Indian Ocean Tuna Commission
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Ministry of Agriculture-Jahad
Iran Fisheries Organization

Iran (Islamic Republic of) National Report To the Scientific Committee of the Indian Ocean Tuna Commission, 2016

INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 15/02, final scientific data for the previous year was provided to the Secretariat by 30 June of the current year, **for all fleets other than longline** [*e.g.* for a National report submitted to the Secretariat in 2016 , final data for the 2015 calendar year must be provided to the Secretariat by 30 June 2016].	**YES** **Submitted the 30 June 2016**
In accordance with IOTC Resolution 15/02, provisional **longline data** for the previous year was provided to the Secretariat by 30 June of the current year (*e.g.* for a National report submitted to the Secretariat in 2016, preliminary data for the 2015 calendar year was provided to the Secretariat by 30 June 2016]. **REMINDER:** Final longline data for the previous year is due to the Secretariat by 30 Dec of the current year [*e.g.* for a National report submitted to the Secretariat in 2016, final data for the 2015 calendar year must be provided to the Secretariat by 30 December 2016].	**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 encompassing 140 thousand fishermen and 11300 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 2015 was 271000 Mt of which 232000 Mt belongs to tuna and tuna-like fishes in the Indian Ocean areas. Those catches consist of Big eye tuna 2444Mt,Yellowfin tuna 42599 Mt, Longtail tuna 59647Mt, Skipjack 38720Mt, Frigate tuna 10655Mt, Kawakawa 28392Mt, Indo-pacific king mackerel 7242Mt, Narrow- barred Spanish mackerel 22798Mt and Billfish 19531Mt. Ttotal catch for purse seine, Gillnet and trolling was estimated 5308 Mt, 241121Mt and 5122 Mt respectively. Gillnet with 95.9% of Catch is the dominant fishing gear followed by Purse seiners 2.1%, and around 2 % comes from Trolling vessels.

Contents:

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 catch and production in the country during 2011-2015 and the annual production in Iran was about 983898Mt in 2015, which can be distributed as 56% (549732Mt) of the total catch and production contributed to the country fishing activities in the Persian Gulf, Oman Sea and offshore waters, about 3% (32618Mt) of production from northern water (Caspian Sea) and 41% (401548Mt) 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 2015 around 549732 Mt, which consist of large pelagic 271000 Mt (49.3 % of total catch) Small Pelagic 65959 Mt, Demersal species 194202 Mt, Shrimp 8342 Mt and Myctophids 10253 Mt. shown in Figure1.2

