

# Social Science

Standard

VI

Part-1



Government of Kerala  
Department of Education

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## THE NATIONAL ANTHEM

Jana Gana Mana Adhinayaka Jaya He

Bharata Bhagya Vidhata

Punjaba Sindhu Gujarata Maratha

Dravida Utkala Banga

Vindhya Himachala Yamuna Ganga

Uchchala Jaladhi Taranga

Tava Subha Name Jage

Tava Subha Asisa Mage,

Gahe Tava Jaya Gatha

Jana Gana Mangala Dayaka Jaya He

Bharata Bhagya Vidhata

Jaya He Jaya He Jaya He

Jaya Jaya Jaya Jaya He.

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Dear children,

The bond between man and universe and that between man and man is on a process of continuous renewal.

We are on a journey of constructing a meaningful world where values strengthen the bonds of all relationships.

Social Science as a discipline has to be evolved as a tool to link historical events and happenings of contemporary life.

This textbook at hand has to be viewed from this perspective by incorporating reading, inquiry and observation. This will definitely help us in analysing problems, situations and to critically assess them. We may have to interfere effectively in various social situations for the welfare of our society too.

Let this textbook help you in all your endeavours.

With best wishes,

**A.P.M. Mohammed Haneesh I.A.S**  
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Social Science  
Standard VI

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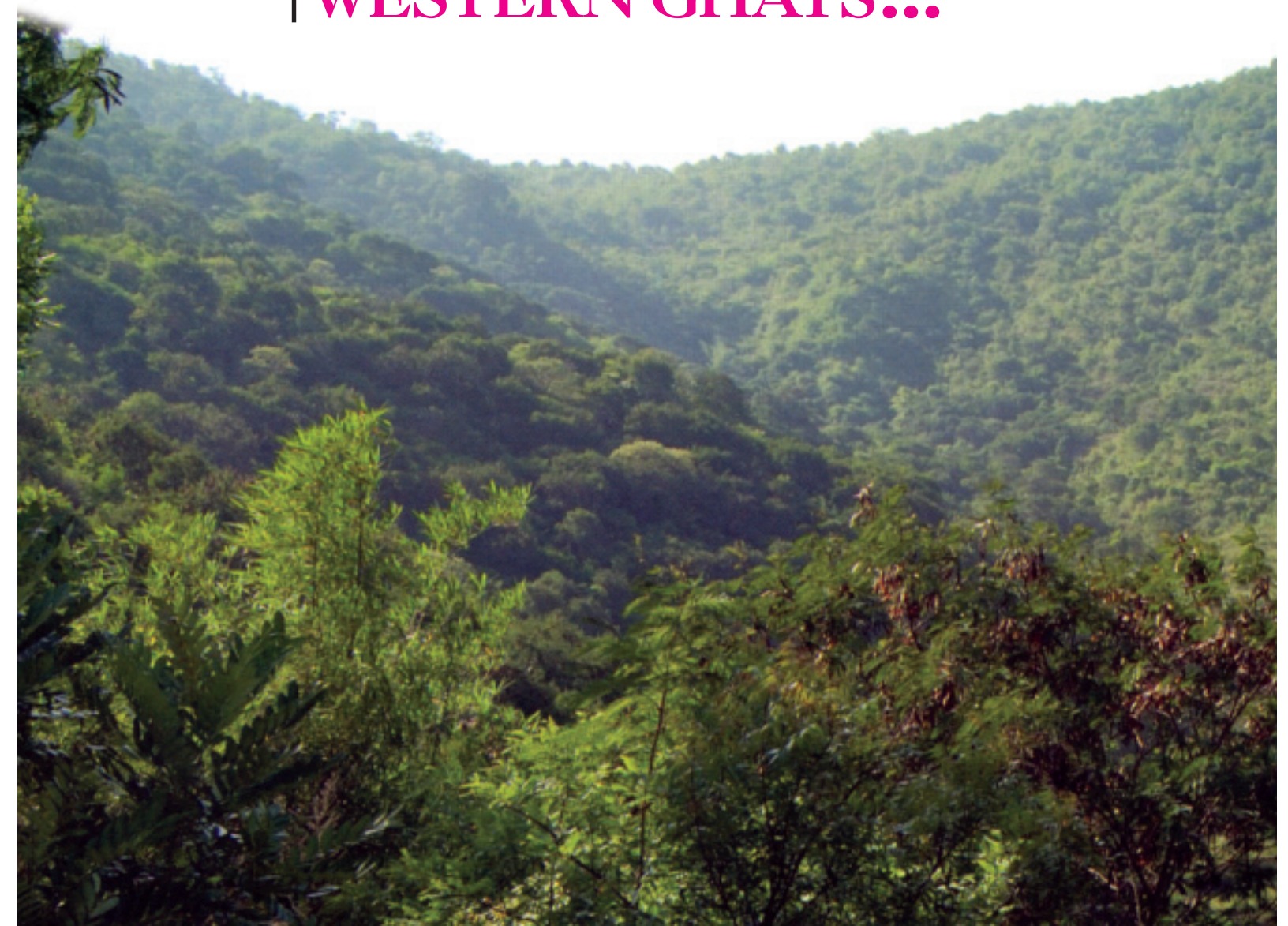
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# 1 | ALONG THE WESTERN GHATS...





Are there animals seen only in Kerala?

Aaminakkutty raised this question at the Social Science Club. At the end of the discussion the children concluded that the Great Malabar Hornbill, Lion-tailed Macaque, Great Malabar Squirrel, Nilgiri Tahr etc. are rare species of animals commonly seen in the Western Ghats. Some of the children have seen pictures of Nilgiri Tahr and Lion-tailed Macaque. But not many have seen the Great Malabar Squirrel or even its picture.

A group of students of the Social Science Club decided to conduct a trip to the Western Ghats.

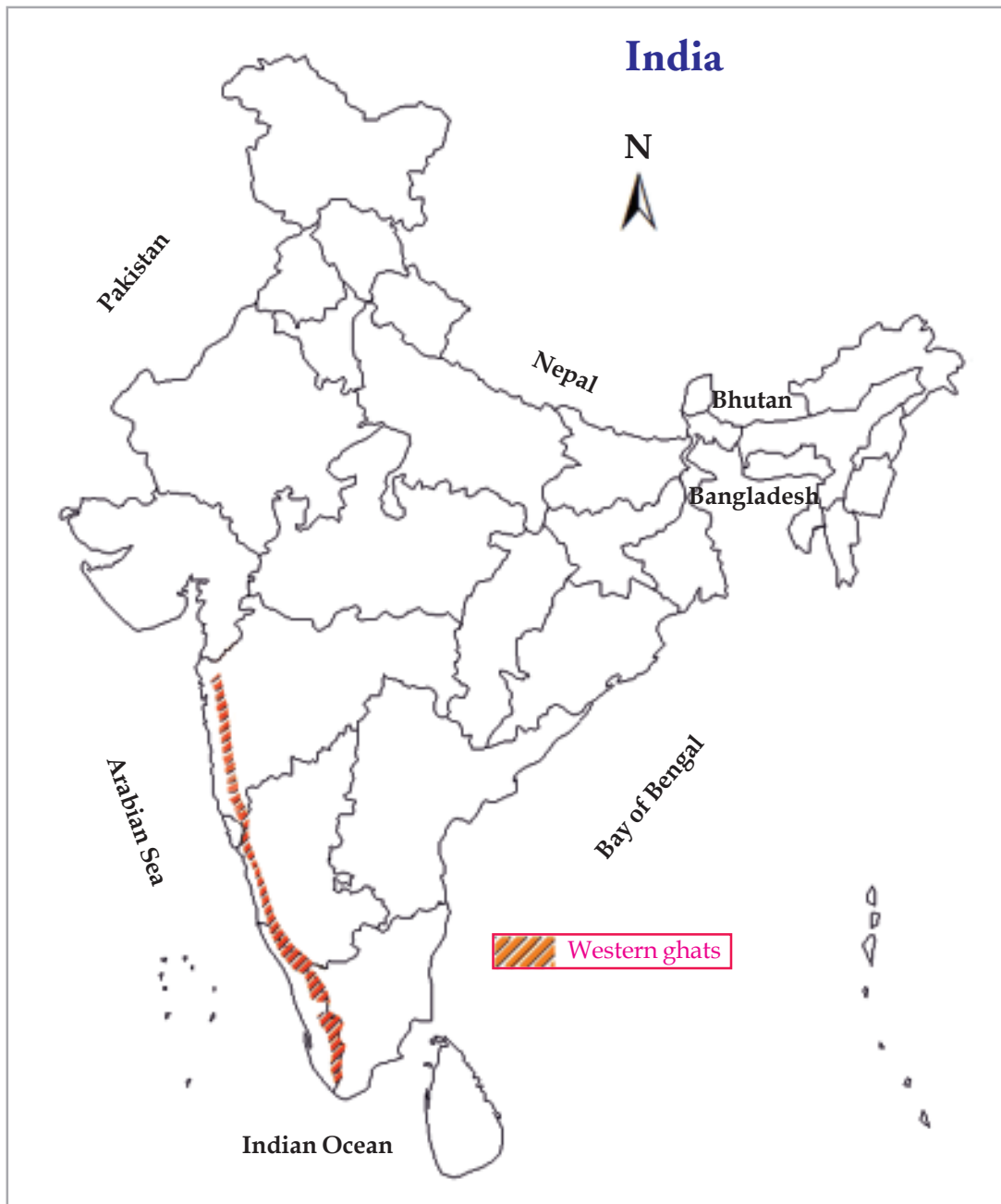
Which mode of transport will they choose for this trip? Why?

- Train
- Boat
- On foot
- Bus

Let's go through a few lines from the travel note prepared by Akhila Nath, a member of the group:

*"A misty morning. It was really cold. The trees were getting ready to welcome the dawn. The dew drops on the leaves shone like diamonds in the rays of the sun. The sights on the way were very beautiful. I was moved by the scenic beauty of the mountain ranges. The hillocks, the giggling narrow streams and the rocky mountains could be seen on either sides of the way at a far distance."*

## Western Ghats





Why is the mountain range on the eastern side of Kerala known as the Western Ghats? It is also called as the Sahya Range.

The moisture laden wind that blows from the Arabian Sea in the west is blocked by the Western Ghats. This results in heavy rainfall in Kerala. The Western Ghats thus strongly influences the climate of Kerala.

Does the Western Ghats influence your locality and the people who reside there? Discuss.

### My findings

- .....
- .....

*The United Nations has identified and enlisted eighteen zones of ecological importance and bio-diversity that need to be protected. Western Ghats is one among them.*

## Bio-diversity of the Western Ghats

The Western Ghats is one of the world's richest source of bio-resources. Dense forests, bamboo groves, deciduous forests, grass lands and shallow forest are all seen here. It is also the habitat of rare species of flora and fauna.



## Silent Valley

Silent Valley is the evergreen rain forest in the north east part of Palakkad district. The speciality of Silent Valley is that it has still areas unexplored by human beings.

Kunthippuzha, a tributary of Bharatappuzha originates here. This river with its crystal clear waters, is indeed a gift of nature. Considering its environmental significance, Silent Valley was declared a National Park in 1984.

Cricketts are quite rare here and the valley came to be named as 'Silent Valley'.

Silent Valley has thousands of species of rare plants. Most of them are medicinal herbs.

A number of animals which are on the verge of extinction like the Lion-tailed Macaque, Great Malabar Hornbill and the Black Monkey can be seen in the Silent Valley.



### Very Rare Plant Species in Silent Valley

*Mannarkkad: A very rare plant species on the verge of extinction was found out in Silent Valley. The newly found out plant's botanical name is Flamingia Nilgiri Ensis. Twenty eight years ago this plant was seen in the dam area. Presently the plant was found at an altitude of 1600-1700 metres at Anavaykkunnu in Silent Valley.*

There was a suggestion to generate power by building a dam across Kunthippuzha. Though Kerala is facing deficiency in energy, many scientists and environmental organisations demanded that taking into consideration the ecological significance of the

area the project should be abandoned. A number of protests also came up and subsequently the Government had to discard the project.

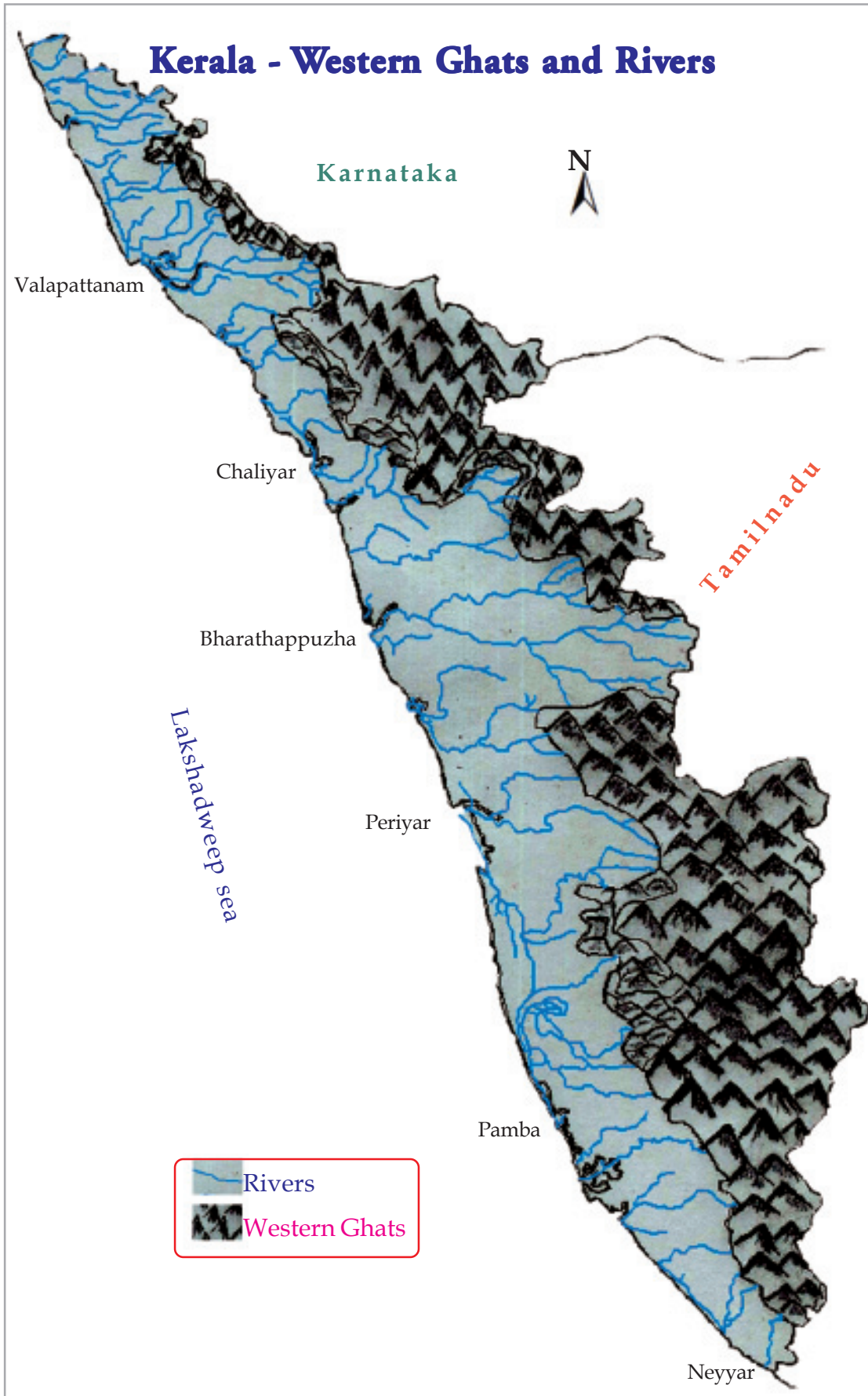
- Many regions of the Western Ghats like the Silent Valley were once habitats of rare flora and fauna. But many of them have become extinct now. Make an enquiry in your locality too. Has any animal species become extinct? If so, why? Prepare a list with the help of the elders.

