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Neritic Tuna Catch Trend in I.R. Iran fishing activities with Particular reference to Longtail tuna

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Abstract

There are around 12 thousand fishing crafts in I.R.Iran in different classes which are engaged in fishing activities. Total volume of country catches in 2012 was around 500 thousand tonnes of which around 226 thousand tonnes attributed to tuna and tuna-like species which showed a considerable increase of 25 % in compared to previous year.

Neritic tuna plays an important role in the livelihood of coastal community. Tuna fish catch quantity in 2012 was equivalent to 136 thousand tonnes. Longtail tuna plays an important role and is in higher value in catch composition of neritic tuna, so that it includes approximately about 60% of Neritic tuna catches.

Longtail tuna catch trend has been accompanied with fluctuation in recent years which depend on different conditions of fishing and exploitation. Since 2006 onward, it shows an increase in trend.

Given the importance of tuna fishes in the country and necessary coordination with the secretariat of IOTC to conform to the requirements of the relevant legislation and the provision of relevant executive, was carried out so that the fishing data collection, crew training, By-catch composition evaluation, designing and distributing of logbook were fulfilled according to the IOTC demanded format, also action taken with high priority to prepare Persian version of guidelines for some group of species including: Tuna fish, Billfishes, Sharks and formulating capture fishery data according to vessel's geographical position which are of attach-importance.

Introduction

As the Neritic tuna catches share a significant contribution in the livelihood of coastal dwellers in terms of catch and revenue, so it has been noticed by public and private sectors and has a special place in a fishery Management Plan.

Total volume of country aquatic production in 2012 was around 840 thousand tonnes of which around 500,000 tonnes was production share of fishing activities of which about 460 thousand tonnes was exploited from Persian Gulf and Oman Sea fishing grounds. The catches include: Large Pelagic, Small Pelagic, Demersals, Shrimp and Lanternfishes (Myctophidae). Large pelagic allocated a large amount of a catch to itself with 236,000 tonnes which account for approximately more than 51% of total catches of Persian Gulf and Oman Sea.

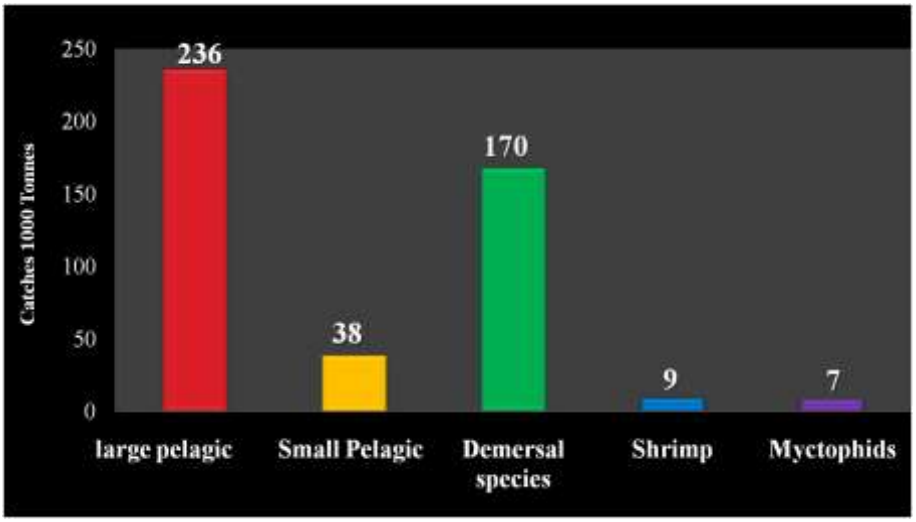
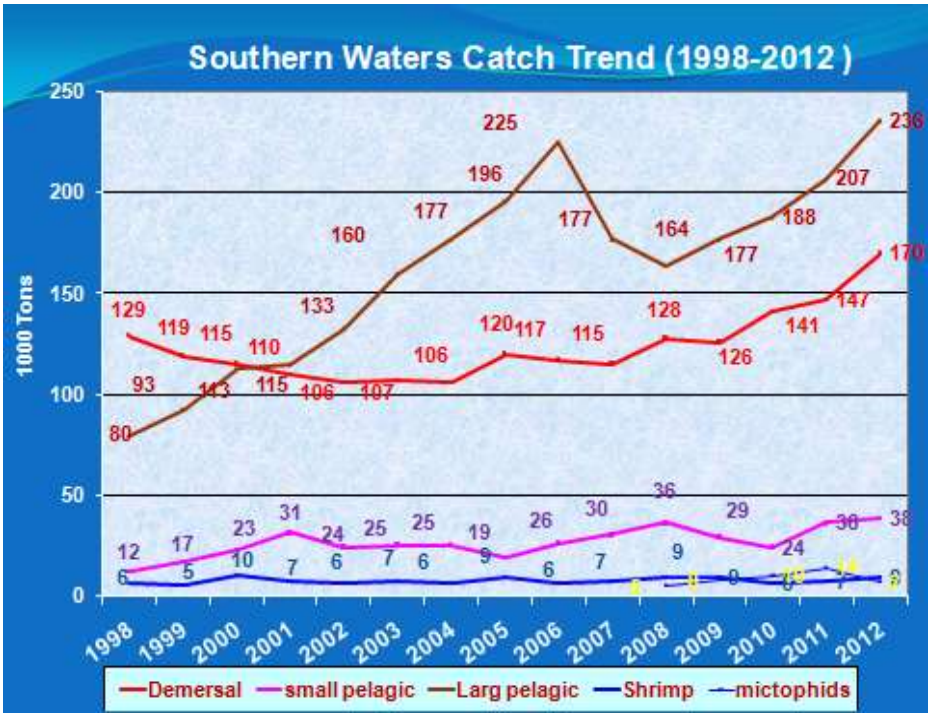


