



## [China] National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2013

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### INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

<p>In accordance with IOTC Resolution 10/02, final scientific data for the previous year was provided to the Secretariat by 30 June of the current year, <b>for all fleets other than longline</b> [e.g. for a National report submitted to the Secretariat in 2013 final data for the 2012 calendar year must be provided to the Secretariat by 30 June 2013)</p>	<p>Not applicable</p>
<p>In accordance with IOTC Resolution 10/02, provisional <b>longline data</b> for the previous year was provided to the Secretariat by 30 June of the current year [e.g. for a National report submitted to the Secretariat in 2013, preliminary data for the 2012 calendar year was provided to the Secretariat by 30 June 2013).</p> <p><b>REMINDER:</b> Final longline data for the previous year is due to the Secretariat by 30 Dec of the current year [e.g. for a National report submitted to the Secretariat in 2013, final data for the 2012 calendar year must be provided to the Secretariat by 30 December 2013).</p>	<p>YES 29/06/2013</p>
<p>If no, please indicate the reason(s) and intended actions:</p>	

## Executive Summary [Mandatory]

Deep-frozen longline and ice fresh-longline are the only two fishing gears used by Chinese vessels to catch tuna and tuna-like species in the IOTC waters. The number of active deep-frozen longline vessels increased from 10 in 2011 to 31 in 2012, while the number of ice-fresh longline vessels kept at five. Chinese longline fleet caught 2943 MT of tropical tunas (BET and YFT) in 2012, which is higher than the catch in 2011(431 MT). The albacore tuna catch in 2012 was 1835 MT, which is also higher than the catch in 2011 (1414 MT). Implementation of both the logbook and observer programs is going on for the Chinese longline fleet in the Indian Ocean. Catch and effort data collection of bycatch species have been improved. One scientific observer was dispatched in 2012 and the trip report has been submitted.

### 1. BACKGROUND/GENERAL FISHERY INFORMATION [MANDATORY]

Longline has been the only fishing gear for the China mainland fleets in the IOTC waters since 1995. One hundred-twenty longline fishing boats were recorded at the peak time in 1998, which mainly consisted of small non-professional boats reconstructed from trawlers or gill-netters originally operated along China coastal waters. After 1998 the number of fishing boats began to reduce due to poor management, low economic performance and fishing ground shift to other oceans. The total number of tuna fishing boats registered in IOTC Secretariat reduced to 93 in 2001 and further cut down to 63 in 2002. The number of fishing boats active reduced from 46 in 2008 to 32 in 2009 due to the piracy activity, of which 27 belongs to the large-size deep-frozen longliners. Before 2008 the deep-frozen tuna longliners usually operated in waters between 40 °E ~ 90°E and 20°N ~ 40°S. Since 2009, most of the deep-frozen fishing effort shifted to southern Indian Ocean owing to piracy effect. The number of deep-frozen longliners was 15 and 10 in 2010 and 2011, respectively. In 2012, however, more deep-frozen longliners came back to tropical western Indian Ocean and reached a total of 36 in the number of active longline vessels.

### 2. FLEET STRUCTURE [MANDATORY]

The Chinese tuna fleet consisted of deep frozen longliners (Deep LL) and ice fresh longliners (Ice LL) in the Indian Ocean. The fleet structure was shown in **Table 1**. The number of deep frozen longliners has returned to the level of 2008, while the number of Ice-fresh longliners kept at five since 2009.

**Table 1:** Number of vessels operating in the IOTC area of competence, by gear type and size

Year	Gear	Vessel size range	Number of vessel
2006	Deep LL	GRT over 400	41
	Ice LL	GRT 200- 400	26
2007	Deep LL	GRT over 400	41
	Ice LL	GRT 200- 400	26
2008	Deep LL	GRT over 400	31
	Ice LL	GRT 200- 400	15
2009	Deep LL	GRT over 400	27
	Ice LL	GRT 200- 400	5
2010	Deep LL	GRT over 400	15
	Ice LL	GRT 200- 400	5
2011	Deep LL	GRT over 400	10
	Ice LL	GRT 200- 400	5
2012	Deep LL	GRT over 400	31
	Ice LL	GRT 200- 400	5



### 3. CATCH AND EFFORT (BY SPECIES AND GEAR) [Mandatory]

Annual catch and effort of Chinese fleet by gear and primary species in the IOTC area of competence were shown in **Table 2**. In 2012, more deep frozen longliners returned to target bigeye tuna. The Deep LL effort (hooks deployed) in 2012 was 156% higher than that in 2011. The Ice LL effort in 2012 was 212% higher than that in 2011.

**Table 2.** Annual catch and effort by gear and primary species in the IOTC area of competence. [Mandatory]

**Table 2a**     **Albacore**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	54
2007	Deep LL	27644	77
2008	Deep LL	22215	145
2009	Deep LL	14417	210
2010	Deep LL	15305	3946
2011	Deep LL	2858	972
2012	Deep LL	7310	7

**Table 2b**     **Albacore**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	2
2007	ICE LL	2431	39
2008	ICE LL	3931	13
2009	ICE LL	621	179
2010	ICE LL	1689	803
2011	ICE LL	1278	442
2012	ICE LL	3985	1828

**Table 2c**     **Bigeye tuna**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	8236
2007	Deep LL	27644	6974
2008	Deep LL	22215	4643
2009	Deep LL	14417	2657
2010	Deep LL	15305	1394
2011	Deep LL	2858	234
2012	Deep LL	7310	2404

**Table 2d**     **Bigeye tuna**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	466
2007	ICE LL	2431	193
2008	ICE LL	3931	320
2009	ICE LL	621	4
2010	ICE LL	1689	4
2011	ICE LL	1278	6
2012	ICE LL	3985	1

