

Trends of Tropical Tuna catch in Iran

20th Session of the IOTC Working Party on Tropical Tuna

(WPTT20), Seychelles

29 Oct – 3 Nov 2018

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Tuna catches covers 7 percent of the world total catch. But in Iran more than 40 percent of the country catch belongs to tuna and tuna-like species. So tuna catch in Iran is very important.

About 11,200 fishing vessels in 7 coastal provinces are engaged in fishing. Because about 6,300 out of 11,200 fishing vessel with 60,000 fishers are engaged in fishing activities and as the capture fishery in Iran is handled mainly small scale, so there are variety of socio-economic and management issues.

Islamic republic of Iran has a longest coastline in Persian Gulf and Oman sea and Caspian sea with 5,800 km long (including islands) and 193 ports and landing places encompassing around 140 thousand fishermen and 11,200 fishing crafts with annual marine captures of around 725 thousand tons in 2017.

There are three categories of fisheries activities in Iran comprised of the southern fishery, the northern fishery and inland fishery and aquaculture. As statistics shows, the level of aquatic production in 2000 was around 425,000 tons and in 2017 increased to

1,202,086 tons, which can be distributed as 57% (691,174 tons) of the total catch and production contributed to the country fishing activities in the Persian Gulf, Oman Sea and offshore waters, about 3% (33,643 tons) of production is collected from northern waters (Caspian Sea) and 40%(477,269 tons) through inland waters and aquaculture.

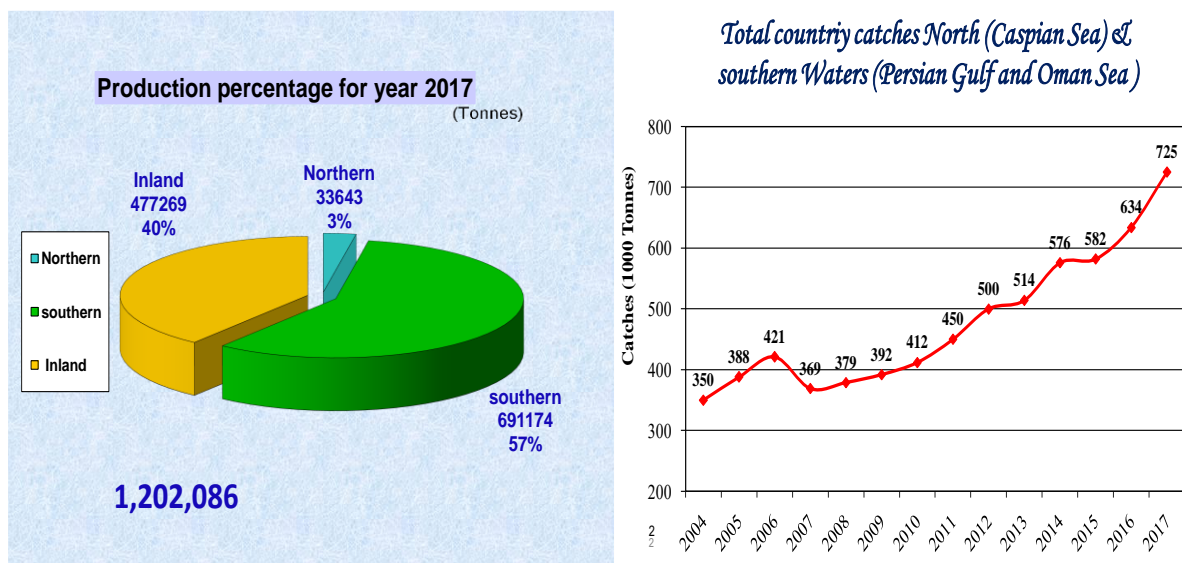


Figure1: Total Catch & production in Iran Figure2: Total Catch amount of southern waters

Of total catch amount of southern waters, around 327 thousand tones attributed to large pelagic, 241 thousand tones to demersals, 95 thousand tones small pelagic, 11 thousand tones shrimp and 17 thousand tones myctophids.

The Catch quantity of large pelagic in Iran was 327 thousand tones in 2017 reported to the IOTC Secretariat and 274,589 Mt belongs to tuna and tuna-like fishes in the Indian Ocean areas. Those catches are mainly comprised of 6 tuna species with 75% (222,279

Mt) of tunas, 2 Seerfish species 11.3% (33,514 Mt) and 5 billfish species with 6.3% (18,795 Mt), 1.2% (623 Mt) different types of shark species and around 6.1% (17,981 Mt) other species of large pelagic landings in southern waters of Iran.

