



Regional Dialogue on Management of Highly Migratory Fish Species  
in the Bay of Bengal  
*23 November 2017; Kochi, India*

**Regional Dialogue on Highly Migratory Fish Species  
In The Bay Of Bengal, Sri Lanka**

Department of Fisheries & Aquatic Resources  
Sri Lanka



# Regional Dialogue on Highly Migratory Fish Species In The Bay Of Bengal

**Sri Lanka**

21-24 November 2017 Kochi, India

# Fisheries Sector

Coast line around the Island- **1,730 Km**

Territorial Sea of  
**21,500 \*Sq. Km**

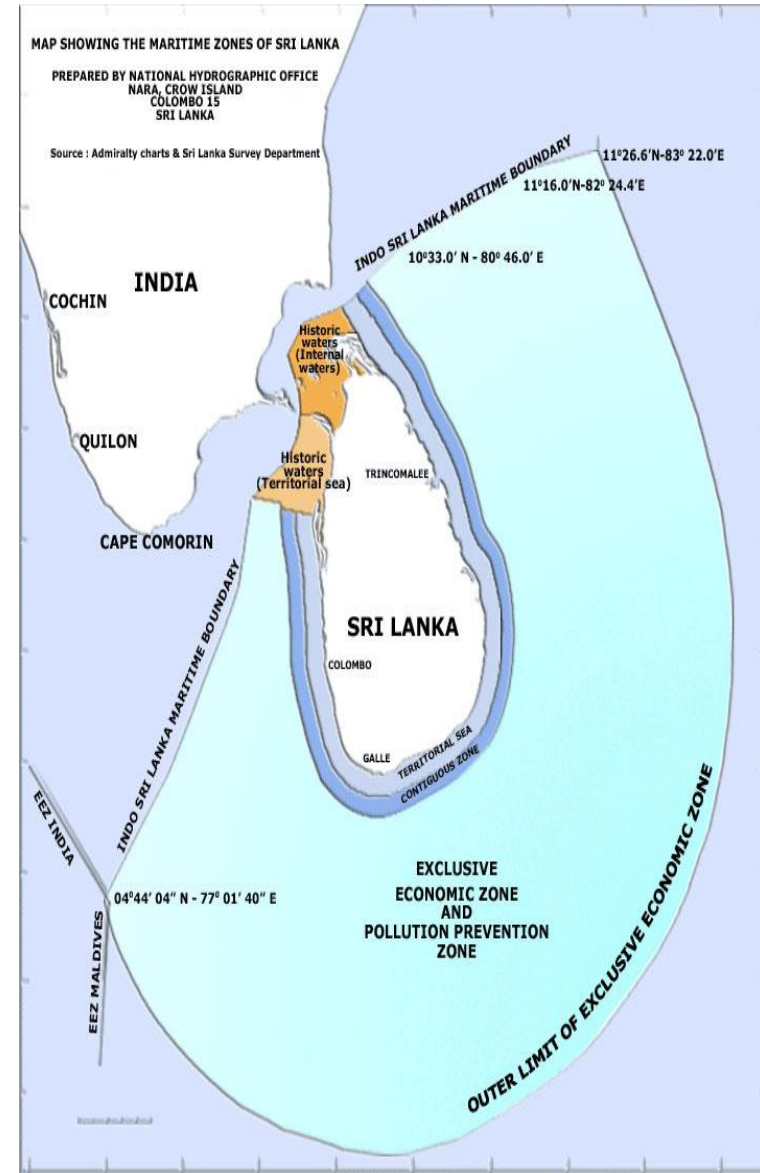
Exclusive Economic Zone (EEZ) of **517,000 Sq. Km**

Total Extend of Fresh water Bodies **260,000 Hectares**

Fisheries have been identified as an important sector of Sri Lanka.

The sector is important to the economy in terms of, Employment  
Foreign exchange earnings, Protein supply to the nation

Contribution of fisheries sector to the GDP is 1.7





# Historic Development of offshore fishery in Sri Lanka:

- Several attempts have been made to expand the fishing more towards the offshore areas, since the 1960s.
- The most effective phase of development began in the early 1980s with the introduction of 8.0 9.8 m boats to conduct multi-day fishing operations in offshore waters in Sri Lanka
- With the development of multi-day crafts and gears, offshore fishing has expanded rapidly with a substantial increase of marine fish production in the country, especially since the 1980s.
- The offshore fishery mainly targets a large number of highly migratory species such as tunas, sharks and bill fishes. The tuna fisheries are dominated by the highly migratory skipjack and yellowfin tunas.