**Table 2e**     **Yellowfin tuna**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	3592
2007	Deep LL	27644	2652
2008	Deep LL	22215	747
2009	Deep LL	14417	449
2010	Deep LL	15305	492
2011	Deep LL	2858	189
2012	Deep LL	7310	308



**Table 2f Yellowfin tuna**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	265
2007	ICE LL	2431	173
2008	ICE LL	3931	150
2009	ICE LL	14417	4
2010	ICE LL	1689	4.2
2011	ICE LL	1278	2
2012	ICE LL	3985	230

**Table 2g Swordfish**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	742
2007	Deep LL	27644	441
2008	Deep LL	22215	387
2009	Deep LL	14417	240
2010	Deep LL	15305	790
2011	Deep LL	2858	160
2012	Deep LL	7310	204

**Table 2h Swordfish**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	33
2007	ICE LL	2431	9
2008	ICE LL	3931	32
2009	ICE LL	621	1
2010	ICE LL	1689	2
2011	ICE LL	1278	1
2012	ICE LL	3985	<1

**Table 2i Blue marlin**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	Not available
2007	Deep LL	27644	Not available
2008	Deep LL	22215	Not available
2009	Deep LL	14417	75
2010	Deep LL	15305	105
2011	Deep LL	2858	38
2012	Deep LL	7310	89

**Table 2j Blue marlin**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	Not available
2007	ICE LL	2431	Not available
2008	ICE LL	3931	Not available
2009	ICE LL	621	1
2010	ICE LL	1689	<1
2011	ICE LL	1278	1
2012	ICE LL	3985	<1

**Table 2k Striped marlin**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	Not available
2007	Deep LL	27644	Not available
2008	Deep LL	22215	Not available
2009	Deep LL	14417	87
2010	Deep LL	15305	89
2011	Deep LL	2858	31
2012	Deep LL	7310	58

**Table 2l Striped marlin**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	Not available
2007	ICE LL	2431	Not available
2008	ICE LL	3931	Not available
2009	ICE LL	621	0
2010	ICE LL	1689	1
2011	ICE LL	1278	1
2012	ICE LL	3985	<1

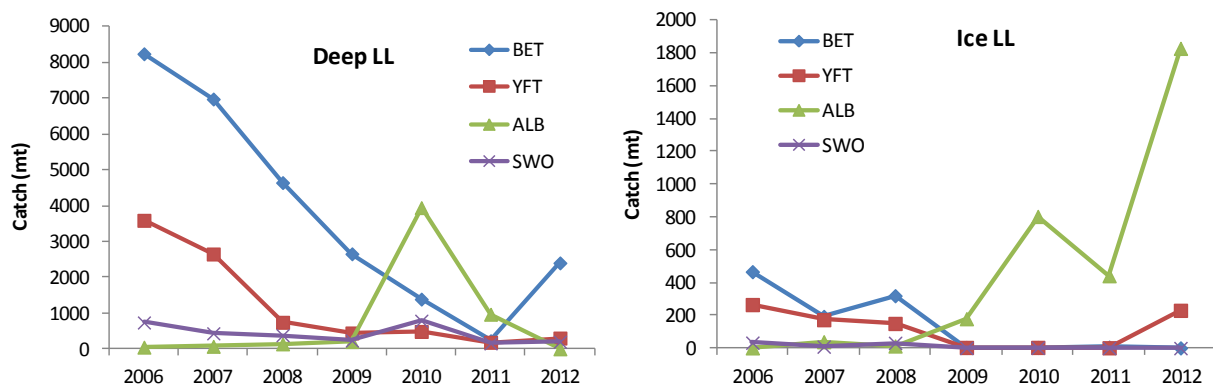
**Table 2m Black marlin**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	Deep LL	31643	Not available
2007	Deep LL	27644	Not available
2008	Deep LL	22215	Not available
2009	Deep LL	14417	33
2010	Deep LL	15305	16
2011	Deep LL	2858	11
2012	Deep LL	7310	9

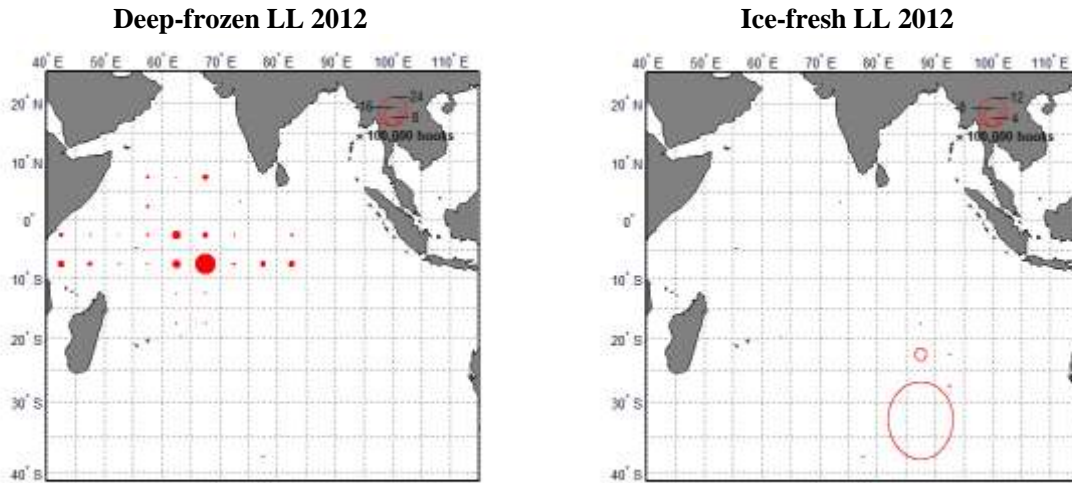
**Table 2n Black marlin**

Year	Gear	Effort (1000 hooks)	Catch (MT)
2006	ICE LL	3642	Not available
2007	ICE LL	2431	Not available
2008	ICE LL	3931	Not available
2009	ICE LL	621	0
2010	ICE LL	1689	<1
2011	ICE LL	1278	<1
2012	ICE LL	3985	3

