



## Forests: Using and Protecting

- Some of you may be familiar with a nearby forest – its trees, plants, animals, rocks, streams, birds and insects. Describe to the class the forest in detail and what you do there.
- Have you ever been to a forest to collect firewood, leaves or fruits and tubers? Tell everyone in the class about it and also make a list of all the things people in your area collect from the forests. How are they used?
- You have read about forests and people living in the forests in the previous classes. Can you recall some of them and talk about people who live in the forests?
- Can each of you draw a picture of a forest and compare them?
- Our folk tales and Puranas and stories repeatedly mention forests. Can you relate in the class some such stories about forests?
- Many forests are sacred and are worshipped by the people. Some forests are famous as the abode of some gods and goddesses. Find out about them and tell everyone in the class about them.

### What is a Forest?

Forests mean many things to different people. Some people are afraid of forests thinking that it is the home of wild animals, snakes, insects and dangerous places like deep gorges, cliffs and rocks. Others have no such fear and walk around the forests as if it were their home and even play in the forests. To some, forests are sacred places whose deities are worshipped. To yet others, it is a place from where they get raw materials like timber, bamboo or beedi leaf or hunt animals and sell them in the market.

Similarly, different people use forests differently. Some people live in simple

shelters in the forests and grow a few vegetables etc., and gather fruits and tubers and hunt for small animals. Some others use the forests to graze their animals – sheep, goat, cows etc. Some others cultivate by making small clearings or *podu* in the forests. You have read about them in Class VI in the chapter about Penugolu. Many people use the forests by cutting down trees and bamboos and selling to paper or furniture factories in the towns. Yet others look at forests as places which can be converted into fields, tourist resorts or dams for storing water.

Of course, we need to remember that human beings are not the only living beings who use forests. Trees, plants, grasses,

birds, insects, animals, fishes - countless beings thrive in and use the forests. So when we think of the forests we need to think about them too.

- What is a forest? There can be many ways of defining a forest. Write a definition of forests.
- Then discuss jointly in the class and write down points which seem to be correct to most students.

How we define a forest will depend upon how we look at them. For example, one easy definition can be 'a large tract of land covered by trees'. While this may be a useful definition, it has several limitations. For example, we need to ask how large a tract? What do we mean by covered by trees? How thickly covered? Can we differentiate between a forest and a plantation which can also be 'covered by trees'? Can a forest be complete without its undergrowth, animals, birds and insects? There can be many more questions like these about any definition.

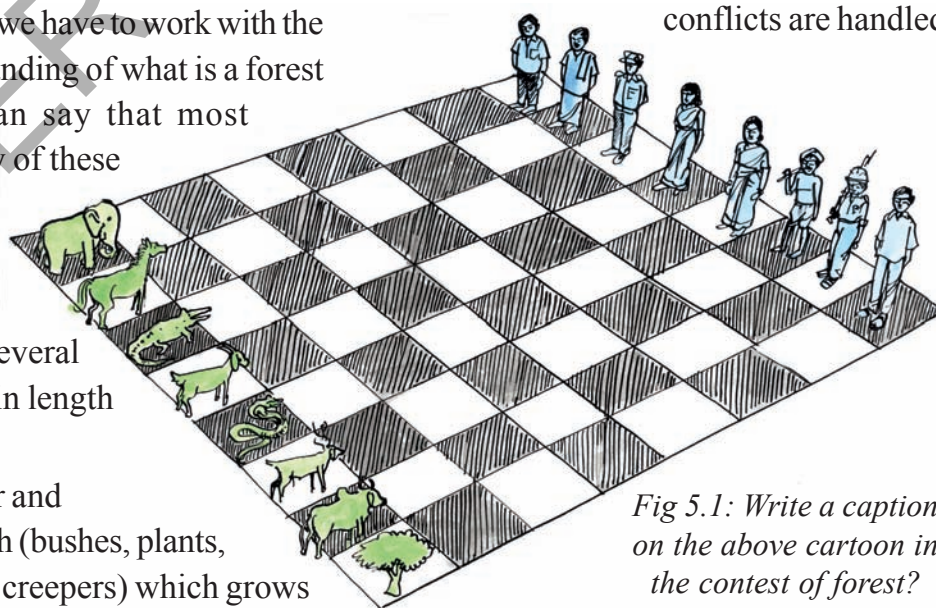
Nevertheless, we have to work with the common understanding of what is a forest – perhaps we can say that most forests have many of these features:

1. A large tract – stretching several kilometres in length and breadth
2. A tree cover and undergrowth (bushes, plants, grasses and creepers) which grows

with little interference from human beings

3. Considerable bio-diversity – where many kinds of plants and animals live and breed naturally without interference
4. In India, at least, most forests are inhabited by people who have been living in them by adapting themselves to the conditions of the forests but without changing them too much.

