

Social Studies

Class-VII



Government of Telangana

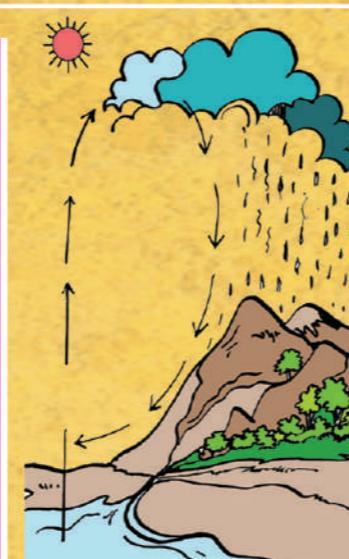
Department of Women Development & Child Welfare - Childline Foundation

When abused in or out of school.



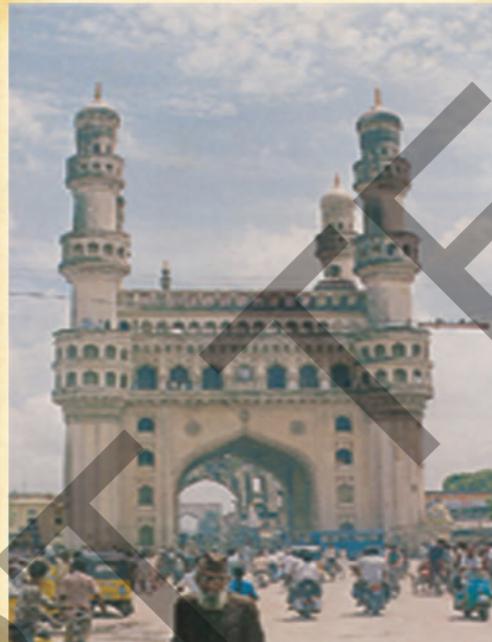
To save the children from dangers and problems.

When the children are denied school and compelled to work.

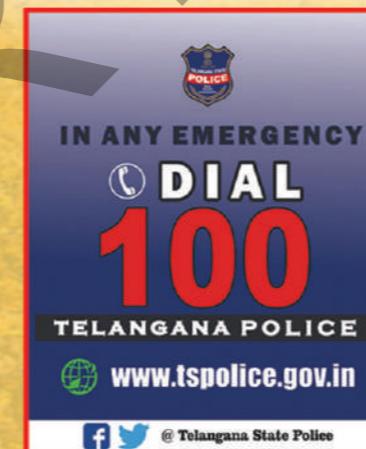


When the family members or relatives misbehave.

1098 (Ten...Nine...Eight) dial to free service facility.



State Council of Educational
Research and Training,
Telangana, Hyderabad



Social Studies CLASS VII

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Free



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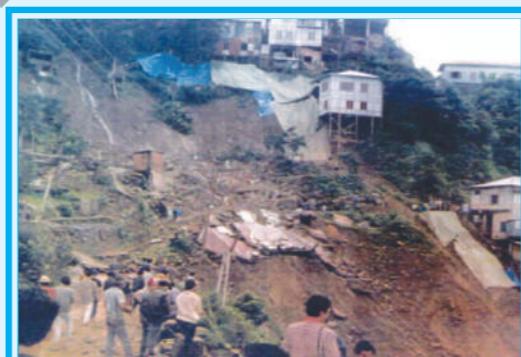
A child is every person under the age of 18 years. Parents have the primary responsibility for the upbringing and development of the child. The State shall respect and ensure the rights of the child.

- I have the Right to express my views freely, which should be taken seriously, and everyone has the Responsibility to listen to others. [Article-12,13]
- I have the Right to good health care and everyone has the Responsibility to help others get basic health care and safe water. [Article- 24]
- I have the Right to good education, and everyone has the Responsibility to encourage all children to go to school [Article- 28,29,23]
- I have the Right to be loved and protected from harm and abuse, and everyone has the Responsibility to love and care for others. [Article-19]
- I have the Right to be included whatever my abilities, and everyone has the Responsibility to respect others for their differences. [Article- 23]
- I have the Right to be proud of my heritage and beliefs, and everyone has the Responsibility to respect the culture and belief of others. [Article- 29,30]
- I have the Right to safe and comfortable home and everyone has the Responsibility to make sure all children have homes. [Article- 27]
- I have the Right to make mistakes, and everyone has the Responsibility to accept we can learn from our mistakes. [Article- 28]
- I have the Right to be well fed and everyone has the Responsibility to prevent people starving. [Article- 24]
- I have the Right to a clean environment, and everyone has the Responsibility not to pollute it. [Article- 29]
- I have the Right to live without violence (verbal, physical, emotional), and everyone has the Responsibility not to be violent to others. [Article- 28, 37]
- I have the Right to be protected from economic exploitation, and everyone has the Responsibility to ensure that no child is forced to work and is given a free and secure environment. [Article- 32, 34]

These rights and responsibilities are enshrined in the United Nations Convention on the Rights of the Child, 1989. It contains all the rights which children and young people have all over the world. The Government of India signed this document in 1992.

DO YOU KNOW DO'S AND DON'TS

FOR FACING THESE
NATURAL DISASTERS !



SOCIAL STUDIES

Class VII

Editors

Sri C.N. Subramanyam,
Eklavya, Bhopal, M.P.

Prof. I. Laxmi, Dept.of History,
Osmania University, Hyderabad.

Prof. M.Kodandaram, Dept. of Political
Science, P.G. College, Sec'bad, Hyd.

Prof. K. Vijaya Babu, Dept. of History,
Kakatiya University, Warangal.

Dr. M. V. Srinivasan, Asst. Prof.
DESSH, NCERT, New Delhi.

Dr. M.V.S.V. Prasad, Asst. Prof.
DESSH, NCERT, New Delhi.

Dr. C. Dayakar Reddy, Asst. Prof.
University College for Women, Koti, Hyd.

Sri K. Suresh,
Manchi Pustakam, Hyderabad.

Prof. G. Omkarnath, Dept. of Economics,
University of Hyderabad. Hyderabad.

Prof. S. Padmaja, Dept.of Geography,
Osmania University, Hyderabad.

Prof. A. Satyanarayana (Retd.), Dept. of
History, Osmania University, Hyderabad.

Dr. K.K. Kailash, Dept. of Political Science,
HCU, Hyderabad.

Sri Aravind Sardana, Director,
Eklavya, Bhopal, M.P.

Dr. K. Narayana Reddy,
Asst.Prof. Dept.of Geography, O.U., Hyd.

Sri Rammurthy Sharma,
Dept. of Education, Govt. of Punjab.

Sri Alex. M.George,
Eklavya, Bhopal, M.P.

Smt. B. Seshu Kumari, Director,
SCERT, Telangana,
Hyderabad.

Sri B. Sudhakar, Director,
Govt. Textbook Printing Press,
Telangana, Hyderabad.

Dr. N. Upender Reddy,
Professor & Head C&T Dept.,
SCERT, Telangana, Hyderabad.



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SOCIAL STUDIES
Class VII

Writers

Sri K. Laxminarayana, Lecturer, DIET, Angalur, Krishna Dist.
Sri M. Narasimha Reddy, GHM, ZPHS Peddajangampally, Y.S.R.Kadapa.
Sri K. Subramanyam, Lecturer, DIET, Kurnool.
Sri M. Papaiah, Lecturer, SCERT, Telangana, Hyderabad.
Dr. B.V.N. Swamy, S.A., GHS Huzurabad, Karimnagar.
Sri P. Srinivasulu, S.A., ZPHS Bandaposanipally, Medak.
Sri Ayachithula Laxman Rao, S.A., GHS Dhangarwadi, Karimnagar.
Smt S. Suvarna Devi, Lecturer, Govt. Degree College, Narsapur, Medak.
Dr. Racharla Ganapathi, S.A., ZPHS Ladella, Warangal.
Sri Korivi Srinivasa Rao, S.A., MPUPS, P.R.Pally, Tekkali, Srikakulam.
Sri Ch. Radha Krishna, S.A., ZPHS Venkatapuram, Srikakulam.
Sri T. Rama Krishna, S.A., ZPHS Deva Penugonda, West Godavari.
Sri K. Kumara Swamy, S.A., ZPHS Dowdepally, Adilabad.
Smt B. Sarala, S.A., ZPGHS Indukurupet, Nellore.
Sri P.V. Krishna Rao, LFL HM, P.S. Mohalla No. 16, Yellandu, Khammam
Sri A.R. Ramesh Rao, S.A., ZPHS Roddam, Anantapur.
Sri Gaddmeedi Rathanga Pani Reddy, SA, ZPHS Janampet, Moosapet, Mahabubnagar.
Sri Vanguri Gangi Reddy, SA, ZPHS Kondurg, Mahabubnagar.
Dr. Chakinala Srinivas, GHM, GHS Durgammagadda, Karimnagar.
Sri U. Anandkumar, S.A, Z.P.H.S, Sujatha Nagar, Khammam.
Sri NC Jagannath, GHS Kulsumpura, Hyderabad.
Smt. Hemakhatri, IGNIS, Hyd. (Proof reading)

Coordinators

Prof. J. Raghavulu, SCERT, Telangana, Hyderabad.
Sri M. Papaiah, Lecturer, SCERT, Telangana, Hyderabad.
Sri S. Vinayak, Coordinator, C&T Dept. SCERT, Telangana, Hyderabad.
Dr. Racharla Ganapathi, S.A., ZPHS Ladella, Warangal.
Sri Ayachithula Laxman Rao, S.A., GHS Dhangarwadi, Karimnagar.
Sri P. Srinivasulu, S.A., ZPHS Bandaposanipally, Medak.

Illustrators

Sri Kurella Srinivas, S.A., ZPHS, Pochampally, Nalgonda.
Sri B. Kishore Kumar, SGT, MP UPS, Alwala, Anumula, Nalgonda.
Sri P. Anjaneyulu, Geomapper, CESS-DCS, Hyderabad

DTP & Design

Kishan Thatoju, Computer Operator, C&T Dept., SCERT, Telangana, Hyderabad.
Kannaiah Dara, Computer Operator, C&T Dept., SCERT, Telangana, Hyderabad.
Smt. K. Pavani, Graphic Designer, Hyderabad.

Letter to students

“As my mother lies down too tired to move after a full day of work in the fields and at home, I sit beside her and wonder, why is life so difficult for women? If I set out of my home I find so many different people – people who speak such different languages and follow such different customs, I wonder who they are and why there are such different kinds of people.

I read newspapers and find out that so many of our farmers who grow our food with such effort are committing suicide out of desperation. I wonder, what has made them so desperate and feel so hopeless. As I walk in the streets of a town, I see such large and beautiful buildings and roads and temples, mosques and churches. I wonder who built them and at what cost. I also see slums in which thousands live in conditions most unfortunate and I wonder, why don’t they have a good place to live in cities with such beautiful buildings.

My elders too discuss some of these problems and talk of voting and electing the right people to rule and I wonder who rules us and how do they rule us? My grandparents tell me tales of olden days when there were kings and queens and of times when gods and saints walked among us people. I wonder if such things were really possible.

I have so many questions that I often wonder if anyone has answers to them at all. Perhaps no one person knows all the answers and perhaps no one may know the answers to some of the questions. Perhaps I need to find out myself. How can I find out? Who will help me?”

Dear Friends,

The questions that are arising in your minds are some of the most important questions which everyone needs to find some answers. They are not at all easy to answer for most of them do not have any one definite answer. In fact many questions will be answered differently by different people. So perhaps you too will have your own answer after you have studied the problem carefully. Social Sciences try to understand the society we live in – by asking questions and working out methods for answering them. It also seeks to help us to understand why different people answer the questions differently - for example if you ask anyone, why are there very few girls in colleges compared to schools, you will get different answers from different kinds of people. If you ask why the slums are not cleaned like the colonies of the rich, you will again get very different answers. Why do people answer these questions differently? Social Sciences try to understand this problem too.

Social Sciences do not merely compile different answers to a problem. They try to bring a rigorous method to study them. They try to understand the problem by seeing how it developed – and how and why it has changed; they try to see if it is similar all over the earth or it changes in different parts of the world; and they try to understand the different points of view about it. Have there been fewer girls in colleges in the past? Is it that all over the world there are fewer girls in colleges? Why? What prevents girls from attending colleges? What do parents who don’t send their daughters say? What do parents who send their daughters say? What do the girls say? What do the teachers say? Social Scientists put together all these before answering the main question. But no Social Scientist can give you the final or definite answer and it is you who have to decide which answer you find more convincing and useful for you to act.

– Editors

About this book

This book is a part of your Social Science Curriculum or a part of various things you would be doing to study the society around you. However, remember that it is only one small part of that curriculum. The Social Science Curriculum requires you to analyse and share in the classroom what you know. It requires you above all to ask questions – think why things are the way they are. It also requires you and your friends to go out of the classroom to the market, to the Panchayat or municipality office, to the village fields, to temples and mosques and museums and find out various things. You will have to meet and discuss with a number of people, farmers, shopkeepers, officials, priests, and so on.

This book will introduce you to a range of problems and enable you to study them and arrive at your own understanding of them. So, the most important thing about this book is that it does not have answers. In fact, this book is not really complete. It can only be completed when you and your friends and teachers bring their own questions and experiences and discuss everything threadbare in the class. You may disagree with many things in this book - do not be afraid to say so - only give your reasons. Your friends may disagree with you, but try to understand why they have a different view. Finally arrive at your own answers. You may not even be sure of your answer - you may want to find out more before you make up your mind. In that case list your questions carefully and request your friends, teachers or elders to help you to find out.

This book will help you to study different aspects of our social life - about diversity of land and people, about how people get their livelihoods, how people provide for their common needs and manage them, how all people in our society are not equal and how people try to bring about equality, how people worship different gods in different ways, and finally how they communicate with each other and build a culture which is shared by them. It also helps the children in seeking protection and security.

To understand some of these matters you may have to study about the earth - the hills, plains and rivers and seas; to understand others you may have to know what happened hundreds or even thousands of years ago; but most of all you may have to go out and talk to different kinds of people around you.

As you study this book in the class room, you will come across many questions - do stop and try to answer those questions or do the activity suggested before you proceed ahead. It is not so important to finish the lesson fast as it is to discuss the questions and do the activities.

Many lessons will suggest projects which may take a few days to do. These projects will enable you to develop skills of social science enquiry and analysis and presentation - these are more important than remembering what is written in the lessons.

Please remember that you don't have to memorise what is given in the lesson, but think about them and form your own opinion about them.

- We can use content related maps, tables & graphs other than text book for practice and evaluation.
- Discussions, conducting interviews, debates and projects are given in the middle of the running lesson and after the improve your learning. To develop social consciousness, sensitivity and positive attitude among the children is the purpose. Hence these must be taken up.

**Director, SCERT,
Telangana, Hyderabad.**

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THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a **SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

Subs. by the constitution [Forty-second Amendment] Act, 1976, Sec.2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)

Subs. by the constitution [Forty-second Amendment] Act, 1976, Sec.2, for "Unity of the Nation" (w.e.f. 3.1.1977)

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OUR NATIONAL ANTHEM

- Rabindranath Tagore

Jana-gana-mana-adhinayaka, jaya he
Bharata-bhagya-vidhata.
Punjab-Sindh-Gujarat-Maratha
Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
Uchchhala-jaladhi-taranga.
Tava shubha name jage,
Tava shubha 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!!

PLEDGE

- Pydimarri Venkata Subba Rao

“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 my parents, teachers and all elders respect,
and treat everyone with courtesy. I shall be kind to animals.

To my country and my people, I pledge my devotion.

In their well-being and prosperity alone lies my happiness.”

Reading Maps of Different Kinds

The world we live in is so full of variety – mountains, hills, sea coasts, deserts, forests, snow-covered regions.... Why is there so much variation? How does this affect the lives of people who live in those parts? To study and understand these questions, we need to take the help of maps of different kinds. Some maps tell us about how high or low the places are, some tell us about how much it rains there or how hot or cold it gets, some tell us about crops that grow there or the kinds of forests that are found in those areas. By studying them, we can know many things about the world.



Fig 1.1 Evergreen forest in Western Ghats of Karnataka



Fig 1.2 Cocana Beach in Brazil of South America



Fig 1.3 An Oasis in the Sahara desert of Libya in Africa



Fig 1.4 Ice covered continent - Antarctica

Bring copies of School Atlas and see how many different kinds of maps are there. Make a list of the maps you would like to read and understand. Last year, we learnt to read some simple maps. This year, we will learn to read maps that show height. But let us first revise what we learnt last year.

- ◆ Hang a political map of India in the class. Look at the map carefully and answer the following questions:
 - i. Mehar went to Bhopal from Hyderabad. In which direction did he travel?
 - ii. Ashok went to Chennai from Lucknow. In which direction did he travel?
 - iii. Regina went to Bhubaneshwar from Mumbai. In which direction did she travel?
 - iv. Weprechu went to Jaipur from Kohima. In which direction did he travel?
- ◆ Make such questions and ask each other.
- ◆ Look at the symbols shown on the map. Now try to find out the boundary of Telangana. Trace your finger along the boundary.
- ◆ Draw the symbol for the boundary of a state and the symbol for the boundary of India (international boundary) in your notebook.
- ◆ Can you make a list of states which lie to the north, south, west and east of Telangana?
- ◆ In class VI, you have learnt to measure the distance between places with the help of the ‘scale’ given in the map. Now try to find out the distance between Hyderabad and various state capitals like Jaipur, Imphal, Gandhinagar and Tiruvananthapuram.

Symbols

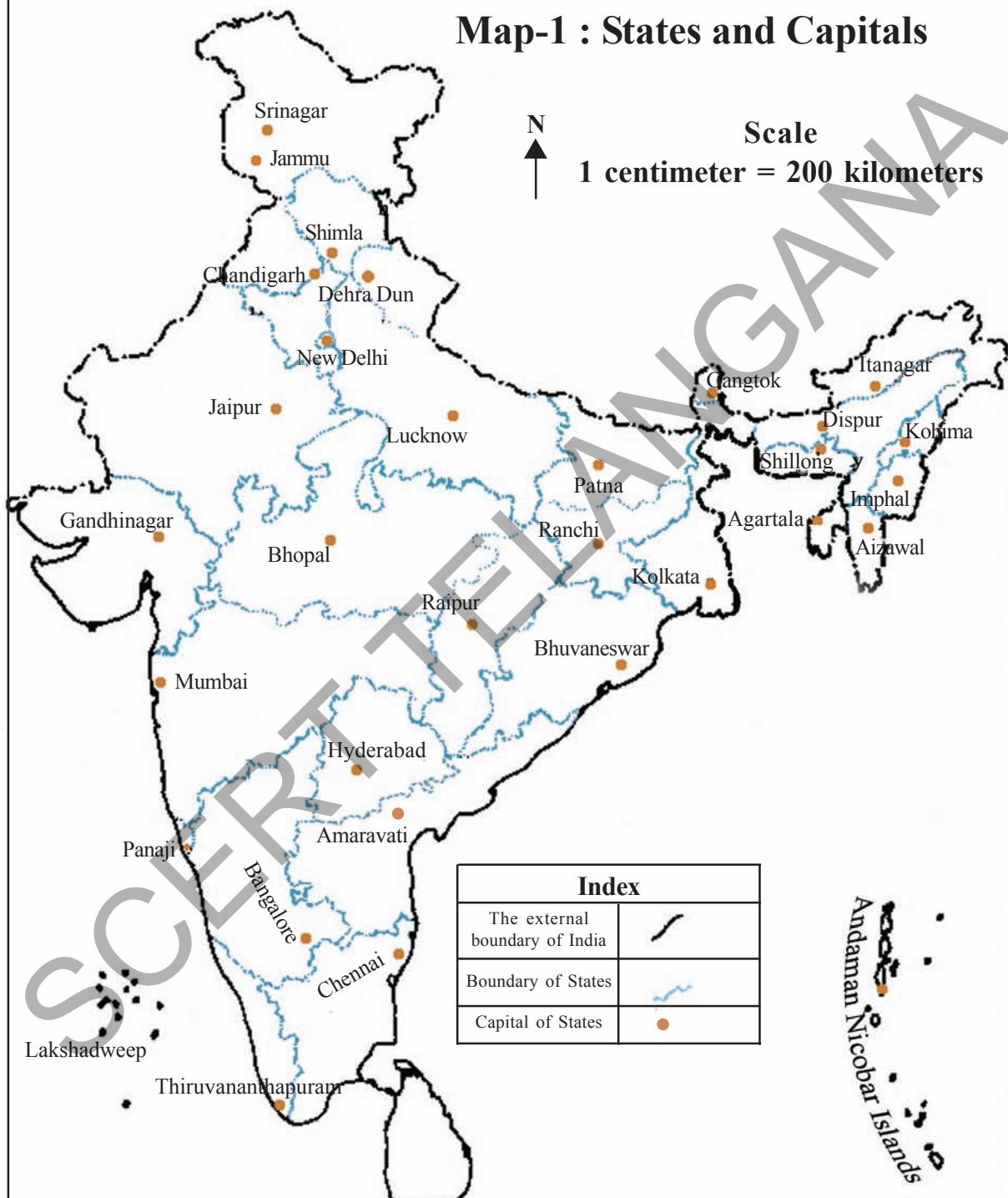
Point, Line, Area: We use symbols to show physical objects on the map. You have seen some of them in class VI.

If we are asked to show Delhi in the map of India, we will mark a point (●) and label it as Delhi. To show the river Manjeera, we draw a line (—) along its course. For the Railway line, we will draw a track line (|||||) to represent it. In Telangana map, if we want to show the area of Medak or Hyderabad district, we demarcate its boundary and mark it with some colour or pattern, which is known as a real symbol. Thus, all physical objects are shown on the map with the help of a point, line or an area symbol.

- ◆ Look at a few maps in the later chapters of this book and list out the objects in the given map in the following table:

Point Symbol	Line Symbol	Area Symbol
1. <i>Delhi</i>	1. <i>River</i>	1. <i>Playground</i>
2.	2.	2.
3.	3.	3.

Map-1 : States and Capitals



Physical Maps

You will find some maps in your Atlas called ‘Physical Maps’. In these maps, you will usually find different parts of the land coloured in green, yellow or brown. Actually, they show the variety of landforms (mountains, plateaus, plains etc.) and depict the height of places.

How can we represent the heights of land on flat paper? Of course, we can make a drawing like the one below:

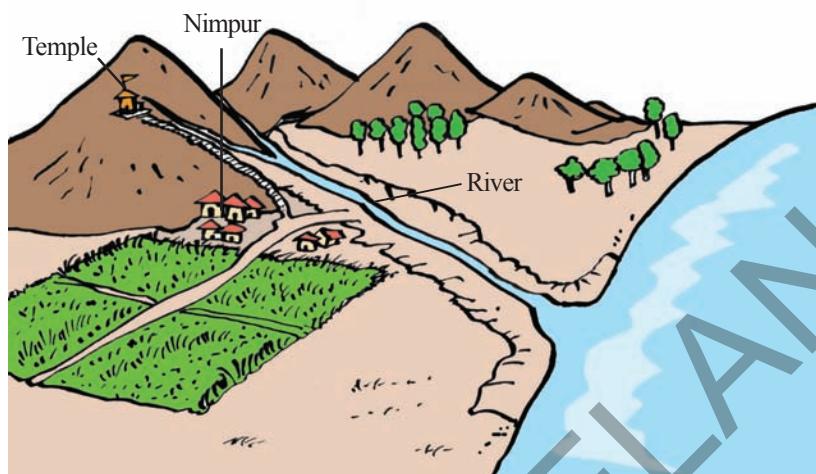


Fig 1.5 Drawing of “Nimpur” Village

As you can see this is a picture and not a map. Here the height of the hills hide what is behind them. A map should show all the places without hiding them. Can you think of a way in which we can draw a map of this place?

One way in which we can show heights on maps is through the use of colour. Let us see how this is done.

Measuring Height on Land

All heights on the land are calculated from the sea level. Since all the seas in the world are connected to each other, the sea level (the top surface) all over the world is taken to be roughly the same. Look at the picture of Nimpur village given below to understand this idea.

You can see from the picture that Nimpur village is fifty meters above the sea level.

- ◆ How many meters above the sea level is the temple?
- ◆ How many meters above the sea level is the top of the hill?

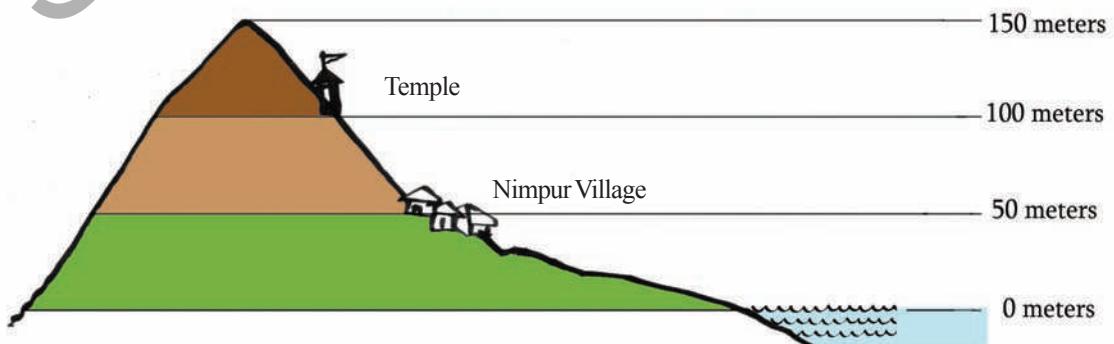


Fig 1.6 Heights in Nimpur Village

Showing Height on a Map

Look at the map of Nimpur village area given here (Fig 1.7).

Can you see that the map shows three height zones – firstly, areas which are between 0 meter to 50 meters height, areas which are between 51 meters and 100 meters and then finally, areas which are between 101 meters and 150 meters? Thus, any place which falls in the height zone 51–100 meters will have a height of above 50 meters but below 100 meters. Height is shown in different shades of colours.

- ◆ Look at the map of Nimpur showing height. What is the colour given to the area adjacent to the sea?
- ◆ What is the colour given to the highest region in this map?

Now, look at the Physical Map of India or Telangana in your atlas or wall map. Find out the range of heights and colours for the places given below by reading the index.

Contour Lines

A contour is a line joining places with equal heights on the map. On the map of Nimpur, you would have seen a line passing through the village, this is the 50 meter contour line. All places on this line will have the same height of 50 meters. Contour lines are shown in irregular shapes depending upon the land form. These lines cannot cut with each other. The distance between two contour lines will depend upon the landscape. If the land has a steep climb then the contour lines will be near each other. If the slope of the land is gentle, then the contour lines will be quite far from each other.

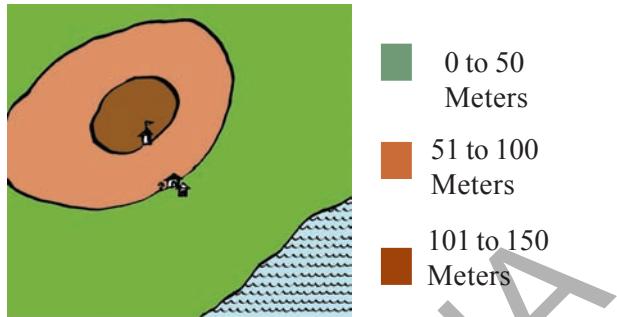


Fig 1.7 Figure of Nimpur Village showing heights

Uses of Maps showing Heights

These maps help us to understand the nature of the terrain, where the mountains are, where the valleys are, etc. If you look at the physical map of Telangana, you can identify the Godavari slopes in the Eastern part. If you travel westwards from the slopes, you will reach the hills in the Plateau region. The plateau region itself is cut by many rivers like the Krishna and the Godavari, which form deep and broad valleys in them.

Maps showing height are very essential when roads or dams have to be constructed. If we have to lay roads in an undulating region between two places, such maps help us in deciding the route to be taken by the road. Similarly, when dams are planned, it is necessary to know how much land will be submerged by the water of the dam.

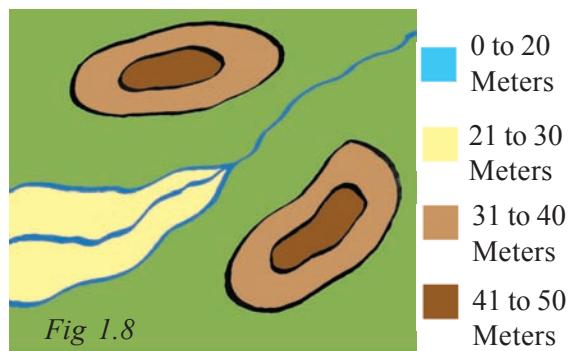


Fig 1.8

Mean Sea Level

There are high tides and low tides on the level of the sea, and they never stand still. As a result of this phenomenon, the level of the sea keeps on either rising or falling. Which of these heights do we take as the sea level or 0 meter height? In order to solve this problem, the level of the sea is carefully measured at frequent intervals and the mean level of the sea is calculated. Over a period, scientists observed the high and low levels of the sea and they have come to one calculated average level, which is known as Mean Sea Level (M.S.L.).

- ♦ If you live near a Railway station, find out the height of that place with the help of display board. The height is mentioned as “_____ M.S.L.” Note it down in your note book.