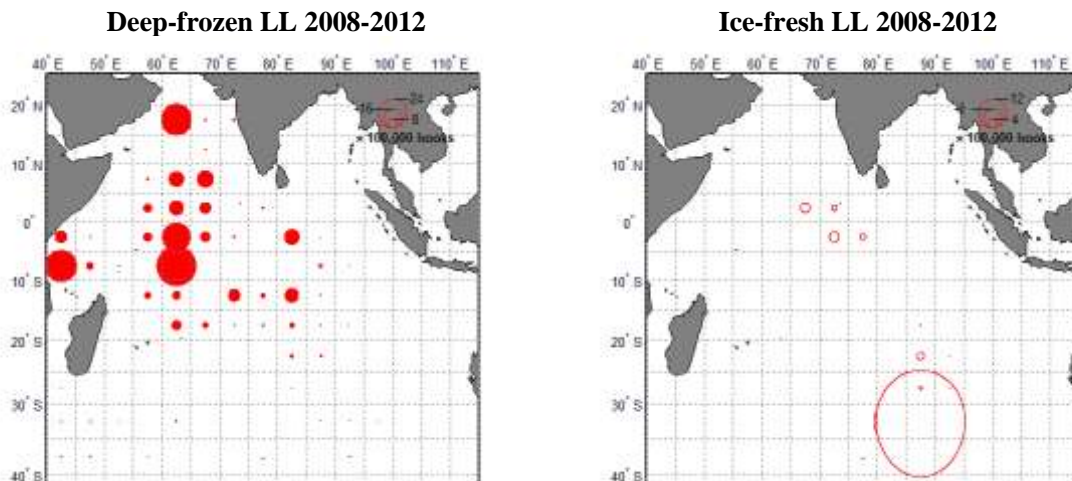
**Figure 1.** Historical annual catch for the national fleet, by gear and primary species, for the IOTC area of competence for the entire history of the fishery/fleet. **[Mandatory]**



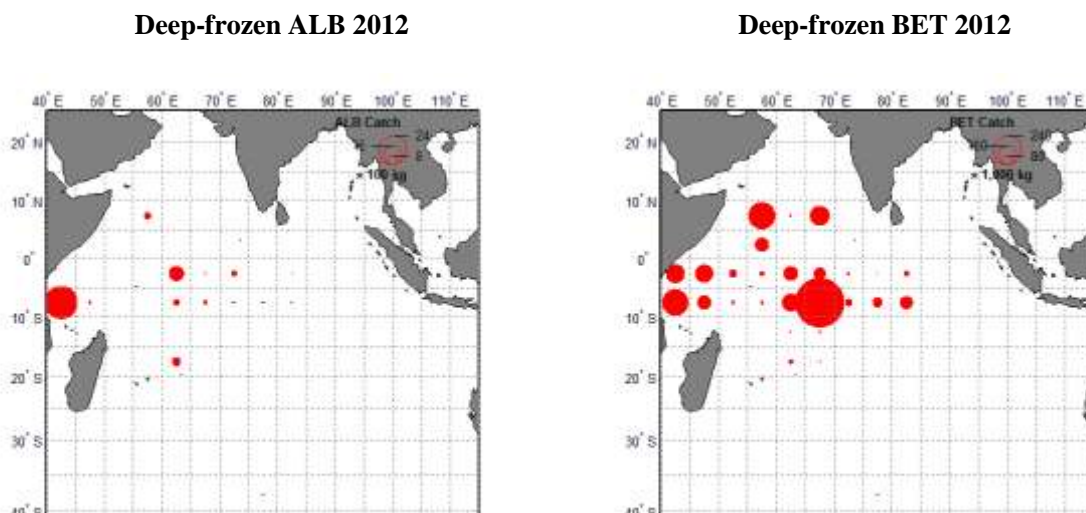
**Figure 2a.** Map of the distribution of fishing effort, by gear type for the national fleet in the IOTC area of competence (most recent year e.g. 2012). [Mandatory]



**Figure 2b.** Map of the distribution of fishing effort, by gear type for the national fleet in the IOTC area of competence (average of the 5 previous years e.g. 2008–2012). [Mandatory]

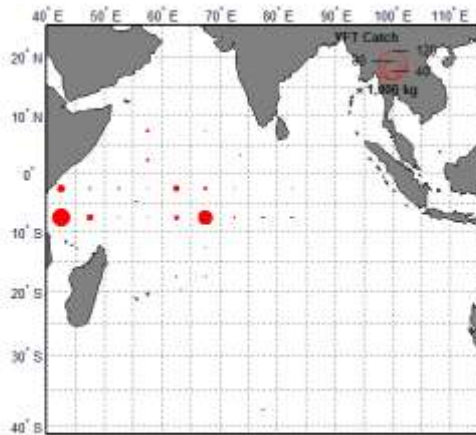


**Figure 3a.** Map of distribution of fishing catch, by species for the national fleet, in the IOTC area of competence (most recent year e.g. 2012). [Mandatory]

