

India Physical Environment

Chapter-21 Natural Vegetation

- Natural vegetation refers to a plant community that has been left undisturbed over a long time, so as to allow its individual species to adjust themselves to climate and soil conditions as fully as possible. In other words, Natural vegetation refers to plant life which grows at any place without human interface.
- Himalayan heights are marked with the different types of vegetation according to altitude.
- The Western and Eastern Ghats and the Andaman Nicobar Islands have tropical rain forests while
- the deltaic regions have tidal forests (mangroves). The desert and semi-desert areas of Rajasthan are known for cactii, a wide variety of bushes and thorny vegetation.
- Depending upon the variations in the climate and the soil, the vegetation of India changes from one region to another.

On the basis of certain common features such as predominant vegetation type and climatic regions, Indian forests can be divided into the following groups:

TYPES OF FORESTS

- i. Tropical Evergreen and Semi Evergreen forests
- ii. Tropical Deciduous forests
- iii. Tropical Thorn forests
- iv. Montane forests
- v. Littoral and Swamp forests.

1. The Tropical Evergreen and Semi Evergreen forests:-

- i. These forests are found in the western slope of the Western Ghats, Eastern slopes of eastern Ghats, hills of the northeastern states and the Andaman and Nicobar Islands.
- ii. They are found in warm and humid areas with an annual precipitation of over 200 cm and mean annual temperature above 22^o C.



- iii. Tropical evergreen forests are well stratified, with layers closer to the ground and are covered with shrubs and creepers, with short structured trees followed by tall variety of trees.
- iv. Trees reach great heights up to 60 m or above.
- v. There is no definite time for trees to shed their leaves, flowering and fruition. As such these forests appear green all the year round.
- vi. Species found in these forests include rosewood, mahogany, aini, ebony, etc.

2. SEMI EVERGREEN FOREST

- i. The semi evergreen forests are found in the less rainy parts of these regions.
- ii. Such forests have a mixture of evergreen and moist deciduous trees.
- iii. The under growing climbers provide an evergreen character to these forests.
- iv. Main species are white cedar, hollock and kail.
- v. The oak forests in Garhwal and Kumaon were replaced by pine (chirs) which was needed to lay railway lines.
- vi. Forests were also cleared for introducing plantations of tea, rubber and coffee.

3. Tropical Deciduous Forests



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- i. These are the most widespread forests in India.
 - ii. They are also called the monsoon forests.
 - iii. They spread over regions which receive rainfall between 70-200 cm.
 - iv. On the basis of the availability of water, these forests are further divided into moist and dry deciduous.

(a) The Moist deciduous forests



- i. They are mostly found in the regions which record rainfall between 100-200 cm.
- ii. These forests are found in the northeastern states along the foothills of the Himalayas, eastern slopes of the Western Ghats and Odisha.
- iii. Teak, sal, shisham, mahua, amla, semul, kusum, and sandalwood etc. are the main species of these forests.

(b) Dry deciduous forest



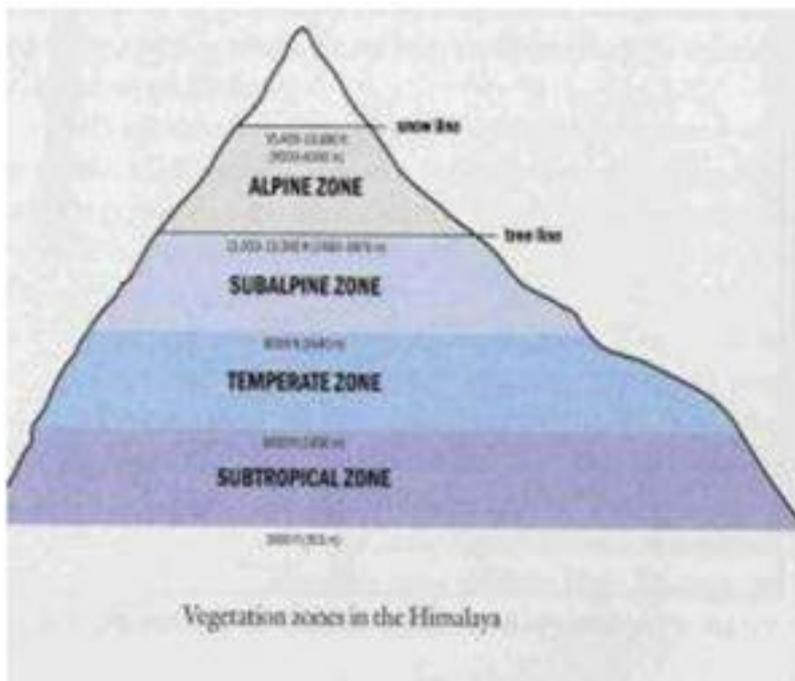
- i. Covers vast areas of the country,
- ii. Rainfall ranges between 70 -100 cm.
- iii. On the wetter margins, it has a transition to the moist deciduous, while on the drier margins to thorn forests.
- iv. These forests are found in rainier areas of the Peninsula and the plains of Uttar Pradesh and Bihar.

- v. Parklands are found In the higher rainfall regions of the Peninsular plateau and the northern Indian plain,
- vi. As the dry season begins, the trees shed their leaves completely and the forest appears like a vast grassland with naked trees all around. Tendu, palas, amaltas, bel, khair, axlewood, etc. are the common trees of these forests.
- vii. In the western and southern part of Rajasthan, vegetation cover is very scanty due to low rainfall and overgrazing.

3. Tropical Thorn Forests

- i. Tropical thorn forests occur in the areas which receive rainfall less than 50 cm.
- ii. These consist of a variety of grasses and shrubs.
- iii. It includes semi-arid areas of south-west Punjab, Haryana, Rajasthan, Gujarat, Madhya Pradesh and Uttar Pradesh.
- iv. In these forests, plants remain leafless for the most part of the year and give an expression of scrub vegetation.
- v. Important species found are babool, ber, and wild date palm, khair, neem, khejri, palas, etc.
- vi. Tussocky grass grows upto a height of 2 m as the under growth.

4. Montane Forests



- i. In mountainous areas, the decrease in temperature with increasing altitude leads to a

corresponding change in natural vegetation.

- ii. Mountain forests can be classified into two types, the northern mountain forests and the southern mountain forests.
- iii. The Himalayan ranges show a succession of vegetation from the tropical to the tundra, which changes in with the altitude.
- iv. Deciduous forests are found in the foothills of the Himalayas.
- v. It is succeeded by the wet temperate type of forests between an altitude of 1,000-2,000 m.

5. LITTORAL AND SWAMP FORESTS

India's wetlands have been grouped into eight categories:

- i. The Reservoirs of the Deccan plateau in the south together with the lagoons and other wetlands of southern west coast.
- ii. The vast saline expanses of Rajasthan Gujarat and the Gulf of Kachchhh.
- iii. Freshwater lakes and reservoirs from Gujarat eastward through Rajasthan (Keoladev National park) and Madya Pradesh.
- iv. The delta wetlands and lagoons of India's east coast (Chilika Lake).
- v. The freshwater marshes of the Gangetic Plain.
- vi. The floodplains of the Brahmaputra, the marshes and swamps in the hills of northeast India and the Himalayan foothills.
- vii. The lakes and rivers of the montane region of Kashmir and Ladakh.
- viii. The mangrove forest and other wetlands of the island arcs of Andaman and Nikobar Islands.

In India, the mangrove forests spread over 6,740 sq. km which is 7 percent of the world's mangrove forests. They are developed in Andaman and Nicobar Islands, Sunderbans of West Bengal, the Mahanadi, the Godavari and the Krishna deltas.