Fig. 1: Diagram shows Catches of Aquatic Groups in 2012

The Catches

The following diagram shows the catch proportion of different aquatic groups in 2012. The catches of large pelagic were equivalent to 236 thousand tonnes, small pelagic: 38 thousand tonnes, Demersal: 170 thousand tonnes, Shrimp: 9 thousand tonnes and lanternfishes 7 thousand tonnes.



Different species of tuna fishes in Iranian waters comprised of longtail tuna, yellowfin tuna, skipjack tuna, Kawakawa, Bigeye tuna, Narrow-barred Spanish mackerel and Indo-Pacific king mackerel which play a role commensurate with their value and economic status in fishermen fishing activities. In evaluating the catch composition of different tuna species since 2001 onward, taking into account the fishing efforts and assessment of CPUE, a broad picture from fish Stocks can be obtained and related fluctuations can be evaluated for different years.

For fishery data collection a sampling method is used. It means 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. Also fishing efforts of active fishing vessels will be registered and used to raise sample data.

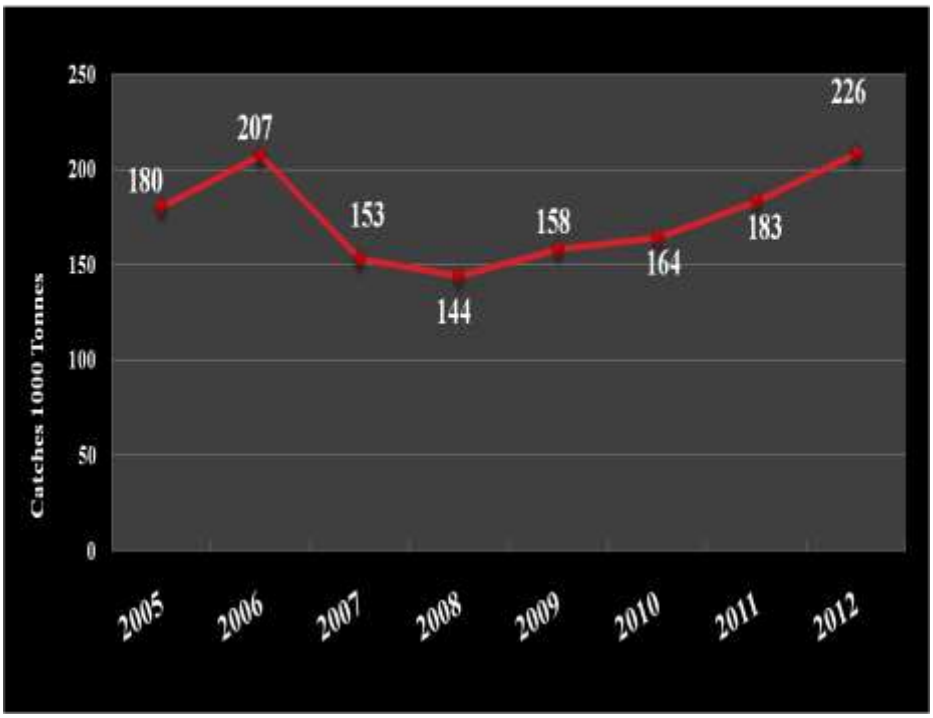


Fig.4: The diagram shows tuna and tuna-like catch trend during recent years

Total number of country fishing fleet in 2012 was about 11586 comprised of fishing boat, dhows, and ship, of which approximately 6700 are engaged in tuna fishing activities. Their total registered fishing efforts in 2012 amounts to I million days.

Fig. 6: Picture of fishing vessels

Fig. 7: Picture of fishing vessels

Longtail tuna

Longtail tuna plays an important role in catch composition of neritic tuna. So that the catch amount the species in 2012 was equivalent to 76 thousand tones which account for more than 50% of total neritic tuna catch.

Neritic tuna in Iran coastal waters comprised of: longtail tuna, Narrow-barred Spanish mackerel, Indo-Pacific king mackerel, Kawakawa and Frigate tuna. In 2012 total

Neritic tuna catch was around 144 thousand tonnes which showed an increase trend in compared to previous years.

