IOTC-2021-SC24-NR10

Iran (Islamic Republic of) National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2021

Ministry of Agriculture-Jahad
Iran Fisheries Organization

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 2021, final data for the 2020 calendar year must be provided to the Secretariat by 30 June 2021)	YES Submitted the 11 Ageust 2021
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 2021, preliminary data for the 2020 calendar year was provided to the IOTC Secretariat by 30 June 2021). **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 2021, final data for the 2020 calendar year must be provided to the Secretariat by 30 December 2021).	N/A
If no, please indicate the reason(s) and intended actions: We don't have any active industrial long-line vessel at present, but we have some of small artisanal gillnetter as a seasonal and temporal longliner to fish in coastal waters and final data for this type of vessels submitted the 30 June 2020.	

Executive Summary:

Iran fishing grounds in southern part of the country is the most important resources for large pelagic species. There are 4 coastal provinces (Khozeastan, Boshehr, Hormozgan and Sistan& Blochestan Provinces) beside the Persian Gulf and Oman Sea where they are located between the longitudes from 48° 30' north to 61° 25' east. Iran, with an interest in fisheries has concluded a number of bilateral agreements that regulate fishing in the area (through RECOFI and bilateral agreement e.g. Iraq, Oman, Kuwait and etc.) For Iranian fishermen the Arabian Sea is the gateway to the northwest Indian Ocean and the opportunity to harvest tuna and other highly migratory large pelagic species. It has been a tradition for Iranian fishers to fish offshore and in the last few decades gillnet and purse seine fisheries have become the established fishing method for Iranian fishers in the international waters of the northwest of the Indian Ocean. So, Iran joint to the Indian Ocean Tuna Commission (IOTC) in 2002 and it has been one of the active countries in the commission.

In a briefed view the total amount of fish production including catch and aquaculture has been 1268719 tons in 2020, which around 715401 tons came from catch and 553318 tons from aquaculture. Around On this way around 140000 fishermen with 11500 different type of vessels including fishing boats, dhows, Purse seine, Trolling, Trawl and Wire-trap which are engaged in fishing operation according to time schedule during different fishing seasons in the coastal and offshore waters and landed their fish in 130 fishing harbors and landing centers. On this way, large pelagic species catch is one of the most important group of fish that are caught by Iranian fishermen. There are four fishing gear types which targeting large pelagic species in the IOTC area of competence , included gillnet, purse seine, long line (by traditional boats) and also some of small trolling boats in coastal fisheries.

The main fishing grounds for large pelagic species in southern part of the country are located in the coastal area of the Persian Gulf and Oman Sea. Total production of tuna and tuna like species (including by-catch and discards) was 285780 Mt in 2020. This amount of catch contains 69.6% (198792 Mt) of Tunas, 12,9% (36944 Mt) of Seerfish, 7.7% (21995 Mt) of Billfish, 1.2% (3595 Mt) different species of shark and 8.6% (25453 Mt) other species.

CONTENTS

1. BACKGROUND/GENERAL FISHERY INFORMATION

There are three major areas for Iran fisheries activities consist to the southern part catch (Persian Gulf, Oman Sea and Indian Ocean), northern part catch (in the Caspian Sea) and inland water aquaculture and catch (in total Aquaculture).

Total aquatics production in 2020 was 1269000 Mt, which can be distributed as 58% (684000 Mt) of the total catch and production contributed to the country fishing activities in the southern water, about 3.3%(31000 Mt) of production from northern water 38.7%(553000) through inland water and aquaculture. Figure 1.1 shows the total catch and fish production in the country during 2015-2020.

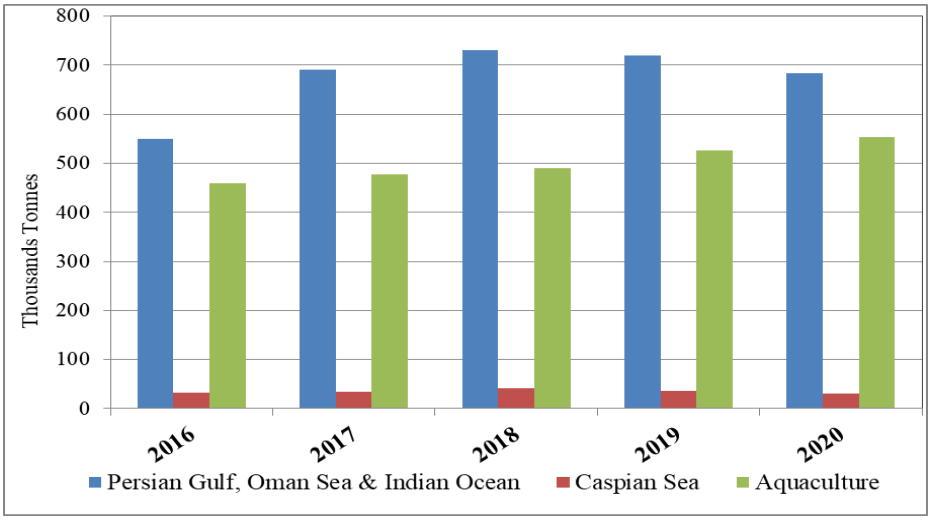

Figure1.1: Total Catch & production in the country during 2016-2020

Large pelagic; tuna and tuna-like species are important fishery resources for food and also have valuable contribution to the Iran's economy. 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 2020 as mentioned above around 684000Mt, which consist of large pelagic317000 Mt of total catch, Small Pelagic 86000 Mt, Demersal species 252000 Mt, Shrimp 12000 Mt and Myctophids 18000Mt. Figure1.2.shows the catches quantity of different aquatic species group in the southern waters of Iran.

