

**Iran (Islamic Republic of) National Report to the Scientific Committee of the  
Indian Ocean Tuna Commission, 2014**

***INFORMATION ON FISHERIES, RESEARCH AND STATISTICS***

<p>In accordance with IOTC Resolution 10/02, final scientific data for the previous year was provided to the Secretariat by 30 June of the current year, <b>for all fleets other than longline</b> [e.g. for a National report submitted to the Secretariat in 2013, final data for the 2013 calendar year must be provided to the Secretariat by 30 June 2013)</p>	<p align="center"><b>YES Submitted the 30 June 2014</b></p>
<p>In accordance with IOTC Resolution 10/02, provisional <b>longline data</b> 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 2013, preliminary data for the 2012 calendar year was provided to the Secretariat by 30 June 2013).</p> <p><b>REMINDER:</b> 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 2013, final data for the 2012 calendar year must be provided to the Secretariat by 30 December 2013]</p>	<p align="center">N/A</p>
<p>If no ,please indicate the reason(s) and intended actions: <b><i>We don't have any active longliner vessel at present ,we have got one longliner but it is not active yet</i></b></p>	

---

## ***Executive Summary***

Islamic Republic of Iran with vast resources in terms of 5800 km coastline (including coastal areas of the Persian Gulf Islands), 2700 km Length of continental coastline and 196000 km<sup>2</sup> Shelf areas has the opportunity to access High Seas through Strait of Hurmoz. The long Iranian coastline about 193 port and landing places with over 140 thousand fishermen which are involved in fishing activities and 11500 fishing crafts consist of fishing boat, dhows and vessel which are engaged in fishing 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 2013 was 239600 Mt which 210000Mt belongs to tuna and tuna-like fishes in the Indian Ocean areas. Those catch consist of Big eye tuna 1649Mt, Yellowfin tuna 32403 Mt, Longtail tuna 66572Mt, Skipjack 33327Mt, Frigate tuna 6827Mt, Kawakawa 28764Mt, Indo-pacific king mackerel 5752Mt, Narrow- barred Spanish mackerel 20021Mt and Billfish 14280Mt. 95.3% of catch comes from Gillnet gear, while around 2.5% of catch belong to Purse seiners and 2.2% comes from Trolling vessels.

Iran has taken various actions to implement the Scientific Committee recommendations and IOTC Resolutions. One of the notable approaches in our country in the field of tuna fishery is how to fulfill the IOTC regulations and adapting it with national implementing condition and complying with the IOTC approvals. Some of actions taken by Iran are improving data collection system by completing of AMAR software to meet IOTC demanded outputs with a suitable reporting for tuna fishery and bycatch during 2013. It is noteworthy to say that we could identify and include billfish and sharks catch by purse seiners and gillnet fleets in our data base and reported to the IOTC secretariat.

***CONTENTS***

Information on Fisheries, Research and Statistics-----	1
Executive Summary -----	2
Contents -----	3
1. Background/General fishery information-----	4
2. Fleet structure-----	5
3. Catch and effort (by species, area and gear) -----	6
4. Recreational Fishery -----	12
5. Ecosystem and bycatch issues -----	12
5.1. Sharks-----	14
5.2. Sea birds-----	15
5.3. Marine turtles-----	15
5.4. Other ecologically related species-----	16
6. National data collection and processing system-----	16
6.1. Logsheet data collection and verification-----	16
6.1. Vessel Monitoring System-----	16
6.3. Observer Programme-----	17
6.4. Port Sampling Programme-----	17
7. National Research Programmes-----	20
8. Implementation of Scientific Committee Recommendations and Resolutions of the IOTC Relevant to the SC-----	21

## 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 2009-2013 and the annual production in Iran was about 885000 Mt in 2013, which can be distributed as 473600 Mt of the total catch and production contributed to the country fishing activities in the Persian Gulf, Oman Sea and offshore waters, about 40400 Mt of production from northern water (Caspian Sea) and 371000 Mt through inland water and aquaculture.

The main fishing grounds for large pelagic species in southern of the country are located in the coastal sectors of Persian Gulf and Oman Sea and total volume of production in the coastal and offshore waters in 2013 around 473600 Mt, which consist of large pelagic 239,600 Mt, Small Pelagic 50200 Mt, Demersal species 171000 Mt, Shrimp 8800 Mt and Myctophids 4000 Mt. shown in Figure1.2