- Exploration and exploitation of the fishery resources in the Indian Ocean area over the past three decades have shown that the tuna resources in Sri Lanka consist of several species. They are yellowfin tuna (*Thunnus albacares*), big eye tuna (*Thunnus obsesus*), skipjack tuna (*Katsuwonus pelamis*), kawakawa (*Euthynnus affinis*), frigate tuna (*Auxis thazard*) and bullet tuna (*Auxis rochei*)
- The first three species are known to be widely distributed in other parts of the Indian ocean Among tuna species, skipjack is dominant in offshore areas, followed by yellowfin tuna



The group of billfishes (family Istiophoridae) includes marlins, sailfishes and swordfishes. Five species of billfishes have been identified in local commercial landings, black marlin (*Makaira indica*), blue marlin (*Makaira nigricans*), striped marlin (*Tetrapturus audax*), sailfish (*Istiophorus platypterus*) and swordfish (*Xiphias gladius*)



# LARGE PELAGIC FISH

## EEZ and High-Seas

Skipjack tuna (*Katsuwonus pelamis*)

Yellowfin tuna (*Thunnus albacares*)

Bigeye tuna (*Thunnus obsesus*)



## Neritic tuna

Kawakawa (*Enthynnus affinis*)

Frigate tuna (*Auxis thazard*)

Bullet tuna (*Auxis rochei*)





