

Pushpa stays at Visakhapatnam. Her grandfather stays at a village near Sringavarapukota.

- Try to locate these places in a map of Andhra Pradesh given in your atlas.

Pushpa always visits her grandpa's place during the summer vacation as grandpa owns a large mango orchard. She could feast on the juicy mangoes and feel the cool air at the orchard there. On the way to grandpa's village the beautiful view of thick forests of Ananthagiri always attracted her. She would ask her parents to stop the car on the roadside to take a look at the forests along the hillside. There were different types of trees; several small and big plants growing close to each other and some climbers growing up to the tall tree tops!



Fig. 1

At the village, grandpa would take her into the orchard which looked like a forest with so many mango trees and the small plants growing under them. The difference was, all trees here grew in lines and were of the same kind!

Every morning after breakfast, grandma would pack a knapsack with some snacks, a bottle of cold water and a flask full of coffee. Pushpa was so fond of the orchard that she would love to spend the whole day under the shade of the trees. She could hear birds chirping, watch squirrels running about, people moving around, grandmas' goats wandering to feed on small plants, some insects flying about (grandpa always used the right insecticide – a chemical to kill insects to keep the orchard free from them yet some were always left!). It was indeed such a wonderful place!



Fig. 2

Pushpa had just passed her class sixth exam and had been pondering over a question in the question paper which was, "What do trees give us?"

In the answer to it she had written about several things as well as shade and cool air. Was she correct?

Do we feel cool under the shade of the trees in an orchard?

- Make a list of things that you know are obtained from trees.

Grandpa's orchard:

Pushpa always wondered how these mango trees had grown in grandpa's orchard.

Grandpa explained that it was great grandpa who was given a piece of land in the forest. The forest area had to be cleared to grow the mango saplings (baby plants) and develop it into the orchard it was today.

"There must have been wild animals then in those days?", enquired Pushpa.

"Yes off course, great grandpa along with his brothers and other villagers had to beat drums and use lighted fire torches at night to drive away the wild animals".

Where did the wild animals go? Where do they live now? What happened to the trees that were already present there? Do we always destroy forests to grow orchards or crops? Questions after questions poured out and grandpa had to think a lot to answer them.

- Why do we need forests at all? We could have only these orchards with so much of fruits to eat and, due to the absence of wild animals, safe to roam around too! Do you support this statement? Why?

What Forests are?

Pushpa asked her friends and relatives to find answers to questions that came to her mind.

These are some information given to her.

- In ancient times the country was famous for its dense and continuous forests like Dandakaranya, Panchavati, Nallamala etc. But with the advance of civilization through ages, most parts of these forests are gone now.

- Forests have been cut down at a very fast rate in the past hundred years and replaced by industries, orchards (plantations of fruit bearing plants) or those needed for timber or other economic needs, croplands etc.

- The natural habitat of a forest is lost when forests are cut down. Several types of organisms disappear (either die out or leave the place).

- There are forests only on 19.3% of the geographical area of our country now (some reports say it's much less than this).

- A forest is a community of trees, shrubs, herbs and other plants and organisms that cover a large area using carbon dioxide, water, soil nutrients etc.

- Forests take up a large amount of Carbon dioxide and some other harmful particles and gases and keep the air clean. They serve as lungs of our earth.

- Forests are renewable natural resources, which play an important role in the maintenance of ecological balance.

- They are an important source of timber, fuel wood, cane, resins, lac, oils, fruits, nuts, firewood, fodder for animals, honey etc.

- The forests also have wild strains of the cultivable crops and medicinal plants.

- If affected by a disease, the whole forest area is not destroyed.

- They provide habitat to wildlife.

- Forests help to control soil erosion.

- They help in causing rain.

- They keep the surrounding cool.

Pushpa was quite confused. There were so many things written about forests! She could not understand some parts such as how forests maintained ecological balance, how they could be lungs of the world etc. She could only make out some common things about forests which were-

Forest is a place where there are many different trees. It is a home for wild animals. It also decorates the world. It is a very airy and shadowy place. We should not cut them to build factories, buildings etc or to grow crops, orchards etc.

- What is your opinion about forests?
- Why do you think forests are called lungs of the whole earth?
- In what way is an orchard different from a forest?