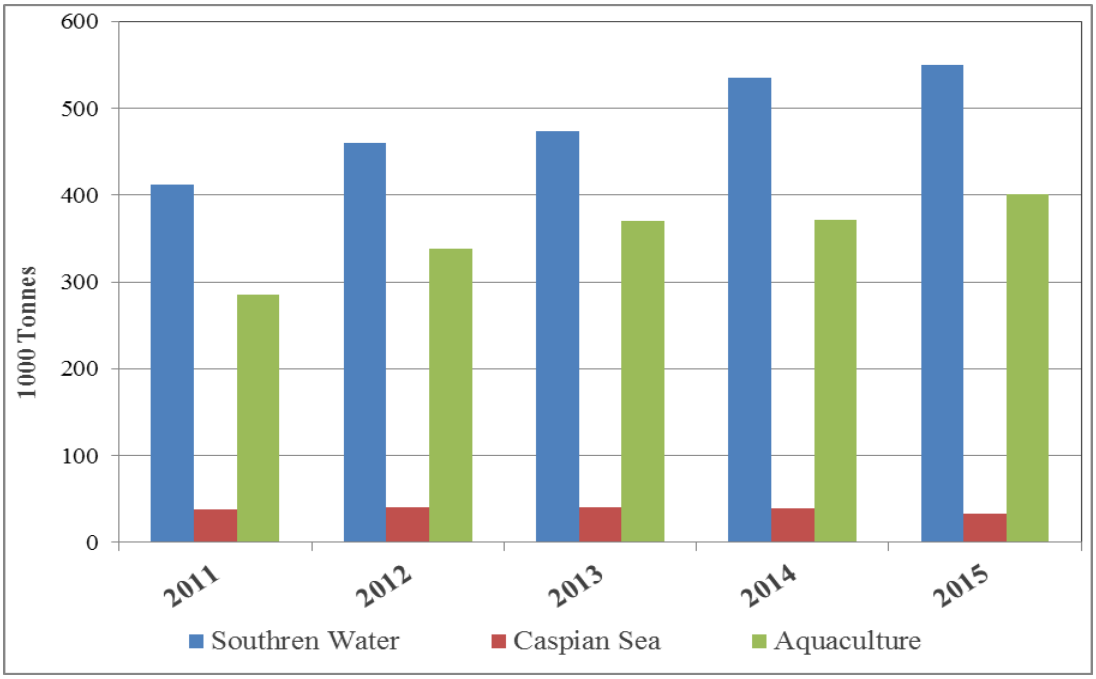

Figure1.1Total Catch & production in the country during 2011-2015

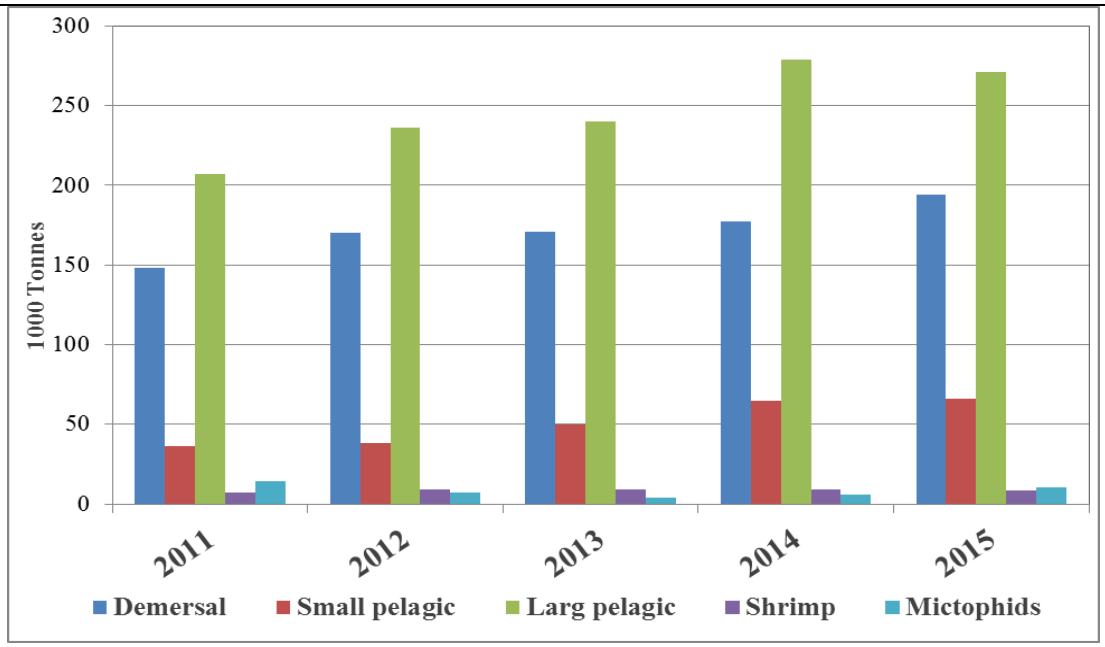

Figure1.2The catches quantity of different aquatic species group in the southern waters of Iran during in 2011-2015

2. FLEET STRUCTURE

Iran industrial and semi-industrial fishing fleets owned by private enterprises carry out almost all fisheries in the coastal and offshore water. Iran fisheries and exploitation of aquatic animals in the southern water is carried out by a fishing fleet around 11498 vessels of which about 6762 fishing crafts are engaged large pelagic species activities in 2015. Of this total volume of vessels, about 1200 are active in Tuna and Tuna like fishing in the outside of EEZ and the rest are operated only 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 3t 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 (GT) categories.

GEAR GROUP	Capacity GT	No. Crafts by year				
		2011	2012	2013	2014	2015
Purse seine	500 - 1000	2	3	3	2	2
	1000 - 2000	5	4	4	5	5
Total Purse seine fishing Craft		7	7	7	7	7
Longline		1	1	1	1	1
Total Longline fishing Craft		1	1	1	1	1
Gillnet	< 3	3340	3784	3741	3155	3630
	3 - 20	586	282	270	271	266
	21 - 50	941	1021	1060	825	364
	51 - 100	479	527	534	480	181
	101 - up	260	329	338	275	293
Total Gillnet fishing Craft		5606	5943	5943	5006	4735
Trolling	< 3	854	810	805	1914	2019
Total Trolling fishing Craft		854	810	805	1914	2019
Total all Gear fishing Craft		6468	6761	6756	6928	6762

*Table 2.1: Number of crafts operating in the IOTC area, by gear type and size (*2011-2015*)*

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

Table 3.1 and figure3.1 shows the total catch by gear type and species reported for the all fleet. The Catch quantity of tuna and tuna-like species in 2015 was equal to 236266 Mt, of which 119000 Mt belongs to coastal waters and the rest (117000 Mt) belongs to offshore fishery.