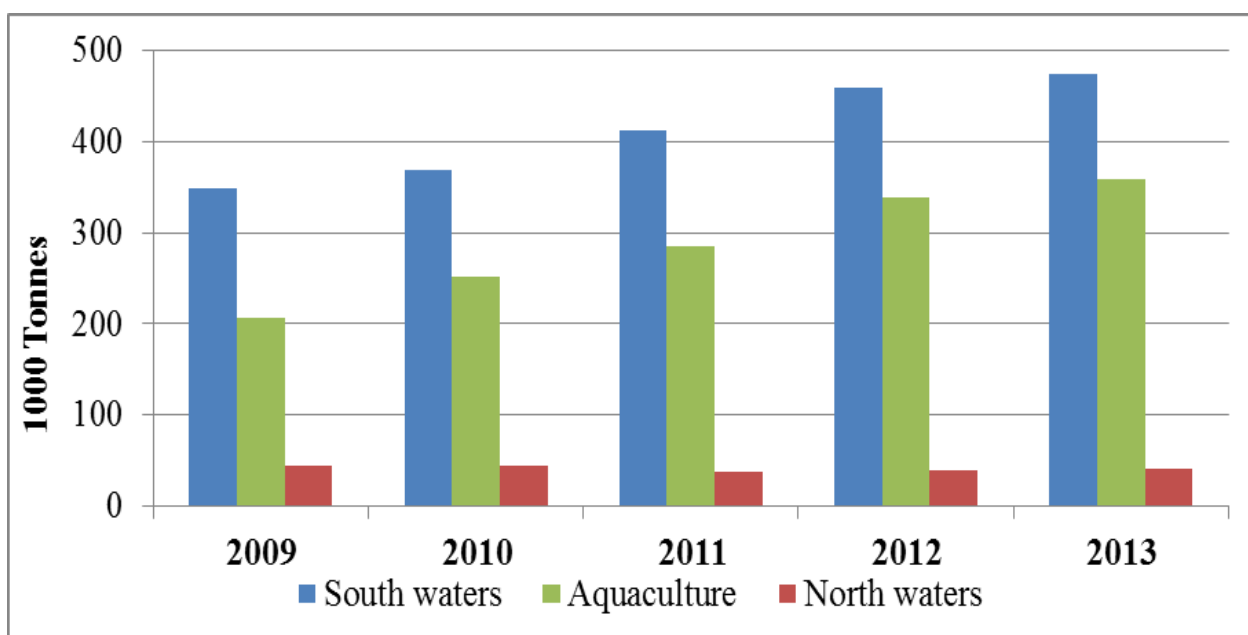


Figure1.1 Total Catch & production in the country during 2009-2013

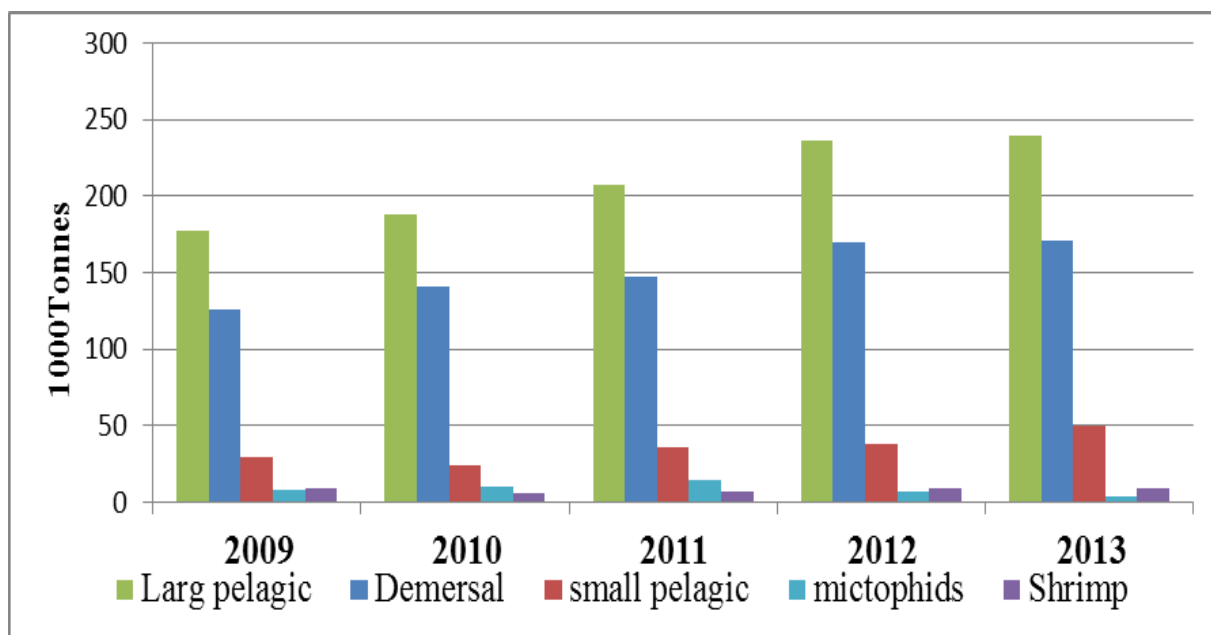


Figure 1.2 The catches quantity of different aquatic species group in the southern waters of Iran during in 2009-2013

## 2. FLEET STRUCTURE

Iran Fisheries and exploitation of aquatic animals in the southern water is carried out by a fishing fleet including 11500 vessels of which about 6752 fishing crafts are engaged large pelagic species activities in 2013, Of this total volume of vessels, about 1200 are active in Tuna and Tuna like fishing in the Oman Sea and offshore waters and more than 80 percent of crafts are operated in the coastal fishery. Those fishing crafts consist of industrial purse- seiners, fishing boats and Artisanal vessels (Dhows) and GRT of purse seiners is up to 1000 t and GRT 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 shows the fishing fleet is disaggregated into the following (GRT) categories during 2009 to 2013

GEAR	GRT	No. crafts by year				
		2009	2010	2011	2012	2013
No. of Active Purse Seiners	1000-2000	6	5	5	4	4
Gillnet	<3	3828	3444	3340	3784	3741
	3-20	753	702	586	282	270
	20-50	667	911	941	1021	1060
	51-100	534	580	479	527	534
	>101	278	283	260	329	338
Trolling		426	634	854	810	805

Table 2.1: Number of crafts operating in the IOTC area, by gear type and size (2009-2013)

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

Table 3.1 and figure 3.1 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 2013 was equal to 210000 Mt, of which 128 000 Mt belongs to coastal waters and the rest (82 000 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 2009 to 2013. Total catch for purse seine, Gillnet and trolling in 2013 was estimated 5735 Mt, 212795 Mt and 4879 Mt respectively. Gillnet with 95.3% of Catch is the dominant fishing gear followed by Purse seiners 2.5%, and around 2.2% 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 2013, for tuna and tuna-like catches around 1,040,000 days fishing efforts was Carried out, of which 916,100 days was operated by Gillnet, 727 days by purse seine and 123,000 days done by trolling fisheries. Figure 3.5 show that the highest gillnet fishing pressure occurs within the Islamic Republic of Iran's EEZ and within 20 nautical miles of the coastal waters.

