



GUIDELINES FOR THE PREPARATION OF NATIONAL REPORTS TO THE IOTC SCIENTIFIC COMMITTEE IN 2023

The National Report is due to be submitted no later than 15 days prior to the start of the annual regular session of the Scientific Committee.

DEADLINE: 19 NOVEMBER 2023

Purpose: To provide relevant information to the Scientific Committee on research and fishing activities and associated monitoring and research activities of Contracting Parties and Cooperating Non-Contracting Parties operating in the IOTC area of competence. The report should include all fishing activities for species under the IOTC mandate as well as for elasmobranch species and other species taken as bycatch as required by the IOTC Agreement and decisions by the Commission.

NOTE: The submission of a National Report is **Mandatory**, irrespective if a CPC intends on attending the annual meeting of the Scientific Committee.

Explanatory note

This report is intended to provide a summary of the main features of the tuna and tuna-like fisheries for Contracting Parties and Cooperating Non-Contracting Parties. As such, it does not replace the need for submission of data according to Resolution 15/02 *Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)* and other data related CMMs.

Mandatory versus Desirable information

National Reports must include all headings as noted in the template below as [Mandatory]. Where data/information is not available for a given [Mandatory] heading, the reason why it is not available should be clearly stated. These mandatory fields for the *National Reports* were agreed to by the Scientific Committee in 2010.

Where available, CPCs are encouraged to provide additional information under the headings shown as [Desirable].

For clarification on minimum reporting requirements for the National Report, please contact the IOTC Secretariat (IOTC-Secretariat@fao.org).

NOTE

Please use the template below when preparing your National Report. Simply delete this explanatory page and add your own cover page/preliminaries if needed.

Please also delete any text shown in **red** below before submitting your National Report.

Sri Lanka National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2023

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INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

<p>In accordance with IOTC Resolution 15/02 (and other data related CMMs as noted below), final scientific data for the previous year were 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 2023, final data for the 2022 calendar year must be provided to the Secretariat by 30 June 2023)</p>	<p>YES 30/06/2023</p>
<p>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 2023, preliminary data for the 2022 calendar year were provided to the IOTC Secretariat by 30 June 2023].</p> <p>REMINDER: Final longline data for the previous year are due to the IOTC Secretariat by 30 Dec of the current year [e.g., for a National Report submitted to the IOTC Secretariat in 2023, final data for the 2022 calendar year must be provided to the Secretariat by 30 December 2023].</p>	<p>YES 30/06/2023</p>
<p>If no, please indicate the reason(s) and intended actions:</p>	

Executive Summary [Mandatory]

The total production of tuna and tuna like species of Sri Lanka in year 2022 was 81973t. 80% of the catch was from the EEZ. 36% of the total catch was Yellow fin tuna, 37% Skipjack tuna and 5.6% was bigeye tuna. 8% of the total catch was bill fish while Sword fish dominate in the catch. The total shark catch was 626t. The YFT catch reductions adhered as per 19/01. Large scale Gill net are being surveyed and reduced in number and length as per resolution 17/07.

Over 5000 boats engaged in large pelagic fishing in both high seas and within EEZ. 1642 vessels were authorized to fish in high seas and 1485 vessels were active. 99% of the high seas operating vessels are less than 24m. VMS is mandatory for high seas operating vessels. Major fishing gears were long line and gill net. The gill nets are being discouraged and directed to selective gears. 29%, 21% and 27% of vessels were exclusively operated for longline, gill net and ring net respectively. 22% of the vessels used multi-gear of more or less combinations of the above gears in seasonal or incidental manner.

Multi-gear vessels are being promoted to long line by introducing mechanized line haulers and the upgrading of vessel conditions to accommodate better cooling systems to improve the fish quality and reduce the post economic loss. High fuel cost has restricted the number of fishing trips and vessels are being kept anchored most of the time. On board observers were deployed in all vessels >24m and pilot project on EMS is ongoing. Port State Measures are being implemented through e-PSM application. Coastal data collection is being improved by introducing better sampling techniques and to achieve the length frequency data as per the required proportions

1. BACKGROUND/GENERAL FISHERY INFORMATION [MANDATORY]

Tuna fishery in Sri Lanka occurs mainly within the EEZ and in high-seas. The traditional coastal fishing remain operating mainly targeting neritic tuna and associated fish such as carangids, scads, barracuda and rainbow runner within continental shelf and slope areas of coastal waters. The offshore fisheries are confined to the area beyond the 40km up to the 200nm and in high seas. Majority of offshore and high seas operating vessels target for Tuna and tuna like species. The tuna fishing fleet consists in array of size but as a whole all are small in size. only 22 vessels are >24m in length 99% boats are below 15m and majority do not have mechanized line hauls. Limited deck space and the manual operation of fishing gears limit the fishing capacity of most boats. About 1780 2182 boats were engaged in one day fishing and about 4170 3602 boats conducted multiday fishing within the EEZ of Sri Lanka Boats > 10.3m are eligible to operate in high seas. All high seas operating boats have operational VMS on board. 1642 vessels were authorized for high-seas fishing in year 2022 and 1485 vessels were active.

2. FLEET STRUCTURE [MANDATORY]

Boat Type	Vessels operated			Gears used	Trip length
	EEZ	High seas +EEZ			
		IOTC Authorized	Active		
8m-10.3m	2182	No	No	29% LL only 21% GI only 27% PSRN 23% Multi gear (more or less combination of all above gears)	About 52% of the EEZ boats within the 8m-10.3m length category operates for 1-10 days while rest operates 10-30 days. - High seas operating multiday boats operates average 30-60 days.
10.3m -15m	1420	1424	1313		
15m-24m		196	164		
>24m	0	22	08		
	3602	1642	1485		
Total vessels engaged in tuna and tuna like fisheries EEZ& HS =3602+1485 = 5087					

Only the vessels >10.3m in length were permitted to engage in high-seas fishing combined with offshore limits of the EEZ. 1642 number of vessels obtained the high-seas fishing operation license for year 2022 and all were operated in high seas.

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

Year	Total Number of vessels operated		
	Total (EEZ+HS)	Authorised (HS)	Active
2015	4294	2470	1615
2016	4485	1603	1577
2017	4572	1536	1461
2018	4601	1337	1164
2019	4878	1449	1182
2020	5155	1118	927
2021	5364	1194	1194
2022	5087	1642	1485

1. CATCH AND EFFORT (BY SPECIES AND FISHERY) [Mandatory]

29% multiday vessels are exclusive long liners. Around 200 -1200 hooks are used in longlines depending on the vessel size. The exclusive long-liners use large number of hooks per set (1000/1200 hooks), and hauled by mechanized winch. 21% of the multiday vessels engage in large pelagic fisheries used large-mesh drift gillnets(GN), targeting skipjack tuna. The tuna gill nets are restricted to maximum 2.5km in length and made of 20-25 pieces and 5” or 6” stretched mesh. Gillnets are being discouraged.

Ring net is become popular for catching of mackerel scads (*Decapterus ruselli*) and trigger fish etc. The other fishing gears being used in lesser extent for tuna were hand-line and trolling. Beach seine is a traditional method of near coastal fishery in Sri Lanka. The target species are near coastal small pelagic and demersal fish. It has proper management practices from the history and those has been regularized and number of license is freeze.

The use of fishing gear in multipurpose vessels is determined based on the availability of fish, climate condition, the availability of the bait, skill of the crew etc. The Indian mackerel, flying fish, milkfish and artificial baits are generally used in long lines. Offshore and the high Seas catch dominated by yellowfin tuna (*Thunnus albacores*), skipjack tuna (*Katsuwonuspelamis*) and bill fish species and other bony fish.

Fishing activities within EEZ are seasonal depending on the monsoon pattern. Fishing in coastal and offshore area are more success in just before and after monsoon. Coastal fishing is conducts mainly with 6-7 meters length FRP boats/ out board motor boats and 7-10 meters 3.5GT in board motor boats. The trip length of offshore fishing multiday boats varies from 10 days or more. If successful long line operations took place, the catch landed early targeting the export market. The boats those use gillnets under take long trips sometimes more than 30 days and preserve the early catch by salting and sun drying and the late catch on ice. The weather conditions, small size of the boat and inadequate safety measures on board also influence the trip duration.

Improving of on board fish quality to reduce the post economic loss, is the main fishery policy in the recent past. To achieve this target offshore and high seas fishing vessels are being upgraded with advanced cooling systems such as chilled seawater (CSW) or refrigerated sea water (RSW). The legal frame work has been strengthen to conduct tuna fisheries in complying with the conservation and management measures of IOTC.

There is no tuna fishing grounds close to Sri Lanka and the small size boats travel far away to find fish. Hence, there is an issue of unbearable operating cost due to the high fuel price, and the poor catch. As a result substantial number of vessels did make limited trips and most of the time the boats are being anchored in harbours although they have obtained an operation license in high sea. According to the fishers the fuel cost represent more than 40% of the operational costs fishing in the offshore and high seas.

Table 2. Annual catch and effort by fishery and primary species in the IOTC area of competence. [for the most recent five years at a minimum] Include a 'not elsewhere indicated – NEI' category for all other catches combined. [Mandatory]

[Annex i.xlsx](#)

Figure 1. Historical annual catch for the national fisheries by primary species, for the IOTC area of competence for the entire history of the fisheries. [Mandatory]

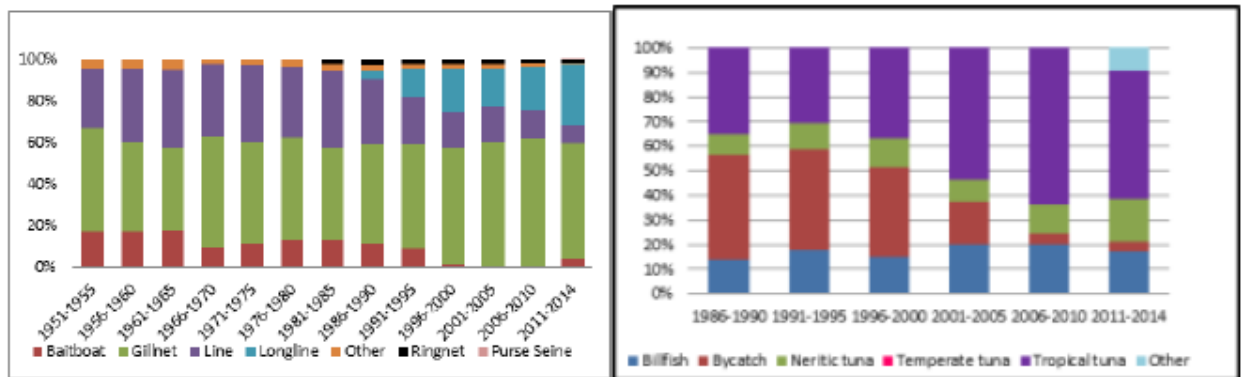


Figure 1a: Relative contribution of fishing gear in Tuna fish production in Sri Lanka 1950-2014

Figure 1b: Catch composition long line and gill net fishery production in Sri Lanka 1950-2014