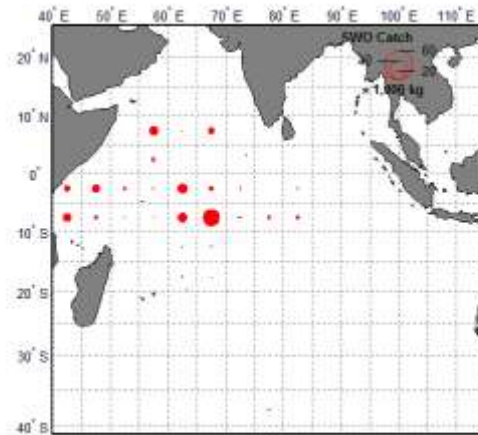




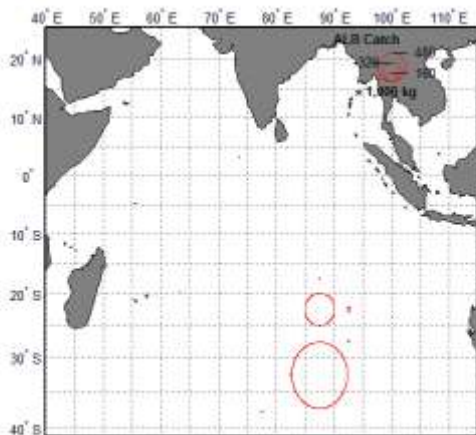
**Deep-frozen YFT 2012**



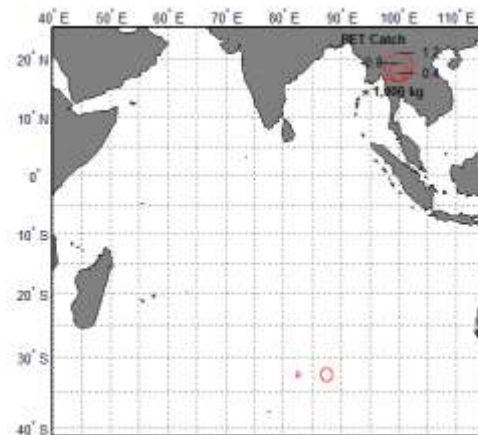
**Deep-frozen SWO 2012**



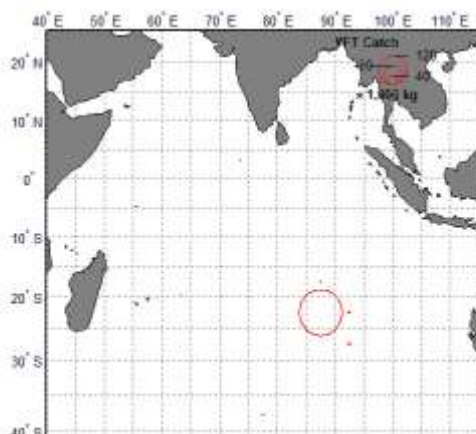
**Ice-fresh ALB 2012**



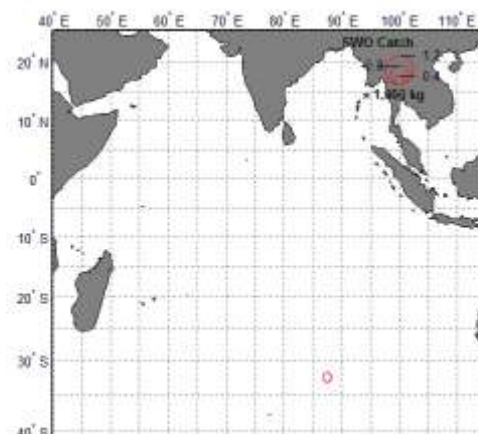
**Ice-fresh BET 2012**



**Ice-fresh YFT 2012**



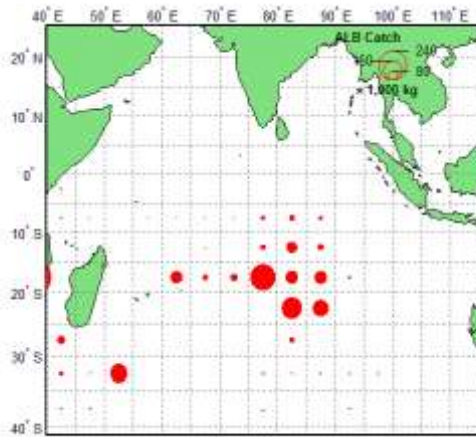
**Ice-fresh SWO 2012**



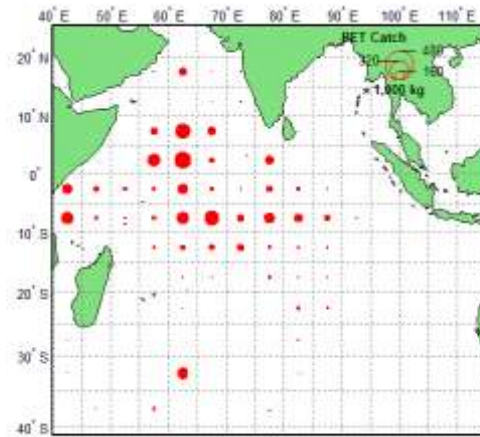


**Figure 3b.** Map of distribution of fishing catch, by species for the national fleet, in the IOTC area of competence (average of the 5 previous years e.g. 2008–2012). [Mandatory]