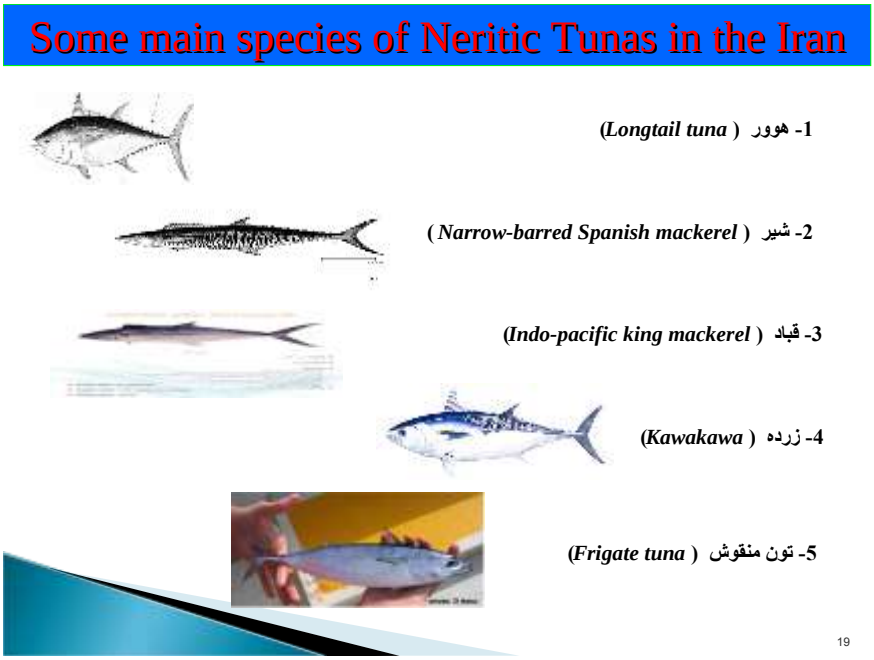


Fig. 8: Picture of Neritic tuna

Fig. 9: Nominal catches of Neritic tuna

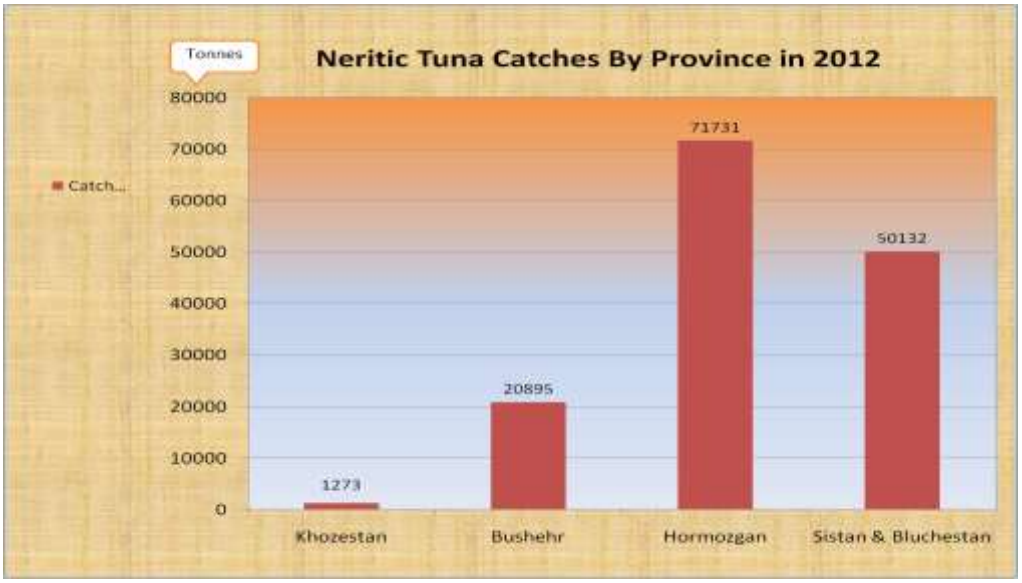


Fig. 10: Catches of Neritic tuna by Province in 2012

Greater parts of fishing fleet in Sistan-and-Bluchestan Province are in high capacity and these fishing dhows are engaged in offshore fishing activities. So in their catch composition, yellowfin tuna and skipjack tuna are frequent. A review of longtail catch in different provinces shows that greatest volume of longtail catch was attributed to Hormozgan Province.