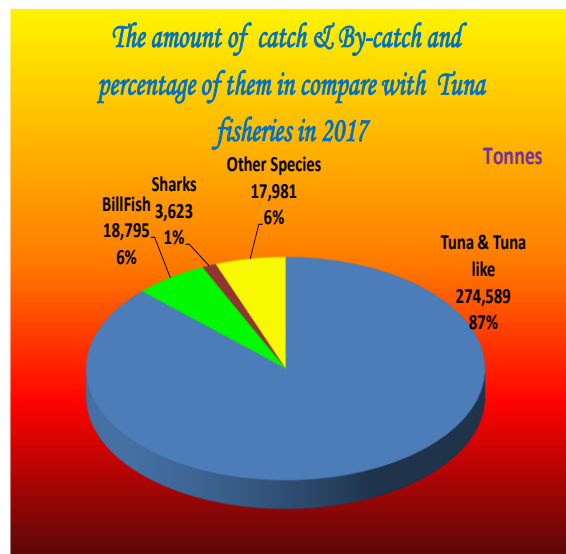
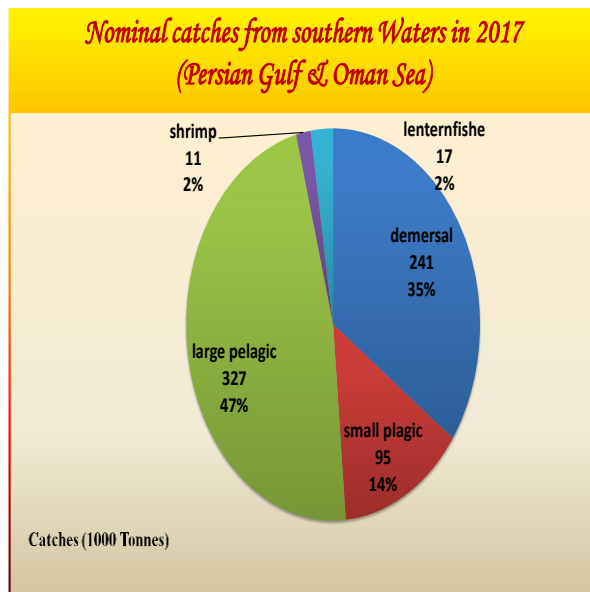


Figure3: Nominal catch from southern Waters in 2017 Figure4: The amount of catch & By-catch and percentage of them in compare with Tuna fisheries in 2017

In 2017 Tuna and tuna-like catches in Iran was equivalent to 274,589 tons that it's five-year average, estimates around 209,851 tons. The five-year statistics indicates that around 87% of catch attributed to tuna and about 37% of tuna and tuna-like catch composition was belong to tropical tuna.

Catches of tuna and tuna-like species have increased by 40%, from 196 thousand tonnes in 2006 to around 275 thousand tonnes in 2017.

Neritic tuna species are very important and have special ranking in coastal waters of Iran (Figure 5). In 2017 the amount of neritic tuna catches were about 143,000 Mt and It's five- years estimate was about 132,000 Mt that means 54% of dominant group of total volume of large species reported to IOTC, followed by tropical tuna (32%), billfishes (6.6%) and sharks (2.7%).

Nominal catch by species reported for the all fleet in 2017

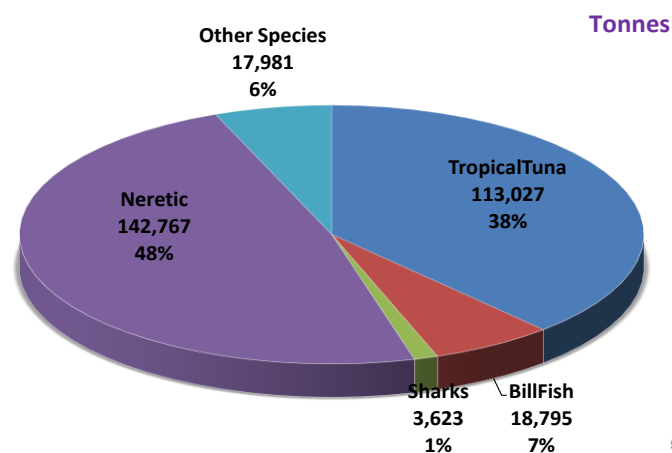


Figure 5: nominal Catch of tuna in 2017

Tropical tuna catch in 2017 was around 113 thousand tons which shows 29% increase compared to the same period last year. Of 113 thousand tons, around 53 thousand tones (47.2%) attributed to SKJ, 56 thousand tons (50.6 %) YFT and 3 thousand tons (3.2%) was belong to BET.

