

Chapter-5

Natural Vegetation and Wild Life



Overview:

- ❖ India is one of the 12 mega bio-diversity countries of the world with 47000 plant species with 10th place in the world and 4th place in Asia
- ❖ 15000 flowering plants which is 6% of flowering plant in the world
- ❖ It also has non flowering plant like ferns, algae and fungi
- ❖ India also has 90000 species of animals and rich variety of fish
- ❖ Natural Vegetation refers plant community which has grown naturally with out undisturbed by humans for a long time. It is called **Virgin Vegetation**.
- ❖ The term **flora** is denotes a plants of a particular region and **fauna** denotes species of animals.
- ❖ This huge diversity is due to the following factors.



Relief:

Land

- ❖ Land affects the natural vegetation directly and indirectly. The fertile level is generally devoted to agriculture.
- ❖ The undulating and rough terrains are areas where grassland and woodlands develop and give shelter to a variety of wildlife.

Soil

- ❖ The soil also vary over space. Different types of soils provide basis for different types of vegetation.
- ❖ The sandy soils of the desert support cactus and thorny bushes, while wet, marshy, deltaic soils support mangroves and deltaic vegetation.
- ❖ The hill slopes with some depth of soil have conical tress.



Climate

Temperature:

- ❖ The extend of vegetation are mainly determined by temperature, air, precipitation and soil
- ❖ The slope of Himalaya and hills in Peninsula above the height of 915 meters, the fall in the temperature affects the types of vegetation and its growth.
- ❖ It changes it from tropical to subtropical temperature and alpine vegetation.

Photoperiod (Sunlight):

- ❖ The variation in duration of sunlight at different places is due to different latitude, altitude season. Due to long duration of sunlight trees grow faster in summer.

Precipitation:

- ❖ Forest are renewable resources, it modify local climate, control soil erosion, regulate stream flow. It control wind force and temperature and cause rains.
- ❖ They provide shelter to the wildlife .
- ❖ India's natural vegetation has undergone many changes due to several factors such as cultivated land, development of industries and mining.



Types of Vegetation:

Tropical Evergreen Forests:

- ❖ These forests are restricted to heavy rainfall areas ,it is having more than 200 cm of rainfall with short dry season.
- ❖ The trees reach great heights upto 60 m. since the region is warm and wet through out the year.
- ❖ There is not definite time for trees to shed their leaves. These forests appear green all the year round.
- ❖ Some of the commercially important trees are ebony, mahogany, rosewood, rubber and cinchona.
- ❖ Some common animals are elephant, monkey, lemur and deer etc.



Tropical Deciduous Forests:

- ❖ It is also called monsoon forest and receiving rainfall between 200 cm and 70 cm and trees of this forest type shed their leaves for about 6 to 8 weeks in dry summer.
- ❖ Teak is the most dominant species of this forest. Bamboos, Sal shisham, sandalwood, khair, kusum, Arjun and mulberry are other important commercial trees.
- ❖ The common animals are found like lion, tiger, elephant, pig and deer.



The thorn forests and scrubs:

- ❖ In region with less than 70 cm of rainfall, the natural vegetation consist of thorny trees and bushes.
- ❖ It is found in the **north western** part of the country. **Acacias, palms, euphorbias and cacti** are the main plant species.
- ❖ Trees are scattered and have long roots penetrating deep into the soil in order to get moisture.
- ❖ The stems are succulent to conserve water
- ❖ Leaves are mostly thick and small to minimize evaporation.it gives a way to thorn and scrubs.



Montane Forests:

- ❖ The wet temperature type of forests are found between a height of 1000 and 2000 meters.
- ❖ Evergreen broad leaf trees such as oaks and chestnuts
- ❖ Between 1500 and 3000 meters temperature forests containing coniferous trees like pine
- ❖ More than 3600 meters above the sea level it gives Alpine vegetation
- ❖ These are used extensively for grazing by nomadic tribes like Gujjar's and Bakarwals.



Mangrove Forests:

- ❖ It is found in the areas of coasts influenced by tides. Mud and silt get accumulated on such coasts.
- ❖ Dense mangroves are the common varieties with roots of the plants submerged under water.
- ❖ Deltas of ganga, Krishna, Godavari, Mahanadi and kaveri are covered by such vegetation.
- ❖ Sundari trees are found which provide durable hard timber.
- ❖ Royal Bengal Tiger is the famous animal in these forests.



Wild Life:

- ❖ India is rich in fauna. It has 90,000 animal species, 2000 species of birds. They constitute 13% of the worlds total.
- ❖ India is the only country in the world that has both tigers and lions.the Himalayas harbor a hardy range of animals. Which survive in extreme cold.
- ❖ Ladakh's freezing high altitudes are a home to yak.
- ❖ 103 national parks, 535 wild life sanctuaries and zoological gardens are set up to take care of natural heritage.

