Received: 28 November, 2011
IOTC-2011-SC14-NR16

Malaysia National Report

to the Scientific Committee of the Indian Ocean Tuna Commission for 2011

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November 2011

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INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

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, **for all fleets other than longline** [*e.g.* for a National report submitted to the Secretariat in 2010, final data for the 2009 calendar year must be provided to the Secretariat by 30 June 2010)	YES 22 June 2011
In accordance with IOTC Resolution 10/02, provisional **longline data** 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 2010, preliminary data for the 2009 calendar year was provided to the Secretariat by 30 June 2010). **REMINDER:** 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 2010, final data for the 2009 calendar year must be provided to the Secretariat by 30 December 2010).	YES 28 June 2011
If no, please indicate the reason(s) and intended actions:	

Executive Summary

Malaysia is considered as a new country in tuna fisheries in the Indian Ocean. And has experienced a drastic growth in tuna longline fleet from 15 vessels in 2003, the year when it started fishing to 58 in 2010. The highest catch was recorded in 2005 at 2885 tonnes. However, the tuna catch (*Thunnus albacares* and *Thunnus obesus*) from the past two years showed a significant dropped from 2,532 tonnes in 2008 to 1,138 tonnes in 2010. Similar pattern were observed in total effort (number of berthing) which decreased from 79 to 30 during the same period. The highest number of berthing was recorded in 2005 with 110 berthings. The catch of neritic tuna from the Malacca Straits (under IOTC areas of Competence) showed a steady increased in catch from 8,978 tonnes in 2001 to the record highest at 20,147 tonnes in 2010. The fishing areas only confined within the EEZ of Malaysian continental shelf with *Thunnus tonggol*, *Euthynnus affinis* and *Auxis thazard* formed the only known neritic tuna species found from these areas. Purse seine nets contributed over 90% of the neritic tuna landings from the Malacca Straits followed by trawl nets, gill/drift nets and hook & lines.

Contents

1. BACKGROUND/GENERAL FISHERY INFORMATION

Malaysia is one of the coastal state to the Indian Ocean which link through the Malacca Straits. The Malacca Straits, on the west coast of Peninsular Malaysia is one out of four different seas that form the marine fishing areas. Malaysian fisheries in the Malacca Straits only confined to the continental shelf operated by local vessels. In 1998, Malaysia registered to become a member of IOTC and in 2003 several tuna longline vessels registered to operated tuna longline in the Indian Ocean. From 23 tuna longline vessels in 2003, the number gradually increased to 58 vessels in 2010. All the tuna longline vessels unload and transhipped their catch on in Malaysian International Tuna Port (MITP) in Penang. The MITP is specially developed as part of the programs to develop the Malaysian tuna fishing industry. For neritic tuna fisheries, they have long established and be part of the important pelagic fisheries in Malaysia. The landings of neritic tuna from the Malacca Straits mainly contributed by purse seine vessels of bigger size (40-69.9 GRT) operating over 30 nm from the shores.

2. FLEET STRUCTURE

Malaysian fleet to the Indian Ocean only consist of long line vessels. Before 2003, the foreign vessels mainly from Taiwan and a few from China, Japan and Indonesia used the Malaysian tuna port as transhipment hub, unloading and exporting their catches to the third countries such as Japan, USA and EU. After 2003, when Malaysia started to directly involved in the tuna fishing in the Indian Ocean, the number of vessels registered under Malaysia flag increased steadily from 15 vessels in 2003 to 58 vessels in 2010 and the size of vessels vary in LOA and gross registered tonnage (GRT) from 19-65 m and 38 – 882 GRT respectively.

Table 1: Number of Malaysian registered tuna long line vessels operating in the Indian Ocean.

Year	<24 m	>24 m	Registered vessels
2003	1	14	15
2004		14	14
2005	1	18	19
2006	9	19	28
2007	9	24	33
2008	18	39	57
2009	18	44	62
2010	16	42	58

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

Catch of tuna and tuna-like species by Malaysian flag vessels in the Indian Ocean. The efforts represented by the number of berthing of the vessels at the fishing port. In most of the occasion, the vessels berthing at the port were carrier vessels where they pooled the catch from several fishing vessels (7-10 vessels) at the fishing grounds before they returned to the fishing port in Malaysia. The highest number of berthing was in 2007 with 110 times and since then, the number of berthing reduce steeply to 30 in 2010. Since 2008, due to increase in operation cost, some of the Malaysian vessels moved their

Table 2a: Annual catch (by weight – tonnes) and effort by Malaysian longline vessels in the Indian Ocean.

