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# Seychelles National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2017

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# INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 15/02, final scientific data for the previous year was	YES
provided to the IOTC Secretariat by 30 June of	30/06/2017
the current year, for all fleets other than longline [e.g. for a National Report submitted	
to the IOTC Secretariat in 2017, final data for	
the 2016 calendar year must be provided to	
the Secretariat by 30 June 2017)	V50
In accordance with IOTC Resolution 15/02, provisional <b>longline data</b> for the previous year	YES
was provided to the IOTC Secretariat by 30	30/06/2017
June of the current year [e.g. for a National	
Report submitted to the IOTC Secretariat in 2017, preliminary data for the 2016 calendar	
year was provided to the IOTC Secretariat by	
30 June 2017).	
<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 2017, final data for the 2016 calendar year must be	
provided to the Secretariat by 30 December	
2017).	
If no, please indicate the reason(s) and intended	actions:





#### **EXECUTIVE SUMMARY**

The Seychelles National Report summarizes activities of the Seychelles' fishing fleet targeting tuna and tuna-like species in the WIO for the year 2016 in comparison with previous years. It also summarizes research, and data collection related activities as well as actions undertaken in 2016 to implement Scientific Committee recommendations and IOTC Conservation and Management Measures.

The Seychelles purse seine fleet increased from 8 vessels in 2012 to 13 vessels in 2016. The number of supply vessels also increased from 3 to 7 vessels during the same period. The annual trend in fishing effort in term of fishing days shows that following a drop of 15% in fishing effort in 2013 from the previous year, the purse seine fishing effort has since then been increasing gradually. In 2016 the nominal effort increased by 786 days (24%) when compared to the previous year to reach a total of 4,050 days fished.

In 2016, the catch increased by 22% from 88,740MT in 2015 to 108,613 MT in 2016. This was achieved from a fishing effort of 4,050 fishing days thus giving a mean catch rate of 26.82MT/Fishing day. Skipjack was the dominant caught, accounting for 56% of the total catch whilst yellowfin tuna made up 37% of the total catch of the Seychelles flagged purse seiners in WIO. Catches of yellowfin tuna increased by 3% from 39,072 MT in 2015 to 40,121 MT in 2016 and catches of skipjack tuna increased by 44% from 42,426MT in 2015 to 60,991 MT in 2016.

One more fishing vessels joined the Seychelles Industrial longline fleet in 2016 making a total of 46 vessels. The total catch reported by the industrial longline fleet for 2016 was estimated at 14,486 MT representing a 16% increase in catches with 45% increased in fishing effort when compared to 2015.

In term of species composition, bigeye tuna remained as the dominant species caught by this fleet for the past five years, accounting for 35% of the total catch. The estimated catch rate increase to 0.44 MT/1000 hooks in 2016.

In 2016, the Semi industrial fishery recorded the highest catch since the beginning of the fishery with a reported total catch of 969 Mt representing an increase of 397% over the 195 MT reported in 2015. The fishing effort also increase by 500% from 205,505 hooks set to 1,233,657 hooks. The catch rate decreased from 0.95MT/1000 hooks to 0.79MT/1000 hooks.

Similar to previous years, the SFA is implementing various actions to improve the quantity and quality of data collected from its fleet targeting tuna and tuna-like species





in the Indian Ocean. Actions include improved logbook for data capture, review and upgrade of data collection and management system and implementation of National Scientific Observer Programme. The Observer programme is currently in its 3<sup>rd</sup> phase, focusing on data analysis and reporting.

In 2016 Seychelles reviewed its NPOA shark and developed a new one for the 2016 – 2020 period. A NPOA for seabird is currently in the process of being developed.





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# 1. BACKGROUND/GENERAL FISHERY INFORMATION

The Republic of Seychelles is an archipelago of around 115 islands scattered over an exclusive economic zone of 1.37 million km² in the WIO. Typical of small-island developing states, marine resources are of significant social, economic and cultural importance. Apart from tourism, the country has limited opportunities for land-based development, and as a result, the fishing industry is a major contributor to the economic development of the country. The economic importance is derived from its role as a source of employment, contribution to production, food security and income generation, trade and foreign exchange generation and government revenue.

Since the mid 1980's the Seychelles have been granting access to foreign flagged vessels to fish for tuna and tuna like species inside of the Seychelles EEZ through various access agreements. Seychelles registered vessels, initially purse seiners, started operating in 1997, followed in 1999 with industrial longliners. A small scale local fresh tuna longline fleet also started operation in 1995.