# OTHER LARGE PELAGIC SPECIES ASSOCIATED WITH TUNA

## Bill-fish varieties

Indo Pacific blue marlin

Black Marlin

Striped marlin

Indo pacific sail fish

Sword fish



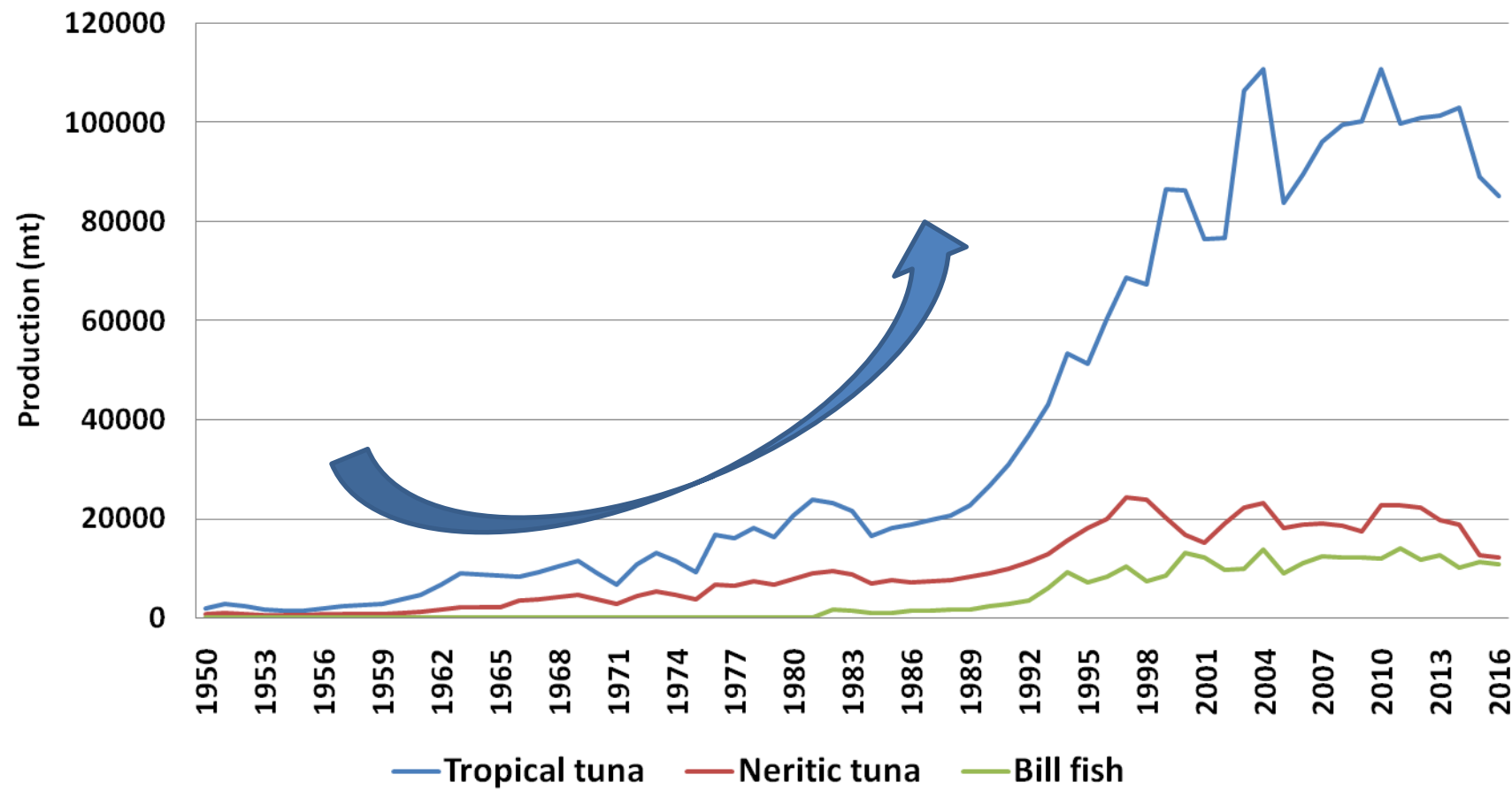
## Spanish Mackerels

## Pelagic sharks and Rays





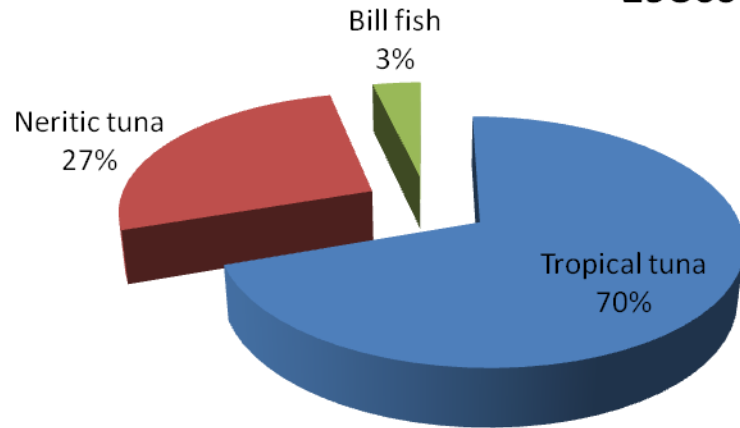