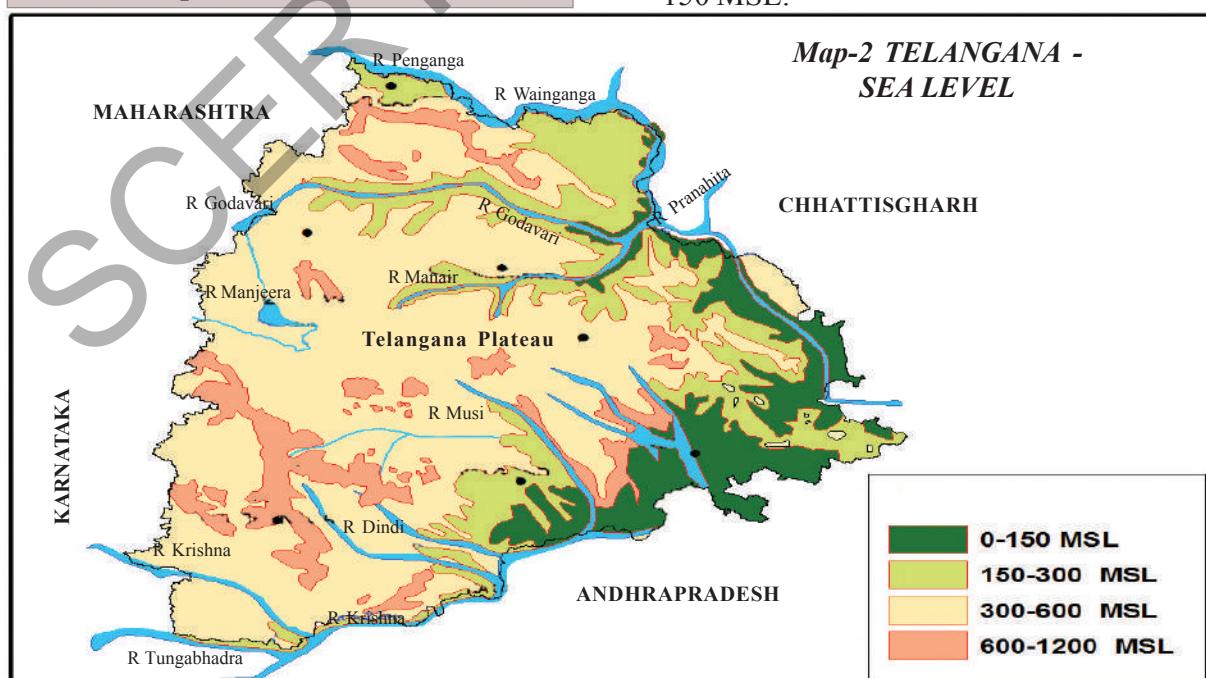
- ♦ Look at figures 1.6 & 1.7 and tell whether Nimpur would be submerged if sea waters were to flood up to 30 meters?

Look at figure 1.8 and answer the following questions:

- ♦ Mark the direction of flow of the river.
- ♦ The height of the lowest land is between ____ meters and ____ meters.
- ♦ There are two high points in this map. What are their heights?

Improve your learning

1. Why are the levels of all the seas equal in the world?
2. How is the sea level measured?
3. What are the uses of maps showing height?
4. What differences do you find between the life style of people living on high altitudes and low altitudes?
5. How are maps helpful to people?
6. Read the para ‘Contour Lines’ on page 5 and comment on it.
7. Observe the Telangana map given and list out the areas of districts which are below 150 MSL.



Rain and Rivers

All life on earth is very crucially dependent on water. As you know, over 71% of the earth's surface is covered with water. We depend on water for growing crops. But we do not get water uniformly over the year. It is also not available uniformly all over the earth. Nor is the quality of water the same everywhere.

Discuss the following in the class: in which months you get rain, in which part of the village or town do you have more water or less water, where do you get good drinking water and where do you



get salty or hard water. In the following chapters, we will study about the diversity in water availability and its consequences.

PART - I

Sun, Clouds and Rainfall

After the unbearable heat of April, May and June comes the rainy season, which lasts for a few months. Do you know what causes rains? Where do the rain bearing clouds come from? Discuss whatever you know or think about these things in the class.

Evaporation

Pranavi woke up early in the morning. She needed to take bath in hot water, so she heated water in a dish over fire. As

the water heated up, water vapours touched the lid and with the help of outside cool air, vapour became water drops and stuck to the lid of the dish. When she removed the lid, some of the water drops fell down into the dish. By observing this, she realised that the water evaporates and latter it becomes condensed into water by cooling.

The story of rain begins with water vapour. What is water vapour? When you dry your wet clothes in the open, you see

that the water disappears after a while and the clothes dry. Similarly, if you keep some water in a plate, it dries up in a couple of days. Actually, water in the clothes or in the plate becomes water vapour and mixes with the air through a process called '*evaporation*'. So, even when water is not boiling there is evaporation.

There are several water bodies on the earth's surface – oceans, rivers, lakes etc. There is constant evaporation of water from these water bodies. In fact, wherever there is moisture, evaporation will take place. There is evaporation from our bodies, from trees, plants and soil. The process of evaporation speeds up with the increase in temperature.

- ◆ In which season would there be more evaporation, summer or winter?
- ◆ When will the evaporation be more, during the day or night?
- ◆ Look at the figure 2.1 and make a list of the places from where evaporation takes place.
- ◆ Where do you think the maximum evaporation would take place – from plants, rivers, oceans or soils?

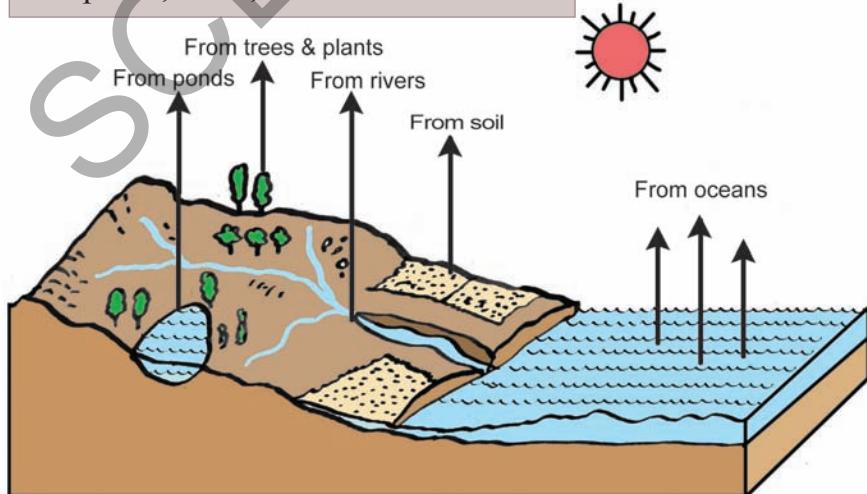


Fig 2.1 Evaporation

Formation of Clouds and Rain

When there is rise in temperature, water vapour rises and reaches high up in the sky, and it gets cooled. This is because the atmosphere gets cooler as we rise above the surface of the earth. With the cooling, water vapour is transformed into tiny water droplets. These droplets gather around minute dust or smoke particles in the air and gradually increase in size. These small drops of water gather to form the clouds.

- ◆ Make a diagram to explain how vapour is transformed into clouds in the box given above. Label your diagram with these terms – earth, sky, rising vapour, dust particles, water droplets, clouds....

As the clouds continue to rise upwards, it gets cooler and more droplets are formed. The droplets come together to form bigger drops. As they get heavier, it gets more and more difficult for them to remain in the air and so they begin to fall as rain drops.

- ◆ Why do you think is it necessary for the clouds to rise in order to cause rain?
- ◆ Have you ever observed dew? Where is it formed?
- ◆ In which part of the day do you see fog?
- ◆ In which season do you have more foggy days?
- ◆ Have you ever seen snow fall? How is it different from rain fall?
- ◆ Have you ever seen the hail storm?

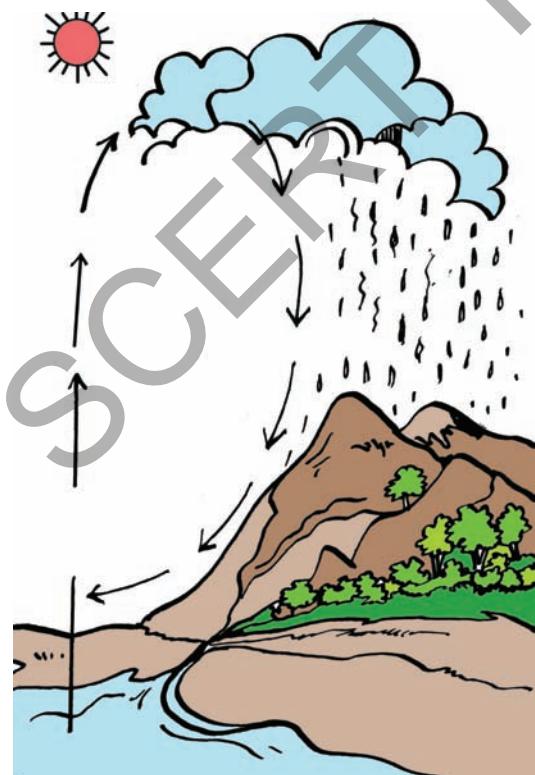


Fig 2.2 Water cycle

Some Important Terms

Evaporation: Change of water into vapours is known as evaporation. The process in which water vapour changes into water is called condensation. Clouds are tiny droplets of water hanging in the air above.

Water Cycle : The process of water evaporating from the seas, forming clouds in the sky, coming down as rain, flowing down the slopes on land in the form of rivers and finally joining the sea, is called the water cycle.

Precipitation: Different forms of condensation of water vapours is known as precipitation. This may take place in the form of dew, fog, rain, snow or hail.

Humidity: The amount of invisible water vapours present in the atmosphere is known as humidity. When temperature and humidity rise, we feel uncomfortable. We perspire and the sweat does not evaporate quickly. We feel sticky and such weather is called sultry.

Winds and Clouds

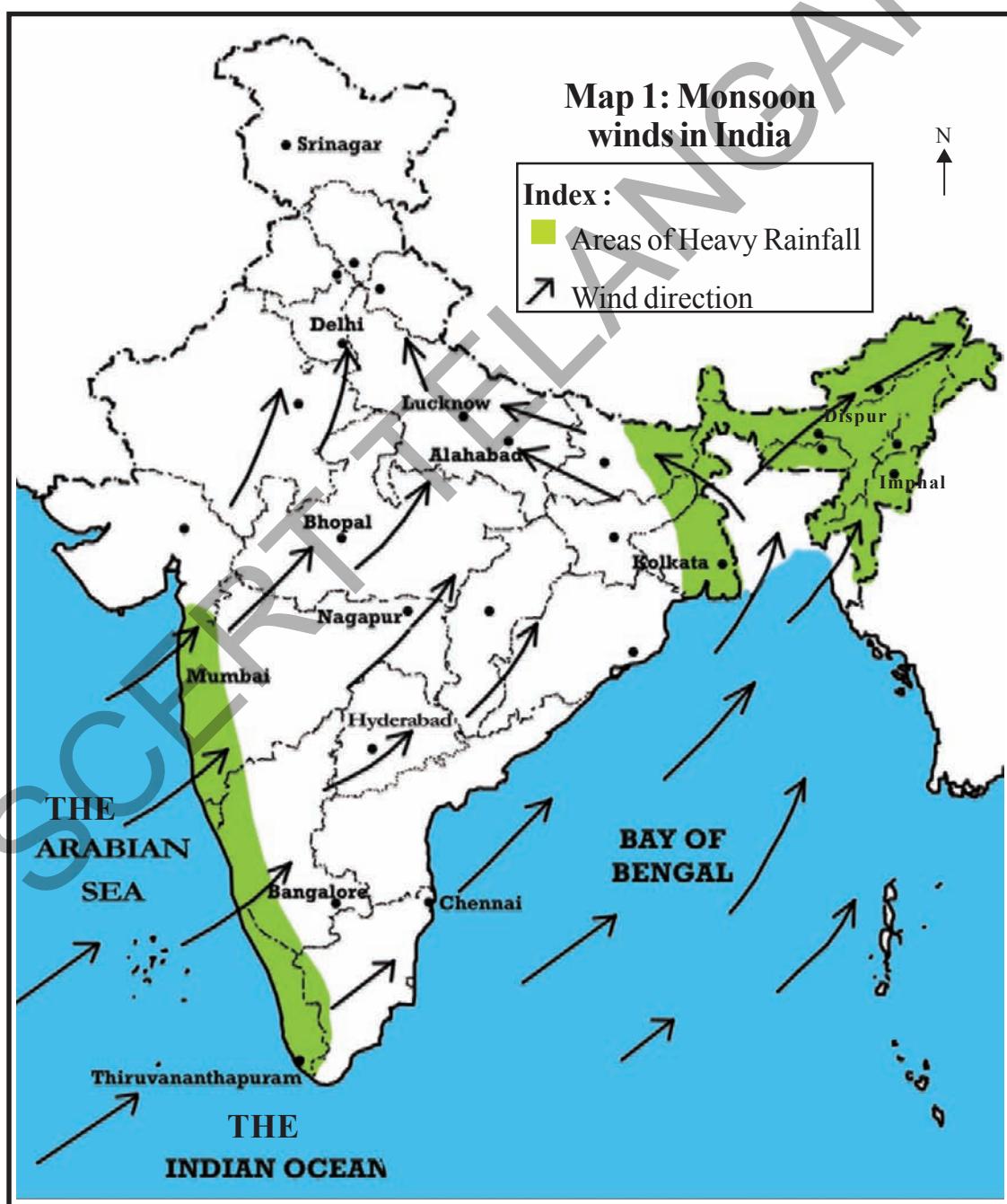
Since evaporation takes place all over the earth's surface, clouds are also being formed all over. However, it is on the surface of the oceans that maximum evaporation and cloud formation takes place. After all, oceans are vast water bodies extending upto thousands of kilometres. As a result, it also rains very

heavily on the oceans. Clouds also travel inland for thousands of kilometres to bring rain to us. Do you know what brings them deep inland?

From which direction does the wind blow during the rainy season?

These winds come all the way from the Arabian Sea and the Bay of Bengal and they transport the rain clouds. They are called '*Monsoon winds*'. They are also called '*south-west monsoon winds*' as they blow from that direction. These winds blow only in the summer.

There are two arms of the monsoon winds: one blows from the Arabian Sea and the other from the Bay of Bengal. The arrows in Map 1 show us the direction of winds.



- ◆ Towards which parts of the country would the winds take the clouds from the Bay of Bengal?
- ◆ Towards which parts of the country would the winds take the clouds from the Arabian Sea?
- ◆ From which direction would the winds blow to bring monsoon rains to West Bengal, Lucknow and Delhi?
- ◆ From which direction would the winds blow to bring monsoon rains to Mumbai, Hyderabad, and Bangalore?

Rainfall in Telangana

- ◆ In which months does it rain the most in your place? List the three雨iest months.
- ◆ Name the three driest months.
- ◆ Do you have ‘normal’ rainfall every year or does it vary every year?
- ◆ Have you ever experienced drought?
- ◆ Have you ever experienced floods?

In Telangana state, the temperature rises higher every day between March and June. When the South West Monsoons sets around the beginning of June, The winds carrying the clouds reach Telangana. The immediate effect of the rains is that there is suddenly a big difference of temperature after a week’s rain. See map 1.

The South West Monsoons bring normal rains to Telangana. The North and Eastern parts of Telangana receive heavy rainfall. Large areas in the Telangana Plateau receive low rainfall. Mahabubnagar and Jogulamba districts receive very little rainfall in Telangana State. See map 2.

The mountain ranges like the Western Ghats come in the path of rain-bearing winds and cause them to rise. Rising air cools down and the water vapour condenses faster, which leads to rainfall. This type of rainfall is common in the mountainous regions.

From May to October, cyclones form in the Bay of Bengal. These cyclones may or may not bring rain to our region. It depends upon the intensity of the cyclone in the Bay of Bengal and the direction of the cyclone after crossing the Coast. Sometimes, monsoons and cyclones bring together wide spread rainfall in this region and cause damage to the crops also.

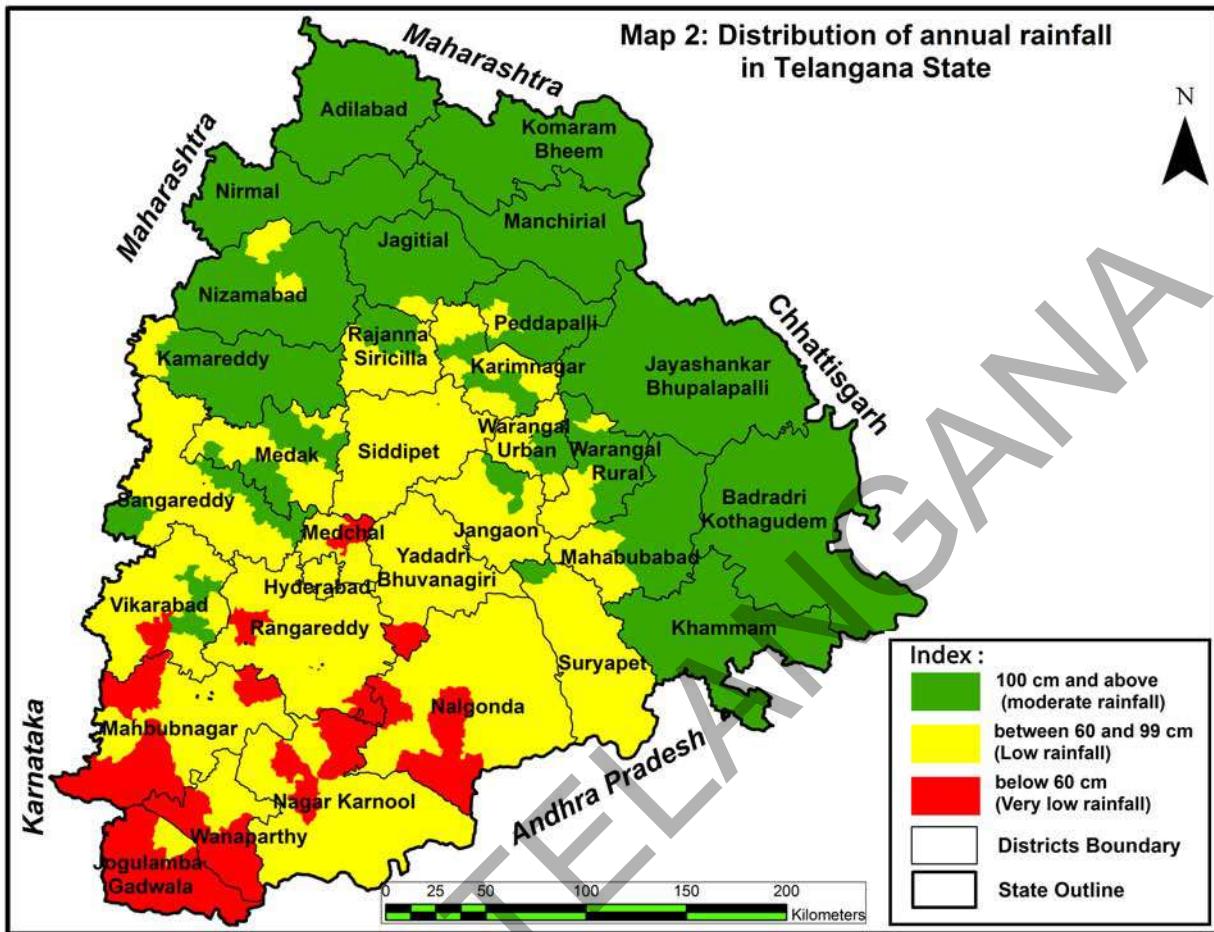
The direction of the winds reverses after October as the winds begin to blow from the Bay of Bengal towards south west. This causes very little rains in October and November in Telangana region. This is called North East Monsoons or the Retreating Monsoons.

10 Years Rainfall in Sircilla town:

Year	Rainfall in M.M	Year	Rainfall in M.M
1996	933	2001	763
1997	695	2002	605
1998	926	2003	819
1999	823	2004	619
2000	895	2005	891

Source: Tahasildar office, Sircilla

- ◆ What is the average rainfall of Sircilla town?
- ◆ Observe the above data. In which year did Sircilla receive the highest and the lowest rainfall?
- ◆ During which two years did it get high rainfall?



- ♦ Look at the map given above showing rainfall received in different parts of Telangana:
 - i. Does your district receive heavy, moderate or low rainfall?
 - ii. Which town has the least/highest rainfall – Nalgonda, Jogulamba, Komrambheem, Yadadri, Hyderabad?
 - iii. Make some more questions and ask each other.
- ♦ Look at the physical map of India in your Atlas and identify Western Ghats and Eastern Ghats. Fill in the blanks in the following sentences.
 - ◆ Western Ghats are spread across the following states _____, _____, _____.
 - ◆ Eastern Ghats are spread across the following states _____, _____, _____.
 - ◆ In which region do Western and Eastern Ghats intersect ?
 - ◆ First, create rough outlines of India in a note book; then draw Western Ghats and Eastern Ghats; after that, roughly mark the areas of Telangana; Finally, label them with months in which it rains.

Rain gauge

An instrument by which the rainfall is measured is known as ‘Rain gauge’. The amount of rainfall for a unit area is measured in centimeters. How do we measure the amount of rainfall? How do we find out if Nizamabad has more rain or Rangareddy?

Make your own Rain gauge



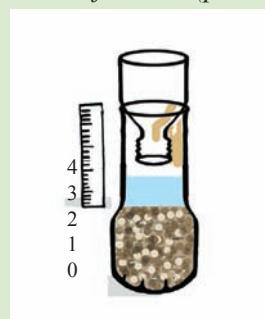
Collect the above items to make a rain gauge (pic 1).



Cut the top of the bottle like this. This ensures the top of the bottle and bottom of the bottle has the same circumference (pic 2).



Turn top of the bottle upside down like this, and fix it to the bottle. (pic 3).



Fill the bottle with sand and water till the spot where you can mark zero. (pic 4)

Now ensure that you keep this bottle in an open place. Make sure that there are no walls or trees that can block the rain water from falling into the bottle. You can use a scale to measure the water. If you leave the bottle in the open for a few days, you can know how much it rained in a week or a month.

When it rains, the water level in the bottle rises. Measure the height of water with the help of a scale and you will get the rainfall in Centimetres for your area during the period you had kept the bottle in the open.

PART -II

Flow of Rivers

What happens to the water that falls on the earth? Some of it percolates into the soil, some flows on the surface of the land and the rest becomes water vapour and mixes with air. You will read about the water that percolates down into the soil in the next chapter. In this part, we will discuss the water which flows on the surface of land.

Rivers

Have you seen rain water flowing in small streamlets on sloping land? Water flows in small streams from the mountain slopes during the rainy season. However, these streams dry up after some time. Nevertheless, water also cuts channels on the mountains.

When it rains again, water flows down the same channels. In this way, river courses and river valleys are formed. This process is shown in figure 2.3.

Study the figure below:

- ◆ Mark the flow of the river with arrows.
- ◆ Mark the slope of the land with arrows.
- ◆ Does the river flow in the same direction as that of the slope of the land?

Transformation of a stream into a broad river

At its source, a river usually starts in the form of a thin stream. As it flows further, it gets bigger and broader. This happens because many small streams join it as the stream flows. Smaller rivers or streams which join a large river are called 'tributaries'.

As the river becomes bigger and broader, its flow gets slower. It starts depositing the silt and sand it has carried, on its bed and banks. This causes the formation of plains.

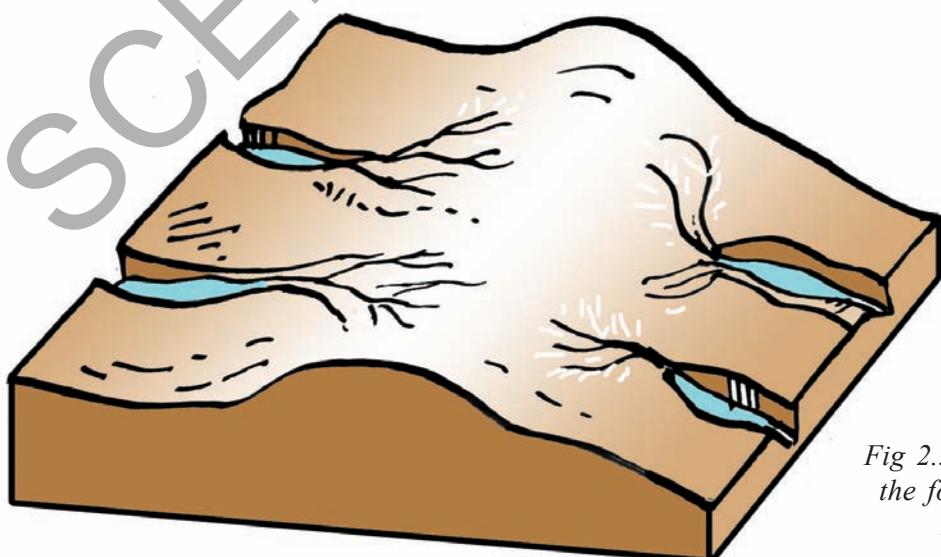
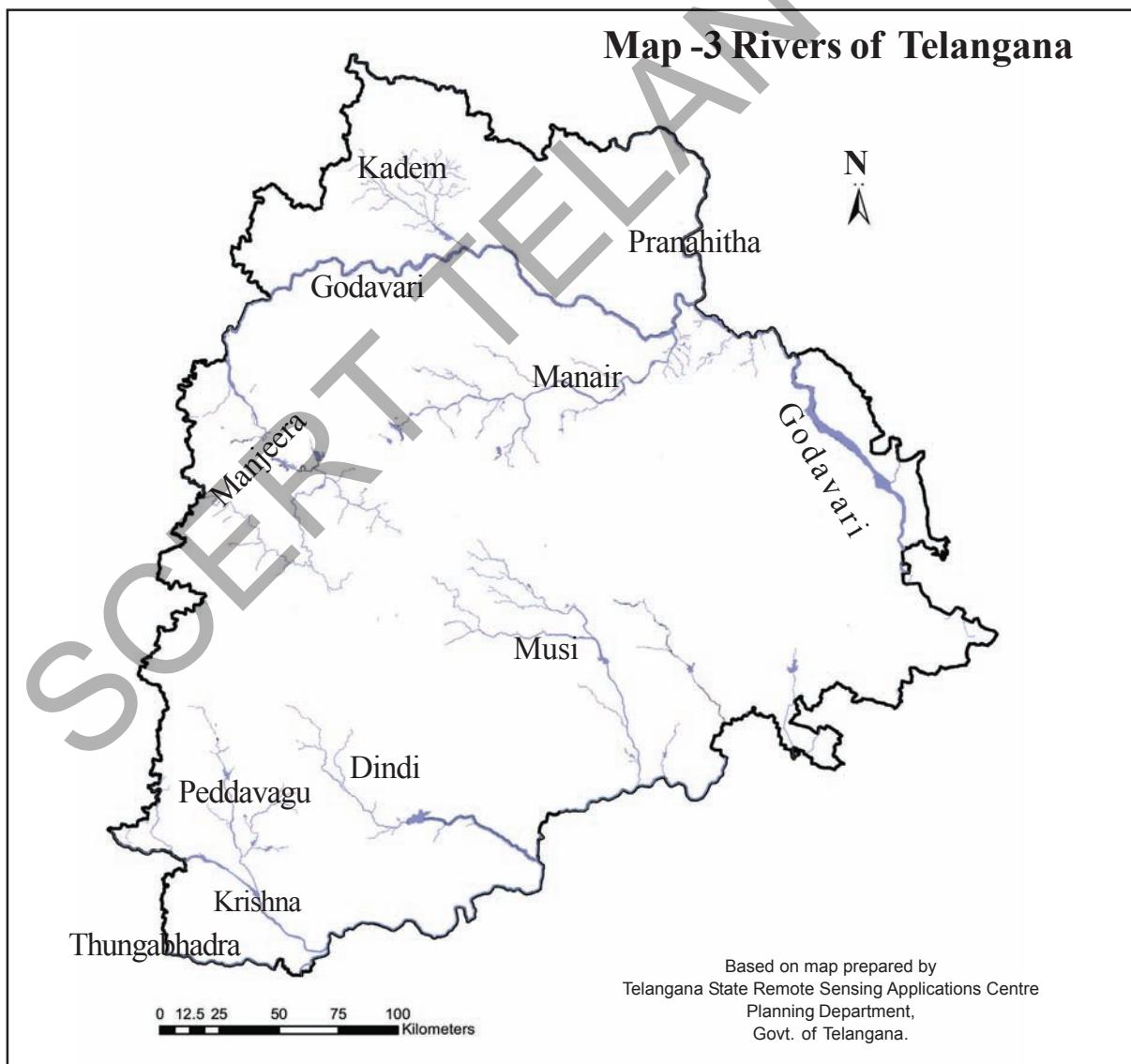


Fig 2.3 Slope and the formation of Rivers

As it nears the sea, the speed of water in the river decreases and is no longer able to carry the silt and sand. It deposits them on its own course, which then gets filled up. When flood waters come again, they have to cut through new channels to reach the sea. Thus, towards the end of its journey to the sea, the river forms a delta. River Krishna and Godavari form deltas in the Eastern Coast. They have water throughout the year. However, we also have a number of small rivers that have water only during the rainy season. Why is this so?

Rivers like Krishna and Godavari start from the Western Ghats, which receive heavy rainfall. The rain water slowly percolates into the ground and flows into the river all through the year. On the other hand, many rivers which start from the dry regions like Dindi, Manjeera, Musi are fed by scanty rainfall. Others, which start in the Eastern Ghats, receive only moderate rainfall and the water flows rapidly into the sea. That is why they go dry during the non-rainy season.



- ◆ Map 3 marks only major rivers of the Telangana state. Take note that some parts of river Krishna form border to the Southern side and Godavari forms border to the North Eastern side.
- ◆ Make a list of important streams in your district and identify the major river it joins.
- ◆ Mark whether the stream in your district flows round the year or only during rainy season.

District	Name of the Stream	Joins the River

- ◆ What do you think is the direction of the slope in Telangana map. From north to south, east to west or west to east?