## Akhila Nath's Description Continues

*"As we approached Kallar, nature seemed more beautiful. Trees and climbers flanked the pathways. A lot of stones, as if thrown from some where, were shining in the clear waters of Kallar.*

*We went to the Meenmutty waterfalls. The journey was highly adventurous. We had to walk, holding to a rope along the slippery boulders. We reached the waterfalls after travelling through very difficult and dangerous forest areas. What a sight it was to see Kallar falling from the heights of the sky-high mountain!"*

Of the 44 rivers in Kerala originate from the hills of its eastern side. Except three, all other rivers flow westward. Most of them join the Arabian Sea and a few end up in lakes.



- List out the rivers in your district. Find out where they end up.
- Find out and make a list of the other districts through which the rivers in your area flow.
- What is the reason for the abundance of rivers in Kerala?

## Energy from Water

Generally, all rivers that originate from the Western Ghats and flow in through Kerala are short in length. A number of waterfalls can be seen in rivers that flow down from very high mountain ranges. Many rivers flow along narrow and steep valleys. So water flow can be checked by constructing dams



Arch Dam - Idukki

connecting the hills on either sides. Water collected in such reservoirs is used for irrigation and power generation. This makes Kerala a suitable place for hydro- electric projects.

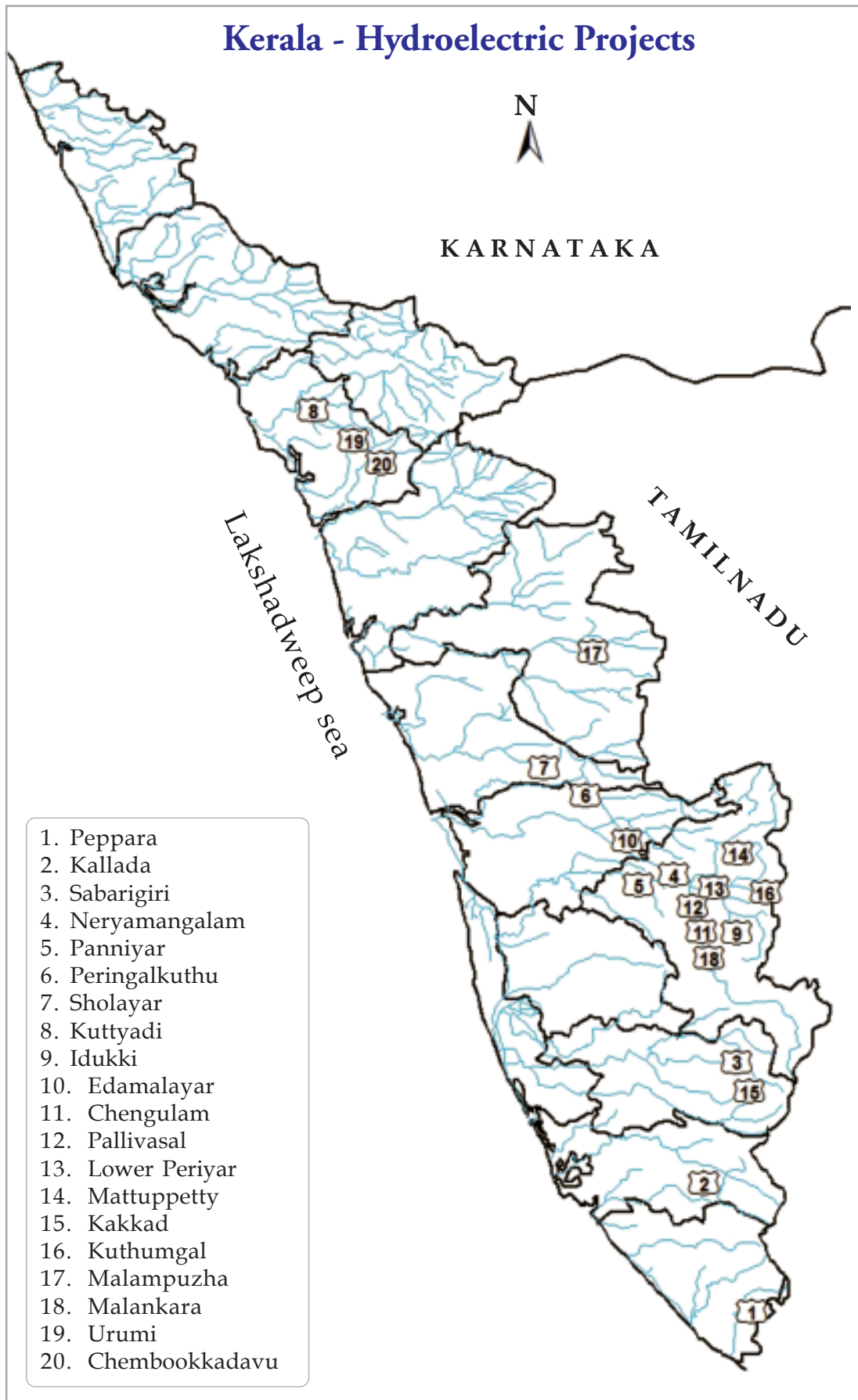
The largest hydroelectric project in Kerala is the Idukki project in the Periyar river.

Complete the table with the help of the map shown on the next page.

| River    | District  | Hydroelectric project |
|----------|-----------|-----------------------|
| Kuttiadi | Kozhikode | Kuttiadi              |
|          |           |                       |
|          |           |                       |

## Panchayat for Power Generation

Small-scale hydroelectric projects do not harm the eco-system as much as the large-scale projects do. These small-scale projects generate power by making bunds in small streams and by making use of waterfalls. The peculiar nature of the Western Ghats is suitable for small scale projects.



Kerala has such hydro electric projects not only in the public sector but in the private sector also.

The Meenvallam project under the Palakkad District Panchayat and the project under Mankulam Grama Panchayat in Idukki District are two hydro-electric projects initiated by the panchayats. These small-scale projects provide electricity for the people in the neighbourhood.

- Rivers originating from the Western Ghats are useful to us in many ways. We have understood how electricity is generated. Similarly in what other ways are these rivers useful to us?

Does the Western Ghats block Kerala establishing relations with other states? How did Keralites establish transport and trade relations with neighbouring states?

### Walking Past the Mountains

Which is the neighbouring state close to your locality? Find out the easiest way to reach that state using a map. Which mode - road or rail, will you select for the journey? What are the reasons for the fewer modes of transport from Kerala to other states?

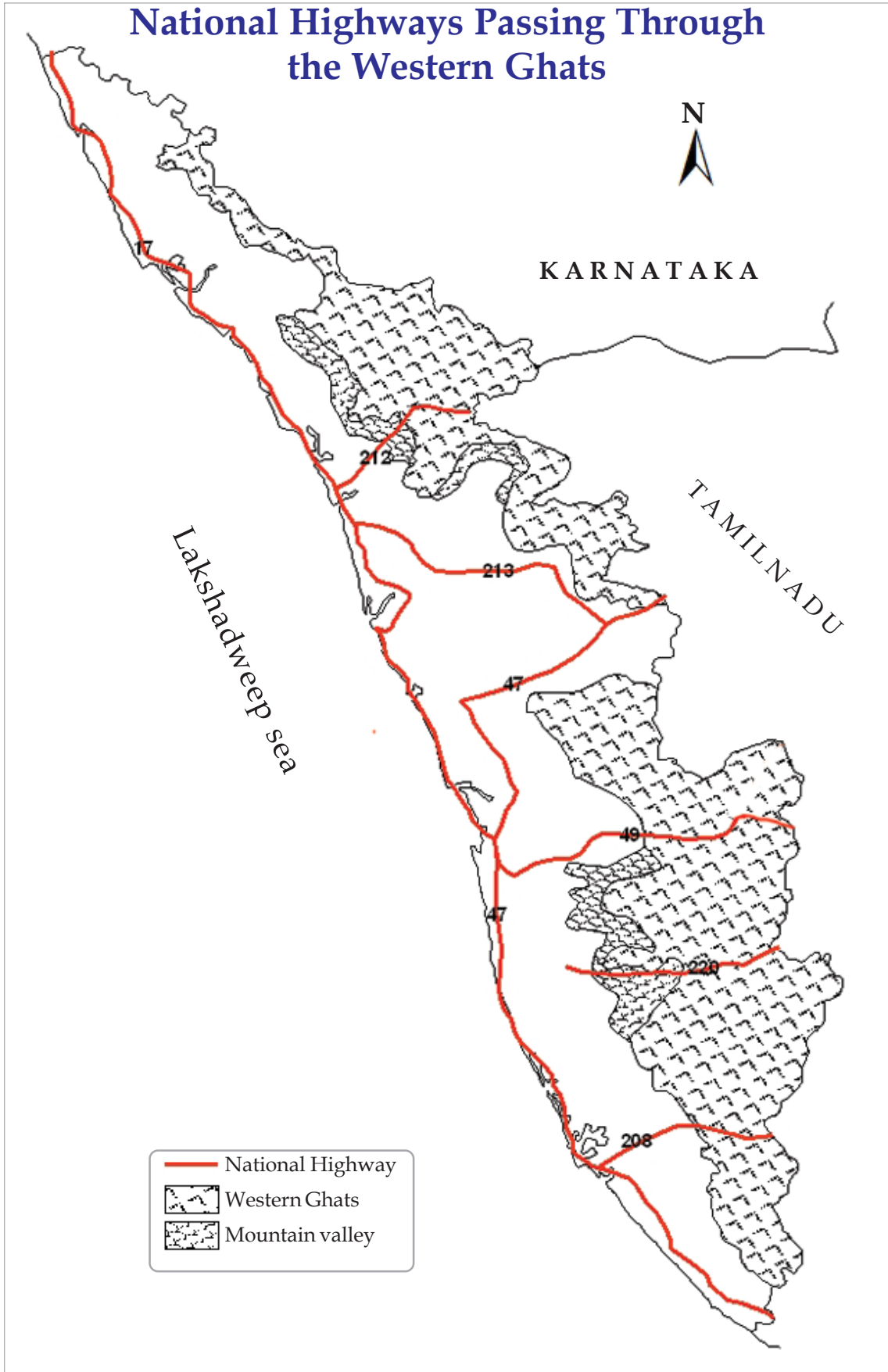
Important roads to Tamilnadu and Karnataka crossing the Western Ghats:

- |                     |               |
|---------------------|---------------|
| 1. Aryankavu        | - Shencottah  |
| 2. Kumali           | - Theni       |
| 3. Munnar           | - Kodaikkanal |
| 4. Marayur          | - Udumalpetta |
| 5. Nenmara          | - Pollachi    |
| 6. Palakkad         | - Pollachi    |
| 7. Palakkad         | - Coimbatore  |
| 8. Agali            | - Coimbatore  |
| 9. Nilambur         | - Gudallur    |
| 10. Sulthan Batheri | - Gundalpetta |
| 11. Mananthavadi    | - Tolpetty    |
| 12. Iritty          | - Virajpetta  |

- Find out the above mentioned roads with the help of a road map.



## National Highways Passing Through the Western Ghats



## The Palakkad Pass

There is a gap of about 24 to 40kms in width in the long stretch of the Western Ghats in the Palakkad region. This is known as the Palakkad Pass. The transport route through this gap has had great significance in the history of Kerala. In the past, it was the main link which connected Kerala with other parts of India.

Many roads and railway line linking Kerala and Tamilnadu can be seen in this pass. This gap in the Western Ghats influences the climatic condition and agriculture of Palakkad.

- In some areas of the Palakkad District, ground nut and cotton are cultivated. Why are these crops not seen in other districts of Kerala?

### Elephant Tracks

Almost all the forests in the Western Ghats are our habitats. We travel a lot, carrying our gigantic bodies, in search of food and water. We have permanent and accurate trails for our journeys. We do not select steep cliffs or inclines of the mountain ranges as our track. Our tracks which are at even levels are called elephant tracks (*Anathaara*) by human beings. People who make their paths in the mountain ranges make use of these tracks. There are many elephant tracks all over the Western Ghats. These elephant tracks are being used by humans in many ways for activities like agriculture, construction of roads, electrification, cow herding and collection of firewood.

As we walk unaware of all these, we face a lot of problems. While crossing the roads or on our trail to find food, many of us die by accidentally touching the electric lines.



There are certain paths through which we travel for ages. Construction of roads and other human activities make obstacles in our age-old paths. Due to deforestation we are often forced to go to the agricultural lands in search of food. Many human beings lose their lives while coming across our tracks.



Casualties can be reduced to a certain extent by shifting human residences away from our tracks. The people of Tirulamkunnu village have shown a model by shifting away from our tracks. Nearly, thirty families have shifted their homes. Let us remind you that the Western Ghats is not only for human beings but also for animals like us.



- How do human interferences in the high range valleys of Western Ghats affect the otherwise secure and free life of the wild animals? Why?
- Why do the high range farmers have to face the attack of wild animals? Discuss it in class.

## Living on Hilltops

Major part of the forests in Kerala is in the Western Ghats. Majority of the tribes in Kerala live here. We can discuss more about these people who lead simple lives and maintain equality in social relations in the lesson titled, 'Those Who Live Here'.

'Irulars' of Attappady in Palakkad district have to live today in areas with low rainfall. Until sixty years back they had lived on water rich areas like the banks of the streams. As others had encroached their traditional habitats, they had to move away to the hilltops having less rainfall.

When a forest tram way was built along the habitat of the "Kadars" of Nelliampathy, the King of Kochi constructed houses for them and provided irrigation facilities for paddy cultivation. Later on, when they shifted to the Parambikkulam forest area they had to face difficulties because of wild life sanctuaries, teak plantations and dams. Now they make their livelihood as labourers under the Department of Forests and such other departments.

Same is the living conditions of the "Malankuravas" of Thiruvananthapuram and Pathanamthitta districts, "Malayulladas" and "Malayarayas" of Kottayam, Idukki and Pathanamthitta districts.

### Attappady Eco -Reinstating Project

*Attappady is a very special region which comes in the rain shadow areas of the Western Ghats. Man's uncontrolled exploitation of nature has left it as an ecologically shattered area. Studies show that almost half of the land area has become barren. This ecological imbalance has adversely affected the social and economic life of the people in the region. The tribes who were highly dependant on nature were the worst hit. It was in this context that Government of Kerala initiated the Attappady Eco -Reinstating Project.*

*Reinstating the deteriorating eco-system of Attappady, preventing the likely deterioration of environment in future, developing ideal models with people's participation for rebuilding the eco system, developing eco friendly livelihood (focus bestowed on the tribal society) for the people of the locality etc. are the aims of this project. The Attappady Hill Area Development Society (AHADS), an autonomous body under the Local Self-Government Department has been formed for the implementation of the project.*

- How does the encroachment affect the flora and fauna of the Western Ghats? Discuss it in class.
- Make a note on how the destruction of the environment has adversely affected the tribes.
- Did any section of the society or any living being had to face such encroachments in your region?

