



CHAPTER-2 GEOGRAPHY

FOREST AND WILDLIFE

Biodiversity → Species diverse in form and function but closely integrated in a system through multiple network of interdependencies.

Flora and Fauna in India

- * 8% of total species in the world (1.6 million)
 - 81,000 species of fauna
 - 47,000 species of flora [15,000 flower species are endemic to India]
- * 10% [wild flora] and 20% of mammals are threatened list eg. cheetah, Pink headed duck, mountain quail, forest spotted owl, Hubbardia.
- * Pace of Extinction.

Vanishing forest

- * Total forest cover = 24.01%.
- * Dense forest = 12.24%.
- * Open forest = 8.99%.
- * Mangroves = 0.14%.
- * According to state of forest, forest area increase by 10,098 sq/km since 1997.

Limitation

- * It does not differentiate between natural forest and plantation.

IUCN Classification

Normal species → Population level are normal for their survival ex. cattle, Sal, Pine.

Endangered species

- * In danger of extinction
- * Survival may not be possible if threats to their Population continues to operates eg Black Buck, Lion tailed Macaque.



vulnerable species

- * Decline in the population from where they are likely to move into the endangered category, if the threat continues to operate.
ex Blue sheep, Asiatic elephant, Crangetic species.

* Rare species

- * Endemic species → Found in Particular area only eg Andaman teal.

- * Extinct species → Not found after searches, where earlier they used to occur.
→ A species may extinct ~~may~~ from, local area, region country, or the entire earth eg Asiatic cheetah, Pink ~~head~~ head duck.

Depletion of flora and fauna

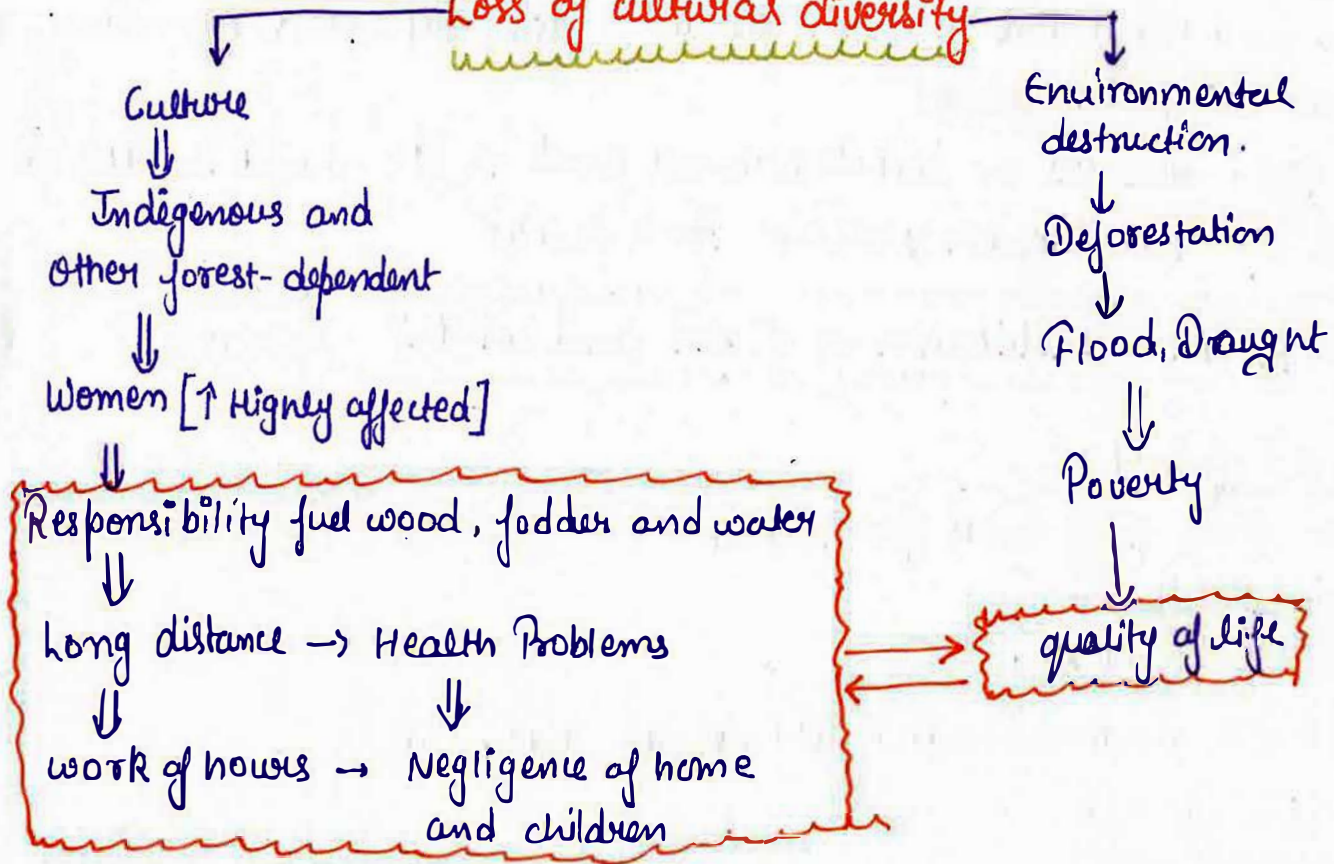
Factors responsible

- * Loss during colonial period due to Railways, commercial, scientific forestry and enrichment of plantation.
- * Agriculture expansion. → According to forest survey of India 26.200 Sq/km of forest area converted to agriculture its due to Slash and Burn agriculture (Jhum) in north eastern and Central India.
- * Large scale development Projects eg Narmada sagar Project, Dolomite mining.
- * Human and natural factors

Impact of destruction of forest and wildlife

- * 1/2 of Natural forests are gone
- * 1/3 of wetland's drained out.
- * 70% of Surface water bodies are polluted.
- * 40% mangroves wiped out.
- * Thousands of species are heading towards extinction.