Catches of all three species of tropical tunas has increased in compare to the previous year. (YFT 24%, BET 17% and SKJ 36%).

During recent years, the peak of tropical tuna catch in Iran in 2006 was equivalent to 144 thousand tons. The catch for 2017 shows 22% decline compared to 2006.

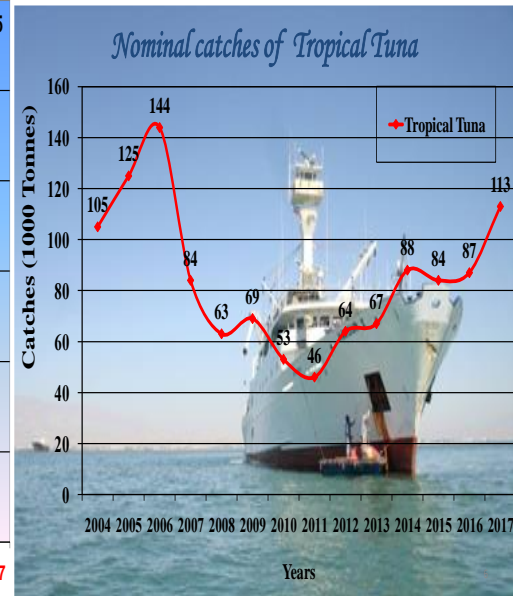
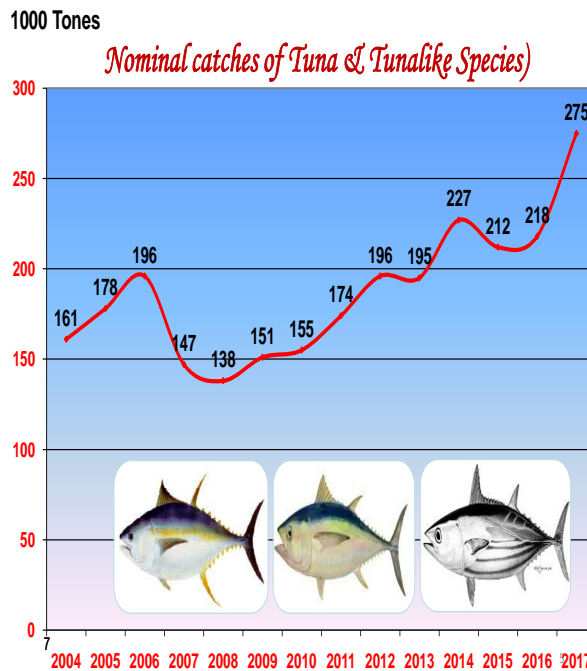


Figure 6: nominal Catch of tuna & tuna like Figure 7: nominal Catch of tropical tuna

Tropical tuna catch account for 44% of tuna and tuna-like species; it's 16% of total country catch and 9% of total aquatic productions.

In 2017, tropical tuna catches were about 113,000 tons and five-year average of it was about 78,000 tons, peak catches of it was 144,000 tons in 2006 and the lowest has been reported around 46,000 tons in 2011. The five-year average catches of tropical tuna shows that about 45.6% of catch belongs to skipjack, 51.6% yellow fin, and 2.8% big eye tuna.

In 2017, around 3.8% of tropical tuna catch in Iran carried out by using purses seine fishing gear, 88.4% by gillnet fishery and 7.8% by Trolling & traditional Longline.

The share of tropical tuna catch from total marine capture production in 2006 was around 34% which has fallen to 16% in 2017.

