CHINA'S TUNA FISHERY IN IOTC WATERS IN 2000

by

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FISHING ACTIVITIES

Up to now, longlining has been the only fishing method applied by Chinese fishing companies for tuna and tuna-like species in the IOTC water. As shown in table 1, 98 tuna longliners from 11 fishing companies are operating in the Indian Ocean in 2000. Fishing area of Chinese fleet in 2000 was $55-85^{\circ}E, 10^{\circ}N-15^{\circ}S$ The tuna fleet is dominated by small-scale longliners with the Loa between 24m and 30m, which accounts for about 80 percent, as showed table 2.

The total nominal catch of tuna and tuna-like species in the IOTC waters is 6,507MT in 2000, 5 percent increase compared with that in 1999, see table 3.

Compared with the previous year, fishing effort in the West Indian Ocean has increased greatly. In 1999, number of hooks deployed in the West part only accounted for 2% of the total fishing effort in the Ocean. In 2000, the number of hooks in the same part accounts for 21.8 % of the total fishing effort (See table 4). This might indicate a tendency of westward movement of the fishing fleet.

CPUE in the Indian Ocean is shown in table 5a and 5b. CPUE varies from 266 to 351gk/1000hooks, with the mean value 309.2 kg/1000hooks. The poorest CUPE occurred in March, while the highest CUPE in August. CPUE for the big eye decreased by 6 percent, from 134.34 kg/1000 hooks to 125.72kg/1000 hooks. CUPE of yellowfin tuna decreased from 133.75 in 1999 to 110.01 kg/1000kg in 2000, down 17.7 percent. While CPUE of swordfish increased from 14.00 to 17.34kg/1000 hooks.

Table 6 is area breakdown of Task I catches by the Chinese longline fishery in 1999 and 2000. Estimated discards last two years are indicated in table7.

HISTORICAL CATCH REVISION

It should be pointed out that original catch statistics submitted by the companies to this working group was based on their sale records because of no observer program being carried out so far in IOTC waters. Last year, this working group did a revision of historical catch data so that reported catch data submitted by China is in the line with the requirement of IOTC. The revised catch data reported to the IOTC Secretary was based on relationship between weights of processing landings to nominal catch recommended by Anon (1998). The raising factors are as the follows:

Fresh landed weight to whole weight:

Yellowfin and bigeye tuna: 1.09

Swordfish and billfish: 1.16

Albacore and tunas:1.10

Sharks: 1.55

Others: 1.10

CATCH STATISTICS AND FISHERIES MANAGEMENT

IOTC Secretary visiting China.

In order to improve the quality of catch statistics, IOTC secretary Dr. David Ardill was invited to visit China. After discussing with Chinese tuna working group and fisheries administration and management officials in charge of distant water fisheries about the catch collection system during his visiting Shanghai Fisheries University and Zhejiang Province, Dr. Ardill suggested that a scientist from the tuna working group should visit the IOTC secretariat after WPTT this year. The Chinese scientist can work with the secretariat on the IOTC logbook and sampling data processing program. He can also, by taking this chance, assess the possibility of using the IOTC soft ware for recording and analyzing the Chinese tuna fishing in the Indian Ocean and discuss the logbook design for use in these fisheries.

Promise to host the Fourth WPTT meeting in Shanghai next year.

In supporting the work of IOTC secretariat, China government will hold the fourth WPTT meeting in Shanghai next year. By this opportunity, more Chinese fisheries scientists and representatives from tuna fishing industries will have chance to know the IOTC and understand the importance of the work of the tuna working group. It will in turn promote the improvement of tuna catch report system in China.

Observer Programme

Last January, the Atlantic tuna fishery coordinating working group was established, which comprised representatives from China fisheries Association, scientific research institutes, tuna working group and tuna fishing industries in Atlantic Ocean. The coordinating working group has decided to send two observers to the fishing fleet in the Atlantic this year. Up to now, one of them has been on board the tuna longliner, another one will dispatch in July. Establishment of Indian Ocean tuna fishery coordinating working group has been put on the working agenda of China Fisheries Association, preparing work is on the way. Hopefully, tuna scientific observer programme can be carried out in the IOTC waters next year.

REFERENCES

Anon., 1998, Indian Ocean Tuna Fisheries Data Summary,1986-1996, IOTC Data Summary No.18, 180pp.

Table 1. Chinese Tuna Fleet operating in Indian Ocean.

No	**Name of Fishing Company**	1995	1996	1997	1998	1999	2000
1	Yantai Fisheries Group Co.	8	16	16	16	10	10
2	Guangdong Provincial Pelagic Fishery General Company*	4	11	9	24	29	25
3	Guangdong Nanyang Fishery Co.		15	12	19	10	15
4	Shandong Group Fishery Co.		10	10	10	1	--
5	Zhanjiang Deep-Sea Fisheries Development Co.			14	14	14	14
6	Ningbo Deep-Sea Fishery Co.			4	4	--	--
7	CNFC Deep-Sea Fisheries Co.			10	14	15	14
8	Guangxi Beihai Deep-Sea Fisheries Company			8	8	--	--
9	Zhoushan Marine Fisheries Co.			6	6	--	6
10	Fujian Deep-Sea Group Fisheries Co.				5	5	--
11	Shanghai Second Deep Sea Fishing Company (Ltd)					2	--
12	Shangdong Deep Sea Fishing Company					1	2
13	Shantou Yuedong Deep Sea Fishing Development General Co.					3	--
14	Zhejiang Ocean Fisheries Group Co. Ltd.					4	4
15	Zhejiang Zhoushan General Pelagic Fishing Company(Ltd)						1
16	Guangdong Haitong Pelagic Fishing Company (Ltd)						6
17	Tianjing Deepsea Fishing Company						1
18	ShenZhen Overseas Fisheries Co., Ltd.					2	--
	Total	12	52	89	120	96	98

* The former translation is Guangdong General Deep-Sea Fisheries Co.

