



MALAYSIA NATIONAL REPORT

TO THE SCIENTIFIC COMMITTEE OF THE INDIAN OCEAN TUNA COMMISSION FOR 2015

Samsudin Basir¹, Sallehudin Jamon¹, Effarina Mohd Faizal ¹ Nor Azlin Mokthar²

Department of Fisheries, Malaysia.

October 2016



- 1. Captured Fisheries Division, FRI Kg Acheh, Department of Fisheries, 32000 Sitiawan, Perak
- 2. Management and Licensing Division, Department of Fisheries, PUTRAJAYA.

TABLE OF CONTENTS

INFORMATION ON FISHERIES, RESEARCH AND STATISTICS	iii
Executive Summary	ii
1. BACKGROUND/GENERAL FISHERY INFORMATION	1
2. FLEET STRUCTURE	1
3. CATCH AND EFFORT (BY SPECIES AND GEAR)	2
4. RECREATIONAL FISHERY	7
5. ECOSYSTEM AND BY-CATCH ISSUES	7
5.1 Sharks	8
5.2 Seabirds	9
5.3 Marine Turtles	10
6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS	10
6.1 Logsheet data collection and verification (including date com implementation)	
6.2 Vessel Monitoring System (including date commenced and stating implementation)	
6.3 Observer programme (including date commenced and status;	number of observer,
include percentage coverage by gear type)	11
6.4 Port sampling programme	11
6.5 Unloading/Transhipment [including date commenced and state implementation]	
7. NATIONAL RESEARCH PROGRAMS	12
8. IMPLEMENTATION OF SCIENTIFIC COMMITTEE RECOMMENDATION OF THE IOTC RELEVANT TO THE SC	
O LITEDATURE CITED	





INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 15/02, final scientific data for the previous year was provided to the IOTC Secretariat by 30 June of the current year, for all fleets other than longline [e.g. for a National Report submitted to the IOTC Secretariat in 2016, final data for the 2015 calendar year must be provided to the Secretariat by 30 June 2016)	YES 30/06/2016
In accordance with IOTC Resolution 15/02, provisional longline data for the previous year was provided to the IOTC Secretariat by 30 June of the current year [e.g. for a National Report submitted to the IOTC Secretariat in 2016, preliminary data for the 2015 calendar year was provided to the IOTC Secretariat by 30 June 2016).	30/06/20016
REMINDER: Final longline data for the previous year is due to the IOTC Secretariat by 30 Dec of the current year [e.g. for a National Report submitted to the IOTC Secretariat in 2016, final data for the 2015 calendar year must be provided to the Secretariat by 30 December 2016).	
If no, please indicate the reason(s) and intended ac	tions:









EXECUTIVE SUMMARY

Total marine fish productions in Malaysia were not much different for 2014 and 2015, during which 1,440,109 metric tons and 1,486.051 metric tons were respectively landed. The large barge of the catches attributed by the coastal fisheries, only 22% of the total marine landings contributed by the offshore fishing. Tuna fisheries is considered to be future contribution toward the increase in fisheries production as well as the main factor to accelerate and develop deep-sea fishing industries. The Malaysian government has taken steps to develop tuna fishing industries from coastal waters, offshore waters within the Exclusive Economic Zone (EEZ) and open sea especially in the Indian Ocean by joining as a member of the IOTC RFMO.

During early 1980s, small tuna (as neritic tuna were called then) were only caught as by-catch by gill nets and handlines. When tuna purse seines were introduced in 1987, the neritic tuna fisheries started to develop. High demands from processing and canning industries from Thailand have resulted the rapid increase in tuna catch in Malaysian waters (from the South China Sea and Malacca Straits). During the early stage of purse seine operations, the fishermen used to hunt wild tuna schools. When the FADs technology was introduced, FADs then were widely used by the purse seine operators. Currently, the purse seines are the major contributor (> 85%) to the neritic tunas landing

In Malaysia, main neritic tuna species are longtail tuna (*Thunnus tonggol*), kawakawa (*Euthynnus affinis*) and frigate tuna (*Auxis thazard* and bullet tuna (*Auxis rochei*). Overall, neritic tuna contributed 3.95% of the total marine landings. Although the contribution in weight is rather low, the value of this group of fish is still substantial at more than USD121 million in 2014. In the year 2015, neritic tuna landings amounted to 54,901 mt; decreasing by 3% compared to 56,816 mt in 2014. Landings in Malaysia ranged from 40,000 mt to 65,000 mt. The highest catch was recorded in 2008 and 2002 with 65,000 mt and 62,000 mt respectively. There was a decreasing trend in landings from 2002 to 2005 before an increasing trend until 2008. Landings of neritic tune in Malaysia appear to have stabilised from 2010 to 2015.