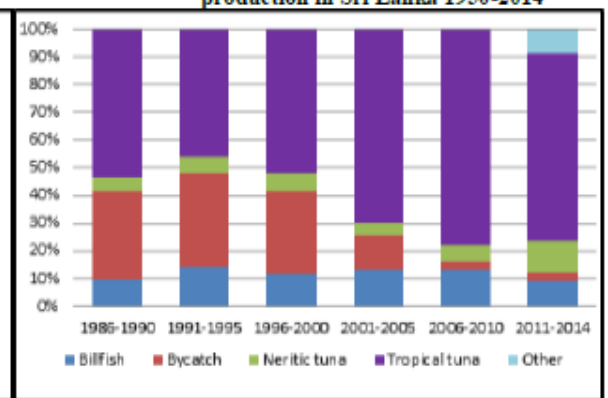
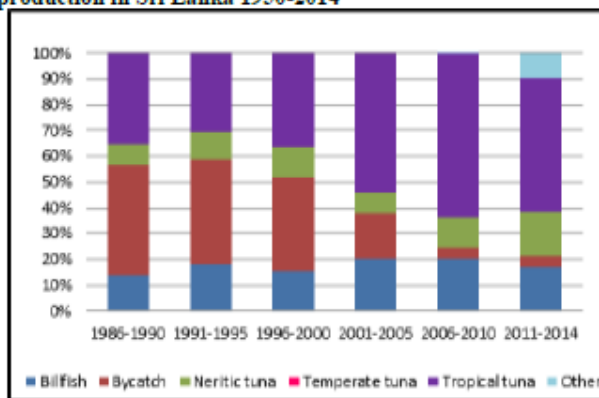


Figure 1c: Catch proportions gill net cum Long line Sri Lanka 1950-2014

Figure 1d: Catch proportions long line fishery (including Long line attached to gill net) In Sri Lanka 1950-2014

Source: IOTC data base

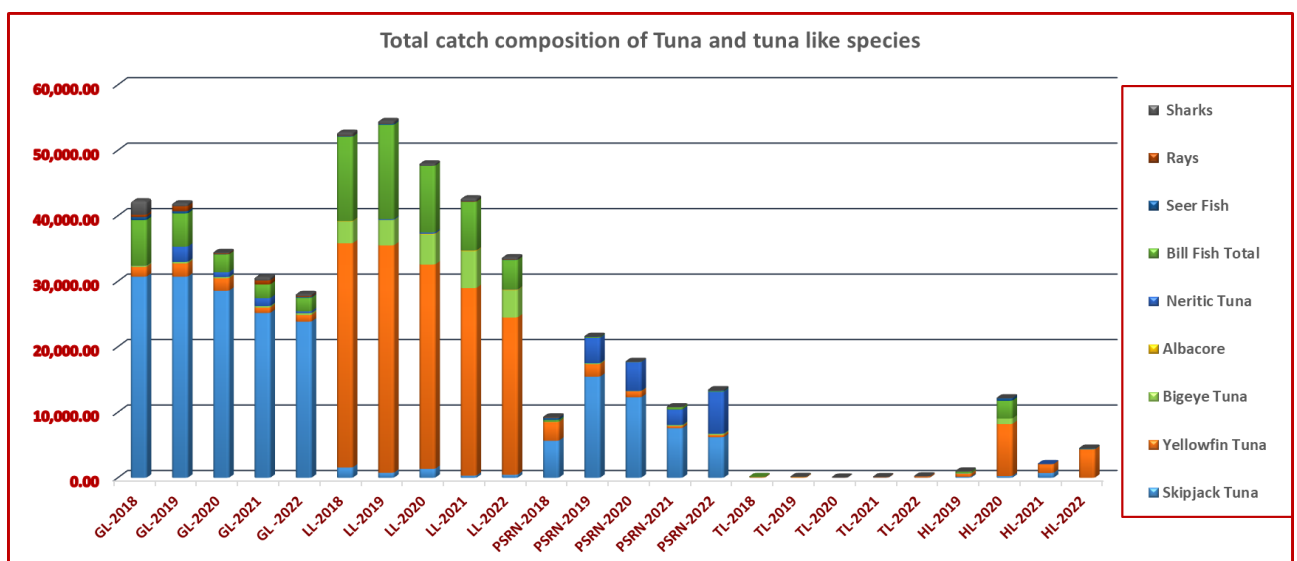
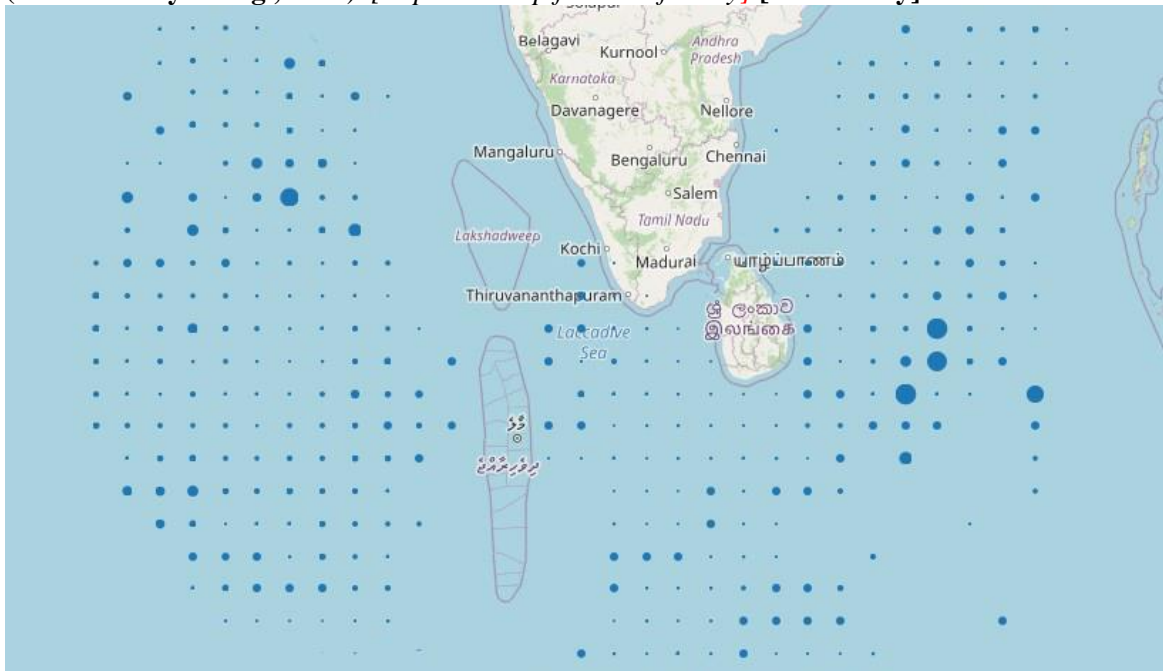
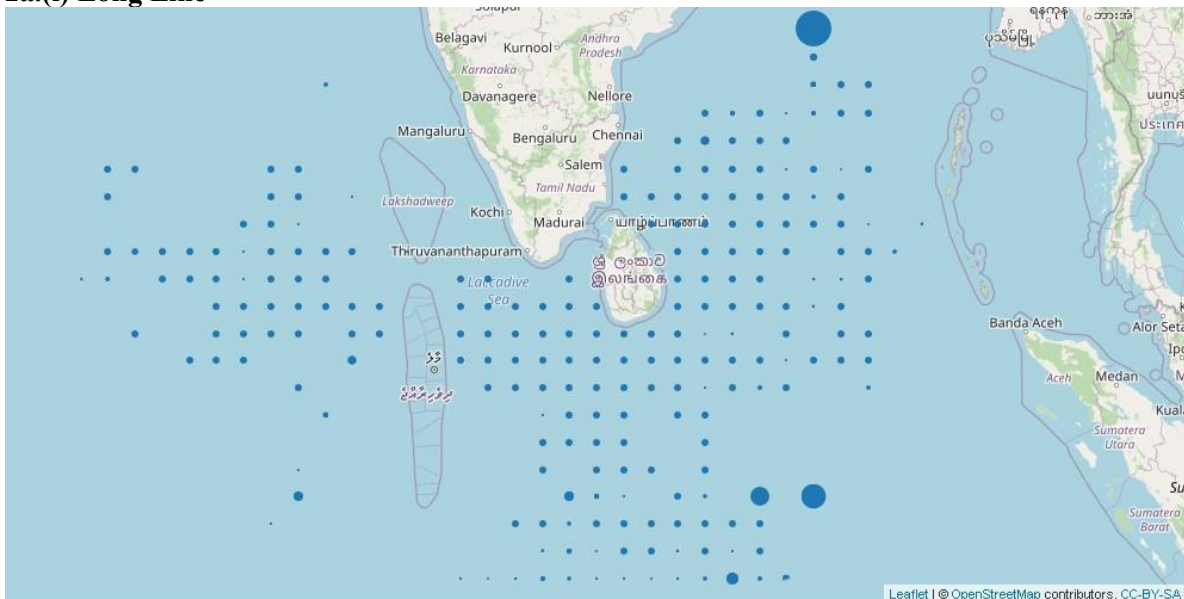


Figure 1e: Total Catch composition of Tuna and tuna like species by gear for the years 2018 To 2022
Source: PELAGOS database(NARA),log book database-(DFAR) & land based sampling database (DFAR/MFARD)

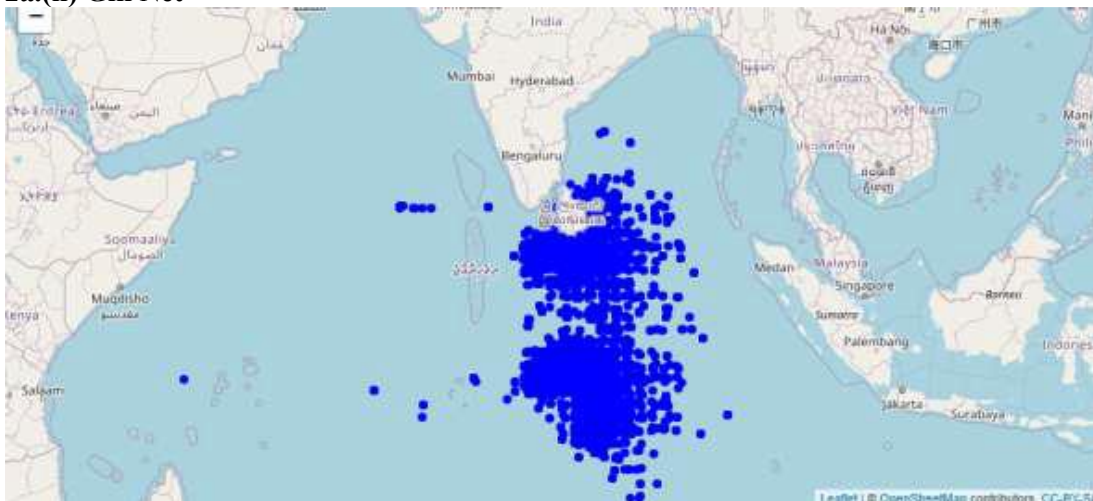
Figure 2a. Map of the distribution of fishing effort, by national fishery in the IOTC area of competence (most recent year e.g., 2022). [separate map for each fishery] [Mandatory]



