

**Thailand National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2018**

Pattira Lirdwitayaprasit\* Aekkarat Wongkeaw and Tirabhorn Yothakong  
Overseas Fisheries and Transshipment Control Division,  
Department of Fishery, Thailand  
\* Corresponding author: Pattiral@hotmail.com

**INFORMATION ON FISHERIES, RESEARCH AND STATISTICS**

<p>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, <b>for all fleets other than longline</b> [e.g. for a National Report submitted to the IOTC Secretariat in 2018, final data for the 2017 calendar year must be provided to the Secretariat by 30 June 2018)</p>	<p>YES 30<sup>th</sup> June 2017</p>
<p>In accordance with IOTC Resolution 15/02, provisional <b>longline data</b> 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 2018, preliminary data for the 2017 calendar year was provided to the IOTC Secretariat by 30 June 2018).  <b>REMINDER:</b> 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 2018, final data for the 2017 calendar year must be provided to the Secretariat by 30 December 2018).</p>	<p>NO 30th June 2017</p>
<p>If no, please indicate the reason(s) and intended actions:  In 2017, no Thai longliners operated in IOTC competence area since 2016 to present. For purse seiner, Thailand has only one purse seine vessel operated 2 months in this area.</p>	

## Executive Summary

For the past 30 years, fisheries resources and the marine environment have been seriously degraded through overfishing brought about by a lack of control of fishing capacity that was allowed expand, both in terms of increasing number of fishing vessels and in adopting new technologies, which were not commensurate with the natural productivity of the resources. These challenges provided fertile ground for the proliferation of illegal, unreported and unregulated (IUU) fishing within Thai fisheries waters by both Thai and foreign vessels and outside Thai waters (high seas and fisheries waters of other States) by Thai fishing vessels.

Thailand has built upon the reforms of all dimensions undertaken during nearly the past 3 years, including the reform of legal framework and implementing regulations, the fisheries management limiting the fishing license issuance in compliance with the quantity of aquatic animals, the fleet management putting control over fishing vessels of all sizes and types, the monitoring, control and surveillance through port-in and port-out control. Moreover, for Thai oversea vessels installation of vessel monitoring system (VMS), and especially installation of electronic reporting system (ERS) electronic monitoring system (EM) for oversea fishing fleet, as well as the development of traceability system for catches from Thai-flagged vessel.

Neritic tuna in the Andaman Sea in 2017, there were 12,802 tons of Neritic tuna caught by 4 fishing gears. The main gear was Purse seine caught 12,768 tons while Anchovy falling net, Otter board Trawl, and Squid falling nets caught 24, 6 and 4 tons respectively. Anyway, to study on the length distribution of neritic tuna was done only for purse seine.

During 2011-2015, six Thai tuna longliners operated in the Western coast of the Indian Ocean, but in 2016 - present, Thailand did not have commercial longliner vessels operated in Indian Ocean. In 2017, there was one Thai purse seiner operated only two month in this area. They declared logbook to Department of Fisheries, Thailand. Data from logbook displayed important information of their fishing operation and effort. The fishing operations were recorded 11 times. The major neritic tuna species consisted of kawakawa 13,469 kg and longtail tuna 979 kg. The average percentage composition by weight of kawakawa, longtail tuna, narrow-barred spanish mackerel and other species group (round scad, bigeye scad, Indian mackerel etc.) were 34.76%, 2.53%, 0.16% and 62.56%, respectively. The average CPUE was 3522.82 kg/time.

Foreign tuna fleets unloading in Phuket in 2017, the annual catches were estimated 21,657.59 tonnes. The main species composition were tuna group, billfish group and other species group which 20,714.87, 889.28 and 53.44 tonnes. The main species composition of Tuna group were Skipjack tuna, yellowfin tuna, bigeye tuna, bill fish group (Swordfish, Blue marlin, Indo-Pacific sailfish) and other species group (Oilfish, Dolphin Fish, Wahoo).