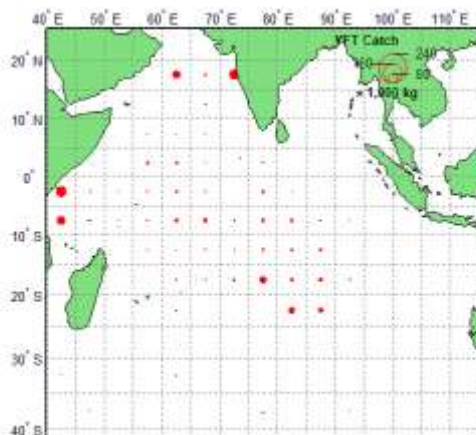
**Deep-frozen ALB 2008-2012**



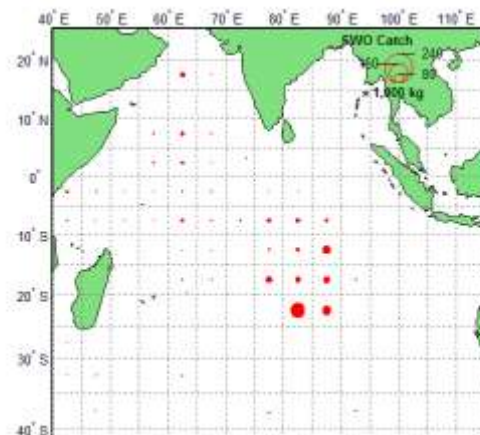
**Deep-frozen BET 2008-2012**



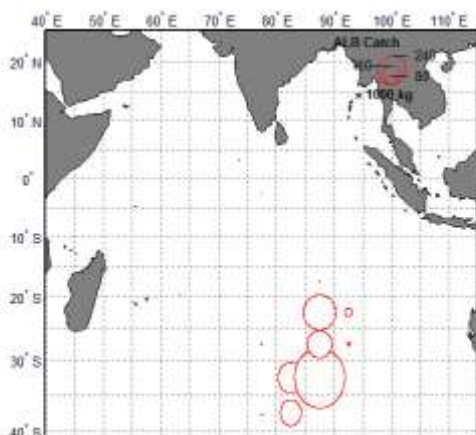
**Deep-frozen YFT 2008-2012**



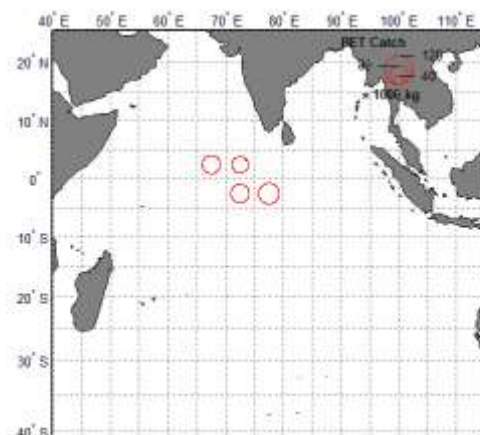
**Deep-frozen SWO 2008-2012**



**Ice-fresh ALB 2008-2012**

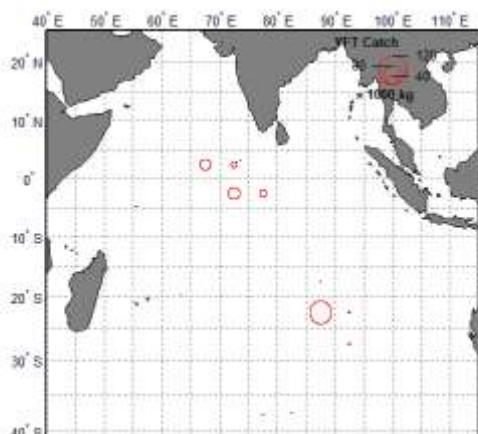


**Ice-fresh BET 2008-2012**

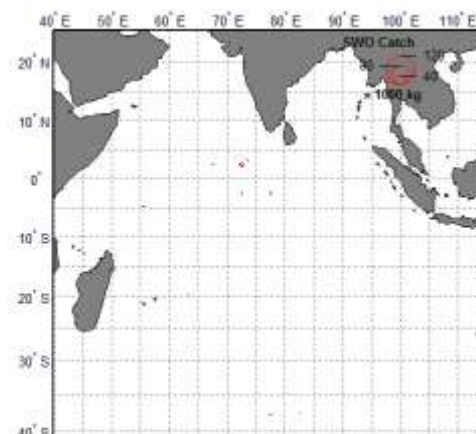




**Ice-fresh YFT 2008-2012**



**Ice-fresh SWO 2008-2012**



**4. RECREATIONAL FISHERY [Mandatory]**

No recreational fishing activities.

**5. ECOSYSTEM AND BYCATCH ISSUES [Mandatory]**

China is making its effort in contribution of data collection for ecosystem and bycatch issues in the Indian Ocean, based on our observer and logbook programs. Scientists and analysts from Shanghai Ocean University (SHOU) take a majority of work in China’s tropical tuna and bycatch research in the Indian Ocean. Although not conducted yet, national plans of action for sharks and seabirds are under developments. We are also planning an ecological risk analysis for sharks using data from our observer program and other data sources. We have provided scientific data from our observer programs and these data were used for ecological risk analysis for sharks on WPEB08. In accordance with various management resolutions, China is now enhancing its management and conservations measures for important bycatch species (i.e. sharks, seabirds and marine mammals).

**5.1 Sharks [Mandatory]**

China is developing a national plan of action for sharks. China is also collecting biological and ecological information based on longline observer program. Now, species-specific catch and effort data are being recorded in the logbook data collection. However, in consideration of fishermen’s poor knowledge in species identification and workload onboard, complete recording species on the recommended list is hardly finished for them at least for the current years. With the development of species identification cards and manuals, this issue will be solved in the near future.

**Table 3:** Total number and weight of sharks, by species, retained by the national fleet in the IOTC area of competence (for the most recent five years at a minimum, e.g. 2008–2012). **[Mandatory]**

Table 3a		Blue shark	
Year	Gear	Catch (number)	Catch (kg)
2007	Deep LL	No data	108000
2008	Deep LL	6965	314552
2009	Deep LL	5009	239394
2010	Deep LL	2410	100282
2011	Deep LL	716	31547
2012	Deep LL	439	17560



**Table 3b Blue shark**

Year	Gear	Catch (number)	Catch (kg)
2007	ICE LL	No data	4000
2008	ICE LL	452	26743
2009	ICE LL	64	2060
2010	ICE LL	56	1818
2011	ICE LL	58	2529
2012	ICE LL	1630	48484