Figure 3.2, 3.3 and 3.4 showing the amount of catch for different fishing methods by species during 2011 to 2015. Total catch for purse seine, Gillnet and trolling in 2015 was estimated 5308 Mt, 241121 Mt and 5122 Mt respectively. Gillnet with 95.9% of Catch is the dominant fishing gear followed by Purse seiners 2.1%, and around 2.0% 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 2015, for tuna and tuna-like catches around 918449 days fishing effort was carried out, of which 737514 days was operated by Gillnet, 1005 days by purse seine and 179930 days done by trolling fisheries. Figure3.5 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	2011	2012	2013	2014	2015
Purse Seine	KAW	24	162	0	11	0
	LOT	2280	2074	1520	140	814
	SKJ	1336	1621	1605	798	489
	YFT	876	1103	1980	4832	3842
	BET	105	161	100	10	135
	COM	0	0	11	0	0
	SFA	0	0	74	0	0
	BLM	0	0	150	0	0
	Sharks	0	0	53	0	0
	Others	0	34	242	3	29
Total Purse Seine Catch		4621	5154	5735	5794	5308
Gillnet	FRI	5876	8175	6848	13265	10422
	KAW	22091	25984	28377	28936	27877
	LOT	77408	71242	62704	60771	57555
	SKJ	16028	25430	31722	38931	38232
	YFT	27924	33834	30421	41326	38412
	BET	0	1483	1549	2259	2309
	COM	13375	14980	18324	21218	20617
	GUT	3750	5127	5638	6705	6997
	SFA	0	6347	7401	11595	9693
	BLM	0	3041	4023	6179	5958
	Other Billfish	0	1909	2631	3681	3829
	FAL	0	2560	1812	1293	1567
	SPN	0	128	68	49	63
	MAK	0	128	113	80	94
	CCW	0	354	438	554	499
	RHA	0	2122	2606	3302	2976
	Other sharks	0	1445	1587	1855	1731
	Other Species	0	11262	9533	10731	12292
Total Gillnet Catch		175318	215551	215795	252729	241121
Trolling	FRI	119	35	25	228	233
	KAW	109	76	387	452	516
	LOT	1189	2884	2348	4672	1278
	YFT	0	28	2	57	345
	COM	1368	1461	1687	2420	2181
	GUT	117	371	114	162	245
	SFA	0	18	0	3	53
	Sharks	0	295	317	0	205
	Others	0	0	0	7	68
Total Trolling Catch		2902	5169	4879	8002	5122
Total all Gear Catch		182842	225874	226410	266524	251551

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

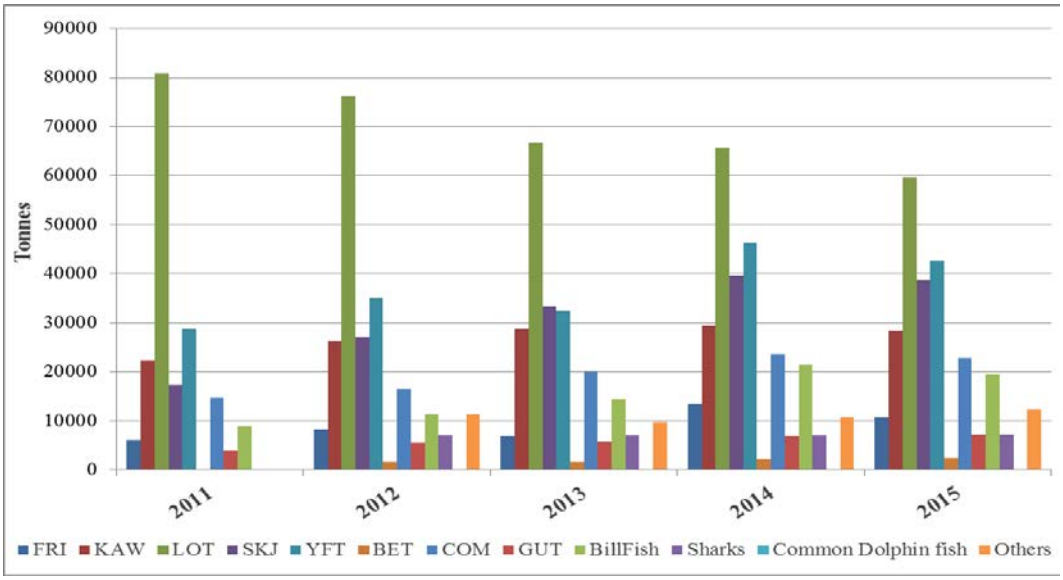

Figure3.1 Total annual catch by species reported for the all fleet during 2011-2015