Flood-Plains and Floods

A river does not contain the same amount of water all year round. While the river is full during the rainy season, it usually shrinks during the dry season. Look at figures 2.4 and 2.5. You can see that the river trough is very wide and it has high banks. This valley is filled with sand and gravel. The river flows in a small stream amidst them. You will notice that there are no trees here. This is because every year when it rains heavily, this valley is filled with water allowing no permanent trees or plants to grow here. This treeless bed is called the *flood-plain* of the river. All major rivers have their flood plains.

You must have heard that during the rainy seasons some parts of the country get flooded due to excess rainfall. You may have read about floods occurring in rivers like Krishna, Godavari, Brahmaputra or the Ganga.

Figure 2.5 depicts a flood situation. Look at it carefully and answer the following questions:

- ◆ Has the river water covered the entire flood-plain or confined to the tiny stream that was flowing in the dry season?
- ◆ Is the water confined to the flood-plain or overflowed to the banks of the river?
- ◆ In what way have the floods affected the villages, agricultural fields and trees?
- ◆ How are floods beneficial to agricultural fields?

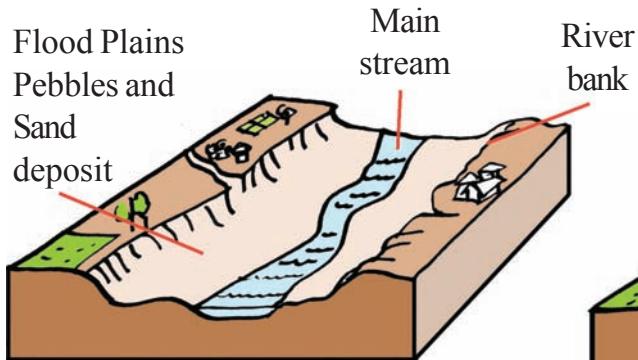


Fig 2.4 Flood Plains

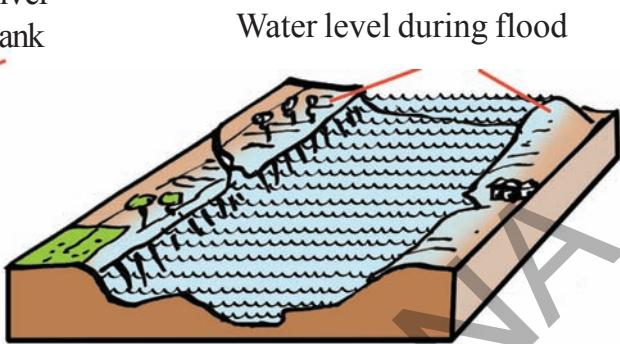


Fig 2.5 Flood

Floods have become a major problem in India in recent years. Some part or the other is flooded every year during the rainy season. This causes severe damage to people, crops and livestock. Let us find out if we have contributed to this in any way.

Vegetation cover on the land (trees, plants, grass etc.) obstructs the run off of rainwater and slows down the speed of its flow. This slowing down helps the rainwater to percolate into the soil. Floods are often caused by sudden increase in the volume of water reaching a river. Vegetation allows the water to flow slowly into the river, thus preventing sudden flooding. It also helps to increase the amount of water which goes into the soil.

Vegetation also helps to prevent floods in another way. It reduces the erosion of soil by rainwater. If there is little or no vegetation, rainwater cuts and carries with it a lot of top soil. This soil is deposited on the riverbed, which reduces the depth of the river. This results in the reduction of capacity of the river to carry water. Thus, with even a little rain, the rivers are flooded and they overflow their banks, causing damage. If the surface of the land is covered with vegetation, then soil erosion is greatly reduced.

Massive tree plantation

With this aspect as the main focus, majority of the governments are initiating the afforestation programmes in the name of Greenery. Telangana state is in forefront with massive tree plantation programme.

The government is implementing plantation of 230 crore saplings all over the state. It is aimed to plant 40,000 seedlings in each village and 40 lakh seedlings in each assembly constituency every year. Representatives of the people, officials, villagers and all community people are trying to make it a successful programme by planting trees on all road sides, on barren hills, tank bunds, housing colonies and community lands etc.

Preventing soil erosion

Forest cover controls floods and soil erosion. Tree roots with their holding capacity of the soil, not only lessen erosion but also reduce the flow of surface water which otherwise resulting floods. To construct roads, big trees of more than fifty years old, are being cut down. Hence plantation of trees has become mandatory.

For the effective implementation of the programme, the protection and safeguarding the plants and to monitor the programme, the village level Haritha Rakshaka Committees are formed under the chairmanship of sarpanch. In the same way, district and state level committees are also formed.

- ◆ What are the activities taken up under tree plantation programme in your school?
- ◆ Why is it necessary to take up the initiation of massive plantation of saplings?

Let us take the case of the Ganga. Earlier, there were dense forests on the Himalayas from where Ganga and its tributaries originate. In the recent years, there has been a large scale felling of trees and hence, the forest cover in the Himalayas has reduced considerably. As a result, whenever there is heavy rainfall, the rainwater rapidly flows down the slopes of the mountains and fills up the floodplain of the river. The waters also bring a very large quantity of silt and deposit it on the riverbed. This results in frequent floods which cause heavy damage to life and property along the river.

All this tells us about the importance of protecting our forests and increasing the vegetative cover over other lands.

- ◆ Can you explain how forests and vegetation help in preventing floods?
- ◆ Can forests and vegetation help in reducing droughts? How?

Facing the challenge in Cyclones and Floods

India has a long coast line and it is frequently faced with destructive cyclones from the Bay of Bengal. When heavy winds blow from the sea, heavy rains lash the lands, and high waves make the sea very unsafe. These usually occur between June and December. The worst cyclone hit the East Coast in November 1977. When six-metre high tidal waves swept across villages in coastal area, killing 9941 people. At least, 100 villages were washed away by the cyclonic storms and the ensuing floods. Seen from air, it seemed like a sheet of water drawn over the affected areas floating in the swirling waters.

Formation of cyclones may seem natural over which human beings have no control. However, the impact of these disasters are heightened or lessened due to how our society is organised and prepared. For example, if you see who lives in the most vulnerable part of the land which is most affected by cyclones, you will find that it is the people who live there with least resources to defend themselves. The sea coasts are lined with the huts of poor fisher folk and the low lands of the towns and villages, which get flooded, are usually inhabited by the slums of the poor. The people who live in high cement concrete buildings are able to store food, water etc. for many days. Thus, we can see that disasters affect the poorest the most.

Usually, immediately after the flood waters recede, all sources of water are polluted and become unsafe for drinking. But, the poor are forced to use the polluted water and face the risk of several diseases

like cholera, dysentery, jaundice etc. Only those with resources are able to arrange for safe bottled water to drink. Since roads are damaged and it rains heavily, bringing in relief to the worst affected areas is not easy. Here, people are forced to rely on their own resources to save themselves.

While the immediate damage of the cyclones is also heavy – like loss of lives, crops, houses property etc., more importantly they also cause long term damages.

For example, the life savings of most of the poor stored in the houses in the form of food, tools, cattle, small shops, vehicles, boats, nets, etc. are destroyed. To go back to their work, they need to buy all these again. Many families may lose their working members. Daily wage workers face loss of work for several weeks till normalcy returns and therefore, loss of livelihood. Farmers too not only face loss of crops but also permanent damage to their lands.

How can people meet the challenge of disasters like cyclones and floods?

This can be done through long term planning by governments and close cooperation between the people and the government agencies. Today, with the installation of early warning systems by the government, it is possible to predict the possibilities of natural disasters like cyclones and floods. Governments thus put these systems in place and inform people about the possibility of disasters.

Governments are also responsible for providing long term security to all the people by building strong roads which are not easily destroyed, safe pucca houses for those living in vulnerable areas like sea coast or along the rivers or in low lands. Food, water and medical emergency teams



Fig 2.6 Cyclone in the Bay of Bengal
should be kept ready whenever there is a forecast of cyclone.

How can the people prepare for disasters?

1. Cyclones and floods are a seasonal phenomenon. During the cyclone, listen to the radio or TV weather reports. In case of a cyclone/flood warning, ensure that everyone is alerted. This is usually done through loudspeakers or by going from door to door.
2. Keep an emergency kit ready at home. These kits should contain important papers, some food, some money and emergency telephone numbers.
3. The nearest available place where refuge could be sought in case of a cyclone should be identified in advance.
4. Wherever necessary, the walls of the house, roofing, doors and windows

should be strengthened.

5. When you get a cyclone warning, store adequate drinking water and food grains in waterproof bags.
6. Do not venture outside, especially into the sea during and after the warning has been sounded.
7. Close doors and windows and stay indoors.
8. Move to a pucca building if you feel your house is not strong enough..
9. If the cyclone strikes while you are in a vehicle, stop but keep away from the sea-shore, trees, electric poles and other objects that may be uprooted during the gale.
10. If the cyclone wind suddenly drops, do not go out, as it could be the eye of the cyclone. Wait till the all clear declaration is made officially.
11. Listen to Radio/TV for updates on the situation.
12. Even after ‘all clear’ has been sounded, take necessary precautions while moving to or out of your house. There may be partially uprooted trees or poles.
13. Look out for snakes that may have come out of their holes.
14. Do not enter flood waters. They may be too deep.
15. As a student group, you can play a very significant role in spreading awareness about the above precautions.

If you need to Evacuate:

1. Pack clothing, essential medication, valuables, personal papers etc. in water-proof bags, to be taken to the safe shelter.
2. Put furniture, clothing, appliances on beds or tables.
3. Turn off power.
4. Whether you leave or stay, put sandbags in the toilet bowl and cover all drain holes to prevent sewage back-flow.
5. Lock your house and take the recommended or known evacuation routes from your area to the safe-shelter.
6. Do not get into water of unknown depth and current (stream).

During Floods:

1. Drink boiled water.
2. Keep your food covered and don’t eat too much.
3. Use raw tea, rice water, tender coconut water etc. during diarrhoea.
4. Do not let children remain on empty stomach.
5. Use bleaching powder and lime to disinfect the surroundings.
6. Avoid entering floodwaters. If you have to enter, wear proper protection for your feet and check the depth and current with a stick. Stay away from water with over knee-deep depth.
7. Do not eat food that got wet in the flood waters.
8. Boil tap water before drinking in rural areas. Use halogen tablets to purify water before drinking (ask Village Health Worker for details).
9. Be careful of snakes. Snakebites are common during floods.

Keywords:

1. Rivers and Tributaries 2. Condensation 3. Annual rainfall 4. Flood plain

Improve your learning

1. Explain how water changes into water vapours and how clouds are formed from it?
2. Where do evaporation and cloud formation take place on a large scale?
3. How do the clouds reach deep inlands?
4. Where does it rain the most? Choose the correct option :
 - a) sea coasts that are in the direction of the winds
 - b) mountains that are in the direction of the winds
 - c) lands far away from the seas.
5. The Godavari flows from the west to the east. Why?
6. Describe the main stages of the water cycle.
7. There may be streams and rivers flowing near your village or town. Find out about them and fill in the table below:

No.	Name	Source	Which river does it join?	Which sea does it meet?

8. Do the rivers/streams in your area contain water throughout the year? Find out from your elders if they had more water in earlier times.
9. How can the people be prepared to face the disasters?
10. Collect the pictures showing cyclones and floods and prepare an album.
11. Make a poster on the floods devastation.

Project:

Observe in your village/locality where the water is being wasted, furnish the details in a table, discuss the reasons, suggest the ways how water can be saved.

Sl. No.	The place where the water is being wasted	Reason	Ways to prevent/ save the water

Tanks and Ground Water

PART - I

Tanks (*Cheruvulu*)

For thousands of years, our ancestors have tried to utilize run-off rain-water by building tanks. We have evidence of tanks being built and used for agriculture from the times of the Megaliths. You will also read about the Kakatiya kings who built a large number of tanks in Telangana. This enabled the extension of agriculture into dry regions. To this day, most of the villages in these regions have at least one or two major tanks.

How were the tanks built?

The tanks were usually built by building a strong wall of stones and mud across a small stream in such a way that with a wall on just one side, a large lake could be formed. Look at the picture below:

Tanks were sometimes built by a king, sometimes by a military leader or nayaka or often by the people of the village themselves. Usually, every village preserved the memory of those who were responsible for building the tank through stories or temples or festivals. In building the tank, everyone in the village contributed towards the expenses and labour. All the people of the village maintained the tank together by repairing the tank bund (wall) or removing silt from the tank bed. They also ensured that no one stopped the water from flowing into the tank. They also appointed a person to regulate the use of the water from the tank. This particular person is called ‘Neerati’ or ‘Neeru Katte manisi’.

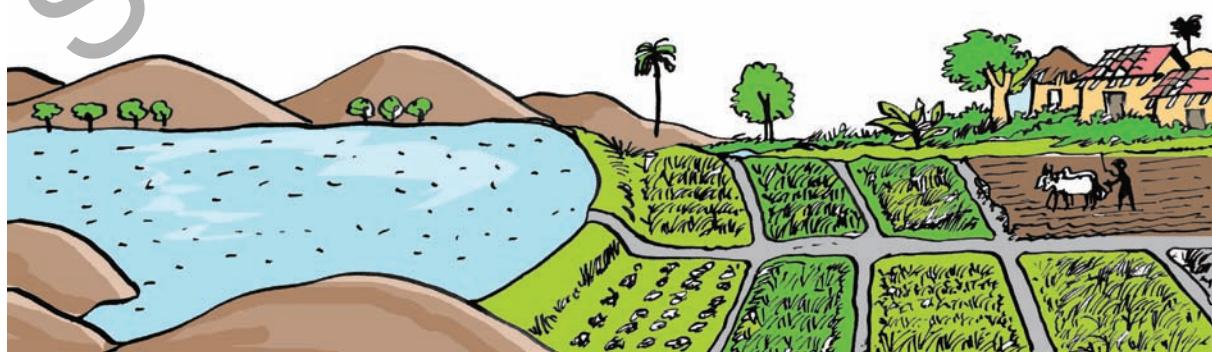


Fig 3.1(a) Tank and fields

How did the Tanks Help?

Tanks helped the people not only by giving them and their animals drinking water, but also in irrigating their fields in such a way that even during drought years, they could raise at least some crops. The tanks also helped to increase the water level in the wells nearby.

After the rain stopped and the tank water decreased, the tank bed could be used for raising some crops.

The most important thing is that tanks helped to prevent run-off of rain-water and the erosion of top soils. Every year, people would collect tank silt and use it in their fields to fertilise the soil.

We should remember that no one person owned the tanks and they belonged to all the people of the village. Thus, they benefitted not one or two people but all the villagers.

Decline of Tanks in Our Times

During the last twenty or thirty years, tanks have been neglected and have been allowed to break down. Repairs to the tanks, desilting etc. have not been done regularly. People also have gradually taken



Fig 3.1(b) Ramappa Cheruvu-Jayashankar District

over the tank land for building houses or for agriculture. As a result, in almost every part of the state, we see the sad state of dry tanks lying uncared for. Instead of caring for the tanks, we have been digging deeper and deeper tube wells at a great expense. But they only benefit a few, and in the long run, deplete the water resources. On the other hand, tanks build resources for all.

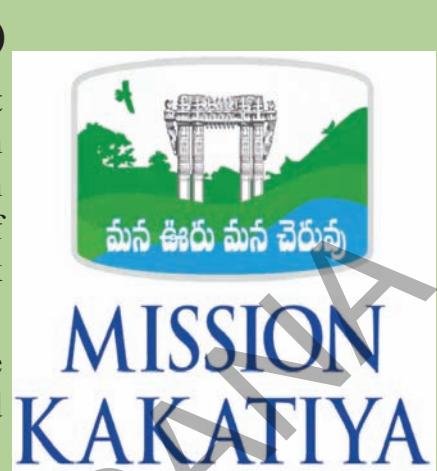
Project

- ◆ Prepare a report with the following details about the tank in your village or town.
 - ◆ Prepare a sketch map of the tank and its nearby areas.
 - ◆ Find out from where does the water come into the tank and where does the excess water go.
 - ◆ Find out the names of the river or stream across which it has been built or the names of the hills near which it has been built.
 - ◆ Find out what is the tank bund made of and who maintains it.
 - ◆ Find out who built the tank and when it was built.
 - ◆ If there are any stories related to the tank, write them down
 - ◆ Prepare an illustration of the tank with various things around it or get photographs of the tank.
 - ◆ Find out what crops are grown, who controls the water, and how is it regulated.

Mission Kakatiya (Our Village - Our Tank)

After the formation of the new state, the government of Telangana has started a programme for minor irrigation tanks in the state. This programme, called ‘Mission Kakatiya, *mana uru mana cheruvu*’, aims at removal of silt from tank beds and repair and construction of tank bunds on about 47000 tanks.

Find out about the implementation of this programme in your area. How many tanks have been improved and whether people have benefitted from this.



Fishing in Tanks

Tanks not only provide drinking water and water for irrigation of fields, but also provide livelihood for fisherfolk. Many of the fisherfolk are from traditional fishing communities like Besta (Gangaputra), Goondla and Mudiraj (Tenugu) Community depend upon these tanks and rivers for leading their lives. Let's find out more about their lives by visiting a village in Suryapet district.

Bhethavolu village

This village is 16 kilometers from Kodada near Suryapet.

According to village elders ‘Bhethavolu’ got its name from Bhethala Reddy, the subordinate of Kakatiyas. He got the tank



Fig 3.1 (d) : Goddess of Katta Maisamma

built in the name of his wife, Veeral Devi. Thus the villagers call the large tank as Veeral Devi tank or Eerla Devi Tank. The tank irrigates about 1900 acres in the village today even though originally it was meant to irrigate about 3000 acres. The ayakat (command area of tank) has been reduced due to illegal encroachments on the tank bed and due to silting.



Fig 3.1 (c) : Veeral Devi Tank

On the tank bund is situated the shrines of Katta Maisamma and Gangamma, who considered the guardian deities of the tank. Fisherfolk and other villagers worship in these shrines before fishing and also celebrate annual festivals in their honour.



Fig 3.1 (e) : Throwing net

There are about 600 families of Besta (Gangaputra) and Mudiraj Community in Bethavolu village. Out of which 60-70 households are leading their lives by fishing. However, they fish in the tank only during the months of March and April. During the rest of the year they work as small farmers or labourers.

Fishes in the tanks

Earlier, different kinds of fishes like Buddaparakalu, Jellalu, Kodipelu, Chandamamalu, Kuntumukkulu, Pulishalu, Isuka dondulu, paperalu, Gandraparakalu, Guriyopillalu, Koraminulu, Valugalu etc., were easily available in the streams, small rivers and canals. When these waters flowed into the tanks the fishes bred in them. But during the recent times these fishes are disappearing due to heavy usage of pesticides and chemical fertilizers in the agricultural fields. So now, the young fish are bred artificially in fish farming centres and are let out as seedlings into the tank. When they grow big they are fished and sold. The important among these are Merige, Ravvu, Bochche (Katla) and Bangaru Theega. These fishes are mainly available in the market nowadays. Each fish has its own special taste. Have you tasted the above mentioned fishes?



Fig 3.1 (f) : Fishing

- ◆ Why do we eat only a few types of fish?
- ◆ Why is the cat fish banned?

Net Types

The fishermen use nets of different kinds to catch the fish. There would be 30 'Kannulu' (holes) in small parisha (thinner net) whereas 60 Kannulu in big Parish (thicker net). These nets are also called as 'Sannapu vala and Doddu vala' in some areas. The nets contain the beads made by either iron or lead. The Sannapu vala weighs less. They catch fish and prawns by Sannapu vala. Doddu vala is used to catch the fish of weight 100 grams to 5 kilos. Doddu vala weighs more. Can you think why..... ?

- ◆ Visit the fishermen families of your area and see how they catch fish.
- ◆ Find out which types of nets are used in your region and discuss in the class.

Fisherfolk use two methods to catch fish - one in shallow waters and one in deep waters. *Visire vala* is used when there is less water in the tank. *Kachchu vala* weighs less. Fisher men go farther in to the stable water

and spread the Kachchu vala. These are used mostly in the occasions where the water is deep.

- ◆ Discuss why the nets are selected based on the depth of water.

Fishing:

Fishermen start for fishing early in the morning. Some use Visire vala for the fishing on the banks where the water is not deep. Others go into the lake on a ferry made with thermocol and reach a place where water is very deep and spread the Kachchu vala. Fishing is done twice a day. They catch the fish from 4'0' clock to 8'0' clock in the morning and take them to market. Again they catch fish from 1 to 4'0' clock in the afternoon and take them to market. They don't care for cold, rains and heat and do the fishing. The fish left over after the sale are washed neatly and dried under the sun. When the catch is small they take them to Kodad or Suryapet for selling and when it is large they take it to cities like Hyderabad. Usually it is the men who do the fishing and it is the women who do the selling in the market. See figure 3.1(g)

Cooperative Society of Fishermen

A family needs to have a membership in the Cooperative Society for fishing. The membership is decided on the basis of the ayakat. Usually the Society takes one member per one hectare (two and half acres). There are 339 members in the society today. The Society pays Rs.2,35,000 to the Department of Fisheries for fishing in the tank. The Society has to purchase fish seedlings and put them



Fig 3.1 (g) : Fish Market

into the tanks. They are supposed to pool the produce and share the earnings equally among all members.

- ◆ Meet the members of Co-operative society of your village and find about the Functioning of the society.
- ◆ Why do you think the fisherfolk have to make payments to the Fisheries Department?

Recently a new practice can be seen in many fishing tanks. The fishermen are too poor and need loans for running their households. They cannot afford to buy the fish seedlings from the fish farms. Hence they are forced to take loans from traders. Traders give advance loans and also take the responsibility of putting seedlings in the tank. In return the fisherfolk have to sell all their produce to the trader at a price fixed by him which is usually about 10 to 20 percent of the actual market price. In this way the trader makes a huge profit. If banks could give loans to the Cooperative societies, the fishermen could become independent of the trader-contractors.

- ◆ Why do you think the banks are reluctant to give loans to the fishermen?

PART - II

Groundwater

Rainwater not only flows down the streams or rivers but also slowly goes down into the soil. This water accumulates below the ground in the gaps between rocks, pebbles, sand etc. This is the groundwater which we reach through wells and bore wells.

Rocks which have cracks or pores (minute holes) in them and can contain water are called pervious rocks. In Telangana, there are some areas where such rocks like sandstones are found. Some rocks like granite, Kadapa limestone etc. are very compact and do not have pores in them. Water cannot enter into them. Groundwater usually accumulates above such rocks. Since the water cannot go beneath them, these are called impervious

rocks. Most of the rocks underlying the soil in telangana are of this kind. A small portion of land in Telangana, which is next to rivers, has deep layers of sand, soil and pebbles. Water also accumulates in these layers.

The layer of water which accumulates under the ground among rocks is called aquifer. The thickness of the aquifer determines the availability of groundwater in the area.

Visit the wells in your area and try to find out how many feet below the ground is the water level. Find out if there is any rocks underneath and if so, what kind of rock it is. Also find out about who owns the well, when was it dug and how much money was spent. Add up all the information about the wells and prepare a small booklet.

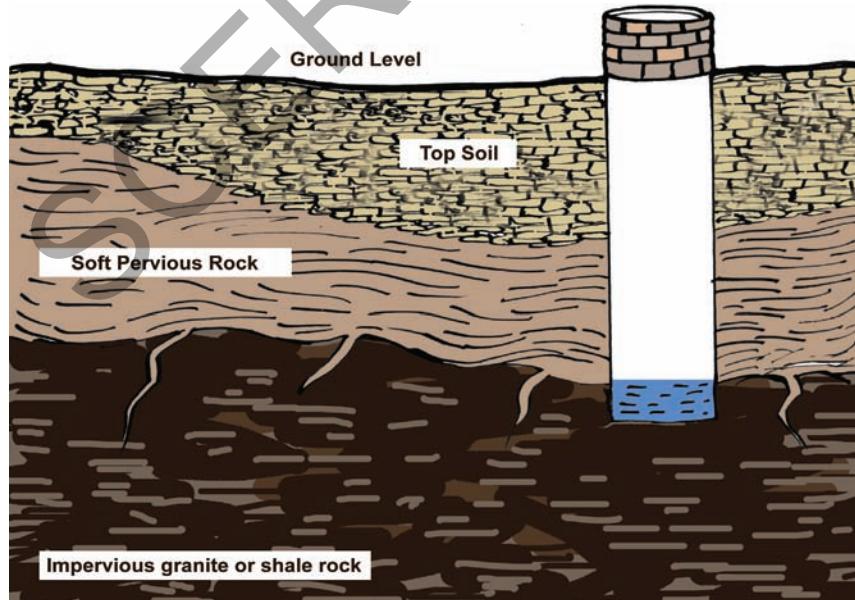


Fig 3.2. Rocks and Water below the ground level

- Do you think groundwater would accumulate if there were no impervious rocks?
- What would happen if the pervious rock is below the impervious rock? Where would the ground water accumulate?

Water Table or Groundwater Level

Look at the wells in figure 3.3 given below carefully, the water level is the same in all these wells. This is the water level in the wells after the rains. You can see that in all these wells, water is available at the depth of 5 meters, this means that if you were to dig a new well in the same region you would strike water at the same depth. This is the level of groundwater, which is also called the water table.

Water level is never stable. It goes deeper in summer months and comes up during the monsoons.

Rocks and Groundwater in Telangana

Most of the rocks under the soil in Telangana consist of granites, which are hard and impervious. However, the top portion of these rocks (about 20 meters) are broken (weathered) and they carry water. Many of these rocks also have deep cracks going down to 50-100 meters depth. These cracks too contain water. Normally, with ordinary wells that we dig, we tap the water present in the top weathered layer. Bore wells, which are dug with the help of drill machines, reach the deep cracks and draw water from them.

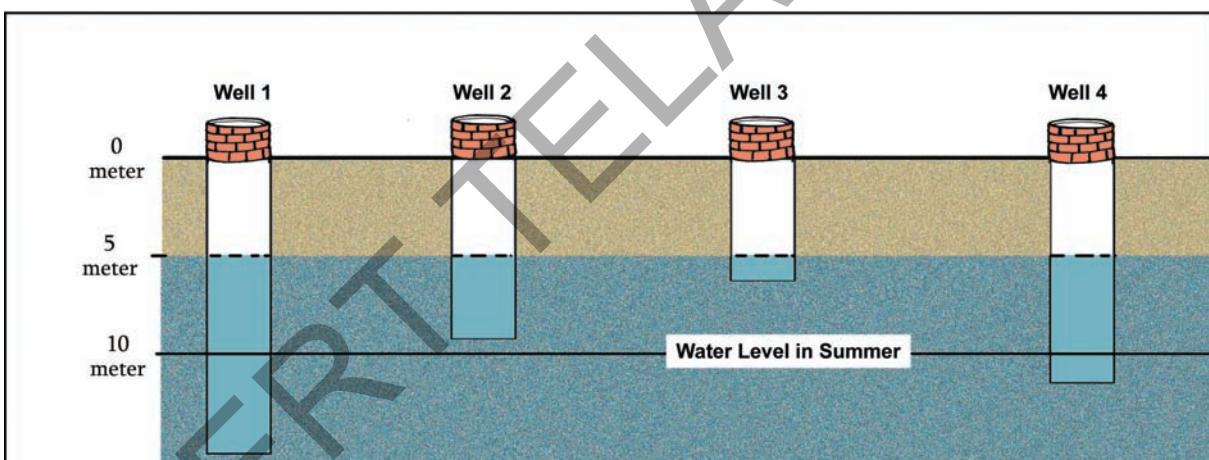


Fig 3.3. Groundwater level

Look at figure 3.3 and answer the following questions:

- i. The groundwater level is meters below the ground level.
- ii. In summer, if water level goes down to 10 meters below the ground level which of the four wells will go dry?
- iii. Which well will have the maximum water available?

Look at the figure 3.4 and answer the following questions:

- ◆ Can you find out how water entered the level below the impervious rock and reached the crack in the rock below?
- ◆ During summer, which well will go dry first? Give reasons.
- ◆ Will there be water in the well even if there is no crack in the rock?

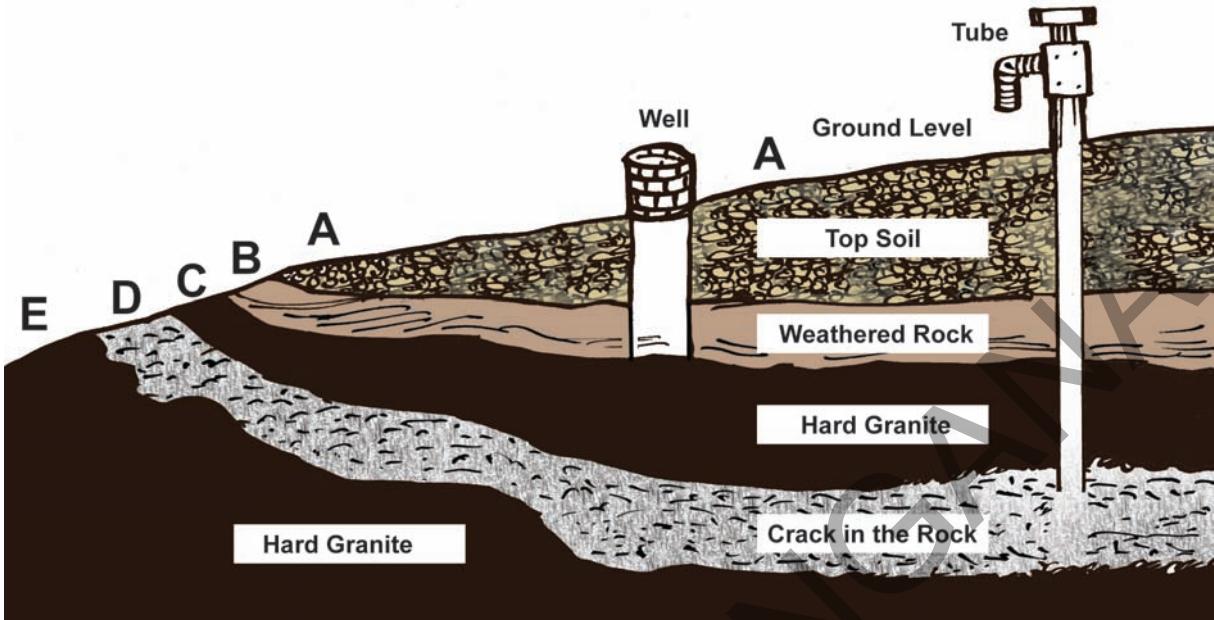


Fig 3.4. Rocks and Water below the ground level

In many mandals of Telangana, the predominant rocks are not granites. Small quantity of ground water goes in these structures. Rocks of the Kadapa type of limestones are available in some areas. They are also hard but are greatly broken and have a lot of gaps between them allowing water to accumulate in them. In the cracks of the rocks, ground water is available in some areas.