Table 2 Composition of Chinese tuna longliners by Loa

Loa (m)	< 24m	24~30 m	30~40 m	40~50m	> 50m	Total
Number of fishing boats	7	79	4	6	2	98
%	7.1	80.6	4.1	6.1	2.0	100

Table 3 Catches of tunas and tuna-like species during 1995-2000

(round weight in MT)

Species	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Yellowfin tuna	137.89	493.77	750.14	402.1	2,335	2,361.5
Bigeye tuna	139.52	466.3	1,651.68	2,164.48	2,182	2,698.6
Swordfish	71.34	237.8	255.2	117.16	270	372.2
Albacore					189	2.8
Sharks					187	98.4
Billfish					287	485.9
Others*	95.7	299.42	306.77	396.43	712	487.6
Total	444.45	1,497.29	2,963.79	3,080.17	6,162	6,507

Table 4 Fishing Effort in IOTC Waters between 1999 and 2000

Year	Area	Total hooks(x1000)
1999	East	14,939
	West	317
2000	East	17,628
	West	3,839

Table 5a CPUE of Main Tuna Species in IOTC Waters in 1999 and 2000 (kg/1000hooks)

Year	Total hooks(x1000)	BET	YFT	SWO
1999	15,256	134.34	133.75	14.00
2000	21,466	125.72	110.01	17.34

Table 5b Fishing Effort and CPUE in IOTC waters in 2000 by month

Month	Jan	Feb.	March	Apr.	May	June
Hooks (x1000)	1,924.5	2,003.9	2,254.3	2,355.1	2,244.6	1,897.5
CPUE (kg/1000 hooks)	311.7	288.9	266.5	299.9	271.9	291.0
Month	July	Aug.	Sept.	Oct.	Nov.	Dec.
Hooks (x1000)	1,005.3	993.4	957.4	1,458.4	2,086.5	2,285.4
CPUE (kg/1000 hooks)	338.0	351.0	327.8	346.3	314.1	304.2

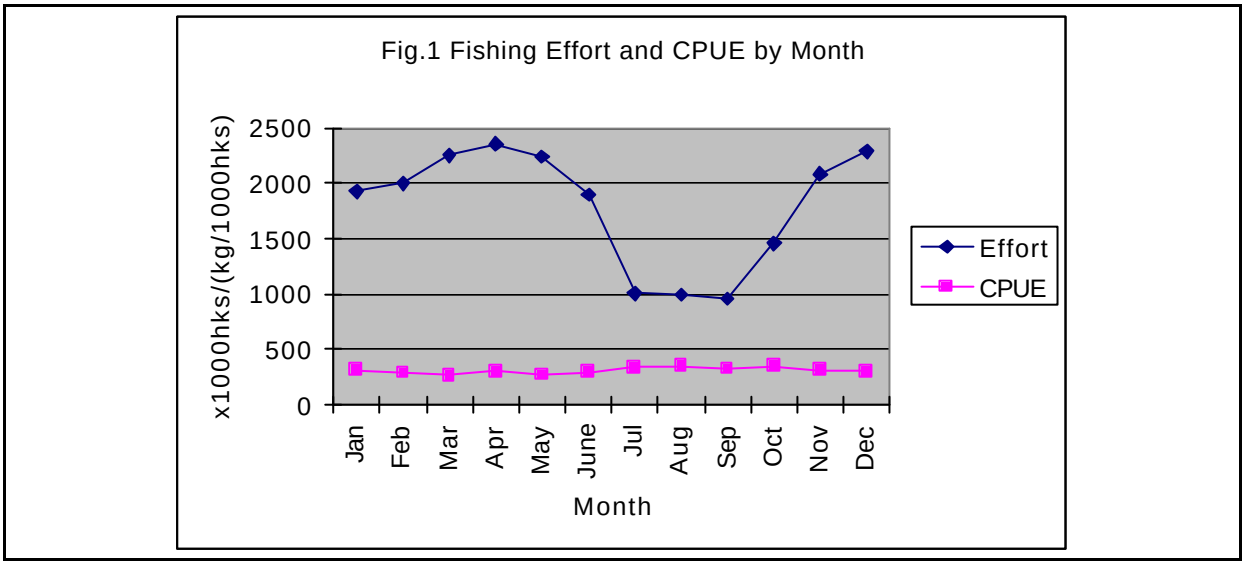

Table 6. Nominal Catch in Metric tons from Chinese Longline Fleet by Gear and Fishing Areas in 1999 and 2000 (IOTC Form 1)

Year	Gear	Area	BET	YFT	SWO	ALB	BIL	SHK	OTH	TOTAL
1999	LL	East	2113	2206	262	101	287	187	712	5868
	LL	West	69	129	8	88	//	//	//	294
	Sum		2182	2335	270	189	287	187	712	6162
2000	LL	East	1822	2055.2	293.6	0	343.8	94.8	308.5	4918
	LL	West	876.5	306.3	78.6	2.8	142.1	3.6	179.1	1589
			2698.6	2361.5	372.2	2.8	485.9	98.4	487.6	6507

Table 7. Discards Reported in MT from Chinese Longline Fleet in 1999-2000 IOTC Form 1

Year	Gear	Area	BET	YFT	SWO	ALB	BIL	SHK	OTH
1999	LL	East	4	5.5	//	//	3.1	14.5	5.6
2000		West	13	16	0	0	12	16	11