The catch of oceanic tuna from the Indian Ocean in 2015 increased significantly by 419.43% from 851.35 tons in 2014 to 1,270.78 tons in 2015. Albacore showed most apparent increasing from 713.92 tons in 2014 to 1,049.1 tons in 2015. The fleet which only consisted of 5 fishing vessels and one carrier, unloaded and exported the catches at the Port Louis, Mauritius. Albacore tuna formed nearly 70% of the catches in the form of frozen tuna. On observer program, it will only be implemented accordingly when the size of Malaysian fleet increase to 20 units. However, for domestic vessels operating beyond 30 nm offshore, there are plan by the DoF to implement observer on board and logbook system by 2017. The revised NPOA- Sharks is already complete and gazetted and will be published in 2014. On sea turtle, 2 sanctuary and information centres have regularly implementing awareness program for student and fishermen communities. Hatching program at these centres managed to release over 65,000 baby turtles back to the sea. There are several research programs on sea turtle been carried out at different areas in Malaysian waters and the ongoing projects are c-hook and satellite tracking.





1. BACKGROUND/GENERAL FISHERY INFORMATION

Malaysia as a tropical country has a multi-species and multi-gears fishery. There are over 100 commercial marine fish species in Malaysian waters and more than 10 type of fishing gears. Two most efficient fishing gears are trawlers and purse seines. The trawlers and purse seines contributed more than 75% of total marine catch and the rest of the catches are from traditional gears. In tuna fishery, the purse seines and trawlers catches 95% of neritic tuna and the rest by traditional gears such as trolling, hook and lines and gill nets. Tuna species represented nearly 5% of the total marine catch in Malaysian waters. The Malacca Straits and the South China Sea are the two main fishing areas which contribute most to catches and a small portion from the fishing areas in Sulu and Sulawesi sea, east coast of Sabah (Borneo continent). There are oceanic tuna fishing activities by the traditional hook and lines gear in the Sulawesi Seas. There are oceanic tuna species found in Malaysian waters, the South China Sea and Sulawesi Sea. The main species are yellowfin tuna, bigeye, albacore and skipjack. The oceanic tuna are caught by handline with small traditional inboard boats, 4-5 days per trip. There is one large tuna purse seine that catch oceanic tuna using FAD in the South China Sea. The main species are skipjack and juvenile yellowfin. Malaysian longline vessels started to operate in the Indian Ocean in 2003 using tuna longline. From 15 tuna longline vessels in 2003, the number gradually increased to 58 vessels in 2010. However, in 2011, the number of active tuna longline vessels dropped drastically to 7 vessel due to management problem faced by the vessel company. From 2012, a fleet of 5 longline from new fishing company started to operate by targeting albacore tuna. Their fishing areas were in the southwest of Indian Ocean and they unload the catches at the Port Louis, Mauritius.

2. FLEET STRUCTURE

Malaysian vessels operating in the Indian Ocean consist of tuna longline. Before 2011, the tuna longline targeted tropical tuna species and most of the vessels fishing in southern part of Sri Lanka to the eastern part of Indian Ocean. Some of the Malaysian flag fishing vessels downloaded their catches in foreign ports such as Port Louis, Mauritius, Sri Lanka and Phuket, Thailand. From 2012, the Malaysian flag tuna fishing vessels shifted their target species to tuna albacore and their fishing areas at most of the time in the southwestern part of Indian Ocean. The size of vessels vary in LOA and gross registered tonnage (GRT) from 19-65 m and 38 – 882 GRT respectively (Table 1).

Table 1: Number of registered Malaysian flag tuna longline vessels.

^{*} Represent number of active vessels.