2a.(i) Long Line

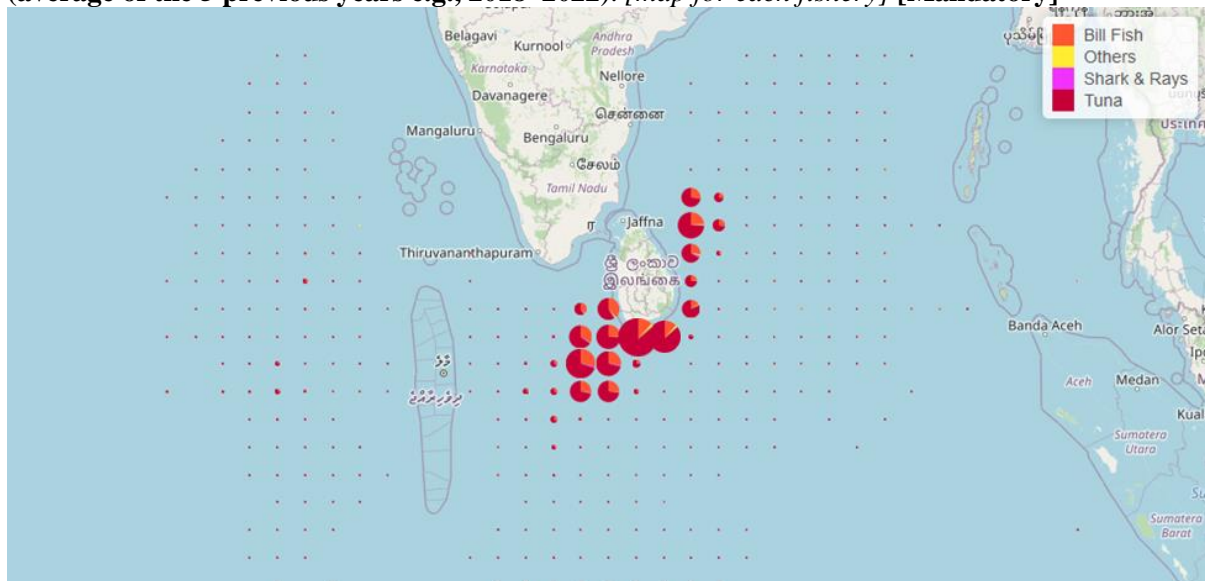


2a.(ii) Gill Net

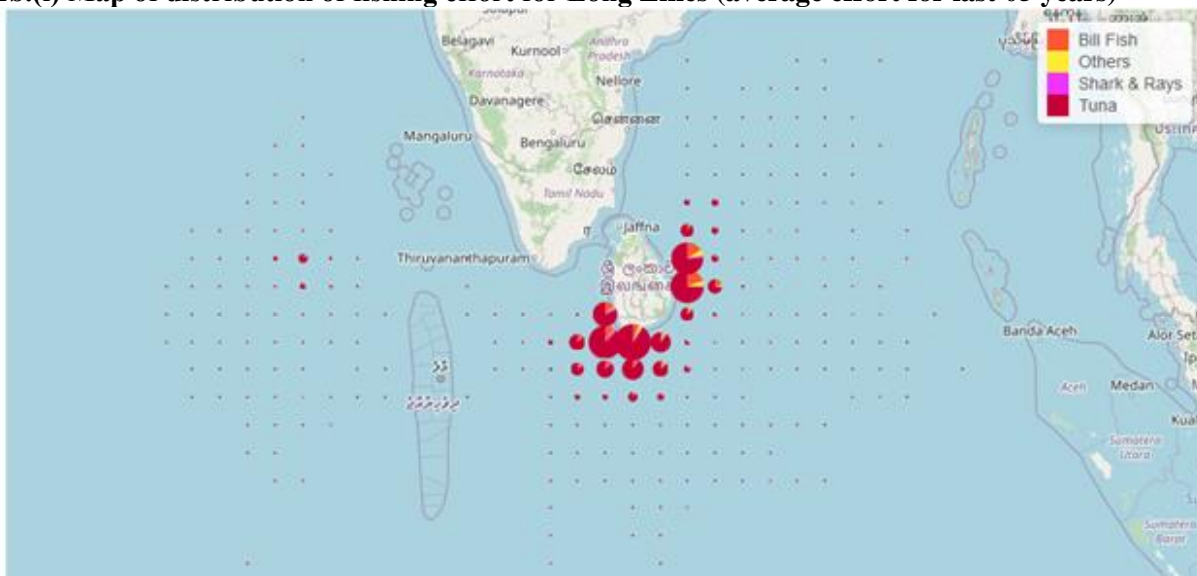


2a.(iii) Ring Net

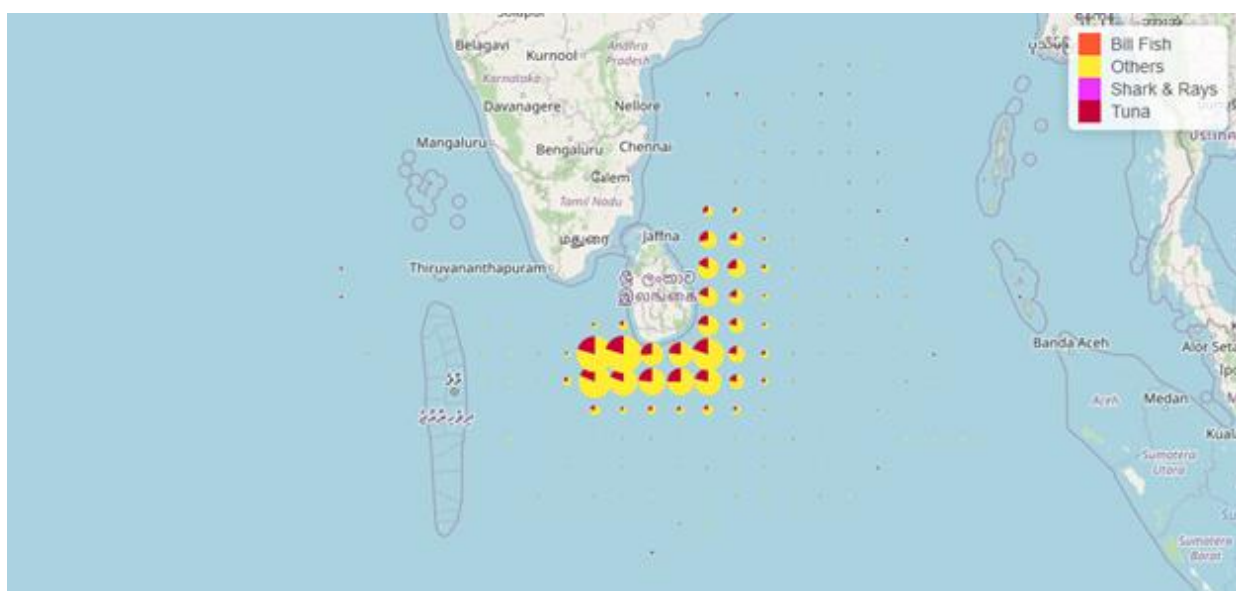
Figure 2b. Map of the distribution of fishing effort, by national fishery in the IOTC area of competence (average of the 5 previous years e.g., 2018–2022). [map for each fishery] [Mandatory]



2b.(i) Map of distribution of fishing effort for Long Lines (average effort for last 05 years)

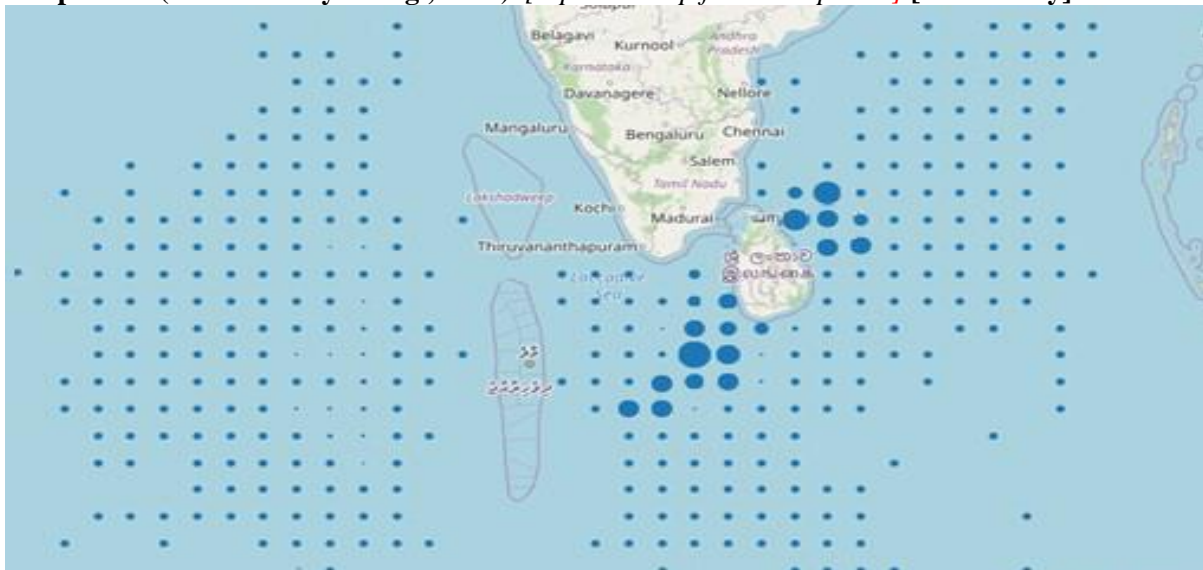


2b.(ii) Map of distribution of fishing effort for Gillnets (average effort for last 05 years)

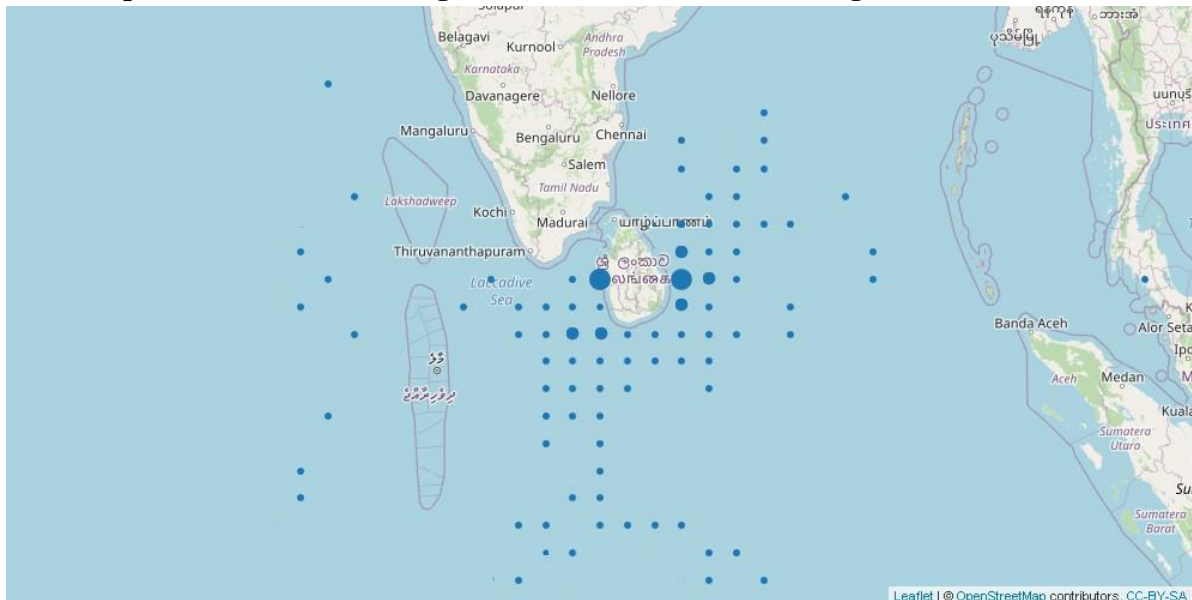


2b.(iii) Map of distribution of fishing effort for ring nets (average effort for last 05 years)