People living around the forests use them for a variety of purposes: for food, for wood for building cottages and making agricultural tools, fuel, grazing animals, for worship, solitude etc. People living far away from forests too have been using the forests for many things like wood, medicines etc. which they buy in the market. Thus, many people earn their livelihood by collecting forest produce and selling them. Later on, we shall see how these different uses of forests often come into conflict with each other and how these conflicts are handled.



*Fig 5.1: Write a caption on the above cartoon in the contest of forest?*

- Do you think it is important to have forests? What will happen if all the forests are cleared and used up for growing crops, building factories or mines or houses for people to live? Can't we live without forests? Discuss in your class.

## Location and Types of Forests

Where do forests grow? This is a difficult question to answer. Several thousand years ago, forests grew almost everywhere where there was soil, sunshine and rain. Thus, forests did not grow only in the Arctic regions or high up in the snow covered Himalayas or sandy or rocky deserts, or on sandy sea coasts. Leaving aside such places, forests grew almost everywhere. However, as human beings took to agriculture and living in villages and towns, forests were cut down for agriculture, mines, plantations, industries, etc. Slowly, by the beginning of 20<sup>th</sup> century, forests were confined to only tracts that were not useful for agriculture. Regions that were hilly, swampy, rocky etc. or which were too cold or far away from population centres retained forest cover.

- Which is the nearest forest area from your village or town? Find out why this area still has tree cover and has not been converted into fields or habitations or mines.

Forests can be classified on the basis of different criteria. For example, we can classify them on the basis of how dense or sparse the vegetation is. We can have very dense forests, dense forests, open scrub forests, degraded forests etc. This classification helps us to understand where we have thick forest cover and where it is in a degraded situation. Another way of

classifying forests is by looking at the type of vegetation that grows in them. Different kinds of trees grow in places which have a particular climate – combination of rainfall, temperature and cycle of dry, wet and hot months etc. For example, some trees such as coniferous trees like pine will only grow in very cold climates which also have snowfall. Some trees like teak grow in regions of moderate rain and warm temperatures. The density of the trees will also depend upon the nature of rainfall and temperature.

Let us learn more about some main kinds of forests.

**1. Evergreen Forests:** Regions which get very high rainfall and also have a very warm climate such as Equatorial regions or regions like Kerala and Andaman in India have evergreen forests. These are dense forests with a very large variety of trees, plants, creepers, etc. These forests are always green as the trees shed their old leaves but get new leaves very soon. While one kind of tree sheds its leaves, another tree remains green. This is because they get moisture and warmth to grow constantly. *Jamun*, canes, bamboos, *kadam* etc are some characteristic trees of these regions. We do not have such forests in Telangana.

There are also different kinds of evergreen forests in the Himalayas. These are pine forests which remain green throughout the year. However, they have leaves which are very thin and shaped like needles. These trees don't bear flowers but produce cones and hence are called coniferous trees. These trees grow in areas with snowfall. Hence, these trees have needle like leaves which do not allow the snow to rest on them. The tree itself is shaped in such a way that the snow slips





Fig 5.2: (top) Evergreen forest in Western Ghats, Anaimudi, (bottom) Snow covered Deodar forest in Gulmarg Himalayas

down the sides and falls on the ground (just like sloping tiled roofs of houses).

