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Iran (Islamic Republic of) National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2015

INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 15/02, final scientific data for the previous year was provided to the IOTC Secretariat by 30 June of the current year, **for all fleets other than longline** (e.g. for a National Report submitted to the IOTC Secretariat in 2015, final data for the 2014 calendar year must be provided to the Secretariat by 30 June 2015)	**YES** **Submitted the 30 June 2015**
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 2015, preliminary data for the 2014 calendar year was provided to the IOTC Secretariat by 30 June 2015). **REMINDER:** Final longline data for the previous year is due to the IOTC Secretariat by 30 Dec of the current year [e.g. for a National Report submitted to the IOTC Secretariat in 2015, final data for the 2014 calendar year must be provided to the Secretariat by 30 December 2015).	**N/A**
If no ,please indicate the reason(s) and intended actions: ***We don't have any active longliner vessel at present ,we have got one longliner but it is not active yet***	

Executive Summary

Iran (Islamic Republic of) fishing grounds in Northern and southern waters of the country are located in the Caspian Sea and Persian Gulf and Oman Sea. Fishery for tuna and tuna-like species is a major component in large pelagic fisheries in Iran and one of the most important activities in the Persian Gulf, Oman Sea and offshore waters. The long Iranian coastline about 193 port and landing places and about 143 thousand fishermen individuals which are directly engaged in fishing activities and Around 11500 thousand fishing crafts consist of fishing boats, Dhows and vessels using different fisheries including: Gillnet, Purse seine Trolling, Trawl and Wire-trap which are engaged in fishing operation according to a time schedule during different fishing seasons in the coastal and offshore waters. Gillnet and purse seine are two main fishing methods used by Iranian vessels to target large pelagic species (especially tuna and tuna-like) in the IOTC area competency and also some of small boats used trolling in coastal fisheries.

The total production of large pelagic fishes during 2014 was 267000 Mt of which 249000 Mt belongs to tuna and tuna-like fishes in the Indian Ocean areas. Those catch with 73.7% (196,689 Mt) of Tunas, 11.5% (30505 Mt) of Seerfish, 8.0% (21,468 Mt) of Billfish, 2.8% (7,552 Mt) different species of shark and 4% (10734 Mt) other species.

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1. BACKGROUND/GENERAL FISHERY INFORMATION

There are three categories of fisheries activities in Iran consist of the southern fishery, the northern fishery (the Caspian Sea) and inland fishery and aquaculture. Figure 1.1 shows total yearly catch and production in the country during 2010-2014 and the annual production in Iran was about 946,500 Mt in 2014, which can be distributed as 57% (535860 Mt) Mt of the total catch and production contributed to the country fishing activities in the Persian Gulf, Oman Sea and offshore waters, about 4%(39640) Mt of production from northern water (Caspian Sea) and 39%(371000) Mt through inland water and aquaculture.

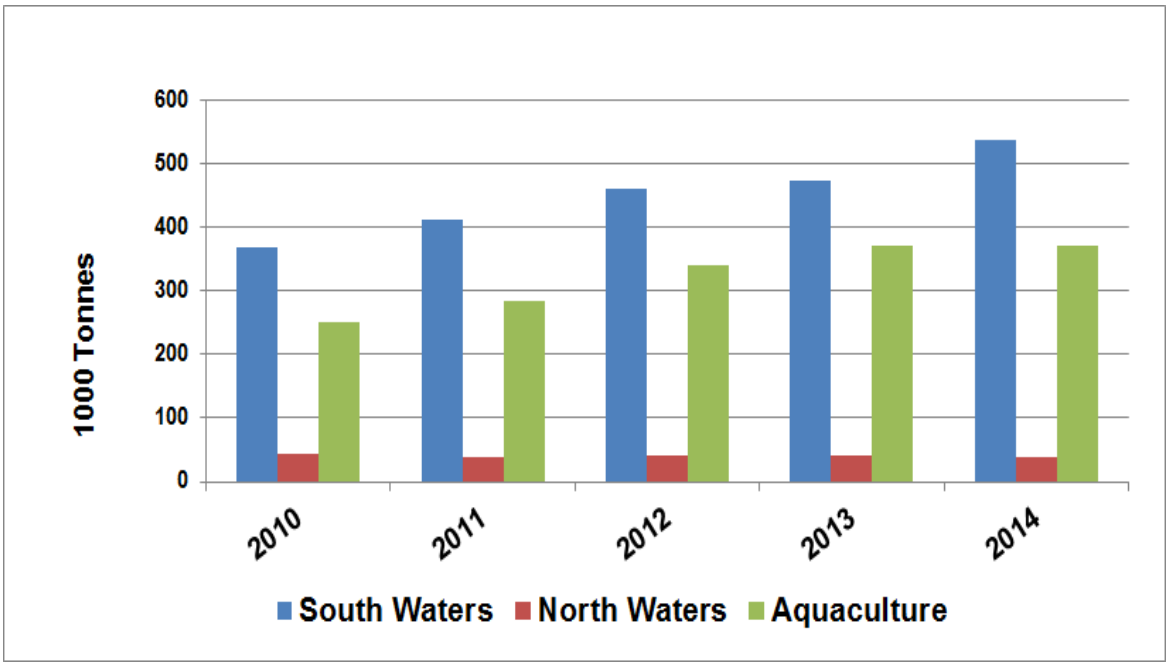


Figure1.1Total Catch & production in the country during 2010-2014

Fishery for tuna and tuna-like species is a major component in large pelagic fisheries in southern of the country and one of the most important activities in the Persian Gulf & Oman Sea.