- Can large areas of plantations of same type of trees like eucalyptus be called forests? Why?
- Draw the picture of a forest in your notebook on the basis of what you have learnt so far.
- Do all forests have the same type of animals and plants? Why or why not?

Diversity in forests:

A. Forests of A.P.

Let us find out about the types of plants and animals in the forests of our state.

In the forests of Andhra Pradesh we can see different types of trees like Teak, Sal etc., as well, that grow very tall. Neem, Tamarind, Amla, Soapnuts, Red sandalwood grows quite tall. There are bushes, creepers, guggilam,

Forest area	Animals that live in the forest	Types of Trees
Chittoor Dist.	Elephants, Deers, Monkeys, Snakes, Squirrels	Tamarind, Amla, Neem
Kurnool Dist.	Tigers, Bars, Jackals, Wolf, Salamanders	Tamarind, Amla, Neem, Tangedu
Visakhapatnam Dist.	Tigers, Deers, Chimpanzees, Snakes, Fox	Tamarind, Amla, Neem, Tangedu, Bamboo
Adilabad Dist.	Elephants, Tigers, Monkeys	Tamarind, Amla, Neem, Tangedu, Addaku

tangedu, kamba, yegisa, nallamaddi, bamboo, etc as well.

Let us do-1: Studying diverse animals and plants

Form groups and discuss about animals and plants found in the forests of our state. Take

the help of the above table, add some more names (refer to books in your library and also ask your teacher) and make a list of them.

Discuss and write why there could be variation in the type of animals and trees found in forests.

B. Forests of other regions

Let us do-2: Comparing forests

Find the similarities and differences between the two types of forests as given in the pictures?

- We have studied about habitats in class VI, on the basis of that, can you say why forests are good habitats?



Fig. 3(a)

Forest of hot and humid areas (Equatorial)



Fig. 3(b)

Forest of cold areas (Alpine)

- Do you think forest is a habitat for human beings as well? How?

Besides animals and plants, forests have been a home of people as well, from ancient times. In various forest areas of Andhra Pradesh we find some people still living there and making it their home. They usually live in places in the forest where water is available.

To know more about them let us read this.

These people never harm the forest in any manner. Chenchus (adivasis) never cut green trees for fuel wood and for domestic purposes. They collect only dry wood. They also hunt only small animals like lizards and rabbits for their food. While collecting tubers that they eat, they leave a part of them in the

soil for the plant to grow again. They have very little needs and happily go about their daily lives.

These people are being forced to leave their forest dwellings and start other professions. Chenchus are the only people living in the company of tigers and wild animals. If they withdraw from the core areas, their rich knowledge of wild animals, medicinal plants and tree species will vanish.

- What are the problems that these people will face if shifted from the forests?

Let us do-3: Preparing case study on tribals

Collect information about other tribal people living in forests and prepare case studies. You can take help from one given on “Chenchu’s”.

The Chenchus – Handling forests with care!

Nayudu cheruvu thanda is a small village near Papinenipally in the dense Nallamala forest of Prakasham District. This village is surrounded by the highest hill ranges of Andhra Pradesh and there are thick forests as well with several wild animals.



People living in this village belong to “Chenchu” tribe (these people are found in other villages and districts of the state as well). A Chenchu walks through forests for nearly 30 km every day and has

thorough knowledge of forest, its flora, fauna and birds within a radius of around 15 km. They collect various food products like soapnuts, honey, tamarind, bamboo etc and sell them in the ‘Santha’ (a weekend market) and purchase materials like clothes etc. They also collect medicinal plants from the forest for which they are well known throughout the state.

Destruction of forests- An alarming pace!

Read the following news.



Fig 5(a)

- Discuss and write reasons.

Usually people destroy the forest for their own economic purposes for example, earning by selling trees and thus, excessive cutting down of trees or deforestation takes place. Deforestation also takes place when forests are cleared to construct buildings, roads, industries etc. Now-a-days thermal, nuclear power plants, mining industries led by multinational companies are a major threat to forests throughout the globe. Often large parts of forests are also lost due to forest fires.

