

5. NATURAL VEGETATION AND WILDLIFE



Figure 5.1 : Flora and Fauna of Brazil

Observe the images shown in figure 5.1 and discuss on the basis of the following points.

- Can you tell the names of the plants/trees shown in the image?
- Where have you seen these plants before?
- Name the fauna shown in the image.
- Where have you see them before?

You might have recognized the species shown above and discussed them, because there is similarity between them and many Indian species. But these species are found in Brazil. Look for their names. Now we will study about the variety of flora found in Brazil.

In figure 5.2, rainfall, flora and fauna of Brazil have been shown in the cross profile along with physiography. The change occurring in the above elements while going from north to south is clearly seen here. Discuss about this in the class and write a note about it.

Geographical explanation

Brazil Vegetation :

In Brazil, rainfall varies due to physiography. In most parts of the equatorial region, it rains throughout the year. As one moves away from the equator, the number of rainy days as well as amount of rainfall reduces. This affects the life cycle of the vegetation too.

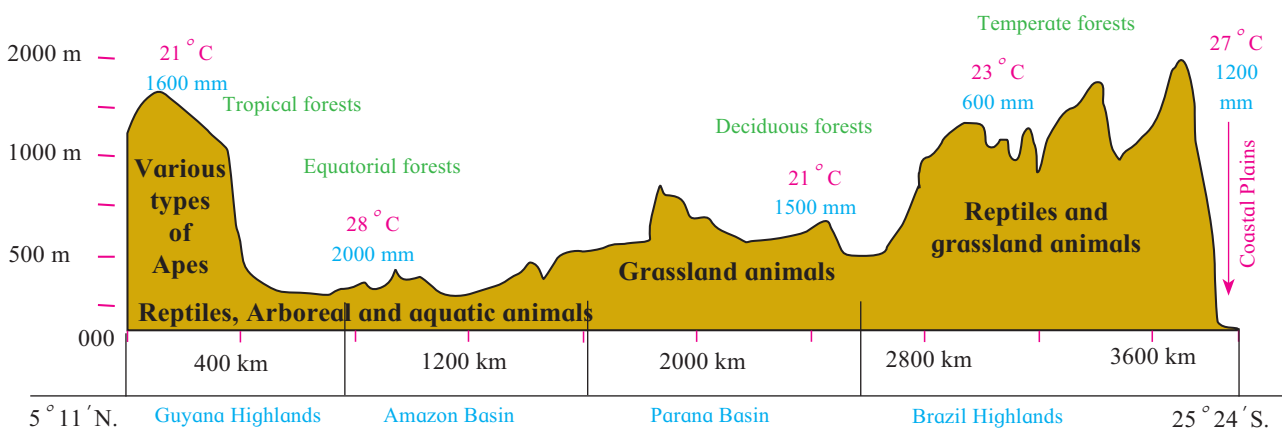


Figure 5.2 : Physiography, Natural Vegetation and Wildlife

Evergreen forests are found in the area where it rains throughout the year. In regions which receive rainfall only during certain seasons, the density of the vegetation reduces. Instead of forests, various types of grasses, short shrubs, thorny vegetation, etc. are found.

Brazil has the largest number of vegetation species in the world. This includes evergreen vegetation, semi-evergreen, arid, etc. One finds trees like Pau Brasil, rubber, mahogany, rosewood and a variety of orchids.

Because of the evergreen rainforests in Brazil, there is a large amount of oxygen that is released in the environment. This helps to reduce carbon dioxide levels. Therefore, these rainforests are rightly called the 'lungs of the world'.

INDIA VEGETATION :

Answer the following questions on the basis of figure 5.3

- Which forests are found in western snow-capped regions?
- On which coast do you mainly find the coastal vegetation?
- Which type of forests occupy maximum area in India? Why?
- Where do you find thorny and shrub vegetation and why?

Geographical explanation

Following types of forests are found in India.

In regions which receive more than 2000 mm of rainfall on an average along with abundant sunlight, evergreen forests are found. The leaves of the trees in these forests are broad and green. The trees have hardwood, heavy and durable. E.g. mahogany,

rosewood, rubber, etc. Also, there are various types of creepers found here. Highest biodiversity is found in these forests.