**2. Deciduous Forests:** These grow in regions where it rains only for some months and is warm and dry for most of the year. The trees shed their leaves during very dry months. Water evaporates through the leaves, and the trees try to conserve moisture by getting rid of the leaves during the dry months. New leaves come with the onset of rains so that the trees can produce food for themselves. Most of the forests of Telangana fall in

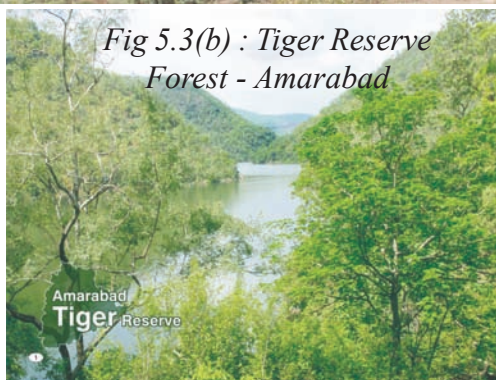
this category as we get less rainfall, only for some months and it is very hot during most of the year.

Normally, there are two kinds of deciduous forests – one which receives more rain and one which receives less rain. The deciduous forests which receive more rain have the following kind of trees – *Vegi*, *Ageisa*, *Maddi* (*Arjuna*), *Bhandaru*, *Gittegi*, *Teak*. In Telangana, such forests are found in Komram Bheem, Adilabad, Manchiryal, Nagar Kurnool, Jaya Shankar and Badradri districts.





**Fig 5.3(a) : Teak trees in summer**



**Fig 5.3(b) : Tiger Reserve Forest - Amarabad**

In areas with less rainfall, we have trees like *Maddi*, *Teak*, *Velaga*, *Aegisa*, *Yepi*, *Tuniki*, *Chiguru*, *Billu*, *Neem*, *Dirisena*, *Buruga*. Such forests are more widespread in Telangana in Adilabad, Warangal, Khammam, Nizamabad, Karimnagar and some areas of Mahabubnagar districts.

**3. Thorny Forests:** These forests grow in very dry areas with little rainfall and high temperatures. Most of the trees are thorny. The common trees are *Babul* (*Thumma*), *Bulusu*, *Regu*, *Seetaphal*, *Moduga*, *Neem* etc. In Telangana, they are found in Nalgonda, Mahabubnagar and some parts of Medak districts.



**Fig 5.4: Thorny bushes**

You may recall that these districts get very little rainfall nearing desert conditions. Thorny trees have very tiny leaves and thorns which help to conserve water. The forests are also not dense and have open spaces and more undergrowth with fewer trees.

#### **4. Littoral (sea coast) and swamp forests:**

These forests grow mostly on the sea coasts, on sandy beaches and marshy lands and on lands affected by tidal waves. Here, the trees are adapted to salt waters and the flow of tidal waves (tidal waves typically submerge these areas for some hours of the day and recede, thus alternating salt water flooding and drying).

These are also called mangrove forests – the trees have developed some unique features to survive in this difficult environment.

*Uppu ponna*, *Boddu ponna*, *Urada*, *Mada*, *Tella Mada*, *Gundu mada*, *Kadili* and *Bella* are some of the typical vegetation of coastal region.

- Find out how the mangrove trees adapt to the special conditions of sea coasts.
- You may remember reading about Equatorial forests in Africa. What are the main differences between the forests of Telangana and the Equatorial forests?
- Look at the map of Telangana given on the next page, showing the distribution of forests. Find out if your district has any forest and if yes, what kind of forest.

#### **Status of Forests in Telangana**

You read about some of the important kinds of forests in our state. But how large are our forests? Are they increasing or decreasing? Let us find out.

About 26,904 sq kilometres of the region has been declared as forests by the government. This is about 24% of all land in the region or nearly one quarter of our state. However, all this is not really forested as only about 16.74% of our land has tree cover to qualify as forest. This means that is about 7% of our forest lands are open grounds and with very few trees. Even this forest cover is dwindling due to felling, encroachment, mining etc. Every year about 30 sq.km of forests are lost in our state.

- Is this a satisfactory situation? Discuss in your class.

### Initiation for Greenery in Telangana

Due to this Telangana government has initiated massive plantation programme in 2015 with the aim to increase the forest cover. It is planned to plant about 230 crore saplings in four years time. As a part of the programme, the saplings are being planted near the open spaces in habitations of the people, on both sides of the roads, on all tank bunds, in all public places like schools, colleges, universities, hospitals and in the premises of the offices.