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





IOTC-2016-SC19-NR16

2009	18	44	62
2010	16	42	58
2011	1	6	23 (7*)
2012		5	5
2013		5	5
2014		10	10
2015		10	10

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

Catch of tuna and tuna-like species by Malaysian flag vessels in the Indian Ocean are shown in Table 2a. The efforts represented the number of active vessels fishing in the Indian Ocean. early operation period of the Malaysia fleet (2003 - 2010) in most of the time, both carrier and fishing vessels from the fleet unload their catches in several fishing ports. For carrier vessels, they collected the catches from the fishing vessels including the fishing vessels from foreign flag states such as Taiwan. Before 2011, fishing effort were counted from the number of berthing by the fishing and carrier vessels at the fishing port. The highest number of berthing was in 2007 with 110 times and since then, the number of berthing reduce steeply to 30 in 2010. In Since 2011, due to increase in operation cost and change in vessels' owner, some of the Malaysian vessels moved their operations toward the western Indian Ocean and unload their catches at the Port Louis, Mauritius. The fishing effort were then counted as the number of active vessels registered with the IOTC. Before 2011, tropical tuna such as yellowfin and bigeye attributed to the major catch compositions. Starting from 2012, catches of albacore tuna by Malaysian fleet dominate the landings. In 2015, catch of albacore tuna was the highest ever record increased by 47% from 2014. The catch of yellowfin tuna in 2015 also increased to the highest since 2012 with 162 tonnes, almost double the catch from 2014. There was also an increase in catch of swordfish from 93 tonnes in 2014 to 117 tonnes in 2015.

Table 2a: Annual catch (tonnes) and effort by Malaysian longline vessels in the Indian Ocean until 2015.

	YEAR	Registered Vessels	YFT	BET	MAR	swo	SFA	SHK	ALB	MISC
F	2003	7	461.9	307.9	40.5	22.6		5.3		
_	2004	14	591.53	0	20.76	12.14		2.66		108.96
-	2005	19	2228.7	657	225.3	162		134.2		29.2
•	2006	28	1078.9	501.53	83.74	124.78	48	11.5		
=	2007	33	1228.93	892.81	145.66	217.13	81.14	35.24	349.62	
•	2008	48	1210.83	1321.79	137.76	141.86	162.17	29.01	285.46	
7	2009	62	970.5	1179.6	69.44	182.44		33.33	202.34	
•	2010	44	545.69	592.39	69.56	45.87	38.11	9.9	3.55	
7	2011	7	44.2	69.46	1.61	2.6	1.13	0.63	131.68	
7	2012	5	119.7	46.8	35.8	30	-	6	681.8	58.66
7	2013	5	107.49	32.28	31.49	22.3	-	0	107.49	100.91
7	2014	5	77.32	60.11	25.419	93.14	-	-	713.92	76.316
_	2015	5	161.678	59.982	24.58	116.73			1049.1	126.72

Figure 1 shows the historical catch of tuna and tuna-like species by Malaysian flag vessels from 2003. The lowest catches was recorded in 2011 during the transition of target species from tropical tuna to temperate tuna (albacore species). The catches of albacore tuna showed an increasing trend. The albacore tuna in 2015 accounted nearly 68% of the total catches by Malaysian tuna longline same as in 2014.

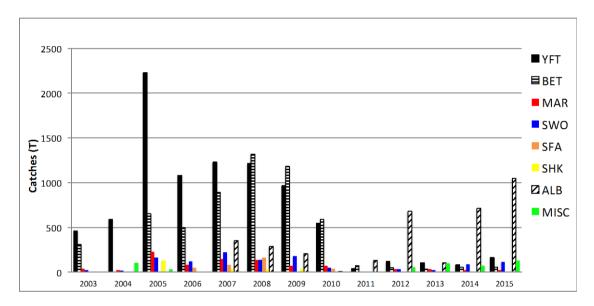
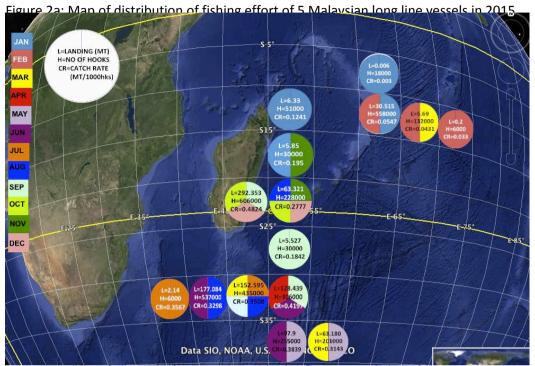


Figure 1: Historical catch of tuna and tuna-like species by Malaysian tuna longliners.