**Table 3c Oceanic whitetip shark**

Year	Gear	Catch (number)	Catch (kg)
2007	Deep LL	No data(unclassified)	No data(unclassified)
2008	Deep LL	No data(unclassified)	No data(unclassified)
2009	Deep LL	1346	55839
2010	Deep LL	5125	160026
2011	Deep LL	1044	33559
2012	Deep LL	No data(unclassified)	No data(unclassified)

**Table 3d Oceanic whitetip shark**

Year	Gear	Catch (number)	Catch (kg)
2007	ICE LL	No data(unclassified)	No data(unclassified)
2008	ICE LL	No data(unclassified)	No data(unclassified)
2009	ICE LL	0	0
2010	ICE LL	7	282
2011	ICE LL	13	501
2012	ICE LL	Not available	7768

**Table 3e Shortfin mako shark**

Year	Gear	Catch (number)	Catch (kg)
2007	Deep LL	Not available	32414
2008	Deep LL	1705	57177
2009	Deep LL	1969	72072
2010	Deep LL	3100	120826
2011	Deep LL	910	34297
2012	Deep LL	132	6004

**Table 3f Shortfin mako shark**

Year	Gear	Catch (number)	Catch (kg)
2007	ICE LL	Not available	2341
2008	ICE LL	148	7716
2009	ICE LL	80	3246
2010	ICE LL	47	1996
2011	ICE LL	37	1108
2012	ICE LL	9932	66886

**Table 4:** Total number of sharks, by species, released/discarded by the national fleet in the IOTC area of competence (for the most recent five years at a minimum, e.g. 2008–2012). Where available, include life status upon released/discard. **[Desirable]**

We are unable to provide estimates of total discard and release status since this information was not routinely recorded in our current logbook.

## 5.2 Seabirds [Mandatory]

Most of China tuna longline vessels are operating in the tropical areas of IOTC waters and there are no interactions with seabirds. No seabird mortality was observed by China tuna longline fleet, which was confirmed by national observer programme. For a few number of vessels operated in the south of 25° S, mitigation measures were implemented according to the management measures.

## 5.3 Marine Turtles [Mandatory]

Observers are responsible for recording species specific interactions of marine turtles in longline fisheries, including number of caught, fate, and release status. No national plan of action for marine turtles is under development. No sea turtle was reported to be incidentally caught by Chinese longline vessels in 2012.

## 5.4 Other ecologically related species (e.g. marine mammals, whale sharks) [Desirable]

Observers are responsible for recording species specific interaction of marine mammals in longline fisheries, including number of caught, fate, and release status. No national plan of action for marine turtles is under development.

**Table 5.** Observed annual catches of species of special interest by species (seabirds, marine turtles and marine mammals) by gear for the national fleet, in the IOTC area of competence (for the most recent five years at a minimum, e.g. 2007–2011 or to the extent available). **[Mandatory]**

**Table 5a** Marine turtles

Year	Gear	Species	Catch (number)	Species	Catch (number)
2008	Deep LL		No mortality		
2009	Deep LL		No mortality		
2010	Deep LL		No mortality		
2011	Deep LL		No mortality		
2012	Deep LL		No mortality		

**Table 5b** Marine turtles

Year	Gear	Species	Catch (number)	Species	Catch (number)
2008	ICE LL		No mortality		
2009	ICE LL		No mortality		
2010	ICE LL		No mortality		
2011	ICE LL		No mortality		
2012	ICE LL		No mortality		

**Table 5c** Marine mammals

Year	Gear	Species	Catch (number)	Species	Catch (number)
2008	Deep LL		No mortality		
2009	Deep LL		No mortality		
2010	Deep LL		No mortality		
2011	Deep LL		No mortality		
2012	Deep LL		No mortality		

**Table 5d Marine mammals**

Year	Gear	Species	Catch (number)	Species	Catch (number)
2008	ICE LL		No mortality		
2009	ICE LL		No mortality		
2010	ICE LL		No mortality		
2011	ICE LL		No mortality		
2012	ICE LL		No mortality		

## 6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS [Mandatory]

**6.1. Logsheet data collection and verification** (including date commenced and status of implementation)  
China started the pilot logbook data submission system in 2005 in order to obtain more detailed information about catch and fishing effort as required by the IOTC. In 2006 the Bureau of Fisheries, Ministry of Agriculture, required that all tuna fishing boats need to fill logbook and return to the Bureau of Fisheries. The Bureau also announced that implementation of logbook work will be considered as one of the main factors for renewing fishing permission and licenses. Under the support of China Overseas Fisheries Association (COFA) and cooperation of the tuna fishing companies, China's logbook system has been carried out smoothly as a normal data collection work. Since 2009, 100% logbook coverage for the longline fishery has been realized. So far about 85% of the logbooks have been returned to SHOU through the Bureau of Fisheries. All the information of those logbooks has entered the national tuna fishery database in SHOU and is being processed by the tuna technical working group at SHOU. Preliminary analysis showed that the data quality of some logbook needs to be further improved.

**6.2. Vessel Monitoring System** (including date commenced and status of implementation)

All the Chinese longline vessels operating in the Indian Ocean have been equipped with VMS system.

**6.3. Observer programme** (including date commenced and status; number of observer, include percentage coverage by gear type)

Under authorization by the Bureau of fisheries, Ministry of Agriculture, the SHOU has been in charge of the national tuna observer program in the Pacific Ocean, Atlantic Ocean and Indian Ocean. China began to implement tuna Scientific Observer programme in IOTC in 2002. So far, the program has been carried out normally under the support of COFA. Observers have been dispatched each year since then. No observer was dispatched for the year 2011 due to the piracy activity (the observer has been selected and trained). One observer was sent in 2012. Graduate/Senior students majoring in marine fisheries science & technology or marine fisheries resources from SHOU are chosen to take the task as scientific observers.