Total catch production in the southern water in 2014 is equal to 536000 Mt which include large pelagic, small pelagic, demersal, shrimp and lantern fishes (Myctophids). Major catch is allocated to large pelagic with 279000 Mt (52 % of total catch) in the coastal and offshore. Figure1.2 shows the catches quantity of different aquatic species group in the southern waters of Iran.

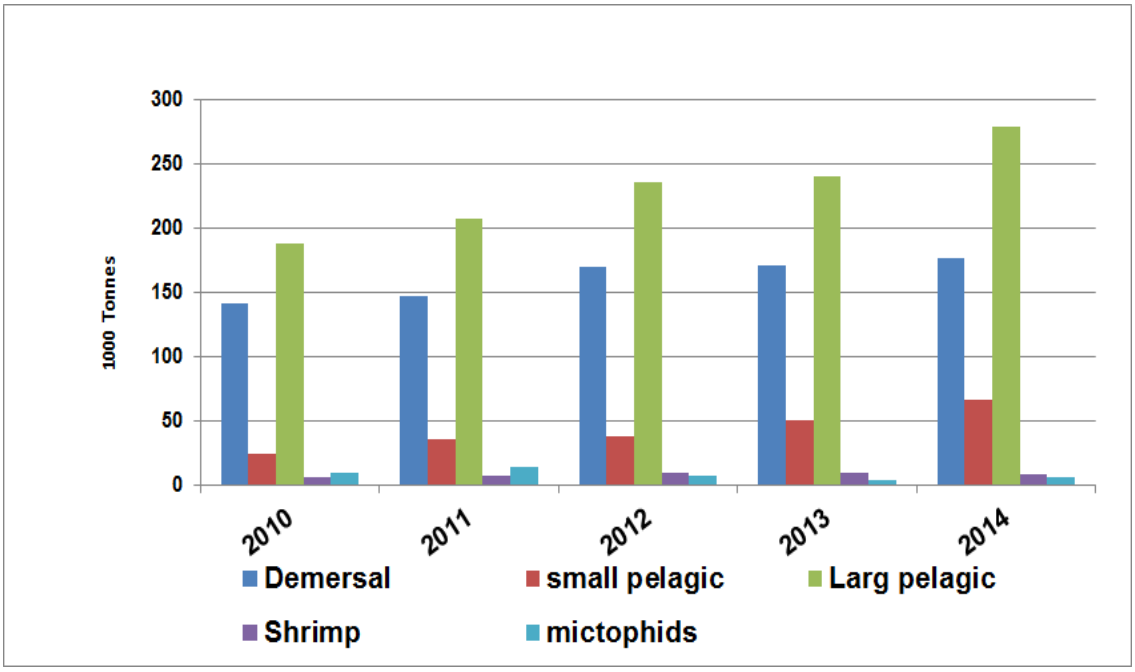


Figure1.2The catches quantity of different aquatic species group

2. FLEET STRUCTURE

Iran Fisheries and exploitation of aquatic animals in the southern water is carried out by a fishing fleet including11498 vessels of which about 6928 crafts are engaged large pelagic species activities in 2014. Of this total volume of vessels, about 1220 are active in Tuna and Tuna like fishing in the Oman Sea and offshore waters and the rest are operated in the coastal fishery. Those fishing crafts consist of industrial purse- seiners, fishing boats and Artisanal vessels (Dhows) and GT of purse seiners is up to1000 t and GT of Gillnetters ranges from less than 3 t to more than 100 t. Gillnet and purse seine are two main fishing gear for catching tuna and tuna-like Species in the IOTC area and also some of small boats used trolling in coastal fisheries (Table 2.1).

GEAR	GRT	No. Crafts by year				
		2010	2011	2012	2013	2014
No. of Active Purse Seiners	1000-2000	5	5	4	4	5
Gillnet	<3	3444	3340	3784	3741	3155
	3-20	702	586	282	270	271
	20-50	911	941	1021	1060	825
	51-100	580	479	527	534	480
	>101	283	260	329	338	275
Total fishing Crafts (Gillnet)		5920	5606	5943	5943	5006
Trolling	<3	634	854	810	805	1914
TOTAL fishing Crafts		**6563**	**6468**	**6761**	**6756**	**6928**

Table 2.1: Number of crafts operating in the IOTC area, by gear type and size (2010-2014)

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

Table 3.1 and figure3.1 shows the total yearly catch by gear type and species reported for the all fleet. The Catch quantity of tuna and tuna-like species in 2014 was equal to 251,000 Mt, of which 138 000 Mt belongs to coastal waters and the rest (113000 Mt) belongs to off-shore fishery.

Figure 3.2, 3.3 and 3.4 showing the amount of catch for different fishing methods by species during 2010 to 2014. Total catch for purse seine, Gillnet and trolling in 2014 was estimated 5794 Mt, 252,729 Mt and 8002 Mt respectively. Gillnet with 94.4% of Catch is the dominant fishing gear followed by Purse seiners 2.6%, and around 3% comes from Trolling vessels.

Table 3.2 shows the fishing effort for tuna and tuna like species by different vessel categories for the all fleet consist of purse seine, gillnetter and trolling during recent years. In 2014, for tuna and tuna-like catches around 1,027,000 days fishing efforts was Carried out, of which 803,219 days was operated by Gillnet, 1080 days by purse seine and 223,360 days done by trolling fisheries.