### Let us find more

Some flora and fauna are known after the places of their habitat. Can you find more of them? Let's try.

| Plants           | Fish                | Bird             | Animal        |
|------------------|---------------------|------------------|---------------|
| • Wynad Turmeric | • Kuttanad Karimeen | • Kadalundi Aala | • Vechoor Cow |
| • Attappady Gram | •                   | •                | •             |
| •                |                     |                  |               |
| •                |                     |                  |               |
| •                |                     |                  |               |

### Agricultural Practices in Hilly Areas

Apart from forests, the Western Ghats has plantations, fields and other agricultural lands too. Plantation crops like tea, rubber, coffee and spices are widely cultivated here.

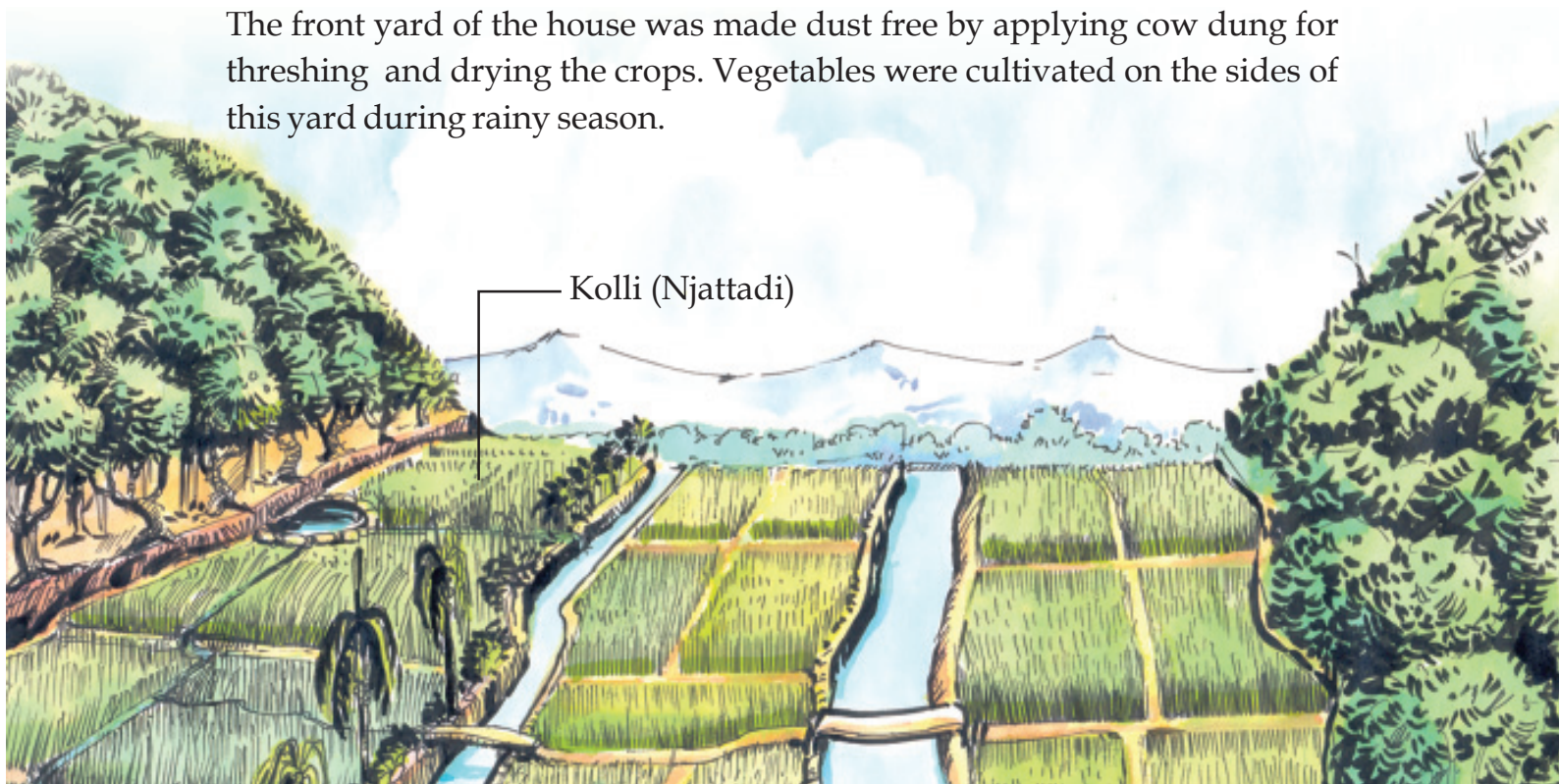
In ancient times, people of the Western Ghats cultivated lands without harming the innate nature of forest lands. Later on they moved on to the interior forests for cultivation. The fertile land was highly suitable for agriculture. Hills, valleys and level grounds were made suitable for cultivation by human effort. By easing water flow with ponds and bunds, new modes of agriculture was made possible on the hill slopes. Farmers could overcome drought this way. Because of natural fertility of the soil, high yield was possible. We can see that over the years many attempts have been made to make the soil suitable for cultivation by effecting changes in the soil structure.

### Paddy Fields in Waynad

Sudhakaran's farm is in Madakkimala near Kalpetta. His farm spreads from the top of a hill to its valley. The slope is filled with coffee and pepper plants. There is a water channel from the western side. The field below is an arecanut plantation with "*Kasargodan*" and "*Mangala*" varieties bearing arecanut. The arecanut plants have vanilla climbers on them. Cardamom and banana plants are planted in between the arecanut plants. Except for a little bit of land kept apart for vegetable farming all other areas in the field are full of trees.

This was not the situation forty years back. The upper hill had coffee and pepper plantation while half of the land was filled with paddy and the seedling section (Kolli). Paddy was cultivated once or twice a year. Rare paddy varieties like "*gandhakasala*" and "*jeerakasala*" and ordinary varieties like "*veliyan*", "*tondi*" and "*paltondi*" were cultivated here.

The front yard of the house was made dust free by applying cow dung for threshing and drying the crops. Vegetables were cultivated on the sides of this yard during rainy season.



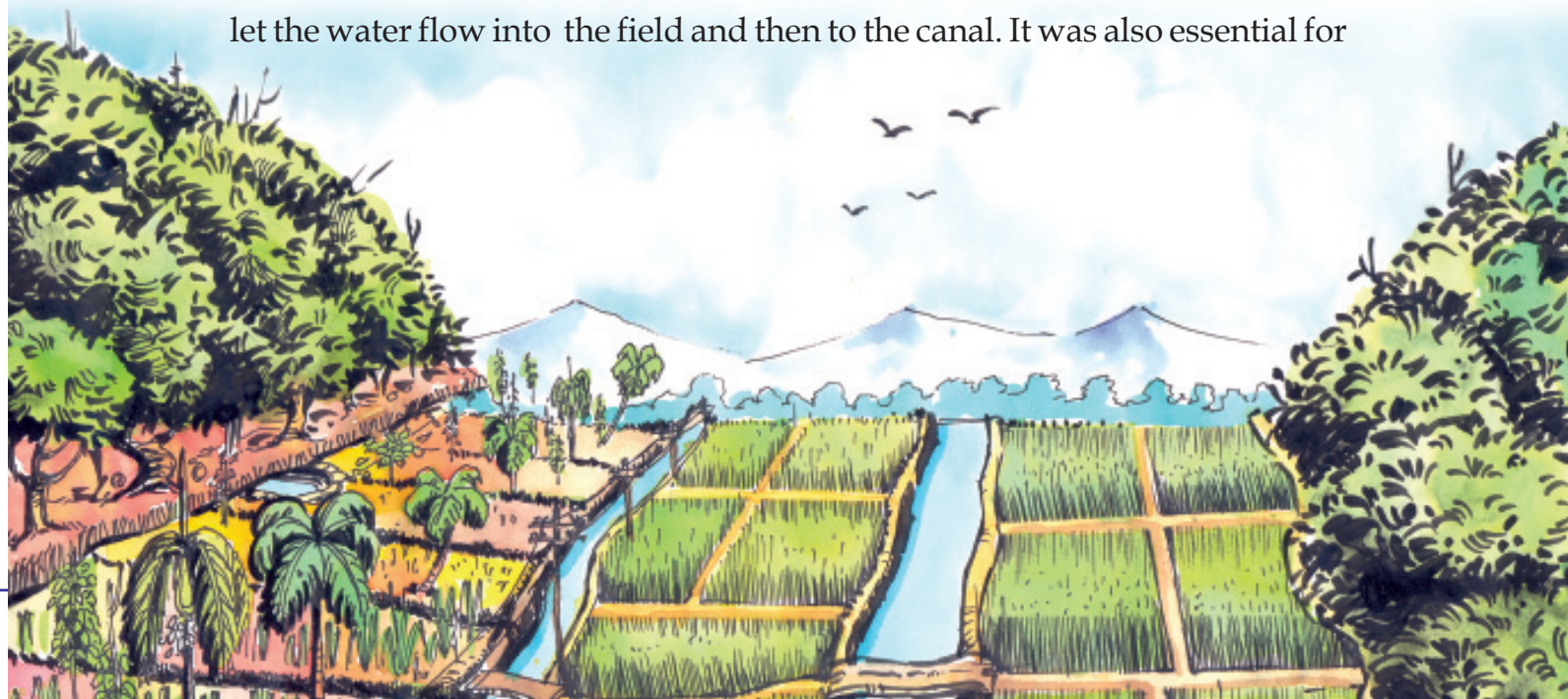
The upper part of the seedling section was a pond locally called "keni." Water would be flowing from it always. So paddy was cultivated here. Later on cardamom was planted here as it was more profitable. As water logging was not suitable for cardamom the water was drained through channels. In the beginning cardamom gave high yield and fetched good price too. But later when it became less profitable, he switched over to pepper which gave good yield for sometime.

In 1957 Sudhakaran's father planted coconut seedlings there. Waynad had no coconut farming at that time. As coconut became part of their daily food more coconut seedlings were planted. Coconut trees took quite a long time to provide their yield. In the early stages the yield was very poor. Sudhakaran's experience tells us that now it has good yield as in any other place.

Drainage of water was ensured by making channels in the seedling section. Hence coconut grew in plenty. There is now only a channel left in memory of the old seedling section.

Even after converting the seedling section into plantation, the paddy field below was retained. As plantain cultivation seemed profitable they turned to plantain cultivation. Since continuous plantain cultivation was not good they opted for plantain and paddy as alternate crops.

At that time the farmers on either side of the field had started cultivating arecanut. Sudhakaran still hesitated. As the arecanut trees grew, they blocked the sunlight required for his cultivation. Finally Sudhakaran was also forced to plant arecanut in his field. It was at that time that vanilla had good price so he planted it too. With that the paddy field became a plantation with arecanut, vanilla and cardamom. For this he made channels in between the two rows of arecanut trees and let the water flow into a canal. Sudhakaran let the water flow into the field and then to the canal. It was also essential for



the new crops then in cultivation. As a result the seedling section and the field gradually became a well drained area. From the canal, the water reached Panamaram river and then to River Kabani and Kaveri and ultimately to the Bay of Bengal.

In elevated lands channels were made to collect the run-off water. This helped the seepage of water into the soil. These practices carry on even today. But water from the fields and seedling sections has to be drained off very quickly.

With the water being drained away from the fields, the water level in the wells also went down. Things came to a situation when well-water had to be pumped for vegetable cultivation. Sudhakaran, opines that one of the reasons for the high temperature and drought in Waynad has been due to such changes in the methods of cultivation.

- Find out the changes in your place that people have made in nature for the sake of agriculture. Compare it with the changes affected in the Western Ghats.
  - Bio resources.
  - Increasing the fertility of soil.
  - Construction of canals and bunds.
  -

Present your findings in a seminar.



## 2 | THOSE WHO LIVE HERE





Kerala has a population of more than three crores. Keralites have adequate facilities for education, transport, health and housing. Are there still social groups which have access to these facilities only in limited ways?

Let's see the life of the tribal clans who live in geographically isolated hills and mountains.

## Settlements of the "Irulars"

'Irulars' are a tribal population living in the forest areas of Kerala. Their settlement is called "Ooru." The administration of Ooru is carried out by "Ooru Panchayat" and its head is called "Mooppan." The decision of the Mooppan is final in all matters. His decision is executed through the "Bandari" and the "Kurutalai." They hold second and third positions respectively after the Mooppan. If a dispute between two persons comes before the Mooppan, Bandari and the Kurutalai bring them before the Ooru panchayat and the Mooppan finds a solution for the dispute. All tribal clans had similar administrative systems of their own.

These people are called tribals or adivasis in the sense that they are the most primitive occupants of a particular region. The Western Ghats and its forests were the main habitats of these tribes in Kerala. There are more than 36 tribes including the Kurichyars, Kattunaikkars, Kanikkars, Adiyans and Ulladars residing in Kerala. The administrative system mentioned above is that of Irulars.

## Agriculture



The tribals ate tubers and fruits and drank water from forest streams. They were adept in the art of fishing and hunting. But the scarcity of fish and meat had put them in a crisis. Many of them turned to cultivation of food crops. Ragi was an important crop. Along with ragi, they cultivated many other crops such as black gram, horse gram, cereals, pulses etc. Their agriculture largely depended on the monsoons.

This mode of agriculture in the forest was known as "punam krishi" and "maatta krishi." Punam krishi was a mode of farming where farming was done in the forest land after clearing the bushes. They used to shift the place of cultivation from one area to another and so this was known as maatta krishi. The cultivation was done in the fertile top soil. Ashes made out of burning leaves and twigs were also added to the soil. Only a slight stirring of the soil was needed. There was no need of any extra manure.



- Why did the tribals shift their farms quite often? Why don't other people shift their farms very often?

Cultivation in the forest demands constant care and caution. *Punam krishi* had to face the threat of insects and pests and the attack of animals like wild hens, rats, monkeys, elephants and boars. The tribals had indigenous techniques like "*marunnu chavachootal*" and "*keyy kettal*" to fight diseases like '*mangapani*' and '*vebu*' which curbed the growth of the plants. Planting branches of neem and "*nachila*" in the farm was known as *keyy kettal*. The pungent smell of crushed garlic and the fruit of '*eenth*' was spread on the boundaries to ward away rats and boars. For preserving grains they had their own methods too. One was to keep the grain in a container made with woven hay. Large containers with openings at the top and bottom made by weaving splints of bamboo were used for keeping huge quantities of grains. Dried seeds for cultivation were hanged in small packets without splitting it open just above the kitchen stoves. Vegetable seeds were placed in cow dung and dried and kept near stoves.