The Seychelles Fishing Authority (SFA) was incorporated in August 1984, and since it was set up, the SFA has been implementing data collection programme, mainly to collect catch and effort information via logbook system, as well as port sampling programmes to collect data on transhipments, landings, size frequencies and species composition.

Port Victoria is the home base for the WIO purse seiners and the Seychelles small scale longline fleet, hence the activities of those fleet are covered almost 100%. On the other hand, distant water industrial longline vessels seldom use Port Victoria as their port of transhipment, making it difficult to obtain good logbook coverage, transhipment/ landings as well as size frequency data. The Seychelles is however participating in the regional Observer Scheme to monitor transhipment at sea. Furthermore at sea scientific observer programme on the purse seine fleet and self sampling programme on the industrial longline fleet is currently being implemented.

The Seychelles National Report summarizes activities of the Seychelles' industrial purse seine and longline (industrial and small scale longline) fleet in the WIO, reported over the past 5 years. It also summarizes research, and data collection related activities as well as actions undertaken in 2016 to implement Scientific Committee recommendations and IOTC resolution.





#### 2. FLEET STRUCTURE

Table 1a. Shows the number of Seychelles registered purse seiners, supply vessels, industrial and semi-industrial longliners for the period 2012 to 2016. The number of Seychelles registered purse seiners increased from 8 vessels in 2012 to 13 vessels in 2015. In 2016, the number of Seychelles registered purse seiners remained the same as the previous year. The number of supply vessel also remained the same in 2015 and 2016. The Seychelles registered longliners increased from 32 vessels to 46 vessels during the period 2012 to 2016. An increasing trend was also observed in the number of registered small scale (semi-industrial) longline vessels from 7 vessels in 2012 to 29 vessels in 2016.

Table1a. Number of Seychelles registered vessel for the period 2012 to 2016

Year	Purse seiners	Supply vessels	Longliners	Semi-Industrial
2012	8	3	32	7
2013	7	4	33	6
2014	11	6	38	9
2015	13	7	45	11
2016	13	7	46	29

Table 1b.Seychelles registered vessels by size (GT) as reported to IOTC in 2016

GT	Purse seiners	Supply vessels	Longliners	Semi-Industrial
<50	-		-	21
51-100	-		1	8
101-500	-	7	27	-
501-1000	-		19	-
>1000	13		-	-

#### 3. CATCH AND EFFORT

#### 3.1 Purse Seine Fishery

Table 2a summarizes the total annual catches by species, fishing effort and catch rates for the Seychelles purse seine fleet reported over the 2012 to 2016 period. Trend analysis of the purse seine catches in Seychelles over the last 5 years shows that catches has been on





an increasing trend since 2012. In 2016, the catch increased by 22% from 88,740MT in 2015 to 108,613 MT in 2016 (Table 2a and Figure 1a)

The annual trend in fishing effort in term of fishing days shows that following a drop of 15% in fishing effort in 2013 from the previous year, the purse seine fishing effort has since then been increasing gradually. In 2016 the nominal effort increased by 786 days (24%) when compared to the previous year to reach a total of 4,050 days fished.

Historically skipjack tuna dominated the catches of the Seychelles flagged purse seiners in the Western Indian Ocean (WIO). However between period 2012 to 2013 yellowfin replaced skipjack tuna as the dominant species.

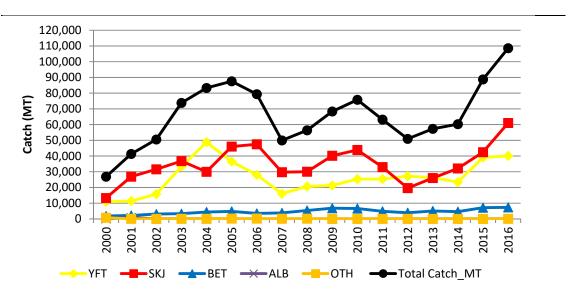
In 2016, skipjack was the dominant caught species, accounting for 56% of the total catch whilst yellowfin tuna made up 37% of the total catch of the Seychelles flagged purse seiners in WIO. Catches of yellowfin tuna increased by 3% from 39,072 MT in 2015 to 40,121 MT in 2016 and catches of skipjack tuna increased by 44% from 42,426MT in 2015 to 60,991 MT in 2016.

Between the period 2012 to 2013, the catch rate increased from 23.88 Mt/Fishing days to 31.69 Mt/Fishing days and has since then been decreasing to reach 26.82 Mt/Fishing days in 2016.