An evaluation of Neritic tuna catch for different months of the year in 2012 suggest that appropriate conservation and management policy and balancing between the level of fishing effort and fish stock, of course, in June and July simultaneously with the Monsoon season in Oman Sea a large number of fishing crafts cease their fishing activities consequently Neritic tuna catch would be decline during this period.

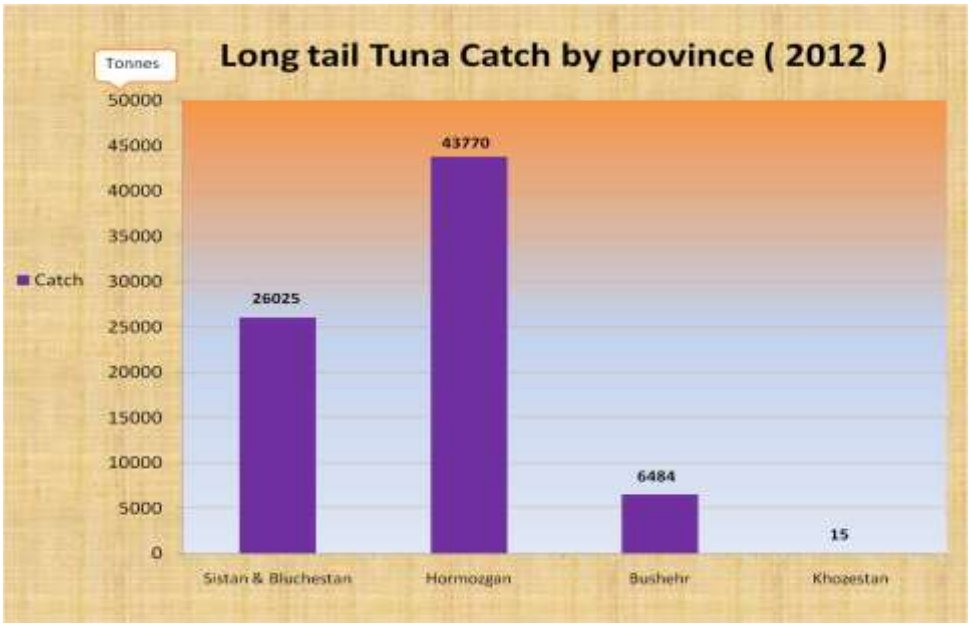


Fig. 11: Catches of longtail tuna in 2012 by Province.

