## Tropical Tuna Catch Trends in Iran

Present to 17<sup>th</sup> Session of the IOTC Working Party on Tropical Tuna (WPTT17), Montpellier, France

23-28 October 2015

By: Mokhtar Akhondi

Akhondi2200@yahoo.com

M-Akhondi, DG Fishing & Fishery Affairs of Iran Fisheries Organization

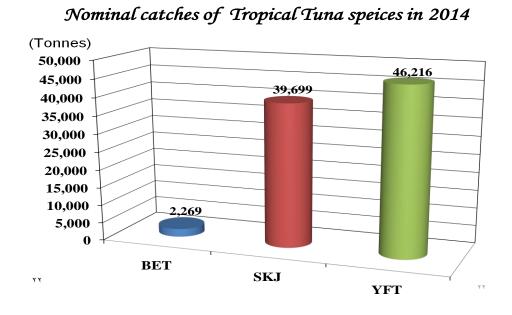
Tropical tuna catch in 2014 was around 88 thousand tons which shows 31% increase compared to the same period last year. Of 88 thousand tons, around 40 thousand tones (45%) attributed to SKJ, 46 thousand tons (52.4%) YFT and 2 thousand tons (2.6%) was the BET.

Catches of all three species of tropical tunas has increased in compare to the previous year. (YFT 43% BET 38% and SKJ 19%).

During recent years, the peak of tropical tuna catch in Iran in 2006 was equivalent to 144 thousand tons. The catch for 2014 shows 31% decline compared to 2006.

Tropical tuna catch account for 35% of tuna and tuna-like species, 15% of total country catch and 9% of total aquatic production.

In 2014, around 6.4% of tropical tuna catch in Iran carried out by using purses seine fishing gear and 93.6% by gillnet fishery.



## Figure 1. Nominal catches of Tropical Tuna speices in 2014

There are three categories of fisheries activities in Iran consist of the southern fishery, the northern fishery and inland fishery and aquaculture. As statistics shows level of aquatic production in 2000 was 425000 tons and in 2014 increased to 946,500 tons, which can be distributed as 57% (535860 tons) of the total catch and production contributed to the country fishing activities in the Persian Gulf, Oman Sea and offshore waters, about 4%(39640) of production from northern waters (Caspian Sea) and 39%(371000) through inland water and aquaculture.

Based on the information of 2014, the entire Tuna, Tuna-like and some other species caught by Iranian fishing fleets were 266937 tons including, 227193

tons attributed to Tuna and Tuna-like species (target species 85.1%), 21470 tons Billfishes (8.1%), 7551 tons Sharks species (2.8%) and 10734 tons Of the other species (4%) are caught by Iranian fishing vessels in the IOTC area of competence.

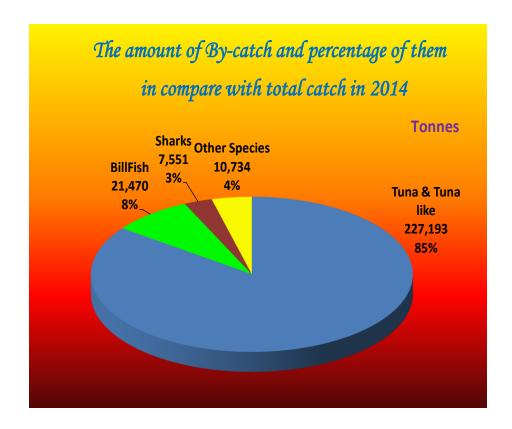


Figure 2. The amount of By-catch and percentage of them in compare with total catch in 2014

In 2014 Tuna and tuna-like catches in Iran was equivalent to 227,000 tons that the ten-year average of it estimates around 180,000 tons. The ten-year statistics indicates that about 90% of catching attributed to tuna and about 44% of tuna and tuna-like catch composition was belong to tropical tuna.

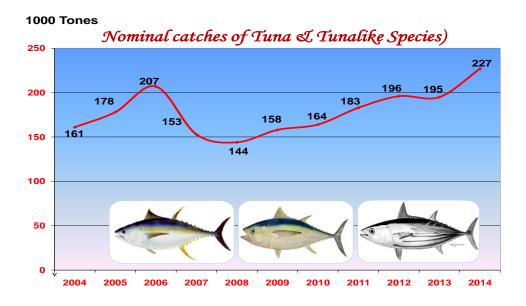


Figure 3. Nominal catches of Tuna & Tunalike Species

In 2014, tropical tuna catches were about 88,000 tons and ten-year average of it was about 80,000 tons, peak catches of it was 144,000 tons in 2006 and the lowest has been reported around 46,000 tons in 2011. The ten-year average catches of tropical tuna shows that about 60% of catch belongs to skipjack, 39% yellow fin, and 1% big eye tuna.