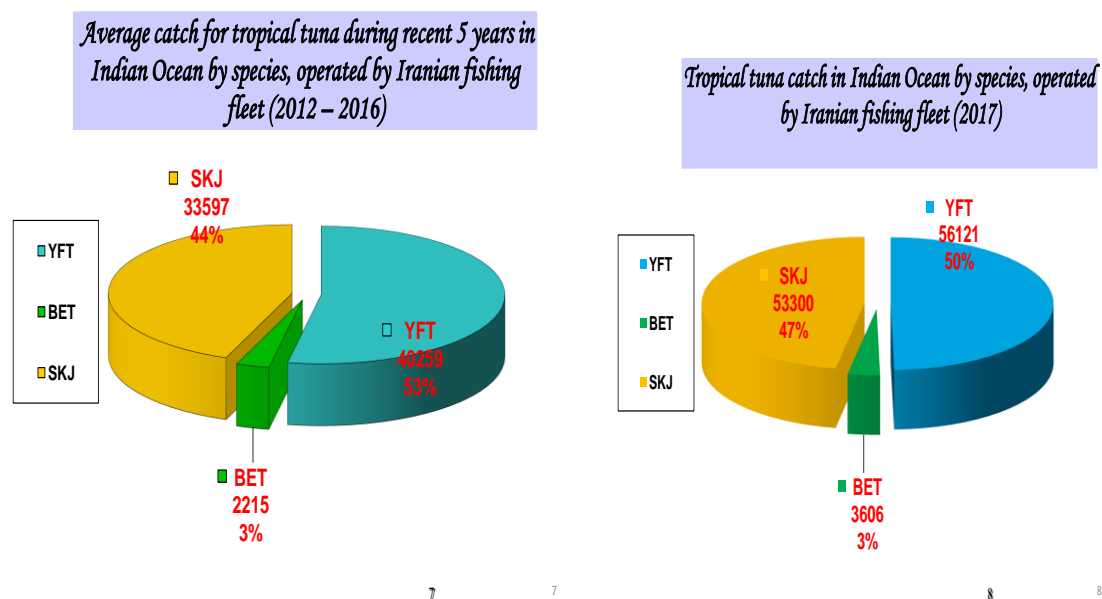


Figure 8: Average Catch of tropical tuna (2012-2016)

Figure 9: Percentage Catch of tropical tuna in 2017

The following diagrams show the catch trend of yellowfin tuna and skipjack. maximum catches of skipjack was 103,000 Mt in 2006 but after phenomenon of piracy it declined sharply to its minimum amount of 17,000 Mt in 2011, after that it increased slightly to 56,000 Mt in 2017.

The maximum catch amount of yellowfin tuna was reported 51,000 Mt in 2004 but after phenomenon of piracy it declined sharply to 16,000 Mt in 2007, after that it increased dramatically to 53,000 Mt in 2017.