Gear Group	Species Group	2010	2011	2012	2013	2014
Purse Seine	Kawakawa	0	24	162	0	11
	Longtail tuna	220	2280	2074	1520	140
	Skipjack tuna	628	1336	1621	1605	798
	Yellowfin tuna	2529	876	1103	1980	4832
	Bigeye tuna	0	105	161	100	10
	Others			34	530	3
Total Purse Seine catch		3377	4621	5154	5735	5794
Gillnet	Frigate tuna	6172	5969	8175	6848	13265
	Kawakawa	16336	22208	25984	28377	28936
	Longtail tuna	63761	78080	71242	62704	60771
	Skipjack tuna	21657	16137	25430	31722	38931
	Yellowfin tuna	28522	27646	33834	30421	41326
	Bigeye tuna			1483	1549	2259
	N.B.Spanish mackerel	10523	14248	14980	18324	21218
	Indo-Pacific King mackerel	3106	3801	5127	5638	6705
	Billfish	9209	8866	11297	14056	21455
	Sharks	-	-	6736	6624	7132
	Common Dolphin fish	-	-	1804	1052	1834
	Others	-	-	9458	8481	8897
Total Gillnet catch		159286	176956	215551	215795	252729
Trolling	Frigate tuna	-	43	35	25	25
	Kawakawa	-	34	76	387	387
	Longtail tuna	469	523	2884	2348	2348
	Yellowfin tuna	434	277	28	2	2
	N.Barred Spanish mackerel	361	546	1461	1687	1687
	Indo-Pacific King mackerel	64	99	371	114	114
	Indo-Ppacific Sailfish	-	-	18	0	0
	Sharks	-	-	295	317	317
Total Trolling catch		1328	1522	5169	4879	8002

Table.3.1 Annual catch by gear type and species (Mt)

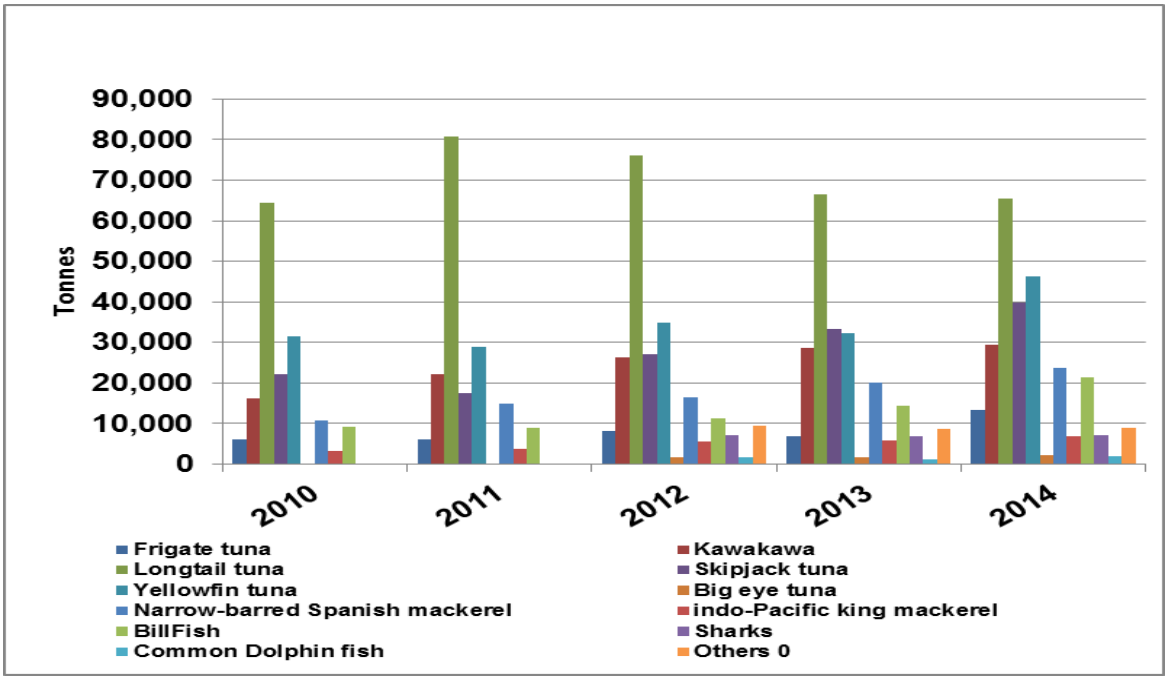


Figure3.1Total yearly catch by species reported for the all fleet during 2010-2014