Figure 2a shows the distributions of catches and efforts by areas of the Malaysia fleet. The fishing areas extended from latitude 5°S in the northern most down to the southernmost 35°S and longitude 35°E of the western most to 70°E in the eastern most. During early of the year (January to March), the fishing vessels operated in the tropical areas near the equator above 150S. The catches from these areas dominated by tropical tuna namely yellowfin and bigeye. The bycatches such as swordfish and marlin also showed higher catches during these periods.





Toward middle of the year (May to August), the fleet moved their fishing areas down to the southern most and during this period the catch composition dominated by albacore tuna. Normal size of the albacore tuna catch during this period were smaller than those caught in the northern part. After August, the fleet gradually moved their fishing areas toward the north and finally during end of the year, the fleet back to the fishing areas above 25°S off the eastern side of Madagascar.

Table 2b shows annual catches of neritic tuna, spanish mackerel and sharks in the west coast The common neritic tuna species caught in the Malacca Straight are of Peninsular Malaysia. kawakawa (Euthynnus affinis), longtail (Thunnus tonggol) and frigate (Auxis thazard). There is also a bullet tuna (Auxis rochei) which rarely caught by the fishing gears. For Spanish mackerel, two species abundantly caught in the Malacca Straight are Narrow-barred Spanish mackerel (Scomberomorous commersonii) and Indo-Pacific King mackerel (Scomberomorous guttatus). The official statistical record group these two species as a single fish group. It is known that the Scomberomorous commersonii is more abundance than the other and both of them are commonly caught by trawlers driftnet, handlines and small portion from purse seines. Sharks species mainly caught by trawlers and majority of the shark species are of demersal species. A total of 56 species of sharks from 17 families, 52 species from 12 families of batoids and 2 species from 1 family of chimera are found in Malaysian waters (Yano., et.al., 2005). Since there are large number of shark species occur being caught, it is difficult for field worker to identify the catch to the species level. In the official statistical record, the catch of sharks are not to the species level. In the Malacca Straight, non of the shark caught by the fishing gears fall under the endangered species.

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

			Frigate		
2001		8978*		1,253	3,857
2002		15510*		1,373	4,695
2003	12,599	819	11	1,088	4,625
2004	8,248	3,934	-	1,043	4,603
2005	8,834	2,862	3	805	3,469
2006	10,601	6,348	24	1,170	4,697
2007	15,749	3,487	-	1,162	4,292
2008	13,692	2,759	-	863	4,542
2009	13,764	5,160	83	1,463	4,178
2010	14,549	5,598	1	1,228	5,501
2011	13,122	8,405	148	4,743	1,059
2012	13,260	10,478	429	4,815	1,202
2013	10.376	7.259	339	5.937	1.334

^{*} Mixed species of longtail, kawakawa and frigate.

7,372

5,323

2014

2015

The catch of kawakawa (*Euthynnus affinis*) increased in 2015 to 8,188 mt from 6,214 mt in 2014. In contrary, the catch of longtail tuna (*Thunnus tonggol*) show a decreasing trend since 2012 and the in 2015 the catch was further decreased to 5,323 mt. For frigate tuna (Auxis thazard), the catch only marginal to other species and the landing in 2015 was the lowest since 2012.

6,214

8,188

920

272

6,189

5,446

Table 2C shows the catch of neritic tuna species by various major fishing gears in the Malacca Straits. Purse seines contribute over 95% of neritic tunas landings in 2015, increase by nearly 10% in term of catch composition from 2014. Drift nets is the second contributor to the landings of neritic tunas followed by trawlers. From total catches of the purse seines, neritic tunas attribute only 12% of the catches and are considered as by-catch where the main target species are other small pelagic species such as Indian mackerel (*Rastrelliger spp.*) and scads fish (*Decapterus spp.*) which form major composition of the catches. Large amount of neritic tuna species caught by purse seines of large size (above 70 GRT and 49 – 70 GRT) which operate beyond 13 nm off the coastal line. Almost all the purse seines operate by deploying FADs and the main fishing areas are in vicinity to Perak Island northwest of Peninsular Malaysia. For driftnets and handlines, the gears are operated by coastal fishermen below 13 nm from the coastaline and the neritic tuna attributed only small percentage of the total catches. The landing of neritic tunas in the west coast of Peninsular Malaysia occur throughout the year and the peak season is immediately after the northeast monsoon (January – March).