Loss of cultural diversity



Conservation of forest and wildlife

→ Conservation Preserves to ecological diversity

- It preserves genetic diversity.

Ex Traditional crop varieties

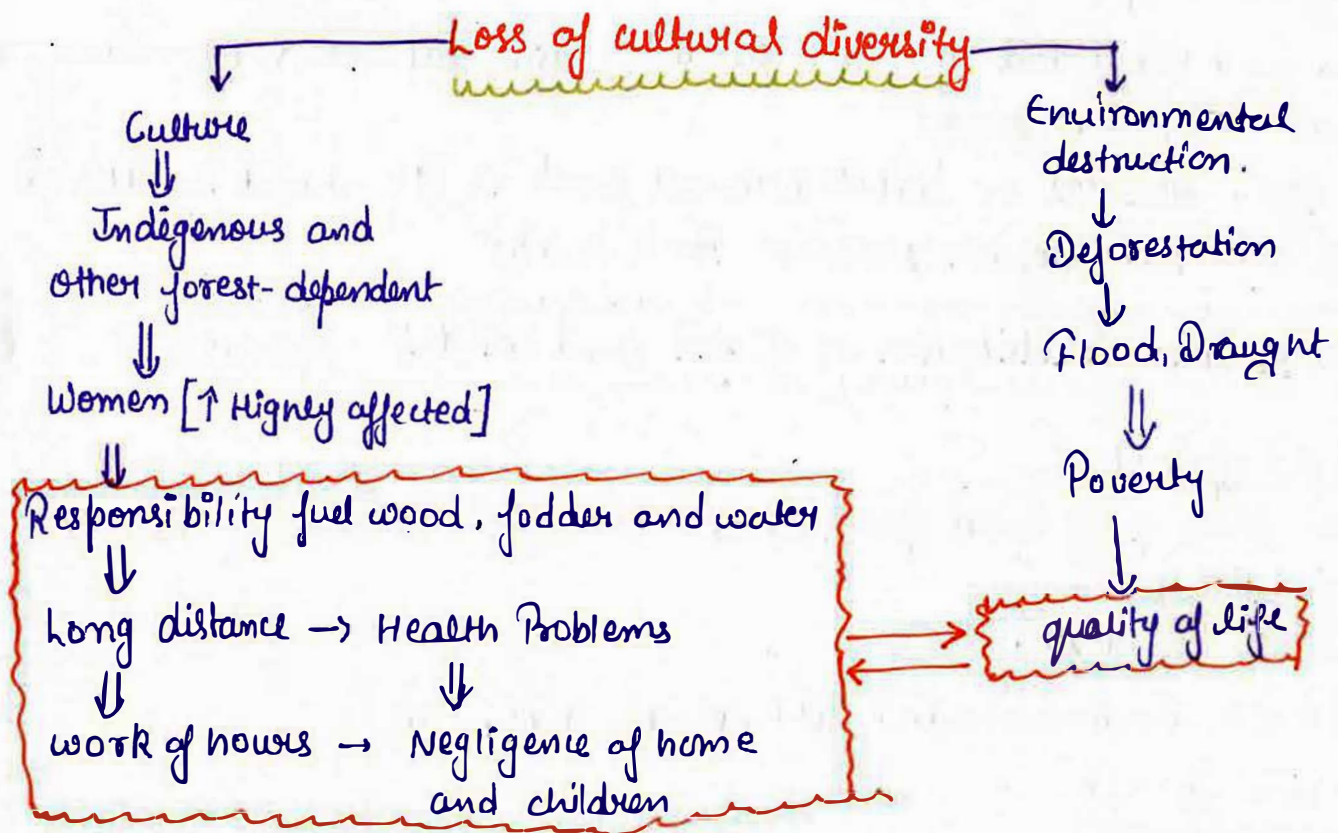
fisheries on aquatic biodiversity.

→ Steps taken to conserve

- Indian wildlife Protection act [1972]
- An all-India list of Protected species was published.
- Banning, hunting, giving legal Protection to their habitat, Restricting trade in wildlife
- Establishment of National Park and wildlife Sanctuaries.
- Project to Protect specific animals, such as tiger, one horned Rhinoceros

→ Project tiger (1973)

- Population decrease from 55,000 to 1,827 due to
- Poaching for trade, shrinking habitat, depletion of Prey base species



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- ChipRoo Movement → Resisted deforestation and also revived the traditional conservation by community afforestation.
- Beey Bachao Andolan → In Tehri and Nardanya, diverse variety of crop is produced without the use of synthetic and chemicals.
- JFM (Joint Forest Management) → Involving local communities in restoration of degraded forests.
 - In 1988, state of Orissa passed first resolution of JFM.
 - local Institute takes up the protection activities on lands managed by govt.

Sacred groves

- Tribal Belief
↓
Nature worship
↓
Preserved several forests
↓
Sacred groves i.e.
the forest of god and goddess
- Munda and Santhal of Chota Nagpur worship Mahua and Kadamba.
 - Tribes of Orissa and Bihar worship tamarind and Mango during wedding.
 - In general peepal and Banyan tree is considered as Sacred.
 - In Bishnoi village of Rajasthan, herds of Blackbucks, nilgai and peacocks and integral parts.