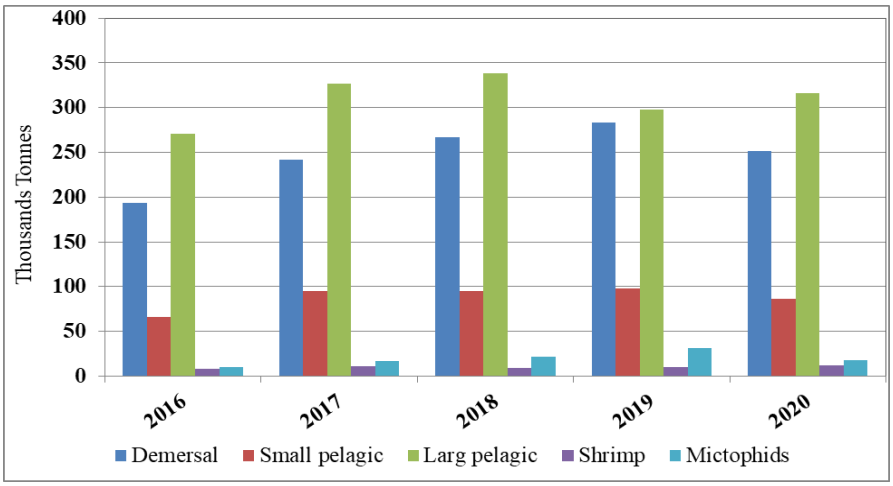

Figure1.2: The catches quantity of different aquatic species group in the southern waters of Iran

2. FLEET STRUCTURE

Iran Fisheries and exploitation of aquatic animals in the southern waters by around 6837 fishing crafts are engaged in large pelagic species in 2020, Of this total volume of vessels, about 1211 are active in Tuna and Tuna like fishing in the Oman Sea and offshore waters and rest of them are active in the coastal water. Those fishing crafts consist of 3752 were gillnet boats (less than 3 GT), 446 gillnet Dhows of less than 50 GT, 246 gillnet Dhows of 51-100 GT, 487 gillnet Dhows of more than 100 GT, 1900 Trolling boats of less than 3 GT, 250 coastal artisanal longline boats of less than 3 GT, 71 traditional longline Dhows of less than 50 GT, 14 traditional longline Dhows of 51-100 GT and 5 industrial Purse seiners. Table 2.1 shows the fishing fleet is disaggregated into the following (GT) categories during 2016-2020.

GEAR GROUP	Capacity GT	NO. of active crafts by gear type and size				
		2016	**2017**	**2018**	**2019**	**2020**
Purse seine	500 - 1000	2	2	2	2	2
	1000 - 2000	5	5	5	5	5
Total purse seine fishing Craft		7	7	7	7	7
Coastal artisanal longline *	< 3	300	324	324	400	250
	21 to 50	80	165	165	184	70
	101 up	14	14	14	20	0

Total Coastal artisanal longline fishing Craft		**394**	**503**	**503**	**604**	**320**
Gillnet	< 3	3,319	2,758	3,168	3,319	3,752
	3 - 20	258	239	226	258	230
	21 - 50	391	318	271	391	216
	51 - 100	171	316	297	171	246
	101 - up	283	326	377	283	487
Total gillnet fishing Craft		**4,422**	**3,957**	**4,339**	**4,422**	**4,930**
Trolling	< 3	2,190	1,820	1,645	1,748	1,900
Total all gear fishing Craft		**6,619**	**5,784**	**5,991**	**6,177**	**6,837**

Table 2.1: Number of active vessels which are operating in the IOTC area of competence, by gear type and size

*We don't have any specific active industrial longline vessel, but numbers of artisanal longline were encouraged extensionally to move to long line seasonal and temporal during a year. This number are not included in total crafts number.

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

Tuna and Tuna like fisheries by Iranian fleet, are done in coastal area and offshore by different type of vessels that the result of catch reflected in 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 large pelagic in Iran was 285780 Mt in 2020 and around 239332 Mt belongs to tuna and tuna-like species in the coastal and offshore waters. Figure 3.2, 3.3 and 3.4 showing the amount of catch for different fishing methods by species during five years. In 2020 annual catch for purse seine, gillnet, coastal artisanal longline and trolling was estimated 1026 Mt, 264414Mt, 8839 Mt and 11501 Mt respectively.

According to Iran national regulation, offshore fisheries baseline starts at 24 miles. While, defined offshore fisheries by IOTC is rather different from Iran and offshore fisheries starts from 200 miles, and this point make some minor differences in statistical information.