---

**Contents**

1. BACKGROUND/ GENERAL FISHERY INFORMATION	4
2. FLEET STRUCTURE	4
3. CATCH AND EFFORT	5
3.1 Fishing efforts; Neritic tuna in EEZ	5
3.2 Fishing efforts; Neritic tuna in high sea	5
3.3 Fishing efforts; Foreign tuna fleets unloading in Phuket	6
4. Recreational Fishery	7
5. ECOSYSTEM AND BYCATCH ISSUES	7
5.1 Sharks	7
5.2 Seabirds	8
5.3 Marine turtles	8
5.4 Other ecologically related species	8
6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEM	9
6.1 Data collection	
6.1.1 Logsheet data collection and verification	9
6.1.2 Human observer programme	9
6.1.3 Port sampling programme	9
6.1.4 Unloading/Transshipment	10
6.2 The improve activities related to data collection	10
6.2.1 Vessel monitoring system	10
6.2.2 Electronic observer programme	10
6.2.3 Inspection at port	10
7. NATIONAL RESEARCH PROGRAMME	10
8. IMPLEMENTATION OF SCIENTIFIC COMMITTEE	12
RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT TO THE SC	
9. LITERATURE CITED	13

## 1. BACKGROUND/GENERAL FISHERY INFORMATION

Marine fisheries are important both socially and economically for Thailand. Fish are very important to the food security and self-sufficiency of Thailand. Based on a recent survey (2017), a total number of 10,913 active Thai commercial fishing vessels caught 1.18 million tonnes in 2017. This catch supports the livelihoods, incomes and employment for fishermen and employed in supporting industries (e.g. fish processing industry, ship building industry, canned and frozen fisheries product factories, fish meal factories). For rural Thailand, fish constitutes a generally affordable source of protein, contributing significantly to dietary health and food security, particularly the more than 2,500 villages of artisanal fishing communities along the coasts. Thailand is also a major seafood producer and exporter. In 2017, exports total 1.51 million tonnes, valued at USD 6,683 million and imports total 1.91 million tonnes valued at USD 3,776 million (DOF, 2018).

Thailand has built upon the reforms of all dimensions undertaken during nearly the past 3 years, including the reform of legal framework and implementing regulations, the fisheries management limiting the fishing license issuance in compliance with the quantity of aquatic animals, the fleet management putting control over fishing vessels of all sizes and types, the monitoring, control and surveillance through port-in and port-out control. Moreover, for Thai oversea vessels installation of vessel monitoring system (VMS), and especially installation of electronic reporting system (ERS) electronic monitoring system (EM) for oversea fishing fleet, as well as the development of traceability system for catches from Thai-flagged vessel.

Thai tuna longliners operated in the Western Indian Ocean since 2007 after that were distributed around central and southern part of the Indian Ocean during 2011-2015. Data was collected from logbooks provided to the Department of Fisheries, Thailand. The data included information related to fishing trips and operations. The trip data was composed of dates and ports of vessel departure and return, number and weight of catch and effort (such as the number of hooks used) by species. The fishing operation included data on the time of the operation, location (latitude and longitude), the retained catch of target species and other information related to the operation. The data were provided by the Siam Tuna Fishery Company and Three Wonderful Company. Logbooks were used to estimate annual catches of the longline fleet. In 2016 to present, Thailand don’t have commercial longliner vessels operated in Indian Ocean.

Thailand has one purse seiner operated in Indian Ocean. The purse seine started fishing in December, 2016 - February, 2017. The main fishing grounds were in the Saya de Malha Bank of the Western Indian Ocean. Data was collected from logbooks submitted to the Department of Fisheries, Thailand. The data included information related to fishing trips and operations. The trip data was composed of dates and ports of vessel departure and return, weight of catch and effort by species. The fishing operation data comprised the time of the operation, location (latitude and longitude), the retained catch of target species and other information related to the operation.

## 2. FLEET STRUCTURE

Neritic tuna in Andaman Sea of Thailand mostly caught by purse seine vessels. The purse seiners along the Andaman Sea Coast of Thailand is registered 268 vessels.

For Thai overseas fishing fleet, there was no Thai commercial longline vessels operated in Indian Ocean since 2016 to present. Thailand had only one purse seiner named “Century 9” operated fishing started in December 2016 – February 2017. The number of fishing fleet was shown in table 1.