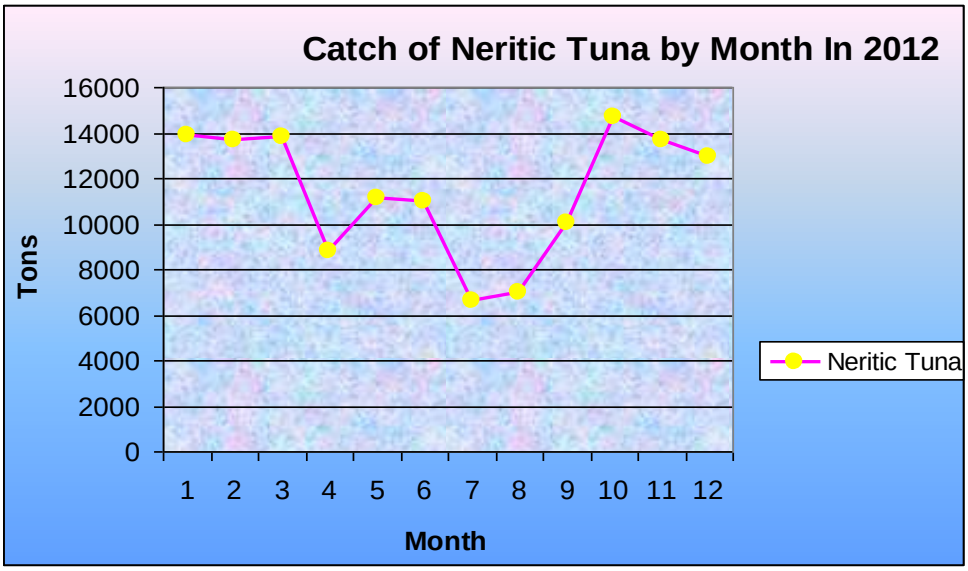


Fig.12: Annual distribution of Neritic tuna catch in 2012.

Also registered fishing efforts for tunas and tuna-like fishes during recent years and comparing of fishing efforts and mean CPUE for longtail tuna will be considered and evaluated.

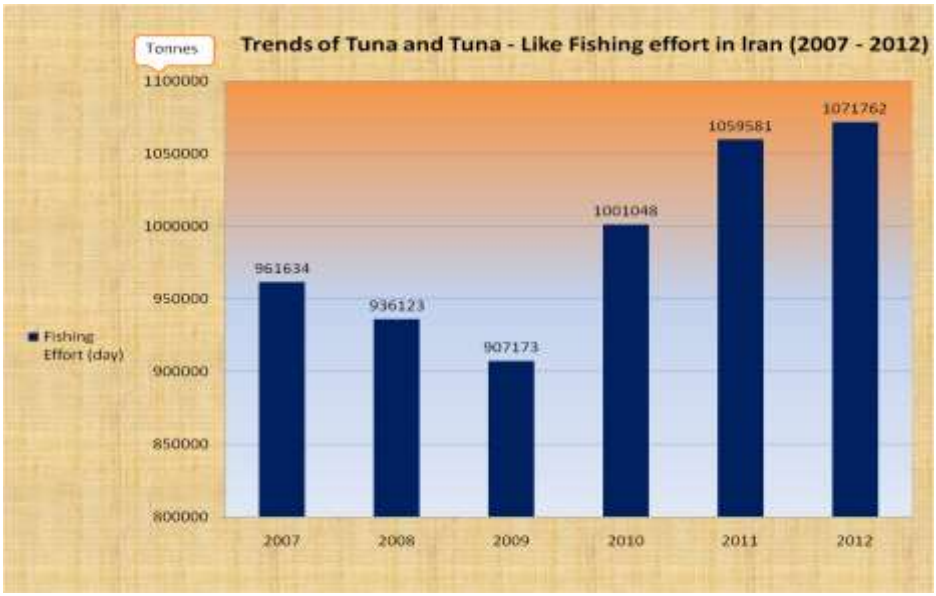


Fig. 13: Catch trend for tuna and tuna-like fishes during (2007-2012).

Main management measures and executive coordination

During recent years much efforts have been made to provide necessary fielded to comply the IOTC approvals with the country condition and follow related subject matters. Meanwhile, for better understanding, the issue will be discussed for exploiters of fisheries resource and address sustainable and long-term exploitation of fisheries resource appropriate with the responsible fishery objectives.

Some of the main actions and substantial planning are: fishermen training and exploiter community, fishery data collection according to the demanded format, design and distribution of fishing logbook, providing guidelines for yellowfin and bigeye tuna and some other measures.

Also as a pilot project, By-catch and Discard data collection carried out on a few fishing Dhows. By continuing doing this with an appropriate planning, it can be seen as a complementary control measure is used in conjunction with a data collected.

Establishing a suitable environment for implementing IOTC rules and regulations in the country and among the fishing community are of successes in recent years which are important and to this end, Code of Conduct for Neritic tuna Management has been prepared and communicated.