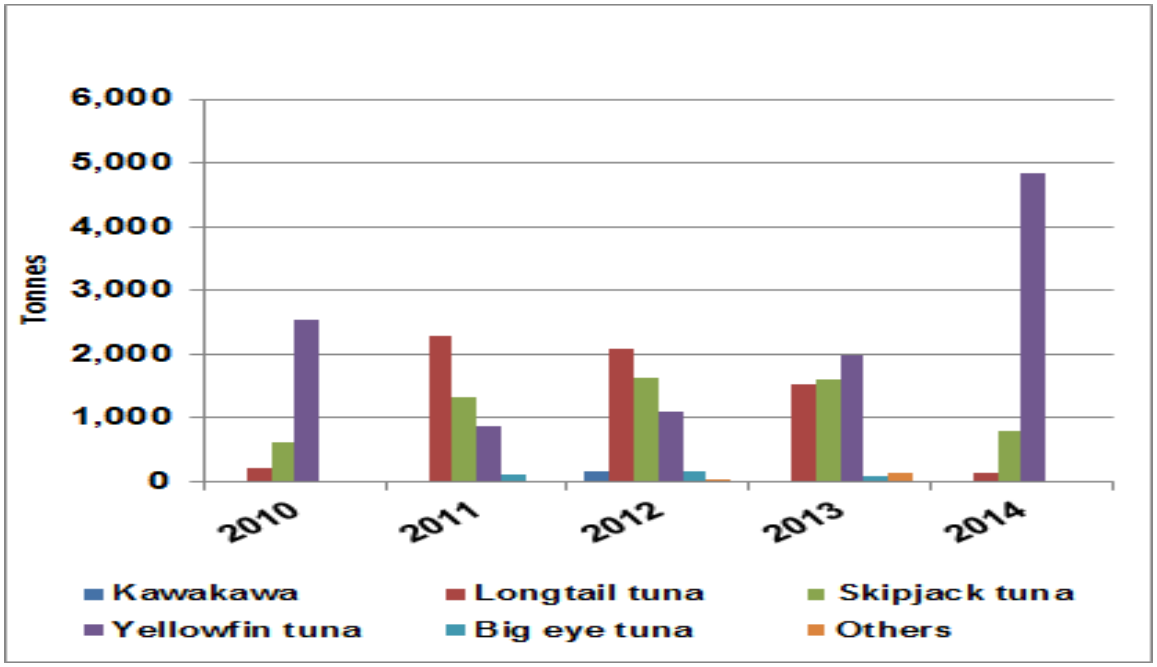


Figure3.2 Annual Catch of Purse Seiners by Species

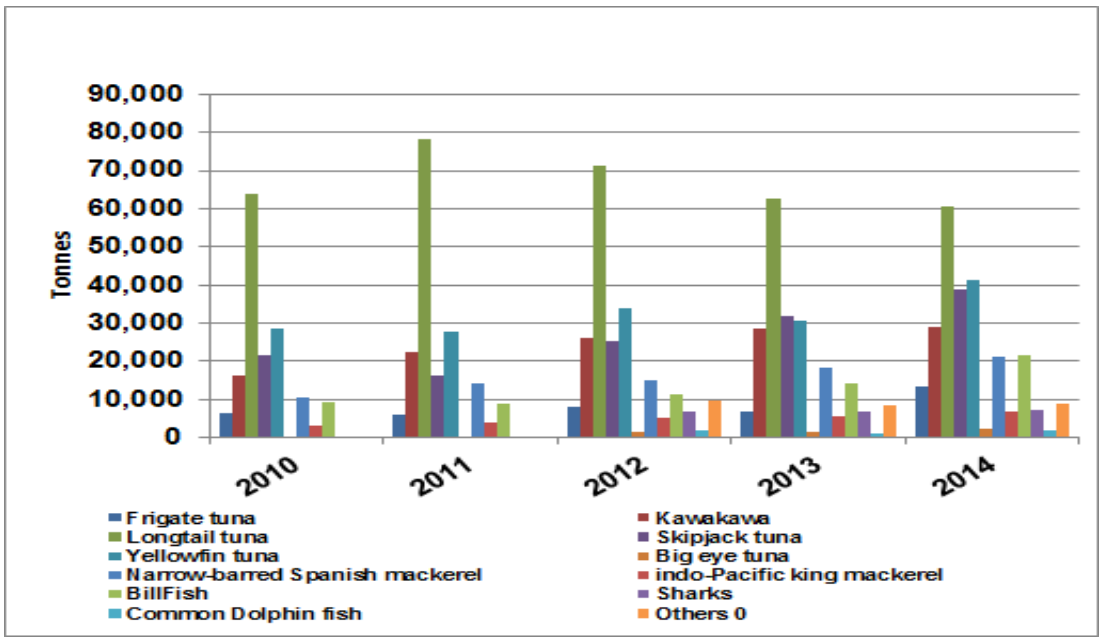


Figure3.3 Annual Catch of Gillnets by Species

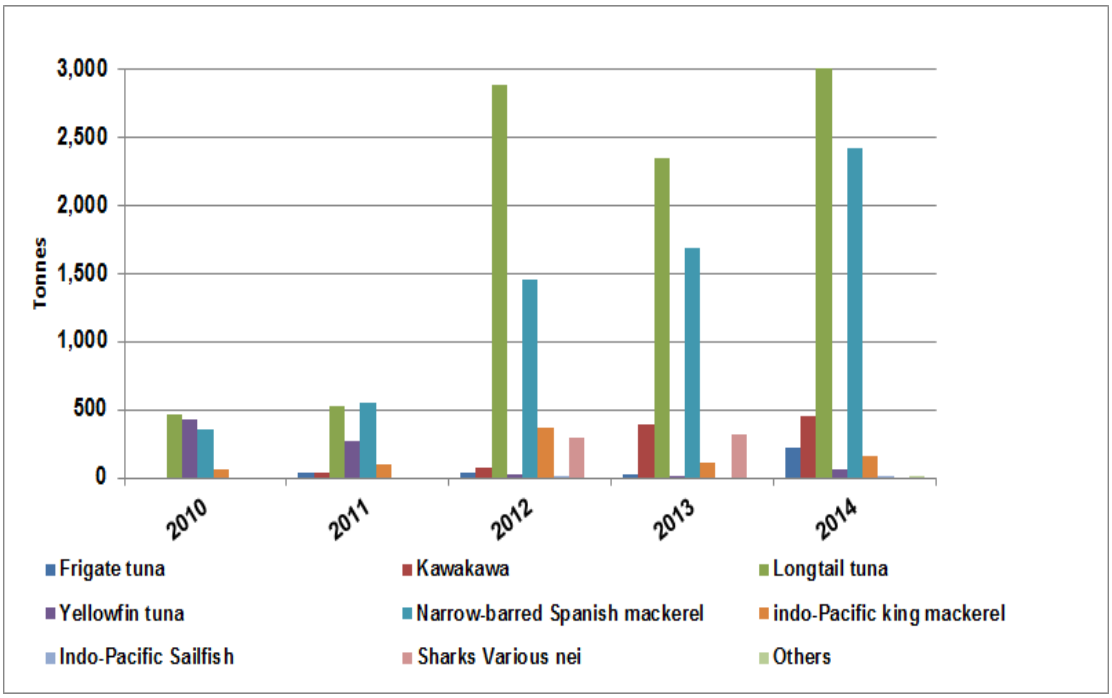


Figure3.4 Annual Catch of Trolling Method by Species

Gear	Capacity GRT	Fishing effort by gear(days)				
		2010	2011	2012	2013	2014
Purse seine	1000-2000	880	450	981	727	1080
Gillnet	<2	501402	515372	557434	538550	468502