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

Year	Number of Thailand commercial longliners vessels	Size of the vessels(GT)	Remark
2013	3	347-434	In 2016 - present, Thailand don’t have commercial longliner vessels operated in Indian Ocean
2014	3	347-434	
2015	6	74-434	

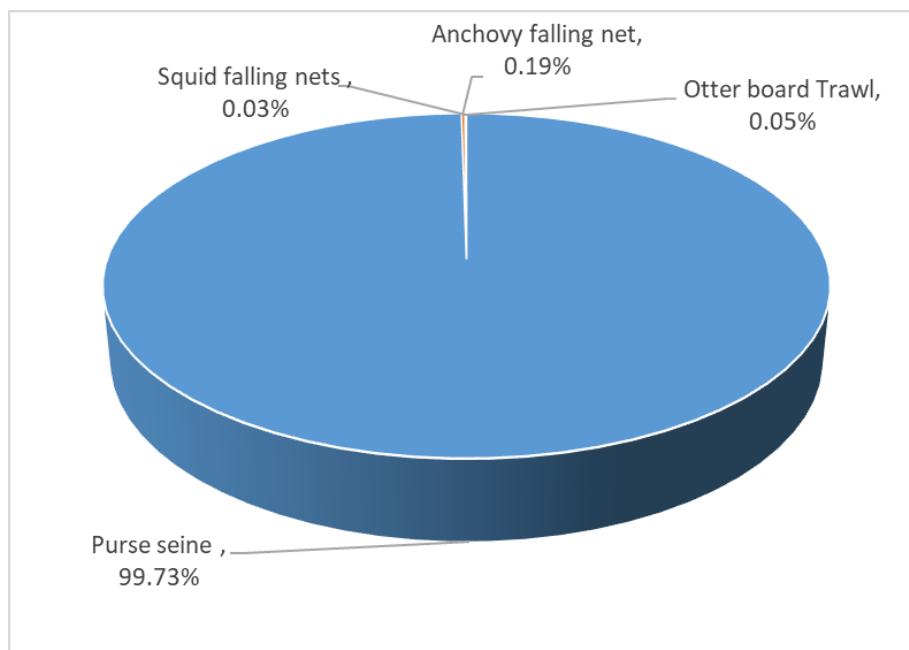
Year	Number of Thailand commercial purse seiner vessels	Size of the vessels(GT)	Remark
2016	1	199.78	
2017	1	199.78	

Year	Number of Research Vessels of DOF Thailand	Size of the vessels(GT)	Remark
2011	3	1,178-1,424	
2012	3	1,178-1,424	
2013	3	1,178-1,424	
2014	3	1,178-1,424	
2015	3	1,178-1,424	
2016	3	1,178-1,424	
2017	3	1,178-1,424	

### 3. CATCH AND EFFORT (BY SPECIES AND GEAR)

#### 3.1 Fishing efforts; Neritic tuna in EEZ

In 2017, there were 12,802 tons of Neritic tuna caught by 4 fishing gears. The main fishing gear was Purse seine their caught 12,768 tons while Anchovy falling net, Otter board trawl, and Squid falling nets were caught 24, 6 and 4 tons respectively. Anyway, to study on the length distribution of neritic tuna was done only purse seine.



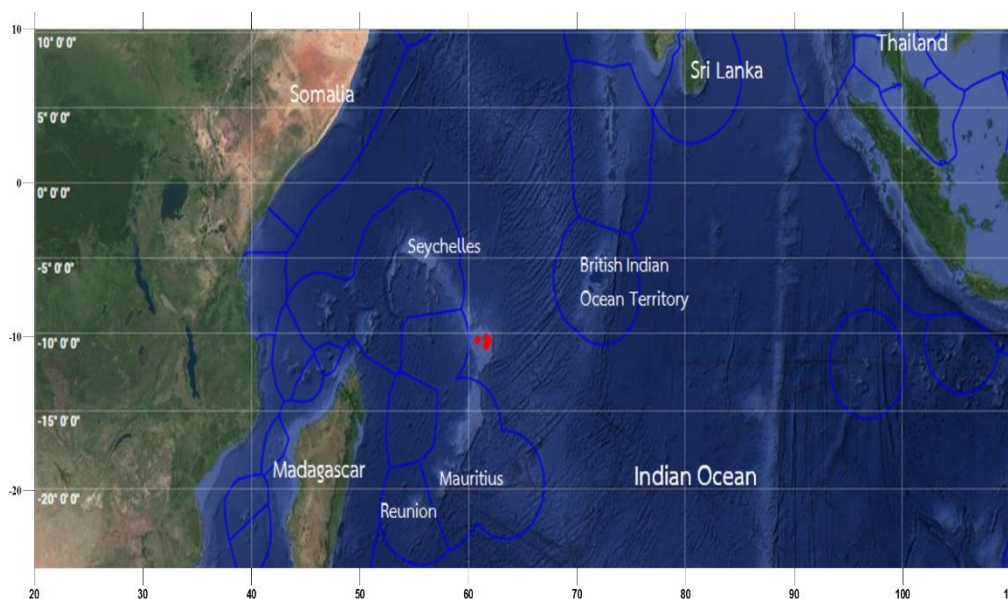
**Figure 1** Gear composition of neritic tuna in EEZ caught by purse seiner in 2017