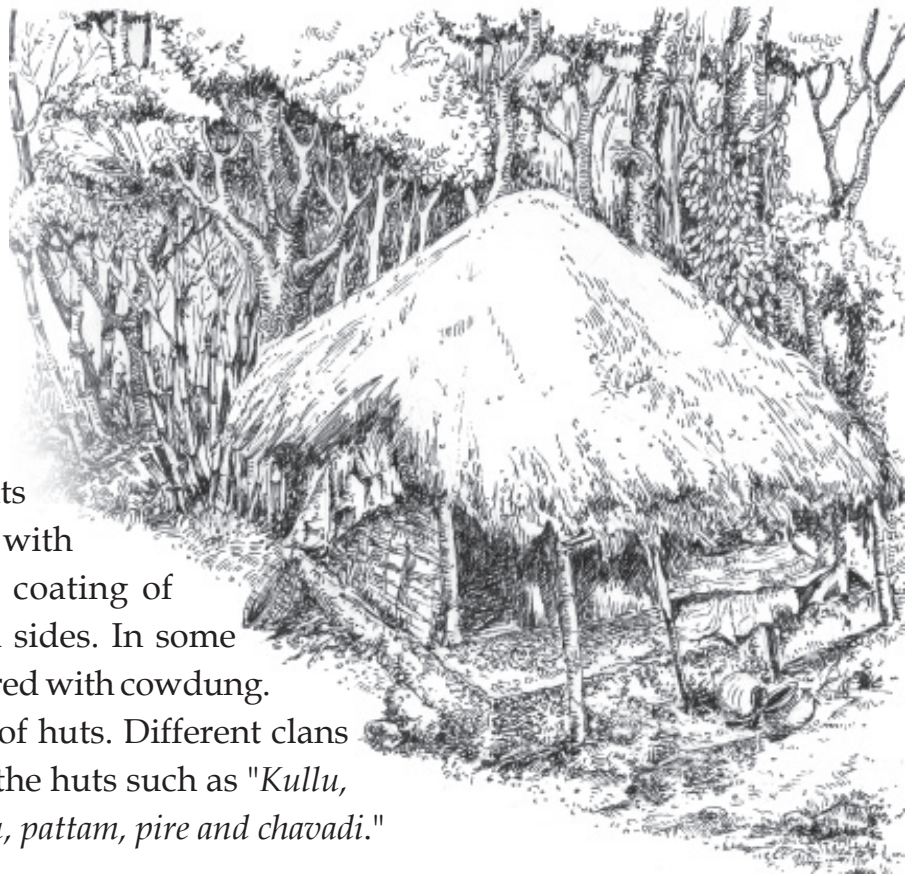
In ancient times agriculture must have been a collective effort; that is, all were involved in cultivation and the yield was shared by all. As they constantly shifted their farm lands, they did not have the need to own any forest lands.

Their mode of cultivation was not harmful to the flora and fauna of the area either. More over, they did not have the habit of producing anything more than what was needed.

Collectively they tilled and shared the products. There were no questions such as whose cultivation or whose land. Though they led an agrarian life they did not have land in their possession. It went

on like this for a long time. At one stage, the Britishers banned *punam krishi* saying that it caused deforestation. This ban threatened the very existence of the tribals.

Tribals use raw materials available in each region for house construction. They build low floor huts for which unbaked bricks, bamboo, grass, fibre, wooden poles and reeds are used. The roof is supported by wooden poles and is thatched with reeds and its leaves. The wall is made with crushed bamboo and a coating of mud is applied on both sides. In some houses the floor is plastered with cowdung. There are different size of huts. Different clans use different names for the huts such as "Kullu, Koppu, Kudumb, kudi, illu, pattam, pire and chavadi."



These huts were weather friendly; extreme heat or extreme cold was not felt inside. Since the raw material was locally available, repair and reconstruction was easy. All the elders were experts in house construction.

- You have read about the house construction methods of tribals. Now, compare it with the modern methods of constructing houses.

### Customs of Marriage

*Different customs of marriage existed among the tribal societies. Let's see the practice among one group. Marriage is held in the bridegroom's house. The bride and her relatives are brought to his house on the previous day. The groom will not be present at that time. A "pandal" is constructed in his house. Usually the "pandal" is made on a Friday. On the day of engagement a pillar called the pillar of wedding (vivahathoone) is erected in the front yard which will be removed only seven days after the wedding. A lot of changes have taken place in marriage ceremonies now. Now, marriages are conducted in the bride's house.*

- Prepare a note on such special marriage rituals.

## A Name Given Collectively

*Kuragar* is a tribe sect which keeps high unity among the clan. Let's read about their ceremonies in connection with child birth and naming of the newborn. Once the child is born all the family members leave the house (*koppu*) leaving the mother with one woman to look after her and the newborn. For five days the family members will stay in other houses observing "*pula*." On the sixth day they come back and bathe the mother and the baby. They invite everybody to see the mother and the baby. Others in the clan accept the invitation and present them with rice, oil and coconut. Then the priest requests them to suggest a name for the child



and considering the opinion of the elders a name is given to the child. There will be a feast after this. The rice got as gift to the mother and baby is used for this. Then the coconut gifted by the neighbours is broken and one piece is taken by the mother and the other is returned to the one who brought it. There is a condition for this also. If it is a boy, the male piece is for the mother and if the baby is a girl, the mother gets the female piece. In this way the provisions for celebrating birth are collected as gifts. Family members and neighbours join together and enjoy themselves. Thus the joy of an individual becomes the joy of a society.

- Have you ever experienced such occasions when the joy of individuals and families becomes the joy of a society too? Find out examples.

- Wedding
- .....
- .....



*Nattugadhika of Adiyalas*

Many art forms are there among the tribals. Most of them are ritualistic. Pictures of some tribal art forms are given here. Collect such pictures and prepare a note on any one tribal art form.

- Why not make a compilation of the pictures and notes you have collected?

### Seminar

What are the contributions of the tribals to Kerala culture?

- Art forms
- Agriculture
- Marriage ceremony
- House construction



*Dance of Kurumbas*

*Karadi kali of Malayappulayas*





A scene from  
*Mannankoothu*

The patterns of agriculture and construction discussed above existed some fifty or sixty years back. Now, no such methods or rituals exist and even if they do it is not much different from those observed in the villages. These changes have brought in a lot of problems in their life. They even had to move away from their own lands.

- You have already learned, about the various encroachments at different times learned in the lesson named "Along the Western Ghats". Prepare a note on how these encroachments might have affected the tribals.

### The Sons of the Forest Who Lose Their Land

See the history of how the Wayanad of tribals became the Wayanad of settlers. Let us listen to what a former village officer of Purakkadi has to tell us:

*"I joined as a Village Man of Purakkadi in Wayanad in 1949. I have been residing in Wayanad for the last 37 years. In 1949 almost all the paddy fields in Purakkadi village belonged to the tribal kurumars. But now they have only 10% of the paddy fields with them and the rest is in the hands of the settlers.*

*Let us take a look at the land value. The price of an acre in 1949 was Rs.50. What about it now? The present price is between Rs. 14,000 to 20,000. The story of the forest is also pitiable. In 1949 two third of the village was forest; that is, out of the 17,000 acre of village 12,000 acres was forest. Practically there is no forest now. Population of the village in 1951 was 10,000 whereas it is 35,000 now.*

*In the past, there were a few Paniya families in the village. But now they have disappeared. They used to work in the paddy fields. With the advent of settlers they lost their jobs and were forced to move elsewhere. Devaswom had the ownership of land once. The early settlers bought this temple property. Those who bought one acre encroached more land. They even encroached on Government land. Through dishonest ways, the major part of the Government's land and that of the tribals came into their hands.*

(Information collected on 14-06-1986 from Purakkadi village office- K. Panur, Keralathile Africa)

This is not the story of Purakkadi village alone. The same thing has happened in other tribal regions also. The findings of the 1976 Legislative Sub Committee confirms this fact.

### Findings of the Legislative Sub Committee

Regarding the findings of the Legislative Sub Committee, K. Panur, in his book 'The Africa in Kerala'(Keralathile Africa) says thus:

"The Kerala legislative assembly appointed a sub committee to study how the tribals were losing their land. The information collected after visiting some parts of Wayanad was definitely shocking.

298 people attended the hearing and stated how they lost their land. 71 people lost the land because of encroachment. In 67 cases land was taken over as security for very small loans. The land of some others was bought for very small amounts and the documentation was on plain papers. Five people who sold their property with registered documents complained that they were not given the amount offered. Some complained that the money paid before the sub registrar was taken back on the veranda of the office. It is quite certain that there will still be many people who dare not even complain."



Haven't you read about the direct experience of the tribals who lost their land and wealth two and a half decades ago? You can see news stories about these sections of society in the media.

Collect such news and discuss in groups and prepare a note on "Life of the Tribals: Then and Now."

• What are the findings of the village officer and the Legislative Sub Committee? Compare them with the findings you have made.

Majority of the settlers not only captured land resources of these people but also reduced the forest area by planting cash crops. They made the tribals their labourers in the plantations. Often they are not even paid the wages due to them. Moreover, the continuous work in the plantations left them with little time to pursue farming independently. Decrease in the forest area also affected their life adversely since they depended heavily on forest produces.

- These people were forced to move to the mainstream for livelihood as their very existence was threatened because of the decrease in forest areas. Examine whether they have got due recognition as a part of mainstream society.

### The Dialect of the Tribal Mavilanmar

Nikkarena putar echa (What is your name?)

Enna putar rame (My name is Raman)

Oorte chand visesam (How is it in your place?)

Matherkla chukenne (All are OK)

Nikkar ettbare kaltkar (Up to which class have you studied?)

Enu radamklasupoke (Up to class II)

Pattatt erane iller (Who are there in your house?)

Patda amme, appe, mekiya, mekeeta, iller (Father, mother, brother and sister)

(Mavilanmar on the Hills, Dr. R. C. Karippath)

### ആദിവാസി വിഭാഗമായ മാവിലന്മാരുടെ സംഭാഷണം

നിക്കരനെ പുതാര് എച്ച (നിങ്ങളുടെ പേരെങ്ങനെ)

എന്ന പുതാര് രാമെ (എന്റെ പേര് രാമൻ)

ഉര് ചെ ചാന്ത് വിശേഷം (നാട്ടിൽ എന്താണ് വിശേഷം)

മത്തേര് ക്കു ചുകെന്ന (എല്ലാവർക്കും സുഖം തന്നെ)

നിക്കര് എത്തുബരെ കൽത്തകര് (നിങ്ങൾ ഏതുവരെ പഠിച്ചു)

ഏനു രധാം ക്കുപ്പോകെ (ഞാൻ രണ്ടാം ക്ലാസുവരെ പോയി)

പട്ടട്ട് ഏറാനെ ഇള്ളെറ്റ്? (വീട്ടിൽ ആരെല്ലാമുണ്ട്)

പട്ടട്ട് അമ്മ, അപ്പ, മെകിയ, മെകീത ഇള്ളെറ്റ് (വീട്ടിൽ അച്ഛൻ, അമ്മ, അനുജൻ, അനുജത്തി ഉണ്ട്)

അവലംബം: മലയിലെ മാവിലന്മാർ, ഡോ. ആർ.സി. കരിപ്പത്ത്

- You have seen the dialect of tribal Mavilanmar. Are there people in your locality who use such regional dialects? Collect information.

# 3 | FOOD SECURITY





**There** are many among us who cannot work regularly even if they desire so. One of the major problems for the helpless, aged people and those disabled due to diseases or accidents is the non-availability of food. Who has the responsibility to provide food to these people?

"When she woke up in the morning Soumya looked at her mother. She was still sleeping. Poor mother, she was restless throughout the night because of high fever. She might have dozed off only in the morning. Soumya could hear her mother groaning throughout the night. She walked towards the kitchen. She prepared a glass of black tea and walked back to her mother.

'How will I prepare some rice gruel today? Rice and provisions are over. For one whole week mother couldn't go for work.' The little money left at home was spent on medicine and other things. As payment was overdue, the shopkeeper would not give provision on credit any more."

There are many people like Soumya's mother who work for daily wages. If they miss one day's work, they face several problems.

Everyone in the society has the right to get food, clothes and shelter. They are the basic needs of every citizen. It is the primary duty of the Government to provide basic needs to the people.

The society has the responsibility to help those individuals and their families who do not have permanent income or the ability to work.

## Schemes by the Government

The Government has certain schemes to help the aged and incapacitated.

- 'Annapoorna' is a Central Government scheme through which old people above 65 years of age and who do not have their own income is given 10kg of rice per month free of cost through ration shops. The deserving people



are identified by the *Grama* Panchayat and the Municipal committees.

- ↳ 'Anthyodaya Annayojana' is a scheme for the people below the poverty line. Through this scheme food grains are made available for the poor people at reduced rates. Under this scheme 35kg rice or wheat is given to a family at the rate of Rs.3 per kg. This scheme came into effect from December 2000.
- Enquire whether the supply of food grains through ration shops as per 'Annapoorna' and 'Anthyodaya Annayojana' schemes duly reach the needy ones.

There are instances when families that are willing to do manual labour often starve due to lack of opportunities. National Rural Employment Guarantee Scheme provides a minimum of hundred days of guaranteed wage employment per year for them. This scheme is based on the National Rural Employment Guarantee Act enacted by the Parliament in September, 2005. The upliftment of the poor is the aim of the scheme. As per this scheme, those who have completed 18 years of age are eligible for employment. Those who need employment have to register their names in the *Grama* Panchayats. conservation of water, construction of minor irrigation projects, cleaning of water sources, construction of rural roads, afforestation etc. are some of the activities done under this scheme.

### Poverty Line

*Poverty Line is the criterion fixed by the Government to provide benefits to the people by considering their social and economic conditions. The beneficiaries are widows, handicapped, aged, those affected with deadly diseases, backward classes and those who live in backward regions. Apart from this the present economic conditions of the people of a backward region is also considered to enlist them as A.P.L. (Above Poverty Line) or B.P.L. (Below Poverty Line). Some special privileges are given to those under the B.P.L. category.*

- Prepare a note on how the poverty eradication schemes of the Government fulfil the basic needs of the financially backward people.

## Poverty

Poverty is not just the condition of scarcity of food. A healthy person needs enough food for doing work. Children need nutritious food during their growing years. Feeding mothers and pregnant women too need nutritious food. In this way, if any person does not get adequate food, we can understand that they are stricken by poverty. In India there are innumerable people who live like this. But, people who do not get sufficient quantity of food turn out

to be more than those who do not get any food at all. Government has the responsibility to provide sufficient food for all. How does the Government fulfil this responsibility?

## Poverty Eradication - Various Schemes

It has already been told that there are people who suffer poverty in different ways. Each category needs separate schemes. Let us see some of these schemes.

### • FOOD FOR WORK

This is a Central Government scheme where a part of the wage is given as food grains during times of food scarcity.

One of the important schemes implemented jointly by the Central and the State Governments with the cooperation of local self-governments for solving the problem of malnutrition in women and children is the Integrated Child Development Programme. The aim of the scheme is to provide nutritious food to children below the age of 5 and to their mothers. Lack of nutrition in childhood may adversely affect the whole life of an individual.

- Collect information about the poverty eradication schemes implemented by various governments in your locality.
  - Central Government
  - State Government
  - Local Self-Government
- Collect information with the help of the Village Extension Officer (V.E.O) about the poverty eradication schemes being implemented in the Grama Panchayat.