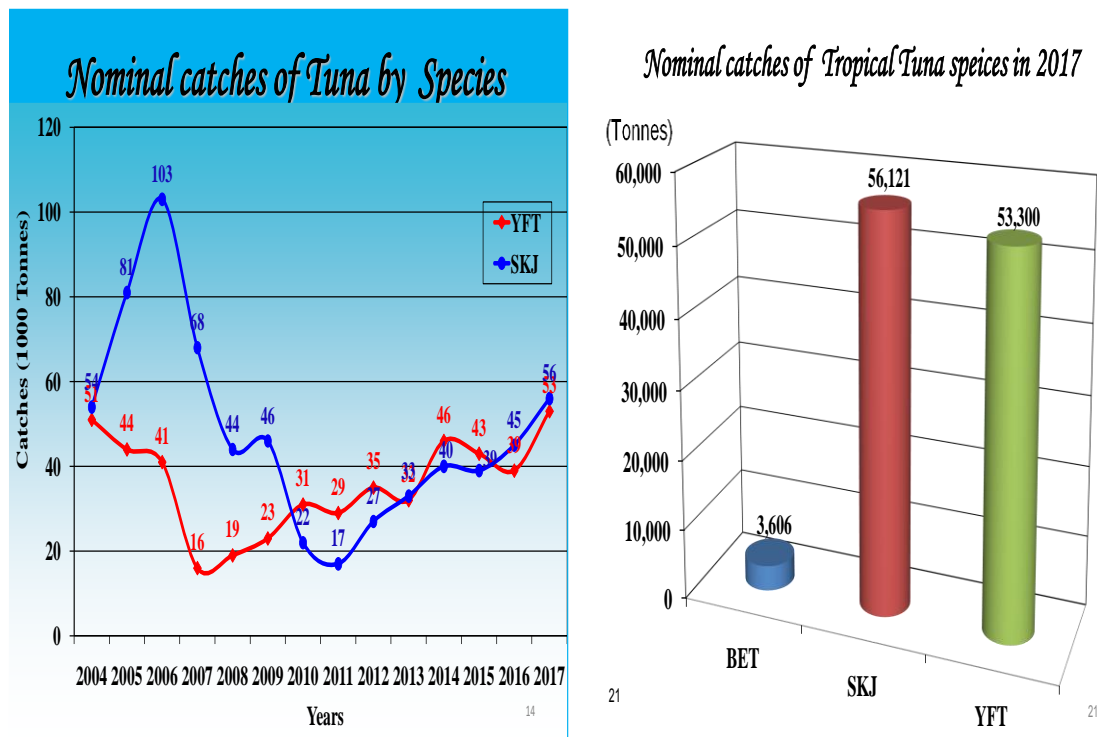


Figure 9 &10: nominal Catch of tropical tuna by species

Around 6287 fishing crafts were engaged in tuna and tuna-like fishing operation, of which 2758 were gillnet boats (less than 3 GT), 557 gillnet Dhows of less than 50 GT, 316 gillnet Dhows of 51-100 GT, 326 gillnet Dhows of more than 100 GT, 1820 Trolling boats of less than 3 GT, 324 traditional Longline boats of less than 3 GT, 165 traditional Longline Dhows of less than 50 GT, 14 traditional Longline Dhows of 51-100 GT and 5 Purse seiners. their Total fishing efforts were 877,940 days in 2017 of which, 653,815 days carried out by gillnet fishery, 196,440 days by trolling, 26,600 days by traditional Longline and 1,085 days by purse seine fishery.

The traditional Longliners are not included in total vessels number, because they are active seasonal and temporal during a year.

Fleet	2-Number of Fishing Craft recorded in the IOTC Database	2017
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GEAR GROUP	MECHANISATION	TYP E	FROM	TO	Unit s	Fish Preserv ation	vess els	Effort (per Day)
Purse seine	Mechanised	GT	500	100 0	t	FRZ	2	0
			1000	200 0	t	BRI	5	1,085
		Total Gear Group					7	1,085
Longline	Non- Mechanised	GT		< 3	t	ICE	324	19,440
	semi Mechanised	GT	21	50	t	ICE	165	6,600
	semi Mechanised	GT	51	100	t	ICE/F RZ	14	560
	Mechanised	GT	101	up	t	DFRZ	0	0
	Total Gear Group					503	26,600	
Gillnet	Non-mechanised	GT		< 3	t	ICE	2,758	438,046
	Non- Mechanised		3	20	t	ICE	239	43,035
	Non-mechanised		21	50	t	ICE	318	58,114
	semi Mechanised		51	100	t	ICE/FR Z	316	54,873
	semi Mechanised		101	up	t	FRZ	326	59,746
	Total Gear Group					3,957	653,815	
Trolling	Non-mechanised	GT		< 3	t		1,820	196,440
		Total Gear Group					1,820	196,440
TOTAL							6,287	877,940

Table 1: Fishing effort for large pelagic species by different vessel categories in 2017

Actions carried out for improvements of tropical tuna management in Iran:

- Increasing the number of tropical tuna size frequency from 1811 individuals in 2010 to 63,316 in 2017, also increasing the number of tuna and tuna-like species length frequency from 33,877 individuals in 2010 to 124,793 in 2017.
- In the past few years, Islamic republic of Iran carried out the following actions in line with IOTC recommendations and

approvals of WPTT, SC and the Commission, which lead to enhancement of compliance to related provisions and regulations from 11% in 2010 to 71% in 2017.

We are attempting to solve the remained issues and comply fully with IOTC provisions and regulations. Meanwhile it shall be noted that our fishing fleet is a small scale fleet and some regulations are very hard to follow in compare to those countries with industrial fleet.

- As the Long Line fishing method is more selective than Gillnet fishery, and that the catch quality and the cost of the fishing gear and equipment is cheaper in compare to gillnet fishery, Iran fisheries org. (IFO) is attempting to substitute the Gillnet fishery by Long Line fishery gradually, by doing so, around 8% of tuna and tuna like species were complied by LL method in 2017. We are planning to increase this proportion in 2018.