The areas adjacent to the great rivers like Krishna and Godavari have deep layers of sand and silt. The water level here depends upon the water in the river. Usually, there is plenty of water. It is nearly five to seven meters below the ground in these areas and it is very easy to dig wells in them.

- ♦ Can you recall the wells and bore wells in Penamakuru, Dokur and Penugulu villages you had studied in class VI?

Recharging Groundwater

Water flows swiftly on naked ground which has no cover of trees or grass, as there is nothing to stop the flow. However, if the flow of the rain water is checked by vegetation or bunds, then there is a greater possibility of it percolating into the soil to join the groundwater. Grass is planted on the hill slopes from where a stream starts and small check dams are also built across streams to store water for a longer time. All of these help to increase or recharge the groundwater.

However, it is seen in most parts of Telangana that we are extracting more water than the recharging rate. This means that we are over using the groundwater. The amount of water that percolates into the soil has also declined due to the cutting down of forests. Consequently, there is a rapid fall in the water table or water level by half to two meters every year.

If we draw more water than what percolates down, the groundwater will decrease over time. Finally, there may be little groundwater left for us. This has been happening during the last few years.

- ◆ Can you think of ways in which groundwater can be used less without wastage?

In our part of the country, it rains only for about three to four months. For the rest of the year we are dependent upon groundwater. Rivers, wells and ponds all get their water from these groundwater sources.

Can we increase the ground water? You may observe that water quickly flows when they are no trees, vegetation stones etc. Then water quickly flows into streams and rivers. However, if the flow of the rainwater were to be checked by vegetation and *bunds*, there would be a greater possibility of the water percolating into the soil to join the groundwater. This is why vegetation like trees, grasses and *bunds* are used to enhance groundwater.

Over the last few years, great efforts have been made to ‘harvest’ rainwater by these means. These measures are usually taken for a stream or a river. Such efforts are called ‘watershed development projects’. Under these projects, trees and grasses are planted on the hill slopes from where a stream starts. Also, small *bunds* are built across streams to stop the flow of water. Small check dams are also built across streams to store water for a longer time. All of these help to increase or ‘recharge’ groundwater.

- ◆ Are there any watershed development projects in your area? Try to visit the site and study how this is done. Try to draw a sketch-map of the project area.

Quality of Groundwater

Groundwater is usually mixed with many minerals. Sometimes, the water is salty and sometimes it is sweet.

- ◆ Collect the water from various places like dug well or bore well, lake or pond. Can you explain why the taste of the water taken from some dug wells is sweet, while that of others is salty or brackish?

This difference is because of the minerals which are dissolved in the groundwater. These minerals come from the rocks and soils underneath. Hence, depending upon the minerals which mix with the water, the taste and nature of water changes. In many mandals of Telangana, there is excess quantity of certain minerals like Sodium, Fluoride, Chloride, Iron, Nitrate, etc. Drinking such water is not good for our health and can cause diseases, which affect our bones, teeth etc. (Fig 3.5). In such situations, the drinking water should be properly treated to remove the excess minerals.

Many times, water is polluted due to the excessive use of fertilisers, pesticides or poor drainage. In our country this problem is increasing day by day. Unless we take the preventive steps, most of the wells or river water soon will become unsafe for drinking or even for bathing.



Fig 3.5 Person affected by excessive fluoride in drinking water

Use of Groundwater

Groundwater like the rivers, is the common resource of all people and not just of those who have land over aquifers. However, at present, it is being used only by those who have such lands.

Those who own land over aquifers tend to over use the water, which decreases water table for all the neighbouring people. Some of them dig deeper tube wells, which cause further decline in the water level. As

a result, the wells in the neighbourhood are going dry. Unless we use the groundwater as a common resource and in a restrained manner, can we ensure that everyone is able to benefit from them? In fact, after a few years, even those who dig deeper tube wells will not have any water left to pump.

- ◆ Can you think of a way in which the groundwater in your village can be used equitably so that all families – including those who do not have any land, get water? Draw up such a plan and discuss them in the class.

Today's generation has received water from the past as a sacred asset. We should pass it on to the future generation just as we received it. We should also develop ways of using and conserving water in a restrained manner. Otherwise, future generations will fight destructive wars over water and we will be responsible for it.

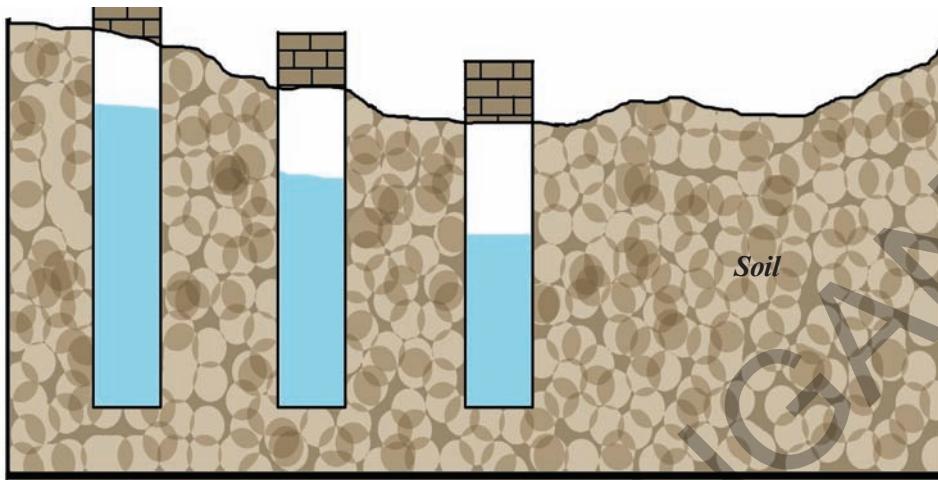
Keywords :

1. Pervious rocks
2. Impervious rocks
3. Vegetation
4. Aquifers
5. Megalithic age

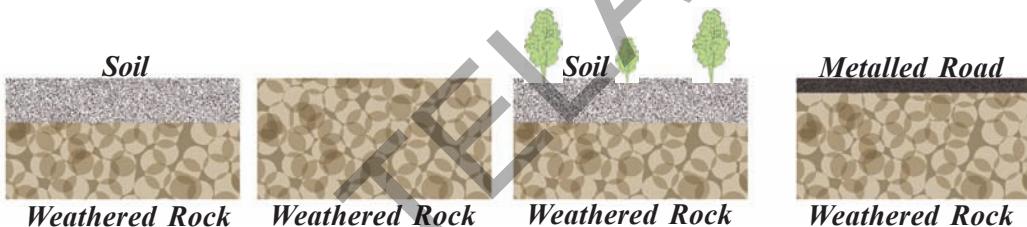
Improve your learning

1. Correct the incorrect sentences.
 - a. Water flows from the plains to the plateau.
 - b. There is a thick deposit of sand and gravel in the plateau.
 - c. Groundwater will never dry.
 - d. It is easy to dig wells in Mahabubnagar.

2. The wells shown in this figure are situated on the slopes of the Godavari. But there seems to be a mistake in the figure. Can you correct it?



3. In which of these places do you expect maximum percolation to take place?



4. When the owners of some wells in Pallerla started using high-powered motors to draw water from the wells, the owners of other wells noticed that their wells were drying up. Discuss the possible solution to the problem.
5. In areas where there is a shortage of groundwater, should there be any restrictions on digging bore wells? Why?
6. Think about the ways to restore the groundwater in your area.
7. Observe the figure 3.1(a) and compare it with your locality.
8. Draw the map of your village and locate the water resources of your village in it.
9. Read the third paragraph under “Quality of Ground water” in page no. 30 and comment on it.

Project:

Collect the following information about the tanks/Kuntas.

Sl. No.	Name of the Tank/Kunta	Ayacut (in acres)		Other uses of tanks	Reasons for not repairing	Benefits, if repaired
		Previously	at present			

Oceans and Fishing

PART - I

The earth is known as a watery planet as it is the only planet containing water in abundance. It is estimated that about 71% of the earth's surface is covered by oceans and seas. What is your image of a sea or an ocean? What have you seen or heard about oceans and seas? An extension of saline water on earth is called sea. Large sea areas are called oceans. Oceans are huge bodies of water generally separated by continents.

- ◆ Is the water found in your village/town saline or potable? Is it different in different parts of the village/town?
- ◆ What names do you know for different water bodies? Do large or small waterbodies have different names?
- ◆ In a map of the world or on the globe, find the names of five seas and five oceans. Run your fingers over the areas they cover.

It will be interesting to find out what lies under the water. The surface of water does not tell us about what lies under it. You may have had the opportunity to notice or feel what the bed of a river or stream or pond is like.

- ◆ Please share what you have seen or felt about what lies under the surface of waterbodies.
- ◆ How many meters deep are the water bodies that you have seen?

Ocean Relief

The floor of the ocean is just like the surface of the earth. The bottom of the sea is not a flat surface. It consists of hills, mountains, plateaus, plains, trenches etc. Many trenches on the ocean floor are so deep that even if the Mount Everest was placed in them, it would

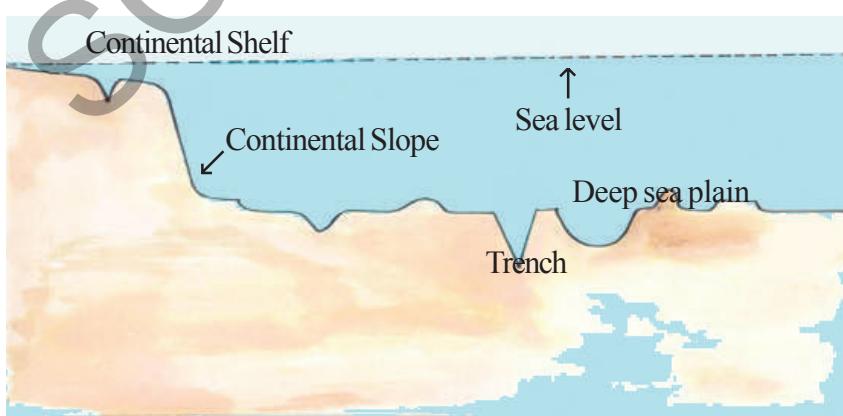


Fig 4.1 Relief features of an Ocean

drown completely. A major part of ocean floor is about 3-6 kms below the sea level.

Figure 4.1 is a sketch of the different kind of land forms that can be found under the surface of an ocean. Fig 4.2 shows the relief features of what lies below the surface of the oceans around India.

In figure 4.2 , observe the land mass of India and then go over to the floor of the Bay of Bengal, the Arabian Sea and the Indian Ocean. Try to point out the areas look like hills, plains and trenches on the ocean floor.

The waters of the oceans are never still. There are different kinds of movements in them.

- ♦ Have you experienced the different movements of water in a river? You may be aware of waves, currents and the coming and receding of floods. Discuss these experiences in the class.

Ocean waters have three kinds of movements. They are:

1) Waves: When the water on the surface of the ocean rises and falls, they are called waves. Waves are formed when gentle winds scrape across the ocean surface. The faster the wind, the bigger will be the waves.



Fig 4.2 Relief features of Indian Ocean

2) Currents: In the oceans, water moves from one part to another in big streams. These streams which flow constantly in a definite direction on the surface of the ocean are called ocean currents. The ocean currents are of two types - the warm currents and the cold currents. The warm currents flow from the equatorial region towards the poles. The cold currents flow from the poles to the equatorial regions. They are mainly caused by the prevailing winds, difference in temperature and salinity of the ocean water.

3) Tides: Tides are the rhythmic rise and fall in the level of the water in the oceans every day. All places on the coast experience some hours of low tide and some hours of high tide. Tides do not rise to the same height every day. When the tide is high, water comes up to the coast for some distance. Then as low tide begins, the water moves back from the land. The tides are of great help for fishing. Tides at some places take away the mud brought down by rivers and prevent silting.

PART - II



Fishing Village on the Coastal Plains

Ocean water is always saline. It contains several mineral salts dissolved in it. Oceans are the main source of rainfall. Oceans are also storehouses of fish and other seafoods. Oceans provide natural highways for international trade. Let us visit Bhavanapadu, a fishing village near the coast of Andhra Pradesh and study the life of people living near the ocean.

- ◆ Find the districts that lie on the coastline of Andhra Pradesh.
- ◆ Find the district in which Bhavanapadu village is located.
- ◆ Look at the image of Bhavanapadu village (Fig 4.4) and find the following:

- i) Identify the water bodies in the image.
- ii) Identify the land that is used for activities other than agriculture in this village. If so, for what purpose?

Fishing

It is four in the morning. Appalakonda's wife, Dhanamma, wakes him up and gives him some rice gruel to eat by 5.00 am after which Appalakonda is ready to go out to the sea. His friends wait for him on the beach. All of them are poor fishermen. They don't own any boats or nets. They work on Tata Rao's mechanical boat. Altogether there are 20 members on a boat. Tata Rao also joins them and works along with them. The boat had already been made ready the day before, with all the necessary things properly loaded in it.

Fig 4.3 Bhavanapadu village settlement





Fig 4.4 Aerial view of Bhavanapadu village settlement

Before launching into the sea, they check the engine, the rope puller, the additional stock of diesel and also put their food packages down. They pray to the goddess in whom they have a strong faith.

Tata Rao owns this boat, which he purchased from Markonda in Odisha. It cost him around Rs. 6 lakhs. He borrowed the money from private lenders at a high rate of interest. He couldn't get a bank loan as he had no fixed assets. Even for daily fishing expenses, he has to get advances from middlemen. He has to invest a minimum of Rs. 5,000/- per trip for diesel, wages and other expenses. Since he borrowed money from a middle man, Tata Rao has to sell the day's catch of fish to the middleman at the rate he fixes. By this time, the boat is ready for sailing and all the twenty

members are on the boat. They go up to 15-20 kilometers in the sea.

Dhanamma, wife of Appalakonda attends to domestic work after he leaves for work and finishes this work by 9 am. Then, she goes to work in the salt pans. Sometimes, she also attends to agricultural work. As they don't possess any agricultural land or salt pans, their family depends on the daily wages they get. While labouring in the salt pans, Dhanamma eagerly waits for her husband's phone call. She remains anxious about her husband's safety and also about the catch. If there is a good catch, they will get more money for the household.

The fishermen return any time between 1 pm and 8 pm or sometimes even late in the night. On the day we visited the village, they came back at 3 pm with a good catch of a type of fish known as "para".



Fig 4.5



Fig 4.6

Fig 4.5 Anchored Boat with neatly packed net heap,

Fig 4.6 Engine of the boat, lunch carriers, diesel cans and picture of the goddess

Some middlemen temporarily store the fish, segregate them and carry them in cold container tanks to faraway places like Kolkata, Bangalore, Chennai, Hyderabad, Kerala and so on. These people get four times more money than the catcher does. Observe the following pictures of the Potaiah *adda* (4.9), the local middleman.

- ♦ What makes the middlemen in the fish business to earn much more money than the fishermen?
- ♦ For what purpose are the thermocol boxes shown in the photo lined up in the middleman's *adda*?

So far we discussed the big fishing business but there are also small fisher folk in this village. *Karrateppa* is a country made boat which goes up to 5 kilometers into the sea and brings small catch of fish. This fish can be taken by the wives of the fishermen known as *Berakatthelu*. They sell this fish in nearby towns like Naupada, Tekkali, Pundi and Palasa.

Compared to the *Karrateppa*, there is far more risk of life in *Marapadava* (mechanised boat) because it goes far into sea and it is difficult to swim over to the shore in times of trouble. Apart from that, there is no first aid available in the big boats, nor any life jacket. Fishing is a risky and brave occupation.



Fig 4.7



Fig 4.8

Fig 4.7 Unloaded fish being carried to Auction hall.

Fig 4.8 Fish spread in the Auction hall, Middlemen are already there.



Fig 4.9 Middleman's adda storage tanks.



Fig 4.10 Loading at the middle man's adda to sell the fish in the big cities.

Nets

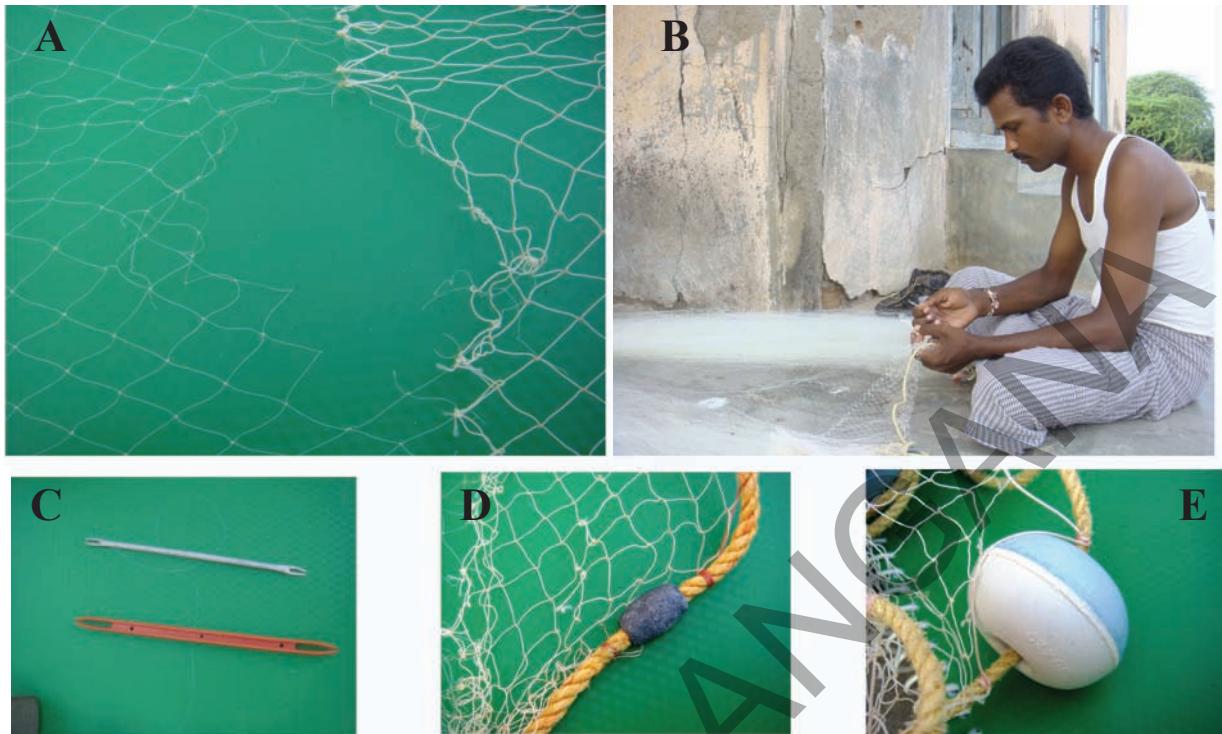
After reaching home in the afternoon, Appalakonda had his lunch, came to the cyclone shelter with the broken nets, and started repairing them. It is an activity commonly seen everywhere in Bhavanapadu.

The fishermen have a special tool kit for repairing the nets which consists of *Nulukarralu* (net repairing fork) (Fig 4.12), *Nulukanda* (Thread) and a flattened stick that determines the net ring size.

Nets are of different types based on different sizes of the *Kannulu* (Rings) and the layers of the net. Now a days, a net known as Ring Net which helps in getting a better catch is being increasingly used by the fishermen. This has helped to reduce migration from the village. Earlier, the nets were made of cotton thread. Now cotton nets have been almost completely replaced by plastic, nylon and other synthetic material. A net lasts for 4-5 years. Nets are purchased by weight and the type of rings they contain. Nets cost



Fig 4.11 'Berakatthelu', waiting for their turn to load fish in their Thattalu to sell at nearby towns.



*Fig 4.12 (A) Repairing nets, (B) Fisherman stitches (C) Nulukarralu.
(D) Floating beads-Lead, (E) Floating beads-Plastic.*

around Rs. 250-300 per kg. Ring nets weigh around 500 kgs. The fishermen of this area usually buy nets from Barhampur (Odisha).

Agriculture and Animal Husbandry

Fishing is not the only occupation of the people in Bhavanapadu village but they also cultivate the land to grow crops. They also rear animals and birds.

The village soil is mainly loamy and rice is the principal crop grown on it. Only a few acres of land are irrigated. Bhavanapadu lies at the tail end of Vamshadhara canal. Water comes to Bhavanapadu only after the fulfilment of the needs of the nearby village, Marripadu. Hence, most of the agriculture in Bhavanapadu depends on the rain.

There are no landlords in the village. A large number of cultivators of Bhavanapadu are small farmers. They don't grow any commercial crops. Some of them rear cows and buffaloes. There are two poultries in this village running profitably. Rice production is not sufficient for their needs, so the people get rice from the ration shops through their 'white cards' and sometimes buy it from the market.

Salinity and Drinking Water

The water in the village is saline. If one digs upto 8 or 10 feet near the beach, one can get potable water. But in summers, these wells dry up. And it takes a long time for the water to fill up again. Sometimes you have to wait for an hour to get another pot of water. So, women have to wait long to fetch water or have to walk upto 2 km to collect fresh water.

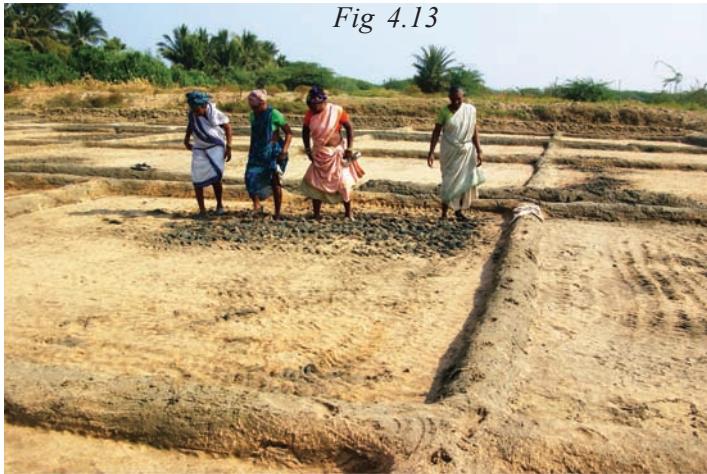


Fig 4.13



Fig 4.14

The government has sanctioned a protective water project that pumps water from the nearest village known as Suryamanipuram. This project provided some relief for some time. But cleaning of overhead water tank and frequent repair of pumping motor is a hurdle. For some time, a youth organisation helped in keeping the water project active. But it has stopped functioning now.

Social Life

A large number of people of Bhavanapadu worship Gangamma, Gowri, and Shiva. They perform puja of their boats and nets. The most important festival is Gowri Purnima. They spend common good fund of the village on these festivals. Observe the Fig. 4.16. Most men, like Appalakonda, wear tattoos like this.

Fig 4.13, 4.14 Salt pan leveling work known as 'Adugetha', which makes the pan impervious



Fig 4.15 An old woman fetching water from a faraway place



Fig 4.16 Why do you think people wear tattoos? What is the symbol on Appalakonda's hand? What does it signify?

There is an open stage, where the dramas, *burrakathas*, *harikathas* and record dances are performed. All these activities are led by the caste headmen called *Pillas*. They determine customs and traditions of the people. They even resolve disputes and impose fines. The money collected goes to common good fund.

Keywords :

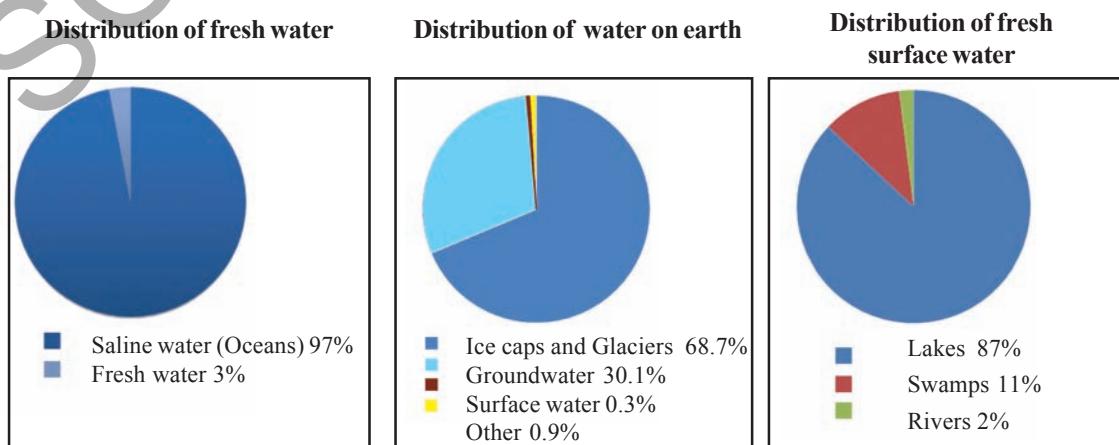
1. Tool kit 2. *Kannulu* 3. *Burra Katha* 4. Mechanical Boat

Improve your learning

1. Does Bhavanapadu look like the place you live in? What differences and similarities can you think of? Compare them in the following aspects:
 - a. Sources of livelihood
 - b. Types of employment
 - c. Water sources
 - d. Agricultural practices
2. How many types of ocean movements are there? Which of them is useful to the fishermen?
3. What is the difference between fishing with mechanical boats and with *Karrateppa*?
4. Write the process of getting a mechanical boat ready for fishing.
5. What does the tool kit of fishermen contain?
6. What are the similarities that you find between the surface of the earth and the bottom of the sea?
7. Collect information about the aquifers of your village / town and fill in the table. Analyse the benefits.

S.No.	Name of the aquifer	Uses	Limitations

8. Make an album of pictures that reflects the life of fishermen.
9. What solutions can you suggest to the fishermen so that they do not have to depend on the middlemen for money?
10. In the last 4 chapters, we studied many different aspects of water. Here is more information about the availability of water on Earth. Look at them carefully and explain the availability of water resources on Earth.
11. How do you support the statement ‘The life of fishermen is tied up with seas’?
12. Read the first paragraph under the heading “fishing villages on the coastal plains” in page 35 and comment on it.



Europe

In this chapter, we will try to find out about how the people of Europe have been using their distinct natural environment and resources.

Location of Europe

In order to find out the location of Europe and to see how far it is from India, you will need an atlas or a globe. To begin with, look at Map 1 in which Europe has been shaded. Identify the boundaries of Europe. There is an ocean to its north. Identify its name on the map. This ocean is frozen for most of the year.

- ◆ Name the ocean to the west of Europe.

This ocean separates the two continents Europe and North America. About 500 years ago, the people of Europe discovered the sea route to America and millions of Europeans migrated to the continent of America and settled down there.

- ◆ Look at the atlas and find the name of the sea just south of Europe.

This sea separates Europe in the north from Africa in the south. The name of this sea means ‘middle of the world’. Do you know why it is called by this name? In ancient times, the people of Europe did not know about other continents like America

or Australia. They only knew about Europe, western parts of Asia and northern parts of Africa. You can see that all these regions are situated around the Mediterranean Sea. That is why Europeans thought that this sea was in the centre of the world and named it so. It has been known by this name ever since.

- ◆ Name the mountains to the east of Europe.

The Eural mountains are eastern boundaries of Europe. These mountains are not very high. Asia is on the east of these



Map 1: Location of Europe

mountains while Europe is to their west. In fact, Asia and Europe are one continuous landmass. This landmass is therefore called Eurasia.

- ◆ Now you are familiar with the location of Europe. You can also look at the countries of Europe. Look at Map 2 to find out their names. Have you heard the names of some of these countries before?
- ◆ Map 3 has been left blank for your use. Write the names of the countries of Europe on this map and colour them. See that no two neighbouring countries have the same colour.

Mountains, Plains and Rivers

Let us learn more about the mountains, plains and rivers of Europe with the help of Map 4. Europe has several snow-covered mountains. Look for the Alps and the Pyrenees in the map. The Alps, the most important mountain ranges of Europe, are covered with snow all year round.

- ◆ The Alps stretch across several countries. Find out the names of these countries by comparing Maps 2 and 4.
- ◆ Write the names of the two rivers starting from the Alps.
- ◆ Name the countries across whose borders the Pyrenees stretch.
- ◆ Name the mountains stretching to the Eastern Europe.
- ◆ Identify the other mountains in Europe and prepare a table.