The increased green cover helps in high rainfall and abundant water sources. It also prevents soil erosion. If we protect nature, it protects us. Thus the state government is seriously focusing on plantation of saplings. The preservation, restoration and improvement of the natural and social environment is the major issue all over the world. It includes conservation of natural resources, prevention of pollution and sustainable use of land.

- What sort of climate changes will occur with the high density of tree cover?
- Give suggestions for better implementation and protection of the plants.

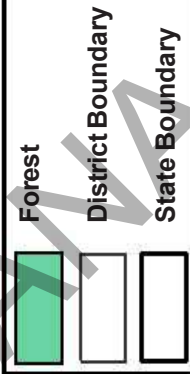
### Tribal people and Forests

It is difficult to imagine forests in our country without the people who live in them and use them. Forests provide the critical resources for the poor in our state to make a living. Very few people in Telangana collect minor forest produce (called Non-Timber Forest Produce or NTFP) and sell them in the local markets for earning a living. You would have made a long list of forest produce that people collect, but the complete list is much, much longer with about more than sixty items on it!

Of the people who depend upon forests for their livelihood, the tribal people are the most important. For thousands of years, tribal people have lived in these forests, protected them and earned their livelihood from them. You have read about them in the earlier classes.

Even today, more than 60% of the forests of Telangana are in areas where tribal people live. Similarly, about 60% of tribal people in Telangana today live in forests. How do the tribal people use the forests? You may remember how people of Penugolu use the forests around them – for podu cultivation, collection of forest produce like food items, (fruits, tubers etc), items for sale like beedi leaves, medicinal plants, bamboo, tamarind, etc.

Unlike in plain villages, tribal people don't have the notion of private property in land and all clan members use the forest with the consent of the village elders. Each family has customary right over the land they cultivate and will shift to in the coming





years. Since the *podu* keeps shifting every few years, there is no fixed record of ownership of land. Also, when population increases and new families are formed, the village elders give them permission to clear new plots of land. Before the British rule, the tribal people treated the forests as their own. It was a sacred land to them and they used it without causing damage to it or the animals in it. Even when they hunted for animals or cleared forests for *podu* fields, they ensured the regeneration of animals and trees. Thus, they worked after as well as used the forests, just as a peasant family takes care of its fields.

- Do you think it is possible for people to take care of forests and use them as well? What would they have done if someone had tempted them to cut trees and sell them in the markets?

During the last two hundred years, after the establishment of the British Rule, in India the tribal people gradually lost their control and rights over the forest. Since then, forests were rapidly cut down. This happened in two ways. Firstly, there was a great demand for wood for various purposes like building railways, ships, factories, mines, houses, furniture etc. Similarly, many industries like paper industry, as you have read in Class VII, need large quantities of pulp wood. As a result of these pressures, large tracts of forest were cut down and the wood was sold out. In many areas, forests were cut down to create

plantations of tea, coffee or rubber and later on, of quick growing trees like eucalyptus or bamboo. Thus, the total area under forests got reduced greatly.

- Do you think there is any difference between a plantation of eucalyptus trees or tea shrubs and a forest? Discuss in the class.

Moreover, the laws passed by the Nizam government in the areas under its control restricted the traditional/customary rights of the tribals and forest users by classifying forests as ‘reserved’ and ‘protected’ forests. Reserved forests were forests in which no one could enter. ‘Protected’ forests could be used by people; they could take head-loads of wood and small forest produce for their own use and could graze their cattle. But, here too, there were many restrictions on cutting trees, grazing more than the limit set by the Forest Department etc.

Yet, as we know, a very large number of people lived in these forests and depended upon their use. The government at that point of time did not really care for them. When the government had to define





the area under forest, it treated most of the land used by the tribals as forest belonging to the government. This was because, unlike in the plains villages which had village land records, most of the tribals cultivated land without any ownership records. In the northern districts of Telangana, the Gonds cultivated settled agriculture, while the Kolams etc. practised *podu* cultivation on the hill slopes. Even the Gonds who practised a more settled type of agriculture were in the habit of leaving lands fallow and cultivating alternate lands in two-year cycle. The demarcation of Reserve Forests did not take notice of these practices and rendered many tribals without rights and led to forced evictions.

