

Tanzania National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2016

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

EXECUTIVE SUMMARY

Tanzania national fleets are dominated by artisanal fleets which are characterized by multi-species catch which involve the use of multi-gear and multi-cultural fisheries. However, a small number of boats are involved in the fisheries of tuna, bill fish and sharks, using manually handled small-scale drift gillnets, trolling and longlines. There are three commercial Tanzania flagged longline vessels that have been operating in the EEZ of contracting parties as well as the high seas under the IOTC area of competence.

Artisanal fishery statistics from the Fisheries Division (mainland Tanzania only) for the year 2015 shows that 5410.2, 2226.3 and 6459.6 tonnes of tuna and tuna-like species, kingfish and sharks and rays were caught respectively. Available catch data from artisanal fishery is missing for geographic position, gear and effort information. Total catch for tuna and tuna-like species for long-liners flagged vessels operating in the IOTC area of competence was about 698.4 tonnes. Collection of log sheet data from all licensed vessels fishing in Tanzania EEZ started since 2002 and Vessel Monitoring System (mainly for licensed vessels and flagged vessels) started in 2009.

There is still no data recorded from recreational fishing, however, available information is considered to be insignificant. There has been neither Observer nor Port sampling programmes but efforts are now underway to enable Tanzania to have facilities for handling commercial deep sea fishing vessels. Transshipment at sea is not allowed within the EEZ of Tanzania. There is no major research programme for tuna and tuna like species. The only existing programmes are from universities and individuals from research institutes. Most of these programmes are focusing on identifying and marking of potential fishing grounds on the EEZ, the target being reducing fishing pressure on shallow water habitats.

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1. BACKGROUND/GENERAL FISHERY INFORMATION

Tanzania national fleets are dominated by artisanal fleets which are characterized by multi-species catch which involve the use of multi-gear and multi-cultural fisheries. Fishing activities take place within 6 nm from shore predominantly on coral reef areas and seagrass beds. However, a small number of boats are involved in the fisheries of tuna, bill fish and sharks, using manually handled small-scale drift gillnets, trolling and longlines.

2. FLEET STRUCTURE

Fleet is involved in highly diverse fisheries that include crustaceans, cephalopods, and reef fish species, small pelagic, sharks as well as tuna and tuna like species. It is composed of different types of fishing boats that varies from un-motorised dugout canoes of 3m to boats of 11m long with inboard engine. All the fishing takes place within the territorial waters, mostly not more than 6nm from shore and predominantly on reef areas and seagrass beds. Fishing gear used includes bottom-set and drift gillnets, hand-, long- and troll lines, purse seine and trawl nets that are all manually handled.

Further, to the artisanal fleets, there are three commercial Tanzania flagged longline vessels that have been operating in the EEZ of contracting parties as well as the high seas under the IOTC area of competence.

Table 1: Number of vessels operating in the IOTC area of competence, by gear type and size (Year 2015)

Vessel/Gear Type	Size (m)	Number
Long Liner Tuna Best	44.60	1
Long Liner Venus	49.69	1
Long Liner IKAR	48.65	1

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

Artisanal fishery data (2015) indicated total catch for tuna and tuna-like species was 5410.2 tonnes, while sharks and rays was 6459.6 tonnes and that of king fish was 2682.3 tonnes (Table 2a).

Table 2a. Nominal catch (t) of tuna and tuna-like species from artisanal fishery for year 2015

Fish Group	2011	2012	2013	2014	2015
Tuna	3887.521	7702.764	4672.44	2133.00	5410.2
Bill fish	1146.440	1411.962	-	-	2682.3
Sharks & rays	3492.781	6168.808	5752.51	3908.00	6459.6
King Fish	-	-	2188.35	1335.00	2226.3

Table 2b. Annual catch and effort by gear (LL) and primary species in the IOTC area of competence (Year 2015). BET (Bigeye Tuna), SWO (Swordfish), YFT (Yellow Fin Tuna), SM (Stripped Marine), BLM (Black Marlin), BSH (Blue Shark), ALB (Albacore), MAK (Mako Shark) and SFA (Sailfish).