Gear Group	Species Group	2009	2010	2011	2012	2013
<b>Purse Seine</b>	Kawakawa			24	162	0
	Longtail tuna	994	220	2280	2074	1520
	Skipjack tuna	1159	628	1336	1621	1605
	Yellowfin tuna	1693	2529	876	1103	1980
	Bigeye tuna	0	0	105	161	100
	Others				34	530
<b>Total Purse Seine catch</b>		<b>3846</b>	<b>3377</b>	<b>4621</b>	<b>5154</b>	<b>5735</b>
<b>Gill net</b>	Frigate tuna	5178	6172	5969	8175	6848
	Kawakawa	17827	16336	22208	25984	28377
	Longtail tuna	47260	63761	78080	71242	62704
	Skipjack tuna	45935	21657	16137	25430	31722
	Yellowfin tuna	19749	28522	27646	33834	30421
	Bigeye tuna				1483	1549
	N.B.Spanish mackerel	7279	10523	14248	14980	18324
	Indo-Pacific King mackerel	2633	3106	3801	5127	5638
	Billfish	7976	9209	8866	11297	14056
	Sharks				6736	6624
	Common Dolphin fish				1804	1052
	Others				9458	8481
<b>Total Gillnet catch</b>		<b>153368</b>	<b>159320</b>	<b>176956</b>	<b>215551</b>	<b>215795</b>
<b>Trolling</b>	Frigate tuna			43	35	25
	Kawakawa			34	76	387
	Longtail tuna	239	469	523	2884	2348
	Yellowfin tuna	318	434	277	28	2
	N.Barred Spanish mackerel	412	361	546	1461	1687
	Indo-Pacific King mackerel	36	64	99	371	114
	Indo-Ppacific Sailfish				18	0
	Sharks				295	317
<b>Total Trolling catch</b>		<b>1005</b>	<b>1294</b>	<b>1522</b>	<b>5169</b>	<b>4879</b>

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

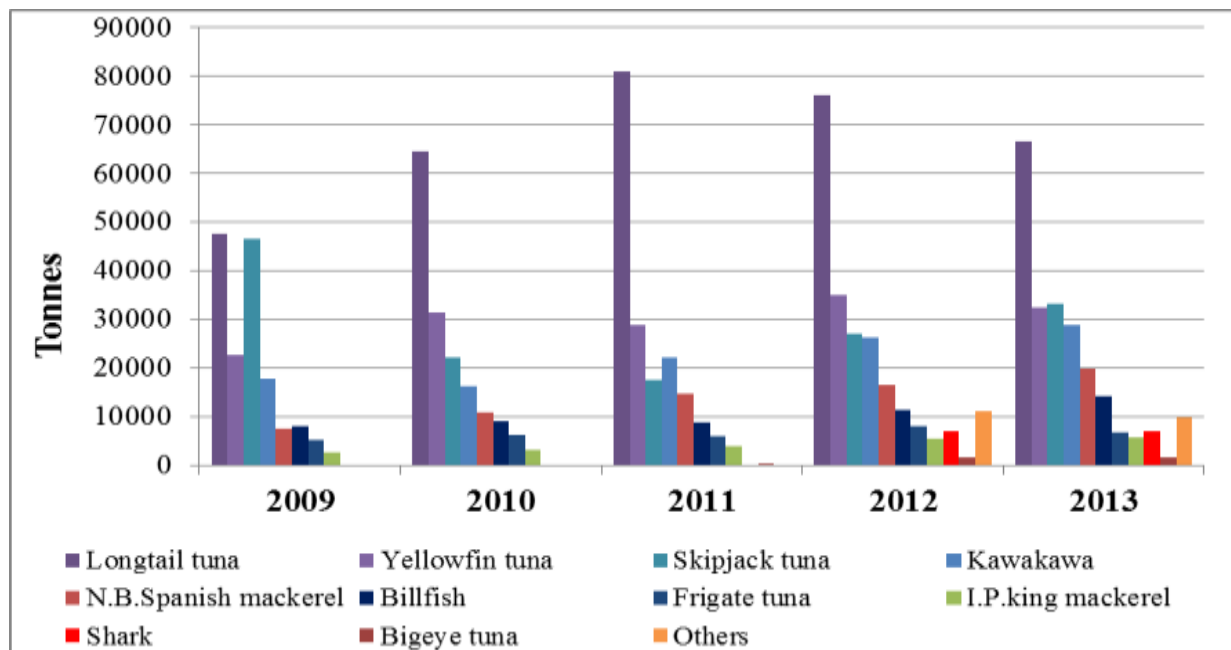


Figure 3.1 Total yearly catch by species reported for the all fleet during 2009-2013