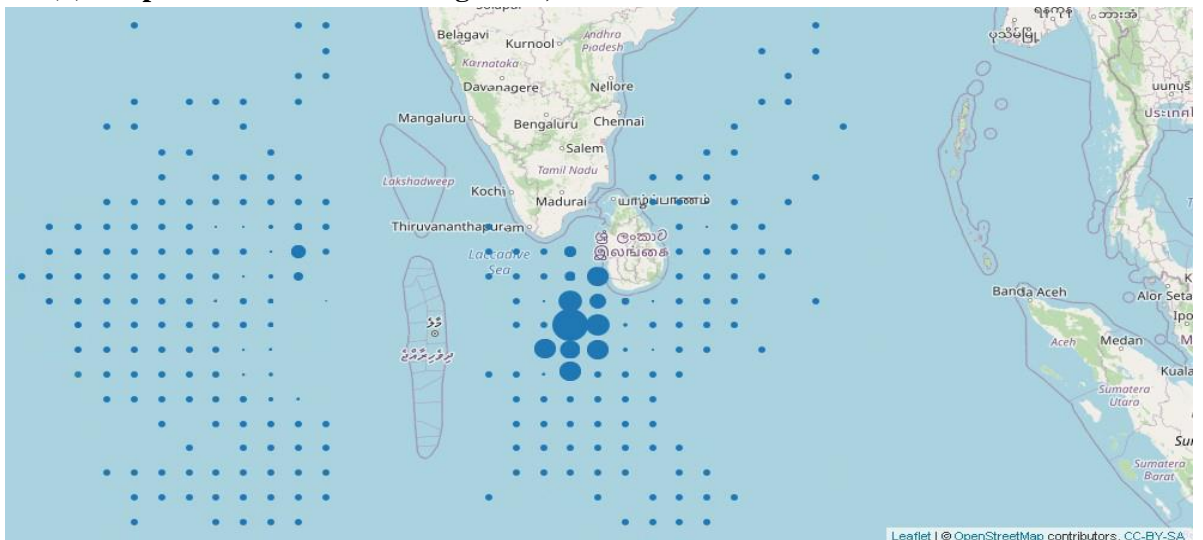
Figure 3a. Map of distribution of fishing catch, by species for the national fisheries, in the IOTC area of competence (most recent year e.g., 2022). [separate map for each species] [Mandatory]



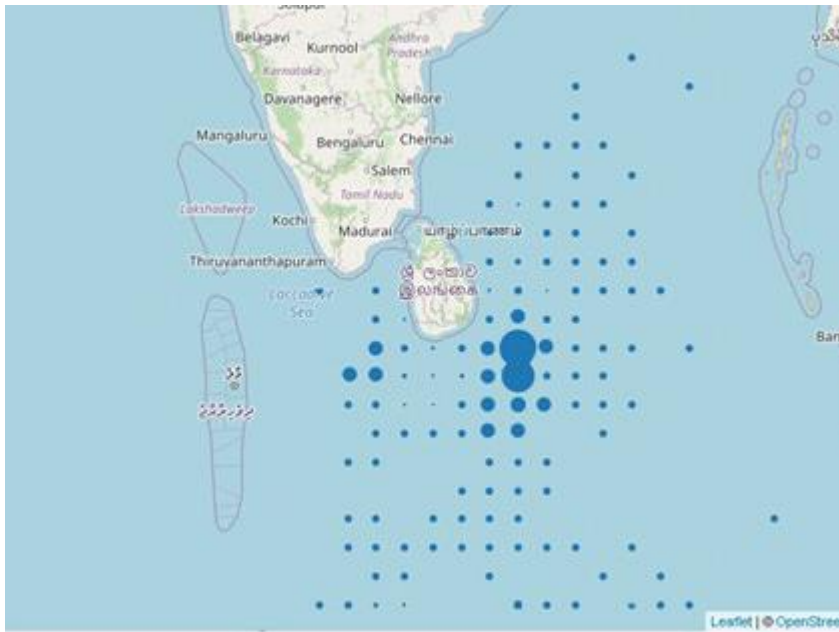
3.a (i) Map of distribution of fishing catch; Yellow Fin Tuna in Long line



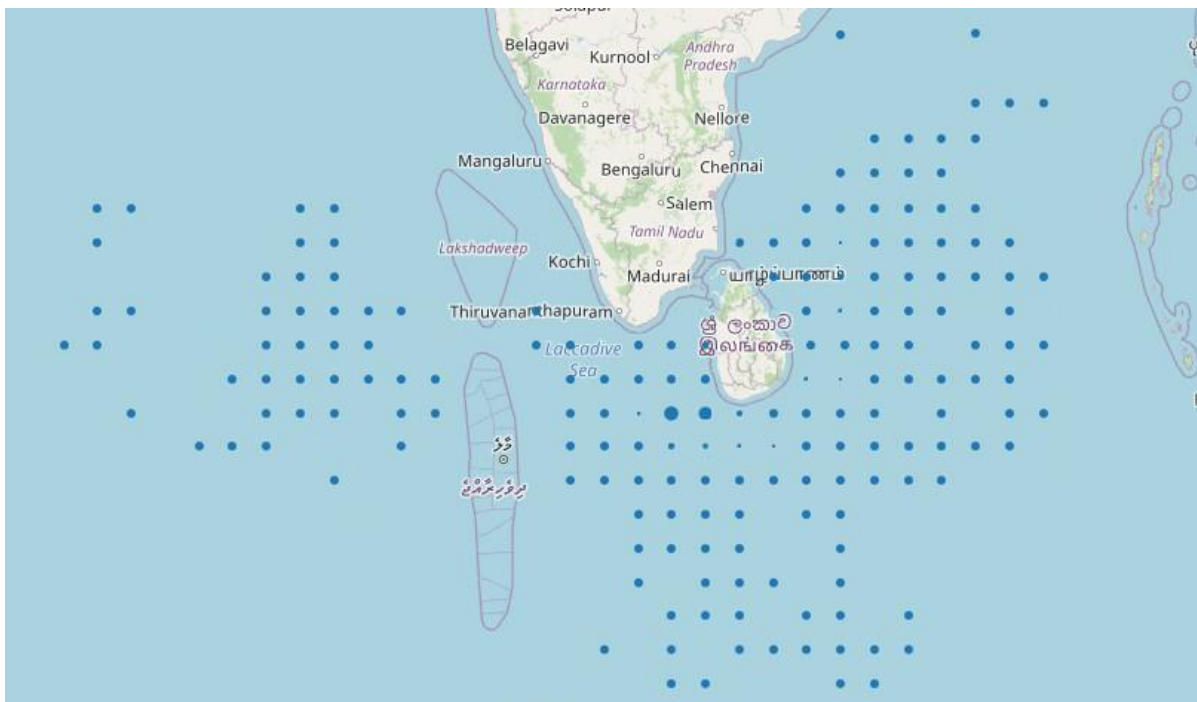
3.a (ii) Map of distribution of fishing catch; Yellow Tuna in Gillnets



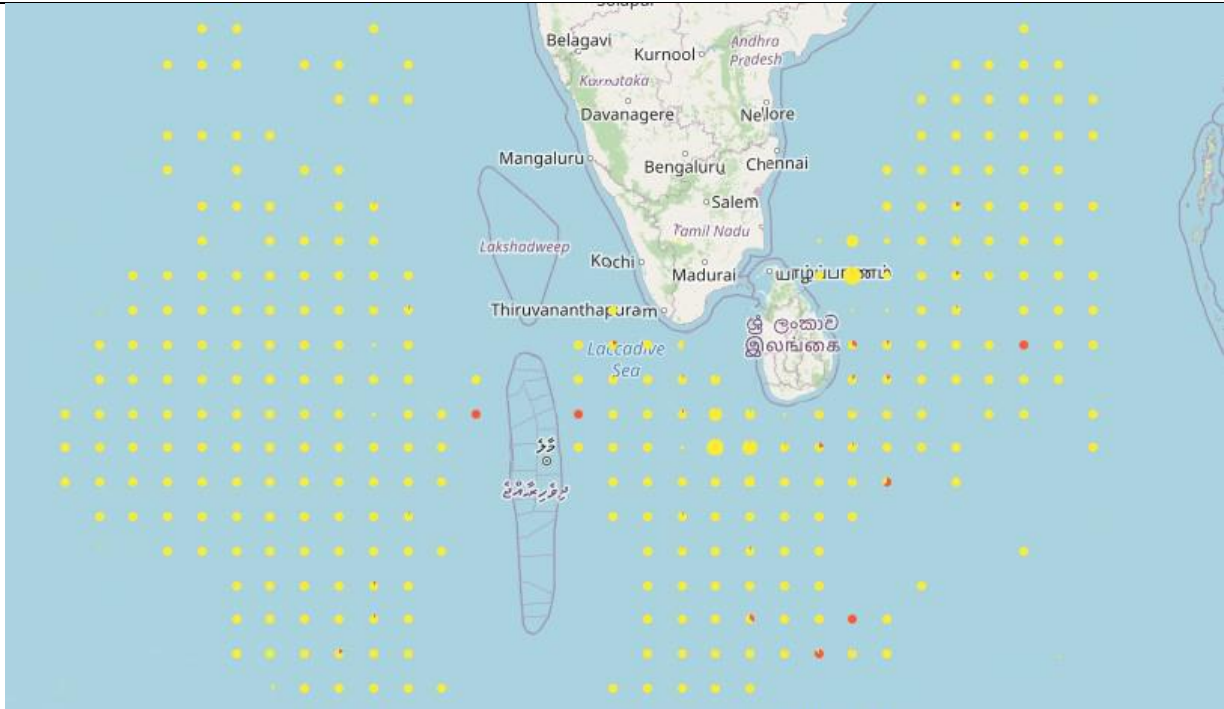
3.a (iv) Map of distribution of fishing catch; Bigeye Tuna in Gillnets



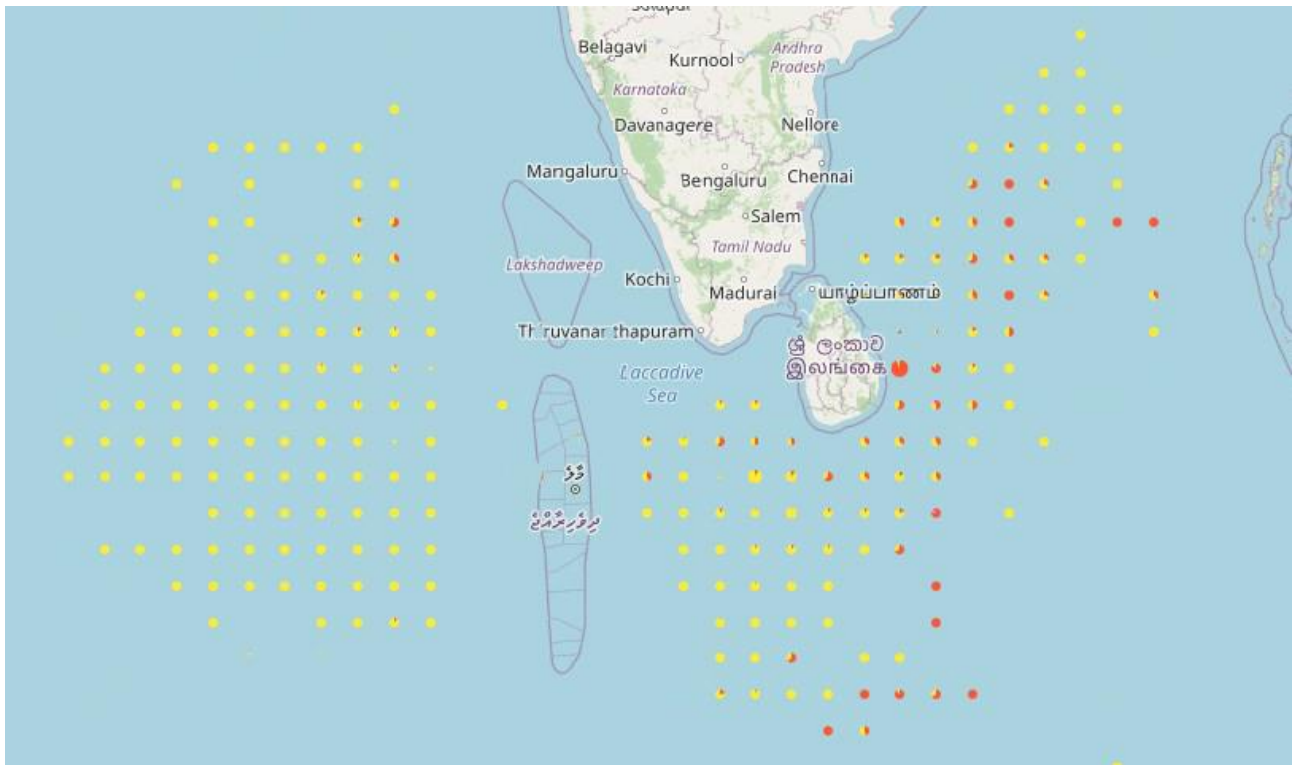
3.a (v) Map of distribution of fishing catch; Skipjack Tuna in Longlines