# HIGHLY MIGRATORY FISH SPECIES: HISTORICAL TREND IN SRI LANKA



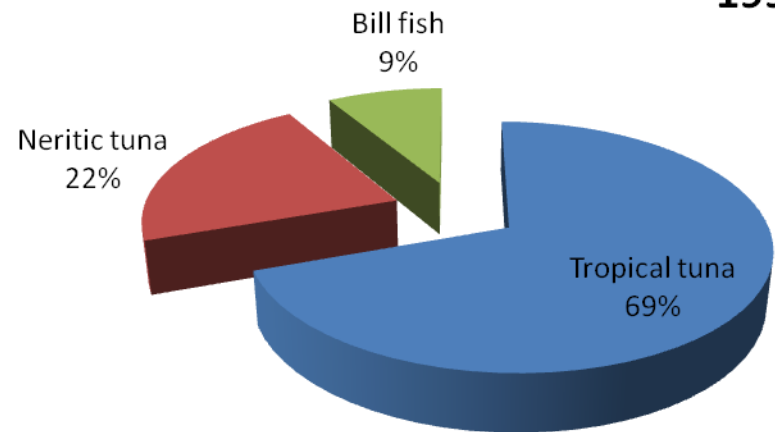
Source: IOTC data base

# AVERAGE COMPOSITION OF HIGHLY MIGRATORY FISH GROUPS DURING FOUR DECADES:

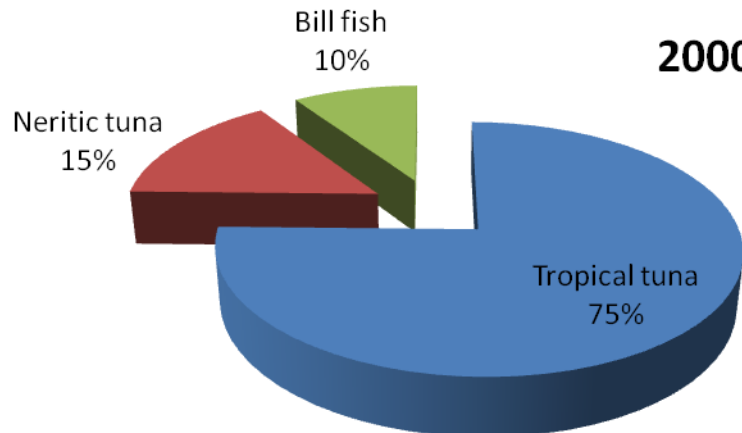
**1980s**



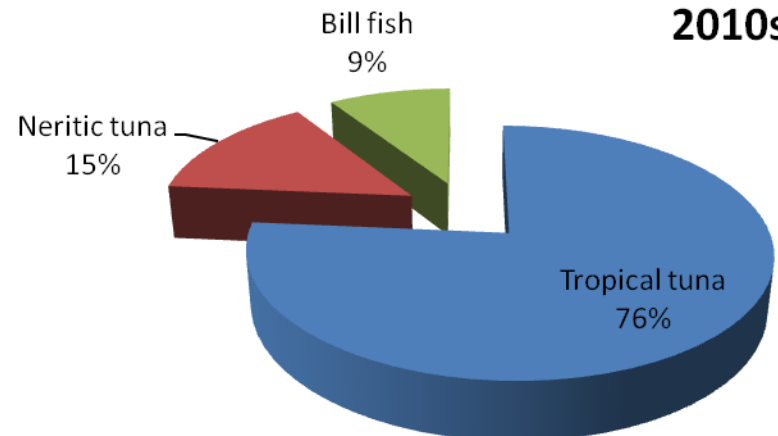
**1990s**



**2000s**

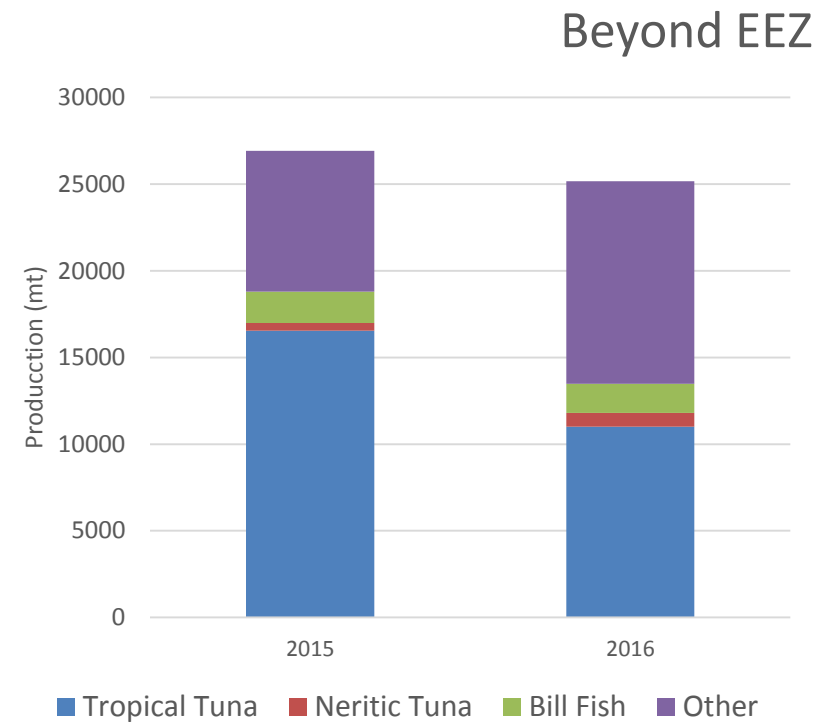
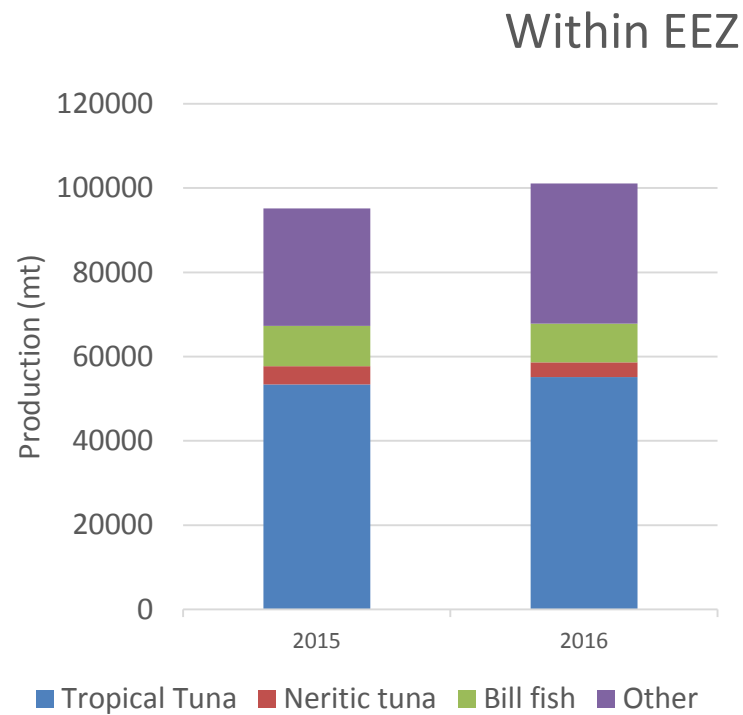