**Table 6.** Annual observer coverage by operation, e.g. longline hooks, purse seine sets (for the most recent five years at a minimum, e.g. 2008–2012 or to the extent available). [Mandatory]

Year	Gear	Hooks deployed	Number of observers	Hooks observed	Coverage (%)
2007	Deep LL	27,643,505	2	Data to be recovered	Data to be recovered
2008	Deep LL	22,215,000	2	Data to be recovered	Data to be recovered
2009	Deep LL	14,417,000	2	Data to be recovered	Data to be recovered
2010	Deep LL	15,304,660	1	153,000	1
2011	Deep & ICE LL	0	0	0	0
2012	Deep LL	11,295,050	1	218,520	2

**Figure 4.** Map showing the spatial distribution of observer coverage. **[Mandatory]**

Because there was only one observer (one trip) conducted in 2012, here only the observed longline sets were shown (Figure 4). This observer worked on onboard a deep-frozen longliner between October 2012 and January 2013.

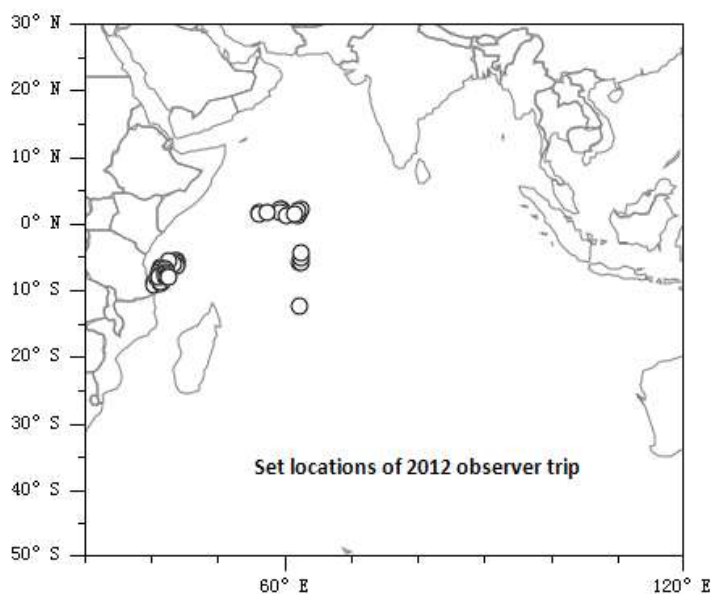


Figure 4 Map showing the observed longline operating sets during the 2012 observer trip

**6.4. Port sampling programme** [including date commenced and status of implementation]

China has set up a port sampling program in early 2012. The program was designed for vessels which return and unload catch in domestic ports.

**Table 7.** Number of individuals measured, by species and gear] **[Mandatory]**

In 2012 there was no unloading at China’s domestic ports for catch from the Indian Ocean tuna fisheries.

**6.5. Unloading/Transshipment** [including date commenced and status of implementation] **[Mandatory]**

**Table 8** Transshipment of China fleet in 2012 (at sea and in port)

Date of Transshipment	Species Transshipped at sea (Unit: metric ton)			
	BET	YFT	SWO	MLS
2012/6/18	131.492	9.739	7.43	1.312
2012/8/23	26.8	3	2.7	
2012/10/19	34.9	3.294		
2012/11/15	141.888	7.678	14.257	10.027
2012/12/16	43.108	5.169	3.422	0.506
2012/12/16	48.753	10.795	3.131	0.447
2012/12/19	45.51	9.716	3.442	0.532
2012/12/20	35.555	3.821	0.623	
2012/12/18	24.161	3.359	2.494	0.444
2012/12/18	39.302	3.633	3.324	0.405
2012/12/17	29.588	3.57	3.386	0.749

2012/12/17	34.782	3.536	3.03	0.309
2012/12/20	71.022	8.753	7.451	1.3
2012/12/19	51.817	6.251	4.127	1.027
2012/12/30	67.022	10.429		0.749
2012/12/31	90.267	11.897		1.207

Date of Transshipment	Port Name	Species Transshipped in port (Unit: metric ton)						
		BET	YFT	SWO	ALB	MLS	Sharks	Others
2012/8/8	MAHE	55.076	1.629	8.475		1.32		
2012/8/8	MAHE	69.031	5.026	6.105				
2012/8/8	MAHE	47.732	2.585	12.695				
2012/8/9	MAHE	43.644	3.77	5.846		4.157		
2012/10/29	PORT LOUIS	84.253	13.26	5.27	0.08	2.845		4.745
2012/10/30	PORT LOUIS	91.62	12.856	4.689	0.225	4.11		6.337
2012/11/8	PORT LOUIS	89.228	12.13	7.37		2.424	1.895	0.562
2012/11/28	PORT LOUIS	114.197	20.863	9.823		1.917		
2012/12/28	MAHE	41.679	8.897	3.354		0.762		

## 7. NATIONAL RESEARCH PROGRAMS [Desirable]

China has launched a couple of domestic research projects regarding tuna fisheries and stock status of key species in the Indian Ocean, which are funded by Shanghai Municipal Education Commission and undertaken by SHOU. **Table 9** shows a representative project. Besides of these specific projects, scientists from Shanghai Ocean University are collecting and analyzing biological and size composition data based on national longline observer program.

**Table 9.** Summary table of national research programs, including dates.

Project title	Period	Countries involved	Budget total	Funding source	Objectives	Short description
Stock assessment and risk analysis of bigeye tuna in the IO	2012-2014	China		Innovation Program of Shanghai Municipal Education Commission, China	Test alternative management strategies and quantify stock risk to these strategies	

## 8. IMPLEMENTATION OF SCIENTIFIC COMMITTEE RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT TO THE SC. [Mandatory]

**Table 9.** Respond with progress made to recommendations of the SC and specific Resolutions relevant to the work of the Scientific Committee [to be updated annually to include most recent Conservation and Management Measures adopted by the Commission].