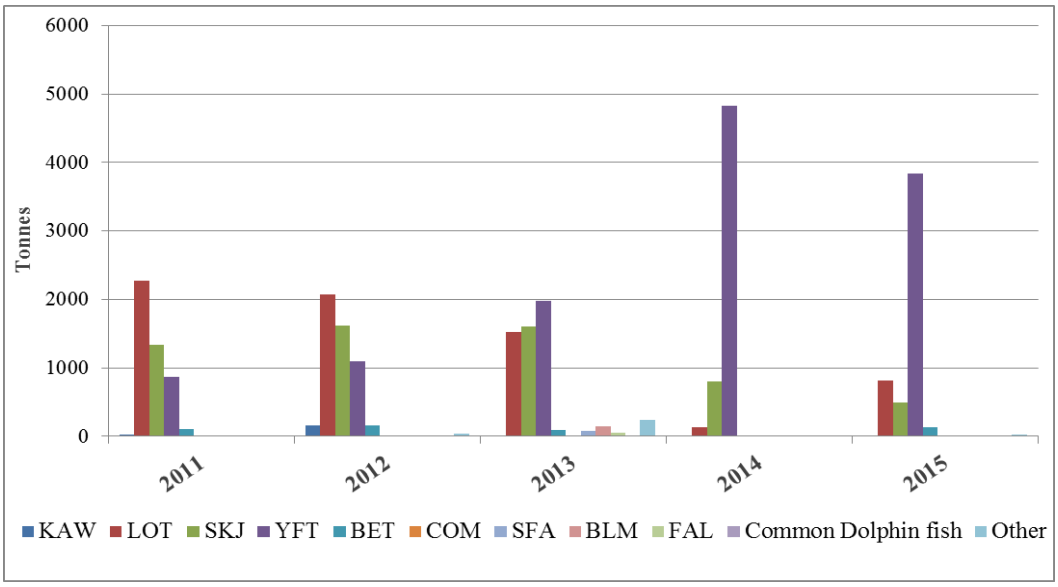

Figure3.2 Annual Catch of Purse Seiners by Species

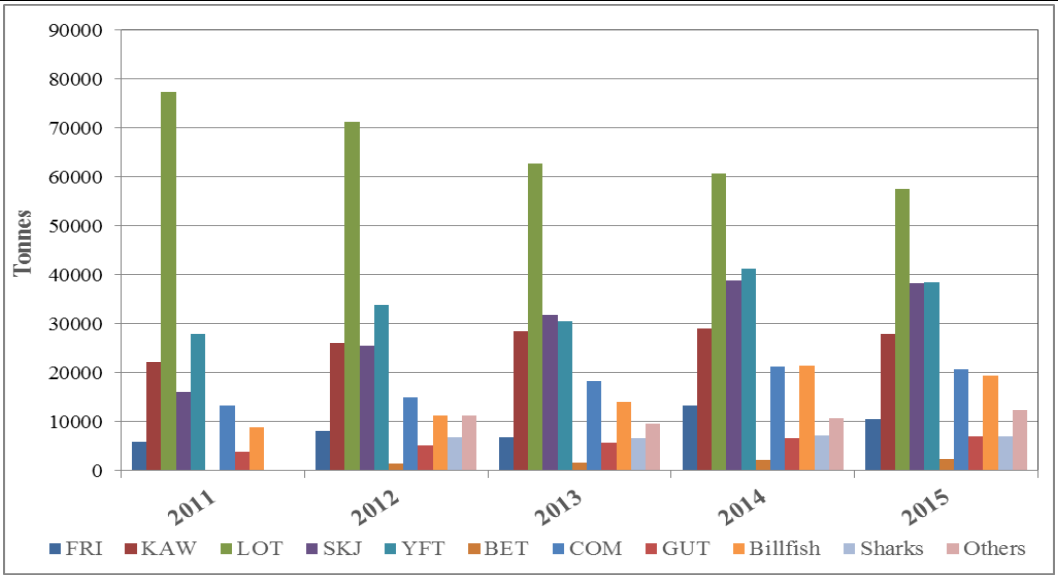

Figure3.3 Annual Catch of Gillnets by Species

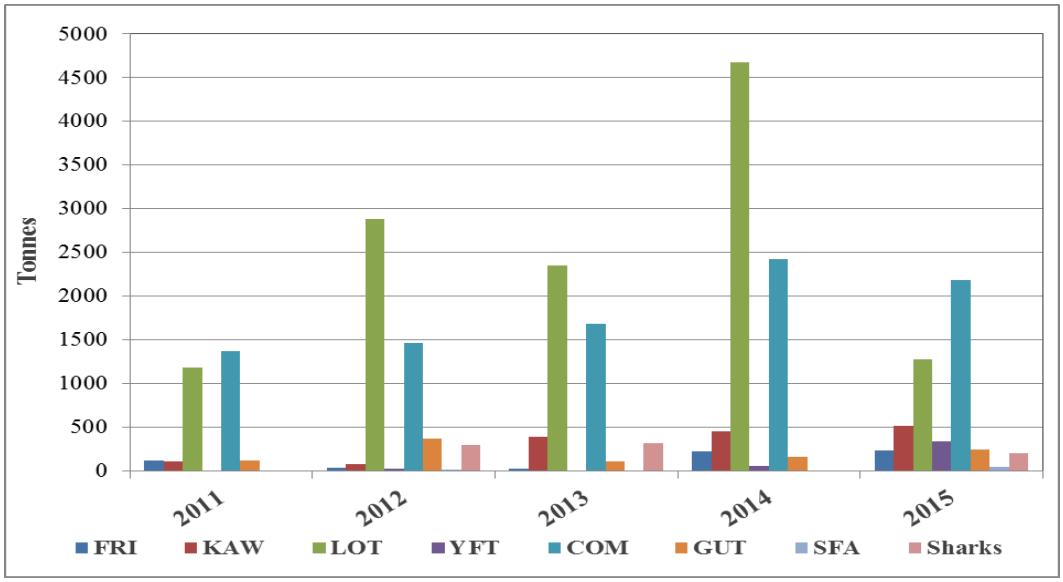

Figure3.4 Annual Catch of Trolling Method by Species

GEAR GROUP	Capacity GT	Fishing effort by gear(days)				
		2011	2012	2013	2014	2015
Purse seine	500 - 1000	0	0	0	0	0
	1000 - 2000	450	981	727	1080	1005
Total Purse seine fishing effort		450	981	727	1080	1005
Gillnet	< 3	515372	557434	538550	476632	552367
	3 - 20	100809	43303	40985	44679	44374
	21 - 50	176132	195643	184070	137860	72121
	51 - 100	82637	91293	91790	84658	33749
	101 - up	45020	57662	60400	53020	51260
Total Gillnet fishing effort		919970	945335	915795	796849	753871
Trolling	< 3	139161	125446	123450	226770	254934