The Caucasian Mountains, which lie between the Caspian Sea and the Black Sea,



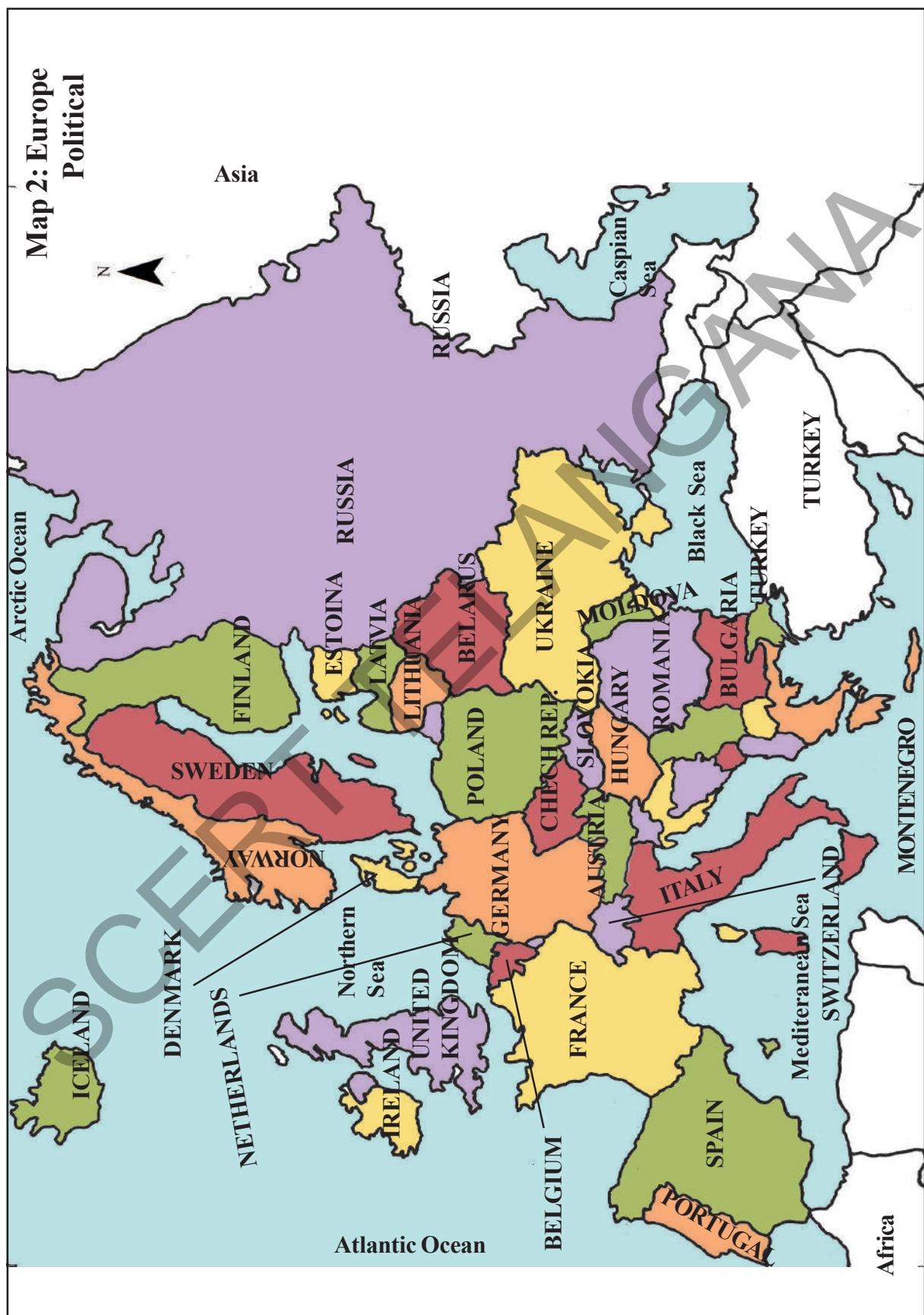
Fig 5.1 Budapest, capital of Hungary by the river Danube in Eastern Europe

form the southern boundary of Europe. They too are very high and covered with snow all year round.

There is a lot of difference between Asia and Europe. We can see many plateaus in Asia. But, there are no large plateaus in Europe. There are only some small plateaus in France, Germany and Spain. There are vast plains in Europe. Eastern Europe is a vast plain, which stretches across several countries like Russia, Ukraine, Poland, Byelorussia etc. These plains experience heavy snowfall and bitter cold in winters. When the snow melts in summer, small streams start flowing. They join to form mighty rivers. It is from these plains that rivers like the Dnieper and the Volga (the longest river in Europe) originate.

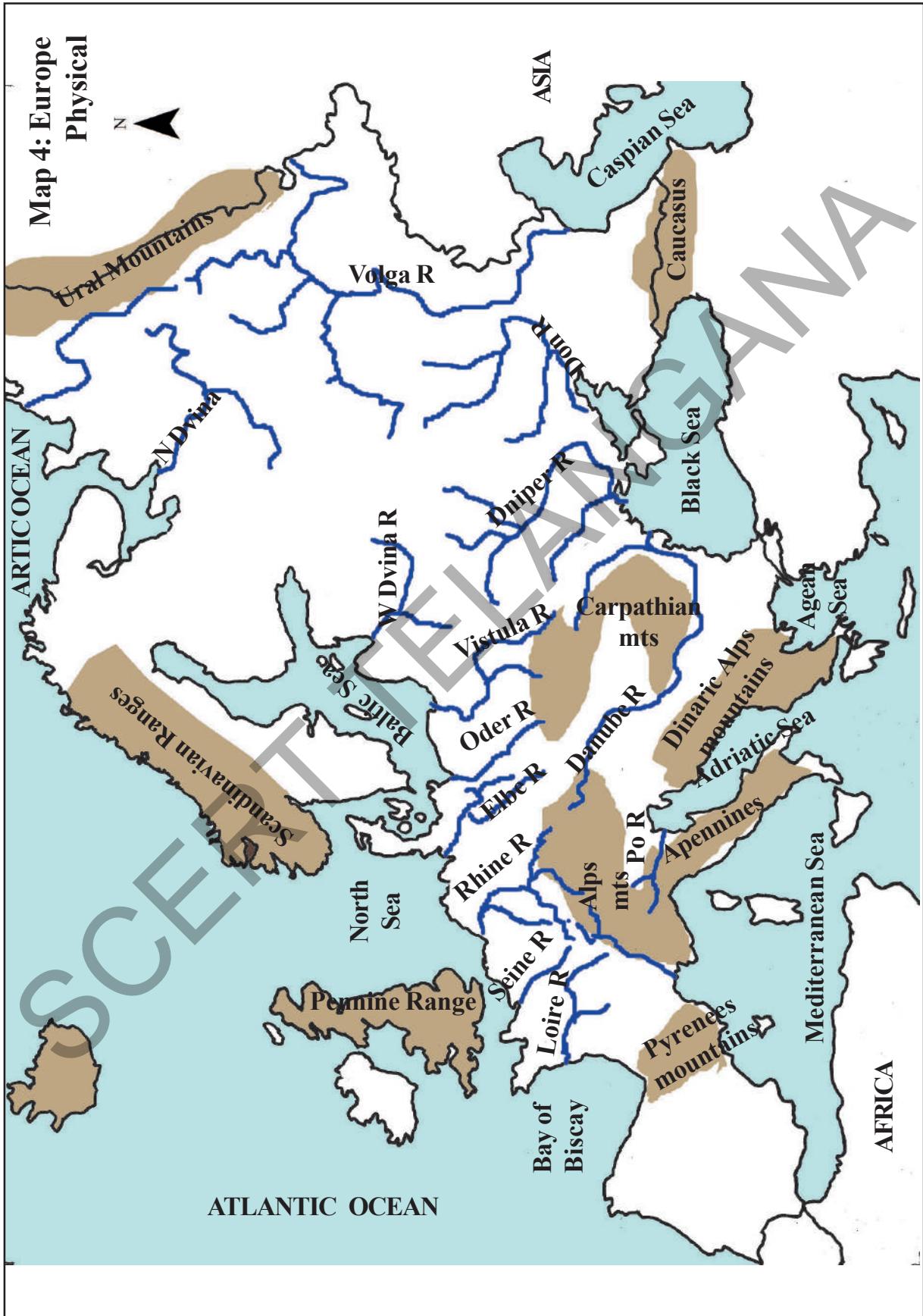
European rivers are used not only for irrigating the fields but also as major waterways; ships and barrages ply on these rivers and transport people and goods from one place to another. Since these rivers flow across several countries, they also facilitate international trade and transport. In this respect, the Rhine is one of the most important rivers as it flows through several countries and empties itself into the North

Map 2: Europe Political



Map 3:
EUROPE
Practice Map





Sea. There are several major industrial and mining cities on the open sea and thus linked to intercontinental trade. Unlike the Rhine, the Volga drains into the Caspian Sea, which is a vast lake. Transport to the open sea through this river-way is not possible. Thus, the cities on the Volga are not linked to transcontinental trade through waterways.

- ◆ Study Maps 2 and 4 to answer the following questions:
- ◆ Names of countries through which the Rhine flows: 1..... 2..... 3..... 4..... 5.....
- ◆ Names of countries through which the Danube flows: 1..... 2..... 3..... 4..... 5.....
- ◆ Names of two mountain ranges on the border of the Hungarian plains. 1..... 2.....
- ◆ Names of countries which ring the Black Sea. 1..... 2..... 3..... 4..... 5.....
- ◆ Names of oceans or seas into which the following rivers empty themselves:

River	Ocean/Sea
1. Seine	
2. Rhine	
3. Oder	
4. Po	
5. Danube	
6. Vistula	
7. Volga	
8. Dnieper	
9. Don	
10. Dvina	

Peninsulas, Islands, Bays and Gulfs

The sea coast of Europe is very jagged. In several places, it appears that the sea has cut deep into the land as in the case of the Baltic Sea. Elsewhere, it would appear that a part of the land has stretched far into the sea as in the case of Italy.

Italy is surrounded on three sides by the sea. Land masses that are surrounded by the sea on three sides and connected to the mainland on the fourth side are called '*peninsula*'. Norway and Sweden are also part of a peninsula. You can check this out in the map. This peninsula is called the Scandinavian Peninsula.



Fig 5.2 Peninsula and Bay

- ◆ Which of the following is a peninsula: Greece or France?
- ◆ Are Spain and Portugal peninsulas too?
- ◆ Name the mountain range in the Scandinavian Peninsula.

The sea surrounds some of the European countries, not just on three sides but on all four sides! These are island countries. Great Britain is one such island country.

- ◆ Find out the names of some other island countries of Europe.

Since ancient times, the seas have played an important role in the lives of the people of these islands and peninsulas. Central and southern Europe is largely mountainous. Travel and transport over them is both difficult and expensive. In comparison, sea transport is easy and less expensive. This is the reason why Europeans have been extensively using sea routes since ancient times.

The presence of a large number of bays and gulfs has also facilitated the use of sea routes. *Bays* and *gulfs* are parts of the sea enclosed by land on three sides. In a bay, the land curves inwards and the mouth of the bay is usually wide as in the Bay of Bengal. A gulf is a narrow inlet of the sea and has a narrow mouth. The entire Baltic Sea as you can see in the map is a large gulf. Since the bays and gulfs are protected from the storms of the high seas, they are very useful for building harbours where ships can be safely anchored and cargoes loaded or unloaded. Deep gulfs or bays are preferred for building harbours as large ships can be anchored in them. Ships need deep waters so that their bottoms do not touch the sea floor.

- ◆ Find out the names of the countries on the three sides of the Baltic Sea from Map 4.

Climate

Europe has a cooler climate than ours. Most of its countries experience snowfall in winter. Their summers too are not as warm as ours.

- ◆ Why is the climate of Europe so different from ours? Discuss in the class.

Distance from the Equator

The regions near the Equator remain warm all round the year. As we move northwards or southwards away from the Equator, it gets cooler and cooler. Indeed, the Polar Regions are covered with ice all round the year.

- ◆ Look at a globe or refer to map 1 to see how far is north Europe from the Equator.
- ◆ Is Europe farther than India from the Equator?
- ◆ Norway and Italy are two European countries. Which country do you think is warmer? Why?

The Atlantic Ocean

The climate of Europe is influenced by another factor – the Atlantic Ocean and the winds blowing from it. This impact is felt more by the regions along the Atlantic Ocean than the ones which are far inland.

- ◆ Locate the regions of Europe along the Atlantic Ocean and state whether they are on eastern side or western to the Atlantic Ocean?

In the winters, it is quite cold in Western Europe but it is even colder in Eastern Europe. Thus, countries like Poland and Russia have severe winters while France and Great Britain are comparatively warmer. Russian winters are so cold that the rivers and the nearby seas freeze. However, this does not happen in the countries of Western Europe that are located along the sea coast.

- ◆ Look at the map and tell which country is warmer, Spain or Slovakia?

You would have guessed that this difference must be because of the nearness of Western Europe to the Atlantic Ocean. Let us see exactly how this ocean affects the climate of Europe.

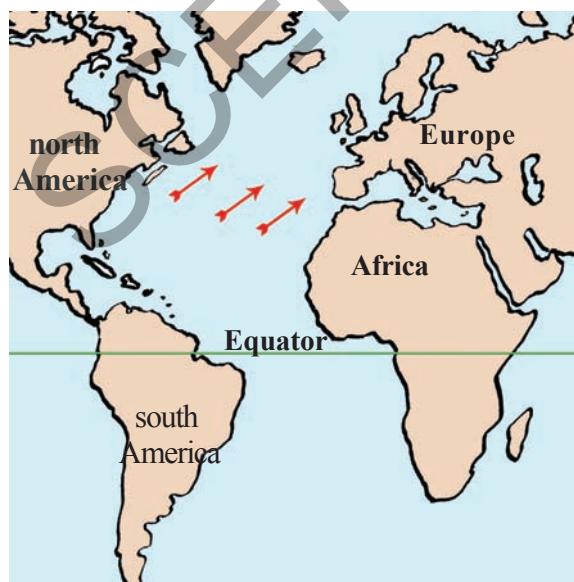
Westerlies

Winds blow all the year round from the Atlantic Ocean towards Europe. Since they blow from the west, these winds are called '*Westerlies*' (Actually, they blow from the southwest towards the northeast). These winds are warmer than the land temperature and are moist too. The climate of Western Europe is affected by these warm and moist winds all year round as they blow throughout the year.

- ◆ Can you guess the impact of Westerlies on Europe ?

Warm Ocean Currents

The waters in the oceans are not static. They keep flowing from one place to

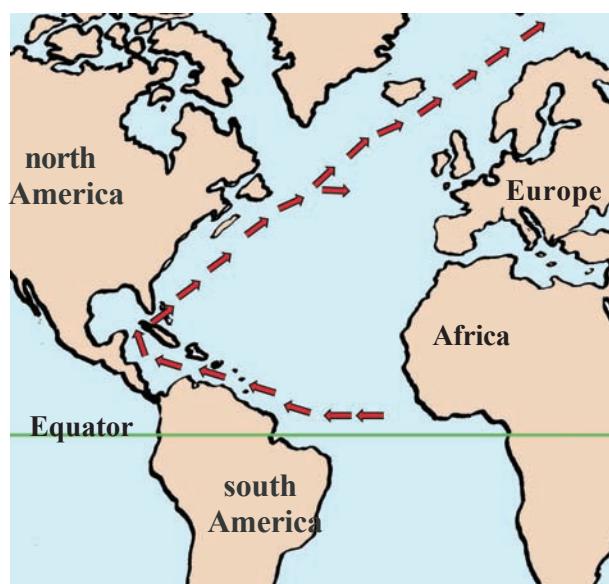


Map 5: The Westerlies

another along the continents. These are the ocean currents, which flow for thousands of kilometers in the ocean just as rivers flow on land.

One such ocean current is to be found in the Atlantic Ocean. This current originates near the Equator where the waters are warm throughout the year. This current flows westward to North America. It flows towards the north along the eastern coast of America under the impact of the Westerlies and then advances towards Europe. Moving northeastwards, it hits the western coast of Europe. This current is called '*Gulf Stream (The ocean water current which flows speedily is called a stream)*' in America, while in Europe, it is called '*North Atlantic Drift (The ocean water current which flows slowly is called a drift)*'.

The coastal waters of the east coast of North America and the west coast of Europe do not freeze in winters, thanks to the Gulf Stream. Thus, it is possible for ships to visit the ports on these coasts even during winter.



Map 6: Gulf Stream

- ◆ Why do you think is the climate of Eastern Europe not so strongly affected by the warm currents?

Fill in the blanks:

- ◆ The waters near the Equator are..... (warm / cool / icy cold)
- ◆ Starting near the Equator, the Gulf Stream reaches the coast of America. (eastern / western / northern)
- ◆ The Gulf Stream flows in the (Atlantic Ocean / Mediterranean Sea / Black Sea)
- ◆ The waters of the Gulf Stream which hit the European coast are (cold / warm / icy cold)
- ◆ The Westerlies blow from the Atlantic Ocean towards Europe (in winter / in summer / all round the year)
- ◆ These winds are (dry / moist / icy)

Western Europe: Showers all Year Round

The Westerlies, which blow throughout the year, also bring ample moisture to northern and western Europe. Since these winds blow from the sea, they carry a lot of moisture and regularly cause rainfall. Therefore, it rains throughout the year in northern and western Europe. While it rains only for a few months in our country, there are light showers all round the year in Western Europe. The sky is usually clouded. While we, in India, eagerly await cool showers, the people of Western Europe await bright sunny days.

- ◆ What differences did you notice between the climates of India and West Europe?

Western Europe also benefits in other ways from the Gulf Stream. The warm currents are very good for fish breeding as they contain ample food material for the fishes. As a result, the fishery industry is well developed in the North Sea near Britain. This part of the North Sea is called '*Dogger Bank*'. Fish is an important part of the food of the Europeans and fishing is a very important industry in Europe.

- ◆ Name the countries which would benefit from the Dogger Bank.

Mediterranean Climate in Southern Europe

Look at the countries of Southern Europe. They have the Mediterranean Sea to their south, so they are called 'Mediterranean Countries'. The lands along the Mediterranean Sea have a distinct climate called the '*Mediterranean climate*'.

- ◆ Look at Map 2 and name four Mediterranean countries.

The Mediterranean countries are the southernmost countries of Europe. As a result, the winters here are not too cold and summers are warm. It does not rain all through the year as in Western Europe. The Westerlies blow here during the winter months only. These winds bring rain to the Mediterranean countries. In other words, it rains here only in winter. Such rainy winters and dry summers are termed as '*Mediterranean climate*'. Several regions in other continents too have a

Mediterranean climate. This climate is very good for growing juicy fruits. Thus, regions with Mediterranean climate are famous for their fruits. Fruits like olives, figs, grapes, oranges etc. are grown extensively in southern Europe.

- ◆ Compare Mediterranean and Telangana climates on the following aspects:
Seasons
Rainfall
- ◆ When does it rain the most in your state, in summer months or in winter months?
- ◆ Find out if your region gets light winter showers and the name given to it in the regional language.
- ◆ Fishing industry is importance in,
- ◆ whereas fruit growing is important in

Four Seasons

In our country, we have three seasons, winter, summer and rains. However, most European countries have four main seasons. They are winter, spring, summer and autumn. The look of the land changes according to the season and the agricultural routine changes too. The transformation of a place over these seasons can be seen in the pictures given in the next page.

Winter: As November approaches, it begins to get cold. December onwards, it gets very cold and snow begins to fall once in a while. It snows heavily on the mountains and less on the plains. The sun shines once in a while. The sun rises very late in the day, at about nine or ten O' clock and sets by

four O'clock in the afternoon. The overcast sky makes it even darker. Broad-leaved trees shed their leaves in winter and stand entirely leafless.

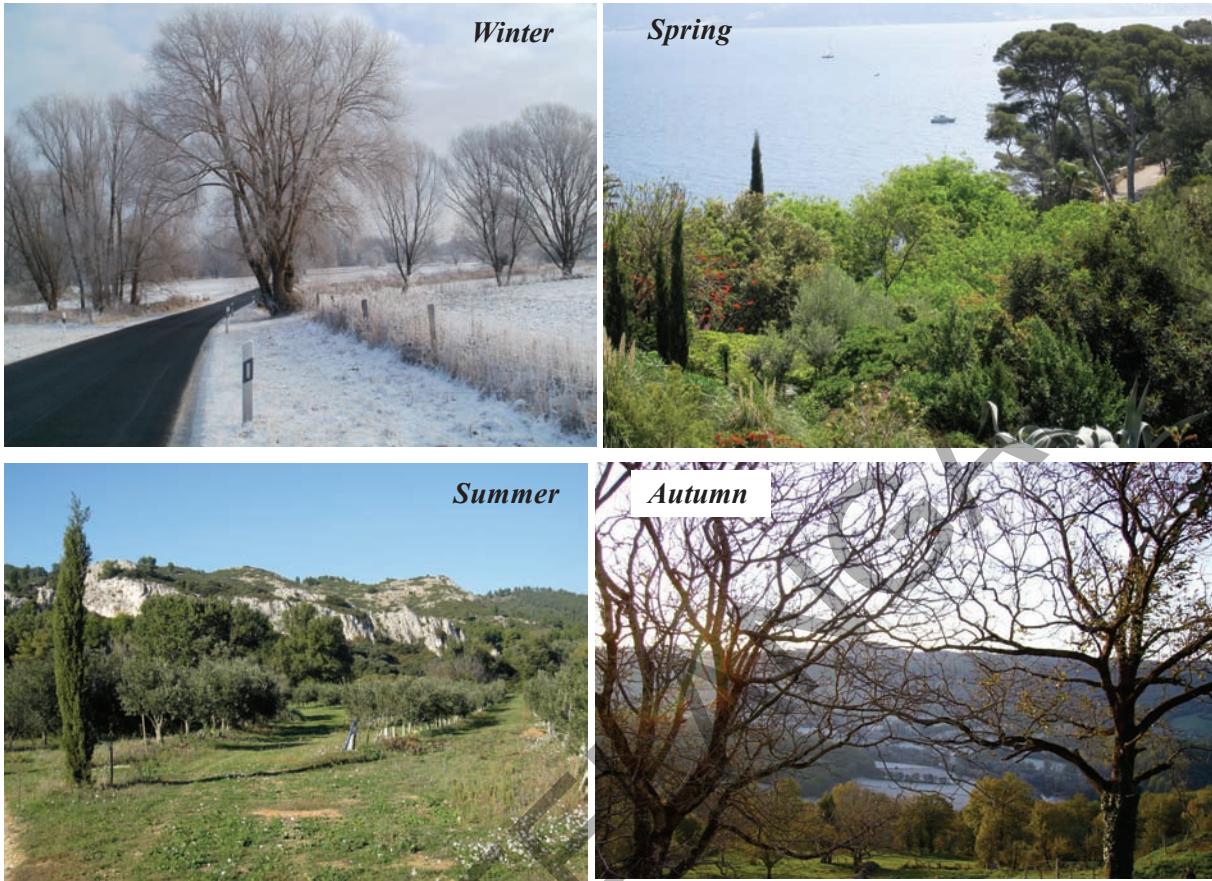
Spring: The landscape begins to change as March comes. The days get longer and the nights shorter. The snow begins to melt and new shoots appear on trees. Fresh green leaves appear and colourful flowers bloom everywhere. Lush green grass begins to grow on the pastures.

The fields are ploughed in spring and sowing is done during this season. Wheat, rye, barley, corn, sugar beet and oats are the principal crops.

- ◆ Which of these crops grow in our state and in which area?

Summer: It is summer from June to August. It does not rain much and there is more sunshine. The days are longer - longer than our country too. The sun rises as early as four O'clock in the morning and sets after eight O'clock in the evening. In fact, in the northern countries like Sweden, the Sun does not set at all. These countries are called lands of Midnight sun. Nevertheless it does not get very hot. This is because the Sun does not rise high on the sky and remains close to the horizon – where the earth and the sky seem to meet.

Summer is the season of agriculture in Europe. Crops mature in this season. There is no need for irrigation as the occasional showers are sufficient for the crops. At the end of summer, the crops are ready to be harvested.



- ◆ Look carefully at the pictures above. They belong to different seasons. What differences can you identify?

In our country, we have two agricultural seasons: *Rabi* and *Kharif* (winter and monsoon). Thus, it is possible to grow crops for nearly eight to ten months in a year. On the other hand, in France and other European countries, cultivation is possible only for six to seven months.

Autumn: The climate changes once again in September and October. Tree leaves turn red and yellow and begin to fall. Agricultural operations are wound up. Hay is cut and dried for feeding farm animals in winter. Grapes and other fruits are plucked and used for making wine, jams and juices of various kinds and preserved in other forms.

Land and Agriculture

European plains and river valleys are very fertile. It rains here all through the year and the rivers also do not dry up in any season. As a result, the plains are highly suitable for agriculture. However, a large part of Europe is mountainous and not suitable for agriculture. Some countries have very little agricultural land. For example, only 3% of the land in Norway is available for cultivation. 30% of England is cultivable while in Germany, it is about 40%. This is very different from our country. In India, as much as 55% of the land is cultivable.

There is an acute shortage of land in Holland. The people of Holland (the Dutch) have reclaimed small portions of land from the sea by building embankments called

dykes to push back the sea. The land that is reclaimed is called '*polder*'.

In eastern and northern Europe, it is not possible to cultivate the land in winter as snow covers it for almost six months. The snow begins to melt only in spring leaving very little time for crops to ripen. It is in spring that sowing takes place and crops ripen in the summer months and are ready for harvest in autumn. As a result, it is possible to raise only one crop in a year in these parts. However, in southern Europe it is possible to raise two crops a year.

- ♦ Why is it possible to raise two crops in the Mediterranean countries?

Wheat is the main crop in the European plains. It is grown extensively in France, Germany, Russia, Ukraine, Poland, Italy, Greece etc. We have seen that fruit cultivation is prominent in southern Europe. Fruits like grapes are used for making wine. The Mediterranean countries like Portugal, Spain, Italy and southern France are famous for their wines.

Barley, oats, rye, sugar-beet, potato etc. are also important crops of Europe. Sugar

is manufactured from beet in Russia, Ukraine and Germany.

Agricultural Revolution

Europe was like Asia, a continent of small farmers and landlords. However, over the last two centuries this has changed so drastically that only a very small section of the population practices agriculture and there are no small farmers as in India. This happened due to technological revolution which enabled farmers to cultivate large tracts of land with very little labour. Machines, chemical fertilisers etc came to be used extensively in farming and the product of farming was now mainly for sale in the market. At the same time, large landowners and capitalists took over the agricultural land from small farmers who abandoned agriculture and took employment in the cities in industries or other services.

European Farms today

Most of the cultivation in Europe is carried out in large farms - more than 50 to 100 acres in size. Generally, farmers build their houses in their own farms. The farmhouses are usually very large and have a number of rooms for different purposes

- sheds for animals, godowns for storing grains, coops and sties for poultry and pigs.

These big farmers hire labourers to work on their fields. They also use heavy machines like tractors and harvesters. Almost the entire product is sold in the market. Sometimes the farmers also hire machines from nearby cooperative societies.

Fig 5.3 Hay bales after the harvest which will be stored as fodder for winter.



- ◆ Find out the average size of the farmer's land in your area.
- ◆ Do farmers in your area too hire tractors and harvesters?

Large holdings and mechanized farming enable European farmers to earn a good income. They live in comfortable houses equipped with modern amenities. They use gas and electric stoves for cooking. About fifty years ago, most European farmers baked their own bread. Now, they sell off most of their produce and buy their bread from the market daily. Several varieties of bread and cakes are available in nearby towns. Fresh meat, which is an essential part of French diet, is obtained from poultry, cattle and pigs of the farm. Meat is also preserved by smoking, drying or freezing. All houses have larders or cellars to store meat, cheese and wine. Now, they are also stored in large cold storages.

The farmers obtain most of the things of their requirement from the nearby towns. Besides bread and other food items, they also obtain agricultural tools and machines from nearby towns.

Modern Agriculture

In Europe, agriculture is practised as a commercial enterprise, just as any industry. The farmers make his living by selling their entire produce and getting all of their requirements from the market. The agricultural technology they use also requires the use of hybrid seeds, chemical fertilisers, pesticides etc.

However, compared to our country, very few people in Europe are dependent upon

agriculture. Most of them work in industry or service sector like banks, transport etc. Even those who work in the field of agriculture are helped by the government with a lot of subsidy to carry on farming as it gives them less income than other kinds of work. The government pays them for carrying on agriculture in the villages.

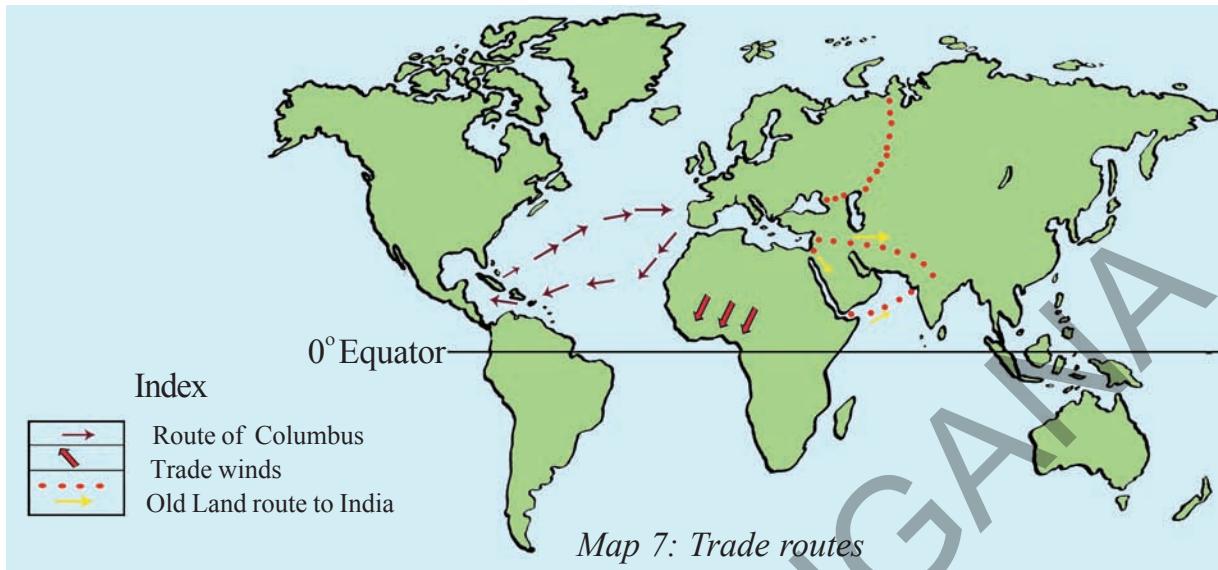
Discovery of Sea Routes

No part of western Europe is too far from the ocean. In contrast, many countries of Asia are thousands of kilometers from the sea.