YEAR	EFFORT* (No of Berthing)	YFT	BET	MAR	SWO	SFA	SHK	ALB	MISC
2003	30	461.90	307.90	40.50	22.60		5.30		
2004	18	591.53	0.00	20.76	12.14		2.66		108.96
2005	94	2228.70	657.00	225.30	162.00		134.20		29.20
2006	82	1078.90	501.53	83.74	124.78	48.00	11.50		
2007	110	1228.93	892.81	145.66	217.13	81.14	35.24	349.62	
2008	79	1210.83	1321.79	137.76	141.86	162.17	29.01	285.46	
2009	65	970.50	1179.60	69.44	182.44	68.44	33.33	202.34	
2010	30	545.69	592.39	69.56	45.87	38.11	9.90	3.55	

fishing operations in the western Indian Ocean and land their catch at the port Louis, Mauritius.

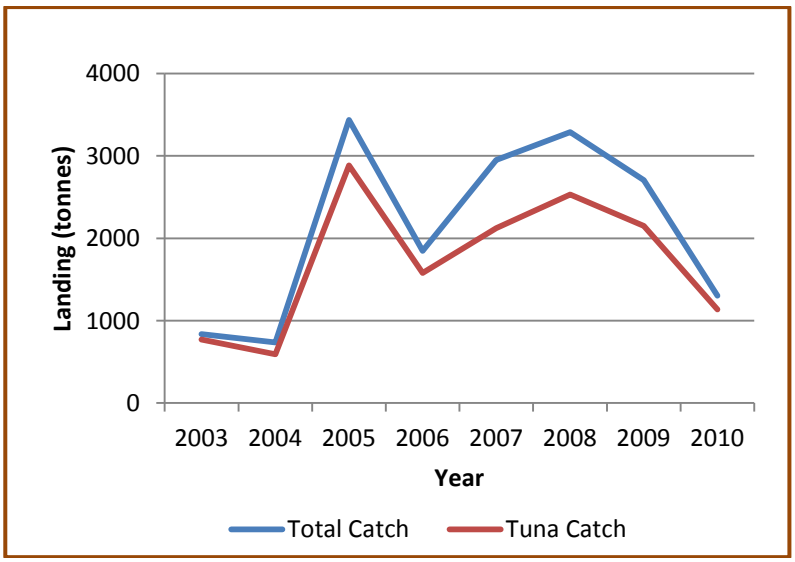

Figure 1 : Historical catch of tuna and tuna-like species by Malaysian tuna longliners.

