

## CHAPTER 17: Forest: Our Life Lines

- Forests are one of the richest sources of natural resources.
- They supply oxygen and a natural water purifying system.
- Forests appear lush green with a vast green cover over the land.
- The distribution of the forest cover is not uniform.
- Forest environment is cool and peaceful.
- A large number of birds and animals like boar, bison, jackals, porcupine, elephants' monkeys, also inhabit the forest.
- The trees like *sal*, teak, *semal*, *sheesham*, *neem*, *palash*, fig, *khair*, *amla*, bamboo, *kachnar* are found in forests.
- Shrubs, herbs, creepers, climbers and grasses are also found on forest floor.
- In deep forest sunlight does not reach the leaves of the trees, making it quite dark inside the forest.
- Different household items are obtained from material which are obtained from the forest.
- Wooden items such as plywood, fuel wood, boxes, paper, matchsticks, furniture, gum, oils, spices, fodder for animals and medicinal plants are some products obtained from forest.
- In these forests trees produce enough seeds which germinate on the forest floor and grow up in trees.
- Canopy is a large roof like structure of branches of tall trees.
- Different trees have crowns of different types and sizes creating a diverse horizontal layer in the forest called understories.
- Varied climatic conditions lead to generation of different types of trees and other plants. Different animals are found in different forests.
- The ground surface is a place where numerous insects, spiders, squirrels, ants and various other small animals reside.
- The forest floor is dark colored due to formation of humus.
- Autotrophs, heterotrophs and saprotrophs are all found in forest.
- Autotrophs produce their own food. All animals be it herbivores or carnivores, depend ultimately on plants for food.
- Saprophytes feed on dead decaying matter.
- Food chains are part of the forest.
- All the food chains are interlinked and if any chain is disturbed, it affects other food chains also.
- Microorganisms are also a part of forest soil and utilize dead plant and animal tissues and convert them into a dark colored substance called humus.
- They are called as decomposers.
- Humus provides nutrients to the soil which are absorbed by the roots of the living plants.
- Dead animals become food for vultures, crows, jackals and insects.
- Forest is known as green lungs, where plants release oxygen through the process of photosynthesis.
- The plants provide oxygen for animal respiration and maintain balance of oxygen and carbon dioxide in the atmosphere.
- Trees absorb water from their roots and release water vapors into the air through transpiration.

- Many people living in the forest belong to different tribes provide them with food, shelter, water and medicines.
- Animals like deer drink water from surrounding stream and on sensing any danger disappear into the bushes.
- The tall grass provides animals with the food and shelter and protect them from carnivores.
- Animals in the forest can be identified by their droppings and footprints.
- Animals disperse seeds of plants and help forest to grow and regenerate.
- The wide variety of animals helps the forest to regenerate and grow.
- Decomposers maintain the supply of nutrients to the growing plants in the forest.
- When it rains the rain water does not hit the forest floor directly.
- The forest canopy prevents the flow of raindrops and water coming down through the branches and stems of trees.
- The ground is comparatively drier.
- Water does not stagnate the forest and acts as a natural absorber of rainwater and allows it to seep.
- It helps to maintain the water table throughout the year.
- Forest help in controlling floods and helps in maintaining the flow of water in the streams
- Deforestation leads to soil erosion.
- Noise pollution is also reduced due to forests.
- Construction of roads, buildings, industrial development and increasing demand of wood creates pressure on the forests and increases in deforestation.
- IMPORTANCE OF FOREST:
  - Forests give us oxygen.
  - Forest prevents soil erosion and provide shelter to a large number of animals.
  - Forests increase rainfall in neighboring areas.
  - Forest provides us with medicinal plants, timber and many other useful products.
  - Deforestation increases the amount of carbon dioxide in air and also increases the temperature.
  - If trees are cut plants, animals will not get food and shelter, soil will lose its water retention and cause floods.