**Table 2a**. Seychelles flag purse seine annual catch, fishing effort and catch rates reported between 2012 and 2016.

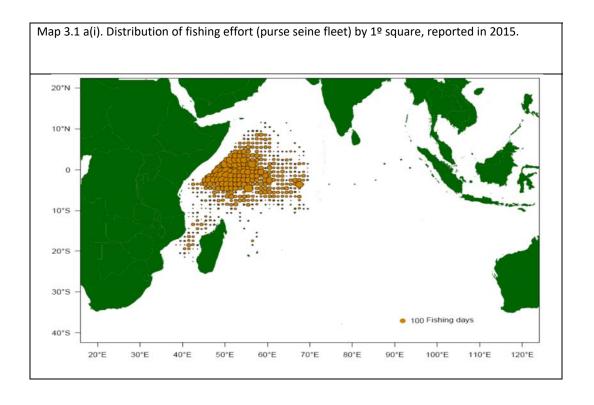
Year	Days Fished	Catch Rate	YFT	SKJ	BET	ALB	NEI	Total
2012	2,133	23.88	27,220	19,641	3,928	148	1	50,938
2013	1,809	31.69	26,231	25,997	5,045	49	2	57,324
2014	2,109	28.57	23,463	32,104	4,636	45	7	60,255
2015	3,264	27.19	39,072	42,426	7,168	60	13	88,740
2016	4,050	26.82	40,121	60,991	7,325	110	65	108,613



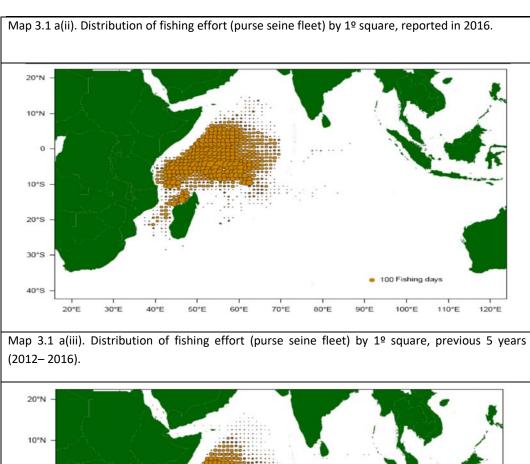


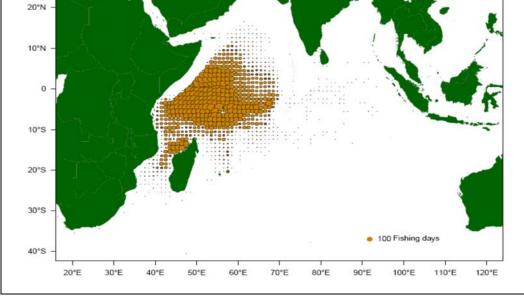
**Figure 1a**. Trends in annual catches by species for Seychelles' purse seine fleet reported for the period 2000-2016

Maps 3.1 a(i), a(ii) and a(iii) show the distribution of fishing effort by 1° square reported by Seychelles purse seine fleet for 2015, 2016 and for the previous 5 years (2012 – 2016) respectively.



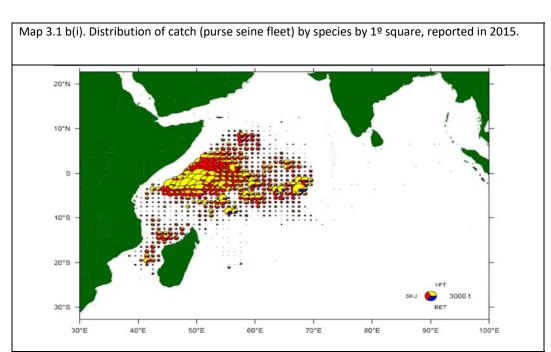




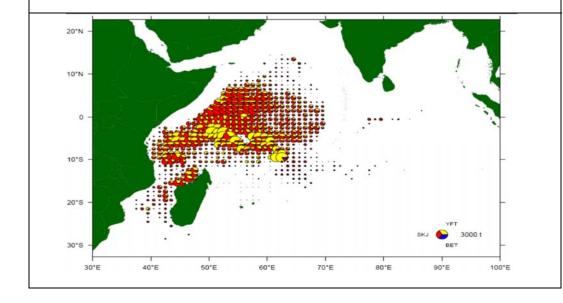


Maps 3.1 b(i), b(ii) and b(iii) show the distribution of catches by 1° square reported by Seychelles purse seine fleet for 2015, 2016 and for the previous 5 years (2012 – 2016) respectively.





Map 3.1 b(ii). Distribution of catch (purse seine fleet) by species by 1º square, reported in 2016.





Map 3.1 b(iii). Distribution of catch (purse seine fleet) by species by 1º square, previous 5 years (2012 – 2016).