- ◆ Look at the wall map or atlas to identify the names of at least six cities of Europe which are situated on the sea coast.

There are thousands of such seaside settlements where seafaring people have been living for hundreds of years. With centuries of experience of sea travel, the European sailors were famed for their skill and courage on the seas. They were also skilled in building boats and ships. Initially ships were built and used for fishing in deep seas. Later on, they are used for international trade too.

From the very ancient times, the people of Europe have been trading with India and other countries of Asia like Indonesia and China. From these countries, Europe obtained many goods like cotton and silk cloth, gems, ivory and spices such as cloves, pepper and cinnamon – that were not available in Europe. The Europeans got these in exchange for gold and silver, which they brought from Europe. Do you know



Map 7: Trade routes

what route they took from Europe to India? Look at map 7 in which two major routes are given. Both the routes crossed the Mediterranean Sea; while one of them took a land route via the Middle East, Iran, and Afghanistan, the other route took a sea route via the Red Sea and the Arabian Sea.

About five hundred years ago, the West European sailors and traders began to search for new routes to India. This was because both the routes mentioned above passed through countries ruled by the Arabs who were often at war with the Europeans. Further, most of the trade in the Mediterranean Sea was controlled by Italian merchants who did not let in traders of other countries. That is why the sailors of the other countries began to look for routes to India that did not have to pass through the Mediterranean Sea or the Arab ruled countries.

- ◆ Looking at the map, can you tell what the new route could be?

Of course, these maps did not exist in those days and people had just begun to

figure out that the earth must be round and not flat. An Italian sailor named Christopher Columbus thought: ‘If the earth is round then it should be possible to reach India from the west too. If we were to travel westward across the Atlantic Ocean we would reach China and India sooner or later.’

- ◆ Look at a globe to check whether Columbus’s thinking was correct.

Columbus set out with three ships in 1492 to cross the Atlantic Ocean. After three months of sailing, he saw land ahead. Columbus thought that he had reached India. Actually, he was still far from India; he had reached the country which we now call the West Indies. These are a group of islands near America. In fact, Europeans did not know of America before Columbus. In a way, he ‘stumbled’ onto America. Soon, Europeans realized that Columbus had not reached India but a new unknown continent. After that, several Europeans went to America to trade, conquer and settle there.

The ships of those times had sails to harness wind-power. They sailed with ease with the winds blowing westwards towards America. Were they the Westerlies? No, they were not the Westerlies which blew towards Europe. These were different winds, which blew from the south of Europe towards the south-west direction. They blew throughout the year and took ships from south-west Europe to the east coast of America. They are called ‘Trade Winds’ (Map 7).

The Westerlies blow from the south-west to the north-east to the south-west. In other words, the two winds blow in opposite directions all through the year (both these winds are shown on Map 7). This helped Europeans to travel to and from America easily. They could go to America using the Trade Winds.

Look at Map 7 and answer the following questions :

- ◆ Which winds would help the sailors to return to Europe from America?
- ◆ Could the sail driven ships use the Trade Winds to return to Europe? Give reasons.

After Columbus, the Europeans discovered several sea routes. They could now sail not only to America but also to different parts of Africa, India and Australia. They traded with these countries and amassed immense wealth, which was used to develop industries in Europe.

You will read about the industrial revolution in Europe in greater detail in a later chapter.

Keywords :

1. Peninsula
2. Island
3. Bay
4. Currents
5. Gulf
6. Climate

Improve your learning

1. The Atlantic Ocean has a great impact on the climate of Europe as well as on the lives and livelihood of the people of Europe. Collect relevant information and write an essay on the theme.
2. Answer these questions with the help of the maps given in the chapter:
 - Which of the following is not a landlocked (surrounded by land) country – (Hungary / Romania / Poland / Switzerland)?
 - Which mountains lie between the Caspian Sea and the Black Sea – (Alps / Caucasus Mountains)?
 - Which countries are on the shores of the Arctic Ocean – (Russia / Germany / Sweden / Norway)?
 - Can a ship sail from the Black Sea to the Atlantic Ocean? If yes, trace the route it will have to take.
3. Why are harbours built in deep gulfs or bays?
4. Why are the winters less severe in Western Europe than in Eastern Europe?
5. Name four countries on the coast of the Black Sea.
6. How do the Westerlies benefit the people of Western Europe?
7. What are the characteristics of the Mediterranean climate? Name the countries which have a Mediterranean climate.
8. What are the factors that limit European agriculture?
9. Name the important crops of southern Europe.
10. How can you say that the trade and cultural relations have developed among the countries due to the discovery of new sea routes by European sailors?
11. “However, as times changed, trading with them” Read the above paragraph in page no: 56 and comment on it.
12. How is agriculture similar or different in Europe from that of our country?

Africa

To the west of India lies a large continent. On this continent, there are extensive deserts, dense forests, long and broad rivers, numerous large lakes and grasslands stretching over thousands of miles. There are certain wild animals which we do not find in our country. The world's largest gold and diamond mines are located here. The name of this continent is Africa. Perhaps, you will be surprised to know that Africa is the cradle of the humankind. Human beings first evolved in Africa and then moved to other continents.

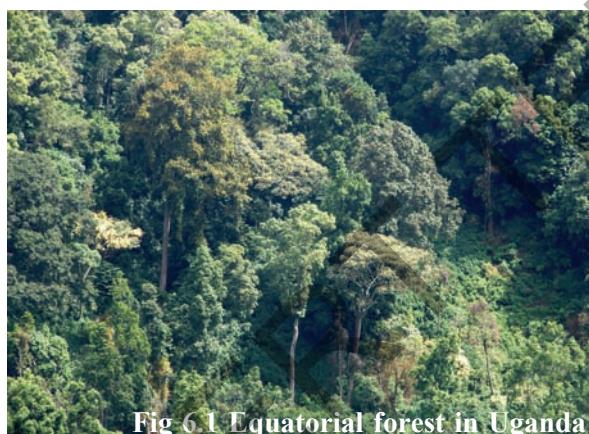


Fig 6.1 Equatorial forest in Uganda

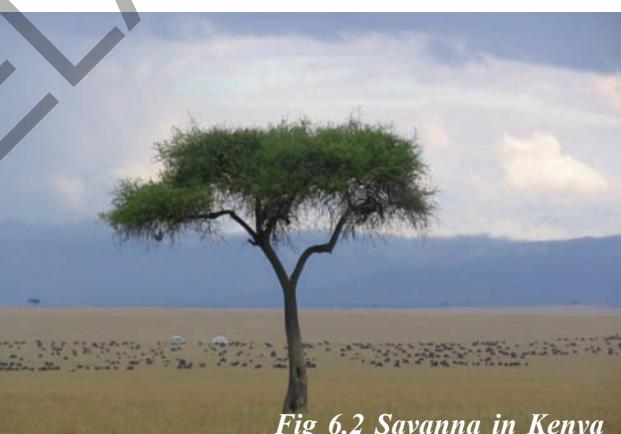


Fig 6.2 Savanna in Kenya



Fig 6.3 The city of Cairo by the River Nile

- ◆ Look for Africa on the world map and name the oceans that surround it. Which are its neighbouring continents?

Africa - A Vast Plateau

Look at the physical map of Africa. Do you see any large plains in the interior of the continent? Only on the coast do we find a narrow plain? The rest of the continent is a vast plateau of varying height. Look for the valleys of the Nile and the Congo. There are also several mountains on this plateau. The highest peak in Africa is Mount Kilimanjaro in Tanzania.

Look at Map 1 and answer the following questions:

- ◆ What is the average height of the narrow coastal plains?
- ◆ What is the height of a major portion of the plateau?
.....
- ◆ The height of the high plateaus in the south and east of Africa is
.....
- ◆ In the north are the Mountains.

There are long and narrow valleys in the high plateaus. There are several large lakes in these valleys.

- ◆ Identify two lakes in Africa other than Lake Victoria and write down their names.
- ◆ Locate the following rivers on a map of Africa. Use map 6 to locate the countries of Africa. Which countries do the following rivers flow through, and which oceans do they empty themselves into?

River	Country	Ocean
Nile		
Niger		
Congo		
Zambezi		

Map 1: Relief map of Africa



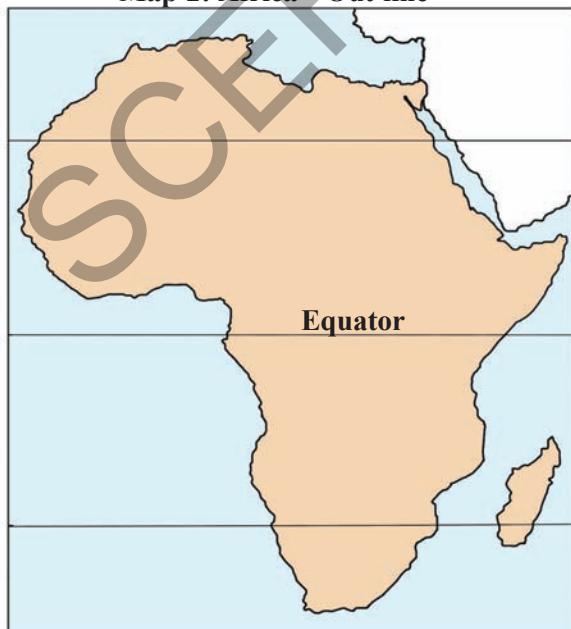
There is a region in the north where no rivers are to be seen. This is the Sahara Desert which receives very scanty rainfall. There is only one river, Nile, which crosses the Sahara Desert.

Look for some of the large lakes on the plateau. Lake Victoria is the largest lake in Africa. It is one of the largest fresh water lakes in the world. The Nile originates from this lake.

The region where Nile has its source receives such heavy rainfall that there is enough water to flow across the desert into the Mediterranean Sea. The Nile also flows through Egypt. Most of Egypt is a desert.

The Nile has helped civilization to develop in this desert. Egyptian civilization is several thousand years old. The waters of the Nile have helped to irrigate the fields of Egypt for thousands of years (look at Map 3).

Map 2: Africa - Out line



Climate

If you look at Africa on the globe you will find that the Equator passes through its middle. Thus, Africa is divided into northern and southern parts.

- ◆ Try to recognise the Tropic of Cancer on the wall map of Africa and label Map 2. To the south of the Equator is the Tropic of Capricorn. Locate it and write its name in the correct place on the map.
- ◆ Does the Equator pass through the middle of any other continent?

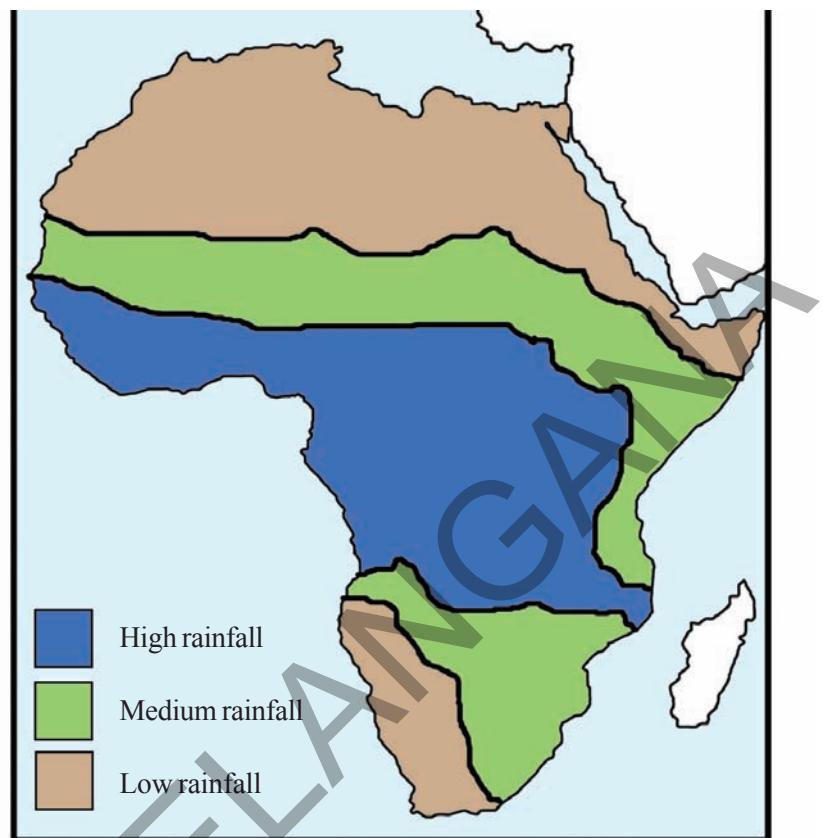
The zone between the Tropic of Cancer and Tropic of Capricorn is the hottest region of the world. There is hardly any winter here. This is also known as the Tropical region.

- ◆ Locate this zone on the map of Africa, colour it and label it as the 'Tropical Region'. Colour the zone north of the Tropic of Cancer and south of the Tropic of Capricorn in different colours.

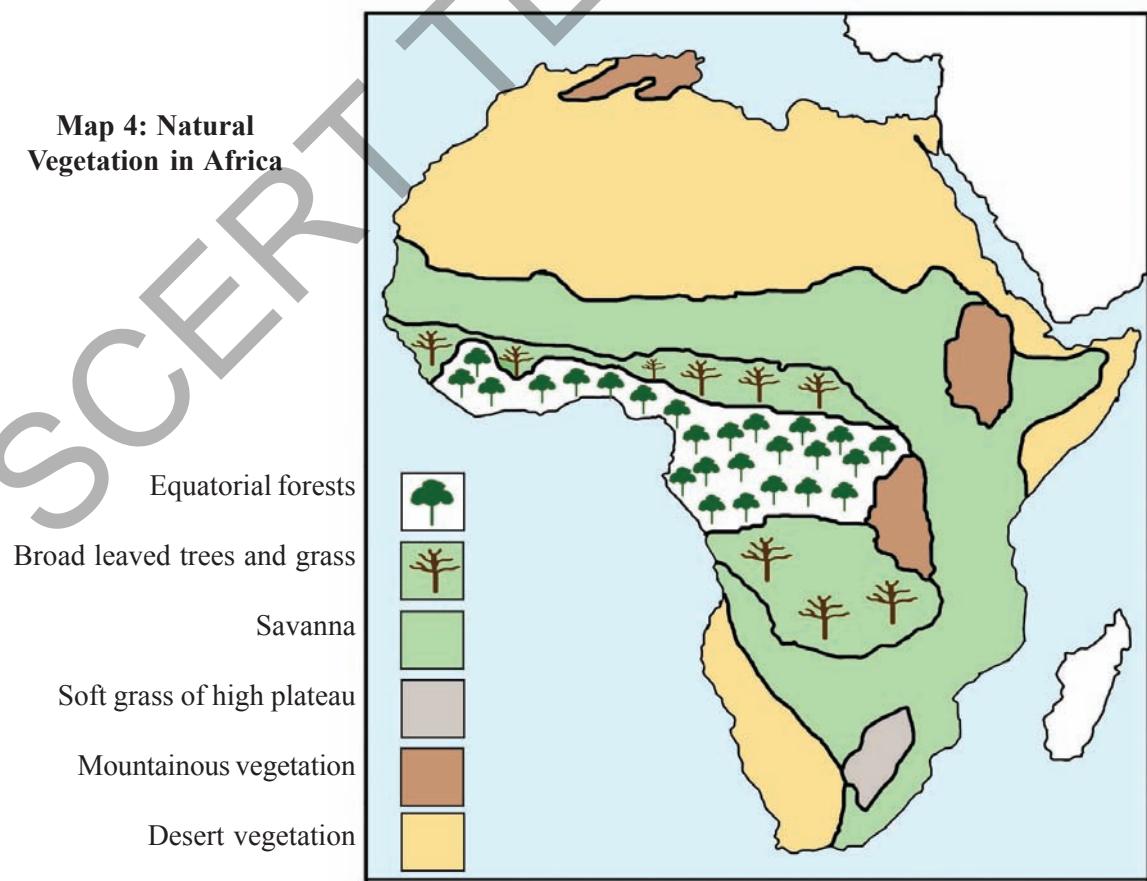
These zones – south and north of the tropics experience summer as well as winter. They are called '*Temperate Regions*'.

So far we have been talking only about summer and winter. However, regions that are hot but receive heavy rainfall have a different climate from hot regions that get scanty rainfall.

Map 3: Distribution of Rainfall in Africa



Map 4: Natural Vegetation in Africa



Regions with Heavy Rainfall

A large part of Africa, on both sides of the Equator, receives heavy rainfall. Look at the regions with heavy rainfall on Map 3. They are in Central and Western Africa. They have dense forests due to heavy rainfall and warm climate.

Regions with Moderate and Scanty Rainfall

Look for regions with moderate rainfall in Map 3. It surrounds the zone of heavy rainfall. In the region with moderate rainfall, it rains only in the summer, whereas it rains throughout the year in the equatorial regions.

As in our country, dry and wet seasons are distinct in the zones of moderate rainfall in Africa. Due to moderate rainfall, tall grasses grow in this region. In some places, these grasses are so tall that even elephants can hide in them! Some trees also grow between the grasses. This region is known as the '*Savanna*'. Look at this region in Map 4. Different kinds of wild animals inhabit this region. You will read about them later.

A very large part of Africa is extremely arid (dry), where the rainfall is scanty or there is no rainfall at all for several years.

- ◆ Locate these arid zones in Map 3.

Almost half of the northern part of Africa is an arid region and is called the Sahara desert. Thorny bushes and short grasses grow in some parts of this desert. In other parts, there are large stretches of sand, bare hills and rocks, stones and pebbles. In the south, there is another arid region called the Kalahari Desert.

Study Map 2 and 4 and answer:

- ◆ Zones of heavy rainfall have vegetation.
- ◆ Zones of moderate rainfall have vegetation.
- ◆ Zones of scanty rainfall have vegetation.

Pictures of different areas of Africa have been shown in the beginning of the chapter. Somewhere, there are dense forests, in another area, trees and grass grow together, elsewhere there are grasses and shrubs, and in still other areas, there is no vegetation at all.

The People of Africa

People with different languages, lifestyles and habits live in different regions of Africa. Since ancient times, people have lived in small tribes, carrying out hunting gathering, animal husbandry and agriculture. Hunters have inhabited the equatorial regions and the deserts. Pastoralists inhabited the high plateaus and Savanna, grazing their animals on the extensive grasslands. Agriculture has long been carried out on river banks as well as on the margins of forests. There are several cities on the coasts where traders from distant countries come to trade.



Fig 6.4
Baobab tree

Africa, Europe and Asia

For a long time, people from other continents were largely ignorant about Africa. Europeans were familiar only with the northern coastal regions of Africa while the Indian and Arab traders knew about the eastern coast.

- ♦ Look at the world map and guess how Europeans would have reached the northern coastal areas. How can one reach Africa from Europe? Which sea has to be crossed to reach Africa?

Apart from these coastal areas, neither the Europeans nor the Indian or Arab traders had much knowledge about the interior parts of Africa.

About 500 years ago, Europeans began their attempts to reach India by the sea route by going around Africa. Traversing the Atlantic Ocean, they used to stopover on the islands of St. Madiera and Azores. They were apprehensive about going south of these islands. They thought it would be so hot further south that the sea would be boiling. Then, in 1498, a Portuguese sailor named Vasco da Gama went around the southern tip of Africa and reached India.



Fig 6.5 Cape of Good Hope in South Africa

Look at the map to answer these questions:

- ♦ How can one reach India from Africa? Which ocean has to be crossed?
- ♦ Are Asia and Africa connected by land?

The African Coast

While studying Europe, you must have noticed its broken coastline. You have read about the gulfs and bays of Europe. Try to recall how these helped the Europeans in their ocean travel.

Now look at the African coast. Do you see a broken coast or a smooth coastline?

Do you find many bays and gulfs here, as in Europe? Name a bay and a gulf near Africa from Map 6.

Initially, when Europeans tried to go inland, many African tribes came in direct conflict with them. Europeans indulged in unfair trade, tried to enslave the African people and sold them abroad. They wanted to establish their rule over Africa and exploit its resources. Hence, the African people resisted the efforts of foreigners to establish themselves in their land.

Slave Trade

In the 16th century, many Europeans began migrating to America and started cultivation there. There was plenty of land in America, but not enough people to work on the fields. To fill the gap, the slave trade from Africa began.

Africans were captured and enslaved mainly from the coastal areas of Guinea as well as eastern Africa. The captured people were brought to the coast and sold to the Europeans. In exchange for the slaves, the African tribal leaders accepted guns, iron objects, liquor and clothes.

The slaves were greatly oppressed. Many of them died by the time they reached the ports. The ships were stuffed with slaves. There were no proper arrangements for food or medicine. In those days, it took

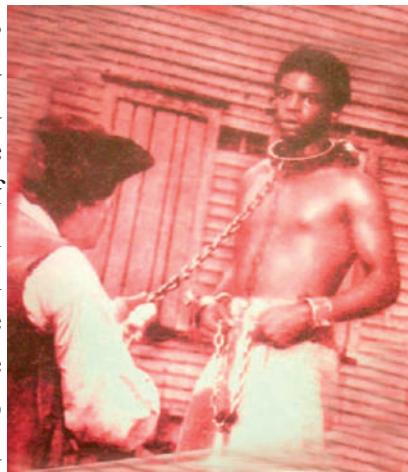


Fig 6.6 A Slave

several days to reach America. Many slaves did not survive the journey due to illness and malnutrition.

Even in America, inhuman treatment was meted out to them. Despite working hard, they were not given proper food or living quarters. In this manner, millions of Africans were enslaved and taken to North and South America and the nearby islands. Lakhs of people died after they were made slaves. In the 16th and 17th centuries, numerous companies were engaged in slave trade. Eventually, the slave trade ended in the 19th century and the slaves were declared free citizens in America in 1860.

European Colonies

Earlier, you had read that Europeans had reached India by going around Africa. Subsequently, these Europeans started halting at African ports. Slowly the

Portuguese, Dutch, English, French and Germans gained a foothold in the interior and colonized these areas. The political map of Africa at the close of the 19th century is given in Map 5. The regions colonized by the European colonies have been indicated on this map.

Map 5: European colonies in Africa in 1913



- ◆ Can you locate the countries that colonised Africa on a map of Europe?
- ◆ Which European countries colonized Sudan and Zaire?

- ◆ Can you point out any area of Africa which was not colonised?

Along with attempts to build their colonies in Africa, the Europeans continued to explore the interiors of the continent. They travelled to the source of the Nile in the north. In the west, they explored the entire valley of the Niger and in the south, they moved northwards from Cape Town. They explored the region around the river Zambezi.

The Europeans exported African timber, minerals etc. on a very large scale to Europe. In fact, the gold and diamond mines in southern Africa are still under the control of European companies. Zambia and Zimbabwe have priceless mines of copper. This mineral has long been an important export item.

The Europeans did not stop with exporting the resources of Africa. They established plantations to grow tea, coffee, rubber, tobacco etc. These products were also exported to Europe.

Plantations in Nigeria

You may be fond of eating chocolates. They are made of cocoa, which grows in Nigeria. In southern Nigeria, apart from cocoa, there are also rubber plantations. Oil-bearing palm trees are also found there. Oil is extracted from its fruit. People reach these forests after crossing the Niger by boat to collect palm fruit. Earlier, all these trees were found in wild forests. When the demand for them increased, patches of forest were cleared and these trees were planted there. Cocoa, rubber, palm and palm oil are being exported and this enables Nigeria to earn foreign exchange.

- ◆ Locate the areas where these crops grown on the map of Nigeria (as per map 4).

Plantations were started by the British who were not satisfied with the quantity of wild products collected from the forests. They wanted to produce more and export them.

Plantations made many things easy for them. First of all, it was no longer difficult to go into the forest and locate the trees. It was easy to look after the trees since they were all in one place. Harvesting the produce became much easier. Therefore, the production increased. Nigerian people started working in these plantations, while the British were their managers. In this way, commercial agriculture of palm, cocoa and rubber began in Nigeria.

Not only this, a number of processing units were also set up near plantations, such as units to separate seed from the cocoa fruit, to dry it, extract oil from palm fruit, extract milk from rubber plants and so on.

Most of the profit from trade of palm, cocoa and rubber went to the British. The Nigerian people worked there only as agricultural labourers. Even in India, during the British times, plantations of tea and coffee were started for trade purposes. Nigeria was under the British rule until 1960 when it won independence. After that, the plantations and trade in plantation products have gradually come under the control of the Nigerians and they are able to benefit from these.

Independent Africa

During the last century, African countries gained independence from the control of European powers. New nations came up with their own governments. Of course, many Europeans are still settled in African countries. But slowly, the African people are acquiring control over their land, forests, mines, and agricultural production and benefiting from them.

Minerals of Africa

The continent is very rich in minerals like coal, copper, tin etc. Besides, it is perhaps the largest producer in the world of precious minerals like gold and diamonds. One of the main aims of Europeans in Africa was to exploit these resources by using servile labour of the Africans. Many of these countries and their companies control most of the mineral resources of even the independent African countries till date.

For example, mineral oil or petroleum is the most important natural resource of Nigeria. The Dutch companies established control over the oil mining and refining in

Nigeria. Since 1958, mineral oil has been exported from Nigeria. Oil refineries have been set up at Harcourt and Vari port.

This industry is mostly in the hands of foreign companies to this day. The Nigerian government has only a small share in this industry. This is the same with many other minerals mined from Africa.

The foreign companies do bring in new technologies and investments into the mining and processing industries, thus creating employment for the local people. However, they use cheap labour to make huge profits which are taken away from the African people. Most of these companies are also careless about environmental protection and have caused immense damage to the natural environment. This has affected the quality of land and life of the people adversely.

- ◆ Familiarise yourself with the countries of Africa, by colouring and labelling - Map -7.

Keywords :

1. Colonies 2. Slave 3. Plateau

Improve your learning

1. From Europe, which sea does one have to cross to reach northern Africa?
2. State three difficulties that the Europeans faced in reaching the interior parts of Africa.
3. Name the two large deserts of Africa.
4. Two political maps of Africa have been given in the chapter. Compare the two to find out which European country controlled the present day countries of Nigeria and Zimbabwe.
5. Name two countries of Africa where equatorial forests are found.
6. What goods did Europeans trade with Africa? What kind of agricultural produce did they promote for trade purpose?
7. Who benefited from the slave trade? Why did America need slaves?
8. How can you say that the slave trade is highly heinous?
9. Read the last para of this lesson and comment on it.

Map 6: Countries of Africa



First, label this map with the help of Map 6. Then colour all the countries with different colours. Take care not to colour two neighbouring countries with the same colour.

Map 7: Countries of Africa



Handicrafts and Handlooms

PART - I

Basket Maker of Andugula

Polaiah is a basket maker from Andugula village in Madugula Mandal, Ranga Reddy district. He is about 35 years old. He belongs to Yerukala, a tribal community. His family has been weaving baskets for generations. Bagyamma, his wife, also works as a basket maker. They have three children. Polaiah's father along with 25 other families came to the city about 30 years ago as the demand for baskets had declined in their native village. He sells baskets on the pavements of Chaderghat in Hyderabad.

Polaiah uses the spines of wild date palm (*eatha chettu*) leaves to make baskets. Using a knife, he shaves off the leaves and keeps them in hot sunshine to dry them. The raw material, wild date palm leaves, are brought in bundles from Andugula, their native village. His relatives in Andugula collect the spines from bushes around their villages and sell them to basket makers like Polaiah. Andugula is about 60 km from Hyderabad.

- What do you understand about raw material in the context of basket making? Who collects them?

- What are the tools used by the basket makers?

Each bundle of date palm spines costs Rs.120. Polaiah and other basket makers usually bring 10 bundles for two months. Polaiah's family makes 25 baskets from one bundle. Ten bundles of spines would give them about 250 baskets. It takes 30 minutes to make a basket. He weaves baskets from 10 am to 5 pm with a few breaks to eat and rest.



Fig 7.1 Basket shop with bamboo products

Polaiah sells each basket for Rs. 20. Sometimes, customers ask for a bigger basket for family rituals. These are sold at a higher price depending on the amount of raw material used. He sells baskets throughout the year. In two months, he can



Fig 7.2 Basket weaving

sell Rs.5000 worth of baskets. The cost price is Rs. 1200 excluding the transportation charges of Rs.100 for every visit to his village. So, the income of his family is Rs.3700 for 2 months. He does not earn sufficient money to meet his family's expenditure. To supplement his income, Polaiah buys and sells bamboo products like trays and stands.

Basket making is a craft work that involves the use of wild date palm leaves, cane and bamboo which are found in forests. There has been depletion of forests due to their extensive exploitation for big industries. This affects the livelihoods of people who have traditionally depended on forest. Further, the demand for such products has reduced considerably. This forces them to move out of rural areas and migrate to urban areas for survival. This

is true for many involved in traditional activities. However, they often have to live in urban areas without basic amenities.

Urban Slum

Polaiah lives in a slum, which does not have proper drainage, so it emits foul smell and breeds mosquitoes and flies. There is no electricity connection or safe drinking water. Polaiah's hut is made of bamboo, mats and recycled plastic bags and tarpaulin. During the rainy season, their roofs often leak and the huts are flooded. Sometimes the Municipal Corporation officials evict Polaiah and other basket maker families.

Despite struggling hard, people like Polaiah have been denied voting rights in the city. In fact, they have been denied ration cards as they don't have any proof of identity or proof of residence. Thus, they cannot either participate in the democratic processes of the city or avail the facilities meant for the poor.