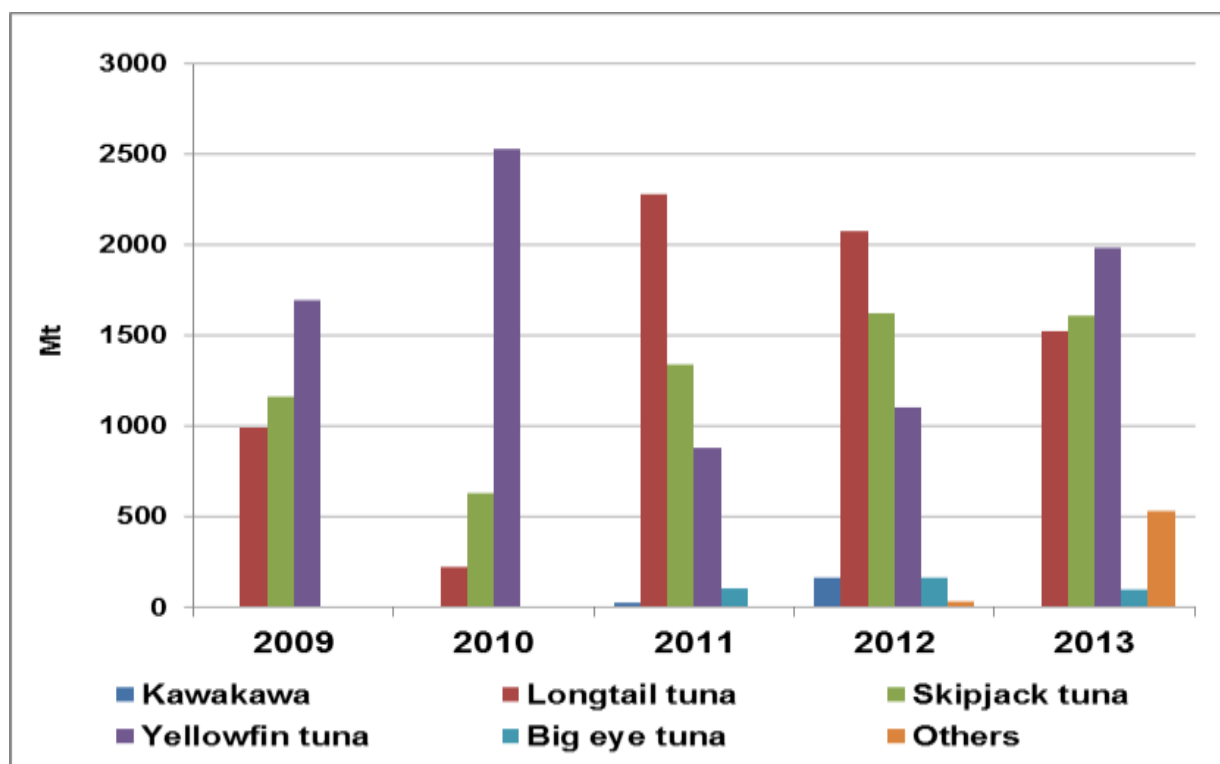


Figure 3.2 Annual Catch of Purse Seiners by Species



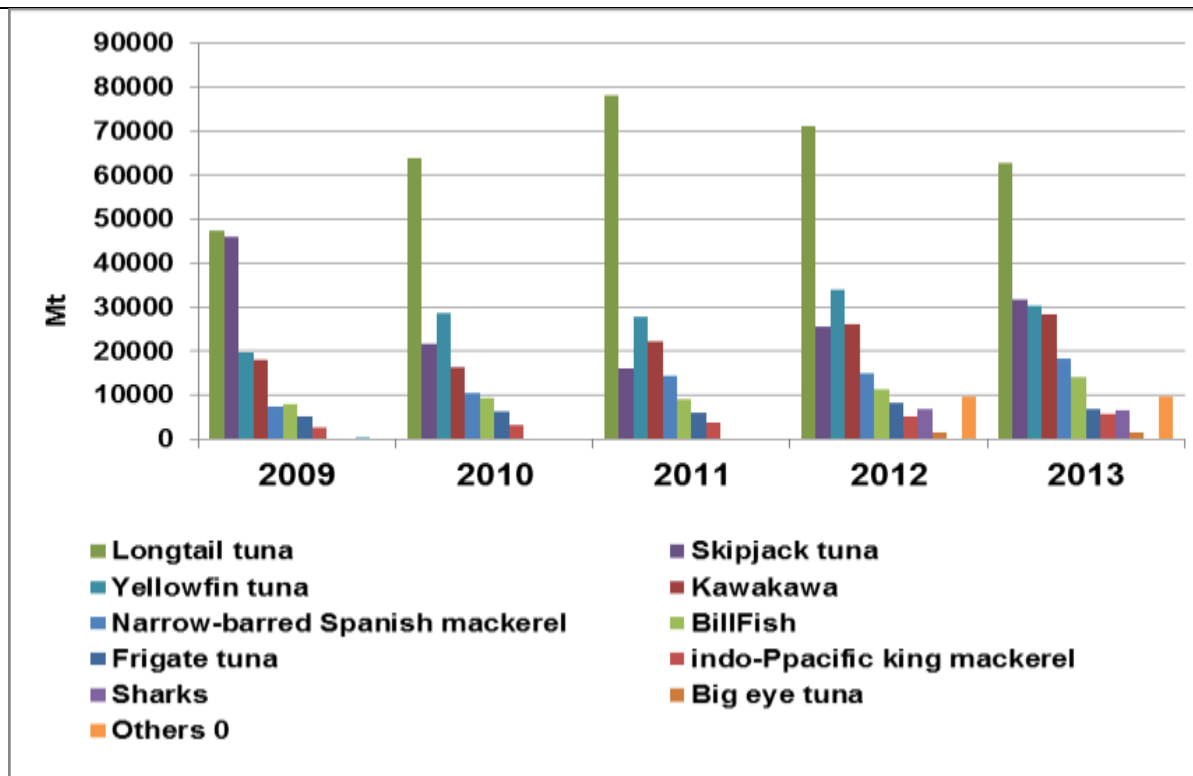


Figure 3.3 Annual Catch of Gillnets by Species

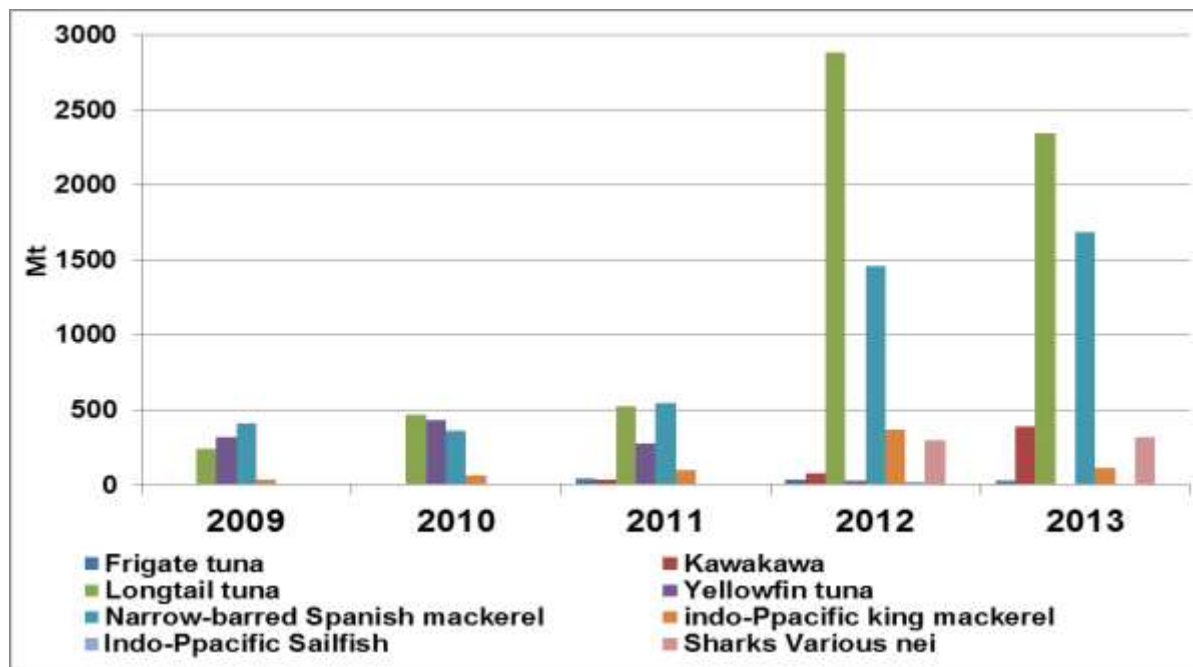


Figure 3.4 Annual Catch of Trolling Method by Species

Gear	Capacity GRT	Fishing effort by gear(days)				
		2009	2010	2011	2012	2013
Purse seine	1000-2000	675	880	450	981	727
Gillnet	<2	486156	501402	515372	557434	538550