# 3.2 Industrial Longline Fishery

Table 2b summarizes total yearly catch by species, fishing effort and catch rates reported by the Seychelles industrial longline fleet during period 2012 to 2016.

The reported fishing effort in terms of the number of hooks set decreased by 8 % from 2013 to 2014 and has since then been increasing steadily. In 2016, a 45 % increased was recorded in the number of hooks set to 33 million hooks compared to nearly 23 million hooks set in 2015. This increase in fishing effort is partially due to the increase in the number of industrial longliners. The number of industrial longliners increased from 38 in 2014 to 46 in 2016.

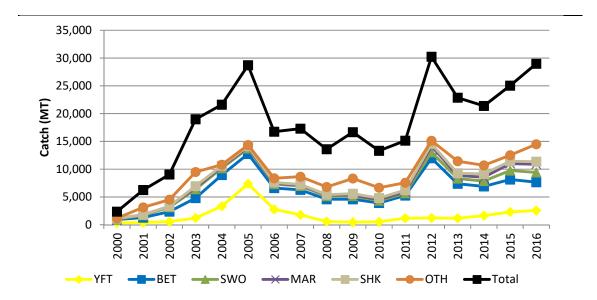
The total catch decreased from 15,116 MT in 2012 to 10,689 MT 2014 and has since then been on an increasing trend. For the year 2016, the Seychelles registered industrial longliners reported an estimated catch of 14,486 MT representing an increase of 16% in catches, when compared to 2015. In term of species composition, bigeye tuna has remained the dominant species caught by this fleet for the past five years, accounting of 35% of the catch during 2016. The reported catch of marlin, swordfish ,yellowfin tuna and the NEI category increased by 19%, 9%, 11% and 189% respectively whilst catch of bigeye tuna decreased by 13% when compared to the previous year. The increase in catch of NEI category is mainly due to an increase in the catch of oil fish species (figure 2a).NEI consist of albacore, sailfish, skipjack, unspecified species and oil fish.

Following an increase in catch rate to 0.77 MT/1000 hooks in 2012, the average catch rate reported in 2013 decreased to reach 0.49 MT/1000 hooks . The catch rate has since then been increasing gradually to reach 0.55MT/1000 hooks in 2015. In 2016 catch rate declined again to 0.44MT/1000 hooks .

Year	Fishing Effort (million hooks)	Catch rate (Mt/1000 hooks)	YFT	ВЕТ	swo	MAR	SHK	NEI	Total
2012	19.56	0.77	1,220	10,749	1,082	1,109	389	567	15,116
2013	23.48	0.49	1,177	6,193	945	564	392	2160	11,431
2014	21.59	0.50	1,643	5,260	965	687	583	1551	10,689
2015	22.82	0.55	2,306	5,834	1,621	1,238	436	1083	12,518
2016	33.00	0.44	2,564	5,093	1,759	1,468	469	3133	14,486

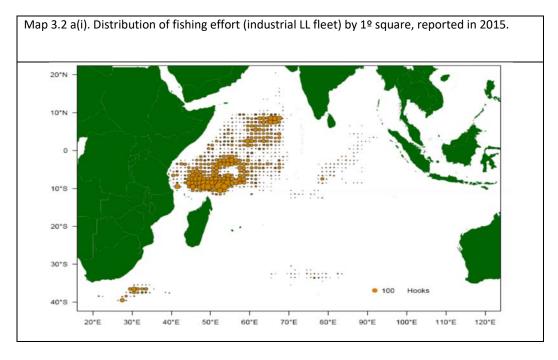
**Table 2b.** Annual catch, fishing effort and catch rates reported by Seychelles industrial longline fleet from the years 2012 - 2016



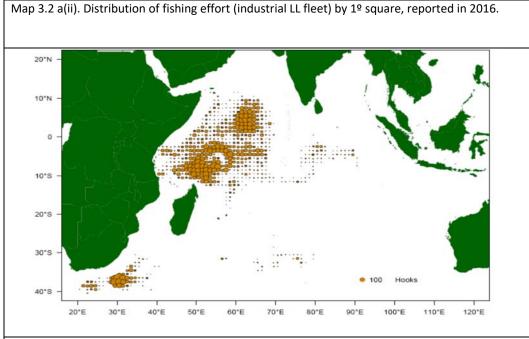


**Figure 2a**. Trends in annual catch by species reported by the Seychelles industrial longline fleet for period 2000-2016