## In the International Scenario

Food is essential for life. Everyone in the world should get food. Let's take a look at the declaration of the first World Food Conference held in Rome, the capital of Italy, in 1974.

"By 1984, not even a single child across the world should fall asleep hungry and the mental and physical growth of an individual should by no means be stunted."

But when the World Food Summit was held again in Rome in 1996, 70 crore

people were sleeping in hunger and 80 crore were suffering from lack of nutritious food.

How do we solve this situation?

Do we produce enough food for all in the world? If yes, is it distributed to all? Food security cannot be attained in the absence of proper distribution system. See what the World Food Conference has to say about food security.

“Food security exists when all people, at all time, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.”

## Self - sufficiency of Food and Food Security

The condition of producing enough food articles domestically is called self-sufficiency in food production.

Grains are the main item in human food. Intake of vegetables, fruits, milk, egg, fish and meat etc. assure nutritive value. The production of these items are inevitable for attaining self-sufficiency of food. India is self sufficient in food production.

However, all the countries in the world are not self-sufficient and they depend on other countries for food. Though India is self-sufficient in food production, all Indian states are not self-sufficient in this.

For example, Kerala depends on other states for many food items.

- Make a table of the main food items in our place. Find out the things needed for making them and from where they are brought to our state. Exhibit the chart in the class.

*In India 23 crore people suffer from malnutrition. 27% of the people suffering from malnutrition in the world are in India. The United Nations report on the rural food security of India shows that half of the child mortality is due to malnutrition.*

## Uttar Pradesh - A Lesson out of True Experience.

The Gangetic Plain is one of the most fertile regions of the world. Uttar Pradesh, Punjab and Haryana of this plain together form the heart of Indian agricultural land. Fertile soil, uninterrupted irrigation and favourable climate have made Uttar Pradesh the foremost in the production of food grains.

Uttar Pradesh stands first in production of wheat, second in paddy and excels in the production of milk, fruits and vegetables.

16% of Indian population is in Uttar Pradesh and its share in India's food production is 22%. It has surplus production of grains, tubers, sugar and vegetables.

Though Uttar Pradesh is self sufficient in food production, the Central Government studies show that it has the highest number of families below the poverty line that is about 31.6%. Inequality prevails in availability and distribution of food grains in spite of the high rate of production. People living in remote places do not get enough food grains. Most of the worst affected are women, children, scheduled castes and scheduled tribes.

We have seen that food security cannot be achieved with sufficient production alone. Similarly, states differ from one another in self-sufficiency also. Self-sufficiency is an important factor in food security.

Food security depends on the following three factors.

- **Production**

Enough food is to be produced to fulfil the need of the people. Naturally, India's demand for food is very high, as India is the second most populated country in the world. Rice and wheat are our major food grains. These are produced in different regions of the country. While Gangetic plain is good for wheat production, Andhra plain is good for rice production. We have been able to attain self-sufficiency in food production through well organised reforms.

- **Procurement**

Not all regions in India are equally suitable for food production. So only by procuring and preserving food grains from regions of surplus production can they be distributed everywhere. More over, all crops will not be available throughout the year. It is inevitable that food grains should be preserved scientifically. There are godowns of Food Corporation of India (F.C.I.) in different parts of the country for this



purpose. The food grains collected from the farmers by the Central Government are preserved in these godowns. It is from these godowns that food materials are supplied to states running short of food grains.

### • Distribution

Distribution is important in attaining food security. Every section of people of every region should get adequate quantity of food. An effective distribution system is essential for this. This is made possible through a public distribution system, which ensures that every family will get a fixed quantity of food grains every week. There is difference in the quantity and price of food grains distributed to B.P.L. and A.P.L. sections of the society.

Food grains procured and preserved in F.C.I. godowns reach the ration wholesalers and then to the retailers and finally to the ration card holders.

In situations of variation in food production, governments can overcome it with an effective collection-distribution system. During times of food scarcity, necessary food grains are imported to ensure equitable distribution.

What are the details shown in your family's ration card? How does this information relate to the quantity of food grains you get? Discuss and make a note on your inferences.

## Kerala and the Public Distribution System

Kerala produces only 13% of its food grain requirements. The major portion of our demand is met from other States. Food grains, vegetables and other food commodities are brought from other states to Kerala. The Government-run public distribution centres, were earlier known as 'Fair Price Shops'. Now, in Kerala, we have 14,274 public distribution centres. Panchayat level Maveli Stores, Sabari Stores and Supplyco Stores function along with these public distribution centres. While food items are distributed to the B.P.L. families at reduced rates from these centres, all other sections get food items and other essential goods at controlled prices.



There is strong intervention from the Government to ensure adequate food supply to everyone in the society and to eradicate poverty by attaining food security.

Different agencies of the United Nations Organisation and the governments are trying their best to ensure food security throughout the whole world. The central as well as State Governments are trying to attain the same. The drawbacks in the distribution system and the ignorance of the people are stumbling blocks on the way towards attaining perfection in these spheres.

### An Alternate Model for Poverty Eradication

*See how a group of school children from Thrissur district recognised that there are people who are struggling for a day's meal around us. This happened when they were studying about food and food security. As a temporary solution to this issue they spent the amount they had collected for Onam celebrations by giving a days' meal for the inmates of an orphanage. In another occasion the same children spent their celebration fund for providing food packets to the street children.*

- Find out the number of B.P.L. / A.P.L. families in your place and find out how many of them are below the poverty line.
- Visit your neighbouring houses and find out whether they depend on public distribution centres. If so:
  - The number of people depending on the public distribution system.
  - Items they get
  - The available quantity, price and quality of the items received

Find out all these details and present it in class.

- Prepare a collage from newspapers and magazines by collecting news reports and photographs on issues related to scarcity of food and poverty.

### Do not Waste even a Bit...

It was when she went to wash her plate after lunch that Anu noticed students were wasting food. The compost pit was getting filled with food waste every day. Her neighbour, Ramettan, had kept a bin for collecting waste. But no one had noticed it and the left overs were seen scattered in and around the

bin. The stinking smell of stale food was horrible. Anu felt sad that lot of food was being wasted at a time when many people were starving.



- Considering the amount of food wasted in our school, can we not save one or two kilos of rice everyday ?
- How much rice can we save in Kerala everyday by avoiding this wastage and how can this rice be put to use?
- Is it only in school that we waste food?
- Which are the other occasions when food is wasted?
  - House
  - Parties
  - Celebrations
- Prepare a plan to provide good lunch in your school with the help of the PTA and social workers.



# 4 | ON INDUSTRY



Agriculture and industry play a major role in the development of a nation. We use a number of products in our day- to-day life such as cloths, grains, vegetables, medicines and so on.... Make a list of them.

Categorise them as agricultural produces and industrial products.

| Agricultural Produces | Industrial Products |
|-----------------------|---------------------|
|                       |                     |
|                       |                     |
|                       |                     |
|                       |                     |

Industrial products are manufactured in factories. In this chapter let's discuss how industries are setup and how they are functioning.

## Industries in Kerala

A number of small scale and large scale industries are there in Kerala. A wide variety of products are manufactured here. We have already learnt that many industrial units function in most of the districts of our state. Identify them and make a list.



Western India Plywood Limited



TELK



Kerala Minerals &amp; Metals Limited



Malabar Cements

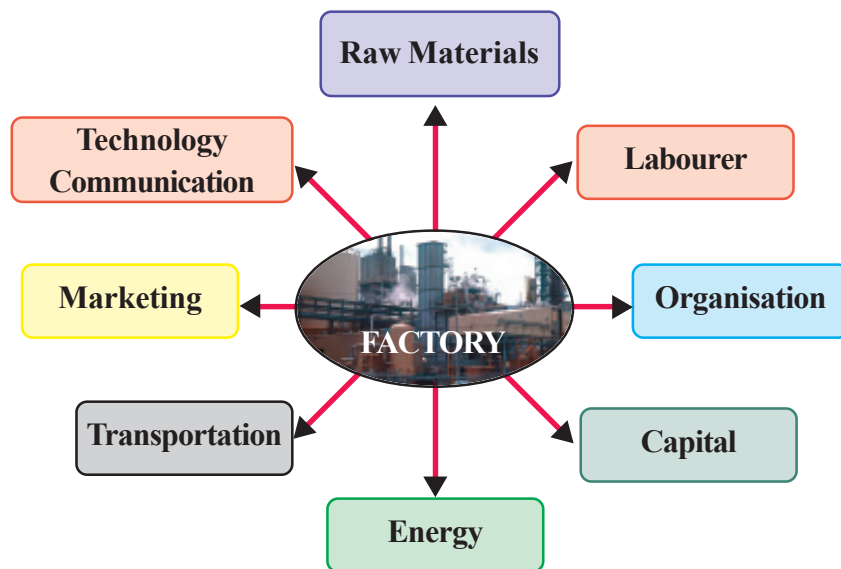
Examine the pictures given above.

Find out the major industries in Kerala with reference to the pictures given above and the unit titled 'Industry Suitable to the Nation' in your class V textbook.

In order to manufacture a particular product, a factory requires certain basic necessities. You have learnt this in class V. Now enlist them.

- .....
- .....

What are the components needed to run an industry?



Let us examine how these different components function in an industry.

## Raw Materials

The material required for manufacturing a product is called raw material. Raw materials are available directly or indirectly from nature. Thread is the

raw material used for manufacturing cloths. It is made from another raw material- cotton. Iron ore which is the raw material for Iron and Steel industry is converted to iron in factories. Iron that is manufactured thus, is in turn used in the industrial units that manufacture machinery. Here iron ore and iron are used as raw materials for manufacturing different products.



FACT



### Fertilizers

- Factomphose
- Ammonium Sulphate
- Bio-fertilizers

Fertilisers and Chemicals Travancore Limited (FACT) is a prominent factory in Kerala. It is situated in Udyogamandal and Kochi in Ernakulam district. The major objective of this industrial unit is to carry out research for the development of the Indian agricultural sector. It also manufactures fertilizers. The service of this factory is available to all farmers in the country. It occupies the third place in the world in fertilizer manufacture.

Which are the different fertilizers shown in the table? These fertilizers are manufactured in the factory by blending different chemicals. Naphtha, Furnace Oil, Sulphur, Rock Phosphate, Benzene and Phosphoric Acid etc. are used in manufacturing fertilizers. These are the raw materials for manufacturing fertilisers.

## Labour

Many people work in a factory. They too have a significant role in production. A worker is one who works. Work is a combination of both mental and physical effort. The worker gets wages for his work and every worker is skilled in his work.

Around 3,700 labourers work in FACT, round the clock, in shift system. They include the operators of machinery, loading/unloading workers, Chemical



Engineers, Mechanical Engineers, Computer Experts and various other skilled labourers.

## From Screw to Computer

Many of the industrial products that we use, are not manufactured in a single factory alone. A new product is manufactured by assembling various products - small and big - made in other factories. Different parts of electronic equipments like Television, Computer, Radio, Mobile phone etc. are manufactured in different centres.

### Shift System

*In factories that work continuously all workers do not attend for duty at the same time. While some start work in the morning and stop by evening, others begin their work at night. However, each of them works for eight hours a day and each gets a weekly off too.*

The process of manufacturing requires machinery, tools and buildings. Proper machinery that serves the purpose of production is selected by the factory. Some of this machinery are manufactured in our country whereas some others are imported from foreign countries.

## The Capital Required for a Factory

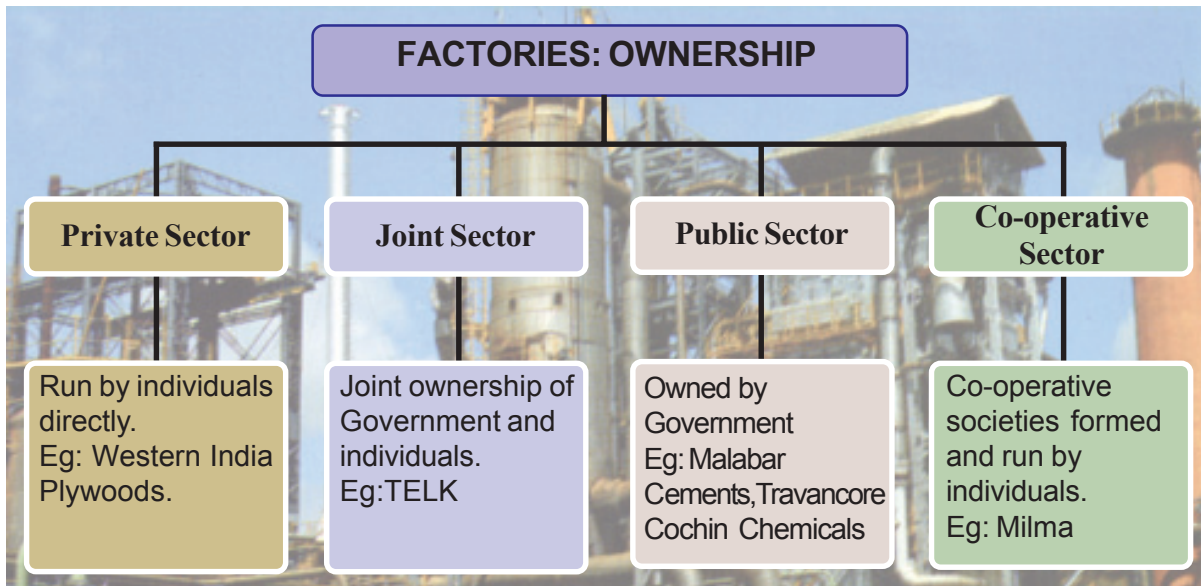
Capital is an essential factor for the functioning of industries. Money is the inevitable factor for the purchase of land, construction of buildings, purchase of machinery, and for the payment of wages to the workers. Money that serves as capital is invested either by the government or by individual investors.

## Co-ordination

We have already seen that for industrial production we need raw material, labour, machinery and tools. We may not get all these things from one place. Proper organisation is needed to co-ordinate these elements. Usually this work is undertaken by individuals, institutions, co-operative societies or the government. Sometimes this is executed jointly by the government and individuals. We have such industries. Examine the flow chart given.

*FACT was established in 1944 at Udyogmandal when King Sree Chithra Thirunal Balaramavarma ruled Travancore. The objectives behind its formation were upgrading the economic status of the country and enriching the agricultural sector. The Central Government took over the factory in 1960.*

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- Visit a factory in your place and make a note on how various components work in a factory.
- Get the help of your teacher to gather the following details about important factories in your district. Complete the table below using the collected data.

| Name of Industry | Product | Raw material | Ownership |
|------------------|---------|--------------|-----------|
|                  |         |              |           |
|                  |         |              |           |

- What type of ownership do the factories in your district have?
- What are the raw materials used in these factories?

## Marketing

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Are all the products we use made in our locality?

Don't we use things produced in other states and outside India?

Which are the countries that produce the things you use?

| Product            | Place of manufacture |
|--------------------|----------------------|
| Electronic gadgets |                      |
| Watch              |                      |
| Medicine           |                      |
| Pen                |                      |
| Soap               |                      |
|                    |                      |

What are the things you use apart from the ones made in India?

How are raw materials taken to factories? How do the finished products reach your hands?

- Transportation
- Communication
- Sales outlets
- .....
- Which are the modes of transport that factories depend on?

