



#### VIRTUAL REGIONAL WORKSHOP ON BIVALVE MOLLUSCS SANITATION

9, 10, 11 December 2020

BIVALVE MOLLUCS OF BANGLADESH : OFFICIAL CONTROL MD. YOUSUF KHAN, PSO(FIQC), DoF

# **Bivalve fauna of Bangladesh**

- Bangladesh being a small deltaic country is abundant with freshwater and marine resources
- Bangladesh has a coastline 480-km long and approximately 1 million hectares of territorial waters, and about 4.7 million hectares of freshwater open and closed water bodies which are abundant with bivalves.
- The major bivalve groups in order of abundance are clams, oysters, and mussels.
- Six freshwater and 142 marine bivalves have been recorded from Bangladesh waters
- Freshwater Mussels are distributed throughout the country in the natural water bodies like rivers, floodplains, lakes etc. as well as aquaculture ponds
- Marine bivalves are mainly distributed in the South Eastern coastal region of Bangladesh, and in the Bay of Bengal
- The present exploitation is far below the level of natural production and confined to wild stocks; bivalve culture is not commercially practiced.

#### Important Bivalve Species of Bangladesh: Oysters

- Oysters grow attached to rocks, gravel, tree roots or any hard object in the intertidal zone.
- Abundant in in brackish waters in estuaries and marshes.
- Edible oysters: Seven species of edible oysters are found in the coastal areas of the country. Important species are-
  - Saccostrea cucullata
  - Crassostrea belcheri
  - Crassostrea madrasensis
- Pearl oysters : Eight species of genus *Pinctada* and one species under *Placuna* belongs to pearl oyster are available in Bangladesh. Important species are-
- Pinctada fucata
- Pinctada margaritifera
- Pinctada maxima
- Placuna placenta





#### **Important Bivalve Species of Bangladesh: Mussels**

- Mussels are found in both freshwater and saline water environments.
- Important species of mussels
  - Lamellidens marginalis
  - Lamellidens jenkinsianus
  - Perna viridis
  - Perna indicus





### **Important Bivalve Species of Bangladesh: Clams**

- Few species of clams are found in coastal region of Bangladesh. Among them two species i.e., *Meretix meretrix* and *Anadra* sp. are found abundantly in the muddy coast of nearly all estuarine areas.
- List of important species of clams in Bangladesh
- Meretrix meretrix
- Anadara granosa
- Anadara antiquata
- Scapharca sp.
- Barbatia foliata



## **Economic importance of Bivalve Molluscs**

- Use of shell in poultry and fish feed industries
- Lime making
- Human consumption of mollusk meat
  - People from Rakhaing and some other tribes of the coast traditionally have long been eating green mussel, clam and oyster meat
- Use of meat used in shrimp hatcheries
- Ornamental and decorative uses
- Paint making/shining
- Pearl culture/collection

## Official Control of Bivalve Products in Bangladesh

- Department of Fisheries, Bangladesh is the Competent Authority
- Regulations
  - Fish and Fish Products (Inspection and Quality Control) Act, 2020
  - Fishery Products: Official Control Protocol
- Testing of bivalve molluscs: No parameter of testing bivalve molluscs yet developed in Bangladesh
- DoF is implementing a pilot project on oyster culture in the Cox's Bazar Area
- Bangladesh Fisheries Research Institute is involved with the experimental production of freshwater pearls
- Consumption of meat of oyster or mussel in Bangladesh is very limited and there is no record of outbreak of diseases due consumption of them.

# Thank you





