

Chapter 5: Natural Vegetation and Wildlife

Question 1: Choose the right answer from the four alternatives given below.

(i) To which one of the following types of vegetation does rubber belong to?

- (a) Tundra
- (b) Tidal
- (c) Himalayan
- (d) Tropical Evergreen

(ii) Cinchona trees are found in the areas of rainfall more than

- (a) 100 cm
- (b) 50 cm
- (c) 70 cm
- (d) less than 50 cm

(iii) In which of the following state is the Simlipal bio-reserve located?

- (a) Punjab
- (b) Delhi
- (c) Odisha
- (d) West Bengal

(iv) Which one of the following bio-reserves of India is not included in the world network of bioserve?

- (a) Manas
- (b) Nilgiri
- (c) Gulf of Mannar
- (d) Nanda devi

Answers :

- (i) (d) Tropical Evergreen
- (ii) (a) 100 cm
- (iii) (c) Odisha
- (iv) (a) Manas

Question 2: Answer the following questions briefly.

(i) Define an ecosystem.

Answer : An ecosystem is a community of plants, animals and smaller organisms that live, feed, reproduce and interact in the same area or environment.

(ii) What factors are responsible for the distribution of plants and animals in India?

Answer : Factors responsible for the distribution of plants and animals in India are-

- a. Climate (temperature, humidity, precipitation)

- b. Soil
- c. Drainage

(iii) What is a bio-reserve? Give two examples.

Answer : protected area reserved for the conservation of endangered species of flora (plants) and fauna (animals) in their natural habitat is called a bio-reserve. The Sunderbans in the West Bengal and Nanda Devi in Uttarakhand are the two examples of bio-reserves in India.

(iv) Name two animals having habitat in tropical and montane type of vegetation.

Answer : The common animals found in the tropical forests are elephants and monkeys and the common animals found in the montane forests are Kashmir stag and spotted deer.

Question 3: Distinguish between

(i) Flora and Fauna

Answer :

Flora - The flora of a country consists of plant kingdom of that country. It covers trees in the forests, other flowering and non-flowering trees grown by man, grassland, scrubs, ferns, etc.

Fauna - The fauna of a country consists of birds, fish and animals. It also includes amphibians, reptiles, mammals, small insects and worms. The fauna of India is quite rich and varied.

(ii) Tropical Evergreen and Deciduous forests

Answer :

Tropical Evergreen Forests - Evergreen forests (or Tropical Rain Forests) are found on the rainy parts of the Western Ghats and the island groups of Lakshadweep and the Andaman and Nicobar Islands.

Deciduous Forests - Deciduous forests are found mostly in the eastern parts of the country - northeastern states along the foothills of the Himalayas, Jharkhand, West Orissa and Chhattisgarh and the eastern slopes of the Western Ghats.

Question 4: Name different types of Vegetation found in India and describe the vegetation of high altitudes.

Answer : Different types of Vegetation found in India are -

- a. Tropical Rain Forests
- b. Tropical Deciduous Forests
- c. Tropical Thorn Forests and Scrubs
- d. Montane Forests
- e. Mangrove Forests

The vegetation of high altitudes are Montane Forests. In mountainous areas, the decrease in temperature with increasing altitude leads to the corresponding change in natural vegetation. The wet temperate type of forests are found between a height of 1000 and 2000 metres. Evergreen broad-leaf trees such as oaks and chestnuts predominate. Between 1500 and 3000 metres, temperate forests containing coniferous trees like pine, deodar, silver fir, spruce and cedar, are found.

At higher elevations, temperate grasslands are common. Generally, at more than 3,600 meters above sea level, temperate forests and grasslands give way to the Alpine vegetation. Silver fir, junipers, pines and birches are the common trees of these forests. At higher altitudes, mosses and lichens form part of tundra vegetation.

Question 5: Quite a few species of plants and animals are endangered in India. Why?

Answer : Quite a few animal species are endangered and some have become extinct. The main causes for this major threat to nature are hunting by greedy hunters for commercial purposes, pollution due to chemical and industrial waste, acid deposits, introduction of alien species and reckless cutting of the forests to bring land under cultivation and inhabitation, which are also responsible for the imbalance.

Question 6: Why has India a rich heritage of flora and fauna?