Species	BET	SWO	YFT	SM	BLM	BSH	ALB	MAK	SKH	SFA	OTHERS
Catch	183.74	36.75	107.74	8.18	19.36	7.22	28.24	2.78	14.52	2.74	279.87

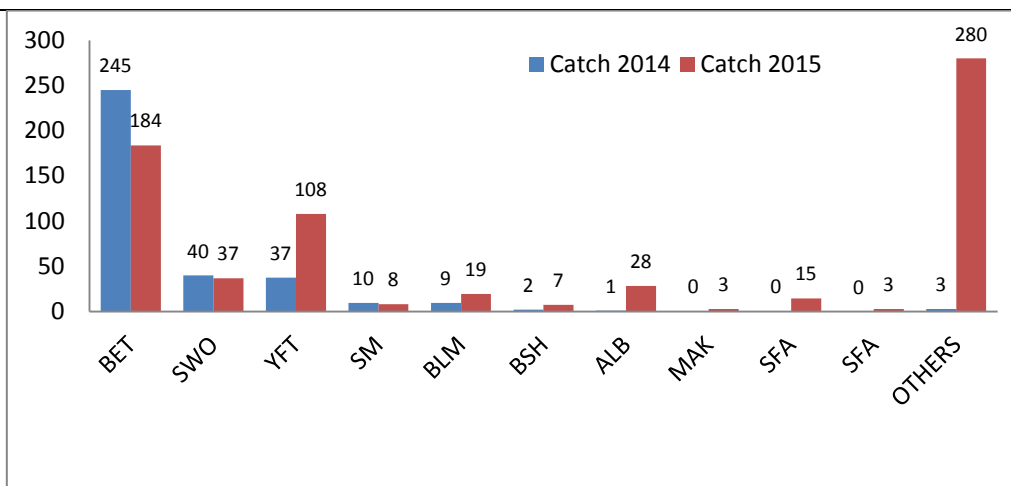


Figure 1. Annual catch metric Tonnes for the national fleet, by gear (LL) and primary species, for the IOTC area of competence for the Year 2014 and 2015:

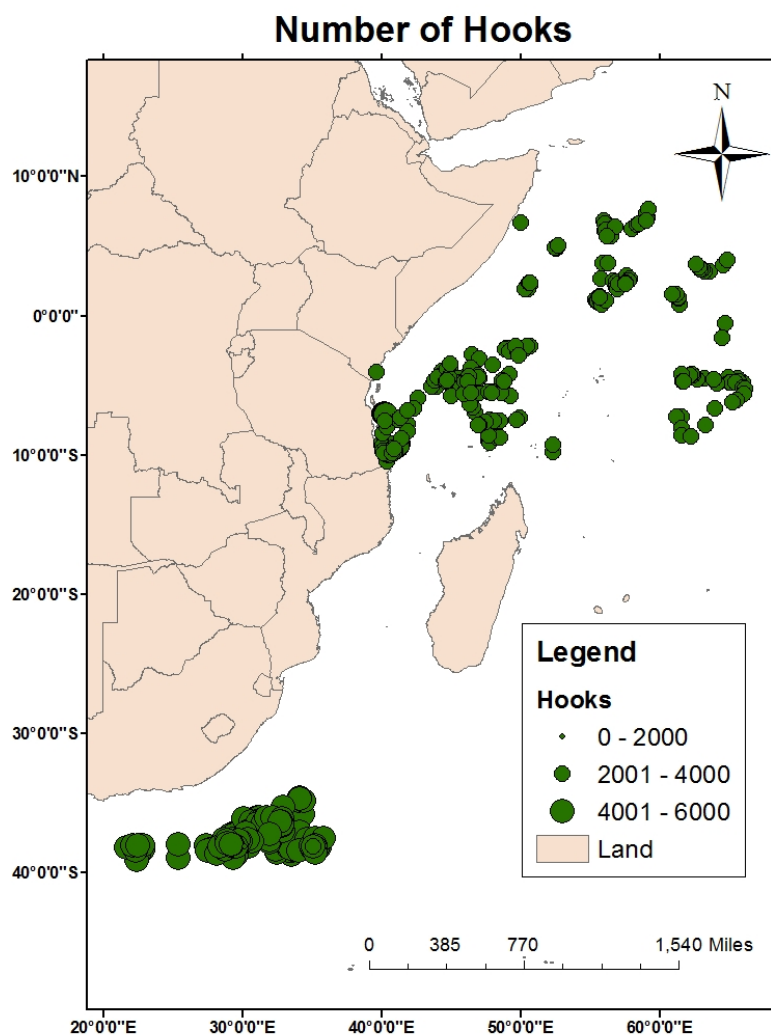


Figure 2a. Map of the distribution of fishing effort, by gear type (Long Line) for the national fleet in the IOTC area of competence (Year. 2015). Green cycles indicate fishing areas.