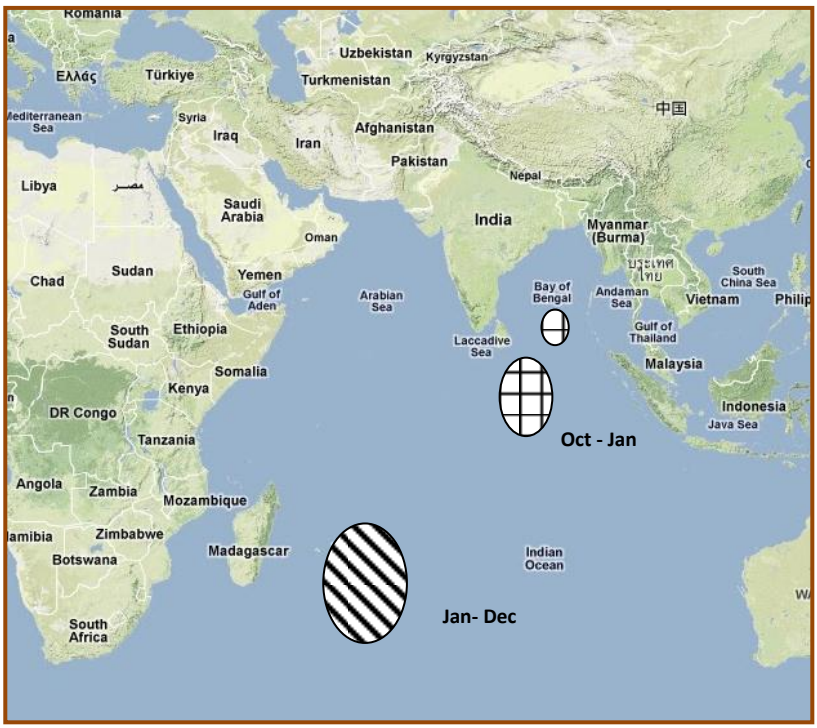

Figure 2: Map of distribution of fishing effort of Malaysian long line vessels. The fishing data were extracted from VMS install in all the Vessels. Two common fishing areas were identified as in the the Adaman Sea and south of Sri Langka (during northeast monsoon) and in the western Indian Ocean

Table 2b : Annual landings of neritic tuna, Spanish mackerel and sharks in the Malacca Straits, under IOTC area of competence.

Year	Longtail	Kawakawa	Frigate	Com	Sharks
2001		8978*		1253	3857
2002		15510*		1373	4695
2003	12599	819	11	1088	4625
2004	8248	3934	0	1043	4603
2005	8834	2862	3	805	3469
2006	10601	6348	24	1170	4697
2007	15749	3487	0	1162	4292
2008	13692	2759	0	863	4542
2009	13764	5160	83	1463	4178
2010	14549	5598	1	1228	5501

'* Mixed species of longtail, kawakawa and frigate.

Table 2c : Catch of neritic tuna* by major fishing gears in the Malacca Straits.

Year	Trawl nets	Purse Seines	Drift/gill net	Hook & Lines
2001	63	8,590	325	0
2002	82	14,910	502	0
2003	140	12,999	291	0
2004	157	11,743	277	5
2005	206	11,182	310	1
2006	469	16,355	164	1
2007	4,322	17,742	171	0
2008	1,425	14,706	132	8
2009	664	18,182	156	4
2010	1,668	18,275	204	0

'* mixed species of longtail, kawakawa and frigate.

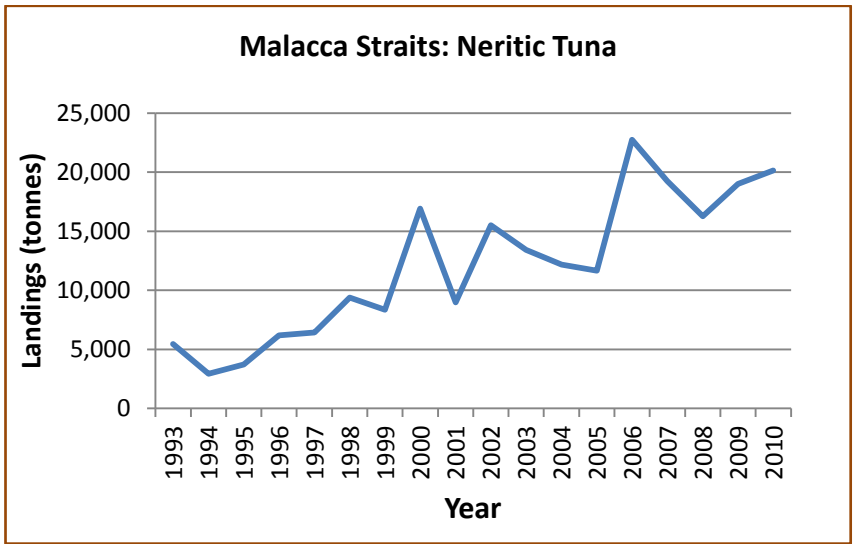

Figure 3 : Historical catch of neritic tuna (longtail, kawakawa and frigate) in the Malacca Straits.

4. RECREATIONAL FISHERY

Recreational fishery for tuna and tuna-like species is not a widely fishing games in the Malacca Straits, and they are only occasional and seasonal events. Currently there is no specific Act to regulate the recreational fishery.