Basket Makers

People of *Yerukula* tribe are usually involved in basket making and live in different parts of Telangana and Andhra Pradesh. They are called '*Yerukula*' after



Fig 7.3 Basket weaving

their women's traditional profession of fortune telling '*Eruka chepputa*' (*Sodhi*). People of this tribe speak '*Yerukula basha*'. Words from Telugu, Tamil and Kannada languages are used in this language.

Choose the correct option:

- a. Forests are depleting largely because of the usage by (basket weavers / big industries).
- b. Polaiah buys bamboo items from (a trader in mandi/a village in Andugula).
- ◆ Make a table showing Polaiah's expenditure for raw material and income from the produce.

- ◆ Do you think people like Polaiah should be given ration card and allowed to vote in Hyderabad?

By now, you have learnt that goods such as baskets made of bamboo and *etha chettu* require simple production – using very few materials mostly made of natural resources. There are many other goods which require raw material to be processed in a more complex way with complex tools. Cloth materials made of cotton and silk are examples of such goods. Cloth can be manufactured today either in hand-operated looms or by power looms or in large mills. We will study here how it is produced by handloom weavers.

PART - II

Handloom Weavers in Pochampally

Pochampally is a small town in Yadadri district in Telangana. The weavers here produce unique sarees called *Ikkat* sarees, which are world famous. *Ikkat* is a term used for the particular style in which cloth is dyed, also often referred to Bandhani or Pochampally itself. They are high quality silk sarees containing simple geometrical designs and available mostly in three colours and shades. There are nearly 10,000 weaving families in 100 neighbouring villages involved in this craft.

Pochampally sarees have a unique design and colour which is quite distinct from other silk sarees. That is why it is the first handloom cloth patented in India. This

means, no other producers of handloom sarees in the world can sell sarees in the name of "Pochampally Ikkat Sarees". Only those sarees that are produced in Pochampally and its surrounding villages can be sold with this brand name. These sarees are sold in India and abroad at high prices.

To make silk sarees, you need raw material like silk yarn, colours and cotton thread. They are not produced by weavers. They buy them from the market. Silkworms, from which silk yarn is made, grow on mulberry leaves. Rearing of silkworms is taken up by small farmers. Cotton is produced in farms and is made into thread either in factories or as a household craft. Colours are often made in factories. Weavers buy yarn and colours from the market.

Tools:

Weavers own the wooden loom, which is the main tool required for weaving. Apart from it, they also use small knives. For weavers, it is also important to know the plan of the design to weave the saree. If you look at a saree, you will notice that there are very intricate designs on them. These designs are marked on special sheets of paper with specific notations. Weavers follow them without making errors. With years of practice, they even develop new designs.

- Look at a saree and draw any of the common designs on them in the box below.



Stages of Weaving a Saree

There are different stages of weaving a saree. The first is preparing the yarn. Silk yarn is wound on a bobbin. These yarns are then marked with the design. These markings of the designs help the weaver to identify what colours need to be dyed into which part of the yarn. Dyeing the yarn is a long repeated process. Each colour needs to be dyed separately and dried one

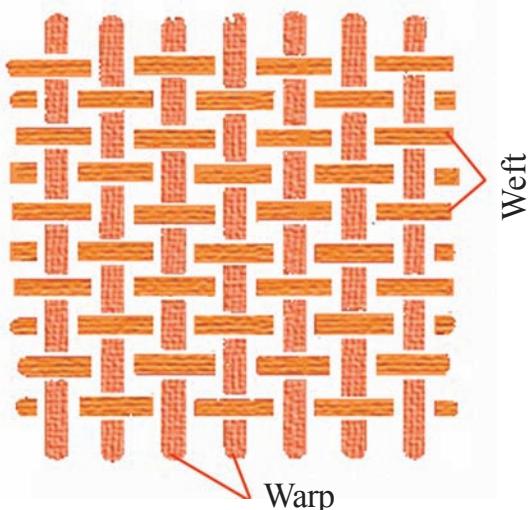
after the other. Only when the colouring is completed, the thread can be used for weaving.

Dyeing yarn

For dyeing, the silk yarn is taken off, but when it becomes dry, it is stretched, partly opened and tied again for dyeing. This process is repeated several times. For making sarees in different colours and shades, different methods of dyeing are followed. The red and brown shades, between white and black colours, are printed using alizarin dyes. For this, the yarn is first soaked in a mixture of castor oil and alkaline earth, then dried, soaked again, dipped in alizarin paste and finally boiled till it becomes red. For the brown shades, iron filings are added to the colour. Dissolving iron filings in vinegar produces black colour.

Warp and Weft

You will notice that cloth has threads passing from top to bottom and sideways as shown in the picture below. Warp is the yarn that goes from top to bottom and weft is the yarn that go from left to right.



Let us look at the account of a visit to a weavers' house in Pochampally to know more about ikkat cloth materials.

Jagathayya is a resident of Pochampally. All of his family members – he, his wife, his son and daughter-in-law work as weavers. When we visited his house, we found all members in the family engaged in different tasks. While he was winding yarn, his son Murali was engaged in weaving on the *maggam* (pit loom) set up inside the house. Other tools such as *Chitkasu* (is a curved frame made for weft ikkat with pegs on which the weft threads are grouped and tied for dyeing), *panni* (reed), *Acchu* (head shaft), thread and rubber tubing were used for different tasks in producing ikkat sarees. Most of the tools are made of wood. Since he has grown old, Jagathayya spends most of the time winding yarn and his son weaves on the loom.

Jagathayya's wife and daughter-in-law do bobbin winding. Jagathayya's grand children are studying in schools. There is some work like warping done collectively by group of weavers on streets / outside the house.



Fig 7.4 At pit loom - weaving a saree



Fig 7.5 Winding thread



Fig 7.6 Bobbin winding

His son Murali brings all the raw material – dyed silk yarn, zari and design from master weaver and sometimes from cooperative society of which he is



Fig 7.7 Marking design

a member. Jagathayya gets all the raw material at a time to weave eight sarees. The whole family has to work for 12-15 hours a day for nearly 50 days to weave 8 sarees. They get about Rs. 1200 per saree for the work.

Weaving saree is a hereditary occupation for Jagathayya's family. The income Jagathayya's family makes from weaving ikkat sarees is insufficient to run the family.

Between March and May, Jagathayya's family is able to weave only for a few hours a day. If the temperature is high, the thread will get cut. The whole family works only till afternoon during these days. Women are distressed as they have to do not only weaving but also the household chores like cooking food, fetching water and preparing children to go to school etc.

Earlier, Jagathayya's family used to weave only for the cooperative society. The cooperative societies provide financial assistance through insurance in case of unexpected illness or death in the weaver's family. They also help in getting loans for construction of houses. Now-a-days, the cooperative society does not give sufficient work, so they have to look for additional sources of income to run their families. Since a master weaver in Pochampally agreed to give work and remuneration, Jagathayya's family began weaving Ikkat sarees for the master weaver.

Jagathayya has not given up the membership of the cooperative society with a hope that it will improve its functioning in the future.

Weaver's Problems and Cooperative Societies

Telangana is one of the states in India which have a large number of handlooms. During the last few decades, handloom weavers have been facing a serious problem. They face a stiff competition from power loom and mill made clothes - these clothes are cheaper as they are produced on machines and also because they use synthetic yarn which is cheaper than cotton or silk. Even though it is popular due to its high quality and unique beauty, the Pochampally saree seems to be expensive. The weavers also do not get good rates due to middle men's involvement.

The buyers are spread all over the world and weavers do not have any direct contact with them. Fashions in cities change fast and it is difficult for the weavers to know what kind of designs are in demand. Therefore, they have to rely on middlemen to know about the designs in vogue and change their designs accordingly. They also have to depend on middlemen to the raw material like cotton or silk yarn as they



Fig 7.8 Weaving in process

are produced in far away centres. This gives the middlemen an important position in the handloom industry and they try to get the largest share of the saree price.



Fig 7.9 Warping

In order to overcome these problems, the weavers are encouraged to form cooperative societies. The cooperative societies are meant to help the weavers in buying raw materials at low prices and arrange for marketing of their cloth. This reduces their dependence upon middlemen and traders. The cooperative societies should help the weavers by training in new designs.

However, now-a-days, a large section of weavers in Telangana do not get sufficient work from cooperative societies. In some cooperative societies, weavers are not given any role in decision making regarding the procurement of raw material and the sale of cloth and dress material. They do not provide opportunities for weavers to produce sarees to suit the changing preferences of consumers. This has once again pushed the weavers into the clutches of the middlemen and traders.

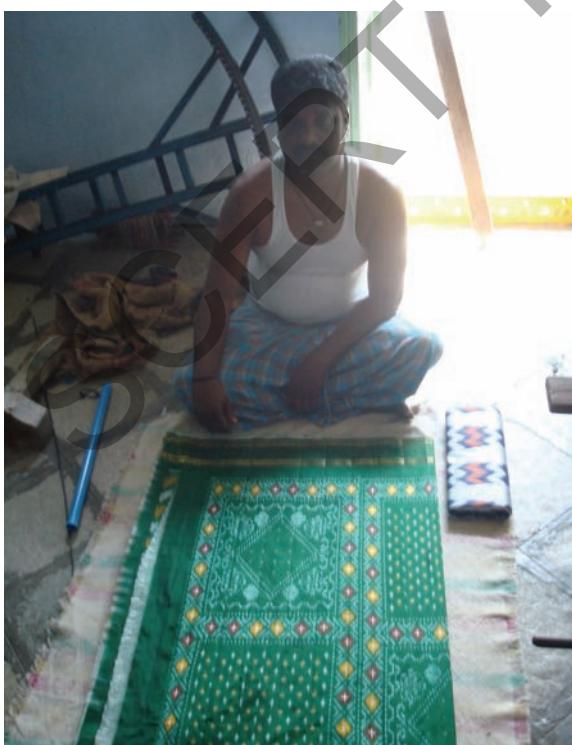


Fig 7.10 Folding the Ikkath Saree

A large amount of handloom cloth material in Telangana is produced and marketed by master weavers and merchants. The master weavers and merchants procure all the raw material, supply it to weavers and collect the woven cloth. Then they sell this material to wholesale cloth merchants. They pay a stipulated amount as wages for the weaving work. Many master weavers also provide loans to weavers to set up a loom, buy other tools and thus restrict them from weaving sarees for other master weavers. They also decide the wages for the work done by the weavers. Since they are interested in raising their own incomes, it is natural for them to look for ways to pay less to the weavers. So, the cooperative societies should provide work and save the distressed weaving families from the master weavers.

- ◆ List the raw materials and tools used to make Ikkat sarees.
- ◆ Why has Jagathayya's family begun to weave for a master weaver?

Keywords :

1. Raw materials
2. *Ikkat*
3. Patent
4. Tie & Dye
5. Warp - Weft
6. Co-operative societies

Improve your learning

1. Do you think people earn enough money from work like basket making and weaving?
2. Prepare a list of goods which could have substituted the basket. Discuss with your parents before preparing the list.
3. Many new products have replaced handicrafts – identify them and find out where they are produced. Discuss how this could affect the lives of handicraft persons.
4. Why did Polaiah's family come to Hyderabad? Why does he have no right to vote in Hyderabad?
5. You may find crafts persons like Polaiah producing goods other than baskets. Meet two such persons, collect the following details and discuss them in the class. One sample is given below.

Sl. No.	Name of the crafts person	Goods produced	One or two important raw materials used	Source of raw materials
1	Polaiah	Baskets	Spokes of date palm leaves	Andugula – native village
2				
3				

6. Why do you think patenting Pochampally Ikkat saree weaving would help weavers in Pochampally?
7. Should weavers procure raw materials, weave Ikkat sarees and sell them directly to the people? What are the challenges in it?
8. Prepare a flow chart depicting the organisation of production in basket making and handloom textile weaving.
9. Mention the differences between basket making and Ikkat saree weaving and fill in the following table:

Work	Raw materials used	Tools used	How goods are sold
Basket making			
Handloom weaving			

10. List the various handicrafts with location in Telangana and prepare a chart.

Discussion: Invite any one artisan available in village/locality, to your school and discuss their profession.

Project:

1. Invite a craftsperson to your classroom or plan visit to a their work place. Make a wallpaper showing different processes of their production.
2. Meet different artisans in village/locality, fill in the following table and discuss in the class.

Sl. No.	Name of the artisan	Profession	Continuing/discontinuing	If discontinued, reasons	If continued, whether they are satisfied

Industrial Revolution

In the previous chapter, you learned about the various ways in which things are made by artisans. We also read that many of them are not able to compete with machine-made products and that many people have stopped practising their professions. In this chapter, we shall explore how machines have come to dominate the way in which products are made and how they impact the lives of people.

Increasing Control of Traders

From 1500 BCE to 1800 BCE, trade between countries in America, Europe, Africa and Asia increased manifold. Textile trade too began to expand. Now, European traders began to use putting out system – that is, they gave advance to small farmers and artisans to produce textile goods. During this period, income from farming was low and many peasants lost their farms and grazing lands. Therefore, textile work helped them to make a living.

Under putting-out system, a cloth trader in Britain purchased cotton from a supplier and carried it to the spinners. Then, the yarn was taken by the trader to the next stage of production - the weavers. The cloth was then taken to the fullers and finally, to the dyers who gave it colour. These different activities could be done in different parts of the country. But, the finishing work was done in London before it was sold in other countries. Thus, textiles goods were

produced by a large number of producers who were controlled by traders. There was no system as in a factory - that is, the different stages of producing cloth did not happen in the same place but in different households. Each trader engaged 20-25 craftspersons at each stage of production.

Sometime later, the traders brought the craftspersons under one roof so that they could explain their requirements and organise the production more effectively. They set up small workshops called *manufactories*. The craftsmen brought their own tools and worked with raw materials given by the trader. Then, the trader took the product and sold it in the market. In this way, slowly, the control of the trader over the craftpersons increased. This phase is called ‘proto-industrialisation’ – a phase in which more and more people entered craft production, traders established control over the workers, and a large market for craft products developed across the world.

Beginning of Industrial Revolution - 1750-1850 BCE

Many changes took place during this period. Around 1750, machines and steam power began to be increasingly used to produce goods, to move goods and people from one place to another. Several people living in villages moved to towns and cities for work. Today, we use many machines and machine-made goods in our daily life. This was the beginning of the ‘machine age’ in Britain.

As the demand for cloth, and other handicrafts increased multiple times, many artisans wondered how they could increase the production to keep up with the demand. Some of them began to think, ‘These days, there is a great demand for our cloth, but we are unable to produce more cloth to meet this demand. Besides, the cloth made in our looms is expensive. If we can make machines that can spin the yarn faster and weave cloth faster, we will be able to produce more cloth at a lower price. Then more people would buy our cloth and we could earn more money.’

As a result of the pressure of trade and work, several people attempted to make

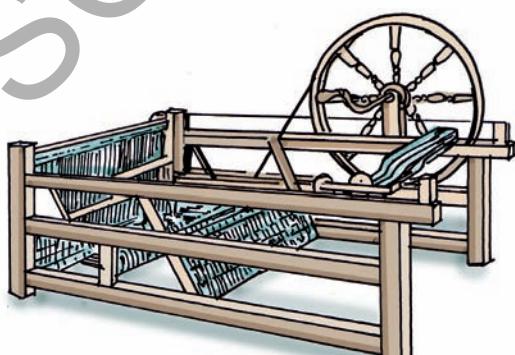


Fig 8.1 Spinning Jenny - A new machine to spin yarn.

such machines. Then came the long awaited invention – a machine which could spin a large amount of yarn in a short time. However, these machines were very heavy and the artisans thought, ‘It is so tiring to turn these machines with our hands or feet. How nice would it be if these machines could turn by themselves!’ This dream also came true with the famous invention of James Watt’s steam engine.

James Watt’s Invention

James Watt was an English craftsman who invented machines. He noticed that steam had so much strength that it could move enormous weight. To tap this energy, he made a machine which would run with the help of steam and would not need men or animals to drive it.

He showed his invention to an industrialist called Boulton and the two entered into a partnership to make such machines. Boulton invested the necessary money and paid a salary to Watt. Watt made the steam engine. They made an agreement

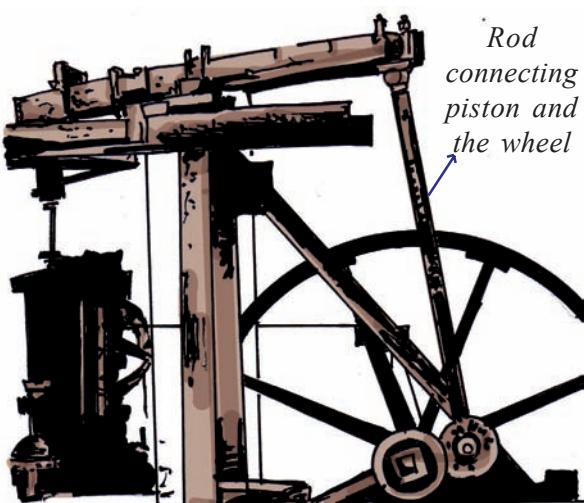


Fig 8.2 This is one of the steam engines made by James Watt. The piston under the pressure from the steam pushes the rod up and down which, in turn, turns the wheel.

between them to share the profits: two thirds to Boulton and one third to Watt. Together, they made a large number of steam engines, sold them and made huge profits. Once it was established that machines could run on steam, such machines were made for all kinds of work – spinning, weaving, making iron tools, driving vehicles and ships etc.

- ♦ How did the need for self-driven machines emerge in England?
- ♦ Do you think the agreement between the scientist-inventor and the capitalist fair ? Give reasons.

Factory System of Production

Between 1750-1850, a new system called the ‘factory system’ emerged. In place of simple tools and manual power, new machines and steam power came to be used increasingly. Production was now carried out in a place called ‘factory’, unlike what we read earlier, where production took place in houses. Hundreds of workers were brought together to work in these large factories. Machines became important in place of minor tools and handlooms. They produced goods on a very large scale.

All the facilities needed for production were owned and managed by individuals called capitalists. They invested money on workers, raw materials, machines, etc. and owned them. Unlike in guild system, workers worked for wages and did not own the things they produced.

The early factories were dreadful places to work.

The Experience of a 19th Century Child Worker

In the 19th century, the industrial workers of Europe had to face several hardships. Let us read about the experiences of a child employed in an English coal mine.

“I have been working in these mines since I was four. Workers hew coal with pickaxes and fill the large wagons with it. Our job is to push these loaded wagons to a point from where horses or mules can haul them. This is a very difficult job. Hauling the loaded wagons through water and slush, and over very steep slopes, leaves us very tired. We have to work in this way for more than 12 hours a day. By the time we return home, we are so tired that we don’t even feel like eating. Yesterday, I fell asleep on my way to home. My mother searched for me and carried me home.”



Fig 8.3 Children pushing a cart inside a coal mine.

Several movements were started to enforce a ban on employing children in factories and mines in such pathetic conditions. In response to these movements, child labour was banned both in Europe and US after 1936.

Inside Early Factories

Major changes swept the industries with the coming of machines. Machines could be worked on by even unskilled persons. Thus, skilled artisans were no longer required. In their place, a large number of women and children were employed and made to work for meagre wages.

Machines cost a lot of money, and ordinary artisans could not afford them. Only wealthy merchants could set up mechanised factories.

This is what the workers had to say about their plight:

“Every day, we come for work at 6 am. and work till 8.30 pm. The lunch break is only for an hour. By the end of the day,

we are too tired to work. But the factory owner uses whips to goad us to keep working.

These days, new machines are being introduced constantly. Since they can do the work of several workers in the same time, fewer workers are required. Every time a new machine is introduced, many of us are thrown into the street.”

Most of these workers had no other option as they had been expelled from their lands and if they were small craftsmen, their shops had closed down. Gradually, workers of factories and mines formed their own organisations to fight against the conditions of work. In the beginning, they demanded for 8 or 10 hours working day, higher wages, disallowing children under 14 years of age from being employed in mines or factories etc. Over time, the struggles and their conditions were improved.



Fig 8.4 Redrawing of an illustration of inside of a factory.

Fig 8.5

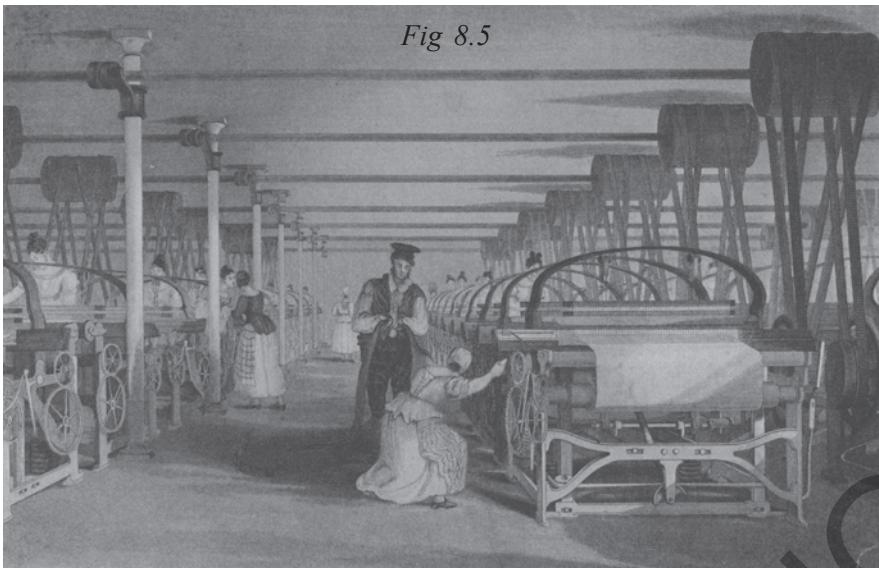


Fig 8.5, 8.6 & 8.7

♦ Look at these illustrations. They are called etching. There were no photographs, but the artists tried to show the details in them. They were made during the time of Industrial revolution. There is also a redrawn illustration on the previous page in colour. How are these pictures different? Which illustration shows more detail? Do you notice children in these illustrations? What details of a factory do you see in them?

Fig 8.6

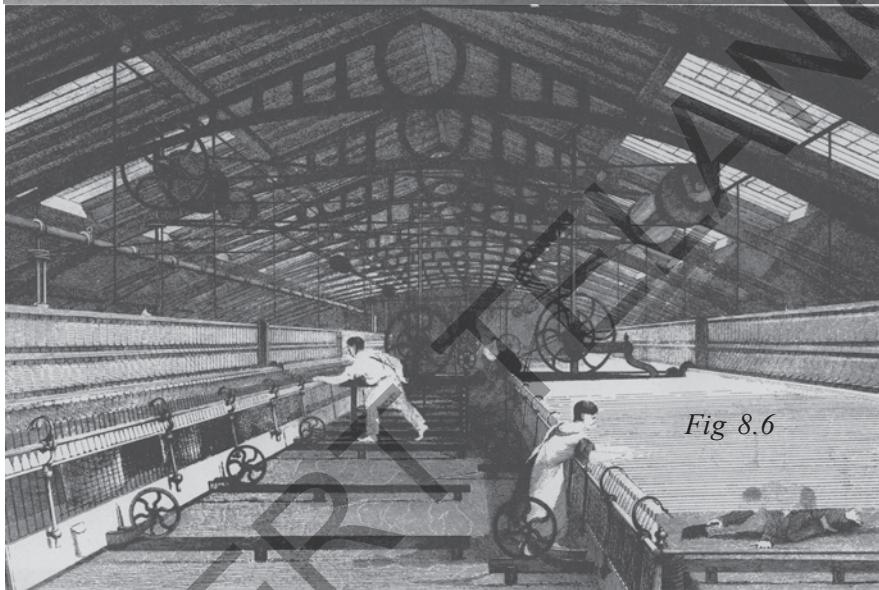
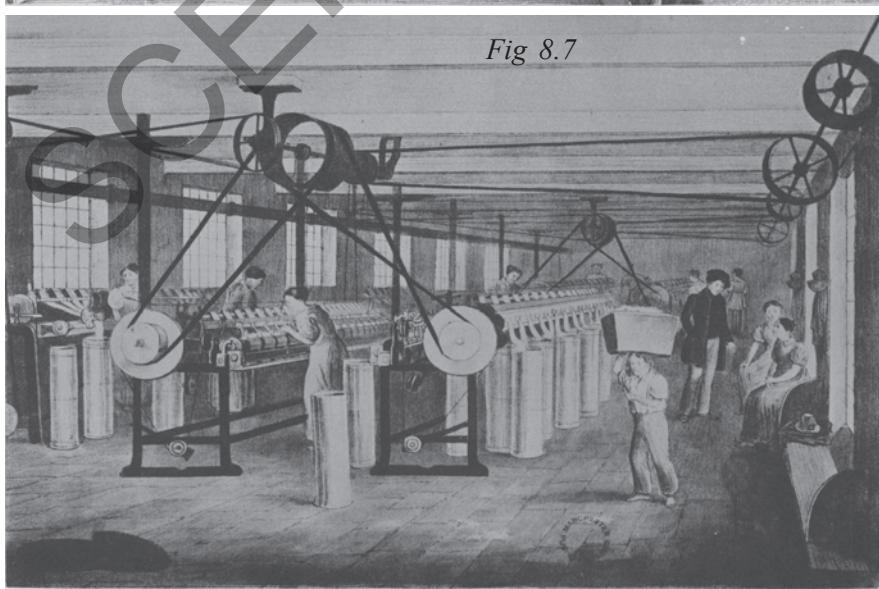


Fig 8.7



- ◆ Who were employed to work on machines?
- ◆ Do you know any factory nearby? Compare its conditions of work with that of English factories of 150 years ago.

The factories too have changed by now. Almost all the work has become automated, with machines directed by computers. They require very few people and little manual work to run them.

Sources of Energy and Industrial Development

You have seen that energy is needed to run machines in a factory. Energy is available from coal, electricity, petroleum, and so on. Initially, industries depended upon the energy from coal and steam. Subsequently, they started using several other sources of energy like thermal and hydroelectricity, petroleum, natural gas, nuclear energy and solar energy.

Transport Revolution

The invention of steam engine boosted the shipping industry. It also reduced the cost of transportation to one third of the cost of road transport. Yet people looked for better means of transportation. The next big thing in the context of transport was adaptation of steam engine to locomotives. George Stephenson's locomotive pulled heavy loads along a 64 kilometre track from Liverpool to Manchester at a speed of 46 kilometers per hour.

In 1840s, John Loudon McAdam devised a method of laying the road using broken stones. This created a hard surface, which was an important advancement in the

construction of roads. Within another decade, bitumen-based binding, which we see in our areas as tar(mac) roads, were built. This was further followed by the use of motor cars.

In the early 20th Century, an aircraft was developed by Wright Brothers and today, air transport is the fastest means of transport.

Trade in Industrial Products

Industrial production increased so much that it was not possible to sell all the products in their own countries. The factory owners began to sell them in other countries too. Machine made goods were cheap and durable. Hence, the demand for them increased all over the world. This gave a boost to the industries in England and other countries. However, the interesting thing about them is they did not have the raw materials required for the production of these goods. For example, the cotton needed for producing cloth was grown in India and America. English traders purchased these raw materials from India and other countries and sold them to factory owners. Subsequently, the traders purchased the finished products and sold them in countries like India, America, etc.

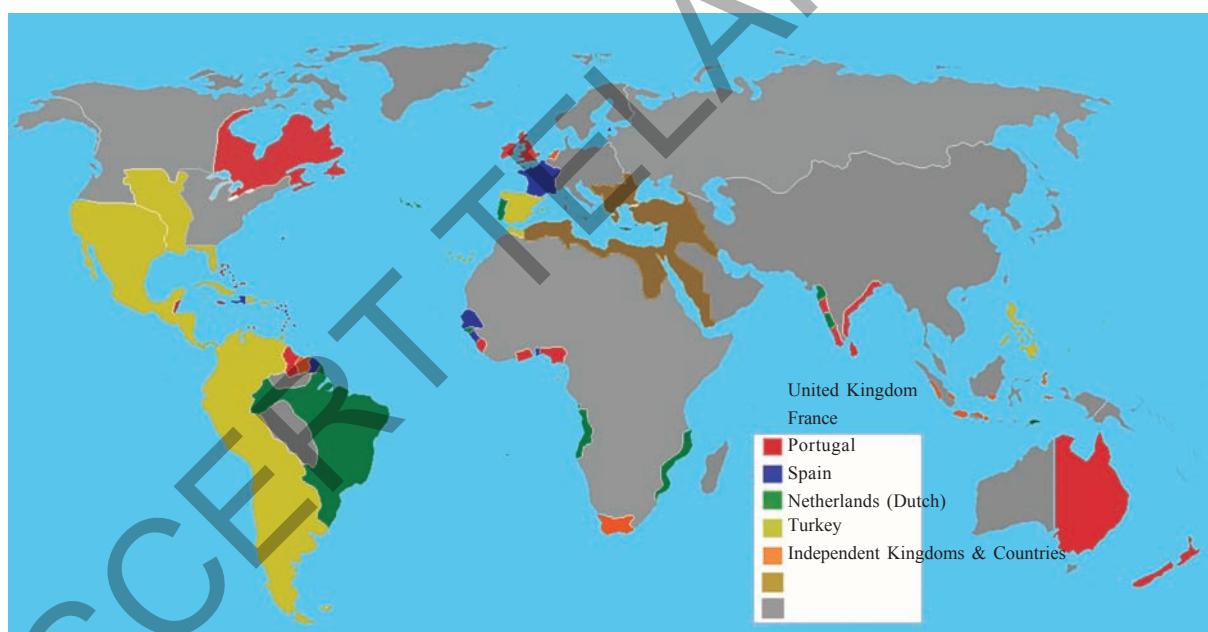
In order to serve the interests of their own trade and industry, the Europeans sought to subjugate these countries. Other countries like France, Germany, Spain, Portugal, Belgium, Holland etc, which considered themselves as mother countries, conquered colonies in Asia, Africa, Australia and America ('Colonies' are those countries whose resources are

used for the benefit of another country). These European countries exploited the colonies in other continents and grew wealthy in the process. Look at the map given below showing the European countries and their colonies around the world in 1800.(map1)

Urbanisation and slums

Industrial revolution led to gradual shift of people from villages to towns. Industries and other urban activities gave livelihood to many people. As people moved to towns which were newly emerging, they settled down in makeshift houses and shelters

which were cramped and had little sanitation or other facilities. Accidents, diseases and epidemics were common. Most workers' residential areas lacked proper ventilation, health and sanitation facilities. Slums became common scenario in towns and cities especially near the factories and mines. At the same time, distinct quarters came up for the rich and the powerful. These areas well provided in terms of open spaces, sanitation, water supply, roads and other facilities. Slowly, people fought for their civic rights and the conditions of the workers quarters also improved.