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

Year	Trawl Net	Purse Seines	Drift/Gill Net	Hook & Lines
2001	63	8590	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	4322	17,742	171	0
2008	1,425	14,706	132	8
2009	664	18,182	156	4
2010	1,668	18,275	204	0
2011	1,271	20,390	102	1
2012	385	23,508	273	2
2013	338	9,154	883	1
2014	13	12,894.28	2029	1
2015	19.25	13,125.48	638.56	0

Table 3C shows the annual catches of two major neritic tuna species in the west coast of Peninsular Malaysia. The catch of longtail and kawakawa shows a steady increase with slight fluctuations until 2012. From 2013 the catches of both longtail and kawakawa declined especially for longtail with steep decreased till 2015 but kawakawa showed a slide increased to 8,188 mt in 2015 from 6,214 mt in 2014 but overall, the landings of neritic tuna species in 2015 was 5% less than 2014. There is an issue of species identification between longtail, kawakawa and frigate by field staff that believed to effect the catch data quality.



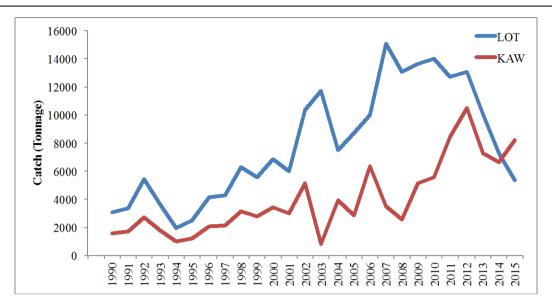


Figure 3 : Annual catches of neritic tuna (longtail, kawakawa and frigate) in the Malacca Straits.

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. However, there is the Marine Recreational Fishing Regulations, promulgated under the Fisheries Act 1985 that have been gazetted and implemented. Under this regulation, recreational fishing shall only be allowed prior to written permission issued by the Director General of Fisheries. Several species listed under the regulation in the First Schedule are prohibited from being landed. The species include 2 shark species; *Atelomycterus marmoratus* (coral catshark) and *Rhincodon typus* (Whale shark). Currently, the DoF is undertaking actions to regulate the recreational fishery by imposing regulation such as permit for the event, and information on catches should be submitted to the Department of Fisheries which include individual weight and length by species.

5. ECOSYSTEM AND BY-CATCH ISSUES

Malaysia has taken measures to reduce the impact of fishing activities 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 (except anchovy purse seine) as the areas are known as breeding and nursery ground of most fish species. Zoning of fishing areas: regulation, at which fishing areas are categorised into 4 zones, and for each zone only for vessels of certain range GRT are permitted to fish.
- Implementation of "vessel operation reports" LOV in which data of fishing activities help in

the management of fisheries resources.

- To reduce by-catch, especially undersize fish, Juvenile and turtle excluding device (JTED) are promoted to the fishermen.
- Enforcement on the use of 38mm cod-end mesh size for trawlers.
- Promoting the use of circle hook to the longline fishermen.

5.1 SHARKS

Malaysian NPOA-Shark had been adopted and published in 2006. It was based on the guideline set by the FAO international Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks). In 2014, the revised NPOA-Sharks was officially gazetted and published. The main objective of Malaysian NPOA- Sharks is to ensure the conservation and management of sharks and their long-term sustainable use. On legislation, Malaysia as a signatory to Convention on International Trade in

Endangered Species of Wild Fauna and Flora in Washington D.C. on 3 March 1973, introduced a CITES Act 2008 and gazetted it in 2010. Under this Act, Appendix II lists the following sharks; Family Cetorhinidae (Basking shark) - *Cetorhinus maximus*, Family Lamnidae (Great white shark) - *Carcharodon carcharias* and Family Rhincodontidae (Whale shark) - *Rhincodon typus*.