In one stroke, the tribal people were rendered homeless in their own homes! To add to it, the government was eager to hand over the land to zamindars and cultivators from other areas so that they could settle down and cultivate the lands and pay revenue to the government. The evicted tribal people had to work for these landlords now. On the lands which the tribal people were allowed to cultivate, they had to pay very high revenue. Often they had to borrow money from moneylenders to pay this amount. In the end, they had to sell off their lands to the moneylenders. Thus, they again lost whatever land they had.

The Forest Department which was established in this period had the task of protecting the forests and planting new trees. It also had the responsibility of managing the 'harvesting of the forest', that is felling mature old trees and selling them to earn money for the government. The

Forest Department officials usually belonged to distant rich communities who regarded the tribal people as ignorant and dangerous and had no sympathy for them. They exploited the helpless tribals cheated them and constantly harassed them. In the name of forest conservation, large-scale evictions occurred in the 1920s and mopping operations continued till 1940. This created an atmosphere of unending insecurity for the tribal people.

The tribal people protested and fought against this from the very beginning. In some regions like the North East, they were able to win some protection from the government.

- List all the causes for the decline of forests in the last 200 years. Do you think *podu* cultivation was also responsible for this? Give your arguments.
- What was the difference between protection of forests by the tribal people and by the Forest Department?
- Why do you think were the tribal people unable to pay the land revenue demanded by the government?

At the time of independence, our national leaders were debating whether it was better for tribal people to be left alone to lead their traditional lives in the forests or should they be made to adopt settled agriculture, modern education and industrial work.

- Which way would have been better according to you? Discuss with you classmates.

## The change from 1988-90

By 1988, the government had realised that the development of tribal people could not be thought of without giving them any rights over forests. They understood that the protection of forests was impossible without the active role of tribals. The National Forest Policy, 1988 declared that the primary task should be to associate the tribal people with the protection, regeneration and development of forests. It also wanted to provide gainful employment to the people living in and around the forests. The government sought to involve the village communities living close to the forests in their protection and development of the degraded forest land. It also prescribed the right of use to village communities to meet their requirements of forest produce and active participation in afforestation programmes. This was the beginning of an active cooperation between the forest/ village communities and the Forest Department for the revival, restoration and development of degraded forests. Under the new policy, the Forest Department and local communities are expected to collaborate in regenerating degraded forests, planting trees. The communities are allowed to use the grass and other minor forest produce.

In Telangana, this programme was renamed as Community Forest Management (CFM) programme. While this programme helped to bring together the Forest Department and the local communities, it only forced the tribal people to give up their earlier *podu* lands for forest regeneration. During the same time, several Tiger Sanctuaries were established in the forests to protect wild life.

- Find out from your elders about their experience of CFM and also Social Forestry projects.
- Why do you think did the government think that forest was not important for tribal people's development?

## Forest Rights Act, 2006

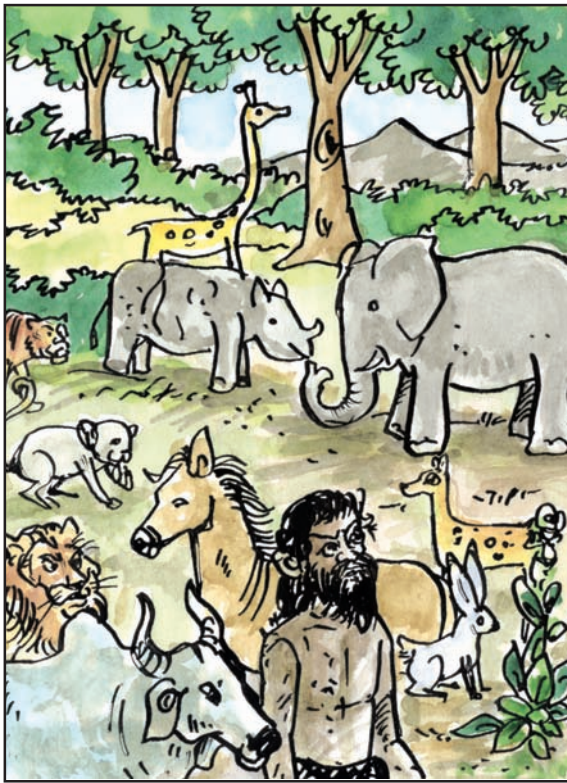
The tribal people had been protesting and fighting against these new policy activities. Their cause was taken up by many non-governmental agencies which built a national campaign for tribal rights over forest. After prolonged debate, the Parliament passed the Forest Rights Act in 2006. For the first time, it was accepted that during the last 200 years, gross injustice had been done to tribal people and others by denying them traditional rights over the forests which actually belonged to them. It also recognized that it was impossible to preserve the forests without restoring the rights of the tribes etc.