Factories depend on market for selling their products. Factories resort to various means to attract consumers. Profit and loss of a factory are based on the rate of the sales of its products.

We know that factories manufacture different products. Many products are being advertised in the media for promoting sales. Have you seen direct advertisements of products other than the ones you see in media? How are hoardings, notices and brochures being used in the publicity of products? Haven't you seen shops selling only the products of a particular factory?

- Why do the factories resort to such publicity strategies?

- How do factories make use of communication facilities?
  - To find workers
  - To sell products
  - To find raw materials
- Make a note on how industrial development influences the development of a particular region.



## Energy

Energy is a decisive factor in industrial development. Industries use different types of energy like energy from electricity and fuels.



## Importance of Industries

We have agricultural and non-agricultural industries in our country. Many industries function depending on produces like coconut, rubber, cotton, grains and jute. Similarly, there are factories that make fertilizers, tractors, trillers, harvesting and planting machines and other agricultural implements.



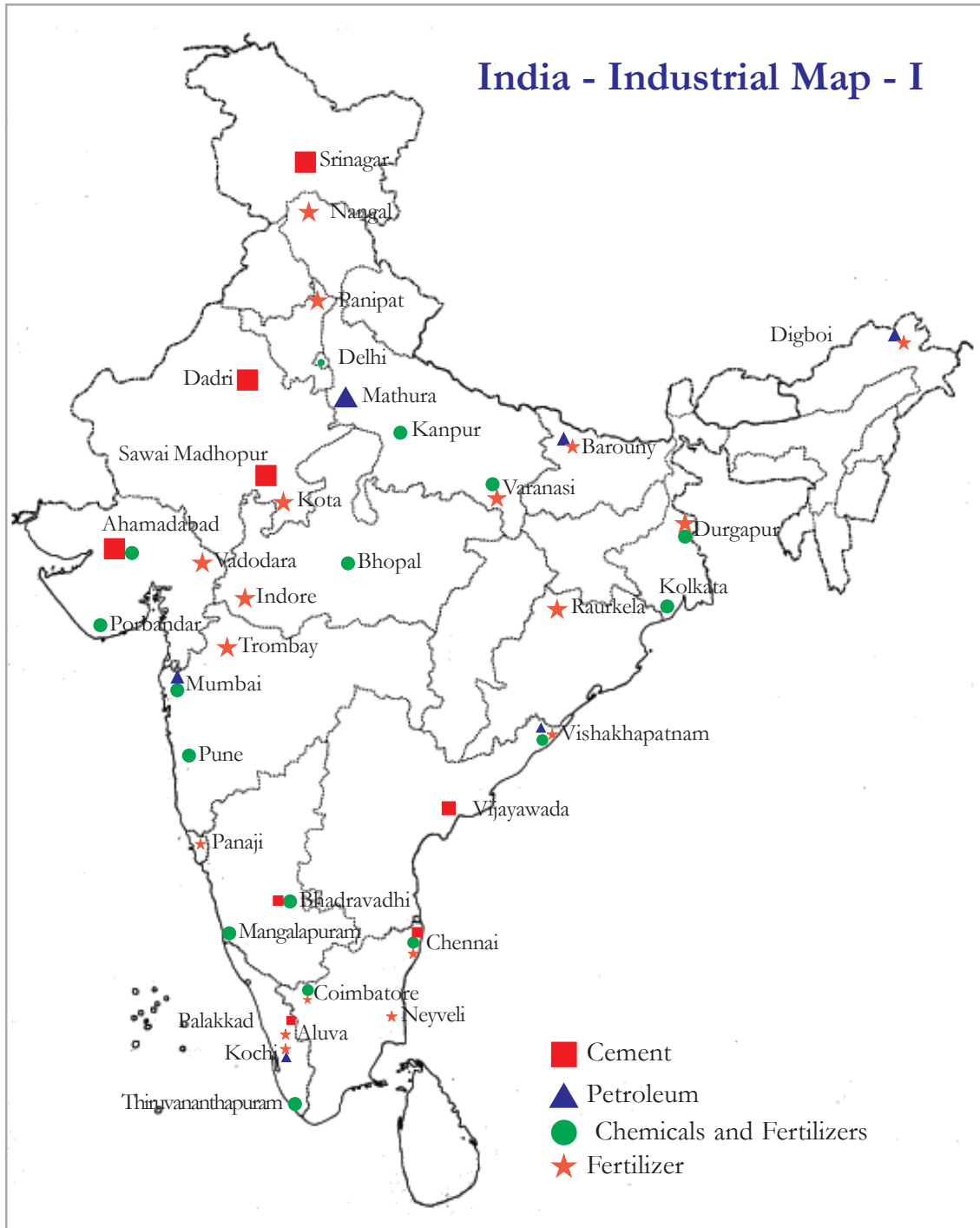
Many products are used in daily life like iron and steel, petroleum, mining industrial products, plastic and cement. We earn millions of foreign exchange by exporting them. Lakhs of people are working in the industrial sector. Transport, communication and urban development are other areas that develop along with industries.

As part of the development of transportation facilities road, rail and water ways also develop. Development of schools, hospitals, tourist centres and commercial areas lead to urbanisation.

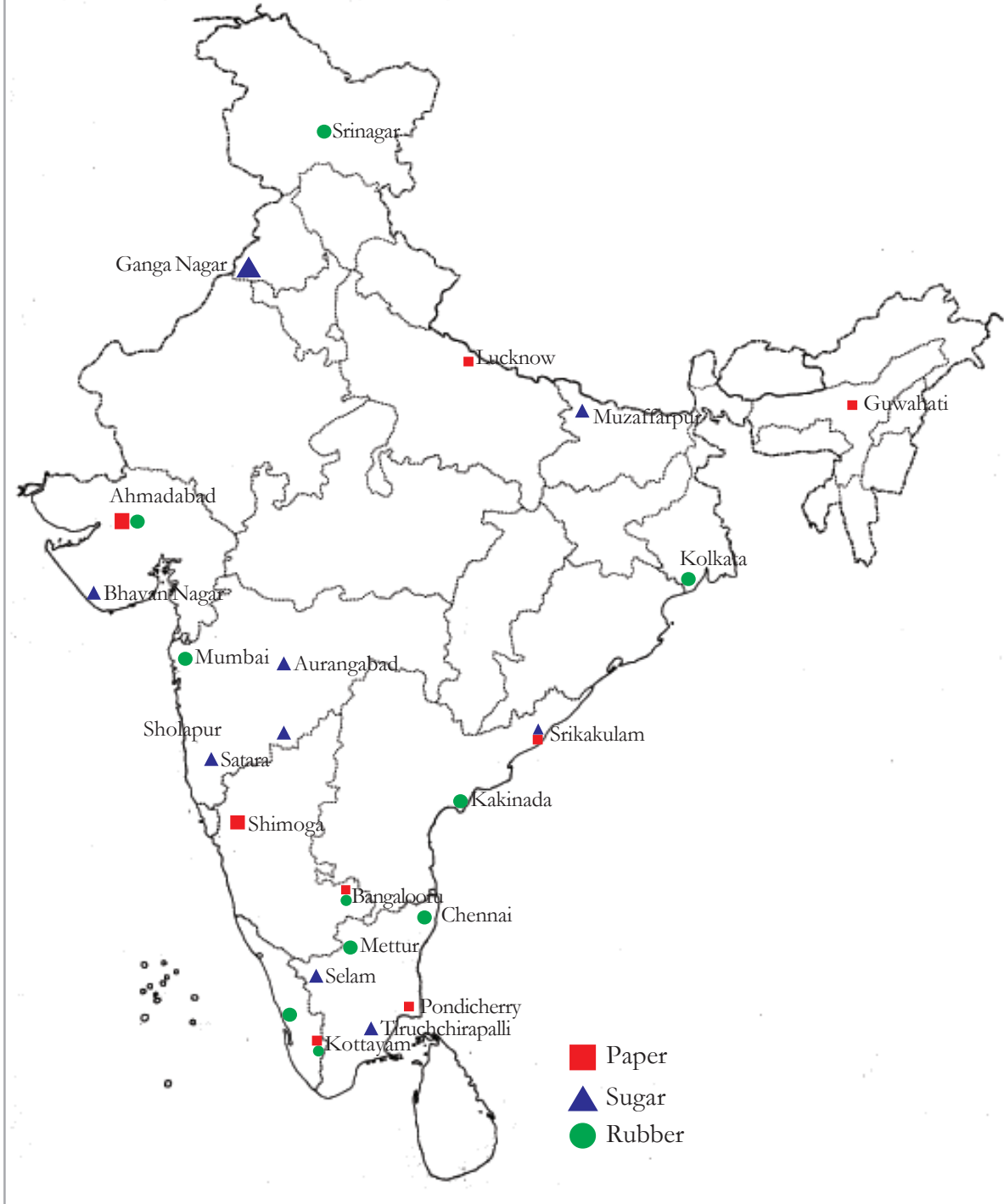


## Technology

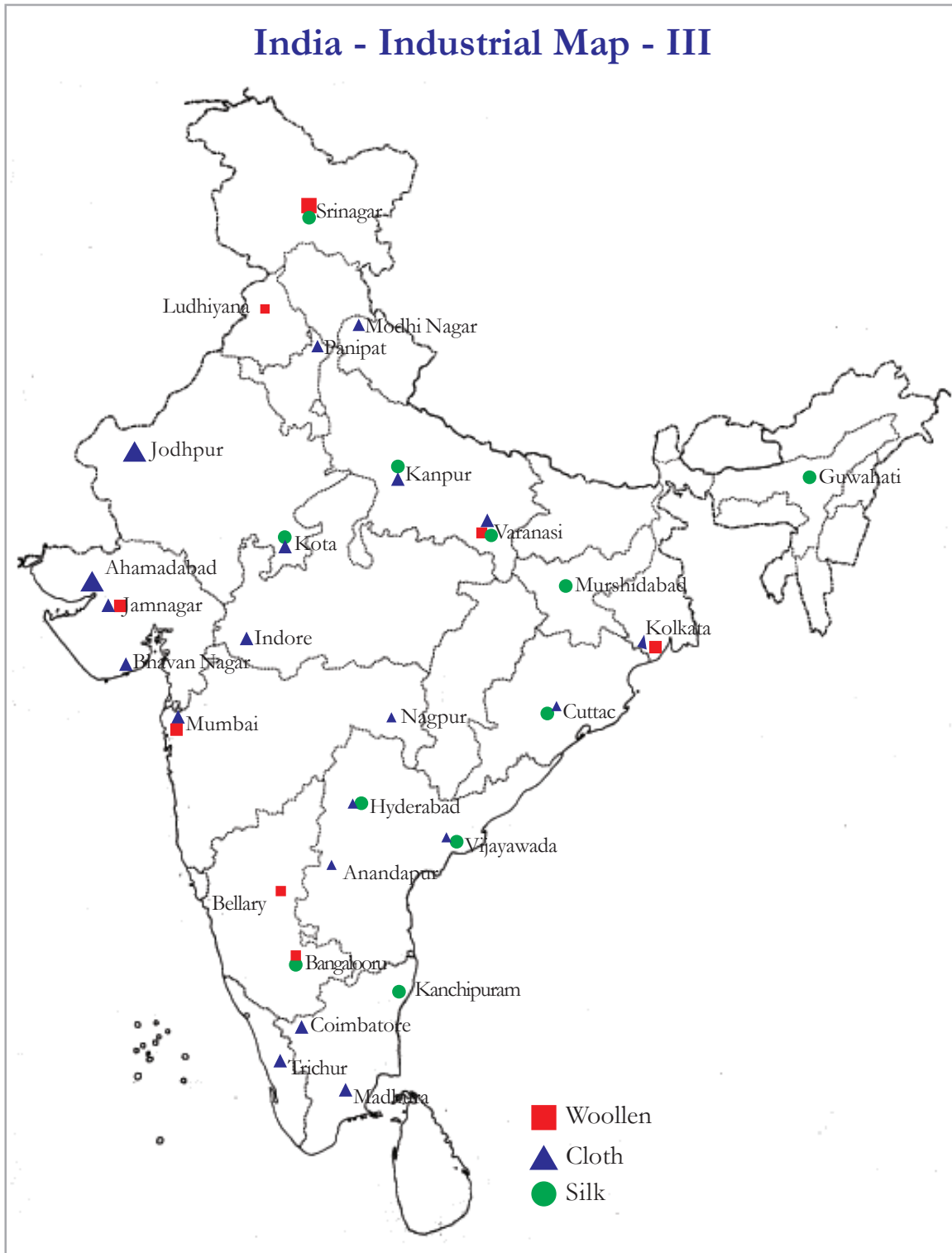
Technology plays an important role in industrial enterprises. It has a decisive role in production and sales sectors. Today technology is used for sophisticated process of production, distribution and marketing.



## India - Industrial Map - II



## India - Industrial Map - III



- Which are the Indian states where the maximum number of agro - based industries are located?
- Identify other industries in India and mark them on a map with the help of the atlas.
- Observe the industrial map of India and find out in which states the industries are spread out.

The establishment of an industry brings in a great deal of change in the life of the people of a particular locality. It gets inhabited by more people. Besides industrial pollution the changes in the life style of people also cause large scale pollution. Pollution caused by industrial effluents, accumulation of garbage, air pollution due to increased motor transport and water pollution are examples. Now modern technology is used to check such pollution.

### Pollution Control is Possible

Water, air and soil get polluted by industrial units. Pollution of this type turn hazardous to all living beings including humans. Many factories have established pollution control systems of their own.

Pollution control board gauges the level of pollutants and provides guidance and assistance to control them. There are pollution control boards functioning at the state and central levels.

Many factories have their own scientific and effective pollution control systems. FACT is an example. Each production unit is set up at stipulated distance. The attempt to check pollution in a natural way by planting large number of trees is successful to a certain extent. The responsibility to assess whether the systems to control pollution function properly and to assure whether the water and air that come out maintain the fixed level of quality is vested with the State Pollution Control Board.



FACT (Kochi ) pollution control plant

The Sulphuric Acid Plant in Udyogamandal has a pollution control plant there itself. Under the Central Pollution Control Board, there is also a plant to process solid waste.

Similarly, many factories in our state have taken precautionary measures. Still, many factories cause severe damage to the environment. This is a threat to all living beings.

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- Prepare a note on the functioning of a factory based on means of production and infrastructure facility.
- Discuss how the small scale and large scale industries in your area have helped the development of the place.
- Make an enquiry into the problems due to non-treated emission of effluents from the factories in your locality. Prepare a report on it.

•

# 5 | OUR PLACE ON THE EARTH



Atlas was a god in Greek mythology. Once he had a fight with god Zeus. In that fight Atlas and his men were defeated by Zeus and his allies. A vengeful Zeus decided to punish Atlas. What could be the punishment? To shoulder the earth for ever. Atlas thus had to shoulder the earth and remain like that for ever, suffering hunger and thirst.

"If I get anyone to help me," Atlas yearned. Days passed. One day Hercules came to him. Atlas was much relieved. "At least one person had come to me," he thought.

"See, Atlas, can you help me pluck the golden apple?"

Sensing this the best opportunity, Atlas said, though weak and tired, "Why not, I will help you if you can hold this for some time."