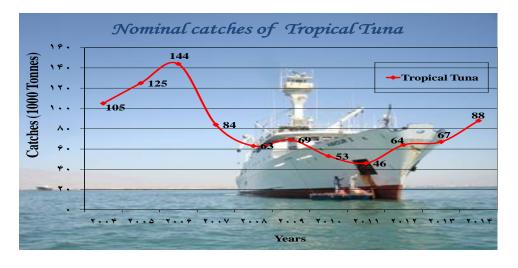


Figure 4. Nominal catches of Tropical Tuna in IRAN



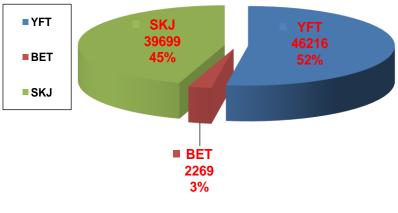


Figure 5. Nominal catches of Tropical Tuna by species

## Method for collecting and reporting Size data in IRAN (I.R. of) fisheries: Tuna Size Data Collection

- Sampling Coverage: 4 Coastal Provinces Total Sample Landing Places: 16
- Total Species sampled: 6 Tunas [YFT, SKJ, BET, KAW, COM, LOT]
- Size data collected for each Fishery: [Gillnet / Purse seine / Hook or Troll]
- Type of data compiled: length (FL)

Sampling Method: PORT SAMPLING

For tuna fishes, 1 fish per one tone catch shall be measured.

- Increasing data resolution for Size data by 5° grid area and month strata.
- Improving species identification: BET From YFT,...

General information: Size frequency data reported to IOTC per fleet, year, gear, type of school, month and 5 degrees square areas for surface fisheries (purse seine, Gillnet and trolling) and (alternative geographical area for coastal fisheries). The standard for the reporting of length frequency data to the IOTC mainly carried out in compliance with the Resolution 15/02.

• Species: the species of which the size data is reported include: all Tuna species (Tropical and Neritic tunas). It is not possible to provide size data for by-catch species at port, because majority of those species, are dressed weights and not the "whole fish" esp. Billfishes which are cut into small pieces immediately after catch, so it not possible to measure them at port.

Fish measurement details: fork lengths, measured straight with a caliper and, 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.

Sample coverage: At least 1 fish per ton is measured by species and fishing method, esp. for purse seine. Sampling is random and being representative of all the periods and area fished. But for oceanic gillnetters there is still a gap to achieve IOTC standards. This is mainly because there

is shortage of workforce and budget restriction at fishing ports, so, there are not enough hands to assist port samplers to fulfill IOTC requests.

- Size data for gillnetters: one of the problem in gillnet fishery is the net "mesh size" which is fixed throughout the panels; this will let the net to catch specific range of fish. Another problem is vessels position. At the moment we have conducted a pilot project for this purpose and gradually the project will cover all fleets fishing with gillnet and vessel position can be derived via logbooks.
- It is noteworthy to say that although size data is not reported according to IOTC mandate (form no. 4), but the report encompass all requested data by the IOTC (as specified in the guidelines).

Regarding tropical tuna size frequency for gillnet fishery, as the number of 800 Iranian fishing crafts classified as semi-industrial and small-scales are facing lack of workforce and shortage of budget to employ observer on-board, on the other hand, there are not suitable condition to accommodate such observers on board, so fish measurement is carried out at sample fishing ports and landing centers, and for collecting size frequency according to the related IOTC resolutions, a program is in progress to train the experienced and literate fishermen and preparing fish identification guidelines for them and planning to employ them as an observer on-board. Also logbook and VMS system will be consulted. Moreover, super control and surveillance will put into effect, to report catch and size data for upcoming years in compliance with IOTC data

collection standards. Of course the recent catch-and-effort data are submitted to IOTC secretariat by: species, type of fishery, month strata, vessel class and by province but they are not according to 1 degree grid area. We hope by a close cooperation with IOTC, we achieve this goal.

According to IOTC evaluation referring to member Countries compliance to IOTC rules, regulations and resolutions, the average level of member countries compliance in 2010 was 25%, for Iran it is reported about 11% and in 2014 the average indicator for member countries was 58%. During recent years Iran has carried out many efforts to enhance its compliance from 58% to 69%. Although there are still problems in some areas, but a lot of actions are in progress to remove those problems and build necessary infrastructures to fulfill all requirements, to sum-up Iran has a reasonably good condition.

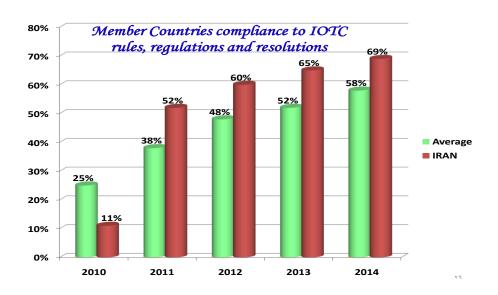


Figure 6. Member Countries compliance to IOTC rules, regulations and resolutions