In regions receiving rainfall between 1000 mm to 2000 mm in India, deciduous forests are found. In dry seasons, trees shed their leaves so that water is not lost due to evaporation. For e.g., teak, bamboo, banyan, peepal, etc are the trees found in these forests.

Regions that receive less than 500 mm of rainfall and experience dry summers for a long period in India, thorny and shrub-type vegetation is found. The leaves are small in size. For e.g. catechu, acacia, khejadi, and varieties of cactus like aloe vera and agave.

In swampy areas, estuaries and lagoons near coastal areas having saline soils and moist climate, coastal type of vegetation is found. They are called mangroves or Sunderbans in India. The wood of these trees is oily, light and durable.



Make friends with maps!

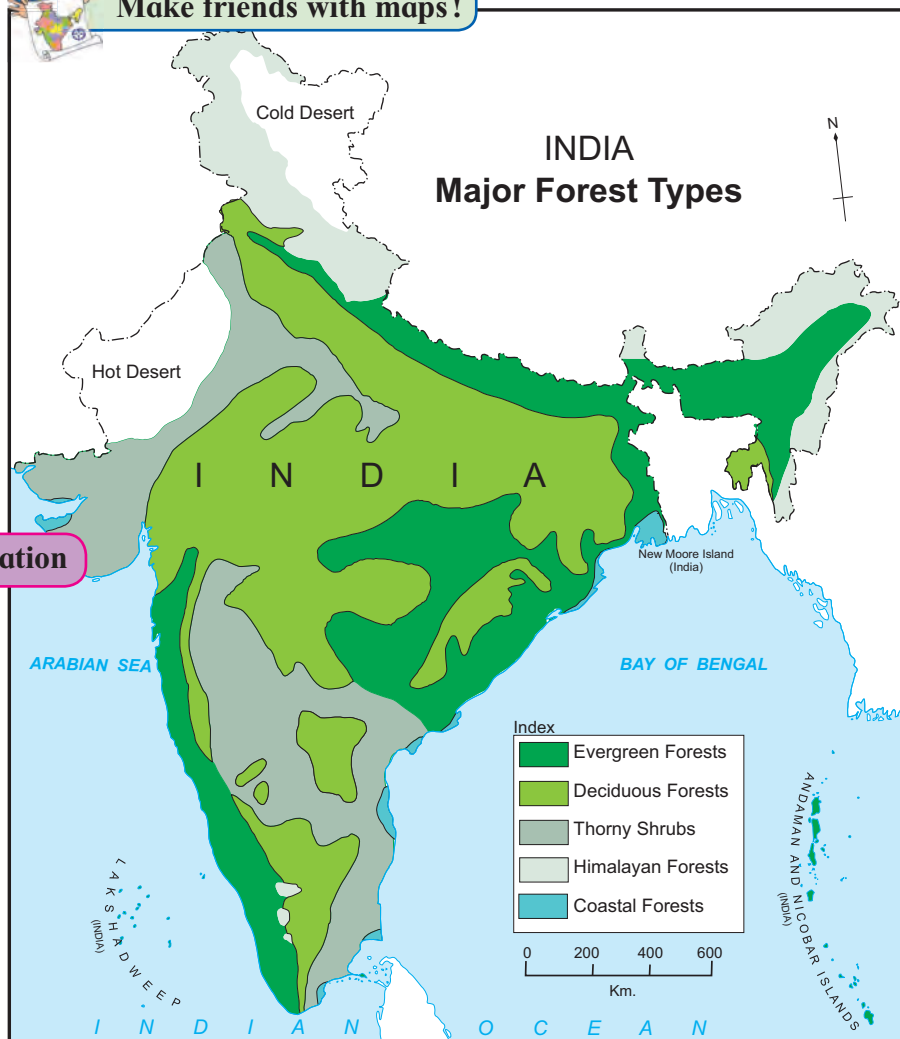


Figure 5.3

In Indian Himalayas, three types of forests are found according to the altitude. In areas located at the highest altitude, seasonally flowering trees are found. In regions with medium altitude, coniferous trees like pine, deodar, fir and at foothills mixed forests are found. This includes both coniferous and deciduous type of forests. Here, the proportion of sal trees is higher.