	3-20	113740	100809	43303	40985	59179
	21-50	165640	176132	195643	184070	137860
	51-100	83754	82637	91293	91790	84658
	>101	38810	45020	57662	60400	53020
Total fishing effort (Gillnet)		880768	852396	903346	919970	803219
Trolling	Non-mechanized	96822	139161	125446	123450	223360

Table 3.2: Fishing effort by different vessel categories (days)

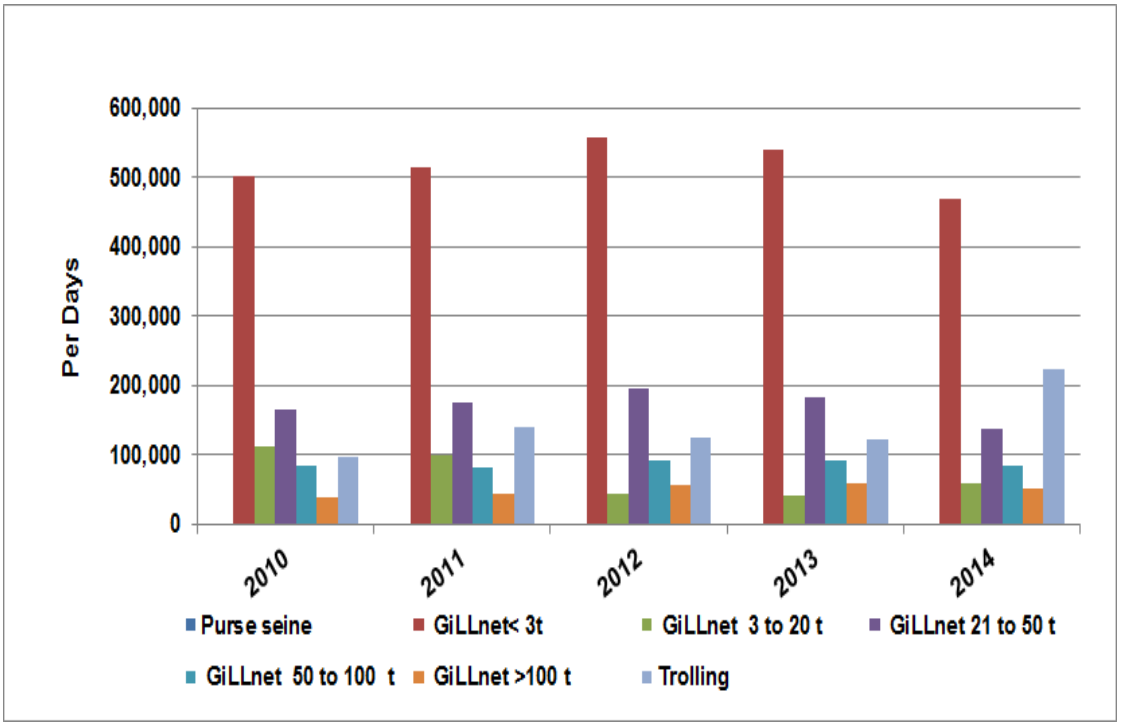
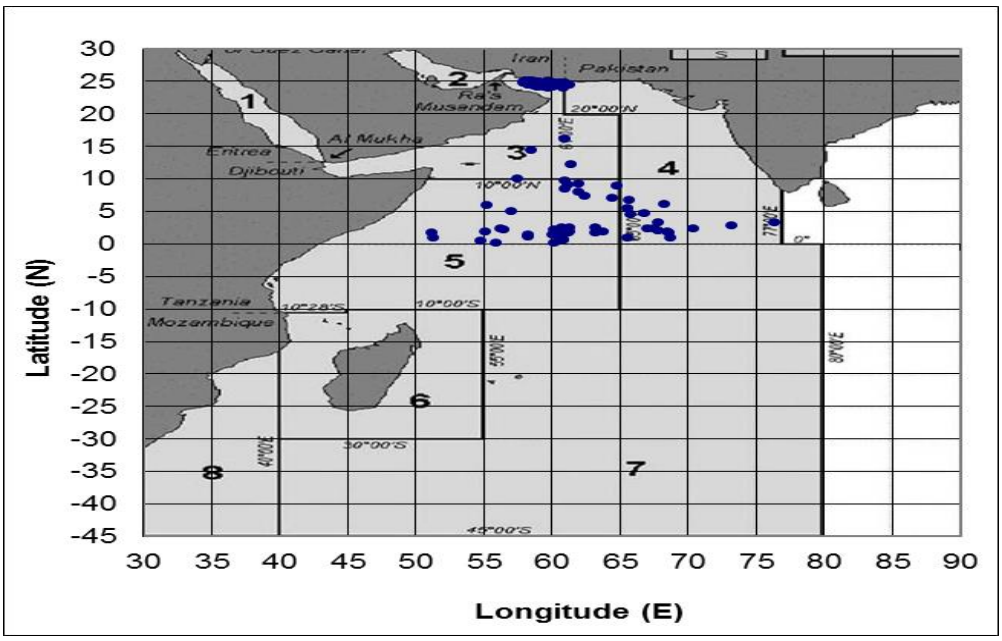
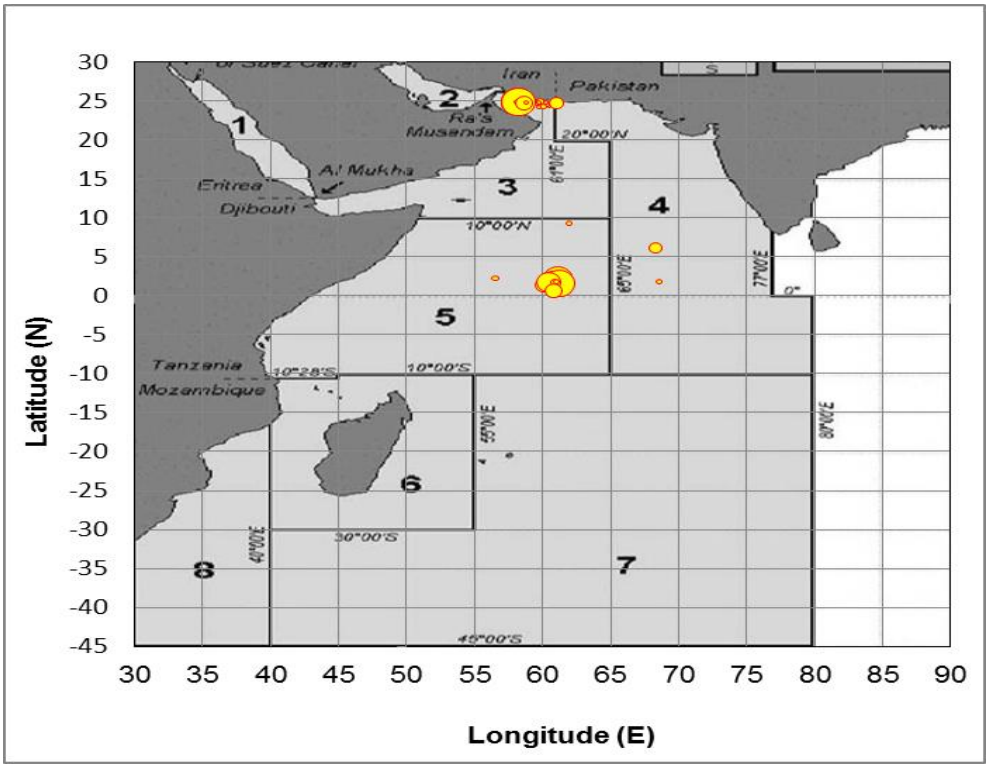