Total Trolling fishing effort		139161	125446	123450	226770	254934
Total all Gear fishing effort		1059581	1071762	1039972	1024699	1009810

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

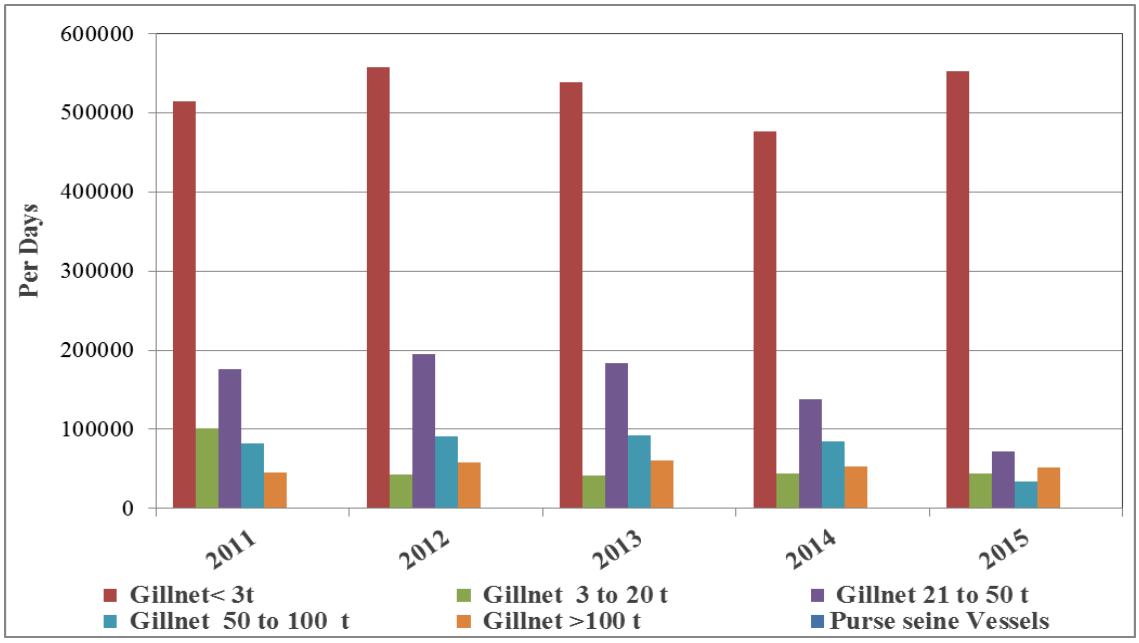

Figure 3.5 Tuna and tuna like fishing effort by all fleet 2011-2015 *(fishing day)*

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 each trip. 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. In addition HFO has tried to train some experts on identification different species especially sharks and turtles where we have really needed technical supports. In addition IFO has tried to train fishermen 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 400 person/ days of fishermen in different aspects in 2014.

