	-	-	-	-	-		
Other	38,649	4,946	-	93,147	136,742	-	-	1,484,950	-	1,484,950		
Total	592,342	42,066	313,377	1,061,379	2,009,164	-	-	1,484,950	-	1,484,950		

Unit : Kg	
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		Location of transs	hipment : Outside of V	WCPFC Area	
Species		At	t sea transshipment		
	G.G	Dress	Round	Others	Sub-total
Bigeye	1,173,310	120,000	-	-	1,293,310
Yellowfin	200,677	15,000	-	-	215,677
Striped marlin	9,192	1,158	-	-	10,350
Swordfish	-	192,587	-	-	192,587
Blue marlin	-	128,495	-	-	128,495
White marlin	-	165	6,344	-	6,509
Albacore	-	-	71,822	-	71,822
Spearfish	-	-	-	-	-
Kingfish	-	-	-	-	-
Oilfish	-	-	-	-	-
Skipjack	-	-	41,064	-	41,064
Shark	-	94,311	-	8,915	103,226
Sharkfin	-	-	-	3,951	3,951
Other	2,518	31,188	482	17,104	51,292
Total	1,385,697	582,904	119,712	29,970	2,118,283

(2) Number of transshipment

	Number of transshipment by location of transshipment								
	WCPFC at	Outside of WCPFC area							
In port	EEZ	High seas	In port	At sea					
267	50	15	1	16					