Figure3.5 Tuna and tuna like fishing effort by all fleet 2010-2014 (fishing day)

Figure 3.6.Distribution pattern of reported Catch and efforts for 2014(Purse seiners)



A) Effort



B) Catch

4. RECREATIONAL FISHERY

We don't have any recreational fishing operation in our water for tuna and tuna-like species.

5. ECOSYSTEM AND BYCATCH ISSUES

Base on Iran Fisheries Organization (IFO) approaches for more monitoring and control, our experts have tried to control all catch gears and devices before starting sailing and in the end of it. Also all the fishermen who participated in different training workshop recognized the importance of IOTC resolutions especially which were adopted related to ecosystem and By-catch. Also we have tried to teach some experts on identification different species especially sharks where we have really need technical supports. We also translated some parts of species ID cards which we hope they will printed very soon.

In addition we have tried to teach participants to how they must to obey international of maritime laws related with fisheries and other countries regulation especially innocent passage through territorial waters of third party. In total IFO has trained more than 300 person/ days of fishermen in different aspects in 2014.

5.1. Sharks

As we reported before IFO started to prepare NPOA of Sharks in 2014. On this way collected some information from different sources specially the printed guideline by FAO. However we understood the national regulation of countries is enough and there is no need to prepare NPOA of different groups as an obligatory regulation. However base on IFO regulations we have never issued any licences for catch of different species of Sharks and fishermen only landed the Sharks which are caught as a Bycatch. Also base on Iranian religious believes near to 90% of people do not eat Sharks. In this case only some people who are living in south eastern part of Iran eat Sharks. Recognizing the importance of Sharks landing in whole body, all resolutions are translated and analysis related with Sharks conservations during different level of meetings. Also we have tried to transfer these concepts to fishermen during training workshops.

Species Group	Species	2012	2013	
Billfish	Indo Pacific Sailfish	6365	7475	11598
	Black Marlin	3041	4173	6179
	Swordfish	586	804	1134
	Striped Marlin	418	574	810
	Shortbill spearfish &other	904	1254	1738
Sharks	Silky Shark	2560	1812	1293
	Hammer head Shark	128	121	49
	Mako Shark	128	113	80
	Oceanic Whitetip Shark	192	136	97
	Whitecheek Shark	354	438	554
	Spottail Shark	707	877	1107
	Milk Shark	2122	2606	3302
	Other Sharks	546	891	651
Other Non-targeted Species	Common Dolphin Fish	1804	1157	1834
	Others	9491	8618	8900
TOTAL		**29346**	**31049**	**39326**

Table 5.1: Annual catch of sharks and other species which are caught as By-catch (Mt)

On this way we have not received any reports about total number of sharks, by species or released/discarded by the national fleet in the IOTC area of competence because of on board observers lack. Also we just have started to separate these species from 2012 and our statistic information are available only base on accumulated of Sharks or Marlins. However, although there are weaknesses in access to historical data of different species especially Sharks but registration of the above group of fish has started since 2012.

