

Causes of biodiversity losses

Over-exploitation

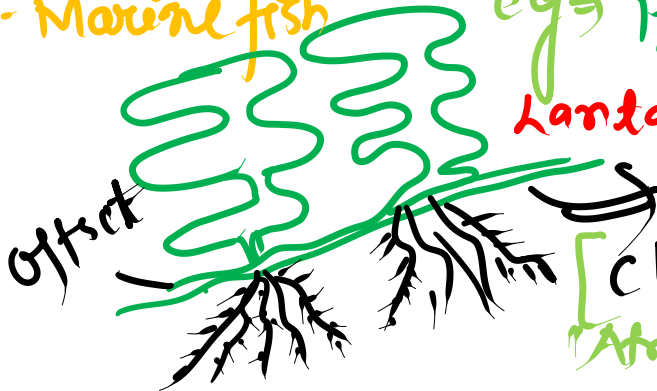
Humans → food + shelter

"Need" turns to "greed"

eg - last 500 years

"Stellar's sea cow"
passenger pigeon

eg - Marine fish



Alien species invasions

"आक्रमक"

eg - Nile perch

Lake → Victoria
in east Africa

"cichlid fish"

eg → Parthenium
"Carrot grass"
Lantana, Water hyacinth
(Eichhornia)

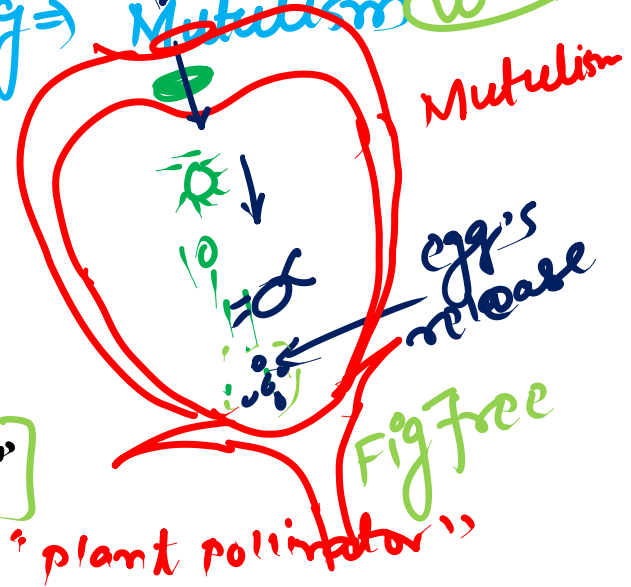
"Clarias gariepinus"
African catfish

Co-extinctions

When a species becomes extinct

plant → fish - extinct
Animals → Parasites

eg → Mutualism (Wasp)



Why should we conserve Biodiversity

① narrowly utilitarian

→ Human desire countless direct economic benefits from Nature ⇒

→ Food (cereals, pulses, fruits) ⇒

→ firewood, fibre

construction material

Industrial products

(tannins, lubricants, dyes, resins, perfumes)

⇒ Medicinal importance.
Species of plants ⇒ 25%

② Broadly utilitarian

"Amazon forest"

↓
20% total O₂ earth

photosynthesis
+
pollination

Covid 19 ⇒

③ Ethical

conserving biodiversity

eg- Plants
Algae bryo, pteridoph
Gymno. Angio.

eg- generation →
→ →

How do we conserve Biodiversity

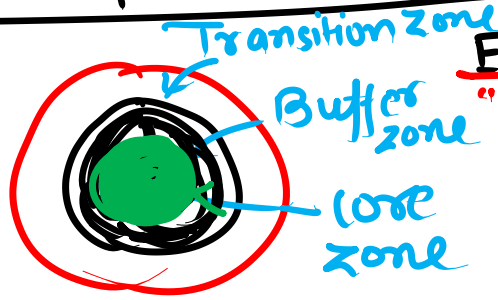
↓
In situ conservation
'on site'

A) Hot spot

25 biodiversity hotspots

+ 9

⇒ 34 Biodiversity hotspots 1.4%



Er-situ conservation
'off site'

↓ Western Ghats, Shri Lanka, Indo-Burma, Himalayas

Endemism ⇒ that is species confined to that region and not found anywhere else.)

'Biosphere reserves' ⇒

94 ⇒ 408

90 National Park
448 wildlife sanctuaries