	3-20	118974	113740	100809	43303	40985
	21-50	116058	165640	176132	195643	184070
	51-100	81168	83754	82637	91293	91790
	>101	50040	38810	45020	57662	60400
Total fishing effort (Gillnet)		880768	852396	903346	919970	915795
Trolling	Non-mechanized	54102	96822	139161	125446	123450

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

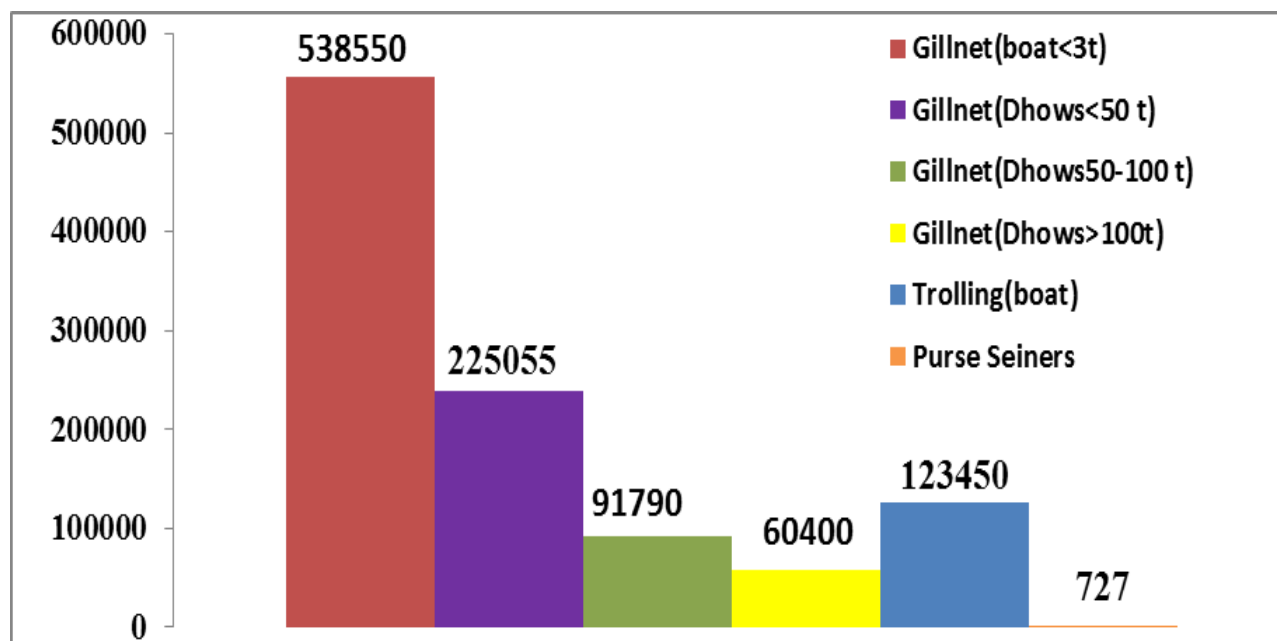
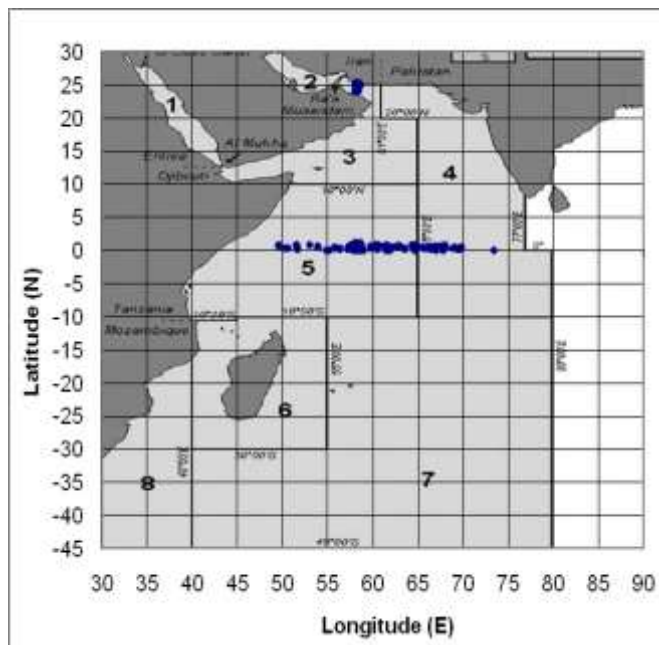