The Act gave three main reasons for passing the new law:

First, to conserve the forests and at the same time, ensure livelihood and food security of the forest dwellers;

Second, the forest rights on ancestral lands and their habitat were not adequately recognised during the colonial period as well as in independent India. This resulted in historical injustice to the forest dwellers, who are integral to the very survival and sustainability of the forests; and, Third, it has become necessary to address the long standing insecurity of land rights and access rights of forest dwellers including those who were forced to relocate their dwelling due to State development interventions (like dams or tiger reserves).





1. Once upon a time humans lived amongst us.



2. Then they began to fence us out.



3. They began building cities and more villages and now finally they have left no forest uncut and still say "reserved forest".



4. Do you think animals feel protected from humans? Have you heard about protected forest?



The Act confers on forest dwellers and other traditional users of forests, their traditional rights over the forests and also entitlement to the lands they use. If implemented properly, this Act can be used to undo the wrongs done to the tribal people over the generations.

- In what way do you think does this act make up for the injustice done to the tribal people in the past 200 years?

Many people who are associated with the conservation of forests fear that this Act may cause further deforestation as the

people may try to make use of forests for commercial purposes rather than for traditional domestic purposes. On the other hand, some others feel that by making the forest dwellers who have been traditionally taking care of the forests the main protectors, we will be able to save the forests better.

- Discuss this in the class – do you think it is the correct way to redress the wrongs done to the tribal people? How will it help in protecting the forests? What other steps need to be taken for this?

### **Try to understand the Provisions of the Forest Rights Act with the help of your teachers**

- a. right to hold and live in the forest land under the individual or common occupation for habitation or for self-cultivation for livelihood by a member or members of a forest dwelling Scheduled Tribe or other traditional forest dwellers;
- b. community rights such as nistar...; (such as traditional rights for firewood, grazing etc.)
- c. right of ownership, access to collect, use and dispose of minor forest produce which has been traditionally collected within or outside village boundaries;
- d. other community rights of uses or entitlements such as fish and other products of water bodies, grazing...;
- e. rights including community tenures of habitat and habitation for primitive tribal groups and pre-agricultural communities;
- f. rights for conversion of *Pattas* or leases or grants issued by any local authority or any State Government on forest lands to titles;
- g. rights of settlement and conversion of all forest villages, old habitation, etc...;
- h. right to protect, regenerate or conserve or manage any community forest resource...;
- i. right of access to bio-diversity and community right to intellectual property and traditional knowledge related to bio-diversity and cultural diversity;

## Keywords

1. Afforestation
2. Deforestation
3. Forest management
4. Forest Rights Act
5. Reserve Forest

## Improve your learning



1. Do you agree with the following statements? Give reasons for your agreement or disagreement.
  - The notion of private property is important to protect the forest.
  - All forests need to be protected by human beings.
  - Over the centuries most people living on earth have reduced their dependence on forest for their livelihood.
2. Create a timeline to show the major changes in use of forests over centuries. You may be required to look at your textbooks from previous classes.
 

Event	Changes affecting tribal life	Impact on forest
Emergence of agriculture		
Arrival of the colonial rulers		
Government rules		
3. Based on the details given in the above text, or from what you already know about the forests, compare the type of forest that is closest to your area of living on the following aspects:
 

Density of trees	Types of trees found	Special features of trees
4. Observe the map of the forests in Telangana and find out which district(s) has/have the maximum forest covered area?
5. A few children in a school participated in *Vanamahothsavam* programme and they planted some saplings. How would you respond to this?
6. Read the paragraph under the Heading 'Forests of Telangana' and answer the question?
7. What is the difference between Evergreen forests and Deciduous forests?
8. Observe the pictures on page 59 and write a comment.