Hercules agreed happily. The next moment, Atlas placed the earth on the shoulders of Hercules. Atlas felt quite relieved and flexed his hands.

Hercules now realised the trap he was in. He wondered how long he should shoulder the earth.

Atlas disappeared in no time but he kept his word. He returned with the golden apple. He thought of quitting the place in no time.

"Please hold this for a moment? Let me stretch myself," requested Hercules.

Without thinking of anything else, Atlas shouldered the earth.

Hercules left the place taking the golden apple without even looking back once.

The word 'atlas' that we use now owes its name to this story in the Greek mythology.

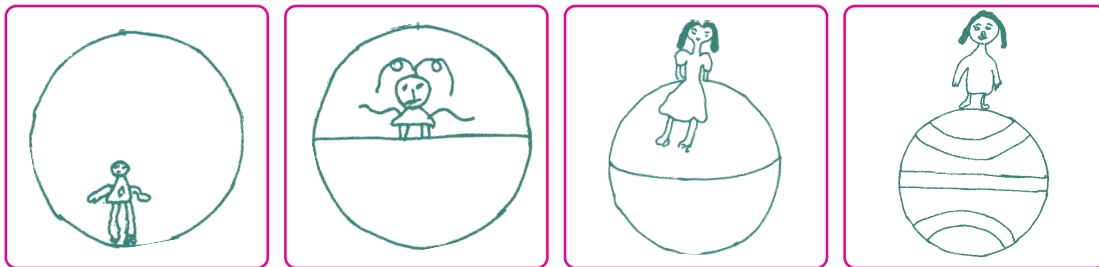
Look up the atlas. How many types of maps could be seen in it?

## Above and Below

You know that the earth is spherical in shape. Draw a picture below showing the position of man on earth.



The pictures shown below were drawn by certain students of a class. Is the picture you draw in any way similar to the pictures given below?



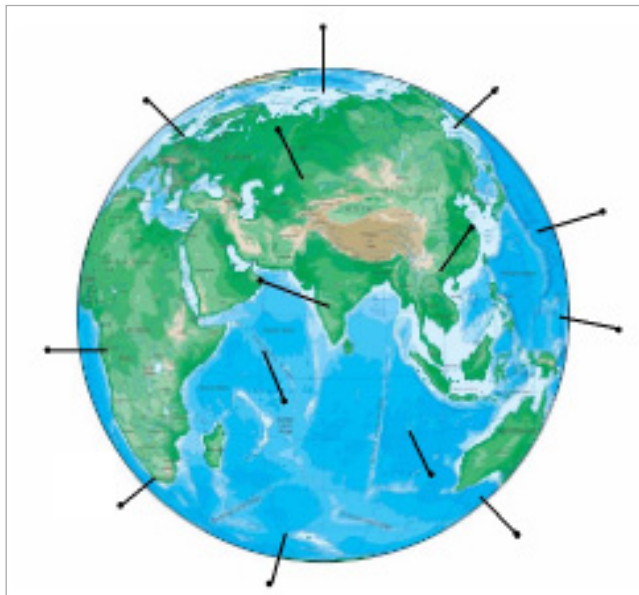
On a globe, show your position by pasting matchsticks on it.

Do you think humans can stand on the globe like the matchsticks pasted? Discuss in the class.

### My Findings

- .....
- .....
- .....

We can see continents and oceans on a globe. See how they are depicted on it. Seven continents and four oceans can be seen in the figure of globe given here. Make a list of them with the help of the figure/globe.







| Continents                                                                   | Oceans                                                                      |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• North America</li> <li>•</li> </ul> | <ul style="list-style-type: none"> <li>• Indian ocean</li> <li>•</li> </ul> |

### Let us do...

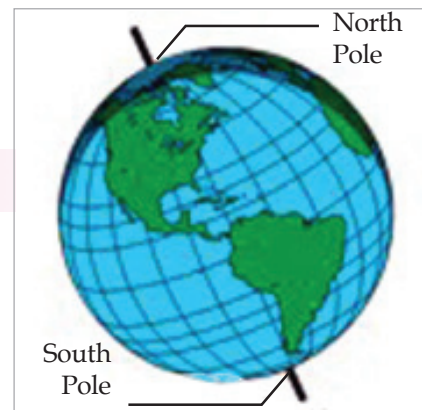
Take a ball and pass a rod through it as shown in the picture. Paste different coloured markers on the two points through which the rod might pass as shown in the picture. Rotate the ball once. Watch the movement of each coloured spot. See if all the spots cover the same distance. Which one travelled the longest distance? The red one or the blue one?



You must have observed that the two spots in green did not move at all. These are the two poles of the ball. Similarly, examine the globe and find out the poles of the earth. The pole on the northern side is called North Pole and the other, South Pole.

### Axis of the Earth

Imagine a rod that passes through the centre of the earth connecting North and South poles. This imaginary rod is the axis of earth. The rotation of earth is based on the inclined axis.



## Hemispheres

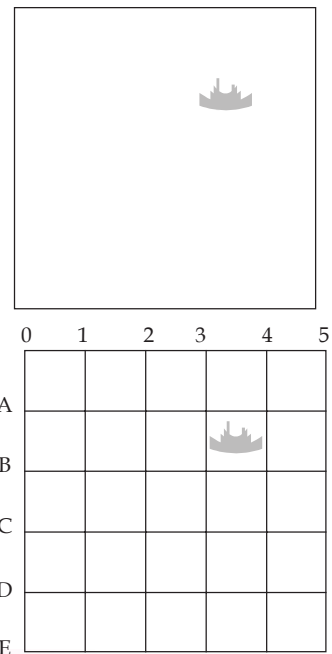
The Equator divides the earth into two hemispheres. The one on the northern part of the Equator is called the northern hemisphere and the other, the southern hemisphere.

- In which hemisphere is India located?
- Which hemisphere has the maximum number of countries?
- Which are the continents that are spread over both the hemispheres?
- In which hemisphere is the continent Antarctica?

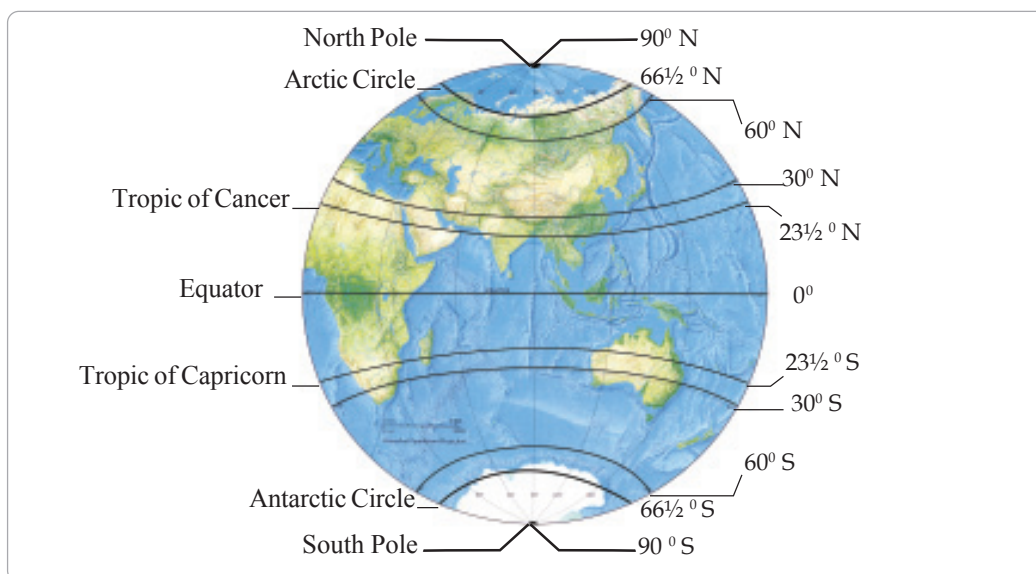
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### Let us do

Draw the picture of a ship on a sheet of paper. Find out the exact position of the ship in the picture. Do you face any difficulty? If so, draw vertical and horizontal lines on the paper at a distance of one centimeter each as shown in the picture. Mark digits like: 0,1,2,3... from left to right and the letters A, B, C... from top to bottom. Now try to find out the exact position of the ship. Isn't it easy now? You can now exactly locate where the ship is. It is at the square made by the intersection of lines A and B and 3 and 4. Now draw another ship on the paper and locate its place. You have identified what helped you to locate the ship, haven't you?



## Latitudes



You can see on the globe certain lines that are drawn parallel to the equator. These lines are latitudes. They are marked in degrees. This ranges from  $0^{\circ}$  to  $90^{\circ}$  to the north and south of the equator. The  $90^{\circ}$  latitude on the north is the North Pole and the  $90^{\circ}$  latitude on the south is the South Pole.

*The imaginary circular lines parallel to the equator are known as latitudes.*

Some important latitudes are shown in the picture.

- In the picture/atlas which line of latitude passes through India?
- Look at the globe and find out the latitudes in between which India is located.

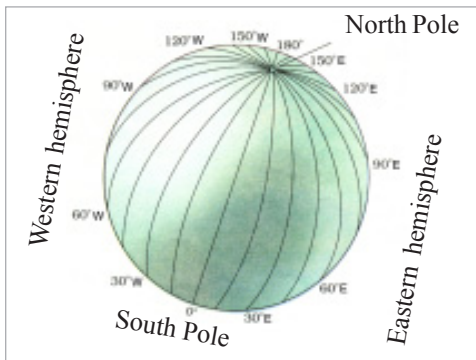
My observations :

.....  
 .....

## Longitudes

We see certain lines drawn perpendicular to the latitudes on the globe. These lines connect the North and South poles. They are called the longitudes.

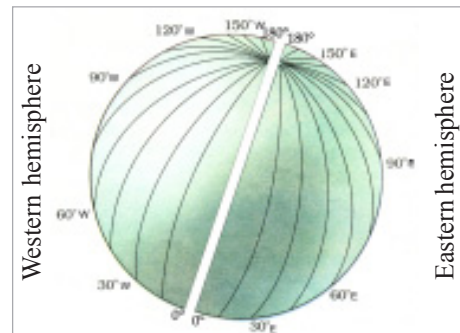
*The imaginary lines that join the North and South poles are longitudes.*



Find out from the globe the  $0^{\circ}$  longitude. It is also known as the Greenwich. The line seen opposite to it is called the International Date Line. This is  $180^{\circ}$  longitude. Based on these two lines the earth is divided into two hemispheres; the one on the eastern side of the Greenwich on the globe is known as eastern

hemisphere and the other as western hemisphere.

- In which hemisphere is India located?
- In which hemisphere is Brazil located?
- What can you find out by making a comparison between the two hemispheres?



All the longitudes from the Greenwich to the International Date Line in the East ( $0^{\circ}$  to  $180^{\circ}$  E) are known as east longitudes and those from the Greenwich to International Date Line in the West ( $0^{\circ}$  to  $180^{\circ}$  W) as west longitudes.

- Find out whether in the picture direction is marked in the  $180^{\circ}$  longitude . Why?

Latitudes and longitudes are essential for locating a place on the globe.

**Complete the table :**

| Continents in the Northern hemisphere | Continents in the Southern hemisphere | Continents that are spread over the two hemispheres |
|---------------------------------------|---------------------------------------|-----------------------------------------------------|
|                                       |                                       |                                                     |

| Oceans in the Western hemisphere | Oceans in the Eastern hemisphere | Oceans that are spread over the two hemispheres |
|----------------------------------|----------------------------------|-------------------------------------------------|
|                                  |                                  |                                                 |

- Meena met some children from different countries in Kovalam. They were: Ligin Yuan, Ronald, Omar and Simon. Meena collected some information about their countries.

Meena has given us certain clues. Can you find out with the help of an atlas the countries Meena's new friends belong to?

- Ligin Yuan - A boy from a country where 40 degree North latitude and 90 degree East longitude intersect.  
Country : .....
- Ronald- A boy from a country where 10 degree South latitude and 60 degree West longitude intersect.  
Country : .....
- Omar - A boy from a country where 25 degree North latitude and 45 degree East longitude intersect.  
Country : .....

- Simon - A boy from a country where 20 degree south latitude and 135 degree east longitude intersect.

Country : .....

### Find out...

- From the map of India shown on the next page find out the latitudes and the longitudes that intersect in the different states given below.

- |                   |                      |                    |
|-------------------|----------------------|--------------------|
| 1. Andhra Pradesh | 4. Orissa            | 7. Maharashtra     |
| 2. Gujarat        | 5. Uttar Pradesh     | 8. Karnataka       |
| 3. Rajasthan      | 6. Arunachal Pradesh | 9. Jammu & Kashmir |

## Globe and Maps

Can you find out Kerala on the globe? Isn't it difficult? If so, find it out from the atlas.

Atlas is a collection of maps. Find out the various types of maps in the atlas and make a table of it.

- Prepare a note on the difference between globe and atlas.

Like atlas, wall maps are also prepared for academic purposes. Wall maps are based on specific themes.

## Different Types of Maps

### Political Maps

Political maps give importance to countries, states, state capitals, other important places and boundaries.

### Physical Maps

Physical maps give importance to geographical features like mountains, rivers, backwaters etc.

### Other Maps

There are other maps that are prepared giving emphasis on different themes like population, agriculture, industry, minerals etc.

Examine any three types of maps of India in the atlas and make a table of the different types of information available in them.

| Physical Map                                                                                                  | Political Map                                                                                      |                                                                                                         | Other Map                                                                                          |
|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|                                                                                                               | State                                                                                              | Capital                                                                                                 |                                                                                                    |
| <ul style="list-style-type: none"> <li>• The Himalayas</li> <li>•</li> <li>• The Ganges</li> <li>•</li> </ul> | <ul style="list-style-type: none"> <li>• Kerala</li> <li>•</li> <li>• Punjab</li> <li>•</li> </ul> | <ul style="list-style-type: none"> <li>• Thiruvananthapuram</li> <li>•</li> <li>•</li> <li>•</li> </ul> | <ul style="list-style-type: none"> <li>• Wheat cultivating states</li> <li>•</li> <li>•</li> </ul> |



# 6 | POWER TO THE PEOPLE



Kannadi, a panchayat area in Palakkad district had been facing scarcity of water during summer until recently. Water supply to this Panchayat was from the wells built on the banks of *Bharatappuzha*. By the month of March, the river used to dry up. Consequently, the water level in the wells came down and as a result water could not be pumped to the Panchayat.

Many complaints came up in the *Grama Sabha* about the scarcity of drinking water. The Panchayat took the matter up and discussed with experts for a solution. Yakkara area of Palakkad Municipality, on the other side of the river, also faced the same problem. Construction of check dams to raise the water level was the solution suggested by the experts. Volunteers took the issue up and constructed a check dam by piling sand bags across the river. However, that was not a permanent solution. A permanent check dam was the only solution before them. But it needs lakhs of rupees and that was beyond the capacity of the Grama Panchayat. Palakkad District Panchayat, with the co-operation of the Kannadi Grama Panchayat and Kuzhalmannam Block Panchayat constructed a permanent check dam at Yakkara across Bharatappuzha.



The check dam constructed by Palakkad District Panchayat

Now there is no scarcity of drinking water in Kannadi Grama Panchayat. Moreover, water is being supplied from here to some areas of Kuzhalmannam and Thenkurissi Grama Panchayats and Palakkad Municipality.