Answer : India has a rich heritage of flora and fauna because our country is one of the twelve-mega biodiversity countries of the world. With about 47,000 plant species, India occupies tenth place in the world and fourth in Asia in plant diversity. There are about 15,000 flowering plants in India, which account for 6 percent in the world's total number of flowering plants. The country has many non-flowering plants such as ferns, algae and fungi. India also has 89,000 species of animals as well as a rich variety of fish in its fresh and marine waters.

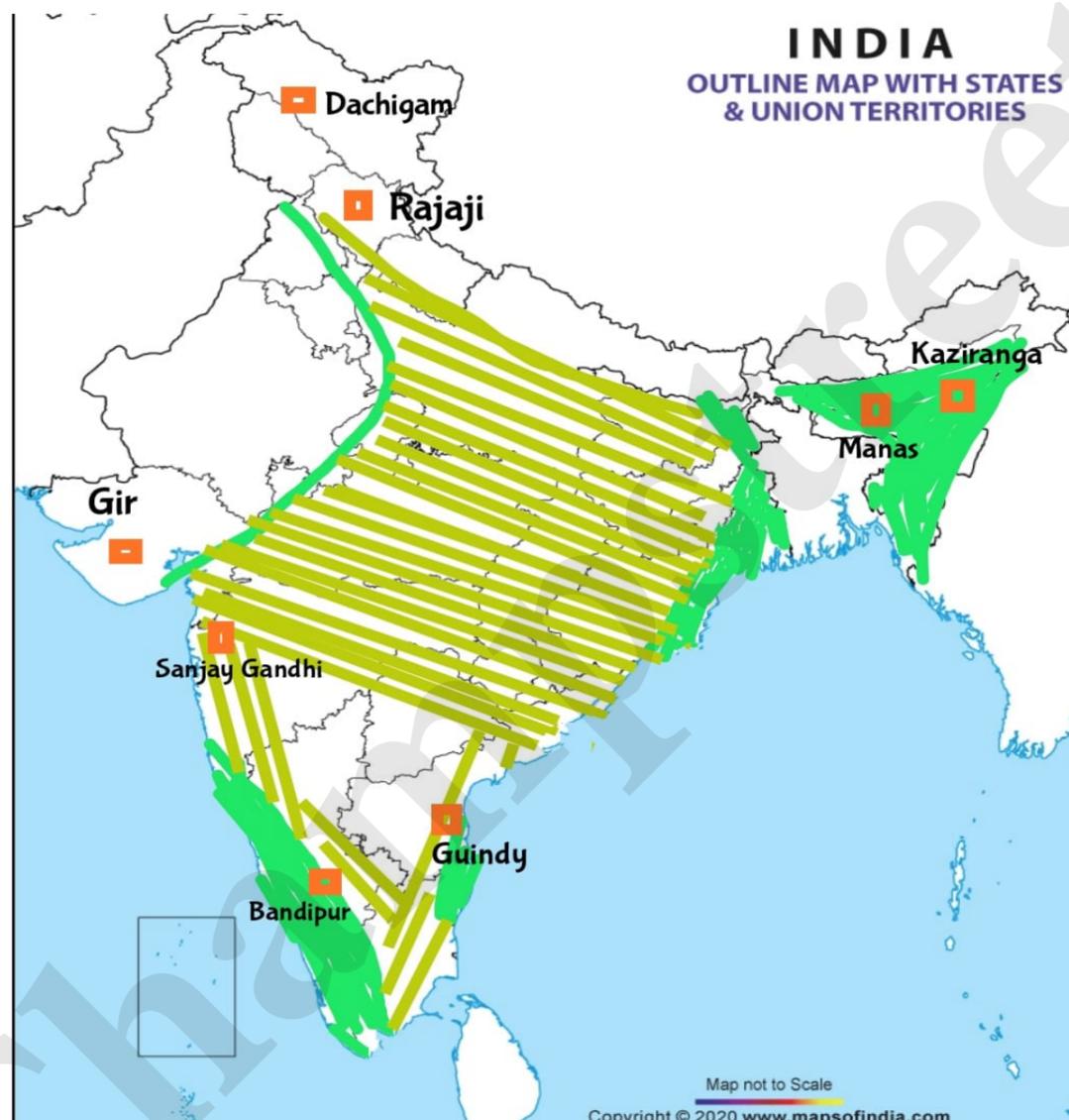
MAP SKILLS

On an outline map of India, label the following.

