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CHINA

Annual Report to the Commission

Part 1: Information on Fisheries, Research and Statistics

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Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 April 2013	**YES**

Summary

There are two types of tuna fisheries in the WCPFC Convention Areas: longline and purse seine fishery. In 2013, 379 longliners and 14 purse seiners operated in the WCPFC Convention Areas. The total catch of tuna and tuna-like species by longline fishery and purse seine fishery were estimated to be 44734 MT and 81,830 MT, respectively. The catch of bigeye tuna, yellowfin tuna, albacore by longline fishery amounted to 10,671 MT, 4,638 MT and 24,162 MT respectively. The catch of skipjack, yellowfin tuna and bigeye tuna by purse seine fishery were estimated to 73,607 MT, 8,051 MT and 170 MT respectively. Catch by Chinese deep-freezon longline fishery for bigeye are exported to Japan for sashimi and catch by fresh-tuna longline for albacore are sold for cannery products. Catch by purse seine fishery for skipjack are also sold for cannery products. From July, 2013 to April 2014, nine(9) scientific observers were trained and dispatched to Chinese longline vessels in the whole Pacific Ocean. Fishery data and biological data were collected during observer trips. Data coverage for catch and effort was 100%. The logbook coverage for longline fishery is being improved and this will promote the quality of China data collection.

1. Introduction

China began to develop its oceanic tuna fisheries in 1988 in the Pacific Ocean and this region is one of the earliest fishing grounds for China tuna fishery. There are currently two types of tuna fisheries in the WCPFC Convention area: longline (LL) fishery and purse seine (PS) fishery. The catch of four main tuna species (skipjack, yellowfin tuna, bigeye tuna and albacore) by China in 2004 was 40,165 MT. Catch of the four species hit historical record 112,260 MT in 2009, but decreased to 81,938 MT in 2010. It should be noted that above-mentioned catch does not include the catch from overlapping areas (S04- S40, W130-W150). Catch of the four species was 91,302 MT

in 2012 (including the catch from overlapping areas), which sharply decreased comparing with 2011. In 2013, the catch of the four species rebounded to 121,299 MT in WCPFC Convention Areas.

2. Fleet structure

2.1 LL

All the Chinese LL vessels operated on the high seas and EEZs of Pacific Islands Countries (PIC). The number of LL fishing vessels has shown an increase trend since the year 2000. Table 1 shows the number of Chinese LL vessels operating in the WCPFC Convention Area in 2009-2013. The number of LL vessels in 2009 was 219, 244 in 2010, 275 in 2011, and 286 in 2012. In 2013, the number of LL vessels amounts to 379.

Size of the LL vessels ranged from 67 GT to742 GT. There are two types of tuna longline vessels, ice fresh tuna longline (IFLL), including those targeting albacore, and deep frozen tuna longline (DFLL). The number of IFLL and DFLL vessel was 120 and 99 respectively in 2009, 155 and 89 respectively in 2010, 182 and 93 respectively in 2011, 202 and 84 respectively in 2012, 272 and 107 respectively in 2013.

Most of the DFLL vessels targeting bigeye tuna on the high seas and the EEZs of PIC. The IFLL vessels mainly operate in the EEZ of PIC and on the high seas, targeting bigeye tuna and albacore. The major fishing grounds distributed among the EEZ of Solomon Islands, Marshall Islands, and high seas.

2.2 PS

Chinese fleet entered the WCPFC tropical purse seine fishery in 2001, and it has become very important for China tuna fishery. The number of PS vessels maintained in a steady level of 12-13 during 2009-2011. In 2013, one new vessel was added to the fleet and 14 vessels were fishing in the WCPFC Convention area. Table 1 shows the number of Chinese PS vessels operating in the WCPFC Convention area in 2009-2013.

3. Catch by species and fishery

3.1 LL

The total catch by Chinese LL in the WCPFC Convention area from 2009 to 2013 are shown in Table 2. The total catch of tuna and tuna-like species by longline fishery amounted to 44734 MT in 2013. The catch mainly consists of ALB, BET and YFT. In 2013, the percentage of ALB, BET and YFT by LL were 54.0%, 23.9% and 10.4%,

respectively.