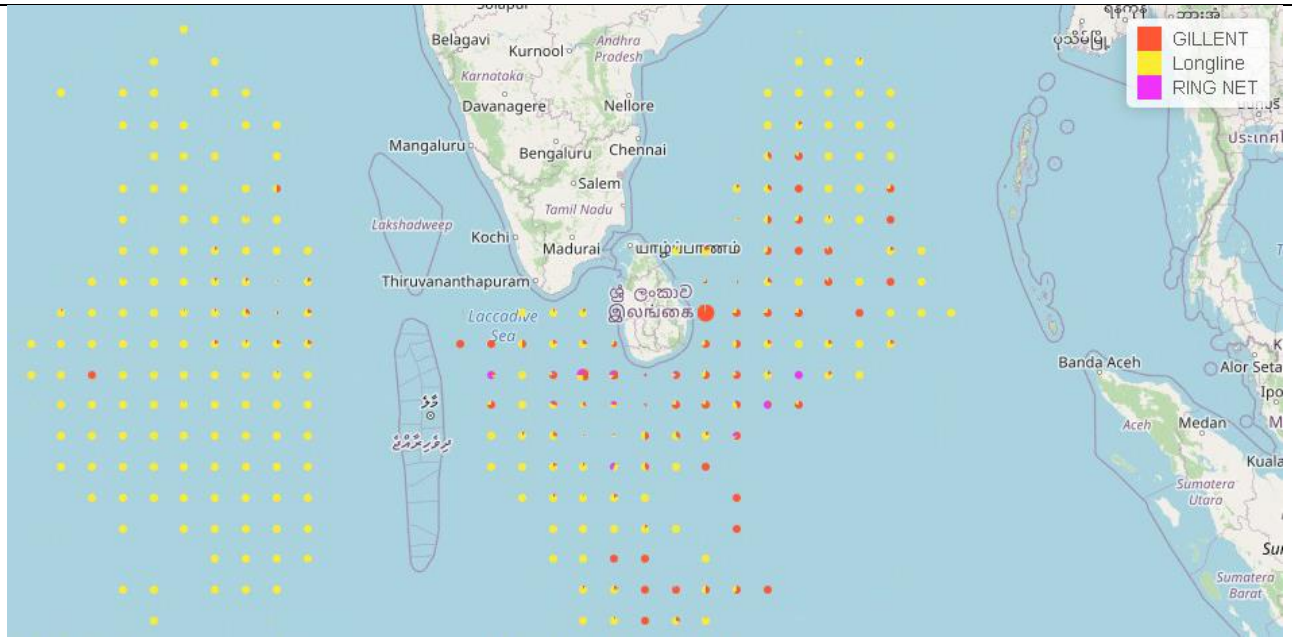
3.a (vi) Map of distribution of fishing catch; Skipjack Tuna in Gillnets



3.a (vii) Map of distribution of fishing catch; Swordfish

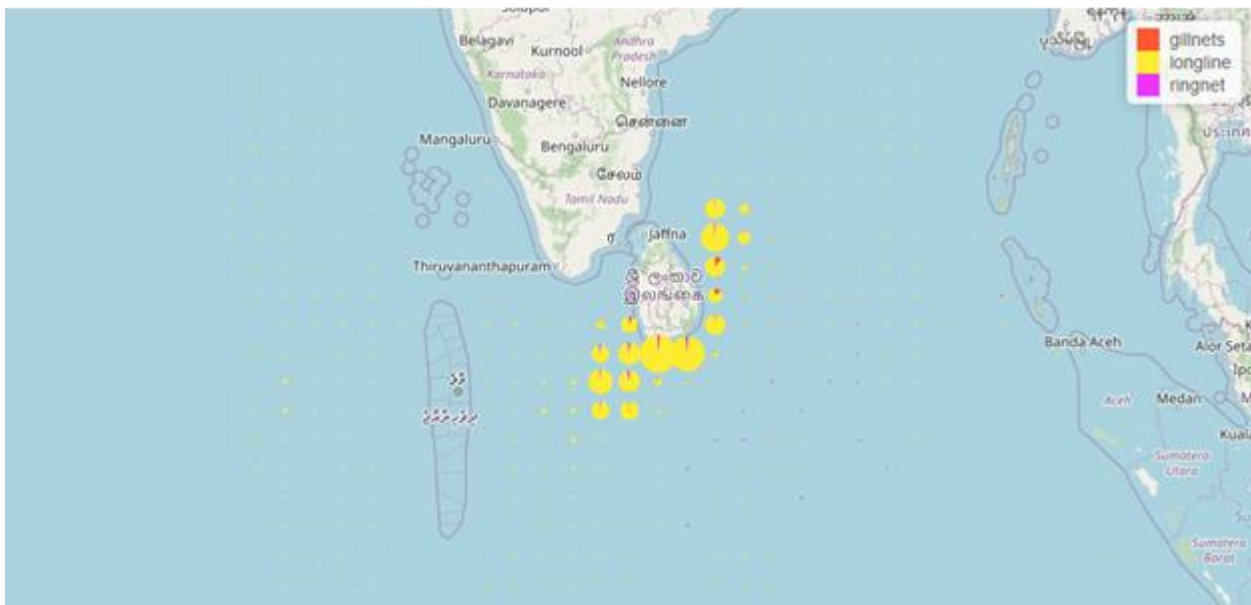


3.a (viii) Map of distribution of fishing catch; Black Marlin

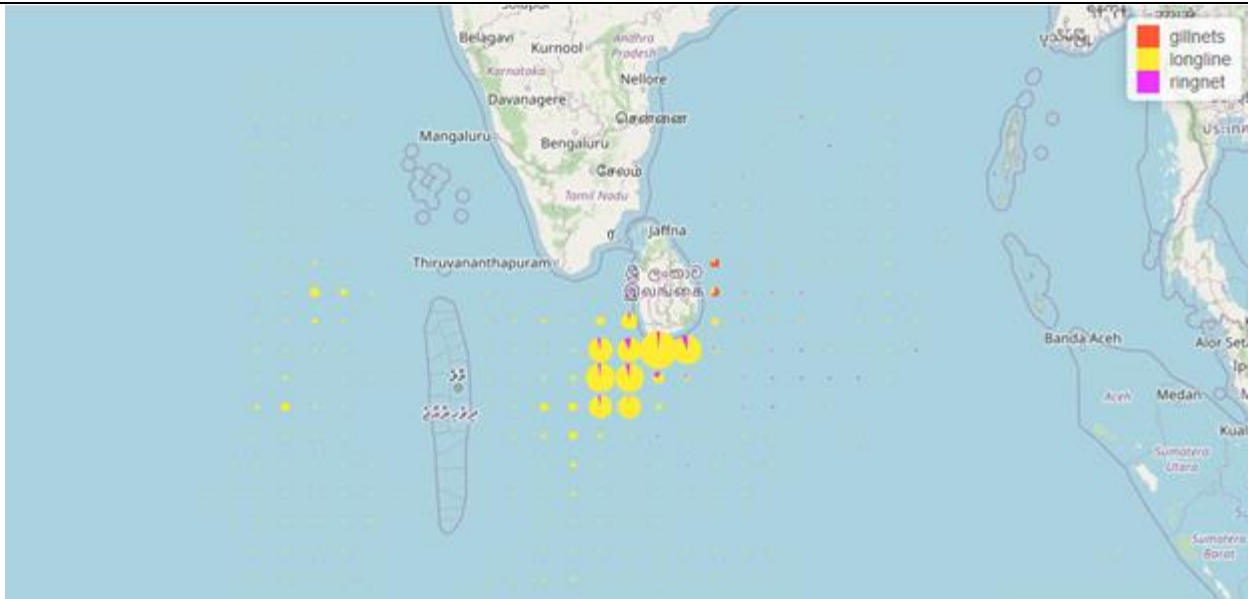


3.a (x) Map of distribution of fishing catch; Sailfish

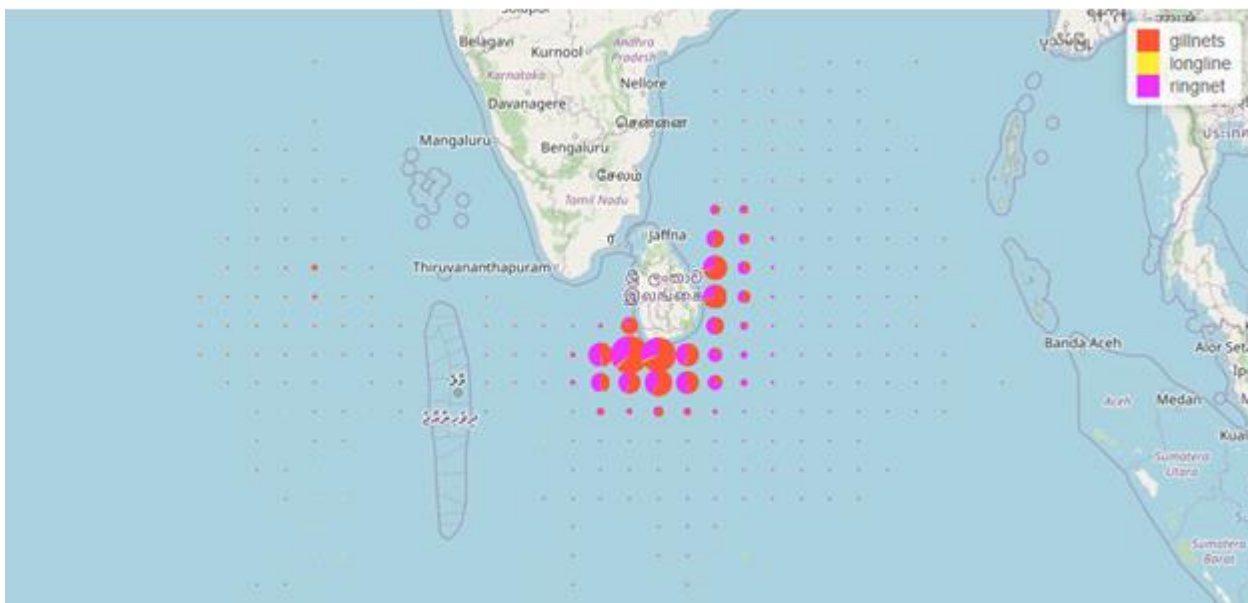
Figure 3b. Map of distribution of fishing catch, by species for the national fisheries, in the IOTC area of competence (average of the 5 previous years e.g., 2018–2022). [map for each species] [Mandatory]



3.b (i) Map of distribution of fish catch Yellow fin tuna (average effort for last 05 years)



3.b (ii) Map of distribution of fish catch Big eye tuna (average effort for last 05 years)



3.b (iii) Map of distribution of fish catch Skip jack tuna (average effort for last 05 years)

4. RECREATIONAL FISHERY [Mandatory]

Recreational fishery for tuna and tuna like species is not a popular or the widely spread event in Sri Lanka, However Recreational fishery take place sporadic manner in associated with tourist industry mostly for coral associated fish such as groupers, basses and trevallies .