GEAR GROUP	SPECIES	2016	2017	2018	2019	2020
Purse Seine	KAW	0	5	0	0	0
	LOT	50	1891	998	467	416
	SKJ	1202	2477	356	190	0
	YFT	3465	1764	3898	3361	610
	BET	138	29	0	0	0
	COM	0	0	0	0	0
	SFA	0	0	0	0	0
	BLM	0	0	0	0	0
	Sharks	0	0	0	0	0
	Others	24	39	40	28	0
Total Purse Seine Catch		**4879**	**6206**	**5292**	**4046**	**1026**
Coastal Artisanal Longline	**YFT**	5760	8452	11974	8441	8839
	DOL	0	122	0	0	0
		5760	**8574**	**11975**	**8441**	**8839**
Gillnet	FRI	10238	10251	9135	8938	12222
	KAW	33677	38311	36006	32822	34549
	LOT	54596	56658	59503	47984	53810
	SKJ	37956	50822	49608	39782	44516
	YFT	35110	45551	42071	45298	34779
	BET	2931	3577	3700	1949	1526
	COM	20759	22529	23675	21549	23749
	GUT	7501	9326	9581	10112	10445
	SFA	7552	10405	10601	7910	11025
	BLM	4148	4974	5859	6109	7054
	Other Billfish	2884	3368	4012	3577	2846
	TOTAL Billfish	14585	18747	20473	17597	20924
	1-FAL	523	586	308	419	154
	2-SPN	20	22	12	20	6
	3-MAK	33	37	19	22	10
	6-CCW	409	272	239	291	331
	8-RHA	2447	1623	1430	1739	1983
	Other sharks	1306	904	764	934	1016
	TOTAL Sharks	4737	3443	2772	3424	3500
	Other Species	13577	17819	36013	29078	24396
Total Gillnet Catch		**254990**	**277035**	**292537**	**258534**	**264414**
Trolling	FRI	6	14	45	20	4
	KAW	231	458	1105	428	1108
	LOT	501	1665	667	568	2328
	YFT	775	354	707	944	4087
	COM	2922	1538	1519	2227	2539
	GUT	158	120	448	226	211
	SFA	257	48	3	82	1071
	Sharks	59	180	195	103	95
	Others	0	0	0	56	58
Total Trolling Catch		**4908**	**4378**	**4690**	**4653**	**11501**
Total all Gear Catch		**270536**	**296192**	**314494**	**275674**	**285780**