### 3.2 Fishing efforts; Neritic tuna in high sea

In 2016-2017, The main fishing grounds was around in the Saya de Malha Bank of the west Indian Ocean (Figure 2). This purse seiner started fishing in December 2016 – February 2017. The fishing operations were recorded 17 times. The average CPUE was 3,757.82 kg/time.

In 2016, the fishing operations were recorded 6 times. The major neritic tuna species consisted of kawakawa 9,176 kg and longtail tuna 1,910 kg. The others pelagic fish including trevally, mackerel, narrow-barred Spanish mackerel, barracuda and other species were 9,350 kg, 4,185 kg, 221 kg, 144 kg and 146 kg, respectively. The average percentage composition by weight of kawakawa, longtail tuna, narrow-barred spanish mackerel and other species group (travelly, mackerel, Barracuda etc.) were 36.51%, 7.60%, 0.88% and 55.01%, respectively. The average CPUE was 4,188.67 kg/time.

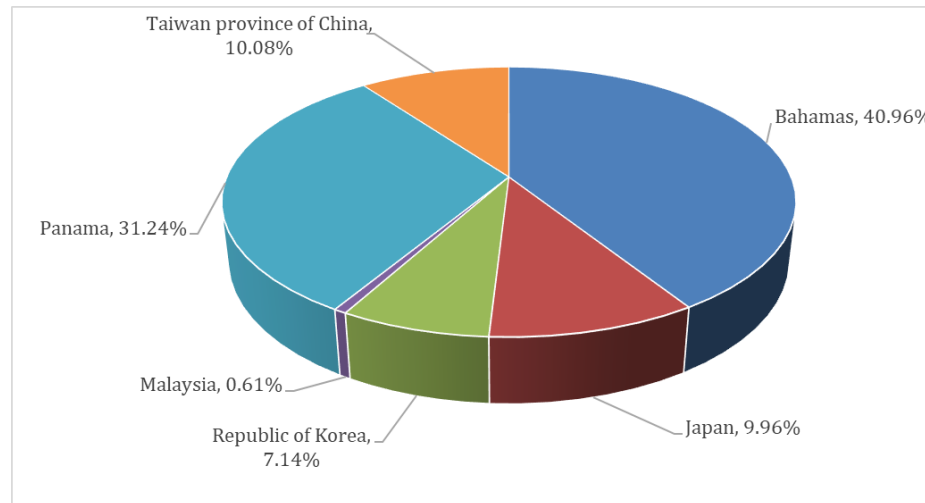
In 2017, The fishing operations were recorded 11 times. The major neritic tuna species consisted of kawakawa 13,469 kg and longtail tuna 979 kg. The others pelagic fish including round scad, bigeye scad Indian mackerel and other species were 10,755 kg, 10,073 kg, 1,275 kg and 1,180 kg, respectively. The average percentage composition by weight of kawakawa, longtail tuna, narrow-barred spanish mackerel and other species group (round scad, bigeye scad Indian mackerel etc.) were 34.76%, 2.53%, 0.16% and 62.56%, respectively. The average CPUE was 3522.82 kg/time.