Brazil Wildlife :

On the basis of figure 5.4, answer the following questions:

- Name the species shown on the map. Condor, Anaconda, Golden lion tamarin, macaw, etc.,
- In which regions are these animals found? Why are their habitats found in these forests?
- Classify the forest regions with reference to their extent.



Colours of Both

- In which country do equatorial forests occupy a greater area? What could be the reason behind it?
- Which type of forests found in India are not found in Brazil?
- Which type of forests found in Brazil are found in India too?
- In which country a greater diversity of vegetation is found? What is the reason behind it?
- Considering the climate and vegetation types, in which country will forest-based occupations flourish?

Geographical explanation

A greater diversity in wildlife is found in Brazil than any other country in the world. In the swampy areas of the Pantanal, huge anacondas are found. In Brazil, guinea pigs, crocodiles,

alligators, monkeys, pumas, leopards, etc are found. Among the fish varieties, mainly swordfish are found in the seas while pink dolphins and piranhas are found in the rivers. Condors which are huge in size and fly high in the sky, various types of parrots, macaws, and flamingoes are the major birds found here. Millions of insect varieties are also found here. As a result of these varieties, the wildlife of Brazil is very rich and diverse.

Degradation of environment is happening due to illegal smuggling of wild animals, slash and burn agriculture (roca), deforestation, pollution, etc. Brazil

Make friends with maps!

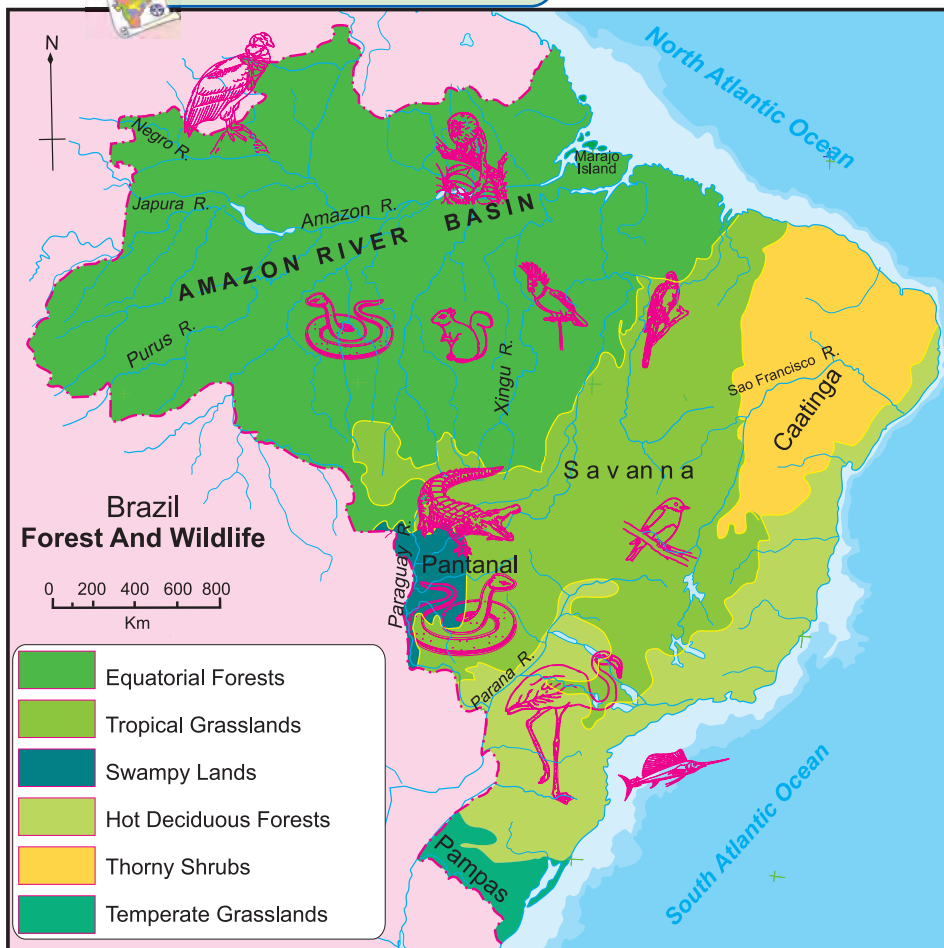


Figure : 5.4

is facing these problems today. Many endemic species are on the verge of getting extinct because of these issues.