IFO also has translated all parts of species ID cards to Persian language and we hope they will print very soon. Also the second regional observer schema ROS meeting has develop to hold in 2017 January in Iran. Based on prepared plan IOTC, WWF and IFO is going to support this meeting and countries such Iran, India, Oman, Pakistan, Maldives and Sri Lanka are going to participate in this meeting.

In addition base on 12WPEB decisions about joint meeting between IOTC and CITES, Iran participated in the meeting actively where we are connected there and we hope to prepare great information during our data mining and study.

5.1. Sharks

Although base on current regulation national regulation of countries is enough to conserve different sharks species and there is no need to preparing NPOA obligatory, but in order to preparing NPOA of Sharks Iran Fisheries organization is collected some information from different sources specially the printed guideline by FAO. So we expected we print Iran Sharks NPOA in 2017.

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.

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 observer 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.

In order to collecting historical data for sharks, IFO has started a study on shark data which it will prepare in 2017 and maybe presented during WPEB.

5.2. Seabirds

Base on Resolution 12/06 of IOTC, reduction of Seabirds bycatch only distinguished for longline fisheries as a target gear and is not applicable for Iran. 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. So for increasing of public awareness of fishermen, 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. On this way around 100 fishermen are trained on board and their vessels by presence of NGOs there. 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. For more monitoring we just started a few months ago to establish a connection net through the Telegram on Mobile phone when we have received many news, Pictures or movies and safe release of them, where all information have receive from Iranian territorial waters.

6. National data collection and processing system

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

We have implemented artisanal gillnets, purse seiners and modification of logbook template to meet mandatory minimum statistic requirement, particularly with regards to data recording of vessel position in IOTC area for target species, By-catch and discard.

6.2. Vessel Monitoring System

As we reported repeatedly, and the problem is reflected on 12WPEB meeting in 2016, Iran Fisheries Organization has started the implementation of satellite base vessel monitoring system more than 14 years ago and 60 vessels equipped by use of thuraya satellite system. Unfortunately the project has not achieved to cover all the vessels and during past 10 years they stopped completely because of special condition of Iran and sanctions side effects. However we started to extend off line vessel monitoring system which is totally different from online. In addition IFO has finished a tender for equipping all vessels again by use of Thuraya satellite system while there is no choice to use any other satellite because of sanction.

But 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 IFO hope with finishing the sanction, the implementation of our VMS will have good progress in 2017 and implement base on the resolution requirements. Unfortunately there is no information available to show on map base on resolution 06/03 adoptions for 2015.

6.3. Observer program

Iran Fisheries Organization has not developed Observer programme yet but during a joint programme with IOTC we have trained some observers during 2016. Also our data and information are collected by monitoring in fishing harbours and landing places. So showing spatial distribution of observer coverage on map is not possible. On this way IFO has continued its port state controls by current observers and we hope by implementation of joint project with IOTC and WWF, we will start our observer plan such a happened in Pakistan and Indonesia before. Also IFO is going to have joint project with IOTC in e-reporting data.

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 8 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 in 2012 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 Software's 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. Size frequency data reported to IOTC per fleet, year, gear type of school, month strata and 5°square areas for purse seine fishery. For oceanic gillnet fishery a pilot plan is in progress and gradually all Iranian gillnetters in high seas will be equipped with logbook system and vessel position can be derived via logbooks. For coastal fishery an alternative geographical area is in place. The species for which the size data is reported include 6 tuna species comprised of: YFT, SKJ, BET, KAW, and COM & LOT at 16 landing places.