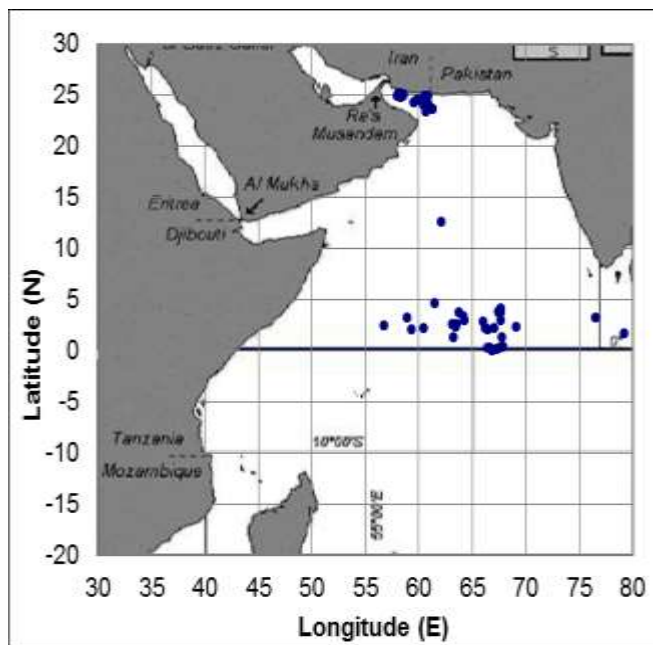
Figure 3.5 Tuna and tuna like fishing effort by all fleet in 2013(fishing day)

Figure.3.6 shows the distribution of fishing effort reported by purse-seine fleet for 2012 and 2013.

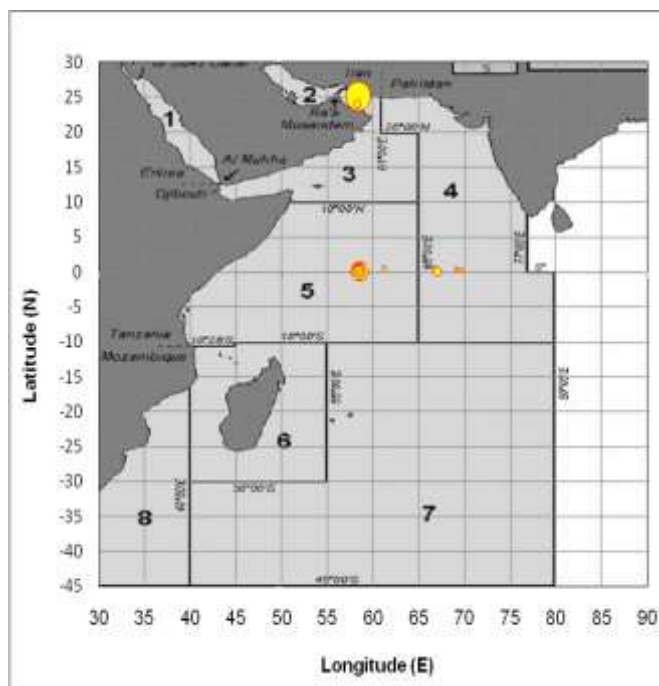
*Figure 3.6. Distribution pattern of reported catch and efforts of Purse seiners*



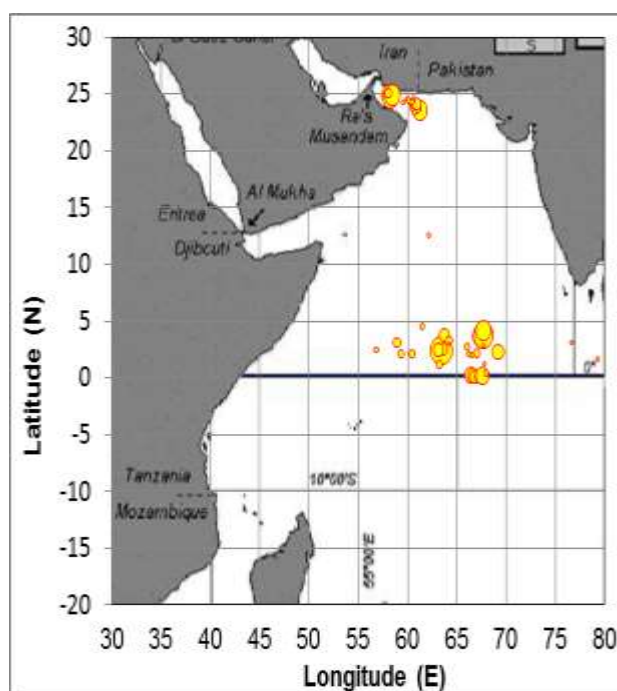
Year 2012



Year 2013



Year 2012



Year 2013

#### **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**

Iran Fisheries Organization has taken different steps to protect marine bio resources by approve various fishing regulations and developing and implementation some measures as a below:

- According to current laws, legislations and regulation, Iran Fisheries organization has not issued any licences for sharks catch. The deputy of fisheries and fishing harbours is responsible for developing all related regulations. Monitoring and control of these regulations are done by fisheries experts, harbours managers and fishery guard. The armed guard established base on law only for control of fisheries and has the authority to arrest offenders, constitute dossier and deliver them to courts.

- During 2013 the coverage of port sampling extended and some trained experts periodically have done monitoring of landing fish.

-Although more than 50 different species of Sharks were reported from landing places up to now but sharks are such species which only are caught incidentally as none target species and bycatch.

- Base on religious believes around 90% of Iranians doesn't eat sharks because, they are not Halla and this is one of the main reasons of shark's stocks and biodiversity richness in Iranian coastline.

-Although practically sharks NPOA are not applicable for Iran fisheries but professional experts have started to study available references especially FAO guideline for international plan of action to prepare the sharks NPOA. Also this national plan will extend for turtles in close future. But scientifically we believe Sea birds NPOA are not applicable for Iran, because Iran dose not has any long line active vessels.

-Iran Fisheries Organization (IFO) has implemented some training courses and extension brochures and posters regarding to bycatch reduction of marine mammals, sea birds and turtles and IFO is going to do this individually for sharks (The posters are shown in related part of this report). Also we have tried to train some crews of fishing vessels to prepare our information requirements base on IOTC regulations via observer reports.

-Base on Our country regulations, the national authority organization for protection of under threatened and sensitive species is Department of Environment (DOE). During past years the organization has developed and implemented some projects, training courses, brochures and posters related to the group of species like marine mammals, Sea turtles, sharks and etc. In addition we have four marine protected areas in coastal line of Persian Gulf and Oman Sea. But DOE by cooperation of Iran Fisheries Organization has proposed to add marine protected area coverage to 16 areas.