(i) Areas of Evergreen Forests

(ii) Areas of Dry Deciduous Forests

(iii) Two national parks each in Northern, Southern, Eastern and Western parts of the Country.



Answers :

(i) Green shaded region represents areas of Evergreen Forests

(ii) hatched lines represents areas of Dry Deciduous Forests

Project/Activity

Question 6:

(i) Find some trees in your neighborhood having medicinal values.

Answer :

- Bael
- Babul
- Neem
- Bargad
- Peepal
- Arjuna
- Asoka
- Amla

(ii) Find ten occupations getting raw material from forests and wildlife.

Answer :

- (a) Carpentry
- (b) Rubber industry
- (c) Leather industry
- (d) Ayurvedic medicine manufacturing
- (e) Paper industry
- (f) Glue industry
- (g) Fruit and food production industry
- (h) Hunting
- (i) Resin extractor
- (j) Perfume industry

(iii) Write a poem or paragraph showing the importance of wildlife.

Answer : Wildlife plays an important role in balancing the environment. Wildlife provides a stability to different processes of the nature. Wildlife and nature have been largely associated with humans for emotional and social reasons. Animals have also been highly useful to us in providing food, clothing and source of income. Wildlife helps in maintaining the eco-logical balance of nature. Wildlife is also considered to be the one of the greatest factors for increase and better development of world trade and increase in national income. It also helps the farmers the most by providing a better way in ploughing and other techniques. Therefore, wildlife is of immense value to all in economic development. Since wildlife is the source of income to many, they play a vital role in their life as the economic factor. Also, many microorganisms and small animals like reptiles etc. also help in increasing the fertility of soil and providing a good base for agricultural activities.

Intext Questions:

Question : Why are the southern slopes in Himalayan region covered with thick vegetation cover as compared to northern slopes of the same hills.

Answer : Because the growth of the vegetation depends upon the rainfall and the southern slopes in Himalayan region attracts more rainfall than northern slopes.

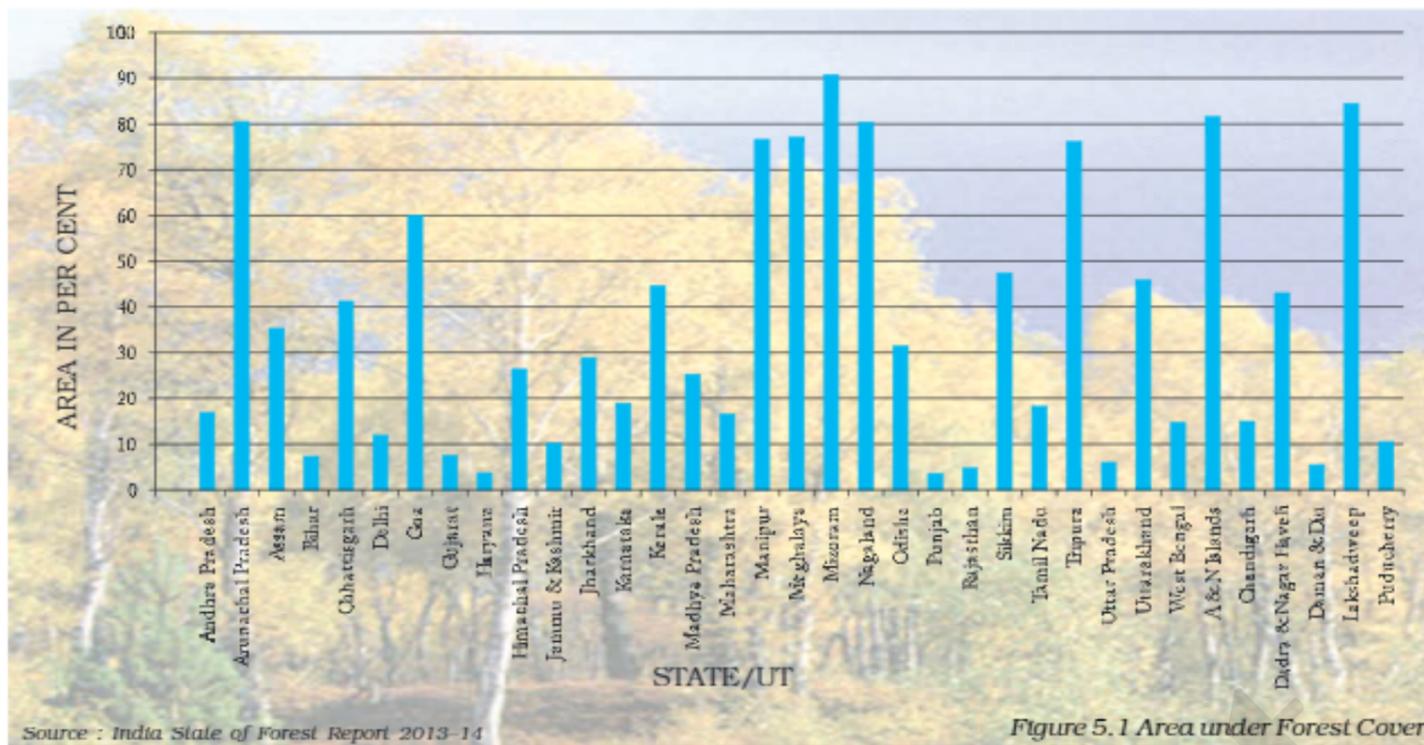
Question : Why are the western slopes of the western Ghats covered with the thick forest and not the eastern slopes?

