



Profile of a forest: About one third of the world's land surface is covered with forests. Forests can be divided into three layers: canopy, crown and understorey. **Canopy**-the uppermost layer of branches which serves as a dense roof of trees over the ground in a forest is called canopy.

Crown-the layer where trees branch off from tree trunk is called crown.

Understorey-the shaded layer of the forest where low light is available is called understorey.

Uses of forests-

- Forests prevent soil erosion and floods.
- Trees help to regulate the climate of a place.
- Trees also help in keeping a check on global warming by using carbon dioxide.
- Coconut and palms, helps to break strong winds in coastal areas.
- We get timbers from sal, teak and rosewood.
- We get several nuts and spices form plants.
- Plants such as neem and amla are used to make several ayurvedic medicines.
- Forests are source of resins(paints), latex(rubber), bamboo used as fodder.

Interdependence of plants and animals-

All animals depend on plants for food.

- Food chain-simple representation of energy flow in nature is called food chain.for e.g. a rat eats grains and plants, a snake eats a rat, which is eatan by an eagle.
- Green plants are producers as they can produce their own food.
- Animals are called consumers as they cannot produce their own food.
- When animals die their bodies are broken down by decomposers like bacteria and fungi.
- Food web- interconnected food chains depicting the complex representation of energy flow in nature is called food web.
- Trees in forests provide shelter to animals such as chimpanzes, monkeys, snakes and birds.

Forest help in purifying air-

Forest play vital role in releasing huge amounts of oxygen into the air. Forest help to balance the levels of oxygen and carbon dioxide in the atmosphere.

Deforestation-large scale felling of trees is called deforestation. If forests disappear

- Global climate and local weather may change drastically.
- Large amounts of greenhouse gases such as carbon dioxide; methane etc.
- Natural resources are depleted due to deforestation.
- Deforestation an cause flooding, soil erosion, landslide.

Conservation of forests-

- **Aforestation**- people should be made aware of the damages caused by felling of trees. Aforestation is the large scale planting of trees on lands where there were no forests previously.
- **Planned cultivation**- a forest should not be cleared of all its trees and converted into an agricultural land.
- **Prevent illegal logging**- illegal logging has led to the decrease of a lot of trees over the years Indian govt. has laid out rules to prevent illegal logging by making it punishable under law.
- **Protection from forest fires**- forest fire can be prevented by being careful while burning debris. Water bombs are used to prevent forest fire.