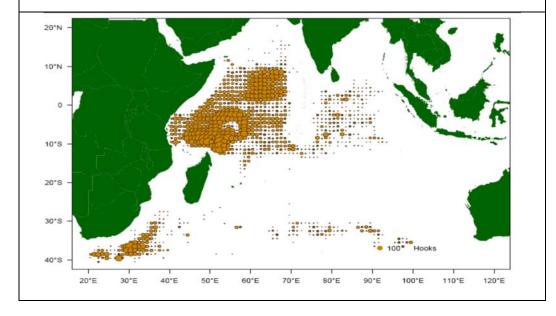
Maps 3.2 a(i), a(ii) and a(iii) show the distribution of fishing effort by  $1^{\circ}$  square reported by Seychelles'industrial longline fleet for 2015, 2016 and the previous 5 years (2012 – 2016) respectively





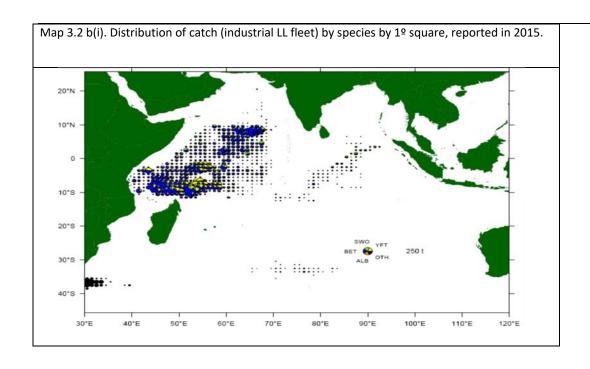


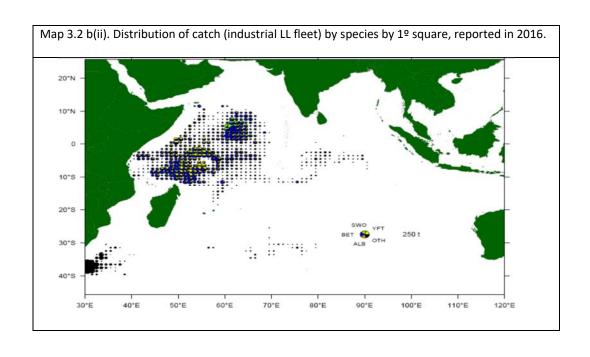
Map 3.2 a(iii). Distribution of fishing effort (industrial LL fleet) by  $1^{\circ}$  square, previous 4 years (2012 – 2016).



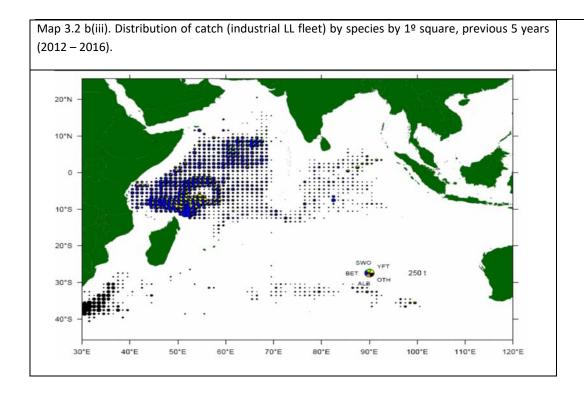
Map 3.2 b(i), b(ii) and b(iii) show the distribution of catches by species by  $1^{\circ}$  square reported by Seychelles' industrial longline fleet for 2015, 2016 and the previous 5 years (2012 – 2016) respectively.











# 3.3 Semi Industrial Fishery

Table 2c summarizes the fishing activities of the locally based small scale (semi-industrial) longline fleet from 2012 to 2016. The fishing effort in terms of hooks set, has been on an increasing trend following a drop by 70% in 2014. In 2016, a significant increase of 500% was reported in the number of hooks set from 205,505 hooks in 2015 to 1,233,657 hooks in 2016. The increase in the fishing effort is mainly due to the increase in the number of vessel joining this fishery in 2016. This upsurge in number of vessel due to new fishing practices imparted by Sri Lankan fishermen to local fishermen resulting in higher catches of tuna which has encourage local investors to join the fishery.

Total catch decreased by 70% from 271 MT in 2012 to 82 MT in 2014. The sharp drop in fishing effort and catch was mainly attributed to problems encountered with export of swordfish on EU market due to its high level of mercury. This lead most semi industrial vessel to switch to targeting demersal species instead of pelagic fish. In 2015, the catch increase by 137%, to 195 MT, when compared to the previous year.





In 2016, the semi industrial fishery recorded the highest catch since the onset of this fishery in 1996, with a reported catch of 969 MT, representing a 397% increase compared to the previous year catch.