Table 3: Total catch of sharks (tons) caught by the Malaysian flag tuna longline in the Indian Ocean

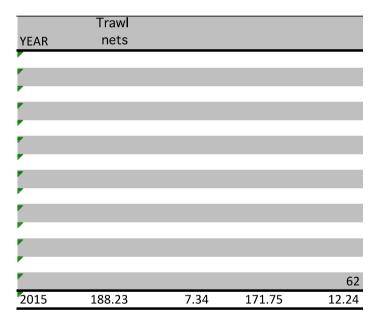
Year	Sharks
2003	5.3
2004	2.66
2005	134.2
2006	11.5
2007	35.24
2008	29.01
2009	33.33
2010	9.9
2011	0.63
2012	5.8
2013	-
2014	-
2015	-

(from 2013, sharks caught by the longline tuna in the IO were discarded.)

High number of sharks were caught by trawlers as by-catch and all the catch are sold in

wholesome in the wet market. The coastal sharks species found in Malaysia waters are of small size and they are not suitable for finning. As a tropical multi-species fisheries, the Department of Fisheries faces difficulty to implement single-species management such as shark species. To tackle the issue of lack of information on catch of sharks to species level, the Department of Fisheries has started to place trained staff in several fishing ports to collected detail of catch data on sharks. On legal instrument, Fisheries Act 1985, fishing regulations could be imposed when necessary for the purposed of conservation and management of the sharks.

Table 3b: Total weight (mt) of sharks caught by various fishing gears in the Malacca Straits.



Common shark caught in the Malacca Strait is *Carchrhinus sorah, Chiloscyllium puntatum, Chiloscyllium hasseltii, Atelomycterus marmoratus* and *Carcharhinus selai*.

5.2 **SEABIRDS**

Malaysian longline vessels only started to fish in areas below 25^o S in mid 2012. To present, no report of seabird interaction by the Malaysian fishing vessels during their fishing operation in the southeast Indian Ocean. However, the fleet"s owner has been reminded about their responsibility on seabird conservation practice stated in the IOTC resolution. Malaysian vessels have applied 2 types of mitigation recommended by the IOTC; tori lines and fast sinking lines. To this date, Malaysia still does not develop NPOA-Seabird.





5.3 MARINE TURTLES

Malaysia is one of the country that actively involved in the conservation program on turtles. In 2008 the NPOA-Marine Turtle was be published it becomes a guideline for the conservation and management of sea turtles. As one of the conservation measure to prevent possible interaction the turtles by the fishing gears especially trawlers, a device known as "Juvenile and Turtle Excluding Device" (JTED) is developed and promoted to the fishermen to use in their trawl nets. The use of circle hook for longline is also been encouraged and promoted to the artisanal fishermen. Several join trails and training were conducted between the government and fishermen for the use of C-hook.

There are a total of 26 Turtle Hatcheries Centres throughout Malaysia and two of them are located in the west coast of Malaysia; Pantai Kerachut, Penang and Segari, Perak. Main activities of these centres are to protect natural nesting areas of turtles and hatching and release baby turtles back to the sea. Education and awareness programs were conducted for the students and public. In 2013 alone a total of nesting in Penang and Perak was 63 and 55 while the number of hatchlings released based to the sea were 3,484 and 2,785 respectively.

Fisheries Act 1985 provides legal instrument to protect turtle and other marine mammals from any type of fishing. So far very few interaction were recorded between fishermen and turtles were reported by the traditional and commercial fishermen.

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. For conservation, whale shark (Rhincodon typus) is one out of 30 species listed as endangered marine animals in Malaysia under Fisheries (Control of Endangered Species of Fish) Regulation 1999.

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, all vessels operating beyond 12 nm from the shore in the Malaysian waters are are compulsory to record their landings in the "Vessels Operation Report" or LOV. Data recording in the LOV is part of the vessel licencing regulation, to renew their annual licence. 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.





For tuna longline vessels operating beyond Malaysian EEZ, both logbook and LOV are required for the vessel operators to submit the report to the Malaysian Fisheries Authority.

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 highseas fishing vessels. It is based on Inmarsat, utilizing Inmarsat C, Mini C and D+/B equipments. For tuna longline vessels operating beyond Malaysian EEZ, they use Argos system for their VMS. 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 Malaysian longline have the devices installed.