Answer : Because the western ghats receives more rainfall due to southwest monsoon winds.

Activity

Question : Study the bar graph (Figure 5.1) and answer the following questions.

- (i) Name the state having maximum area under forest cover.
- (ii) Name the union territory having minimum area under forest cover and why?



Answer :

(i) Mizoram

(ii) Daman & Diu has the minimum area under forest cover because its area is small that is only 102 sq km. So, it is not possible to expand forest area there.

Let us discuss:

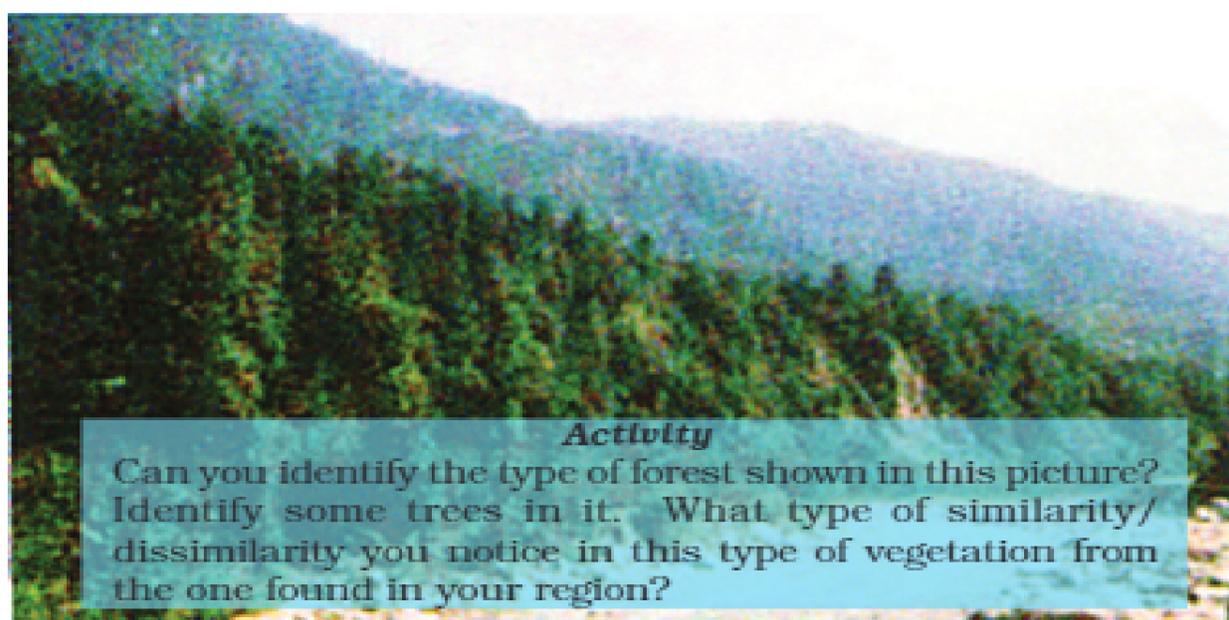
Question : What will happen if plants and animals disappear from the earth's surface? Can the human beings survive under such a situation? Why is biodiversity necessary and why should it be conserved?