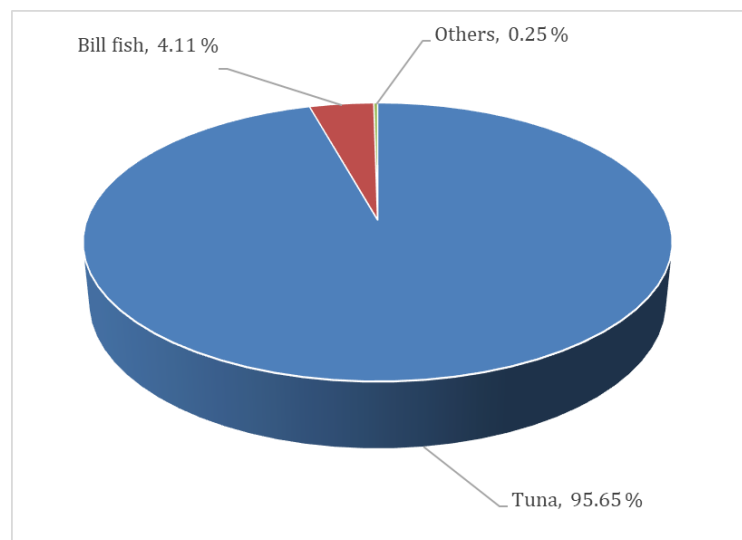
**Figure 2** Fishing ground by Thai purse seine in the Indian Ocean in 2016-2017

### 3.3 Fishing efforts; foreign tuna fleets unloading in Phuket

In 2017, foreign tuna fleets unloaded in Phuket were Bahamas, Panama, Taiwan province of China, Republic of Korea and Malaysia, respectively (Figure 3). The estimated total catch was 21,657.59 tonnes. The major species unloading by foreign fleet were Skipjack tuna, yellowfin tuna, bigeye tuna, Swordfish and Blue marlin, respectively. The average percentage composition by weight of tuna group, billfish group and other species group were 95.65 %, 4.11 % and 0.25%, respectively. (Figure 4)



**Figure 3** The percentage of fish unloading in Phuket by Foreign tuna fleets in 2017



**Figure 4** Catch composition of Foreign tuna fleets unloading in Phuket by weight in 2017

The species of tuna group were skipjack tuna (*Katsuwonus pelamis*), yellowfin tuna (*Thunnus albacares*), bigeye tuna (*Thunnus obesus*), albacore tuna (*Thunnus alalunga*). Their unloading were 12,501.96, 6,566.83, 1,624.20 and 21.87 tonnes, respectively. For billfish group, the species were swordfish (*Xiphias gladius*), blue marlin (*Makaira nigricans*), Indo-Pacific sailfish (*Istiophorus platypterus*), black marlin (*Makaira indica*) and striped marlin (*Tetrapturus audax*) with 500.00, 290.30, 96.97, 1.40 and 0.60 tones, respectively. While the other species group was 53.44 tonnes, their major species were oilfish, dolphin fish and wahoo.

**4. RECREATIONAL FISHERY**

Recreational fishery for tuna and tuna-like species is not a popular fishing game in Thailand, and they are only occasional and seasonal events in Andaman Sea.

**5. ECOSYSTEM AND BYCATCH ISSUES**

Thailand has several measures to reduce the impact of fishing on marine ecology such as 1) prohibited trawler and push netter with engine operated within 3 miles from the shore line 2) mesh size regulation for purse

seine and trawl to reduce a juvenile from the catches, 3) determination of closed area and season in particular fish species, and 4) enlarge the mesh size of code end of trawl net to be 5 cm. 5) limited fishing days

### 5.1 Sharks [Mandatory]

#### NPOA-Shark

Referring to the Thai Fisheries Statistics during 1995 to 2009, it was reported that sharks and rays were mainly caught by otter-board trawler and pair trawler where their fishing areas are located in the Thai’s EEZ. In addition, there is no record from the Thai tuna longliners and purse seiners on the shark by-catch from their fishing operation in the Indian Ocean. (only 2007 was recorded). The total number of sharks retained during 2011-2015 follow table 2.

However, there are a numbers of national initiatives related to conservation and management of sharks. It includes: (i) development in 2012 and will be endorsement of the National Plan of Actions for Sharks in 2015; (ii) a series of study on shark by-catch using the national research vessels; (iii) development of handbook for sharks species identification and its database system for sharks and rays found in Thailand in 2012-2014; and (iv) participation of the staff concerned of Department of Fisheries to the meetings related to sharks/rays conservation and management.