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

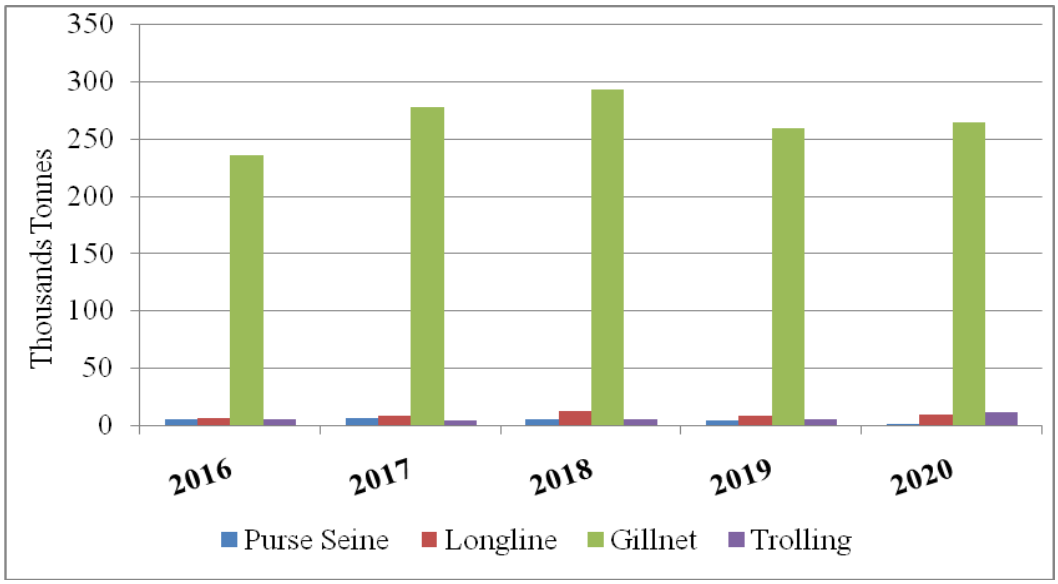

Figure 3.1- Annual Catch by Gear Type

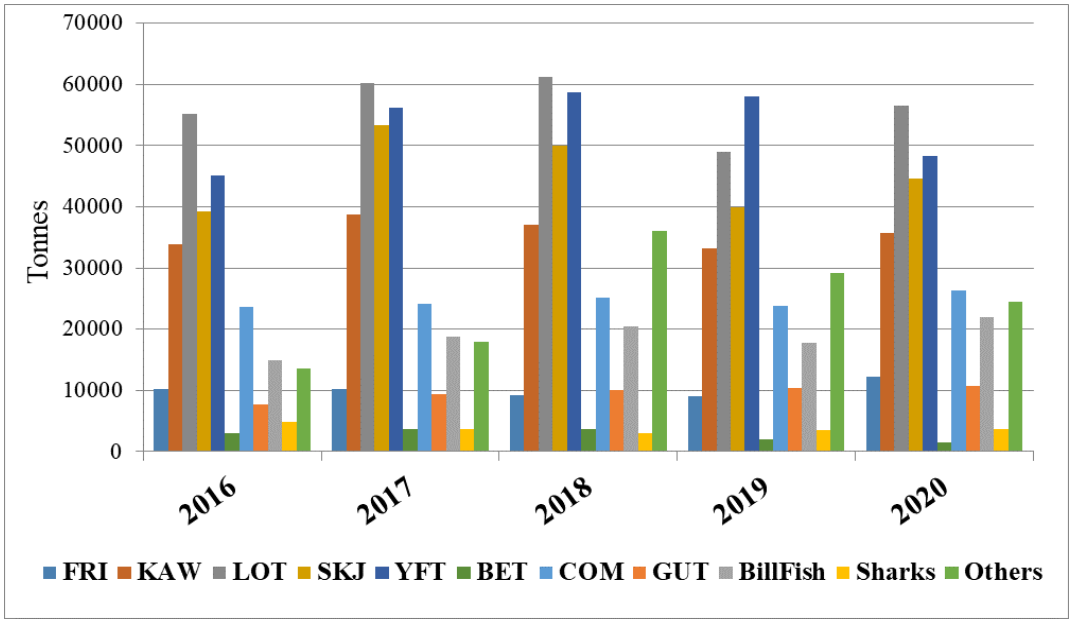

Figure3.1. Annual Catch of all Gear type by Species

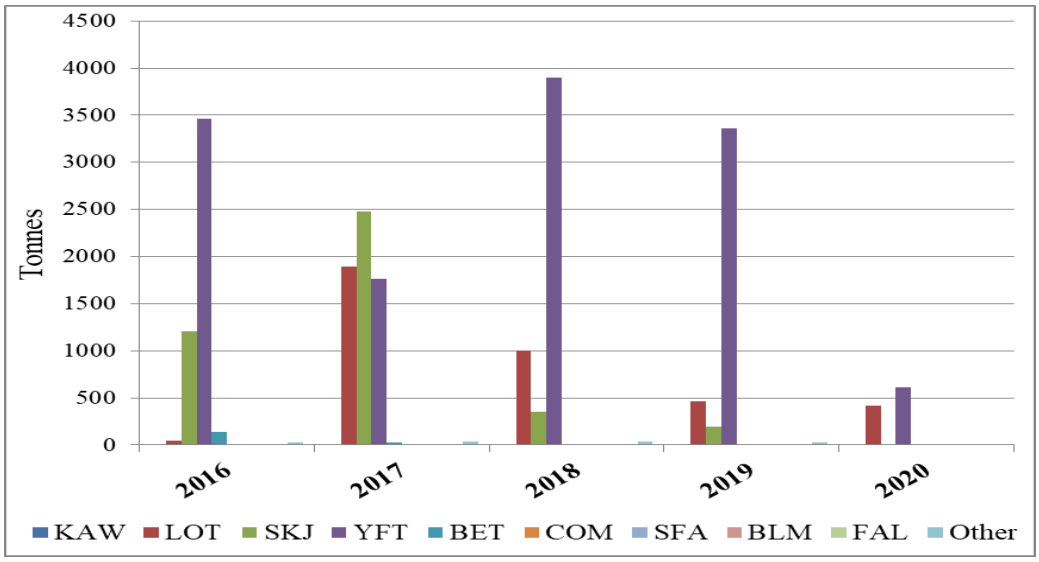

Figure3.2 Annual Catch of Purse Seiners by Species

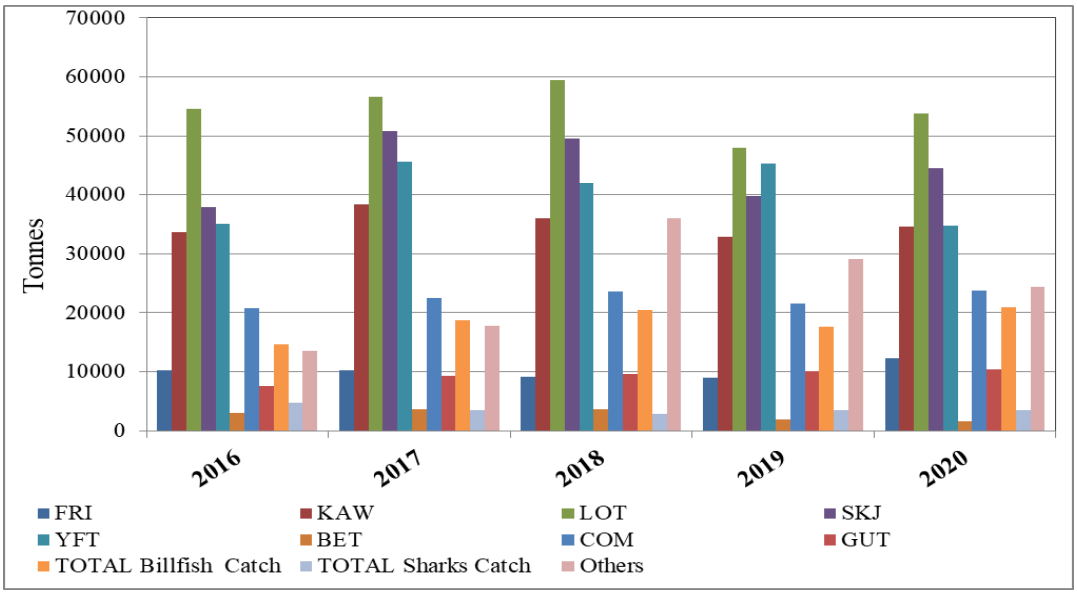

Figure3.3 Annual Catch of Gillnets by Species

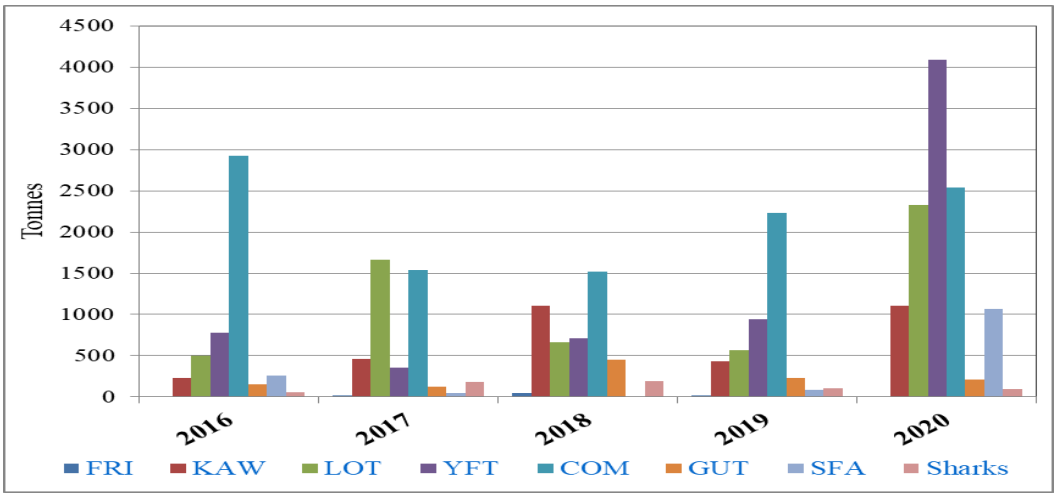

Figure3.4 Annual Catch of Trolling Method by Species

GEAR GROUP	Capacity GT					
		2016	2017	2018	2019	2020
Purse seine	500 - 1000	0	0	0	0	0
	1000 - 2000	1,164	1,085	715	1,164	401
Total Purse seine fishing effort		1,164	1,085	715	1,164	401
Coastal_Artisanal_Longline **	< 3	18,000	19,440	24,300	20,000	34,000
	21 to 50	3,200	6,600	14,025	11,040	9,520
	101 up	560	560	1,190	1,200	0
	Mechanised	0	0	0	0	0
oastal_Artisanal_Longline ** fishing Table.3		21,760	26,600	39,515	32,240	43,520