Res. No.	Resolution	Scientific requirement	CPC progress
05/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1–12	Paragraph 1- China is improving its species specific data collection in logbook task, also is trying to make reliable bycatch estimates for commonly captured sharks. Paragraph 2- Research plan was developed. Stock assessments not conducted yet.



Res. No.	Resolution	Scientific requirement	CPC progress
			<p>Paragraph 3- China is encouraging full utilisation of sharks captured by all longline vessels operation in the IOTC areas.</p> <p>Paragraph 4- The 5 % ratio strategy was being implemented on Chinese longline vessels.</p> <p>Paragraph 5- The 5 % ratio strategy was not fully reviewed by China.</p> <p>Paragraph 6- China is making effort to reduce finning activity on board tuna vessel.</p> <p>Paragraph 7- non-valuable sharks captured (e.g. crocodile shark) are discarded (most alive).</p> <p>Paragraph 8- circle hook experiments were conducted by researchers in Shanghai Ocean University</p> <p>Paragraph 9- China is making effort to collect biological (in particular reproductive info.) data through its observer program, to study reproduction of commonly captured sharks. However, sample size from IO was small, compared with the Pacific Ocean.</p> <p>Paragraph 10- The commission has provided assistances such as species identification and observer training guideline for China.</p> <p>Paragraph 11- no response</p> <p>Paragraph 12- no response</p>
10/02	Mandatory statistical requirements for IOTC members and cooperating non contracting parties	Paragraphs 1–7	<p>Paragraph 1- China has submitted required data to the secretariat.</p> <p>Paragraph 2- China has provided total catch by species and gear for tunas, billfishes, three shark species (BSH, SMA, OCS), and others.</p> <p>Paragraph 3- China has provided catch and effort by species and gear (Deep LL and Ice LL) for tunas, billfishes, three shark species (BSH, SMA, OCS), and others, by 5° grid area and month strata.</p> <p>Paragraph 4- China has provided size data for BET and ALB captured by LL. These size data are based on individual weight data in logbooks. China has no size data from observer trip for 2011 since no observer was sent out to work due to piracy activity.</p> <p>Paragraph 5- No response.</p> <p>Paragraph 6- Data has been submitted before deadline.</p> <p>Paragraph 7- No response.</p>
10/06	<p>On reducing the incidental bycatch of seabirds in longline fisheries.</p> <p><b>Reminder:</b> Resolution 12/06 will supersede Resolution 10/06 on 1 July 2014</p>	Paragraphs 3–7	<p>Paragraph 3- All Chinese longliners operating in the Indian Ocean are equipped with bird scaring lines (Measure in Column A), and longliners fishing in the south of 25° S are required to make their bird scaring lines work during the whole operating period. Offal discharge control (Measure in Column B) is the second measure that has been implemented for fishing south of 25° S.</p> <p>Paragraph 4- The measure has been implemented (Bird-scaring lines).</p> <p>Paragraph 5- Two measures used by Chinese longliner, the Bird-scaring lines and Offal discharge control, conformed to minimum technical standards in Annex 1.</p> <p>Paragraph 6- The design and deployment for bird scaring lines meet the specifications provided in Annex 2.</p> <p>Paragraph 7- Information on interactions with seabirds has</p>



Res. No.	Resolution	Scientific requirement	CPC progress
			been reported.
11/04	On a regional observer scheme	Paragraph 9	Paragraph 9- This information has been included in this report.
13/03	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–11	<p>Paragraph 1-All Chinese fishing vessels are subject to data recording system of IOTC.</p> <p>Paragraph 2-This measure applies to all Chinese fishing vessels.</p> <p>Paragraph 3-Logbooks being used onboard now record bycatch species, but not consistent with the species list in the Annex. So, we are revising the logbook forms accordingly.</p> <p>Paragraph 4-China will submit to the IOTC Executive Secretary by 15 February 2014 a template of its official logbooks.</p> <p>Paragraph 5-China's logbook is published with Chinese and English.</p> <p>Paragraph 6-8. No response.</p> <p>Paragraph 9-China's logbooks are submitted to Shanghai Ocean University which is authorized by the Bureau of fisheries, Ministry of Agriculture.</p> <p>Paragraph 10-China will submit the logbook data, but our current form and data field are not consistent with this measure.</p> <p>Paragraph 11-No response.</p>
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	<p>Paragraph 3- Interactions with marine turtles have been recorded and reported.</p> <p>Paragraph 4- Interactions with marine turtles have been recorded and reported.</p> <p>Paragraph 6- Fishermen are required to help recover marine turtle captured and release. De-hooking techniques and guideline have been equipped onboard fishing vessels.</p> <p>Paragraph 7- No gillnet fishery.</p> <p>Paragraph 8- Line cutters and de-hookers are in place onboard longliner. The fishing operators are required to hand and promptly release marine turtles caught or entangled, in accordance with IOTC Guidelines. Marine Turtle Identification Cards will be distributed among fleet.</p> <p>Paragraphs 9- Most of baits used are finfish bait.</p> <p>Paragraph 10- Incidents involving marine turtles during fishing operations are required to be recorded in logbooks and reported to SHOU.</p>
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	<p>Paragraph 4- Fishermen are encouraged to record and report incidental catches of thresher sharks in logbooks.</p> <p>Paragraph 5- No recreational and sport fishing.</p> <p>Paragraph 6- This kind of information are required in observer program and will be provided for study.</p> <p>Paragraph 7- Specific project or biological sampling for tissues (vertebrae, tissues, reproductive tracts, stomachs, etc.) was not set up for thresher sharks by now. But we will include this task in future's observer work.</p> <p>Paragraph 8- Shark catch data will be recorded and reported as required by IOTC data reporting procedures.</p>

## 9. LITERATURE CITED [Mandatory]

No reference cited.