Table 3 shows the catch of non-target species caught by Chinese LL in the WCPFC Convention Area from 2010 to 2013, including mainly three billfishes species (striped marlin, blue marlin, and black marlin) and two shark species (blue shark and shortfin mako). Catch of Striped marlin has decreased sharply in 2013 compared with the previous data, which complies with the CMM 2010-01.

3.2 PS

The total catch by Chinese PS in the WCPFC Convention area from 2009 to 2013 was shown in Table 2. The catch was 76,649 MT in 2009 and decreased to 53,716 MT in 2010, increased to 77,551 MT in 2011, then sharply decreased to 49,148 MT in 2012. In 2013, the main catch species by PS fishery were SKJ, YFT, and BET. The catch of bigeye tuna (mainly juveniles) was 170 MT. The catch of yellowfin tuna was 8,051MT. The catch of skipjack was 73,607 MT. The total catch of Chinese PS in 2013 increase 66.5% as compared with the catch in 2012 (49,148 MT).

4. Disposal of Catch

Bigeye tuna and yellowfin tuna caught by longline vessels operating in the Exclusive Economic Zone (EEZ) of Pacific Island Countries and on the high seas were exported to Japan sashimi market. Other species caught as by-catch are sold to local market of operating ports. Albacore catch were landed at Fiji for cannery. Catch by PS fishery were mostly transhipped to Thailand for cannery as well.

5. Research and Statistics

5.1 Observer programme

In order to carry out observer program, scientific observers are strictly trained for collecting fishery data of tunas and other pelagic fishes stocks, including size-frequency data of all pelagic fishes as well as sea turtle information. Four (4) observers were sent to Chinese longline vessels on the high seas in 2010, and then six (6) observers in 2011 and eight (8) observers in 2012. During 2013, nine (9) scientific observers were dispatched for the Pacific Ocean. Observer trip information on areas, periods, total hooks and hooks per basket etc. are collected in the Chinese observer programme database.

5.2 Data collection system

Bureau of Fisheries and Fisheries Law Enforcement (BOFFLE), Ministry of Agriculture of China, is leading and supervising the data collection of Chinese tuna fisheries. National-wide meeting on tuna data quality have been organized at least

once a year in recent years. Participants are managers of tuna fishing companies and tuna-related fishery enterprises. Each vessel of every company engaged in tuna fishing is required to report fishery data (such as catch and effort by species, month, gear, area etc.) to China Overseas Fisheries Association (COFA). Data coverage of catch and effort is 100%. COFA and Shanghai Ocean University (SHOU) host and maintain the fishery and observer database for tuna fishery of China

Bycatch data, including those on shark, is collected on monthly basis, though sometimes needs to be verified, by China Overseas Fisheries Association. Such data, together with other data on tuna species, are forwarded to Consultant Team at Shanghai Ocean University to verify the accuracy of the data. Fishing companies that fail to report accurate/reasonable data are reported to the fisheries authority of China by the Team for punishment, including suspension fishing permit of the vessel in question.

Since 2008, each LL vessel is obliged by the BOFFLE to use uniformed logbook and return it back to SHOU before the end of March next year. The data contained in the logbook is evaluated to further promote data collection quality of China.

5.3 Sea turtle and shark conservation measures

For the longline fishing by Chinese vessel, sea turtle is one of the by-catch species that have to be accurately recorded in the logbook. The fisheries authority of China officially issued Logbook for Tuna Fisheries in 2008, and each tuna longline vessel, no matter of its fishing ground, is required to precisely record the sea turtle bycatch. Failure to doing so will lead to sanctions by the government, as China implements performance review on each fishing company on annual basis.

Booklets/posters on some sea turtles are printed and distributed to each longline vessel. Mitigation devices, such as dehookers and cutters, and user manual are provided to each longline vessel since September 2009 free of charge by China Overseas Fisheries Association. In 2012 and 2013, 85 and 72 sets of such devices were dispatched respectively each year to longline vessels, including those operating in WCPFC area. Fishing companies are trained on proper treatment, including safe release, on sea turtle.