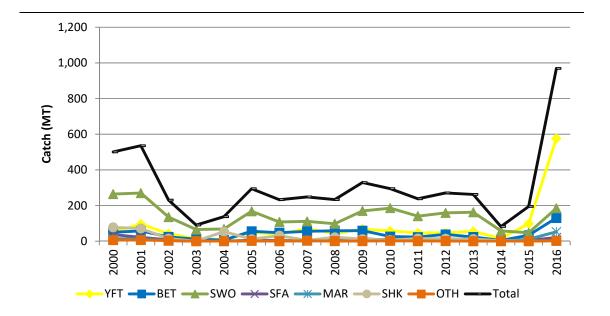
Swordfish dominated the catch composition accounting for an average of 62% of the total reported catch for the period 2012-2014. However during the last two years, yellowfin tuna replaced swordfish as the dominant species caught in the semi-industrial longline fishery, where yellowfin tuna accounted for 59% of the total catch followed by swordfish and bigeye tuna accounting for 19% and 13% of the total catch in 2016 respectively.

The catch rate decreased from 0.82 Mt/1000hooks in 2012 to 0.69 Mt/1000hooks in 2014, followed by an increased to 0.95Mt/1000hooks in 2015. In 2016 the catch rate decreases to reach 0.79 Mt/1000 hooks.

**Table 2c**.Catch, fishing effort and catch rates reported by the Semi Industrial longline fleet between 2012 and 2016.

Year	Effort (Hooks)	Catch rate (MT/1000 hooks)	YFT	ВЕТ	swo	SFA	MAR	SHK	NEI	Total
2012	330,466	0.82	47	38	159	3	9	14	1	271
2013	398,770	0.66	55	24	162	3	5	12	0	262
2014	118,973	0.69	15	5	58	1	1	2	-	82
2015	205,505	0.95	98	33	47	5	11	1	-	195
2016	1,233,657	0.79	576	130	185	20	53	2	2	969





**Figure 1c**. Trends in annual catch by species reported by the Semi Industrial longline fleet between the period 2000 and 2016.





#### 4. RECREATIONAL FISHERY

SFA is currently reviewing its data collection system for the domestic fishery, and is working in close collaboration with relevant stakeholders to develop and implement a more effective system that will cover all the important sectors including the sport fishing sector which target tuna and tuna-like species. The SFA, supported by the Wold bank funded SWIOFISH 3 project, is currently undertaking a comprehensive boat frame survey to cover all fishing vessels (commercial/ recreational and sport). This will be followed by the development and implementation of a licensing framework for all national fisheries. The licensing framework will also include mandatory reporting of statistics from the various sub-sectors and form part of the implementation of the Mahe Plateau trap and line fishery management plan. The licensing framework will be ready at the end of quarter one of 2018.

#### 5. ECOSYSTEM AND BY CATCH ISSUES

#### 5.1 Sharks

The Seychelles Fishing Authority reviewed its National Plan of Action for the Conservation and management of Sharks (NPOA) 2007-2011 and developed a new 5 years plan for the period 2016-2019. One of the main finding of the review was that the key shortcoming for the implementation of the NPOA was the weak functioning of its Steering Committee – in terms of not being given sufficient priority in the Fisheries Portfolio, insufficient secretariat support, a lack of strategic approach and insufficient and irregular meetings.

These shortcomings will be addressed through the setting up of a secretariat with a secretary to coordinate the efforts of key stakeholders, through the Shark – NPOA Steering Committee responsible to oversee the implementation of the Sharks NPOA 2016-2020.

It is expected that a secretary will be appointed before the end of the year and the Steering committee members chosen. Implementation of the plan is expected to begin as of January 2018.





#### **Shark Finning - Regulations, 2006**

These Regulations place restrictions on the removal of fins of all species of shark on board of foreign-owned or local fishing vessels of a total length of 24 metres and above, fishing within or outside the Seychelles Waters. In accordance IOTC resolution 17/05 a ratio of not more that 5% in weight of shark fins to weight of shark carcasses without fins must be respected at all times onboard all Seychelles industrial longline fishing vessels greater than 24 meters in length, up to first point of landing.

#### 5.2 Seabirds

In accordance to FAO IPOA-SEABIRDS (voluntary), Seychelles is collaborating with Birdlife South Africa to develop a National Plan of Action for Seabirds. This is due to the fact that Seychelles registered industrial longliners continues to operate in seabird's hotspot zones, south of 25°S, even though they have been advised to avoid these zones. A sea bird expert has been identified to develop the plan and the TOR is being finalised and work are expected to begin early December 2017.