Gillnet	< 3	487,646	438,046	516,149	487,646	764,432
	3 - 20	41,682	43,035	44,779	41,682	43,369
	21 - 50	74,870	58,114	51,045	74,870	44,594
	51 - 100	30,337	54,873	52,410	30,337	36,904
	101 - up	50,530	59,746	69,535	50,530	72,941
Total Gillnet fishing effort		685,064	653,815	733,918	685,064	962,241
Trolling	< 3	229,190	196,440	224,708	258,713	133,500
Total Trolling fishing effort		229,190	196,440	224,708	258,713	133,500
Total all Gear fishing effort		937,178	877,940	998,856	977,181	1,139,662

Table 3.2: Fishing effort by different types of vessel

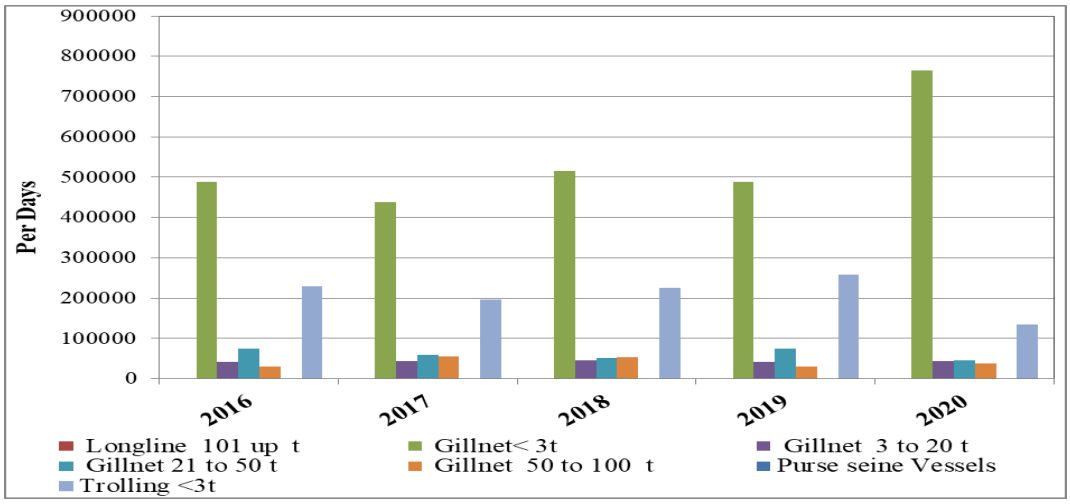

Figure3.5 Tuna and tuna like fishing effort by all fleet in 2019(fishing day)

4. RECREATIONAL FISHERY

According current regulations of Iran Fisheries Organization, there are no tuna recreational fisheries. In fact there is no interest for tuna recreational fisheries, so any licenses are not issued for this type of fisheries.