#### Thailand’s rule and regulations

Thailand has royal ordinance on fisheries 2015 and issued the notification related on defining requirement and procedures for fishing vessels operating outside Thai waters as follow:

- **Section 49:** *“In the case where the holder of a license for fishing outside Thai waters engages in a fishing operation in an area under the jurisdiction of a coastal state or in an area under the control and responsibility of an international organisation, apart from having to comply with this Royal Ordinance, the licensee shall have to comply with the laws, rules and standards of conservation and fisheries management of any such coastal state or international organisation”*

Notification of the department of fisheries for compliance under section 49: rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018).

- **Section 66:** no person shall catch marine mammals, rare aquatic animals or aquatic animals near extinction as prescribed by the Minister or take any such aquatic animal on board a fishing vessel, except where it is necessary to do so in order to save the life thereof.

**Table 2:** Total number of sharks, by species, retained during 2011-2015

Year	Sharks species							
	BSH		MAK		SFA		Sharks unidentified	
	No.	Tonnes	No.	Tonnes	No.	Tonnes	No.	Tonnes
2011							214	5.41
2012							544	18.53
2013							211	5.78
2014							1,145	49.98
2015	1,323	49.65	346	5.61	28	0.67	138	3.62
<b>Total</b>	<b>1,323</b>	<b>49.65</b>	<b>346</b>	<b>5.61</b>	<b>28</b>	<b>0.67</b>	<b>2,252</b>	<b>83.32</b>

### 5.2 Seabirds

In the past, no record available on the number of accidental caught seabird by Thai fishing vessels. Now, Thailand has royal ordinance on fisheries 2015 and Notification of the department of fisheries for compliance under section 49: rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018).



### 5.3 Marine Turtles

Thailand is one of the countries that actively involved in the conservation programme of turtles long time ago.

Under royal ordinance on fisheries 2015 in section 66. Turtle and marine mammals are not allowed to be fished, disturbed or taken for whatever means without the permission of Fisheries authority. The turtles and marine mammals that are accidentally caught alive during fishing have to be release immediately.

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

No record available on the number of accidental caught marine animals and whale sharks by Thai fishing vessels. Under royal ordinance on fisheries 2015 in section 66, Whale shark are not allowed to be fished, disturbed or taken for whatever means without the permission of Fisheries authority.

## 6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

### 6.1 Data collection

#### 6.1.1 Logsheet data collection and verification

Thailand has implemented the new logbook in 2015 and have developed e-logbook in 2016. Then it has developed fishing logbook via Electronic Report System in August, 2017. The implemented on Catch Certificate Exemption Statement since 1st January 2010 by apply Catch Certificate and Fishing Logbook following Deter and Eliminate Illegal, Unreported and Unregulated Fishing. The system of estimate the total production of neritic tunas and seer fish will be gathering and improve on the percentage of coverage of logbook.

#### 6.1.2 Human Observer programme

The 1<sup>st</sup> batch of observers (20 of them) completed their training in December 2015 and the 2<sup>nd</sup> batch of candidate observers (30 of them) were trained to act as onboard fisheries observers in April 2016 and the 3<sup>rd</sup> batch of candidate observers (30 of them) were trained to act as onboard fisheries observers in August 2017. The Department of Fisheries have been preparing operating manuals and report forms, and formulating necessary rules and regulations to ensure the effectiveness of the observer program. The process is being expedited so that the observers can begin working on board selected vessels operating in the High Seas or the Indian Ocean in 2016. The DOF also have a training course for the debriefers or training for the trainer course. Debriefers is the one who in charge the briefing activity for observers before their deployment and in charge the debriefing activity when they return. The briefing and debriefing activity will ensure the quality of the collecting information by observers as well as to improve their capacity and performance

For fishing vessel which operates fishing at high-seas under responsibility of IOTC, observer onboard the vessel shall be placed not less than 5% of total fishing effort and Regional Observer shall be placed for observation entire the period of transshipment.

#### 6.1.3 Port sampling programme

Neritic tuna were collected data by sampling method program. Size sampling program and data collection have collected for 2-3 days/gear /month. There are 2 steps in field trip data collection.

**First is interview:** Mostly fisheries officer has interviewed fishing master about fishing effort is total catch, day per trip, number of haul, fishing ground, depth, species composition, fish price, and problems in fishing. Sometime ask size of fishing gear, size of vessel or some techniques for fishing.