Answer : If the plants and animals disappear from the Earth's surface, then the ecological balance will be disturbed. These animal and plant species, including humans, are all interdependent. Each species has its own place and role to play in the environment and help in the maintaining the ecological balance.

Biodiversity provides our food, cleans our water, provides medicines for curing illness, and even creates the oxygen that we breathe. So, biodiversity is crucial for enabling us to survive and stay healthy. If we reduce the amount of biodiversity there is, by driving many species to extinction, then we cannot expect that nature will be able to keep providing these things for us.

Activity

Question :



Answer : These forests are Montane forests and found in the higher hilly areas of Kerala and Tamil Nadu, also in the region of Eastern Himalayas to the east of 88°E longitude including the hills of Assam, West Bengal, Sikkim, Arunachal Pradesh and Nagaland.

Question :



Activity

- (i) Find out from the above newspaper cuttings, the main concern highlighted in the given news items.
- (ii) Collect more information about various endangered species from newspapers and magazines.
- (iii) Find out various steps taken by the Indian government to protect them.
- (iv) Describe how you can contribute to the protection of endangered animals and birds?

(i) Find out from the above newspaper cuttings, the main concern highlighted in the given news items.

Answer : The main concern highlighted in the given news items is killing of animals and actions to protect them.

(ii) Collect more information about various endangered species from newspapers and magazines.

Answer : various endangered species are:

1. Asiatic Lion
2. Bengal Tiger
3. Snow Leopard
4. Nilgiri Tahr
5. Kashmiri Red Stag
6. Blackbuck
7. One- horned rhinoceros

(iii) Find out various steps taken by the Indian government to protect them.

Answer :

- In the Wildlife Protection Act of 1972, GOI created Protected Areas like National Parks, Sanctuaries, Conservation Reserves and Community Reserves for the wildlife and imposed punishments on those indulged in illegal act of hunting.
- One of the most successful wildlife conservation ventures 'Project Tiger' which was initiated way back in 1972, has not only contributed to the conservation of tigers but also of the entire ecosystem.
- Initiated in 1992 by the Government of India Project Elephant aims at conserving elephants and their habitat and of migratory routes by developing scientific and planned management measures.
- Another successful venture by Government of India to conserve the Indian Crocodiles, whose species were on the verge of extinction once. The project also contributes towards the conservation in a plethora of related fields. The main objectives of the crocodile project are to protect the remaining population of crocodiles and their natural habitat by establishing sanctuaries; to promote captive breeding; to improve management; and to involve the local people in the project intimately.
- With an objective to conserve the Olive Ridley Turtles, the UNDP Sea Turtle Project was initiated by Wildlife Institute of India, Dehradun as the Implementing Agency in November 1999. The project is for 10

coastal states in India especially Odisha where it has contributed towards the preparation of a map of breeding sites of Sea Turtles; identification of breeding places and habitats along the coast line, and migratory routes taken by Sea Turtles.

(iv) Describe how you can contribute to the protection of endangered animals and birds.

Answer :

- **Learn about endangered species in your area.** Teach your friends and family about the wonderful wildlife, birds, fish and plants that live near you.
- **Visit a national wildlife refuge, park or other open space.** These protected lands provide habitat to many native wildlife, birds, fish and plants.
- **Never purchase products made from threatened or endangered species.**
- The best way to protect endangered species is to protect the special places where they live. Wildlife must have places to find food, shelter and raise their young. Logging, oil and gas drilling, over-grazing and development all result habitat destruction.

Question : Study the given map for the forest cover and try to find the reasons as to why certain states have more forest area as compared to others?

- Land affects the natural vegetation directly and indirectly. The nature of land influences the type of vegetation.
- The soils also vary over space. Different types of soils provide basis for different types of vegetation.
- The character and extent of vegetation are mainly determined by temperature along with humidity in the air, precipitation and soil.
- The variation in duration of sunlight at different places is due to differences in latitude, altitude, season and duration of the day. Due to longer duration of sunlight, trees grow faster in summer.
- Areas of heavy rainfall have more dense vegetation as compared to areas of less rainfall.