5. Ecosystem and by-catch issues

Base on Iran Fisheries Organization (IFO) current procedure, monitoring and control of fishing vessels and their catch are happening in fishing harbours and landing areas, by port based monitoring system. On this way our experts control all catch gears and devices, related standards and the vessel crews before starting sailing and in the end of each trip by focus on catch results, its composition and related by-catch.

IFO usually arranges some training workshops for the fishermen who are active in tuna and tuna like fisheries during the time when the vessels are landing in fishing harbours. Through this training system fishermen be familiar with IOTC regulations and resolution especially which were adopted related to ecosystem and By-catch issues. In addition IFO has tried to train experts for identification different species, especially sharks and turtles, where we have really need technical supports of IOTC. Also, IFO has tried to train fishermen to teach them, how they must to obey international maritime laws and regulations related to fisheries and other countries rights and regulation especially during innocent passage through territorial waters of third party. In total IFO has trained more than 300 person/ days of fishermen in different aspects in 2020.

IFO also has distributed around 1000 translated IOTC species ID cards to Persian language and we hope they will be useful for fishermen and in-port observers. In addition, Iran has had close cooperation with IOTC secretariat through regular meetings, especially the meetings related with Observer scheme, because of interest of Iran for implementation of the Regional Observer Scheme, ROS pilot project according to Paragraph 6 of Res. 16/04 (just port observer).

According to, Iran Fisheries organization regulations and Iran Environment supreme council Resolution No.380, Sharks catches completely banded and the fishermen only have permission to retain the sharks that are caught as by-catch in IOTC acceptable level (less than 5%). Also all sharks must to release safely alive, except that they are not in a good condition or dead. According to 2017 the amount of different species of sharks that are caught as by catch has been 3624 tons which is equal to 1.2% of total catch in tuna fisheries. This shows the strong developed and implemented regulation has had affected positively reduction of sharks by-catch in Iran.

5.1. Sharks

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 By-catch. Also base on Iranian religious believes more than 90% of Iranian 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 contents of them related with Sharks conservations are transferred during different level of meetings. Also we have tried to transfer these concepts to fishermen during training workshops. On this way there is close cooperation among Iran fisheries organization, Fisheries Unions, Environment organization and *NGOs*

Accordingly, we have not received any reports about total number of released/discarded of sharks, by species from national fleet in the IOTC area of competence because of on board observer lack. But IFO monitors and controls all the species during landing times in fishing harbours. However, although there are weaknesses in access to historical data of different species especially sharks, but sharks information had recorded by species since 2012. According collected information the amount of Sharks species in 2017 reflected in figure 3.1.

Base on Statistical information total weight of sharks, by species, that retained by the national fleet in the IOTC area of competence has been recorded during 2016–2020 as table 3.1. It is obviously clear the total catch of different shark's species have had a decreasing trend. According to scientific assessment, this trend has two major visions. First, the stocks of different species of sharks showed a decreasing trend all over the world. Secondly, Iran national regulation severity, the penalties and sanctions that approve by courts and Iran fisheries organization which are really strict. So, there is no motivation for the fishermen to catch sharks, or other Haram species, because there is no market for them in Iran.

5.2. Seabirds

Base on IOTC 12/06 Resolution, reduction of Seabirds by-catch only distinguished for long-line fisheries as a target gear and it is not applicable for other gears. Also base on our current fleet structure, we have not had any industrial long-line active vessels, so it is not applicable for Iran. For more insurance, IFO has 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 Iran related to marine turtles is, conservation of different species of turtles, and this strategy practically implemented, because there is no use for turtles in Iran. Although, the Environment Organization is identified as a national competent authority for protection of Sea turtles by the government, 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 and around 50 fishermen are trained on their vessels by cooperation of NGOs. Although environment organization have had some projects about the biology of turtles, but both organizations intent to develop a joint 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 other sensitive and endangered species, are forbidden and if any fishermen catch accidentally any Mammals, Turtles, Sharks or any other sensitive spices, they should release them safely and rapidly. In the other hand if our inspectors or fishery guard (fisheries/ Environment Guard or Police) find any endangered species on board, the owner and captain of the vessel are introduced to court and also punish by fishery infraction investigation commission which are defined and active in different cities and provinces and has the authority to stopped fish up to three months. According to IFO regulations, the offices 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 By-catch in landing places. Also base on Iranian religious believes more than 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 which are released/discarded by the national fleet in the IOTC area of competence.

As we mentioned before, we have not received any reports in detail about incidental catch of different species of seabirds, marine turtles and marine mammals because of on board observers' lack. On this way, lack of on board acceptable accommodation space and facilities, is the main problem for implementation observer scheme. So, it is not possible to record important events by species, gears and positions (timeline) for the national fleets. In order to implementation effective observer program on ports, Iran has joint to the IOTC ROS pilot project which has developed according to IOTC 16/04 Resolution. Also we just started to establish a net through the virtual networks on Mobile phone a few months ago. So, we have received some news, Pictures or movies about safe releasing of these species, where most of them received from Iranian territorial waters. Also there are some NGOs which are active in working with local people and fishermen. They normally focused on training of these people and making improvement in public awareness.