**Second is sampling:** the sampling size were not less than 30 kg/vessel, to identify species and measure total length fish size by punching paper in centimeter and also measure weight in gram.

Every month, data analysis has to be reported for fishing effort, percentage of species composition and length of fish. Mostly of purse seine has fishing ground in the Andaman Sea coast. DOF will use this database to monitor and analyze the status of marine. Fisheries Resources Assessment Group, one of units under the Marine Fisheries Research and Development Division. Fisheries Resources Assessment Group has a responsibility to determine the frame of species, size, quantity, season time for proper fishing, fishing license practices, and assessment with the maximum sustainable yield (MSY). Anyway the number of fishing license granted will not exceed the level of permitted Total Allowable Catch (TAC), calculated based on the Maximum Sustainable Yield (MSY).

#### 6.1.4 Unloading/Transshipment

The cooperation program between Thai DOF and IOTC-OFCF was finished in December 2006. As the information of catches taken by foreign vessels operating in the Indian Ocean and landed at the fishing port in Thailand is so important not only for Thailand but also for IOTC. Nowadays, Thailand is still continuous collecting data from foreign vessel that landing catch at Phuket Province.

The activities involve collecting the number of landings, catch, vessel operating (no. of trip), weight samples, interviewing, biological samples and other activities such as collection of information of shark, other species, and study age of the fish by using otolith.

### 6.2 The improve activities related to data collection

#### 6.2.1 Vessel Monitoring System (including date commenced and status of implementation)

Thailand started and implemented the VMS system on all fishing vessels (> 30 gross ton) in 2015. All overseas vessels have already implemented the VMS system on board in compliance with the fisheries management authorities.

#### 6.2.2 Electronic Observer programme

Thailand has Electronic Monitoring System on fishing vessel and carrier vessel. The Electronic Monitoring System (EM) is a system using information technology and satellite communications for getting information on the use of fishing and transshipments gears at sea from electronic sensor equipment on fishing vessels which has direct connections with the equipment gears used in fishing and transshipments. Information on the use of these gears will be confirmed by information regarding vessels’ direction from the vessel monitoring system (VMS) as well as information from the closed circuit televisions system (CCTV) captured in snapshots and transmitted through a satellite communication in real time. This can be monitored and examined after such video recordings. The RFID technology and electronic signals from capstans and cranes on fishing vessels will be the sensor equipment identifying the start and end of fishing and transshipment activities.

#### 6.2.3 Inspection at port

Since 2015, Thailand has improved the data collection of marine fisheries by set up the Port in and Port out scheme.

- Check the number of fishing boat. The official check up the number of vessels follow the license. That is important data for management.
- “Port in – Port out” (PIPO) PIPO scheme has established since 1<sup>st</sup> May 2015, all fishing vessels over 30 gross ton. This system record information of each vessel including the types of equipment, types of caught fish, name of vessel, vessel registration, vessel license, fishery permit, and crew-members. Vessels are required to report these selected information to officer not less 2 hours but within 24 hours before going in and out from the port. However, every day has Port in-port out team check all document at the port.
  - Logbook ; the fishing record information for catch composition and fishing ground daily.
  - Marine catch Purchasing Document (MCPD); Boat owners will sell marine catch to middlemen who sell the fish to processing plants. The processing plant has been reported and submits catch certificate of Thailand, namely Simplified Catch Certificate of Thailand from DOF.
  - Record fish unloaded; The DOF official record sale composition at the landing place. The official will random fishing vessels about 25% of the total number of unloaded. This data will be cross checked with the data from logbook.