6.3 OBSERVER PROGRAMME (INCLUDING DATE COMMENCED AND STATUS; NUMBER OF OBSERVER, INCLUDE PERCENTAGE COVERAGE BY GEAR TYPE)

To date, Malaysia has yet to carry out any observer programme. Capacity building for staff to implement this program is among the step taken by the Department of Fisheries. As it involves financial and additional staff, this will limit the capacity of DoF to immediately implement the program. However, serious discussion and planning have taken place to implement this program for the vessels of >70 GRT (fishing >30nm outside coastal line) operating within the EEZ Malaysia. For tuna longline vessels, observer program is yet to be implemented due to funding ired as the fleet size was smaller then the minimum requirement suggested by the IOTC.

6.4 PORT SAMPLING PROGRAMME

From 2010, permenant staff from the DoF have conducted regular sampling activities at the MITP, Penang. They are resposible to collected, process and assisst tuna scientists to analyse catch data. However, since 2012, all Malaysian flag vessels unload their catches outside Malaysian port, then, no port samplings program were not carried out.

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.

6.5 UNLOADING/TRANSHIPMENT [INCLUDING DATE COMMENCED AND STATUS OF IMPLEMENTATION]

For neritic tuna fisheries, there were not transhipment activities among the fishing vessels as all the





vessels were operating within the EEZ Malaysia and have at most one week period per fishing trip. For longline vessels operating outside EEZ, there was only one carrier of Malaysian flag authorised to carry out transhipment at sea which started November 2012. The first transhipment report was submitted to the Secretariat of IOTC on September 2013.

7. NATIONAL RESEARCH PROGRAMS

For the last 5 years only one research was carried out on tuna and tuna-like species in the IOTC fishing areas namely on neritic tuna by the Fisheries

Research Institute, Kampong Acheh, Perak. The other study on oceanic tuna only involve in area of Sulawesi Sea, east coast of Sabah.

Project Title	Period	Funding	Objective	Status
Landing and biology of longtail and kawakawa tuna in the northeast of peninsular Malaysia	2014-2015	National R&D Fund.	Landing trend by species. Spawning season of kawakawa	Completed
Qualitative determination of small tuna leaking of catches from Malaysian eez.	2014 -2015	National R&D Fund	To determine the leaking trend of neritic tuna resources by local purse seine vessels.	Completed





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

Pos	Indian Ocean Tu	na Commis Scientific	sion
Res. No.	Cresolution des	requiremen t	Ocean Indien CPC progress
10tC	ctoi		IOTC-2016-SC19-NR10
			Malaysia takes note of the resolution and already upgrade the recording
15/0 1	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–10	system comply to the requirement under this resolution
15/0 2	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	Malaysia take note of the resolution and already follow the format given.
15/0 5	On conservation measures for striped marlin, black marlin and blue marlin	Paragraph 4	Malaysia will take note of the resolution
13/0 4	On the conservation of cetaceans	Paragraphs 7–9	Not applicable
13/0 5	On the conservation of whale sharks (<i>Rhincodon typus</i>)	Paragraphs 7–9	Additional of five (5) species of sharks and two (2) species of manta rays will be listed in the CITES Act 1998.
13/0 6	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	Malaysia has already published a revised NPOA-Sharks and all conservation and management measures listed under this NPOA 2014.
12/0 9	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	The operator having long line vessels were officially informed of the resolution and were requested to strictly implement it.
12/0 6	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	Malaysia has submitted annual report on any interaction with seabirds to the IOTC. Vessel operators have been informed to comply and take action within the purview of this resolution. Malaysia LSTV installed Tori Line and Line Weighting as seabird mitigation measures
12/0 4	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	Malaysia is fully committed in conservation and management of marine turtles. Under Section 27 of Malaysia Fisheries Act 1985, (1) No person shall fish for, disturb, harass, catch or take any aquatic mammal or turtle which is found beyond the jurisdiction of any state in Malaysia. Malaysia's National Plan of Action for Sea Turtles has been published in 2008. Longline operators were informed to record any interaction with turtles. The use of TED (turtle excluding device) is encouraged to trawlers





			operators.
11/0 4	On a regional observer scheme	Paragraph 9	Malaysia has only 10 LSTV operating in the IOTC area of competence. Working on capacity building for port sampling programme and cooperation with vessel owner to place the observer onboard.
05/0 5	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1–12	Effective from 2014, All Malaysian fishing vessels are prohibited to practice shark finning in the Malaysia fisheries water.
16/0 6	On measures applicable in case of non-fulfilment of reporting obligations in the IOTC	Paragraph 1	Malaysia will take note of the resolution

Describe the actions taken, under national legislation, to implement conservation and management measures adopted by the Commission in previous Sessions, and which have not been reported previously.