6. National data collection and processing system

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

In recent years, Iran has started to complete the logbooks for the industrial purse seiners, and we hope to extent to other artisanal fleets in future, according to the Iranian fisheries regulations which adopted in 2020, that will cover 10% of the high seas vessels.

6.2. Vessel Monitoring System (VMS)

As we reported to IOTC Secretariat, Iran Fisheries Organization has started the implementation of VMS system. In addition to 5 purse seiner vessels witch equipped with the VMS system in the past years, the number of 68 dhows are equipped with the VMS system in 2020 under the IOTC license. However, Iranian Fisheries Organization is planning to implementation of VMS in all vessels. For this purpose, it is holding meetings to coordinate with the Iranian Ports and Maritime Organization. Since the Iranian Ports and Maritime Organization operates under the commitments of IMO in accordance with its international obligations, therefore Iranian Fisheries Organization is adopting the action plan of the Iranian Ports and Maritime Organization.

6.3. Observer program

Iran fishing fleet unfortunately because of some problems due to lack of accommodations, we have not been able to install observers on board the vessels. Iran has focused for better implementation of observer scheme only in ports and port sampling to achieve the observer rate required by IOTC.So our data and information are collected by monitoring in fishing ports and landing centres. This activity is covering more than 10% of active vessels.

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 stay on landing sites during disembarkation time of fish and they collect the data and fill out the forms. Also Biometry of fish for collecting length/weight frequency data is done during landing time. Catch and Effort data were collected in all the above sites by stratified random sampling by the samplers, in this way, 10% of total fishing crafts for different vessel classes of fishing dhows and boats are picked out randomly and their fishing data will be registered. Landing surveys are undertaken to obtain data on catches in the artisanal fisheries.

Port sampling was carried out for small-scale fisheries. 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. In each landing site, there is one enumerator who is responsible to collect data. All of the operations are fulfilled by Iran Fisheries Organization fish statistic Software called AMAR Software. In addition 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.

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, monthly 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. The species for which the size data is reported include 6 tuna species comprised of: YFT, SKJ, BET, KAW, COM & LOT at 16 landing places.

As an overview, collection of information as port sampling is one of the regular monitoring that has implemented many years ago for all fishing activities and it would be a part of ROS pilot project of IOTC for making more progress on it. On this way Iran offered its interest to join the project. On this way IFO expect beside of making a progress in our monitoring and data collection system, we select as a pilot for learning other countries for port sampling methods.

Size Data recorded in the IOTC Database						
GEAR GROUP	SPECIES	**2016**	**2017**	**2018**	**2019**	**2020**
Gillnet	FRI	Nil	Nil	Nil	Nil	Nil
	KAW	14678	26088	32721	37985	25230
	LOT	21889	19449	30985	46811	33735
	SKJ	23410	30577	24177	18474	19398
	YFT	26287	25885	16684	22970	18063
	BET	888	2639	1782	1256	502
	COM	29315	39753	37591	42115	26946
Total Gillnet Length Frequency		**116467**	**144391**	**143940**	**169611**	**123874**
Purse seine	KAW	0	0	0	0	0
	LOT	125	0	0	1097	0
	SKJ	797	1576	2152	278	0
	YFT	4333	1923	6995	6786	285
	BET	560	716	708	0	0
Total Purse seine Length Frequency		**5815**	**4215**	**9855**	**8161**	**285**
Trolling/ Hand & Line	COM	2511	980	335	2059	2428
	LOT	0	0	0	0	0
	YFT(by Coastal_LL_Method)	0	18457	9813	7371	7712
	YFT(by Hook & Line_Method)	0	2485	3371	0	0
Total Trolling/ Hand & Line Length Frequency		**2511**	**21922**	**13519**	**9430**	**10140**
Total Length Frequency		**124793**	**170528**	**167314**	**187202**	**134299**

Mean Length Data recorded in the IOTC Database						
GEAR GROUP	SPECIES GROUP	**2016**	**2017**	**2018**	**2019**	**2020**
Gillnet	FRI	Nil	Nil	Nil	Nil	Nil
	KAW	56	51	53	53	55
	LOT	69	64	62	68	72
	SKJ	57	56	55	55	60
	YFT	84	93	84	83	84
	BET	82	86	86	83	84
	COM	92	89	85	86	88
Purse seine	FRI	0	0	0	0	0
	KAW	48	0	0	78	0
	LOT	53	55	54	61	0
	SKJ	90	98	110	116	136
	YFT	74	78	80	0	0
Trolling/ Hand & Line	COM	87	110	119	95	84
	LOT	0	0	0	0	0
	YFT(by Coastal_LL_Method)	0	120	111	103	96
	YFT(by Hook & Line_Method)	0	100	108	0	0

Table.6.1. Number of Tuna and Tuna like species that their length are measured by gear types