## 7. NATIONAL RESEARCH PROGRAMS [Desirable]

**Table 3.** Summary table of national research programs

Project title	Period	Countries involved	Budget total	Funding source	Objectives	Short description
The observer onboard program	2015-present			DOF Thailand	The observer onboard program is a part of fisheries management plan. It has been	The 1st batch of observers (20 of DOF officers) started observer onboard program in September 2015



					launched to support the MCS and traceability systems. Data from observer is important because it is the correct and accurate information, to be used in the fisheries management which contains fishing information, quantity of captured and biology of economic fish.	and the 2 <sup>nd</sup> batch of candidate observers (30 of them) and the 3 <sup>rd</sup> batch of candidate observers (30 of them) started in August 2017. The 1st batch were introduced the Observer Scheme and the learned lesson and experience of implementation were shared by the key workshop conductors from the Philippines.
Training for Observer Debriefing	August 2017-present			DOF Thailand	To debrief and verify data of Observer	Verify data of observer report and cross check with logbook, Transshipment Declaration even the observer back to port in.
EU regulation to prevent, deter and eliminate IUU fishing	Since 1st January 2010			DOF Thailand	Improve the Fishing Logbook, Marine Catch Purchasing (MCPD) and Marine Catch Transshipment Documents (MCTD) report system	DOF will emphasize its work on the suppression of illegal practices which is along the line of the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU). At present DOF of Thailand has the NPOA-IUU and will be submitted to cabinet in 2015.

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

**Table 6.** Scientific requirements contained in Resolutions of the Commission, adopted between 2005 and 2018.

Res. No.	Resolution	Scientific requirement	CPC progress
15/01	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–10	Thailand collects fisheries information by using fishing logbook, which will be report through Electronic Report System (ERS).
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	Thailand collects fisheries information in the area and submits report to IOTC in accordance with Resolution 15/02.
18/05	On management measures for the conservation of the billfishes: striped marlin, black marlin, blue marlin and Indo-Pacific sailfish	Paragraphs 7-9	Thailand have been to enforce the law which has designed fishing logbook and incidental logbook for collect the data related billfish. And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018)
13/04	On the conservation of cetaceans	Paragraphs 7– 9	Thailand have been to enforce the law which has designed incidental logbook . And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. 2561 (2018)
13/05	On the conservation of whale sharks ( <i>Rhincodon typus</i> )	Paragraphs 7– 9	Thailand have been to enforce the law which has designed incidental logbook . And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	Thailand have been to enforce the law which has designed incidental logbook . And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	Thailand have been to enforce the law which has designed incidental logbook . And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	Thailand have been to enforce the law which has designed incidental logbook . And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	Thailand have been to enforce the law which has designed incidental logbook . And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating

Res. No.	Resolution	Scientific requirement	CPC progress
			in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E
11/04	On a regional observer scheme	Paragraph 9	Thailand report of number of vessel monitored and submits report to IOTC in accordance with Resolution 11/04.
17/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1-12	Thailand have been to enforce the law which has designed incidental logbook . And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E
18/02	On management measures for the conservation of blue shark caught in association with IOTC fisheries	Paragraphs 2-5	Thailand have been to enforce the law which has designed incidental logbook . And Thailand has notification of the Department of Fisheries: Rules and regulations of overseas fishing vessels operating in the responsible area of Indian Ocean Tuna Commission (IOTC) B.E. Thailand follows and submits Annual Report as required in the Resolution.
18/07	On measures applicable in case of non-fulfilment of reporting obligations in the IOTC	Paragraphs 1, 4	Thailand follows and submits Annual Report as required in the Resolution. And Thailand have been enforce the law which has designed incidental logbook .

## 9. LITERATURE CITED [Mandatory]

Aekkarat Wongkeaw Pattira Lirdwitayaprasit and Prasit Luesrithawornsin.2015.catch of billfish by Thai tuna longliners during 2014-2015.13pp.

Marine Fisheries Management Plan of Thailand.2015-2019

Pattira Lirdwitayaprasit. 2009. National Report of Thailand in 2009.

Pattira Lirdwitayaprasit Aekkarat Wongkeaw and Tirabhorn Yothakong. 2016. Thailand National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2017. 11pp.

Pattira Lirdwitayaprasit Aekkarat Wongkeaw and Tirabhorn Yothakong. 2017. Thailand National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2017. 13pp.

Prasit Luesrithawornsin Pattira Lirdwitayaprasit and Aekkarat Wongkeaw.2015. Shark caught by Thai tuna longline in the Indian Ocean during 2014-2015.8pp.

Prulai Nootmorn. 2014. National Report of Thailand 2014

Prulai Nootmorn. 2015. National Report of Thailand 2015

Thumawadee Jaiyen and Prulai Nootmorn. 2015.Method of data collection in the Andaman Sea.7pp.