Size data collected by type of Fishery including: Gillnet Purse seine and Hook or Troll fishery. Size data compiled by fork length. Fork lengths, measured straight with a caliperand, measuring boards as an alternative. Interval of 1 cm is considered for fish that is measured in fork length. The length of the specimen, measured to the lowest measurement unit. All sampling carried out by port sampling. Sampling is random and being representative of all the periods and areas fished. For tuna fishes, 1 fish per tonne is measured by species for purse seine, but for oceanic gillnetters there is still a gap to achieve IOTC standards. This is mainly because there are shortage of budget and workforce at all fishing ports, so, there are not enough hands to assist port/field samplers to fulfill IOTC requirements.

since 2014, Tuna and tuna-like Species identification was improved by holding training courses to differentiate BET from YFT, KAW from Bullet and frigate tuna, to identify billfishes, shark species and so forth. It is not possible to provide size data for by-catch species at port, because majority of those species, are dressed weights esp. Billfishes which are cut into small pieces immediately after catch, so the whole fish" is not available for measurement.

To sum up, the standard for the reporting of length frequency data to the IOTC mainly carried out in compliance with the Resolution 15/02.

Size Data recorded in the IOTC Database						
GEAR GROUP	SPECIES	2011	2012	2013	2014	2015
Gillnet	FRI	Nil	Nil	Nil	Nil	Nil
	KAW	7553	20299	15467	6036	13765
	LOT	12232	25481	24680	11174	18116
	SKJ	5156	3761	13212	10857	19574
	YFT	1215	4070	11146	11261	22161
	BET	Nil	655	435	630	724
	COM	14586	20907	16435	18283	21087
Total Gillnet Length Frequency		40742	75173	81375	58241	95427
Purse seine	KAW	420	416	0	0	0
	LOT	2358	2822	433	0	1158
	SKJ	424	964	957	1010	416
	YFT	727	445	1296	3682	1892
	BET	442	424	777	523	629
Total Purse seine Length Frequency		4371	5071	3463	5215	4095
Trolling/ Hand & Line	COM	Nil	821	407	2808	4416
	LOT	Nil	Nil	Nil	1289	0
Total Trolling/ Hand & Line Length Frequency		0	821	407	4097	4416
Total Length Frequency		45113	81065	85245	67553	103938
Mean Length Data recorded in the IOTC Database						
GEAR GROUP	SPECIES GROUP	2011	2012	2013	2014	2015
Gillnet	FRI	Nil	Nil	Nil	Nil	Nil
	KAW	58	56	59	53	56
	LOT	64	62	65	62	61
	SKJ	55	57	61	62	59
	YFT	73	79	79	82	81
	BET	Nil	69	78	82	79
	COM	83	87	80	84	89
Purse seine	FRI	50	59	0	0	0
	KAW	64	70	70	0	73
	LOT	56	53	50	50	50
	SKJ	102	84	84	99	113
	YFT	56	54	52	77	76
Trolling/ Hand & Line	COM	Nil	75	92	86	84
	LOT	Nil	Nil	Nil	64	0

Table.6.1 Size data of Tuna species by Gear

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 (Scombridae 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 habits
Determination of gill-net selectivity for Narrow-barred Spanish mackerel (Scomberomoruscommerson) using morphometric parameters in the coast of Hormozgan province	2014-2015	Iran	7000 $	IFRO	1-To determine the relationship between girth and fork length for Narrow barred Spanish Mackerel. 2-To determine the amount of bycatch and length frequency of Narrow barred Spanish Mackerel for different mesh size of gillnets. 3-To determine fish selectivity curve for different mesh size of gillnets. 4-To determine the optimal fish length for different mesh size of gillnets. 5-To ccompare the Gmax/p and Gc/p with the abundance of Narrow barred Spanish Mackerel.

* 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 Julyfrom several landing sites to investigate GSI and feeding conditions.

Results showed thatsardines 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 year−1) was considerably greater than the target (Fopt= 0.28) and limit (Flimit= 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∞ were estimated 0.23year^{-1}and 156.45 cm respectively. Instantaneous total mortality (Z), was 1.13 year^{-1}. The estimate of M was 0.43 year^{-1} and thus, the estimate of F was0.7 year^{-1}.

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

* In this research, size selectivity for narrow-barred Spanish mackerel (*Scomberomoruscommerson)* and other species such as Indo-Pacific king mackerel *(Scomberomorusguttatus),*Longtail tuna *(Thunnustonggol),*Kawakawa *(Euthynnusaffinis),* Talangqueenfish (*Scomberoidescommersonnianus)* and John's snapper *(Lutjanusjohnii)* were investigated in mesh sizes of surface, mid-water and bottom drift nets in coastal waters of Bandar Abbas and in the western part of Hormozgan province (fishing ports of Gong and Bustaneh), as well as of catch composition from the fisheries.