Furthermore, SFA in collaboration with Birdlife South Africa organised a workshop with relevant stakeholders involve in industrial longline fishing as well as with SFA's enforcement officers, in Victoria, between June 8 and 9. The purpose of this workshop was mainly for education and awareness on issues related to mitigation of seabird's mortality on industrial longline fishing operation as well as to build the capacity of SFA's officers in order to identify, during vessels inspection, whether the vessel is geared up to implement mitigation measures such as line weighing, use of tori-lines, to mitigate seabirds bycatch. Enforcement officers had the opportunity to handle those devices. A second training with a bigger group of inspectors was undertaken on 29<sup>th</sup> November 2017 in the Seychelles.

Finally, SFA has introduced a new logbook for its industrial longliners to cater for recording of interactions with seabirds (an IOTC reporting requirement). However, the records will focus on overall number of seabirds accidentally captured and or released alive or dead, but it does not allow for the reporting of seabird species.

Ten industrial longliners operated south of 25°S, during 2016, corresponding to a total fishing effort of 5,895,390 hooks set.





#### 5.3 Marine Turtles

Several marine turtle monitoring programmes are coordinated by a number of different non-governmental organisations (NGOs) such as SIF, Nature Seychelles and MCSS) to monitor turtle population in Seychelles. Under the national fisheries legislation, it is illegal to catch, kill or retain green and hawksbill turtle. The Seychelles fleet (purse seine, industrial longline and small scale longline) have not reported any interactions with marine turtles via logbook. However data on interaction with the purse seine fleet, if and when they occur will be collected via our at sea observer programme. Analysis of observer data is currently ongoing and we expect that during 2018 we can report same in the WPEBy and in the Scientific Committee. It is to be also noted that the new logbook introduced in July 2017 for the industrial longline fleet cater for reporting of interaction with Marine turtles.

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

Not Applicable

#### **6.0 National Data Collection and Processing Systems [Mandatory]**

#### 6.1. Logsheet data collection and verification

A mandatory logbook system collecting catch and effort and other relevant data (such as bycatch, environmental data) exist for the following fisheries targeting tuna and tunalike species.

- I. **Industrial longline:** From early 80's to date 2 (averaging <70% annual coverage with 90% for more recent years)
- II. **Industrial purse seine:** 1984 to date (95 100% annual coverage)
- III. **Small scale longline:** 1995 to date (95 100% coverage)

Logbooks are reviewed as and when required to cater for new obligations when they arise.





#### 6.2. Vessel Monitoring System

Since 2003, one of the prerequisite for any Seychelles registered vessel to be authorized to target tuna and tuna-like species in the WIO is to have an operational Vessel Monitoring System. VMS reports are being automatically transmitted to the Fisheries Monitoring Centre (FMC) at SFA on an hourly basis. VMS information collected are use to validate logbook data. A programme to increase VMS coverage on vessels of less than 24 meters is currently being given consideration.

#### 6.3. Observer programme

Seychelles is implementing its National Observer Programme (NOP) in phases. Following the capacity building phase in 2012 – 2014, at sea deployment started during the last quarter of 2014. At sea deployments continued to this date and currently SFA is working on phase three of the programme which is focussing on data validation, generating and disseminating reports to relevant stakeholders. Currently a performance audit of the programme is being undertaken.

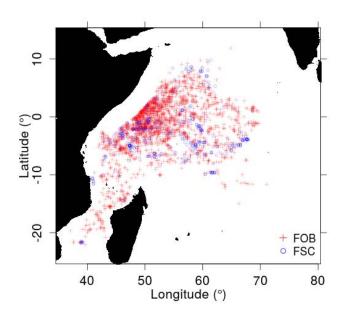
**Table 6.** Annual observer coverage for the Seychelles purse seine fleet (2014–2016).

Year	Trips	Days at sea	Sets	Catch (mt)
Purse seiners				
2014	7	173	132	3,153
2015	60	1,785	1,429	38,640
2016	39	1,150	1,177	30,798
Support vessels				
2015	5	259	N/A	N/A
TOTAL	104	3,367	2,738	72,591





A total of 104 observer data sets were collected on 13 Seychelles purse seiners and 4 support vessels during 2014-2016. This represents about 3,400 days of observation at sea with more than 2,700 fishing sets observed.



**Fig. 1.** Map showing spatial distribution of the fishing sets observed onboard Seychelles purse seiners during 2014-2016. FOB = School associated with drifting floating object; FSC = Free Swimming School, (source: Lucas *et al, 2017*)

#### 6.4 Port sampling programme

Port sampling is a routine and ongoing activity for the purse seine and small scale longline fleet. On the other hand the distant water industrial longline fleet does not land in Port Victoria; hence there are currently no port sampling programmes for those vessels. However a self-sampling programme is being implemented, whereby size frequency data are being recorded by the crew and transmitted to the Seychelles Fishing Authority. For year 2016, data are yet to be captured for submission to IOTC due to human resource constraints.