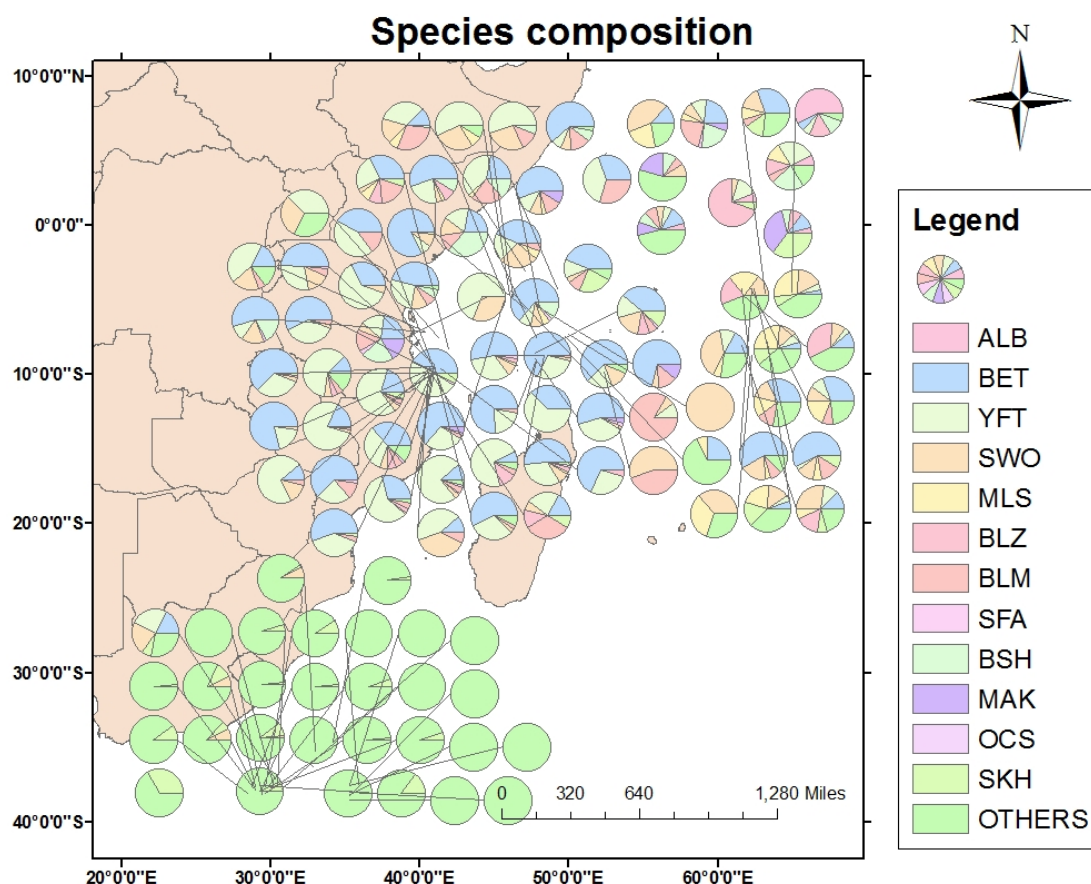


Figure 3. Map of distribution of fishing catch, by species for the national flagged fleet, in the IOTC area of competence (Year. 2015). Colour code: Blue = Big Eye Tuna, Yellow= Yellow Fin Tuna

4. RECREATIONAL FISHERY

There is no big scale recreational fishery for tuna and tuna like species

5. ECOSYSTEM AND BYCATCH ISSUES

[A description of the overall environmental issues and progress within national fisheries (e.g. ecological risk assessments; by-catch action plans) and for individual species groups including]

5.1 Sharks

Discussions on NPOA – are ongoing and Terms and Conditions related to protected sharks contained within EEZ fishing licenses.

Table 3: Total number and weight of sharks, by species, retained by the national fleet in the IOTC area of competence (Year 2015)

Shark Species	2014		2015	
	Number	Weight (Kg)	Number	Weight (Kg)
Mako Shark	47	1,524	9	410
Blue Shark	1342	3,554	1	39
Oceanic Whitetip Shark	9	220	0	0
Other Shark	38	1,091	0	0

5.2 Seabirds

There was no incidence of sea bird interaction with fishing activities reported in our flagged vessels.

5.3 Marine Turtles

Sea turtle are protected by law. However as there is a national turtle and Dugong conservation committee that oversee all issues related to sea turtles and dugongs. There is no information so far with regards to interaction between sea turtles and long line fishery.