In recent (2023), Department of Fisheries passed the regulation on Recreational Fishing Management. In the regulation prohibited species and recommended gear types are clearly mentioned. catch data recording sheet is incorporated to record the species and the number of fish caught.

5. ECOSYSTEM AND BYCATCH ISSUES [Mandatory]

5.1 Sharks [Mandatory]

(A) High Seas Fishing Operations Regulations 2014 (Fisheries and Aquatic Resources Act /FARA)

- i. The masters/skippers of the vessels have been legally ordered to prompt release of all mammals, turtles and seabirds and prohibited and unwanted sharks in live form at minimum harm caused to them if caught incidentally.
- ii. It is mandatory to carry and use of the line cutters and de-hookers on board to release sharks/turtles.

- iii. Conduct inspection of boats at the departure and on arrival of the fishing vessels at the port.
- iv. Prohibition of intentional surrounding of whale sharks by purse seiners. Mandatory to carry dip nets on board for purse seines to release sharks in live form.
- v. Deployment of onboard observer for Scientific data collection in the vessels > 24m.
- vi. Prohibition of use of drift gill nets > 2.5km in high seas.
- vii. In 2021/22 DFAR has prepared and published leaflets on live release of Sharks and Rays Shark and Rays, turtles and marine mammals in three languages and distributed among fishermen and awareness is being conducted.

(B) Shark Fisheries Management Regulation, 2015 (Gazette No. 1938/2 of 26 October 2015)

- i. Prohibition of finning on board and prohibition of , catching, retaining , transshipment , and sale of Thresher sharks(i.e. *Alopius vulpinus*, *A. superciliosus* and *A. pelagicus*) , Ocean white tip shark (*Carcharhinus longimanus*) and whale shark (*Rhincodon typus*). .
- ii. Provisions to collect biological samples for research studies.

(C) Fish Catch data recording regulations 2014 (Log book)

Keeping the records of shark catches including incidental catches, release/discard in live or dead ones of sharks, mammals, turtles and sea birds is legally mandatory.

(D) Other regulations and actions

- i. Regulation on prohibition of use of poisonous, explosives or stupefying substances in fishing (FARA amendment 2004)
- ii. Prohibition of fishing dredging and bottom trawling damaging the sea bottoms and breeding and nursery grounds FARA
- iii. Sri Lanka is a signatory to Convention on International Trade in Endangered Species (CITES)
- iv. Declaration of endangered shark species as protected species under Fauna & Flora Protection Act.
- v. Promoting the use of circle hooks to the longlines rather than “J hooks.
- vi. *Marine Pollution Prevention Act No 59* of 1981 (amended 2008) has legal provisions against pollutions affecting to marine animals and ecosystems.
- vii. National Environment Act, has published “The National Red List 2012” of Sri Lanka revealing the National and Global conservation status of the fauna and flora of Sri Lanka. Special attention has been drawn to corals and marine fish species mammals and holoturians
- viii. Species identification guides and posters for shark identification has been prepared and published in 2015.
- ix. Improve the onsite sampling program to cover all species of shark as per the IOTC resolutions (12/03) to collect required catch and size data to submit to IOTC in the annual submission of data
- x. Awareness programs are being conducted on the banning of thresher sharks, white tip sharks and whale sharks and recording of the incidental catches and prompt release in an unharmed condition.
- xi. The sanction on violations has been increased to a adequate severity up to Rupees one million under the provisions of the Amended Act in 2013.
- xii. Shark fin sample has to be identified to species level obtain CITES clearance from Department of Wildlife to export of the fins of the sharks that are not prohibited to catch in Sri Lanka. The identifications are done both physically and genetically by the National Research Agency (NARA).

5.1.1. NPOA sharks [Desirable]

- Sri Lanka's National Plan of Action for the Conservation and Management of Sharks (SLNPOA-Sharks) published in 2013 and subject to revise in four years period.
- The Steering committee on implementation of NPOA Sharks meets once in six months. NPOA Sharks is revised in 2018 using the comments and observations made by the members of the National Steering Committee.
- NPOA-Sharks is published in www.fisheries.gov.lk website
- Banning of the use /carry on-board the wire trace/shark lines in High Seas fishing is to be Incorporated to the next revision.

5.1.2. Sharks finning regulation [Mandatory]

Shark Fisheries Management Regulation, 2015 (Gazette No. 1938/2 of 26 October 2015)

- (i) Prohibition of finning on board and prohibition of , catching, retaining , transshipment , and sale of Thresher sharks(i.e.Alopius vulpinus, A. superciliosus and A. pelagicus) ,Ocean white tip shark (Carcharhinus longimanus) and whale shark(Rhincodon typus). .

There is no practice of finning onboard by the Sri Lanka fishermen. The fins are cut and removed by the buyers who engage in shark fin exports in the shore/ harbor after landing as per their interest. Sri Lanka do not have target fishery for Sharks for fin exportation.

5.1.3. Blue shark [Mandatory]

- Maintenance of updated log book (as per Res. 15/01) on board is legally mandatory.
- Skippers have trained on species identification and catch data recording.
- There is a separate column in the log book to report Blue shark catches for all gears.
- Log book database is maintained at DFAR.
- Catch by small boats is collected by the data collector assigned to the landing sites.
- Annual catch & effort data and size frequency data is submitted to IOTC as per the resolution 15/02.

5.2 Seabirds [Mandatory]

Sea bird catches are not reported in Sri Lanka due to the nature of the fishery and less availability of sea birds species in the high seas around Sri Lanka. Seabirds are not interacting with long liners either line is setting or line hauling mostly due to the low height of the small boats without sophisticated super structure. The National Aquatic Resources and Research Development Agency (NARA) has done two short-term studies on sea birds through comprehensive port sampling and onboard observation study made in research vessels in the high seas of Bay of Bengal. The findings were present at the WPEB in 2014. Thus there is no mitigation measures in applied to prevent seabird interactions and Sri Lanka and has not developed the NPOA-Sea birds. Observers are not deployed in the small vessels due to space and safety restrictions . No vessels operated south of 25°S. [Annex ii.pdf](#)

How many vessels operated south of 25°S in the period covered by this report?

Sri Lanka vessels do not operate in this region.

1. How many of those vessels used bird scaring lines (as a proportion of total effort)?
2. How many of those vessels used line weighting (as a proportion of total effort)?
3. How many of those vessels used night setting (as a proportion of total effort)?

5.3 Marine Turtles [Mandatory]

Marine turtles are legally protected under Fauna and Flora Protection Act (FFPA) and Fisheries and Aquatic Resources Act no.2 of 1996. In 1979, Sri Lanka has signed the CITES agreement and therefore, trading of turtles and their parts and products are completely prohibited. The sanctions have been increased in amended FFPA,2008 and FARA, 2013for the violation of laws. Further, large-scale drift net fishing in the high seas is restricted to maximum 2.5km in length reducing the entangling of turtles and other non-target species. In the longline fishery use of circle hooks are encouraged than “J” hooks.. Trawling is completely prohibited in Sri Lanka.

Since 2017 use of gill nets are being discouraged and length of gill nets targeting tuna and tuna like species within EEZ also restricted and incorporated to the fishing operation license as a condition. The logbook data collection system allows the fisherman to report the interaction of turtles to the fishing gear. By-catch data recording is being improved through regular awareness programs. Discard levels monitored by the skipper of the vessel/ fishing master (Log book records) L – Live, D-Dead. Data reported to the Secretariat through form 1DI as per IOTC Res. 12/04, 15/02, as well as via the data reported through the Regional Observer Scheme (ROS).

In 2022 DFAR has prepared and published leaflets on live release of turtles in three languages and distributed among fishermen and awareness is being conducted. (refer 5.1.6.) [Annex iii.pdf](#)

There are two major NGOs working on turtle conservation in south coast of Sri Lanka. In addition

NARA and Department of Wild Life Conservation (DWLC) working on turtle conservation. DWLC is running in-situ conservation activities at Bundala, mainly nest protection, hatching rearing and safe releasing. Eco tourism is one of the main advantage of these projects. This has provided alternative livelihood for the people those engaged in poaching of turtle eggs previously. These projects conduct turtle rescue programs with fisher community.

5.4 Other ecologically related species (e.g., cetaceans, mobulid rays, whale sharks) [Desirable]

Catching of marine mammals is legally prohibited Under the Fisheries and Aquatic Resources Act No.2 of 1996 and the Fauna and Flora protection (amendment) Act 1937 ,(amended 1993 and 2008). Sri Lanka do not operate large purse seines. However regulation is being enforced prohibiting catching of whale shark by intentionally set gears.

The fishermen are made aware to releasing dolphins, turtles and whale sharks if incidentally caught to a fishing gear by conducting regular awareness programs by NARA and DFAR. The Log books facilitate reporting of incidental catches of marine mammals. Deployment of an observer in small boats is not practical due to space , facilities and safety aspects. [Annex iv.pdf](#)

1. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS [Mandatory]

6.1. Log sheet data collection and verification (including date commenced and status of implementation)

Log sheet data collection and verification (including date commenced and status of implementation)
The log book data recording system is legally mandatory by Fish Catch Data Collection Regulations, 2012 (Gazette, No. 1878/11 amended in 01 September 2014)for multiday fishing vessels > 34 feet (10.3m) in length operate basically in catching large pelagic fish within EEZ and high seas.

It is legally mandatory to submit log sheet after every fishing trip. They provide detail data on the spatial and temporal distribution of catch and effort by individual gear, which satisfy the need of rectifying the shortcomings of obtaining special information on catch and effort by individual gear through port sampling programme. Data received in logbooks has been utilized for verification and also to overcome inherent inefficiencies of port sampling data as per the IOTC requirement.

Procedures for comparing logbook data with data on fish landings obtained from the Large Pelagic fishery survey has been completed and pre-tested with a sample of boats.

The vessels that were sampled at ports and the same vessels submitted log sheets were sorted by month referencing to their registration number. The landed catch records were separated by gear and area based on the catch and effort reported as in log sheets since submission of log sheets is a mandatory requirement for multiday fleet of >10.3m. Majority of sampled boats at ports have been regularly submitted the log sheet after every fishing trip. The assumption made during the multi-gear separation process was that each boat made two fishing trips instead of one; longline and gillnet separately. Around 15% landings are sampled jointly by NARA and DFAR officials at 18 major landing sites (fishery harbours) and 14 minor landing centres. Total of 32 data collectors (27 from DFAR and 12 from NARA) are involved in this field data collection.