5. ECOSYSTEM AND BY-CATCH ISSUES

Malaysia has taken measures to reduce the impact of fishings on marine ecology by promoting and encouraging the use of 'eco-friendly fishing gears' as well as introducing various fishing regulations such as;

- Prohibit any commercial fishing gears from fishing below 5 nm from coast line. Zoning regulation, at which vessels of certain size range only permitted to fish in fishing zones stated in the fishing permit.
- Implementation of 'vessel operation reports' in which data of fishing activities help in the management of fisheries resources.
- To reduce by-catch, especially undersize fish, Juvernile and turtle excluding device (JTED) are promoted to the fishermen.
- Research on cod end size mess size for trawl nets have been carried out.
- Promoting the use of circle hook to the longline fishermen.

Sharks

NPOA-Shark:

Malaysian NPOA-Shark was developed and was released in 2006 according to the guideline as set out in the FAO international Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks). The main objective of Malaysian NPOA-Sharks is to ensure the conservation and management of sharks and their long-term sustainable use. The term 'shark' refers to all chondrichthyan or cartilaginous fishes, comprising sharks, skates, rays and chimaeras. One of the mitigation measure is discouraging the shark finning. This NPOA-Sharks is year by year is revised and reviewed the implementation status.

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Table 3: Total number of sharks caught by the Malaysian tuna longline vessels in the Indian Ocean	
Year	Sharks
2003	5.30
2004	2.66
2005	134.20
2006	11.50
2007	35.24
2008	29.01
2009	33.33
2010	9.90

Malaysia has listed all the species listed by CITES as endangered species in its Acts and gazetted in 2010.

High number of sharks were caught by trawlers and they are sold in wholesome form in the wet market.

Table 3b: Total weight (tonnes) of sharks caught by various fishing gears in the Malacca Straits.				
	Trawl nets	**Purse Seines**	**Drift/gill net**	**Hook & Lines**
2001	866	0	308	55
2002	1023	0	273	50
2003	819	0	201	54
2004	754	2	216	52
2005	660	0	83	41
2006	750	81	287	38
2007	733	1	351	57
2008	608	0	130	110
2009	1,217	39	120	114
2010	1,053	1	129	45

Seabirds

Majority of the Malaysian tuna longline vessels operated in the tropical fishing areas which the interactions with the seabirds were very rare. However, fishing operators are required to adopt measures to reduce accidental catch of seabirds. The use of circle hook for longline is one of the measures proposed to the tuna longline owners to avoid the possible interaction with the seabirds.

Marine Turtles

Malaysia is one of the country that actively involved in the conservation program of turtles. In 2008, NPOA-Turtle was released as a guideline for the conservation of turtle including fisheries. As one of the conservation measure to avoid the catch of turtle by the fishing gears especially trawlers, a device known as 'Juvenile and Turtle Excluding Device' (JTED) is being promoted to the fishermen.

The use of circle hook for longline is also encouraged and being actively promoted to the fishermen. Several join trails and in training between the government and fishermen are being carried out to encourage fishermen to use C-hook.

Under Fisheries Act 1985, turtle and other marine mammals are not allowed to be fished, disturbed or taken for what ever means without the permission of Fisheries authority. The turtles and marine animals that are accidently caught alive during fishing have to be released immediately.

Other ecologically related species (*e.g.* marine mammals, whale sharks)

No record available on the number of accidently caught marine animals and whale sharks by Malaysian vessels in the Indian Ocean.

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

6.1. **Logsheet data collection and verification (including date commenced and status of implementation)**

Department of Fisheries Malaysia has yet to implement the logbooks system. Currently, for vessels operating in the Malaysian marine waters, the fishing operations are reported through "Vessels Operation Report" or LOV. Data recording in "Vessels Operation Report" /LOV is part of the vessel licencing regulation, which was enforced in 2001**.** The operators are required to provide information based on the Vessel Operation Report (LOV) forms and submit the forms to the nearby Department of Fisheries office. This form contains detailed information on fishing areas, times/dates, catches by species, details of by-catches if any, names of ports or details of transhipments. Failure to do so, will cause the licence of the vessel to be revoked or suspended as provided under the Fisheries Act 1985. Subsequently the fisheries officers will provide the data to the IOTC.