Table 7a. Number of individuals measured for Seychelles registered purse seiners in 2016

Species	Number of species measured
Yellowfin	39,706
Skipjack	20,500
Bigeye	6,384
Albacore	100
Frigate	773
Kawakawa	89

Table 7b. Number of individuals measured for Seychelles small scale longliners in 2016

Species	Number of species measured
Yellowfin	508
Swordfish	187
Bigeye	45
Albacore	1

#### 7.0 NATIONAL RESEARCH PROGRAMS

Currently there are no national research programmes being implemented which are relevant to tuna and tuna-like species.





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

**Table 8**. Scientific requirements contained in Resolutions of the Commission, adopted between 2005 and 2017.

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	Seychelles has been annually providing the IOTC catch and effort data collected through mandatory logbook system on its purse seine, industrial longline and small scale longline fleets. Catch data for artisanal fishery are also provided to the secretariat in the required formats
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	Seychelles has been annually providing Nominal catch data as well as size frequency data to the IOTC for its purse seine, industrial longline and small scale longline fleets.
15/05	On conservation measures for striped marlin, black marlin and blue marlin	Paragraph 4	Relevant fleet operators have been notified of the requirements of this resolution. Marlin are taken as bycatch in limited quantities.
13/04	On the conservation of cetaceans	Paragraphs 7– 9	The Authority has informed vessels owners and operators of this resolution and prohibits intentionally setting a purse seine net around any cetacean in the IOTC area of competence. Moreover they have been instructed on the best practice guidelines for the safe release and handling of cetaceans, developed by the IOTC Scientific Committee, in case of incidental encirclement. It is also incorporated in their license condition on the Certificate of Authorization
13/05	On the conservation of whale sharks (Rhincodon typus)	Paragraphs 7– 9	The Authority informed vessels owners and operators of this resolution and prohibits intentionally setting a purse seine net around whale shark in the IOTC area of competence. Moreover they have been instructed on the best practice guidelines for the safe release and handling of whale shark, developed by the IOTC Scientific Committee. It is also incorporated in their license condition on the certificate of Authorization.
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	The relevant fleet (s) has been notified of the requirement of IOTC resolution 13/06 and the need to comply and report interactions. Logbooks have been modified to report interaction including releases.
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	Relevant fleet operators have been notified of the requirements of this resolution and thresher shark are not permitted to be retained.
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	Seychelles is in the process of developing an NPOA for seabirds with the assistance of Birdlife South Africa. A new logbook which caters for the reporting of interactions by industrial longliners was introduced in July 2017. Furthermore, SFA's enforcement officers





Res. No.	Resolution	Scientific requirement	CPC progress
			have been trained how to identify mitigation devices.
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6– 10	Under the current fisheries legislation, it is illegal to fish, catch or kill green turtle and hawksbill turtle. Several marine turtle monitoring programmes are coordinated by a number of different nongovernmental organisations to monitor turtle population in Seychelles. Data collected from observer programme on tuna purse seiners are currently being analysed. A new logbook catering for the reporting of interaction has been introduced for the industrial longline fleet.
11/04	On a regional observer scheme	Paragraph 9	Seychelles exceed minimum requirement for coverage of the purse seine fleet. Data collected for this fleet is being analysed to be submitted to the secretariat. Seychelles is also investigating the possibility of expanding this programme onboard its industrial longline fleet. In port observations are undertaken on the small scale longline fleet.
05/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1–12	National rregulations place restrictions on the removal of fins of all species of shark on board of foreign-owned or local fishing vessels of a total length of 24 metres and above, fishing within or outside the Seychelles Waters. Where authorisation is granted, a ratio of not more that 5% in weight of shark fins to weight of shark carcasses without fins must be respected at all times onboard all Seychelles industrial longline fishing vessels greater that 24 meters in length, up to first point of landing.
16/06	On measures applicable in case of non-fulfilment of reporting obligations in the IOTC	Paragraph 1	

# 9.0 LITERATURE CITED [Mandatory]

SEYCHELLES FISHING AUTHORITY (2016) Seychelles National Plan Of Action for the conservation and management of sharks,119 pp.

The Seychelles purse seine fishery observer program: Overview, challenges, and perspectives. **IOTC–2017–WPDCS13–29**, Juliette Lucas, Vincent Lucas, Iñigo Krug, Alexander Tirant, Cindy Assan, Maria Mein, Danielle Jupiter, Emmanuel Chassot.