

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

#### Potentialities of Highly Migratory Fish Stock in the Bay of Bengal, Bangladesh

#### Ministry of Fisheries & Livestock Bangladesh



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## Highly migratory species (HMS)?

The term highly migratory species (HMS) has its origins in Article 64 of the UNCLOS. The UNCLOS Annex-1 lists the species as HMS includes: tuna & tuna like species, pomfret, marlin, sailfish, swordfish, saury, sharks, dolphins and other cetaceans.

## **Marine resources of Bangladesh**

Total fish production are more than 3.88 million MT in which 0.63 million MT is marine (2015-16). In our marine territory totally:

- > Maritime area: 284,813 sq. km.
- Marine fishes: 475 nos
- Marine shrimps: 36 nos
- Shark & rays: 53 nos
- Crab & Lobster: 16 nos
- Marine turtles: 05 nos
- Mollusks: 301 nos.



#### Contribution of marine fisheries production (% by weight) a. Sector wise (1) Industrial: 17 (2) Artisanal: 83 b. Gear wise

- 1) Trawl net: 12.68
- 2) Gill net: 56.55
- 3) Set bag net: 24.61
- 4) Long line: 2.59
- 5) Trammel net: 1.88
- 6) Others: 1.69

R.V. Meen Sandhani undertake scientific cruise from December 2016



### c. Group wise production(%)

- Hilsa: 40.10
- Bombay duck: 10.86
- Pomfret: 6.83
- Jew fish (Croakers): 6.56
- Sardine: 3.49
- Cat fish: 3.40
- Indian Salmon: 0.52
- Sharks & rays: 0.67
- Others fish: 17.60
- Shrimp (Tiger, Brown, White & others): 9.97



### **Tuna & Tuna-like Fishery in Bangladesh**

- The Indian ocean provides about 20% of the global tuna catch.
- Presently there is no specific tuna fishery in Bangladesh.
- No survey have been done solely to explore, assess & to exploit the tuna & tuna like resources in the EEZ.
- Tuna or tuna like fishes are by catch of industrial trawlers & artisanal gill netters.
- In industrial trawl catch, tuna fish contributed only 2.% of total marine production.
- Bangladesh has become 'Cooperating Non-contracting Party' in IOTC (Indian Ocean Tuna Commission)
- Bangladesh is under process to allow 5 private tuna long liner (out of 10) operators to catch tuna & tuna-like species in Bangladesh water.
- Also a pilot project to catch tuna fish by long line through PPP in under process

#### Tuna species in Bangladesh water.....

- 7 tuna spp. recorded in Bangladesh marine territory, mainly South Patches & Middle ground areas. These are:
- ✓ Auxis thazard- Frigate tuna,
- ✓ Auxis rochei -Bullet tuna,
- Euthynnus affinis -Eastern little tuna/ kawakawa,
- ✓ Thunnus albacares -Yellow fin tuna,
- Thunnus obesus -Big eye tuna,
- ✓ Thunnus tonggol- Long tail tuna &
- ✓ Katsuwonus pelamis Skipjack tuna

Gill nets, hooks & lines in artisanal fishing	Industrial trawlers
Auxis thazard Euthynnus affinis Thunnus obesus	Auxis rochei Katsuwonus pelamis Thunnus tonggol
Thunnus albacares	

BIMSTEC survey (2007) confirmed the presence of unexploited tuna resources (Yellow-fin, Skipjack and Big-eye) in Bangladesh EEZ.



#### Landing of tuna fisheries.....





#### Common tuna fish: Eastern little tuna, Euthynnus affinis



#### Common tuna fish: Big eye tuna, Thunnus obesus



#### Indian Sail fish, Histiophorus gladius



## Marine catch trend......

- Overall total marine production increase, but CPUE decrease.
- Because number of fishing boats/ trawlers, gears & active fishing days increases.
- Large size of commercial species numbers decrease with the increase of small size fish.
- Introduce new species (e.g.- sardine species)

### Management of marine fisheries.....

- Marine fishing sector is governed by the Marine Fisheries Ordinance, 1983 & Marine Fisheries Rules, 1983.
- Trawlers are allowed to catch fish/shrimp in area of no shallower than 40 meter depth. Mechanized fishing boats are allowed to fishing within 40 meter depth.
- As the demersal fishes are under pressure, the focus of fishing towards pelagic resources are increasingly being observed after conversion of demersal fish trawlers into mid water trawlers.
- A new act 'Marine Fisheries Act, 2017' is approved by Cabinet of Bangladesh & will get final approval shortly.
- A 65 days (20 May to 23 July) ban period imposed for trawl fishing since last 2 years.
- The MCS activities in offshore operation depends on Bangladesh Navy & Bangladesh Coast Guard.

## What to be done.....

- Details of biology, stock status, exploitation level & harvestable biomass need to be studied.
- To study the stocks of tuna, linkages should be established with IOTC and the knowledge of India, Sri Lanka & Maldives (BOBP) could also be shared.
- Bangladesh placed a request to FAO to cooperate with Norwegian Govt. & provide a survey vessel for detailed pelagic survey.
- Preparatory phase of a mega project funded by World Bank to develop the marine and coastal fisheries sustainability.
- BOBLME Second Phase is in pipe line for overall development of BOB fisheries in the region.

### Regional & bi-lateral issues.....

- Strengthening catch & effort data collection system and establishing an online national & regional comprehensive database that would be necessary for scientific fisheries research, emphasizing marine sector.
- Sufficient investment should be ensured for research & development of the marine sector.
- A regional research vessel with expert in resource assessment may provide help to the member countries by rotation for assessment & sustainable utilization of the marine resources.
- Exchange of technical know-how among the member countries in the field of stock assessment, product development & quality control of marine fishery and its products.

# Thank You All .....