

UPSC Civil Services Examination

UPSC Notes [GS-I]

Topic: Loss of Biodiversity [Geography Notes for UPSC]

Loss of biodiversity

- About three-fourth of the human population resides in the Tropical regions which occupy only about one-fourth of the total area of the world.
- The tropical rain forests contain 50 percent of the species on the earth.
- The excessive population has resulted in the rampant exploitation of resources and deforestation.
- The destruction of the Tropical regions has resulted in the loss of natural habitats which is catastrophic for the whole biosphere.
- Natural calamities like forest fires, droughts, floods, volcanic eruptions, earthquakes, etc. cause damage to both flora and fauna of the earth.
- Pesticides and other pollutants like toxic heavy metals and hydrocarbons destroy the feeble and sensitive species.
- Loss of biodiversity in an area may cause
 - Decline in plant production
 - Lowered resistance to environmental perturbations
 - Increased variability in definite ecosystem developments such as water use, plant productivity, and disease cycles and pests.

IUCN

- The IUCN issues data about endangered species universally as the Red List of threatened species.
- The organization has categorized the threatened species of plants and animals into three categories for the purpose of their conservation.
 - Endangered Species
 - Vulnerable Species
 - Rare Species

Endangered Species

- It comprises those species which are in danger of extinction.

Vulnerable Species

- This comprises the species which are probable to be in danger of extinction in near the future if the factors threatening to their extinction continue.
- Survival of these species is not guaranteed as their population has decreased greatly.

Rare Species

- The population of these species is very small in the world and they are restricted to limited areas or thinly scattered over a wider area.

