



CBSE : Grade 10
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Board: CBSE

FOREST & WILDLIFE RESOURCES

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Biodiversity or Biological Diversity -

Biodiversity or Biological Diversity → immensely rich in wildlife and cultivated species → diverse in form and function → but closely integrated in a system through multiple network of interdependencies.

Flora and Fauna in India :

- one of the world's richest countries in terms of its vast array of biological diversity
- Nearly 8 per cent of the total number of species in the world (estimated to be 1.6 million).
- At least 10 per cent of India's recorded wild flora and 20 per cent of its mammals are on the threatened list.
- Many are categorised as 'critical', that is on the verge of extinction like the cheetah, pink-headed duck etc.

Causes of depletion of the flora and fauna -

- Human beings transformed nature into a resource obtaining directly and indirectly from the forests and wildlife such as wood, barks, leaves, rubber, medicines, dyes, food, fuel, fodder, manure, etc. which depleted our forests and wildlife.
- The various factors that cause depletion of the flora and fauna are:
 - Large-scale developmental projects
 - Shifting cultivation
 - Mining
 - Over-grazing
 - Forest fires
 - historical reason (colonial rule)

Conservation of Forest and Wildlife in India -

- Conservation → Preserves the ecological diversity and our life support systems – water, air and soil.
- Due to conservationist's demand → The Indian Wildlife (Protection) Act -1972 was passed → The aim is to protect the remaining population of certain endangered species by banning hunting, giving legal protection to their habitats, and restricting trade in wildlife.
- The central and many state governments established national parks and wildlife sanctuaries.
- The central government also announced several projects for protecting specific animals, which were gravely threatened, including the tiger, the one-horned rhinoceros and the Kashmir stag or Hangul, three types of crocodiles – fresh water crocodile, saltwater crocodile and the Gharial, the Asiatic lion, and others.
- 1986, several hundred butterflies, moths, beetles, and one dragonfly have been added to the list of protected species.
- In 1991 → for the first time plants were also added to the list, starting with six species.



Project Tiger-1973

- Tiger is one of the key wildlife species in the faunal web.
- 1973→ The tiger population dwindled to 1,827 from an estimated 55,000 at the turn of the century.
- The major threats to tiger population→ poaching, shrinking habitat, depletion of prey base species, growing human population, etc.
- The trade of tiger skins and the use of their bones in traditional medicines, especially in the Asian countries left the tiger population on the verge of extinction.
- Since India and Nepal provide habitat to about two-thirds of the surviving tiger population in the world, these two nations became prime targets for poaching and illegal trading.

Some of the tiger reserves of India →

- ✓ Corbett National Park in Uttarakhand
- ✓ Sunderbans National Park in West Bengal
- ✓ Bandhavgarh National Park in Madhya Pradesh
- ✓ Sariska Wildlife Sanctuary in Rajasthan
- ✓ Manas Tiger Reserve in Assam
- ✓ Periyar Tiger Reserve in Kerala

Types and Distribution of Forest and Wildlife Resources -

- In India, much of its forest and wildlife resources are either owned or managed by the government through the Forest Department or other government departments.

The forests are classified under the following categories:

Reserved Forests	Protected Forests	Unclassed Forests
→ covers half of the total forest land. → most valuable as far as the conservation of forest and wildlife resources are concerned.	→ Almost one-third of the total forest area is protected forest, as declared by the Forest department. → This forest land are protected from any further depletion	→ other forests and wastelands belonging to both government and private individuals and communities

- Reserved and protected forests → also referred to as permanent forest estates → maintained for the purpose of producing timber and other forest produce, and for protective reasons.
- Madhya Pradesh has the largest area under permanent forests, constituting 75 per cent of its total forest area.



Community and Conservation -

- The forests are also home to some of the traditional communities.
- Local communities are struggling to conserve these habitats along with government officials to secure their long-term livelihood.
- In Sariska Tiger Reserve, Rajasthan, villagers have fought against mining by citing the Wildlife Protection Act.
- The famous Chipko movement in the Himalayas has successfully resisted deforestation in several areas
- Farmers and citizen's groups → The Beej Bachao Andolan in Tehri and Navdanya have shown that adequate levels of diversified crop production without the use of synthetic chemicals are possible and economically viable.
- Joint forest management (JFM) programme introduced in 1988 in the state of Odisha shown good example for involving local communities in the management and restoration of degraded forests.

Sacred groves - a wealth of diverse and rare species -

- Nature worship is an age old tribal belief → based on the premise that all creations of nature have to be protected → such beliefs have preserved several virgin forests in pristine form called → Sacred Groves (the forests of Gods and Goddesses).
- These patches of forest or parts of large forests have been left untouched by the local people and any interference with them is banned.
- Certain societies revere a particular tree from time immemorial.
 - The Mundas and the Santhal of Chota Nagpur region → worship mahua (*Bassia latifolia*) and kadamba (*Anthocaphalus cadamba*) trees
 - The tribals of Odisha and Bihar → worship the tamarind (*Tamarindus indica*) and mango (*Mangifera indica*) trees during weddings.
 - Peepal and banyan trees are also considered sacred.