Do you know?

A survey done in 2016 has found that approximately 5831 sq. kms. of land under forests in Brazil had already degraded in that year.



Try this.

India-Wildlife :

Show the following animals in outline map of India in fig 5.5 with the help of signs and symbols according to their habitats. Answer the following questions.

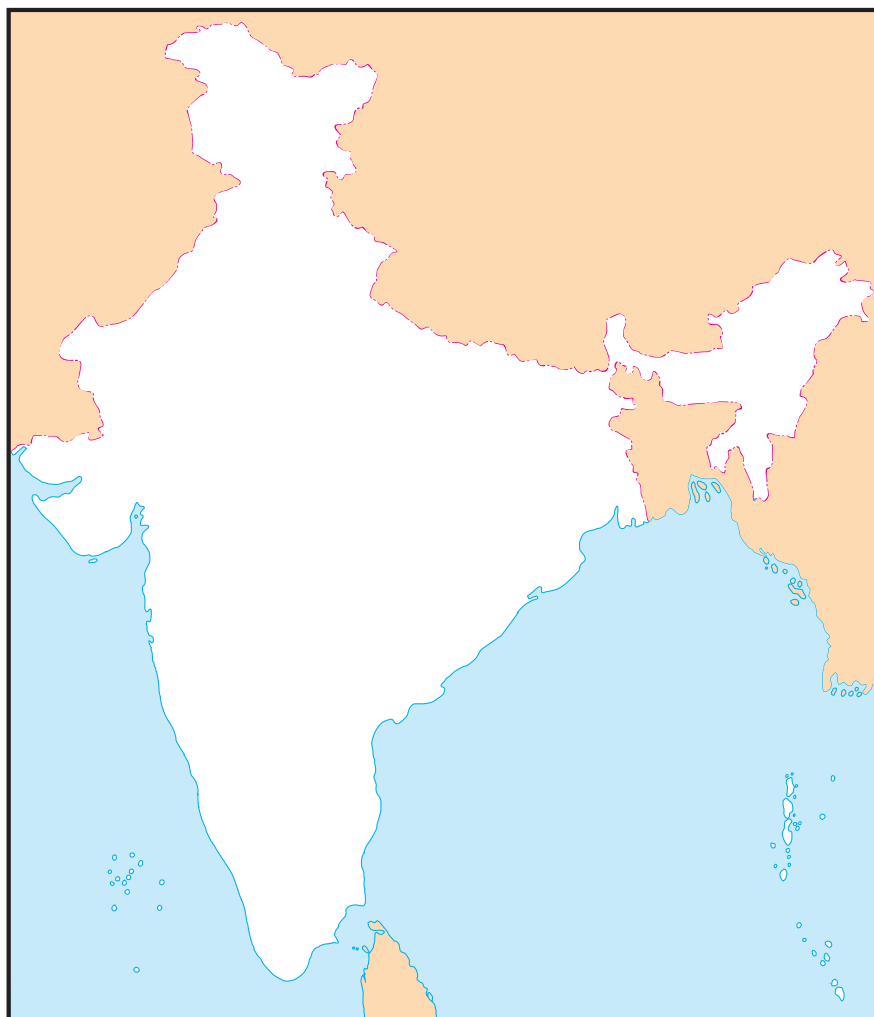


Figure : 5.5

- Bengal Tiger
- Great Indian Bustard
- Olive Ridley Turtles
- One-horned rhinos
- Nilgiri Tahr goat
- Lion
- Gangetic Dolphin
- Swamp deer
- Crocodiles
- Gharials
(Alligators)

- Correlate geographical conditions and the flora and fauna there.
- Do you know some other animals too ?
- Show the habitats of tigers in India with their names on a map.
- Why is their habitat found in these regions?