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

Legislation; Implementation of Satellite based Vessel Monitoring System (VMS) for Fishing Boats Operation in High seas Regulations 2015, Date of published - 03.26.2015 and the amendment of the same published on 14th December, 2022 [Annex v.pdf](#). The regulation has been formulated based on the resolution 06/03 and 15/03 of IOTC.

- All multiday boats > 10.3m shall equipped with operational VMS on board .

- Vessels are being monitored under the provisions of the regulation on “Implementation of Satellite based Vessel Monitoring System (VMS) for fishing boats operating in High Seas 2015” and the amendment of the same published on 14th December, 2022.
- The vessel monitoring center is established in a separate building in the Fisheries Department Head office Colombo.
- The Fisheries Management Centre (FMC) is well equipped. Officials have been trained and function 24/7 basis monitoring the vessels with real time data. The following reports and alerts are now being generated at FMC.
 - o Position data once 4 hrs intervals
 - o Any incident of tampering, power off or crossing of MBLs.
 - o Indicate the entry to buffer zone before arrive to the harbor.
 - o Final report of the cruise track (map) of the vessel
- The cruise tracks data of VMS are being manually cross checked with the Log sheet data submitted on the arrival and results of reconciliation is reported in a standard format. This helps to validate the information submitted in the logbooks.
- VMS data is being accepted as electronic evidence for prosecution at the Courts and Sri Lanka initiated to install VMS to all multiday vessels operation both in High Seas and within EEZ.
- The annual report on VMS for year 2022 is submitted to IOTC on June 2022.

6.3. Observer scheme

Date commenced and current status and number of observers

National observer program is being implemented in Sri Lanka as per the resolution 11/04 of IOTC since 2014. At the beginning there were 28 observers in the pool. At the end of 2022 10 observers in the pool.

Training for selected 10 Observers who completed all trainings and assessment test carried out by IOTC and CapMarine. It was commenced from 10 to 14th October 2022 at CINEC Campus (Pvt) Ltd. First Observer trip was planned to deploy 22 November 2022 and the debriefing process was organized from 20 to 21 November at Dikkovita Fishery Harbor for selected three observers and the Observer Coordinator by IOTC and CapMarine. The training was carried out virtually by the team of CapMarine for Observers and the Observer Coordinator and first deployment was begun 21-November 2022. The trained observers completed first fishing trip on 25 January 2023 and debriefing process was carried out at the same day together with CapMarine and final Observer report was submitted to the IOTC.

Table 3. Annual observer coverage by operation, e.g., longline hooks, purse seine sets (for the most recent five years at a minimum, e.g., 2018–2022 or to the extent available). [Mandatory]

Year	Number of Vessel – 24m<	Number of fishing operations	Number of observer coverage	% of Observer coverage
2014	Purse Seine - 08	10	02	20
2015	Long line - 02	02	02	100
2016	0	0	0	0
2017	Long Line -02	15	02	13.33
2018	Long Line - 02	09	02	22.22
2019	Long Liners - 18	86	05	5.81
2020	Long Liners - 20	63	07	11.11
2021	Long liners - 21	18	03	16.66
2022	Long liners - 21	09	02	22

Majority of fishing fleet of Sri Lanka are small vessels less than 24m length. It is impractical to deploy on board human observers on the small vessels due to lack of space, facilities and safety. Only 7 vessels <24m vessels operated in 2022 and conducted 9 fishing trips. All vessels are long liners and 2 fishing trips were covered by on board observers. The percentage of coverage by long line net fishery in 2022 is 22%.

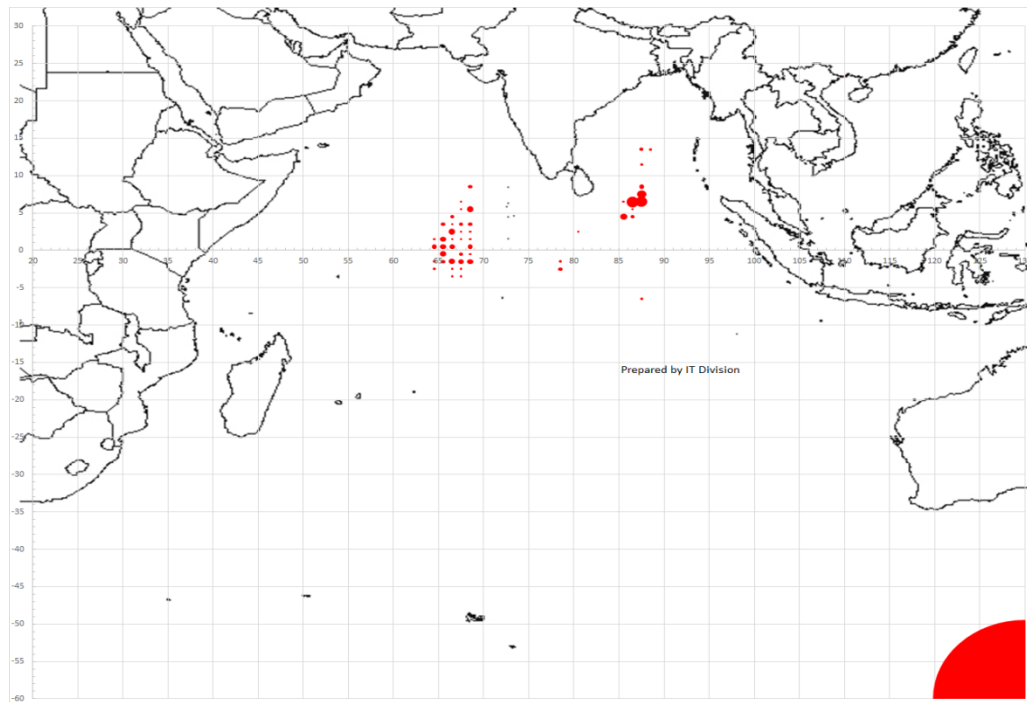


Figure 4. Map showing the spatial distribution of observer coverage. [Mandatory] [Recommended spatial resolution = 1 x 1 degree grid]

6.4 Port sampling programme [Mandatory]

Table 4. Number of vessel trips or vessels active monitored, by species and fishery] [Mandatory]

Zone	Group	Species Code	Number of Specimen Measured				Number of Vessel Trips			
			GI	LL	RN	Total	GI	LL	RN	Total
High Seas	Tropical Tuna	SKJ	3299	74	1055	4427	663	15	211	889
		YFT	93	7630	53	7776	23	1526	11	1560
		BET	13	2315	15	2343	4	464	4	472
			3405	10018	1123	14547	690	2005	226	2921
	Neritic Tuna	FRI	75	2	238	314	28	1	79	108
		BLT	13	1	66	79	4	1	19	24
		KAW	19	1	45	65	4	1	15	20
			106	4	348	458	36	3	113	152
	Bill Fish Total	BLM	65	481	2	548	34	242	1	278
		BUM	136	94	2	232	68	47	1	116
		MLS	1	6	-	7	1	3	-	3
		SFA	202	98	4	304	98	49	2	149
		SWO	79	1162	1	1242	41	580	1	622
			483	1840	9	2332	241	921	4	1167
Shark	BSH	46	107	1	154	30	71	1	102	
	FAL	15	55	7	78	15	55	7	78	
		61	162	8	232	46	126	8	180	
Within EEZ	Tropical Tuna	SKJ	23143	511	6240	29894	2309	51	622	2982
		YFT	1099	19887	380	21366	110	1992	38	2140
		BET	380	2440	209	3029	37	241	21	299
	Total		24622	22838	6830	54289	2456	2284	681	5421
	Neritic Tuna	FRI	128	20	5487	5635	16	3	689	708
		BLT	32	10	695	737	4	1	93	99
		KAW	27	4	732	762	3	1	78	82
	Total		187	34	6914	7134	23	5	861	889
	Bill Fish Total	BLM	658	325	1	984	331	164	0	495
		BUM	234	239	19	492	116	118	9	244

	MLS	135	10	-	145	68	5	-	73
	SFA	704	300	61	1065	353	150	31	534
	SWO	209	2671	3	2883	70	898	1	969
Total		1941	3545	84	5570	938	1335	41	2315
Shark	BSH	81	107	4	192	41	54	2	97
	FAL	173	55	2	230	88	28	1	117
Total		254	162	6	422	129	82	3	214

Table 5. Number of fish measured, by species and fishery] [Mandatory]

Zone	Group	Species Code	GI	LL	RN	Total
High Seas	Tropical Tuna	SKJ	3299	74	1055	4427
		YFT	93	7630	53	7776
		BET	13	2315	15	2343
			3405	10018	1123	14547
	Neritic Tuna	FRI	75	2	238	314
		BLT	13	1	66	79
		KAW	19	1	45	65
			106	4	348	458
	Bill Fish Total	BLM	65	481	2	548
		BUM	136	94	2	232
		MLS	1	6	-	7
		SFA	202	98	4	304
		SWO	79	1162	1	1242
			483	1840	9	2332
Shark	BSH	46	107	1	154	
	FAL	15	55	7	78	
		61	162	8	232	
Within EEZ	Tropical Tuna	SKJ	23143	511	6240	29894
		YFT	1099	19887	380	21366
		BET	380	2440	209	3029
			24622	22838	6830	54289
	Neritic Tuna	FRI	128	20	5487	5635
		BLT	32	10	695	737
		KAW	27	4	732	762
			187	34	6914	7134
	Bill Fish Total	BLM	658	325	1	984
		BUM	234	239	19	492
		MLS	135	10	-	145
		SFA	704	300	61	1065
		SWO	209	2671	3	2883
			1941	3545	84	5570
Shark	BSH	81	107	4	192	
	FAL	173	55	2	230	
		254	162	6	422	

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

Unloading or transhipment of fish in other states ports is prohibited for Sri Lanka flagged vessels by law.

Table 6. Quantities by species and fishery landed in ports located in the IOTC area of competence [Mandatory]

Quantities by species and gear landed by flag vessels in all fishery harbours and landing sites of Sri Lanka (domestic) is reported as a total in table 2(a) of this report .

Landing of fish in other states ports is prohibited for Sri Lanka flagged vessels by law.

Table 7. Quantities by species and fishery transhipped in ports located in the IOTC area of competence
[Mandatory]

Transhipment of fish in domestic or other states ports is prohibited for Sri Lanka flagged vessels by law.

6.6. Actions taken to monitor catches & manage fisheries for Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish [Mandatory]

- Maintenance of updated log book (as per Res. 15/01) on board is legally mandatory.
- Skippers are trained on species identification and catch data recording.
- There is a separate column in the log book to report Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish.]catches for all gears.
- Log book data base is maintained at DFAR.
- Catch by small boats is collected by port sampling by the data collector assigned to the landing sites.
- Annual catch and effort data and size frequency data is submitted to IOTC as per the resolution 15/02.
- Catch, retain on board, trans-ship, land, any bill fish (Striped Marlin, Black Marlin, Blue Marlin, Indo Pacific Sailfish smaller than 60 cm Lower Jaw Fork Length is prohibited in High Seas, and has been included to the conditions of the High seas fishing operation license.

6.7. Gillnet observer coverage and monitoring [Desirable]

Significant number of gillnet operating vessel trips (<10%) are being sampled under the existing port sampling program. Annual catch and effort data and size frequency data is submitted to IOTC as per the resolution 15/02. Refer 6.4, Table 4 above.