-Base on Resolution 12/12 use of large-scale driftnets with more than 2.5 Km in length on the high seas in the IOTC area was prohibited. So during a management plan all Iranian gill nets devices are controlled during port state controls in the fishing harbors and if the fishery inspectors find any infraction, the activities of the vessels will faced with interruption base on special commission decision in fisheries organization.

-In order to increasing fishermen awareness all related resolutions translated and officially impart to fishermen cooperatives. Also related resolutions are reviewed during some meeting which held by cooperation of fishermen representatives.

-Iran has started to employ some experts to implement observer scheme. During past year we evaluate around 20 experts and we are going to train them to use as on board observers. On this way Iran offer its request to hold an observer training workshop in Iran.

- Combating with IUU is one of the main responsibilities of Iran Fisheries Organization. For this, based on experts or fishery guard reports, the dossier of offenders are sent to court and especial commission in Fisheries Organization. During 2013 some vessels punished because of their infractions.

## 5.1. Sharks

Although based on researches and scientific reports more than 50 different species of Sharks have been recorded up to now but sharks are kind of species which only are caught incidentally as none target species and bycatch. Based on religious beliefs around 90% of Iranians doesn't eat sharks because, they are not Halal and this is one of the main reasons of shark's biodiversity and stocks richness, in Iranian coastline. According to current Iran Fisheries organization laws, legislations and regulation, no licences for sharks catch are issued by fisheries organization. The deputy of fisheries and fishing harbours is responsible for developing all fisheries regulations and implementation of them are done by fisheries experts, harbours managers and especial fishery guard. The armed guard established based on law and has the authority to arrest offenders, constitute dossier and deliver them to courts. Although practically sharks NPOA are not applicable for Iran fisheries but professional experts have started to study available references especially FAO guideline for international plan of action to prepare the sharks NPOA. Also this national plan will extend for turtles in close future.

In 2013 the four groups of fish are the shark species with almost 6994 Mt which is around 3.1% the total large pelagic landings in Iran. Table 5.1 shows only seven species of Sharks identified through the port sampling, logbooks and the other reports in tuna fisheries during 2013.

English Name	Family Name	Scientific Name	Total weight (Mt)	%	Mean Individual weight/Kg	Number 1000
Milk Sharks	Carcharhinidae	<i>Rhizoprionodon acutus</i>	2606	37.3	2.8	931
Silky Sharks	Carcharhinidae	<i>Carcharhinus falciformis</i>	1812	25.9	42	43
Spottail Shark	Carcharhinidae	<i>Carcharhinus sorrah</i>	877	12.5	5.4	162
Whitecheek Shark	Carcharhinidae	<i>Carcharhinus dussumieri</i>	438	6.3	3.2	137
Oceanic whitetip	Carcharhinidae	<i>Carcharhinus longimanus</i>	136	1.9	28.2	4.8
Hammerhead Shark	Sphyrnidae	<i>Sphyrna mokarran</i>	121	1.7	56.8	2.1
Shortfin mako Shark	Lamnidae	<i>Isurus oxyrinchus</i>	113	1.6	52.8	2.1
Other Sp.	----	----	891	12.7		

Table 5.1 Total catch, Individual weight and number of each shark species in 2013.



## ***5.2. Seabirds***

As we are aware seabirds have high level of interaction with longline devices and practically this item is not applicable for Iranian fishing vessels where most of them are gillnets. Base on Deputy of fisheries and fishing harbours preparing of seabirds NPOA are not included in our future program because of low level of interaction between seabirds and gillnets.

## ***5.3. Marine Turtle***

Base on national regulation, management and protection of sea turtles is environmental organization responsibility. For this in our future program Deputy of fisheries and fishing harbors intent to develop a turtle NPOA by cooperation of the organization. While during past year we reprinted some pictorial poster related to releasing entangled turtles from the nets and distributed them between fishermen. The notable point is we do not receive any report about released entangled turtles from the nets through the year.

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

Base on national regulation, management and protection of Marine Mammals such as Dolphins and Whales is the environmental organization responsibility. On this way Iran Fisheries Organization in framework of its responsibilities and through the circulars has been communiqué all regulations and resolutions to the fishermen and have been tried to improve fishermen awareness on this field. For this beside of printing and distribution of some posters between fishermen, in order to help and rescue of victim and injured mammals species, Iran Fisheries Organization has hold some training courses for fishermen and local people.

## ***6. National data collection and processing system***

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

In 2011 we have implemented logbook program for Industrial purse seine fishery and designed a new logbook template according to IOTC Resolutions and Four Iranian purse seiners were active in 2013 and their fishing operations reported in logbook format.

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 and received some completed logbooks from fishermen. There are some mistakes during filling the forms by captain of vessels. For this problem Iran Fisheries Organization reviewed the logbook in 2012 and 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.

### ***6.2. Vessel Monitoring System***

Because of some problems (especially Sanction effects) Iran Fisheries Organization has not achieve to extent satellite vessel monitoring system while it started in 2002. In fact on line system only covered purse seines vessels and about 1000 active gillnetters equipped by off line vessel monitoring system during 2013. Distributions of purse seiner fisheries are shown in figure 3.6 and there are many gillnetters position which were extracted from off line system and there is possibility to depict on map.

### ***6.3. Observer program***

Iran has not implemented on board observer scheme for Tuna fisheries yet.



#### **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 43 out of 63 fish landing sites. Consist of 10 landing sites in KHOZESTAN Province, 8 landing in BUSHEHR Province, 20 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, 43 out of 63 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.

52 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 11 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 (*Pomadasy 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*),

The length and weight frequency of species has been recorded from 2001. Sampling in southern waters carried out in 13 landing centers consist of: Choebdeh and Hendijan in Khozestan Province, Daylam, Dayer, Jofreh & Bandargah in Bushehr Province, Jask, Javad'el'aemeh, Salakh , Kong & Kohestak in Hormozgan Province, - Ramin, Pozm & 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-OFCE 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 & Bluchestan Province (Ramin & Pasabandar Ports) to compile Tuna size frequency data by gillnet fishery.