Observers are sent to longline vessel since 2002. In 2013, China conducted nine longline scientific observer trips in the whole Pacific Ocean. Only three leatherback turtles were incidentally captured by entangled, hooked with forelimb and hind limb respectlively. All the sea turtles are retrieved on board with proper treatment and are safely released at alive.

Sharks are important bycatch species for the longline fishing by Chinese vessel. Official document on tuna fishery was issued and distributed to each tuna fishing company in 2013 by the Ministry of Agriculture, where detailed requirements are clearly specified to the vessel owner. Such requirements include, for example, VMS, data collecting and reporting, observer, statistical document, seabird and sea turtle mitigation, and bycatch such as shark. With respect of sharks, it is required in the official document that sharks have to be fully utilized, the 5% ratio on sharkfin and

weight of sharks up to the first landing point must be strictly observed. In accordance with CMM 2011-04, oceanic whitetip shark is prohibited to be kept on board as bycatch, such species must be handled strictly in line with the measure.

Each tuna longline vessel, no matter of its fishing ground, is required to precisely record the shark as bycatch in the logbook. 8 shark species, are required to be recorded in the logbook. Failure to record accurately will lead to sanctions by the government, as China implements performance review on each fishing company on annual basis. Pictures of major shark species are printed in the logbook to assist the fishermen easily identify the shark caught in fishing operation.

Shark data is reported to the Commission before the deadline of data submission. In 2013, 478 tons of shark are caught as bycatch in WCPFC by Chinese fishing fleet, most of which are blue sharks which constitutes almost 94.8% of the total bycatch of shark.

CMMs on sea turtles and sharks adopted by WCPFC and other t-RFMOs are translated into Chinese and distributed to each longline company for their compliance. National-wide annual conference on tuna fishing is held each year, where major conservation measures are explained to the meeting participants. Cases on violation punishment are another major issue during the meeting to call the attention of each company on compliance.

Table 1 Number of Chinese tuna fishing vessels operating in the WCPFC Convention area in 2009-2013

Year	LL	PS	Total
2009	219	12	231
2010	244	12	256
2011	275	12	287
2012	286	13	299
2013	379	14	393

Note: LL vessels include chartered vessels

Table 2 Nominal catch of tuna and tuna-like species by the Chinese tuna fishery in the WCPFC Convention area in 2009-2013

（Unit of catch: MT in round weight）

Year	Gear	ALB	BET	YET	SKJ	SWO	BIL	OTH	Total
2009	LL	19906	9793	6318	0	1569	1335	2598	41519
	PS	0	1535	7073	67635	0	0	406	76649
	Total	19906	11328	13391	67635	1569	1335	3004	118168
2010	LL	16970	8895	2356	0	929	1255	896	31806
	PS	0	1536	9925	42255	0	0	0	53716
	Total	16970	10431	12281	42255	929	1255	896	85017
2011	LL	11996	11139	4598	0	1971	1768	1891	33363
	PS	0	843	8514	68194	0	0	0	77551
	Total	11996	11982	13112	68194	1971	1768	1891	110914
2012	LL	24826	11324	6004	0	2201	2574	2547	49476

	PS	0	222	4623	44303	0	0	0	49148
	Total	24826	11546	10627	44303	2201	2574	2547	98624
2013	LL	24162	10671	4638	0	1840	2102	1321	44734
	PS	0	170	8051	73607	0	0	2	81830
	Total	24162	10841	12689	73607	1840	2102	1323	126564

Note: BIL includes striped marlin, blue marlin and black marlin;
OTH includes sharks and other species.

Table 3 Catch of non-target species by the Chinese LL tuna fishery in the WCPFC Convention Area from 2010 to 2013 (Unit of catch: MT)

Species	**Billfish**			**Sharks**		
	Striped marlin	**Blue marlin**	**Black marlin**	**Blue shark**	**Shortfin mako**	**Oceanic Whitetip**
2010	132	1094	29	506	133	532
2011	370	1226	172	726	408	0
2012	524	1795	255	1126	516	0
2013	165	1926	11	453	25	0