NATIONAL REPORT ON TUNA FISHERIES AND ITS DEVELOPMENT IN INDIA

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Introduction

India being the fourth largest marine fish producer in the world and second in inland fish production, has very vital role in the world fisheries. The present marine fish production from the 2.02 million sq.km EEZ area is about 2.9 million tonnes against the potential of 3.92 million tonnes leaving limited scope for further enhancement from near shore waters. The remaining one million tonnes fish to come from the deepsea and oceanic regions. During 2006-07 Indian marine fish products export was to the tune of 1.85 billion dollars and the target for the current year is 2 billion dollars. The main component of the marine products export from India being shrimps, the Government has decided to lay a greater focus on the products like tuna.

Presently, nearly 80 nations harvest tuna from the oceans of the world. Though, India has vast tuna resources their exploitation to the optimum level has not made any impressive progress, may be due to lack of awareness about the resources and non-availability of appropriate technology and infrastructure for tuna fishing. The Fishery Survey of India, Mumbai has successfully located various tuna resources grounds all along the Indian coasts including Andaman and Nicobar Islands and made tuna longline fishing familiar in India. Presently, with the newly acquired two monofilament tuna longliners **Matsya Vrushti** and **Matsya Drushti** the monofilament

longlining is introduced for the first time in Indian Waters and reported fairly good tuna catches.

Tuna production in India

India's production of tunas and tuna-like fishes during 2006 was about 1,14,269 tonnes. The coastal fishery contributed 1,13,145 tonnes whereas, the contribution of deepsea / oceanic tunas was 1124 tonnes. The total catch of neritic tunas was 64,056 tonnes, billfishes 301 tonnes and seerfishes 49,089 tonnes. The main constituents of neritic tunas were kawa kawa, frigate tuna, skipjack tuna and longtail tuna while the main species of seerfishes were *Scomberomorus commersoni* and *S. guttatus*. The major constituents of longline gears were yellowfin tunas and billfishes. The gears used were drift gill net, hook and line, longlines and trawl nets.

Coastal fisheries

The species composition of coastal tunas is given in Table-1. The main gears used were drift gillnet and hook and line.

Sr.No.	Species	Catch (tonnes)
1	*Euthynnus affinis*	30607
2	*Auxis thazard*	16175
3	*Katsuwonus pelamis*	3330
4	*Thunnus tonggol*	6115
5	Other tunnies	7829
	TOTAL	**64056**

Source : Central Marine Fisheries Research Institute

Oceanic fisheries

In the oceanic fisheries, the target species are yellowfin tuna, bigeye tunas and skipjack tuna. However, there have been contributions by swordfish, sailfish, marlins and sharks. The gears used in the oceanic survey

are conventional multifilament longlines and monofilament longlines. The catches of the tuna longlining vessels in the Indian EEZ are given in Table-2.

Table-2 : Oceanc fisheries - catches by species

Sr.No.	Species	By longlining (t)
1	Yellowfin tuna	793.5
2	Skipjack	0.6
3	Sailfish	86.0
4	Swordfish	104.8
5	Marlin	110.4
6	Sharks	9.7
7	Others	18.9
	TOTAL	**1123.9**

Source : Fishery Survey of India

By-catches

The by-catches of tuna fisheries are billfishes, sharks, wahoo and barracudas. The preliminary estimate of these catches in the oceanic fisheries is about 330 tonnes.

Scientific research programmes

The following research pertaining to tunas are being undertaken by Fishery Survey of India and Central Marine Fisheries Research Institute during the year.

1. Fishery Survey of India

- Survey of oceanic tuna and allied resources using regular longline in Indian EEZ along Northwest coast between Lat.14°-23°N
- Tuna resources survey in Indian EEZ around Andaman and Nicobar Islands between Lat.5°-15°N
- Tuna resources survey using monofilament longlining in Arabian Sea including Lakshadweep between Lat.4° and 23°N

- Tuna resources survey using monofilament longlining in the Bay of Bengal, including Andaman Sea between Lat.10° and 21°N
- Species specific fishery forecast with special reference to oceanic tunas in collaboration with Space Application Centre of Indian Space Research Organization using satellite remote sensing technique

2. Central Marine Fisheries Research Institute

- Assessment of exploited marine fishery resources : seerfishes, coastal tunas and billfishes
- Appraisal of marine fisheries of maritime States including seerfishes and coastal tunas
- Tuna resources of Indian EEZ - An assessment of growth and migratory patterns