5.4 Other Ecologically Related Species (e.g. marine mammals, whale sharks)

Fishing of marine mammals and whale sharks are banned under our regulation and legislations. Observed annual catches of species of special interest by species (seabirds, marine turtles and marine mammals) by gear for the national fleet, in the IOTC area of competence (for the most recent five years at a minimum, e.g. 2011–2015 or to the extent available). [Not available]

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

There is daily reporting of Flagged Vessels with data consisting of all information required by IOTC Resolutions. Log sheets with filled data are daily sent to DSFA by email, upon receipt, quality is checked to verify the information submitted, thereafter received information is entered into a database for storage and archiving. Artisanal catch data is recorded at respective landing sites by a trained member of Beach Management Unit (BMU) in collaboration with a local fisheries officer (where available). There are 32 (out of 257) selected landing sites on main land Tanzania, equivalent of two landing sites per each coastal district; data is collected for 10 days of each month. In Zanzibar, there are 32 selected landing sites and data is collected for 16 days of each month. Data forms are thereafter sent to the respective district fisheries officer for further check-up before submission to the National Fisheries Departments for final check and inclusion into the national fisheries database. The information collected is extrapolated for the entire coastline based on number of fishers, vessel type and gear. On each year both Fisheries Departments are publishing National Annual Fisheries Statistic report to be used by stakeholders reporting of Flagged Vessels with data consisting of all information required by IOTC Resolutions. Vessel Monitoring System (including date commenced and status of implementation)

6.1 Logsheet Data Collection and Verification (NA)

6.2 Vessel Monitoring System

Commenced on February 2009 and still functioning to date. Since 2013 it is mandatory for a licensed vessels to have on board a VMS system that is linked to the Deep Sea Fishing Authority Operational Room.

6.3 Observer Programme

The DSFA has received fund from SWIOFISH, World Bank funded project. Part of the fund will be used to train and deploy observers from next year in tens annually for five years. In 2015 one Observer from Tanzania was deployed in Flagged Vessel Tuna Best from Zanzibar Port. The following was a summary of Observation Operation.

Table 6. Annual observer coverage by operation.

Observation	Detail
Fishing Days	62
No of Hooks	2672-3000
Radio Buoys	5-8
BAIT TYPE:	FRC
BAIT SPECIES :	SQU, CLP

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

6.4 Port Sampling Programme

No port calls of fishing vessels in Tanzania were reported for the year 2015.

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

6.5 Unloading/Transshipment

No unloading has taken place in Tanzanian Ports as there are no facilities for handling commercial deep sea fishing vessels. Transshipment at sea in Tanzania EEZ is forbidden by law.

7. NATIONAL RESEARCH PROGRAMS

There is no major research programme for tuna and tuna like species. Few existing programmes are from universities and individual researchers from research institutes. Most of these programmes are focusing on identification and mapping of potential fishing grounds for tuna and tuna like species on the EEZ, (the target being reducing fishing pressure on shallow water habitats). The Ministry of Livestock and Fisheries Development through the Ministry of Finance have received support from the World Bank to support the development and implementation of the South West Indian Ocean Fisheries Governance and Shared Growth Project known as SWIOFish Project. The Project objective is to improve the management effectiveness of selected priority fisheries (including tuna and tuna like species) at regional, national and community level. The project will support regional integration around fisheries management, while expanding the approach beyond research to strengthen sector governance and promote shared growth through harnessing the value of coastal and marine fisheries to national economies. This year the Project is establishing a grant facility and developing a tuna specific research program/agenda. The total Research Budget under SWIOFish is \$181,579 The DSFA is supporting deployment of 80 FADs in the pilot area for research purposes, after which the results will guide the deployment of FADs in the entire artisanal coast of Tanzania.

Table 8. Summary table of national research programs, including dates

Project	Period	Countries involved	Budget	Total Funding	source	Objectives	Short description
SWIOFISH	2015–2020	Tanzania	\$181,579		World Bank	Improve the management effectiveness of selected priority fisheries at regional, national and community level.	

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

Table 9. Scientific requirements contained in Resolutions of the Commission, adopted between 2005 and 2014.

Res. No.	Resolution	Scientific requirement	CPC progress
13/03	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–11	Its mandatory for flag vessel to have log book for data collection
13/04	On the conservation of cetaceans	Paragraphs 7– 9	
13/05	On the conservation of whale sharks (<i>Rhincodon typus</i>)	Paragraphs 7– 9	
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	Review of the Fisheries Regulation in progress
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	
11/04	On a regional observer scheme	Paragraph 9	No Observer programme being implemented at present
10/02	Mandatory statistical requirements for IOTC members and cooperating non contracting parties	Paragraphs 1–7	
05/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1–12	

9. LITERATURE CITED

Tanzania Annual Statistics Report (2015)

Zanzibar Fisheries Data 2015