Pilot Project on Electronic Monitoring Systems (EMS) in small vessels (<24m) of SL Lanka under the technical assistance of IOTC) is conducted. 6 fishing vessels (4 Long liners and two Gill nets vessels) have been selected to install EMS equipment initiate the project. Four sets of EMS equipment installed on board of small long liners of Sri Lanka. Three days Training Programme is conducted by IOTC technical officer and the representative from Marine Instrument to introduce the EMS System. Dry Observers were trained on on data analysis.

There was a complaint from the skipper of the vessel that the SSB radio communication system of the vessel is get disturbed when the EMS is operating. As such the data received are not sufficient as expected. Two sets of equipment are to be installed. Further technical support for installation and address technical issues is needed

6.8 Sampling plans for mobulid rays [Mandatory]

No intentional catch of mobulid rays in Sri Lanka . The incidental catches are recorded in log books and monitored by the existing port sampling program. Catch and effort data submitted to IOTC in the annual submission as per the resolution 15/02. In 2021/22 DFAR has prepared and published leaflets on live release of Sharks and Rays in three languages and distributed among fishermen and awareness is being conducted

7. NATIONAL RESEARCH PROGRAMS [Desirable]

7.1. National research programs on blue shark

The data collection programme has been improved to report accurate blue shark catch, effort, size and discard data to IOTC in accordance with the Resolution 15/02. No other research conducted at National level.

7.2. National research programs on Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish

The data collection programme has been improved to report accurate Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish catch, effort, size and discard data to IOTC in accordance with the Resolution 15/02. No other research conducted at National level

7.3. National research programs on sharks

- Revised National Plan of Sharks Sri Lanka has an activity plan addressing some of the issues.
- Banning of the use /carry on-board the wire trace/shark lines in High Seas fishing is to be Incorporated to the next revision.
- In 2021/22 DFAR has prepared and published leaflets on live release of Sharks and Rays Shark and Rays, turtles and marine mammals in three languages and distributed among fishermen and awareness is being conducted.
- Under the monitoring and assessment of large pelagic fishery resources research project of the NARA, shark resources are considered.

7.4. National research programs on oceanic whitetip sharks

Revised National Plan of Sharks Sri Lanka has an activity plan addressing some of the issues. No research conducted at National level on white tip sharks.

7.5. National research programs on marine turtles

No currently research programmes. However, turtle entanglement (if any) in fishing gear is recorded and reported.

7.6. National research programs on thresher sharks

Revised National Plan of Sharks Sri Lanka has an activity plan addressing some of the issues. Activities are to be implemented.

Table 8. Summary table of national research programs, including dates. [currently underway]

Summary table of national research programs, up to 2022.

No	Project title	Period	Funding source	Objectives	Short description
(a)	Monitoring and assessment of large pelagic fishery resources	On going	Government of Sri Lanka	i. Update databases for commercially important species ii. Analyse stock status of the resources iii. Biological studies for selected species iv. Annual catch and effort data Submission to IOTC, FAO data sharing. v. Make recommendations for sustainable resource use.	Information provided to FAO, IOTC and also utilized for domestic fisheries management.
(b)	Strengthening marine fisheries data collection in Sri Lanka	2019-2023	Government of Sri Lanka and the Norwegian Government	Upgrade port sampling in marine fishery of Sri Lanka via establishing a proper sampling strategy.	Development and establishment of a robust fisheries information system. Capacity building of NARA scientists
(c)	Fisheries independent surveys in the coastal areas in Sri Lanka	2019-2023	Government of Sri Lanka and the Norwegian Government	Report findings from fisheries independent surveys according to scientifically recognised norms.	Data will be fundamental for the management plans for selected fisheries in Sri Lanka Capacity building of NARA scientists

2.	I M P L E M E N T A T I O N	(d) x a m p l e	Potential Fishing Ground Forecasting (Tuna Fishing Ground Advisory And Fisheries Information Service)	On going	Government of Sri Lanka	Generate and Disseminate fishing ground forecast advisories	The model was updated for the latest satellite and oceanographic model data sources and improved the predictability Successfully practicing for YFT and SKJ
		(e) o n l y	Promote Pole and line for Skip Jack Tuna	2022	Government of Sri Lanka	To replace non selective and harmful gill net fishery by selective eco-friendly, catch one by one fishery. To study the present status of pole and line fishery in Sri Lanka, while understanding the potentialities for the future expansion of the fishery in terms of availability of live bait and free tuna schools	The commercialization of pole and line fishery in Sri Lanka will be feasible primarily with the modernization of the fishery which includes vessel upgrades, introduction of Fish Aggregating Devices (FADs), forecasting of free tuna schools, and efficient methods to harvest live bait and secondarily through proper awareness and skill development.
		(f) n t a t i o n	Studying the suitability of deterrent pingers against depredation of hooked yellowfin tuna and assessment of marine mammal abundance	2022	Government of Sri Lanka	To minimise marine mammals and LL fisheries interactions.	The project is in data collecting stage.

SCSCIENTIFIC COMMITTEE RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT TO THE SC. [Mandatory]

Table 9. Scientific requirements contained in Resolutions of the Commission, adopted between 2012 and 2022.

Res. No.	Resolution	Scientific requirement	CPC progress
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6-10	Refer 5.3 above. Carry the line cutters and de-hookers on board by long liners and dip nets by purse seiners has made legally mandatory for the high seas operating vessels under high seas fishing regulation 2014. In 2021/22 DFAR has prepared and published leaflets on live release of turtles in three languages and distributed among fishermen and awareness is being conducted.
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3-7	There is a separate box in the log book to report incidental catches in the logbook. - Currently there is are no records of Sri Lanka vessels fish in the area of south of 25 degrees South latitude -Sri Lanka will apply , mitigation measures with the development of fishing activities in this area.
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of	Paragraphs 4-8	Refer 5.1.1 National initiatives on conservation and management of sharks Refer 5.1.1 National initiatives on conservation and management of shark.

Res. No.	Resolution	Scientific requirement	CPC progress
	competence		In 2021/22 DFAR has prepared and published leaflets on live release of Sharks and rays in three languages and distributed among fishermen and awareness is being conducted.
13/04	On the conservation of cetaceans	Paragraphs 7– 9	<p>Marine mammals (cetaceans) and turtles are protected under Fauna and Flora Protection (amendment) Act 1937(FFPA) (amended 1993 and 2008); Fisheries and Aquatic Resources Act No. 2 of 1996 (FARA)(amended 2004, 2013</p> <ul style="list-style-type: none"> •Vessels >24m are deployed with observers and data reported . •There is a separate box in the log book to report incidental catches of cetaceans (if any) and release of them dead/alive form. This has been incorporated to the e-log book/tab by giving pictures and drop down selection. <p>In 2021/22 DFAR has prepared and published leaflets on live release of mammals in three languages and distributed among fishermen and awareness is being conducted</p>
13/05	On the conservation of whale sharks (<i>Rhincodon typus</i>)	Paragraphs 7– 9	<p>Catch of whale shark is prohibited by the amended shark fishery management regulation 2015</p> <ul style="list-style-type: none"> •Fishers are being aware recording of the incidental catches and prompt release in an unharmed condition. -There is a separate box in the log book to report incidental catches <p>28</p> <ul style="list-style-type: none"> •The sanction on violations has been increased up to Rupees one million under the provisions of the Amended Act for High Seas Fishing in 2013. <p>Prohibition of intentional surrounding of whale sharks by purse seiners. Mandatory to carry dip nets on board for purse seines to release whale sharks in live form.(High Seas Fishing Operations Regulations 2014)</p> <p>In 2021/22 DFAR has prepared and published leaflets on live release of Sharks and rays in three languages and distributed among fishermen and awareness is being conducted</p>
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	<p>Catch, retain onboard, tranship, land,store or sell of thresher sharks species, oceanic white tip shark, whale shark and shark finning on board and landing sharks fins detached both within EEZ and high seas areas is prohibited in the consolidated A regulation. published in March 2015</p> <p>-submitted data for sharks, as required by IOTC data reporting procedures</p>
15/01	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–10	<p>Paper Log book onboard is made legally mandatory (catch data collection regulation 2012 (amended 2014)</p> <ul style="list-style-type: none"> -The log books for year 2019 are printed as per resolution 15/01 and distributed -The Log book templates are provided to Secretariat to display on IOTC website.
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	<p>Data collection sheets have been introduced and the port samplers were trained, sampling procedures introduced, Log book has been improved in a way that enabling the calculation of total catch as per the resolution...Marine mammals and turtles are protected under Fauna and Flora Protection (amendment) Act 1937(FFPA) (amended 1993 and 2008); Fisheries and Aquatic Resources Act No. 2 of 1996 (FARA)(amended 2004, 2013).</p> <p>nature of the fishery. There is a separate cage to report incidental catches of sea birds</p>

Res. No.	Resolution	Scientific requirement	CPC progress
			if any and release of them dead/alive from.. Electronic software for catch and effort data recording (Elogbook/tab) with autonomy geo- positions is being developed and a tested for better data collection and generation of reports.
17/05	On the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 6, 9, 11	he removal of shark fins on board, landing, retention onboard, transshipment and carrying of detached shark fins.and Landing of carcasses of sharks which are not having fins naturally attached to the body at the point of landing is prohibited by law published in March 2015 . Release of live sharks, especially juveniles and pregnant sharks that are caught incidentally is made lagally mandatory by the above regulation. Fishers and the data collectors law enforcement officers have made aware and the species identification guides are provided. In 2021/22 DFAR has prepared and published leaflets on live release of Sharks and rays in three languages and distributed among fishermen and awareness is being conducted. Data recorded as per IOTC data reporting requirements and procedures in Resolution 15/02.
18/02	On management measures for the conservation of blue shark caught in association with IOTC fisheries	Paragraphs 2-5	record Blue shark catch in accordance with the requirements set out in the Resolution 15/01.The data collection programme has been improved to report accurate blue shark catch, effort, size and discard data to IOTC in accordance with the Resolution 15/02. The domestic catch data to collection and monitor system is given under point (6) this report.
18/05	On management measures for the conservation of the Billfishes: Striped marlin, black marlin, blue marlin and Indo-Pacific sailfish	Paragraphs 7 – 11	Data recording of catch and effort data is practiced by using a log book prepared as per the standards given in the resolution 15/02 in the IOTC area. Use of species identification cards for proper identification of fish species specially to ensure accurate reporting of Striped Marlin, Black Marlin, Blue Marlin and Indopacific Sailfish
18/07	On measures applicable in case of non-fulfilment of reporting obligations in the IOTC	Paragraphs 1, 4	Nominal catches were submitted to IOTC as per the IOTC IRC electronic form covering the most commonly caught elasmobranch species according to records of catches and incidents as established in Resolution 15/01 including zero (0) catches.
19/01	On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence (<i>If not provided under Res 21/01 below</i>)	Paragraph 22	Refer 6.7 above.
19/03	On the Conservation of Mobulid Rays Caught in Association with Fisheries in the IOTC Area of Competence	Paragraph 11	No intentional catch of mobulid rays in Sri Lanka . The incidental catches are already monitored by the existing port sampling program and catch and effort data submitted to IOTC in the annual submission as per the resolution 15/02. In 2021/22 DFAR has prepared and published leaflets on live release of Sharks and Rays in three languages and distributed among fishermen and awareness is being conducted
21/01	On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence (<i>If not provided under Res 19/01 above</i>)	Paragraph 23	Already implemented. This has been reported to compliance committee on the date of 09.03.2023 with a implementation report.
22/04	On a regional observer scheme	Paragraph 12	Refer 6.3 and 6.4 above.

3. LITERATURE CITED [Mandatory]