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## Background

**Genetic Resources** : Wild and domesticated forms includes all the animals, plants and micro-organisms used for food & agriculture (Commission of Genetic Resources for Food and Agriculture).

**Marine Genetic Resources** : Component of Aquatic Genetic Resources which includes all the wild & cultivated species

Wild fauna hunted for food

Wild & farmed plants

Wild & farmed fish

Other aquatic organisms

**Gulf of Mannar Biosphere Reserve (GOMBR)** : Biological paradise & Ecologically Sensitive Area with diverse ecosystem

## Aim

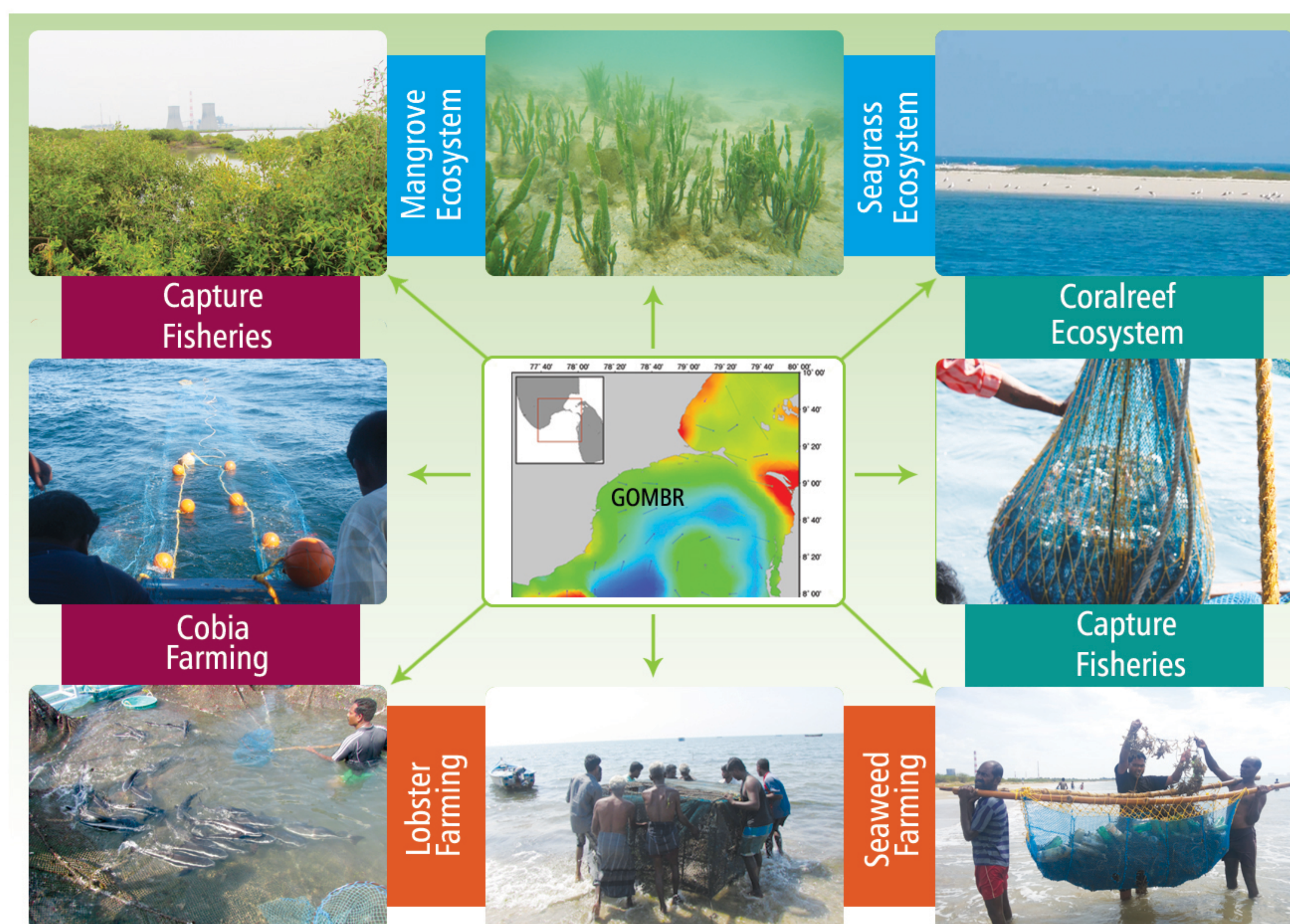
To document and assess the wild and domesticated forms used for Mariculture & Fisheries from GOMBR Reserve

## Materials and Methods

- Weekly observation & sampling of marine organisms at different fish landing centres & farming sites along GOMBR
- Observation & sampling of commercially important marine organisms by Skin and SCUBA diving along GOMBR
- Collection of available published literatures on wild & cultivated species from GOMBR

## Results

### Marine Genetic Resources in Mariculture & Fisheries from GOMBR



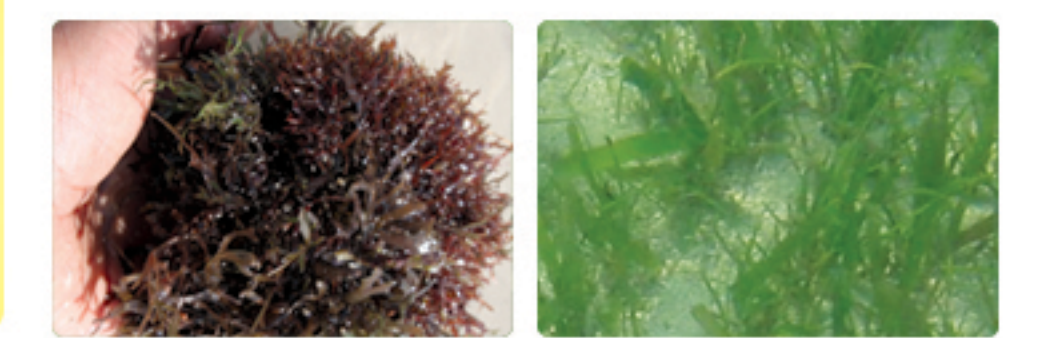
CMFRI is popularising sustainable mariculture practices, conservation & responsible use of GOMBR resources through co-management & participatory approach

### Diversity of Marine Genetic Resources from GOMBR

#### Plantae

Plants  
(207 Species)

Seaweeds  
Seagrasses  
Mangroves



#### Animalia

Chordata  
(1182 Species)

Bonyfishes  
Elasmobranchs



Mollusca  
(856 Species)

Cephalopods  
Gastropods  
Bivalves



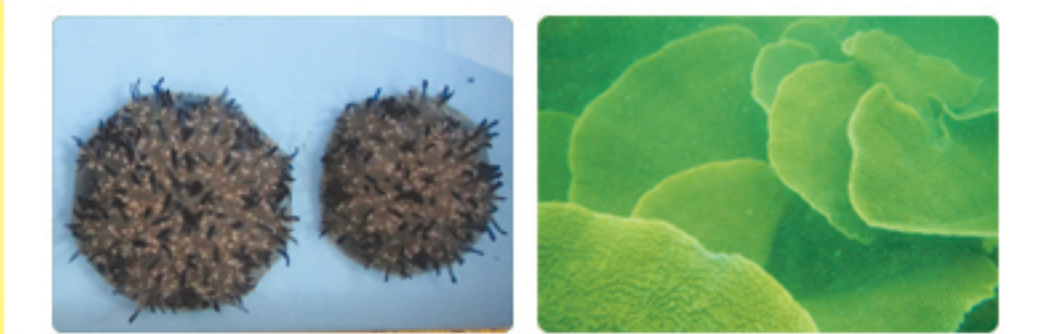
Arthropoda  
(641 Species)

Shrimps  
Crabs  
Lobsters



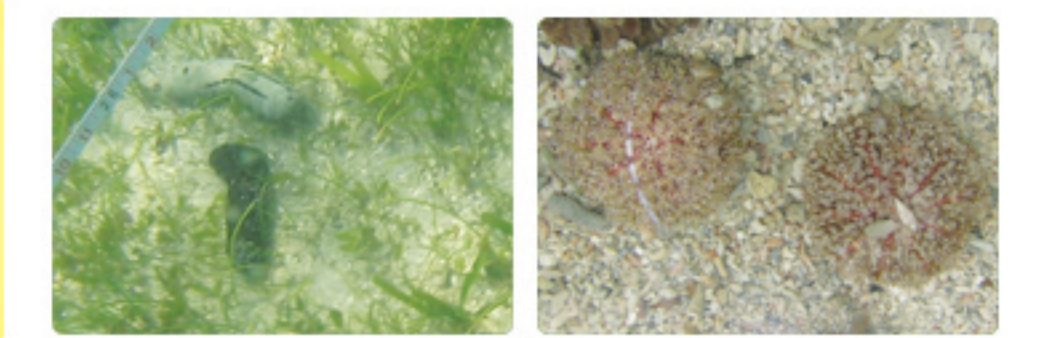
Cnidaria  
(222 Species)

Jellyfishes  
Corals



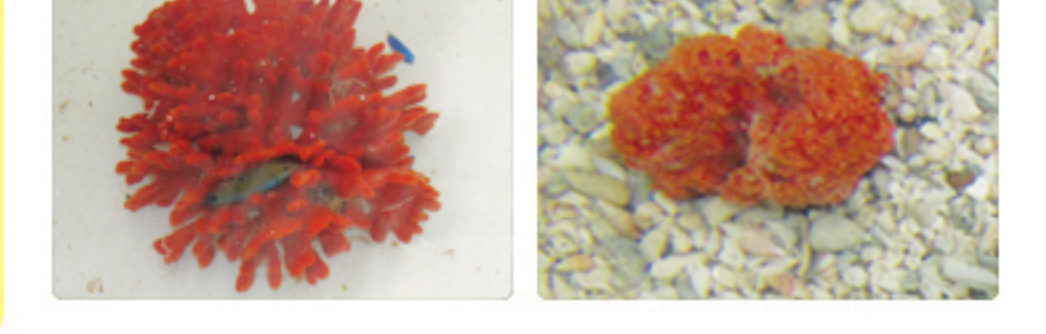
Echinodermata  
(153 Species)

Seacucumbers  
Seaurchins



Porifera  
(280 Species)

Sponges



## Conclusions

Reduction in the areas of major ecosystems like seagrass, mangroves, coral reefs etc., of GOMBR

Due to overexploitation, most of the pairs are not suitable for the pearl fishery in commercial scale at present

Commercial important live sacred chank was exploited at the rate of 15 lakhs chanks per year and fossilised chanks are being exploited in higher intensity

Highest endemism was reported in GOMBR and there are several new marine genetic resources yet to be described

## References

- Joshi *et al.* (2016). JMBAI, No. 58(1), 1895- 1905 p.  
Balaji *et al.* (2012). GOMBRT, Publication No. 22, 128 p.

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