5.2. Seabirds

As through the Resolution 12/06 of IOTC was recognized, reduction of bycatch of seabirds in longline fisheries has identified as a target gear. Also base on our current fleet structure, we do not have any active longline vessels. But for more insurance we have tried to give more awareness and explanation to fishermen about Seabirds importance and necessity of their conservation during different training workshops and meetings.

5.3. Marine Turtle

The main national strategy of country related to marine turtles is, conservation of different species of turtles. Although, the Environmental Organization is recognized as a national competent authority for protection of Sea turtles, but we intent to define a joint project with them regarding to survey on sea turtles and incident entanglement of them in fishermen nets. However, for increasing of public awareness IFO has continued related training programs by hold of workshop, distribution of some brochures and posters. On this way the capacity of NGOs were used. Although environmental organization have had some project before about the biology of turtles, but we intent to develop a project related with fisheries activities.

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

Base on national laws and Iran Fisheries Organization regulations catch of Mammals or any species which located endangered level are forbidden and commitments is introduced to courts. Base on IFO regulations we have never issued any licences for catch of different species of Mammals or Sharks and fishermen try to release all entangled Mammals or endangered species and only Sharks are seen as a Bycatch. Also base on Iranian religious believes near to 90% of people do not eat Sharks or any mammals.

On this way we have not received any reports about total number of Mammals or different species of sharks, by species or released/discarded by the national fleet in the IOTC area of competence.

As we mentioned before, we have never received any reports about incidental catch of different species of seabirds, marine turtles and marine mammals because of observers' lack. So it is not possible to record exact events by species and gear for the national fleet, in the IOTC area of competence. But we have controlled and monitored all the vessels base on our regulated method in fishing ports and landing places.

6. National data collection and processing system

6.1. ***Logbook program was implemented for Iranian artisanal gillnets and industrial purse seiners as follows:***

Logbook program has been implemented for Industrial purse seine fishery and designed a new logbook template according to IOTC Resolutions since 2011.

In 2011 for the first time a number of 50 logbooks distributed among gillnet fishing vessels as a pilot plan in the Sistan-Bluchestan provinces

In 2012 and 2013 designed a new template in compliance with IOTC regulation and implemented the training courses for gillnet fishery to train fishermen on how to collect and fill out the logbooks. Identify and report by-catch and discards species specifically for those fishermen operating in IOTC area of competence.

In 2014 a number of 150 logbooks distributed among gillnet fishing vessels plan in the Sistan-Bluchestan and Hormozgan provinces and some of fishing operations reported in logbook format.

6.2. Vessel Monitoring System

As we reported repeatedly, we have not achieved to implement online vessels monitoring system because of special condition of Iran and sanctions side effects. On this way unfortunately our online system when has stared more than one decade completely close because of the mentioned problem. However we started to extend off line vessel monitoring system which is totally different from online.

But base on resolution 15/03 Each Contracting Party and Cooperating Non-Contracting Party (CPC) shall adopt a satellite-based vessel monitoring system (VMS) for all vessels flying its flag 24 meters in length overall or above or in case of vessels less than 24 meters, those operating in waters outside the Economic Exclusive Zone of the Flag State fishing for species covered by the IOTC Agreement within the IOTC area of competence.

Base on this resolution those CPCs currently without a VMS for any additional vessel now meeting the criteria for inclusion in the VMS obligation since Resolution 06/03 was superseded,

as defined in paragraph 1 above, shall submit an implementation plan to the Compliance Committee in April 2016 that sets out a phased approach to full implementation of their national VMS obligation within a maximum of 3 years, i.e. by April 2019, with at least 50% of all qualifying vessels compliant by September 2017.

So we are hope full with finishing the sanction, we develop our plan up to April 2016 and implement base on the resolution requirements. Unfortunately there is no information available to show on map base on resolution 06/03 adoptions.

6.3. Observer program

Iran Fisheries Organization has not developed Observer programme yet but during a joint programme with IOTC we are going to train some observers during 2015-2016 and our reports will cover 2016 information. So showing spatial distribution of observer coverage on map is not possible. On this way IFO has continued its port state controls by related observers.

6.4. Port sampling program

6.4.1. Catch Data sampling

Catch and effort and biological data of the coastal and offshore large pelagic fishery are collected at the 44 out of 64 fish landing sites Consist of 10 landing sites in KHOZESTAN Province, 8 landing in BUSHEHR Province,21 landing sites in HORMOZGAN Province and 5 landing sites SISTAN-BLUCHESTAN Province in the alongside the Persian Gulf and Oman Sea coastlines, and port samplers permanently stay on landing sites which they collect the data and fill out the forms, and also collect length/weight frequency data. In this way, 10% of fishing vessels are randomly selected and the sample data are raised to all active fishing vessels and total catches are maintained by vessel categories, gear types and species composition, landing site and each month. All of the operations are fulfilled by Iran Fisheries Organization fish statistic Software called AMAR Software.

Considering these points for each landing center, 44 out of 64 were selected and can be used to raise information to other landing sites. In each landing site, there is one enumerator who is responsible to collect data.

54 categories of species/families are identified in the landings of artisanal vessels. Further classified as Demersal, Large pelagic, Small pelagic and Shrimp categories. 6 tuna species, 2 seerfish species, 5 billfish species and 9 shark species which are identified in the large pelagic category landing surveys are undertaken to obtain data on catches in the artisanal fisheries. Control of fishing license and Questionnaire carry out by the Head of fishery Statistical Unit in the relevant port.

This kind of control will then be carried out in Province center through computer. Afterwards this will be processed in Data Center in Tehran. Cross Check by total census in one or two landing site will then be undertaken.