Action has been taken to review various aspects prior to the implementation of logbook to all fishing vessels that registered under Malaysian flag in near future.

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

Department of Fisheries Malaysia has successfully implemented a Vessel Monitoring System (VMS) for all high seas fishing vessels. It is based on Inmarsat, utilizing Inmarsat C, Mini C and D+/B equipments. It enables us to track a vessel's compliance with the geographical limits contained in their license and to check position data contained in their catch and effort/transshipment reports. The installation of Mobile Transceiver Units (MTU) is mandatory under vessel licensing regulation. Failure to do so, will cause the license of the vessel to be revoked or suspended as provided under the Fisheries Act 1985. To date, all the tuna vessels registered in Malaysia have the devices installed.

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

The program/scheme has been postponed, due to the insufficient fund.

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

Before 2010, port sampling activities on vessels from the Indian Ocean were carried out by the contract staff . Since early 2010, four permanents supporting staff were attached to the Tuna Development and Business Centre (TDBC) and they are responsible for sampling activities at the tuna fishing port.

Management of catch data by species of every vessel berthing at the tuna port were under the Fisheries Development Authority of Malaysia (LKIM) which then provide them the TDBC. For size measurement of tuna species, 10% of the total tuna landing were sampled and measured from every vessels during their unloading. To present, data on size measurement for yellowfin tuna and bigeye tuna were submitted along with other statistical data to the IOTC annually.

Sampling for neritic tuna and other tuna-like species is under the responsibility of Fisheries Information Management Division. Their sampling program covers all landing sites and fishing ports along the west coast of Peninsular Malaysia, only on vessels

operating in the Malaysian Fisheries waters. They provide the necessary data on neritic tuna to the TDBC before submitting them to the IOTC.

6.5. Unloading/Transhipment [including date commenced and status of implementation]

Only vessels listed under the IOTC will be permitted to unload their catch at the Malaysian port. Landing is allowed after receiving a request minimum 24 hrs in advance by the vessel owners for the port entry with the valid documents of vessel registration and the authorization for fishing issued by the flag country. Details of the landings are reported to IOTC in the given template. Port inspectors have already been appointed and are now being trained.

7. NATIONAL RESEARCH PROGRAMS

For the last 5 years no research program that related to tuna and tuna-like species was conducted in the IOTC fishing areas by any Malaysian fisheries research institutions.

8. IMPLEMENTATION OF SCIENTIFIC COMMITTEE RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT TO THE SC.

Table 4. Scientific requirements contained in the Resolutions of the Commission, adopted from 2005 to 2011

No	Resolution	Progress
11/04	On a regional observer scheme	The program/scheme has been postponed, due to the insufficient fund.
10/12	On the conservation of thresher sharks (family Alopiidae) caught in association with fisheries in the IOTC area of agreement	The operator having long line vessels were officially informed of the resolution and were requested to strictly implement it.
10/06	On reducing the incidental bycatch of seabirds in longline fisheries.	The use of circle hooks has been promoted and recommended to the tuna long liners.
10/02	Mandatory statistical requirements for IOTC members and cooperating non contracting parties	All statistical Data were submitted annually to the IOTC before due date.
09/06	On marine turtles	• Longline operators were informed to record any

		interaction with turtles. • Research on circle hook has been carried out. The use of circle hooks by fishermen for longlines is encouraged. The use of TED (turtle excluding device) is encouraged to trawlers operators. • turtles and aquatic mammals are considered endangered species under Fisheries Act 1985, thus, prohibiting fishers from catching, disturbing or harassing the animals
08/04	Concerning the recording of catch by longline fishing vessels in the IOTC area	• Currently, all tuna vessels are required to fill in the LOV forms indicating the catch, by catch if any, and submit it to the nearby Fisheries Department offices. • Implementation of logbook for all vessels is in progress and will be implemented in near future. • Data are submitted to the IOTC by due date.
05/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	• Catch data of sharks submitted to the IOTC • Shark finning is not allow and this is incorporated in the NPOA-Sharks.

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