- I. Conservation and management measures adopted by IOTC are mostly covered under Malaysia Fisheries Act 1985.
- II. Effective from 2014, All Malaysian fishing vessels are prohibited to practice shark finning in the Malaysia fisheries water.
- III. Since 2006, All Malaysian deep sea fishing vessels (> 70GRT) are required to install and activate the Mobile Transceiver Unit (MTU) to be monitored by VMS.
- IV. All Malaysian fishing vessels are not allowed to fish outside Malaysia EEZ (including IOTC area of competence) without the permission from the Director General of Fisheries.
- V. Authorization to Fish (ATF) have been issued to the Authorized Fishing Vessels to fish in the IOTC area of competence in July 2014.





- VI. Additional of five (5) species of sharks and two (2) species of manta rays will be listed in the CITES Act 1998.
- VII. The revised NPOA Sharks 2014 have been published in December 2014.

9. LITERATURE CITED

Annual Fisheries Statistic, Department of Fisheries, Malaysia. Department of Fisheries Malaysia, 2003.

Tuna Fisheries in Malaysia. Department of Fisheries Malaysian, 2006. Ministry of Agriculture. 114 pp.

- Malaysia National Plan of Action for the Conservation and Management of Shark. Ministry of Agriculture and Agro-based Industry Malaysia, Putrajaya. 66 pp.
- Sallehudin, J., Samsudin, B. and M.F. Effarina. 2013. Small Tuna Fisheries in the West Cost of Peninsular Malaysia. Working Party on Neritic Tuna. IOTC-2013- WPNT03. 2-5 July 2013. Bali, Indonesia.
- Samsudin, B. and A.B. NorAisyah, 2013. Catches of billfishes by the Malaysian tuna longliners targeting tropical and temperate tuna in the Indian Ocean. IOTC-2013- WPB11-15. 08-14 September 2013. Reunion.
 - Samsudin, B., Mohd, N.N, and M. NorAzlin, 2013 The bycatch records of sharks, marine turtle and marine mammals by the Malaysian tuna longliners and the Malaysian coastal fisheries. Working Paty on Ecosystem and Bycatch. IOTC-2013-WPEB09-35. 12-16 September 2013, Reunion.
 - Samsudin, B. Sallehudin, J. and A.B., Noraisyah 2014. Malaysia national Report to the Scientific Committee of the Indian Ocean Tuna Commission for 2014
 - Samsudin, B., Sallehudin' J., Mohd_Noor, N. and M., NorAzlin. 2013. Malaysia national Report to the Scientific Committee of the Indian Ocean Tuna Commission for 2013
 - Ahmad A.N, Sallehudin J, Effarina M.F, Samsudin B 2015. Neritic Tuna Fishery and Some Biological Aspect in West Coast of Peninsular Malaysia.





- Ahmad A.N, Samsudin B, Sallehudin J, Mohammad Faisal M.S 2015 Catch of billfishes by Malaysian tuna longliners n the southwestern Indian Ocean.
- Samsudin, B., Sallehudin' J., Mohd_Noor, N. and M., NorAzlin. 2013. Malaysia national Report to the Scientific Committee of the Indian Ocean Tuna Commission for 2014
- Samsudin, B., Sallehudin' J., Mohd_Noor, N. and M., NorAzlin. 2013. Malaysia national Report to the Scientific Committee of the Indian Ocean Tuna Commission for 2015
- Yano, K., Ahmad ,A., Gambang, A.C., Idris, A.H., Solahuddin, A.R. and Aznan, Z., 2015. Sharks and Rays of Malaysia and Brunei Darussalam. SEAFDEC-MFRDMD/SP/12. Kuala Terengganu. 557 pp.