6.4.2. Size data sampling

There are 13 important commercial species in Iranian southern waters which their size frequency data will be compiled. The species comprised of:

1. Narrow-barred spanish mackerel (*Scomberomorus Commerson*),
2. Tigertooth croaker (*Otolithes ruber*),
3. Silver pomfret (*Pampus argenteus*),
4. Black pomfret (*Parastromateus niger*),
5. Javelin grunter (*Pomadasys kaakan*),
6. Longtail tuna (*Thunnus tonggol*),
7. Kawakawa (*Euthynnus affinis*).
8. Fourfinger threadfin (*Eleutheronema tetradactylum*),
9. Yellowfin tuna (*Thunnus albacores*),
10. Skipjack tuna (*Katsuwonus pelamis*),
11. Bigeye tuna (*Thunnus obesus*),
12. Grouper(serranidae),
13. Emperor(lethrinidae),

The length and weight frequency of species has been recorded from 2001. Sampling in southern waters carried out in 16 landing centers consist of: Choebdeh and Hendijan in Khozestan Province, Daylam, Dayer, Jofreh & Bandargah in Bushehr Province, Jask, Javad'el'aemeh, Salakh, Bostaneh , Kong & Kohestak in Hormozgan Province, Ramin, Pozm, Beris & Pasabandar in Sistan & Bluchestan Province.

At each landing center there are fish measuring board and precise Balance (scales). A number of biometry equipment has been provided thanks to the IOTC-OFCF project and disseminated among the nominated landing centers and size data compilation is in progress.

Port samplers are all trained on how to measure different fishes. Fishing vessels catches were irregular for all species, but biometry carried out on-board from time to time to get precise data. Raw data will be processed in some statistical Softwares like SPSS, Excel, MiniTab and FiSat. The output results are in the form of some indicators which show the present status of fish exploitation.

There is biometry software to input the size frequency data in a data bank. Data entry interface for length frequency is available; it just needs to be connected to the AMAR Software as integrated software. For strengthened tuna size sampling, we added two more landing centers in Sistan &

Province (Ramin & Pasabandar Ports) to compile Tuna size frequency data by gillnet fishery.

Gear Group	Species Group	2010	2011	2012	2013	2014
Purse Seine	Kawakawa	Nil	Nil	Nil	Nil	0
	Longtail tuna	Nil	2358	2822	433	0
	Skipjack tuna	484	424	964	957	1,010
	Yellowfin tuna	1220	727	445	1296	3,682
	Bigeye tuna	Nil	442	424	777	523
Total Purse Seine Catch		1704	3951	4655	3463	5,215
Gill net	Frigate tuna	Nil	Nil	Nil	Nil	Nil
	Kawakawa	8255	7553	20299	15467	6,036
	Longtail tuna	12802	12232	25481	24680	11,174
	Skipjack tuna	97	5156	3761	13212	10,857
	Yellowfin tuna	Nil	1215	4070	11146	11,261
	Bigeye tuna	0	0	656	435	630
	N. B. Spanish mackerel	11019	14586	20907	16435	18,283
Total Gillnet Catch		32173	40742	75174	81375	58,241
Trolling	N.B. Spanish Mackerel	Nil	Nil	821	407	2,808
	Longtail tuna	Nil	Nil	Nil	Nil	1,289
Total Trolling Catch		Nil	Nil	821	407	4,097
TOTAL		33877	45113	81065	85245	67553

Table.6.1 Length of Frequency of Tuna species by Gear

7. National Research Program

Table 8.Summery table of national program including dates

Project title	period	Countries involved	Budget total	Funding source	Objectives and Short description
Evaluation of the large pelagic fishes (Scomberidae family) for optimum exploitation level in the Persian Gulf	2011-2013	IRAN	20000 $	IFRO	1-estimation of population dynamic parameters 2- estimation of GSI 3- study feeding

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

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	Implementing logbook program on purse seine and gillnet fisheries Incorporate logbooks in database (it's ongoing)
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	All data of 2014 submitted by 30 June 2015 1-Improving data collection system for Big eye tuna, Sharks, Billfish including species identification 2-Iran Fisheries Organization implemented the training courses for port samplers in this way Identification cards for billfish, sharks and big eye was Translated in Persian language and disseminated among port samplers and fishermen to identify different species 3- Amending Database to generate reports for the IOTC 4-Amending database to provide required reports for SHILAT and other national and international entities.
15/05	On conservation measures for striped marlin, black marlin and blue marlin	Paragraph 4	Iran has taken various actions to implement the IOTC resolutions one of them improving data collection system, and include marlins catch by artisanal gillnets in our database and reported to the IOTC secretariat.
13/04	On the conservation of cetaceans	Paragraphs 7– 9	The resolution translated and distributed among fishermen. The related training workshop held for some fishermen. So the resolution implemented now.
13/05	On the conservation of whale sharks (*Rhincodon typus*)	Paragraphs 7– 9	The resolution translated and distributed among fishermen. The related training workshop held for some fishermen. So the resolution implemented now.
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 resolution translated and distributed among fishermen. The related training workshop held for some fishermen. So the resolution implemented now.
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	The resolution translated and distributed among fishermen. The related training workshop held for some fishermen. So the resolution implemented now.
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	Not applicable because the scope of resolution is Long line fisheries and Iran dose not has any long line active vessel
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	The resolution translated and distributed among fishermen. The related training workshop held for

Res. No.	Resolution	Scientific requirement	CPC progress
			some fishermen. So the resolution implemented now.
11/04	On a regional observer scheme	Paragraph 9	Iran Fisheries Organization has not developed Observer programme yet but during a joint programme with IOTC we are going to train some observers during 2015-2016 and our reports will cover 2016 information.
05/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1–12	The resolution translated and distributed among fishermen. The related training workshop held for some fishermen. So the resolution implemented now.