In order to determine the size selectivity of the investigated species, cumulative probability distributions of retention girth (operculum and maximum girth) at length was used. The results indicated that there is a linear relationship length (fork length or total length) and transvers morphometric parameters in six positions of girth between at fish species. Seven types of gillnets with stretched mesh sizes of 70, 76, 79, 101, 114, 132 and 165 mm and different technical characteristics were investigated for size selectivity of *S. commerson*, in which the optimal length were 38, 44, 49, 63, 74, 86 and 100 cm FL in the respective meshes. The capture processes of *S. commerson* were mostly in wedging in the all mesh sizes, whereas in the other species, depending on the morphology of fish, the retention method was different. The comparison of length frequency distribution of kingfish with mean length at maturity (Lm50%) indicated that, depending on mesh size, the frequency of the immature fish in the catch was between 4 and 100%. On the basis of optimal length at mesh size, the minimum legal mesh size of kingfish was estimated as 162 mm. Size selectivity curve was also represented for other species, which depending on fish morphology the model was inadequate in fitting the data. The results from the catch composition showed that the species diversity is different by fishing method. In mesh sizes of 70, 76 and 79 mm, the kingfish was captured in target and bycatch species depending on time by the surface drift gillnet fishery operated by the fishing boats. In this type of gillnet fishery, bycatch accounted for more than half of the total catch in which some of the species was important economically. Catch composition in gillnet fishery operated by dhows was different depending on fishing method. At the first step, it is necessary to impose a ban on gillnets with mesh sizes of 70, 76 and 79 mm in second half of the year. In the next step, for establishing the regulation on minimum legal mesh size of kingfish, it needs to do further study in seas trails aimed at determine the appropriate mesh size. Also, in the multispecies fishery, it is necessary to do a research for optimization of mesh sizes of gillnets and to implement minimum legal mesh size for the main target species.

Table 9.Scientific requirements contained in Resolutions of the Commission, adopted between 2005 and 2015.

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
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	-All data of 2015 submitted by 30 June 2016 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	The catch of the different marlin species for the Iranian gillnet is being reported under Resolution 15/02.
13/04	On the conservation of cetaceans	Paragraphs 7– 9	1-Training of 300 fishermen to safe releasing of any cetaceans , 2- Receiving some reports through the Telegram net as a news, Photos and movie, 3- Ratify a regulation by Environment organization to punish fishermen who catch any Cetacean, Sharks with big Penalties in 2016,
13/05	On the conservation of whale sharks (*Rhincodon typus*)	Paragraphs 7– 9	1-Training of 300 fishermen to safe releasing of any whale sharks, 2-Receiving some reports through the Telegram net as a news, Photos and movies, 3- Ratify a regulation by Environment organization to punish fishermen who catch any Cetacean, Sharks with big Penalties in 2016,
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	1-Translation all IOTC resolutions and notice to all fishermen by related cooperatives. 2- Training of fishermen to releasing of sharks base on current resolutions, 3- Translation all ID cards to Persian, where they are under printing, 4-Monitoring in landing places, 3- Ratify a regulation by Environment organization to punish fishermen who catch any Cetacean, Sharks with big Penalties in 2016,
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	1-Translation all IOTC resolutions and notice to all fishermen by related cooperatives. 2- Training of fishermen to releasing of sharks base on current resolutions, 3- Translation all ID cards to Persian, where they are

Res. No.	Resolution	Scientific requirement	CPC progress
			under printing, 4-Monitoring in landing places, 3- Ratify a regulation by Environment organization to punish fishermen who catch any Cetacean, Sharks with big Penalties in 2016,
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	The resolution is not applicable for Iran because Iran dose not has any active long line vessels.
12/04	On the conservation of marine turtles	Paragraphs 3, 4 6–10	1-Translation all IOTC resolutions and notice to all fishermen by related cooperatives. 2- Training of 300 fishermen to releasing of sharks base on current resolutions, 3- Translation all ID cards to Persian, where they are under printing, 4-Monitoring in landing places.
11/04	On a regional observer scheme	Paragraph 9	1-Training some experts, 2-Translation Identification Cards to Persian which are under printing. 3-joint project with IOTC to e-reporting 4-2nd ROS workshop developing by IOTC, WWF and IFO to hold in Iran. 5-Monitoring in landing places,.
05/05	Concerning the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 1–12	1-Translation all IOTC resolutions and notice to all fishermen by related cooperatives. 2- Training of fishermen to releasing of sharks base on current resolutions, 3- Translation all ID cards to Persian, where they are under printing, 4-Monitoring in landing places, 5-3- Ratify a regulation by Environment organization to punish fishermen who catch any Cetacean, Sharks with big Penalties in 2016,
16/06	On measures applicable in case of non-fulfilment of reporting obligations in the IOTC	Paragraph 1	-Iran is compliant with data reporting requirements and has implemented reporting obligations in their IOTC fisheries.