Geographical explanation

India is also a Mega-diverse country in

terms of wildlife. There are many species of wildlife in India. Elephants are found in hot and humid forests. One-horned rhinoceroses are found in swampy and marshy lands of Assam. Wild ass and camels are found in arid lands. Snow leopards and yaks are found in the snow-capped regions of Himalayas. Indian Bisons, deer, antelopes and monkeys are found in the Peninsular region. India is the only country in the world where both tigers and lions are found.

Rivers, estuaries and coastal areas are homes of many turtles, crocodiles and gavials (gharial). The forests and wetlands are the shelters of variety of birds like Peacocks, Indian bustard, Kingfishers, pheasants, ducks, parakeets, cranes and

pigeons. All these species make it a land of unique habitat of wildlife.

Many species of wildlife are on the verge of extinction from India because of poaching, pollution and rapidly occurring deforestation.e.g. cheetahs. The Government of India has set up number of national parks, wildlife sanctuaries, bird sanctuaries and biosphere reserves for the protection of wildlife and forests in India.



Give it a try.

Tiger is the national animal of India. The number of tigers is decreasing day by day. The situation is similar to elephants. Find information about such plants and animals. Find about their habitats. What should be done to conserve these animals? In which regions can this be done? Make a presentation of their possible places.



Use your brain power!

Find out in which parts of India is agriculture practice like the 'Roca' found in India? By what names are they called?



Exercise

Q 1. On the basis of the information given in the chapter, figures and maps, complete the table below:

Sr.no.	Type of Forest	Characteristics	Regions in India	Regions in Brazil
1	Tropical Forests	1. Broad-leaved evergreen trees		
2	Semi arid thorny vegetation	1. 2.		
3	Savannah	1. Scanty bushes and shrub-like trees and rain-resistant grass		
4	Tropical semi-deciduous	1. Mixed type of vegetation		
5	Grasslands	1. Grassland region like the Pampas of Argentina		

Q 2. Identify the odd man out

- (1) Forest type of Brazil-
 - (a) thorny bush type vegetation
 - (b) evergreen forests
 - (c) the Himalayan Forests
 - (d) Deciduous forests
- (2) With reference to India-
 - (a) Mangrove forests
 - (b) Mediterranean forests
 - (c) Thorny bush-type vegetation
 - (d) equatorial forests
- (3) With reference to fauna of Brazil-
 - (a) Anaconda
 - (b) Tamairin
 - (c) Macaw
 - (d) Lion
- (4) With reference to flora of India-
 - (a) Deodar
 - (b) Anjan
 - (c) Orchid
 - (d) Banyan

Q 3. Match the columns :

- | | |
|-------------------------------------|------------------|
| (a) Evergreen Forests | (i) Sundar trees |
| (b) Deciduous Forests | (ii) Pine |
| (c) Coastal Forests | (iii) Pau Brasil |
| (d) Himalayan Forests | (iv) Khejadi |
| (e) Thorny and bush-type vegetation | (v) Teak |
| | (vi) Orchid |
| | (vii) Sal |

Q 4. Answer in short:

- (a) Differentiate between the forest types of Brazil and India.
- (b) Correlate wildlife and natural vegetation in India and Brazil.
- (c) What environmental issues are faced by Brazil and India?
- (d) What are the major causes of

degradation of forest in Brazil and India?

(e) Why does the deciduous type of vegetation occupy most of India?

Q 5. Give geographical reasons

(a) The northern part of Brazil is covered by dense forests.

(b) Vegetation is scarce in the high altitudes of Himalayas.

(c) A wide variety of species of insects is found in Brazil.

(d) Wildlife in India is decreasing day by day.

(e) Like India, there is need of conservation of forests in Brazil too.



Deodar



Pau Brasil



Pine



Khejadi



Roca : In Brazil , shifting agriculture is called Roca. In this method, the land under forests is cleared by cutting and burning . On this patch of land, subsistence type of agriculture is followed for next few years.