Gear Group	Species Group	2009	2010	2011	2012	2013
<b>Purse Seine</b>	Kawakawa	Nil	Nil	Nil	Nil	Nil
	Longtail tuna	2315	Nil	2358	2822	433
	Skipjack tuna	359	484	424	964	957
	Yellowfin tuna	2113	1220	727	445	1296
	Bigeye tuna	Nil	Nil	442	424	777
<b>Total Purse Seine catch</b>		4787	1704	3951	4655	3463
<b>Gill net</b>	Frigate tuna	Nil	Nil	Nil	Nil	Nil
	Kawakawa	10944	8255	7553	20299	15467
	Longtail tuna	14576	12802	12232	25481	24680
	Skipjack tuna	Nil	97	5156	3761	13212
	Yellowfin tuna	Nil	Nil	1215	4070	11146
	Bigeye tuna	0	0	0	656	435
	N. B. Spanish mackerel	18060	11019	14586	20907	16435
<b>Total Gillnet catch</b>		43580	32173	40742	75174	81375
<b>Trolling</b>	N.B. Spanish Mackerel	Nil	Nil	Nil	821	407
<b>TOTAL</b>		48367	33877	45326	81065	407

Table.6.1 Length of Frequency of Tuna species by Gear

## 7. National Research Program

**Table 8. Summary 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

\*Reproductive biology, Diet and population dynamics parameters of narrow-barred Spanish mackerel, *Scomberomorus commerson*, in the Persian Gulf were studied. Fork length frequencies were collected from the current fishery nets (gill nets with 9 and 14cm mesh size) , the commercial catch at the landing places. 20-40 specimens were collected during 5 months in October, December, March, April and July from several landing sites to investigate GSI and feeding conditions.

Results showed that sardines are the major prey of *S. commerson*. Pony fishes, Haltbeak and Indian mackerel were as a secondary or accidental food items. Hepatosomatic Index (HSI) was maximum in April and minimum in July. The annual instantaneous rate of fishing mortality ( $F = 0.42 \text{ year}^{-1}$ ) was considerably greater than the target ( $F_{opt} = 0.28$ ) and limit ( $F_{limit} = 0.37$ ) biological reference points, suggesting that the stock is heavily exploited. The smallest fish size was observed 17cm FL and the biggest was 152cm FL.

$K$  and  $L_{\infty}$  were estimated  $0.23 \text{ year}^{-1}$  and 156.45 cm respectively. Instantaneous total mortality ( $Z$ ), was  $1.13 \text{ year}^{-1}$ . The estimate of  $M$  was  $0.43 \text{ year}^{-1}$  and thus, the estimate of  $F$  was  $0.7 \text{ year}^{-1}$ .

The result of GSI indicated that spawning season was started from April.

**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	<i>Implementing logbook program on purse seine and gillnet fisheries</i> <i>Incorporate logbooks in database (it's ongoing)</i>
13/04	On the conservation of cetaceans	Paragraphs 7– 9	<i>This Resolution translated and officially bulletined to all fishermen cooperatives to obey the rules. Also all the fishery offices and fishery guard bridgehead in provinces and ports have the responsibility to monitor and control.</i> <i>We have not receives any report from the vessels.</i>
13/05	On the conservation of whale sharks ( <i>Rhincodontypus</i> )	Paragraphs 7– 9	<i>This Resolution translated and officially bulletined to all fishermen cooperatives to obey the rules. Also all the fishery offices and fishery guard bridgehead in provinces and ports have the responsibility to monitor and control.</i> <i>We have not receives any reports from the vessels. Also we have not seen any evidence during port sampling or any reports through the Logbooks.</i>
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	<i>Iran Fisheries Organization encouraged all the vessels to record incidental catches of all sharks as well as lives releases of them especially oceanic whitetip sharks through the letter. Base on 2013 information in total 136 tons equal to 4800 individual species of oceanic whitetip Shark are caught by Iranian fishermen.</i> <i>Up to now we have not received any report about implementation of research project for Oceanic white tip shark by Iran Fishery research organization.</i>
12/09	On the conservation of thresher sharks (family Alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	<i>Iran Fisheries Organization encouraged all the vessels to record incidental catches of all sharks as well as lives releases of them especially oceanic whitetip sharks through the letter.</i> <i>Fortunately recreational fisheries are not usual in Iran. The Shark catch are seen very low in catch composition.</i>
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	<i>The resolution is not applicable for Iran because Iran dose not has any active long line vessels.</i>
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	<i>This Resolution translated and officially bulletined to all fishermen cooperatives to obey the rules. Also all the fishery offices and fishery guard bridgehead in provinces and ports have the responsibility to monitor and control.</i> <i>We have not receives any reports from the vessels. Also we have not seen any evidence during port sampling or any reports through the Logbooks.</i>

IOTC–2014–SC17–NR17

Res. No.	Resolution	Scientific requirement	CPC progress
11/04	On a regional observer scheme	Paragraph 9	<i>Iran did not develop observer scheme in 2013.</i>
10/02	Mandatory statistical requirements for IOTC members and cooperating non contracting parties	Paragraphs 1–7	<p><i>-All data of 2013 submitted by 30 June 2014</i></p> <p><i>1-Improving data collection system for Big eye tuna, Sharks, Billfish including species identification</i></p> <p><i>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</i></p> <p><i>3- Amending Database to generate reports for the IOTC</i></p> <p><i>4-Amending database to provide required reports for SHILAT and other national and international entities.</i></p>
05/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1–12	<p><i>This Resolution translated and officially bulletined to all fishermen cooperatives to obey the rules. Also all the fishery offices and fishery guard bridgehead in provinces and ports have the responsibility to monitor and control.</i></p> <p><i>Sharks only are caught as by catch and related information reported through annual report in WPEB working party.</i></p> <p><i>Iran expect IOTC or any other authorized organization technical assists and financial supports to capacity building in the region especially in Iran as approved by Scientific committee and commission in 2013.</i></p>