- Where did the people raise the problems related to scarcity of drinking water?
- What did the people do to solve the problem?





## Grama Sabha

Given above is the picture of a *Grama Sabha* session. What is *Grama Sabha*? Who are the participants of it? What could be the demands raised in it? Have you seen *Grama Sabha* being held in your locality?

Read the following:

Every Panchayat is divided into wards. A 'Ward member' is the elected representative of a ward. *Grama Sabha* is the meeting of all voters of a ward under the Ward Member's leadership. The Ward Member is the Convener of the *Grama Sabha*.

The *Grama Sabha* accepts proposals for developmental activities by the Panchayat and evaluates their progress. The Convener presents the review of the activities of the previous year and the report of the developmental activities to be taken up in the current year before the *Grama Sabha*. The developmental activities in the areas of drinking water, electricity, housing, women's welfare, transport, agriculture, education, health etc. are decided

by the people of the ward. People prioritise the proposals for developmental activities.

### **Grama Swaraj**

"The independence of India should mean the independence of the whole of India... Liberty must shoot off from the bottom level. Thus every village should be a republic..." Gandhiji visualised that India would be disintegrated if the villages perished as the soul of India rested in its villages. Grama Swaraj was his long cherished dream. He sincerely wished that power should be decentralised and it should reach the common people. The Indian Parliament enacted the legislation of Panchayati Raj and Nagarapalika Bill while P.V. Narasimha Rao was the Prime Minister of India.



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## **The Powers and Responsibilities of *Grama Sabha***

- Propose developmental activities of the village; give leadership to implement them.
- Discuss the literacy programmes and extend support for their implementation.
- Suggest where streetlights, public taps and public wells are to be fixed.
- Suggest where projects for irrigation and public amenities should be established.
- Plan projects for hygiene and pollution control.
- Suggest the beneficiaries of welfare and developmental schemes.

The *Grama Sabha* is to be met at least once in three months. Not less than 10% of the voters are to attend for taking decisions. The employees of the Grama Panchayat help the ward member to convene and to minute the proceedings of the *Grama Sabha*. The suggestions from various

### **Ward Sabha and Ward Committee**

*Ward Sabha like the 'Grama Sabha' is the meeting of the voters in Municipalities and Corporations. In Corporations/Municipalities where the number of wards are comparatively high besides Ward Sabha. A Ward Committee also functions with the heads of institutions, representatives of residents' associations and trade and commerce as members.*

*Grama Sabhas* are consolidated at the Panchayat level. Therefore *Grama Sabhas* have a decisive role in the developmental activities of Panchayats.

- What are the benefits of deciding the developmental activities in *Grama Sabhas*?
- Visit the *Grama Sabha* of your ward and prepare a note.
  - Participation • Chaired by • Discussions
- How does the *Grama Sabha* provide an opportunity for one to be a part of the developmental activities of one's locality?

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### Class level development seminar

Prepare a table on the immediate requirements of your class. Can all these needs be fulfilled at the same time? Prioritise the requirements. Form groups and discuss the issues. Find out ways to solve the issues and present them in the class.

## Panchayati Raj System

In our country the Central Government led by the Prime Minister is governing us at the national level. The State is governed by the Chief Minister as its leader. Any system of Government attains complete success only when the involvement of people is ensured in the administrative process. Problems and developmental requirements of each area of the state are different. The State Government faces difficulty in identifying them. Only the people of a locality will be able to identify and suggest solutions for the problems related to electricity, education, drinking water, agriculture, transport etc. The local self-government institutions ensure the involvement of people in the administrative process. This system is known as Panchayati Raj, which is a three-tier system with Grama Panchayat, Block Panchayat and District Panchayat.

*Though most of the states have a three tier system of Panchayati Raj institutions, Block Panchayats need not be constituted in states with population less than 20 lakhs. Goa, Sikkim and north eastern states have only Grama Panchayat and District Panchayats.*

There is a different system of administration for the cities and towns. Based on the population and income, cities are classified into Corporations and

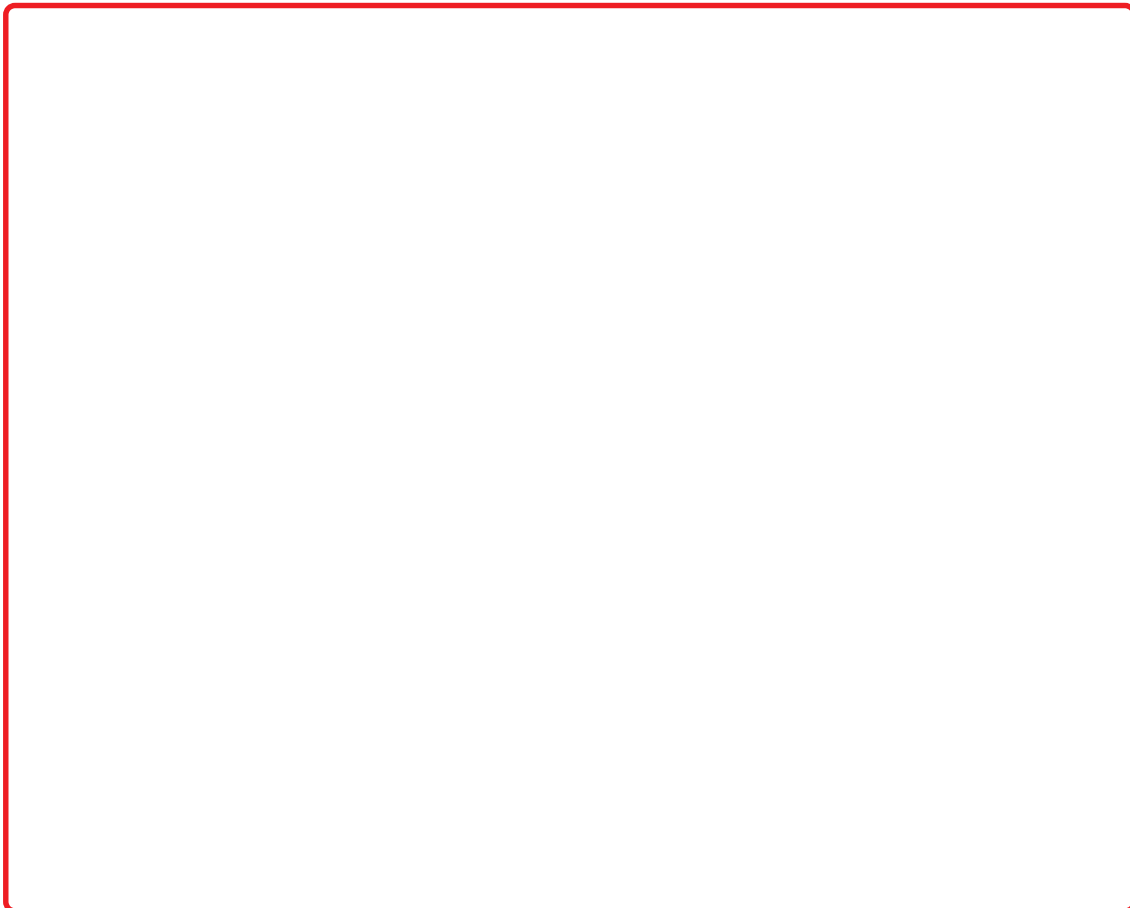
towns as Municipalities. Corporations and Municipalities are divided into wards.

Many developmental activities are going on in your place, aren't they? Find out the local self-government agencies that implement them and fill the columns given below.

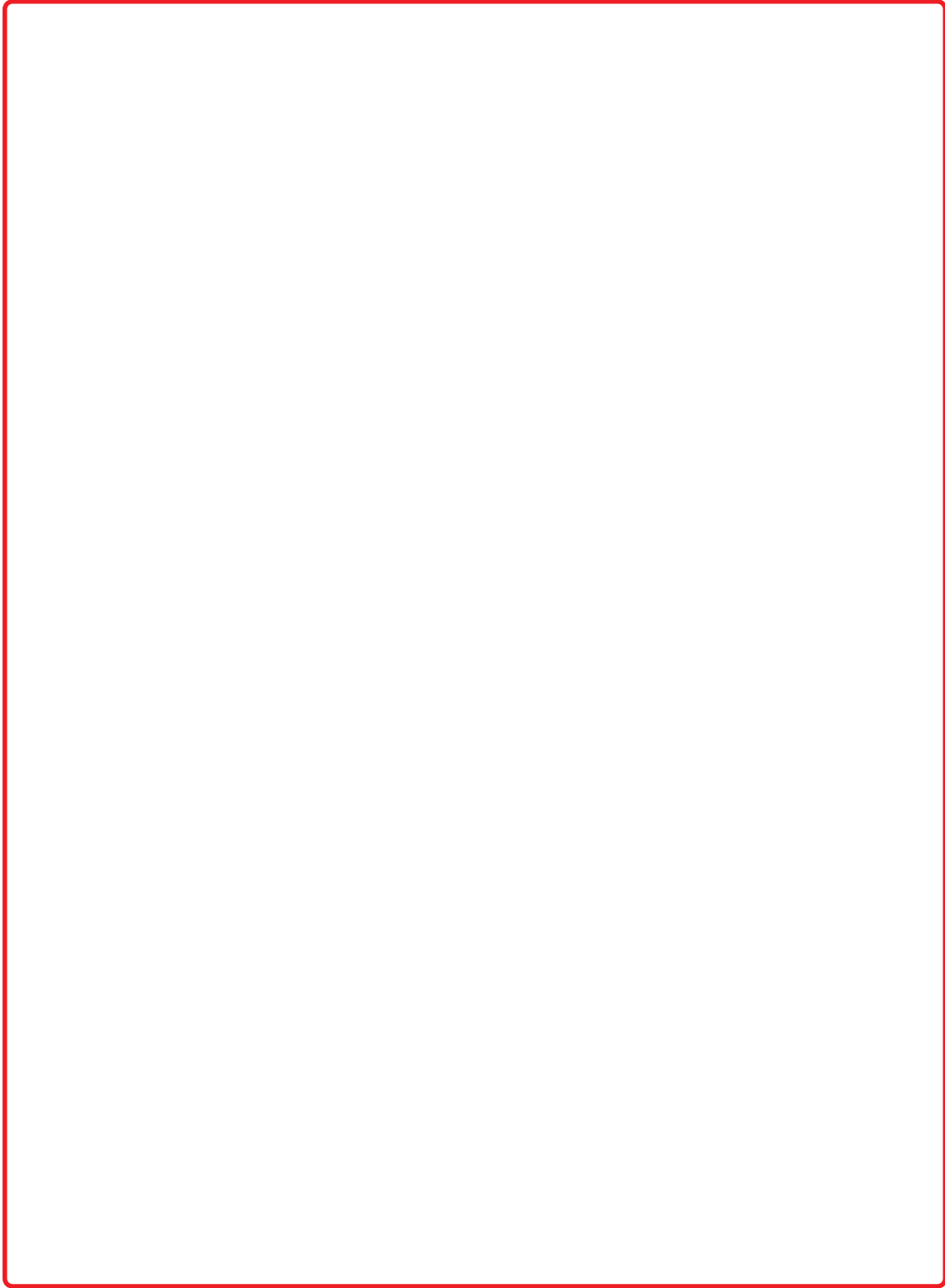
| Developmental activities      | Grama Panchayat | Block Panchayat | District Panchayat | Corporation/Municipality |
|-------------------------------|-----------------|-----------------|--------------------|--------------------------|
| Roads                         |                 |                 |                    |                          |
| School buildings              |                 |                 |                    |                          |
| Facilities for drinking water |                 |                 |                    |                          |
| Street lights                 |                 |                 |                    |                          |

### Developing Map - District

Trace the outline map of your district below and mark the Block Panchayats. Which Block Panchayat do you belong to? Mark the Grama Panchayat/ Corporation/Municipality where you live.



## Developing Map - Grama Panchayat/Municipality/Corporation



Trace the outline of your Grama Panchayat/Municipality/Corporation and mark the wards. Are your house and school in the same ward? Use symbols to mark the public institutions of your ward.

### Local self-government Institutions in Kerala

|                     |     |
|---------------------|-----|
| District Panchayats | 14  |
| Block Panchayats    | 152 |
| Grama Panchayats    | 999 |
| Municipalities      | 53  |
| Corporations        | 5   |

Local self-governments look after the issues of local development. Many powers and responsibilities of the state government were transferred to the local self-governments. The required developmental activities of Village, Block and District levels are implemented by Grama, Block and District Panchayats respectively.

Grama Panchayat Presidents attend the meetings of the Block Panchayats for deciding the developmental activities of the Block Panchayats and the Presidents of the Block Panchayats attend such meetings of the District Panchayat. The system of Panchayati Raj ensures the representation of people in this way.

#### Swaraj Trophy

*Local self-government institutions in Kerala are competing with each other in developmental activities. The state government honours the local self-government body that excels in welfare and developmental activities by awarding the Swaraj Trophy. This helps in strengthening and motivating these local self-government bodies.*

### Powers and Responsibilities of the Panchayat

- Initiating developmental activities in the Panchayat with Government grants and other aids.
- Construction and maintenance of roads, bridges, culverts and canals under the Panchayat.
- Establishing public health centres and child welfare centres.
- Economic development activities as per the suggestions of the *Grama Sabha*.
- Providing streetlights and drinking-water facilities.
- Arranging for the disposal of garbage.
- 
- 

We have seen what all the responsibilities of the Panchayat are, haven't we?

- Enquire as to how far the Panchayat/Municipality/Corporation involves in such matters in your place and make a note of it.

## District Planning Committee

To evaluate and co-ordinate the all round development of the district, every district has a District Planning Committee with District Panchayat President as Chairman and District Collector as Secretary.

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## Local - Self Governments and the Sources of Income

We have already seen that the local self government institutions are taking up a number of developmental activities. All these activities require funding. From where do these institutions get fund? These institutions raise funds through various taxes, plan allocations and loans.

- Find out the facilities provided by the local self-governments in your place. Ask the elders about the difficulties they had faced before such facilities were available. Make a note of it.

### Nirmal Gramapuraskaram

*Maintaining hygiene is an important duty of local self-governments. Nirmal Gramapuraskaram is an honour for local self governments, instituted by the Central Government, to encourage the construction of latrines for all houses and to discourage the habit of defecation in the open. The Government aims at implementing complete hygiene through this award.*

### Source of Income

- Plan allocation (The financial aid of central and state governments to the local self governments)
  - Professional Tax
  - Building Tax
  - Entertainment Tax
  - Fees
- Discuss whether the local self- government bodies can successfully intervene in the developmental activities of your area.

---

## **PLEDGE**

India is my country. All Indians are my brothers and sisters.

I love my country, and I am proud of its rich and varied heritage. I shall always strive to be worthy of it.

I shall give respect to my parents, teachers and all elders and treat everyone with courtesy.

I pledge my devotion to my country and my people. In their well-being and prosperity alone lies my happiness.

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# CONSTITUTION OF INDIA

## Part IV A

### FUNDAMENTAL DUTIES OF CITIZENS

#### ARTICLE 51 A

*Fundamental Duties- It shall be the duty of every citizen of India:*

- (a) to abide by the Constitution and respect its ideals and Institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practice derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievements.