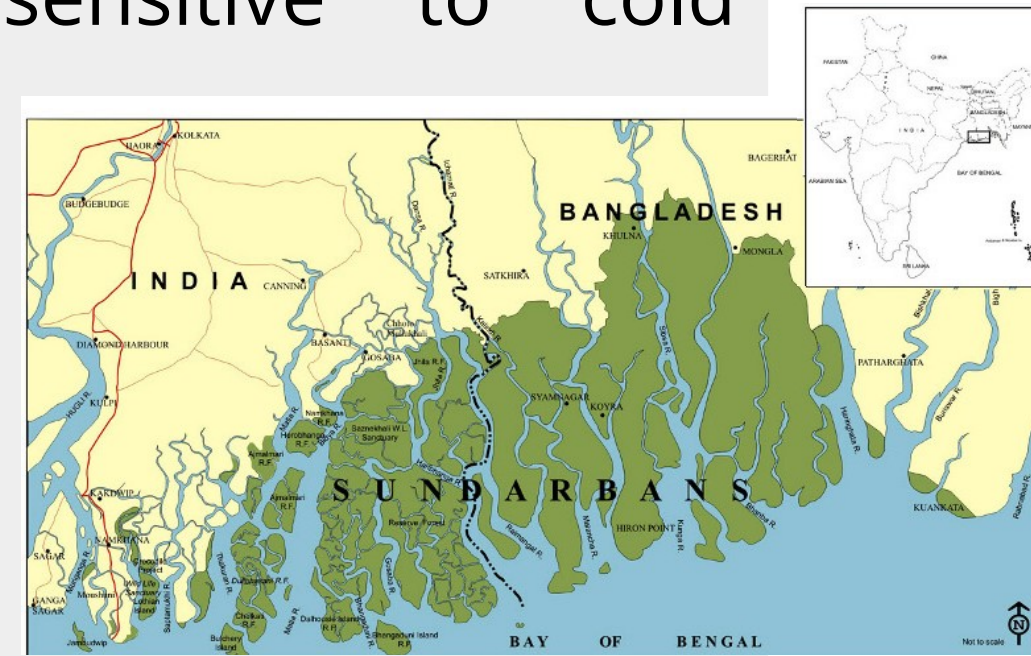


## Mangrove Forests

Mangrove forests are assemblages of salt-tolerant trees and shrubs that grow in the intertidal regions of the tropical and subtropical coastline. Mangroves can have inhospitable conditions, salty and oxygen-poor soil. They are very sensitive to cold temperatures.

The Sundarbans is the world's largest mangrove forest, concentrates a large part of Bangladesh's biodiversity and is a UNESCO Heritage Site.



## WHY IS MANGROVE VULNERABLE ?

Because of mangrove conditions (interface between water/earth, variability), disturbances due to climate change, anthropogenic activities (agriculture, deforestation, transports).

e.g. to build shrimp farm

## Invasive species

Invasive species outcompete other species and damages ecosystems and their functions. They can be native or alien species. They are recognised for their rapid growth, reproductivity, efficient dispersal capabilities, and tolerance to a broad range of environmental conditions.

In the Sundarbans, 4 out of 23 invasive species are alien. Almost **88%** of the area is affected by invasive species in which **55% severely damaged**.

Protect against extreme weather  
Climate regulation  
Carbon storage

Timber  
Fish  
Honey

Ecosystem services

Tourism  
Spirituality  
Education

Nursery ground for fish  
Nutrient cycling



## CONSEQUENCES

**Ecological:** loss of biodiversity, resilience, foraging habitats and genetic modifications.

**Economic:** loss of revenue, agricultural yields

**Health:** water contamination, asthmas

**Cultural:** crisis in knowledge, skills, spirituality

## *Eichhornia crassipes*, highly invasive



- biodiversity destruction
- eutrophication
- breeding ground for pests
- blockages of waterways

Recognized as one of the top 10 worst weeds in the world and highly invasive in the Sundarbans. Eradication by chemical, physical or biological means is inefficient and expensive.

We need to shift our negative discourse about invasive species: accepting them as resources, **part of the natural world** rather than threats.

Potential uses: biofuel, human food and animal feed, medicine and industrial.

## What can we do?

- Include local communities
- Prevent overharvesting of wood
- Source only from certified farmed shrimp
- Increase education and raise awareness

**Red List of Plants and Management Strategy for the Invasive Alien Species** has been integrated in Bangladesh in 2020 to prevent and control invasive alien species spread.