- Does deforestation affect animals living in a forest? How?
- Think and write other reasons for the loss of forests.
- Why do wild animals enter villages near forests?
- What will happen if forests are completely destroyed?
- Can we have only croplands and orchards instead of forests? Why?
- Can growing various types of trees in your locality help to revive forests? Why?

Let us do-4:

Go around your locality and note the number of trees. Also note the different types.

- Write down their names (If you know).
- Are these trees also present in forests of our state?

STEP TOWARDS CONSERVATION

Kondamallipudi Vana Samraksha Samiti, is located at the foot hills of Ananthagiri forest alongside the Srungavarapukota. It is in an area inhabited by members of “Koya” tribe who



Fig 6

are known for getting into forest areas and cutting down trees to grow crops.

These people along with forest officials have now made great efforts to save forests by planting bamboo and other plants like Karaka, Rosewood, Nallamadi, Tamarind, Usiri, Jafra etc. They also took steps to conserve soil moisture by making bunds along edges of plantation areas, digging trenches etc. They see to it that no one harms trees in their area. Thus forests that were degrading started growing once again.

Let us take a step: We know that every bit of effort towards conservation helps. If we take due care of plants growing around us we may not be adding a forest but adding to greenery around us which is essential for our own existence.

Do you know?

In 1730 AD about 350 Bishonois led by Amrita Devi sacrificed their lives to protect sacred green Kejari trees by hugging them when a king wanted to cut those trees later this was led to chipko movement in the history. There after this practice has been carry forward by people like Sunder Lal Bahuguna.

Read the following story and write your opinion in your notebook.

Save a Tree, Save Other Lives Too!

There is a school in a village. The school has no boundary wall. The Headmaster arranged for the construction of a boundary wall with the help of higher authorities. They were measuring the boundaries. There was a mango tree in the school. The tree was on the boundary line. A person staying next to the school argued that the tree belonged to him. The children studying in the school had been playing, reading, having lunch etc for years under the tree.

The children came to know that the person sold the tree. It was going to be cut very soon. They tried to convince that person not to remove the tree, but he adamantly denied the children's request.

Neelima who was studying class VII was worried about it.

She thought throughout the night and got an idea. The next morning she told the idea to her friends. They collected money from their savings.



Fig. 7

All the children went into the village and collected some more money. They went to that person and gave him all the money they collected.

Seeing the concern of the children, the person agreed that the tree would not be cut.

(This is adapted from an award winning story written by R. Ramya, Class – VIII of ZPH School, Navalaku Gardens of Nellore.)

In the state of Andhra Pradesh efforts have been made by communities along with Government officials to grow trees in areas allotted near villages/towns as social forestry, that is, peoples' own efforts to revive forests, which are well known as "Karthik Vanam".

Keywords

Orchard, Plantation, Timber, Firewood, Soil Erosion, Bunds, Deforestation, Tribe

What we have learnt

- We obtain various things and materials from the forest.
- A forest is a good habitat for many plants and animals
- Forest helps in binding of soil and protecting it from erosion.
- People living in forests depend on its products for their livelihood.
- Social forestry could help overcome deforestation.
- Forests are lungs of our earth.
- Destroying forests poses threat to life of animals and plants living there as well our own survival.

Improve your learning

1. How can you say forest is a habitat for people?
2. What variations do we see in forest types?
3. How do we depend on forests?
4. How can you say forests are lungs of our earth?

5. List the things that we use in our daily life which are made from wood.
6. What is deforestation? How can it be stopped?
7. This is not a forest product -
 - a. Soap nut
 - b. Plywood
 - c. Matchstick
 - d. Kerosene
8. If you want to develop social forestry in your village which type of plants would you like to grow. Why?
9. Collect the pictures of forest products and stick them in your scrap book.
10. Write a note on livelihood of forest tribes of our state.
11. Collect some songs / stories/poems about conservation of trees.
12. We can see animals not only in the forests but also in the Zoo. Write some similarities and differences between the conditions in which animals are found in the zoo and the forest.
13. Charita said "forest is good habitat" How can you support her?
14. How do we depend on forests?
15. Draw or collect pictures of forests. Discuss with your friends. Write about fate of forests in your state and what steps you would take to conserve them.
16. Find out about state of forests in India and write a brief report on it.
17. Plant a tree on your birthday or during any celebration in the family.