7. National Research Program

- This study uses free-school purse seine fishing data of 5 tuna purse seiners from 2015 to 2019 in the Oman Sea and Indian Ocean waters.
- Essential fish habitat (EFH) of Tuna fishes were modeled based on satellite images and environmental data, Redundancy analysis (RDA) was applied to provide a preliminary view of relationships between fish presence/absence and environmental variables, followed by the application of Generalized Additive Models (GAMs) and Support Vector Machine (SVM).
- GAMs indicated the presence/absence of fish related to Latitude, Sea surface current velocity, SSH, and sea surface salinity. EFH maps were generated using GAM model's and SVM's Algorithm base on the probability of the presence of Tuna fishes.
- According to the results yellowfin and skipjack tuna, are distributed throughout the waters of the Indian Ocean and the Oman Sea, while several areas were identified with high presence probability, However, these areas have not been constant at different seasons.
- In the Oman sea (Iranian waters), the area of Sirik to the east of the Oman Sea has a high EFH presence probability for Yellowfin tuna in summer and mostly autumn (25 t0 27N, 57 to 64E). Latitude 23N to 25N degrees and longitude 57E to 60 E degrees are the preferred habitats of Longtail tuna that are distributed in high density in these areas. Based on the analysis the distribution and density of Longtail tuna on the east side of the Oman Sea Iranian waters, from Beris to Gwatar Bay, could be neglectable. it seems that, although, the relationship between chlorophyll-a concentration, sea surface height (SSH) and distribution, of Longtail tuna is statistically significant, still the Latitude, Sea Surface Temperature (SST), Sea surface current velocity, and Sea surface salinity (SSS are the most important factors affecting the abundance of this species in the region.
- In the western waters of the Indian Ocean, EFH is revealed latitudes 5 ° N to 5 ° S in East African waters (Near Somalia, Kenya, and Tanzania), as the border or region have a high EFH presence probability for the Skipjack tuna in the autumn and the Yellowfin tuna in the summer and autumn. In the eastern part of the Indian Ocean, high EFH presence is suggested for Skipjack and Yellowfin tuna in the spring and winter (waters of Maldives towards the Equator).

Table 8. Summery table of national program including dates

Project title	Period	Countries involved	Budget total	Funding source	Objectives	Short description
Feasibility study of using remote sensing for determining tuna fish distribution in the Oman Sea and Indian Ocean waters (first phase)	2015-2019	-	8000 US $	Iranian Fisheries Science Research Institute	Integration of satellite-based environmental and tuna purse seiners catch data for fishing ground determination	

Table 9. Scientific requirements contained in Resolutions of the Commission, adopted between 2011 and 2018

Res. No.	Resolution	Scientific requirement	CPC progress
11/04	On a regional observer scheme	Paragraph 9	Partially adopted before (Port Observing). Related report has sent before to the secretariat.
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	Training fishermen Translated current resolutions and distributed among fishermen, there is no interest for their catch because of no market. Related report has sent before to the secretariat.
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	Not Applicable, related report has sent before to the secretariat.
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	Training fishermen Translated current resolutions and distributed among fishermen, there is no interest for their catch because of no market. Big penalties and sanctions approved for offenders, related report has sent before to the secretariat.
13/04	On the conservation of cetaceans	Paragraphs 7– 9	Training fishermen Translated current resolutions and distributed among fishermen, there is no interest for their catch because of no market. Big penalties and sanctions approved for offenders, related report has sent before to the secretariat.
13/05	On the conservation of whale sharks (*Rhincodon typus*)	Paragraphs 7– 9	Training fishermen Translated current resolutions and distributed among fishermen, there is no interest for their catch because of no market. Big penalties and sanctions approved for offenders, related report has sent before to the secretariat.
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	Training fishermen Translated current resolutions and distributed among fishermen, there is no interest for their catch because of no market. Big penalties and sanctions approved for offenders, related report has sent before to the secretariat.
15/01	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–10	Catch and efforts by gears and vessel types are recorded and reported monthly.
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	According to the Res. Iran submitted -Total catch data, -Catch by gear and effort data, - Size (Biometry) data, But, Only Iran dose not submitted, - Timelines and position of data,
17/05	On the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 6, 9, 11	Training fishermen Translated current resolutions and distributed among fishermen, there is no interest for their catch because of no market. Related report has sent before to the secretariat. In total in 2017 the amount of sharks that are caught during tuna

Res. No.	Resolution	Scientific requirement	CPC progress
			fisheries is around 1.2% of total catch.
18/02	On management measures for the conservation of blue shark caught in association with IOTC fisheries	Paragraphs 2-5	
18/05	On management measures for the conservation of the Billfishes: Striped marlin, black marlin, blue marlin and Indo-Pacific sailfish	Paragraphs 7 – 11	Catch by gear and efforts submitted, but size and timeline (position) did not report.
18/07	On measures applicable in case of non-fulfilment of reporting obligations in the IOTC	Paragraphs 1, 4	Related report has sent before to the secretariat.
19/01	On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence	Paragraph 22	Iran is implementing in accordance with Resolution 19/01 Paragraph 22.
19/03	On the Conservation of Mobulid Rays Caught in Association with Fisheries in the IOTC Area of Competence	Paragraph 11	I n 2020 no intentional catch of Mobulid Rays in Iran