**2010s**



**Source: IOTC data base, 2016**

# Catch Composition



# Markets

- Tuna accounts for 51.5% percent of the total fish and fishery products exports of Sri Lanka. Export contribution of European market in 2016 is 16.7%, Japanese market 3.7%, USA 36.6% and other states 43%.





# Management of HMFS

## **Legislation**

Fisheries and Aquatic Resources Act, No. 2 of 1996 amended by the Acts, No. 35 of 2013, No. 2 of 2015, No. 2 of 2016 (Considering the length of the vessel and the catch), No. 11 of 2017

## **Regulations**

- Fish Catch data collection Regulations 2014

Log books have been issued to all IMUL vessels (4072)

Introduction of electronic Log books is underway

Verification of log book data is done at the high seas unit

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# Management of HMFS *cont*

- Introduction of electronic Log books is underway  
Verification of log book data is done at the high seas unit
- Fishing Gear marking regulations 2015
- Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing regulations 2015
- Implementation of Satellite based Vessel Monitoring System (VMS) for Fishing Boats Operating in High Seas Regulations 2015 (1500 vessels are equipped with transponders)

# **Monitoring, Control and Surveillance (MCS) Activities**

- A radio communication (SSB) network to facilitate communication between fishing boats and district fisheries offices or FMC
- Intensified inspection of fishing boats by authorized officers before-departure and after-arrival at 19 fishery harbours

# Issues in Management of HMFS

- Lack of staff
- Lack of Funds
- Lack of awareness among stakeholders
- Lack of Trainings/Capacity buildings
- Post harvest losses



# International and Regional Cooperation

## **International Conventions related to Management of Fisheries**

Sri Lanka is a Party to the following conventions and therefore has to abide by the requirements under them.

- United Nations Convention on the Law of the Sea 1982
- Indian Ocean Tuna Commission Agreement 1993
- FAO Compliance Agreement 1993
- FAO Code of Conduct for Responsible Fisheries 1995 and International Plans of Action
- UN Fish Stocks Agreement 1995
- FAO Port State Measures Agreement 2009

A detailed illustration of a school of yellowtail tuna swimming in the deep blue ocean. The fish are depicted with realistic detail, showing their sleek bodies, large eyes, and prominent fins. The water is a deep blue with some lighter blue highlights near the surface, suggesting sunlight filtering down. The overall scene conveys a sense of movement and natural beauty.

THANK YOU