Map 1: A world map showing colonies of European countries in 1800. Do you notice at this time most colonies were coastal areas including in India. Look at the map of Africa on page 61 and describe the change?

Keywords :

1. Revolution
2. Production
3. Factory
4. Organisation
5. Nuclear Energy
6. Urbanisation
7. Child worker
8. Slums

Improve your learning

- ### 1. Correct the false sentences:

Under the putting-out system,

- a. *Spinners took cotton to the weavers.*
 - b. *Unlike in guild system, traders controlled what product was to be made.*
 - c. *All the work was done by the same group of people.*

Under the Guild system,

- a. *All small farmers were allowed to learn weaving.*
 - b. *Weavers determined the prices and quality of the products.*

2. Putting out system is better than factory based production of textiles. Do you agree? Give reasons for your answer.
 3. If Kruthika argues, “Railways in India were built only for the benefit of the people by the colonial rulers”, how can you counter this statement?
 4. How will the increase in the wages of workers affect industrial production?
 5. Why did factory owners pay low wages and force workers to work for longer hours?
 6. Why do you think the working conditions in factories should be improved?
 7. Why is it necessary for government to enact laws to improve the working conditions?
 8. Why are children not allowed to work in factories?
 9. Transport system helps the industry – justify this statement in the context of Industrialisation.
 10. Locate the following countries in the world map.
 - a) England
 - b) Portugal
 - c) France
 - d) Spain
 11. Read the para ‘Urbanisation and slums’ of page 84 and comment on it.

Project:

1. You may recall the chapter on agriculture and trade in Class VI. Compare the nature of farmers and traders in Telangana with traders in Britain or Europe. You can use a few criteria and tabulate.
 2. Do you know any child working in a factory or shop? If you find, how do you respond?

Production in a Factory – A Paper Mill

Handicraft production is done at home by small families with the help of some simple tools. In contrast, factories produce goods on a large scale with the help of machines and a large number of workers. Let us find out how production is organised in large factories.

- ◆ Have you ever visited any factory? Describe it.
- ◆ Draw a picture of the factory you visited and using your imagination, describe the activities inside a factory in 300 words.

two paper mills in Telangana - Sirpur Kagaznagar (Komrambheem district) and Bhadrachalam (Bhadradri district).

- ◆ Mark the two districts in a map of Telangana. Why do you think are they located there?

Raw Materials

The material required to produce a commodity is called raw material. Factories require a large quantity and a continuous supply of raw material. You will

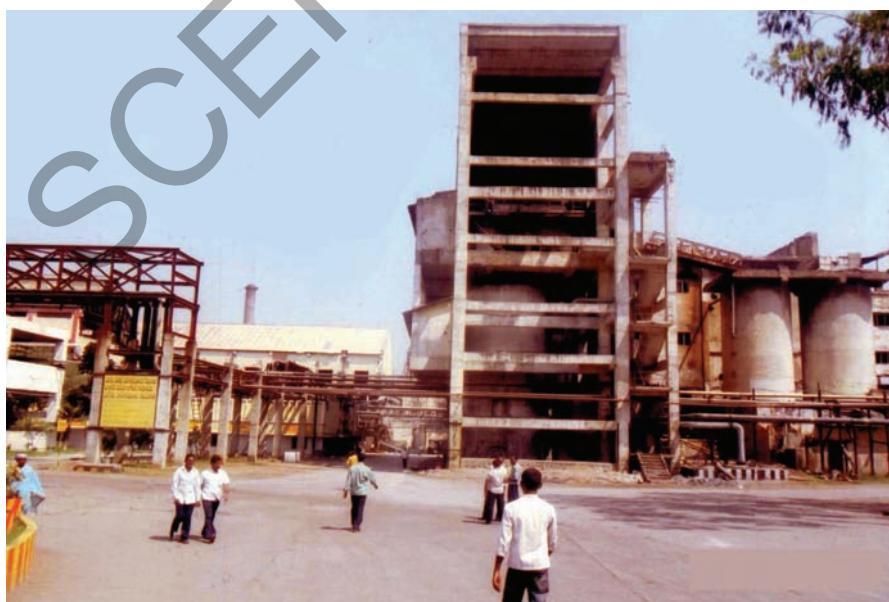


Fig 9.1
Factory from outside



Fig 9.2 Lorries waiting with bamboo loads

find dozens of lorries supplying raw material to factories every day. Paper mills generally use wood from bamboo, eucalyptus and subabul trees. Subabul wood is most widely used now. Besides wood, a number of chemicals like common salt and caustic soda are also used in the different stages of paper-making. Scrap paper is also recycled in paper mills.

Factories use heavy machinery that is run on electricity. For example, the paper mill shown in the figure 11.1 requires nearly 25 Mega Watts of electricity every year. More than half of the electricity requirement is met through the factory's own power generators. Besides electricity, the mill requires a large quantity of clean water throughout the year.

Paper mills and Disappearance of Bamboo

Although raw material for paper is available in the forests, it is not very easy to procure. Paper mills are generally established near forests where bamboo and other soft wood trees are available.

Paper mills engage contractors to supply bamboo and other raw material. A few decades ago, contractors employed tribal people (like those living in Penugulu hills you read about in Class VI) to cut bamboo from forests. Due to excessive cutting in the past, there are no bamboo trees available in forests near the paper mills now.

Hence, these mills are looking for alternative raw materials like subabul trees which are grown in villages. This led the government to encourage people to grow subabul trees on farmland. Now-a-days, paper mills bring wood from distant places.

- ◆ What are the most important raw material required for the paper industry?
- ◆ Would you consider electricity as a raw material? Give reasons.
- ◆ Discuss with your teacher a few mills or factories you know about and fill in the table.

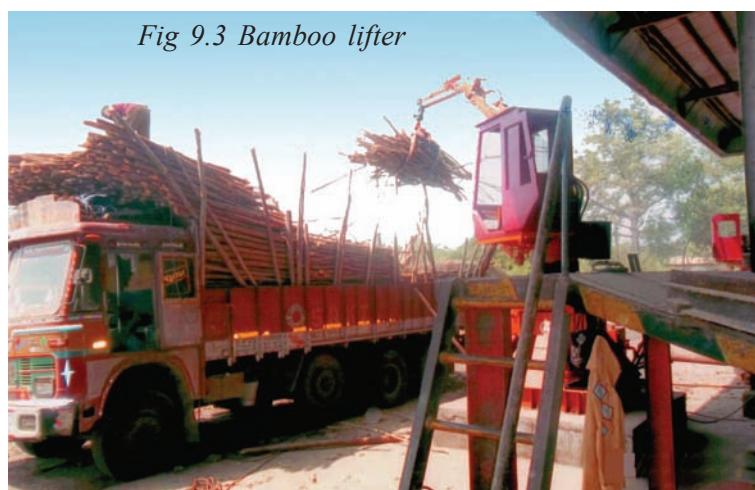


Fig 9.3 Bamboo lifter

S.No.	Product	Name of the industry	Raw Material
1	Shoe/ <i>Chappel</i>	Footwear industry	Leather / rubber / canvas
2			
3			
4			

- ♦ Do you think if we use more paper, we need to cut more forests or reduce the area under cultivation? Discuss.

When we visited the paper mill, we found 4-5 lorries with loads of subabul wood waiting outside the mill gate. They would be allowed to enter the mill only after 9.30 a.m. There were separate gates – one for the workers and the other large gate for the vehicles. We had to take prior permission from the paper mill authorities to visit the mill.

Process of Paper-making

Inside the factory compound, we saw a lifter crane lifting subabul wood from a lorry and placing it on an iron platform. A conveyor belt took the wood to the cutting machine. Paper is actually made in five stages. This paper mill has separate sections for each stage which uses different machines and raw materials. The stages are as follows:



Fig 9.4 Labourer at chipping machine

(i) *Chipping*: In the first stage, large pieces of wood are cut into small chips with the help of large machines. They can cut a lorry load of wood into chips in about 30 minutes. There are about 15 to 20 workers in this section. The chips are then separated according to size. The big chips are again cut into smaller chips. Work goes in this way throughout the day. Can you imagine how many trees have to be cut to run a paper mill for just one day i.e. 24 hours?

(ii) *Making of wood pulp*: The small wood chips are sent to fibre line section. In this section, the wood chips are boiled with some chemicals in large vessels. Through this process, the wood chips are turned into a pulp of thin fibres (like cotton fibres). The liquid pulp is then whitened



Fig 9.5 Labourers at setting machine



Fig 9.6 Pulping machine (Fiber line)

using chemicals. It then becomes creamy. We found the liquid pulp in milky white colour without any dust particles.

(iii) *Spreading the pulp:* The liquid pulp is spread on thin screens over a cylinder. This is an important stage as the width, length and thickness of the paper is set at this stage. The pulp dries up as the water drains out and evaporates due to heat. Once this is done, the pulp is forwarded through the conveyer belt.

(iv) *Pressing, drying and rolling:* The drying pulp is pressed by rollers to smoothen it. When the pulp dries up completely, we get a sheet of paper which is then rolled up.

(v) *Cutting:* The paper is cut in the cutting machines according to the size required. Paper is made into rolls and sheets as well. It is then packed and sent to godowns.

The production work takes place continuously in all the sections simultaneously.

Work in Batches

The paper in the form of rolls and sheets is preserved in godowns. Each roll is labeled with a Batch / Lot no., weight etc. What is a batch? When a lorry load of wood is brought into the factory, the entire quantity of wood is given a batch number. This batch is then sent to different sections one after the other. Raw material of one batch would be processed together at each stage. For example, when batch No. 201 is being cut into small pieces, simultaneously the previous batch (No. 200) would be in the section for making pulp and batch No. 199 would be in the spreading section and so on. As soon as No. 201 is cut into pieces, it would be sent to the next section and No. 202 would come up for cutting into pieces.

Papers produced in one batch would have the same inputs and processing, so their quality will be the same. The batch system allows a factory to produce continuously throughout the day. It also allows the managers to trace any mistake in the product by checking what went wrong with a particular batch.

Working Hours and Shifts

This paper mill runs 24 hours a day. The workers work in three shifts of eight hours each. They are 'A', 'B' and 'C' shifts. In each shift, about 800-900 workers are at work.

A Shift: 6 AM to 2 PM

B Shift: 2 PM to 10 PM

C Shift: 10 PM to 6 AM (Night Shift)

Night shift workers get a special allowance. Workers change their shift

cyclically. Workers of each shift have to move from A shift to B and then to C every week. There is also a general shift for the administrative staff which is from 9.30 am to 5 pm. Administrative staff look after the management, accounts, trade and sales of the product and workers' welfare activities etc.

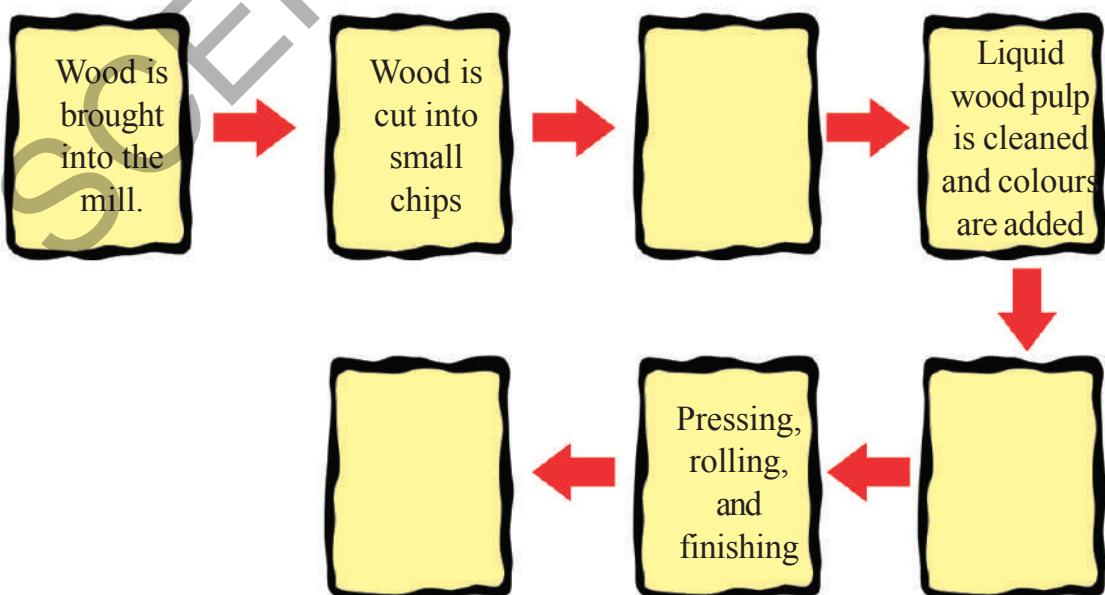
Selling the Paper

This paper mill has marketing depots in different cities. It also sells paper to other countries such as Sri Lanka, Bangladesh, Nepal, Malaysia, Singapore, Nigeria and South Africa. The paper is sold through these depots.

Developed railways and roadways make it is easy to transport wood and paper to and from the mill.

- ◆ Why is it necessary to put the Label / Batch no. on the paper rolls?
- ◆ Why do you think does the paper mill work round the clock? Compare this with agricultural field work.

Fill in the blanks in the flow chart given below:



- ◆ Why is there a security guard at the gate? Enact how the watchman behaves. Which persons or vehicles does he allow or not allow inside the factory?

Working in Paper Mill

A factory employs a large number of workers of different kinds - some work on machines, some help them, some take care of electrical fittings, some help in transporting the materials etc. Some of them are highly qualified engineers while others may have education from ITI and polytechnic colleges. Still others may be illiterate doing manual work like cleaning. A factory also employs people on different terms and conditions.

Some are regular 'permanent' workers of the factory, while some others may be employed as casual workers when the need arises; still others are employed as contract workers. Let us look at this in detail.

Suraj is a permanent worker in the paper mill. You can see him in his uniform - blue shirt and khaki pant in the pressing section.

He has been working in this mill for more than 10 years and gets a salary of Rs. 15,000 per month. As a regular employee, he gets a number of benefits like Provident Fund (that will be paid to him when he retires from service), medical insurance etc. In addition, if, for any reason, his employment is terminated or he cannot work due to an accident, he will be paid a compensation by the factory. He will also get an increment in salary every year. If he or his family members become sick, he takes them to nearby Employees State Insurance (ESI) dispensary and gets medicines free of cost. He pays a small amount and the paper mill pays some amount for availing this facility. Suraj gets regular holidays – one day every week, on festivals, and some additional leaves. He is also given allowances to buy the uniform and get it washed. In due course, Suraj gets bonus too, an additional amount paid to workers when the paper mill earns profits. There are about 1800 such permanent workers in the mill.

Chandu is not a permanent worker but he comes daily and works in the factory.

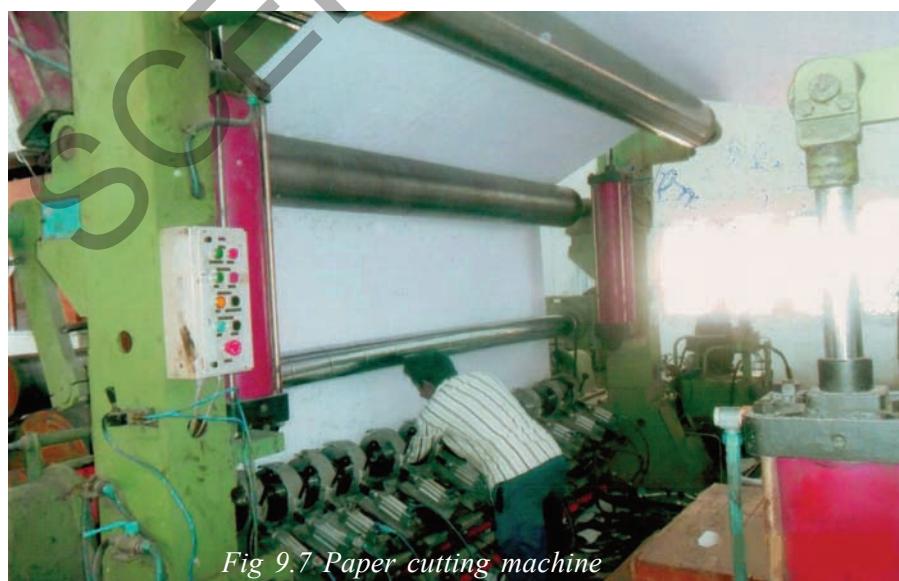


Fig 9.7 Paper cutting machine

He is a contract labourer. He is usually asked to help in unloading the trucks or in packing and loading the paper. Last year, a labour contractor came to his village in Maharashtra and promised him a job in this mill. Workers like Chandu are paid a lower salary than permanent workers (about Rs.8000 a month). They do not get allowances, medical help, bonus and paid holidays. However, they get work throughout the year and may become permanent workers after two or three years.

The women who work in this factory usually clean the floors and paste labels on the paper packets. Tara is working as a casual worker in this factory. Workers who are employed on and off are called 'Casual Workers.' Tara comes every morning to the factory to see if there is work. Usually they employ her for four or five days in a week to clean the floors of the factory. In the section where wood is chipped, there is a lot of wood dust and chips all over the floor. All this has to be cleaned and the machines are to be dusted properly. She is paid about Rs.100-150 on a daily basis. Though she has been working for more than three years, she earns only Rs. 2500 a month. She is not eligible for any of the facilities that are available to permanent workers like Suraj.

Usually factory owners try to reduce their costs by employing casual workers even for regular work. Sometimes, they bring new machines which require fewer workers. In such situations, the workers and their unions resort to agitations and then bargain with the managers to improve their lot.

Besides the workers, the mill also employs a number of accountants, clerks and managers who are paid better salaries. The senior managers who are usually from the families of the owners of the mill get very high salaries along with a number of allowances like free housing and free education for children.



Fig 9.8 Inside the factory

Who Owns the Paper Mill?

This mill does not have a single owner. Some people got together to form a company which owns this mill. These people invested large amounts of money and also borrowed money from the banks

- ♦ Fill the table comparing Suraj, Chandu and Tara's work :

S.No.	Name	Work	Experience	Income	Other Benefits
1	Suraj				
2	Chandu				
3	Tara				

- ♦ Why do you think does a factory employ people on different terms - regular, temporary and casual labourers?
- ♦ What are the problems faced by temporary/casual workers?
- ♦ Why do you think people from faraway places come to work in the paper mills in Telangana?

to set up this factory. They appoint the managers, other administrative staff and regular employees. The workers, managers and administrative staff are paid salaries but not the owners. The owners share amongst themselves whatever money is left after paying wages and other costs of running this paper mill. That is, they get all the profits from the factory. They also bear the losses, if any.

Can you summarise the main features of factory production using the following points?

1. Machines:
2. Raw Materials:
3. Energy and Water:
4. Production:
5. Workers:
6. Managers:
7. Market:
8. Owners:

Some factories are owned not by individual owners or group of owners but by the government. These are run by the government for the welfare of all people

Most factories need raw materials in such large quantities that natural resources like forests, rivers and mines are rapidly exhausting. They also give out smoke and pollute the rivers and surrounding land with their chemical effluents. Thus, there is a need to develop methods to control the damage they cause to the environment.

Factories provide employment to a large number of people. However, the workers who work in these factories often find the work very tedious and many of them become sick due to exposure to dust and chemicals. They also get paid very little. They are also often forced to live in slums with poor facilities.

One of the major challenges before us is to find out how to balance our need for various kinds of goods and the ill effects of the factory system and how to make the life of workers comfortable and dignified.

Pollution

When we were going to the other side of the paper mill, we found some unpleasant smell in the area. This was due to the use of chemicals. After coming out of the paper mill, we talked to a few residents living nearby. They said that this stench was usual and it was common to find dust released from the industry settle on the leaves of plants, in the farms, trees in the nearby area and on garden plants. The mill also draws a lot of fresh water from the river but lets out waste water containing poisonous chemicals, which eventually joins the river.

Only last year, the paper mill got an effluent treatment plant to which all the waste water is sent. This machine removes contaminants (substances causing harm to living organisms through air, water, soil and food) and produce environmentally safe water (treated effluent) and solid waste suitable for disposal or reuse (which is normally used as a fertilizer). Besides this, the paper mills use treated effluent to water their gardens. Some farmers use this for irrigation too.

There are a large number of factories in our state and country, which produce diverse articles of use. They produce them in large quantities in a short time.



Fig 9.9 Rolls of papers

Keywords :

- | | |
|-----------------------|------------------|
| 1. Production process | 6. Bonus |
| 2. Conveyor Belt | 7. Pollution |
| 3. Fiberline | 8. Working hours |
| 4. Label | 9. Raw material |
| 5. Allowance | |

Improve your learning

- Imagine that you wish to start a leather or textile factory. What are the aspects you will have to consider for setting up a mill?
 - Explain the process of paper-making in your own words.
 - Do you think this paper mill will stop working one day? If it does, what will be the impact on the labourers' lives?
 - Imagine a world without paper. What alternatives will you use instead of paper?
 - What are your suggestions to stop the pollution caused by industries?
 - Organise a debate in the classroom on the pros and cons of the paper mill.
 - List the benefits and income received by a regular employee of the paper mill. Contrast them with that of a temporary employee and a casual worker.
 - Compare the production of baskets by craftspersons and production of paper with reference to the following points: (i) Workplace (ii) Tools/machines (iii) Raw materials (iv) Workers (v) Market (vi) Owners.
 - There is a paper mill at Sirpur Kagaznagar in Komrambheem district. Why do you think it is not established in the district headquarters? Discuss.
 - Locate the following countries on the world map.
 - Sri Lanka
 - Singapore
 - Nigeria
 - South Africa
 - Nepal
 - Read the third para of page 91. Do you think that the factories are taking care of their workers health? Why?

Project:

You might have noticed some factories in your area causing pollution. Or imagine that a factory in your locality is causing pollution. Write a letter to the editor of a local newspaper and discuss the contents in the classroom.

Importance of Transport System

In our daily lives, we use various modes of transport to go from one place to another. How people use transport facilities, roads, waterways, railways and airports and why people make different choices to use transport services are discussed in this chapter. Besides these, we will also read about why and how people depend on transport for their source of earning and how markets use transport. You will learn more about the other means of transport such as railways, waterways and airports in higher classes.

You already know a lot about transport systems.

- ♦ Fill the table below with the given words. Some words could be placed more than once. Give reasons for your choice.

Pilgrims, Car, Fish, Cattle, Grain, Bullock-cart, Petroleum, Workers, Ship, Helicopter, Tanker, Lorry, Cycle, Tourists, Iron-ore, Goods Train, Mangoes.

Mode of Transport	Vehicles used	Some products/groups of people – that could be using
Roads		
Railways		
Waterways		
Airways		

Transport System in Telangana

If we look for a big picture about the transport system in the state, we would note the following :

Roads: In India, most roads are built and maintained by the government. There are different types of roads. Some roads are National Highways which are built across different states in the country. For instance,

a road network called National Highway No. 44 runs through Uttar Pradesh, Madhya Pradesh, Maharashtra, Telangana, Andhra Pradesh, Karnataka and Tamil Nadu. While the state government maintains the roads connecting small towns and districts, Panchayats are responsible for the village roads. These roads are made of gravel. Corporations and Municipalities are responsible for urban roads. Roads laid

along the international boundaries are called border roads. Roadways play an important role in connecting the people in remote areas with the main cities.

Railways: One fifth of travellers in India use trains. Railways are mainly used to transport goods like coal, iron ore, fertilizers, cement, food grains etc. Telangana has a well developed railway network connecting all the districts. Railways transport goods to and from sea ports.

Airways: There is one International Airport in Telangana. The International Airport is situated in Hyderabad (Shamshabad). The International Airport is meant for travel from Telangana or neighbouring states to foreign countries. This airport also connects Hyderabad with other cities & states within India.

Waterways: Almost all the goods traded by Indian traders are transported to other countries through its ports. Port cities or towns are thus major trading centres. The state of Telangana does not have any coast lines or ports. Andhra Pradesh has 15 ports out of which Visakhapatnam is the largest. Rivers such as Godavari, Krishna and Penna in Andhra Pradesh and their canals are used as waterways. Seaports are also crucial as most of our foreign trade is done through them.

- ◆ Locate the major airports and port cities on the map of India.



Fig 10.1: In 1932 road transport was introduced under the Nizam with 27 vehicles. You can also see the logo of the then transport company

Use of Roads for production and sale of goods

Most people in Telangana depend on roads for travel. Transport facilities available to villages in Telangana vary. In 2001, nearly three fourth of the villages had transport facilities.

In earlier chapters, there were descriptions about farmers, fisher folk, and industries which depend upon transport for various reasons. Farmers take their produce to Rythu Bazar. Fisher folk need to take the catch to the buyers before it gets spoiled. Paper industry uses lorries to get raw material. Industries that produce goods depend on the transport system to reach their consumers. Let us take the example of cotton. Cotton produced by farmers moves from fields to factories. Since there are different processes through which cloth is produced, it has to move from one place to another until the finished product is made. Markets are thus dependent on transport facilities.

- ♦ Read the following paragraph and solve the problem given below:

Farmers residing in Satyampally sell their paddy mostly in the nearby town, Nayapet, which is about 7 km away from the village. Bullock cart operators can transport about 10 paddy bags at a time and charge Rs. 50 per bag. Tractor owners charge Rs. 20 per bag. Each tractor can carry about 30-40 bags. Lorries charge Rs. 10 per bag and can carry about 150 -170 bags in a trip. In the case of long distances, trucks charge more. For example, to transport paddy from a wholesale trader in Nayapet to the district head quarter, which is about 100 - 120 kms away, truck operators charge Rs. 50 per bag. They charge Rs. 800-1000 per tonne to transport goods for 500 kilometres.

There are three farmers in the village. They cultivated paddy and produced 25 bags, 50 bags and 75 bags respectively. They wish to sell their paddy in the Agriculture Yard in a nearby town, which is 25 kilometres away. What mode of transport would you suggest and why?

- ♦ Find out the fares for travelling in the following types of buses and time taken to travel between any two locations you are familiar with.

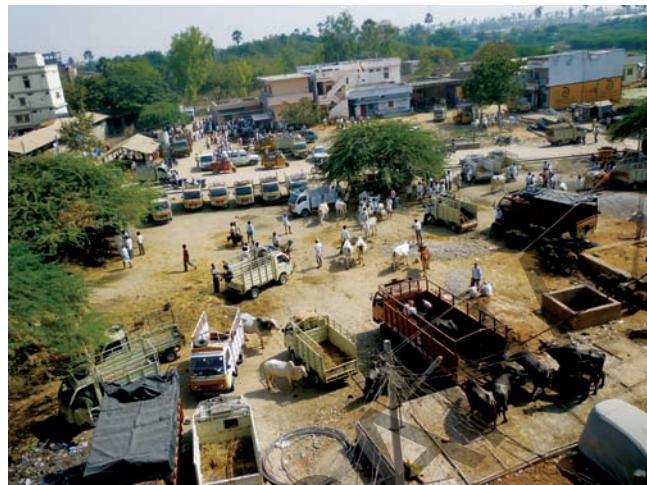


Fig 10.2 Transporting Animals

Employment in Transport Activities

There are two people who operate a bus—a driver and a conductor. For the overall maintenance of transport facilities in a state, hundreds and thousands of people are required. For example, the Telangana State Road Transport Corporation is a government owned transport service which employs about 64,000 people to run about 10,000 buses. These employees maintain accounts, repair buses, or work in the bus depots. Some employees issue bus passes and tickets in bus stands or work as checking inspectors.

Majority of the vehicles running on Telangana roads, that is about, three fourth of them, are two wheelers. The functioning of transport system also requires many support activities – petrol/diesel pump stations, repairing shops, shops selling transport vehicles and spare parts.

Type of bus	Fare	Time taken
Pallelugu / Gramani		
Express		
Deluxe		

- ◆ Do you think the difference in these fares is justified? Give reasons.
- ◆ Along with the difference in fares, there are also differences in facilities and journey time. However, in your opinion, how would most people prefer to travel? If you were responsible for increasing the facilities in them, which type of bus would you give preference to?

Transport Services and Choices

People could use a particular mode of transport depending on the facilities available and affordability. Sometimes, options to use different types of transport are possible. For example, it is possible to travel by bus, train or flight to Bangalore. For centuries, ships were an important mode of travel to far away countries to take people as well as goods. But today, there are fewer people travelling by ships, whereas goods are mostly transported by them.

It is possible that some of you come to school by buses. People who are employed in factories, offices, households, shops etc. also depend on transport. Every city may not have easy access to public transport such as buses, so the people depend on their own vehicles or hired vehicles like auto-rickshaws or taxies.



Fig 10.3 Old and new modes of transport

If the cost of travel is high, people may not be able to move from one place to another. For example, if the wages in one place are higher than in another place, people earning low incomes may wish to move to get higher incomes. But if the transport cost is high, they may not show interest in moving to that place.

The cost of travel, especially for people who earn lower income, is too much, as they have to put away a larger share of their earnings for it. Cycling and walking may not be possible to travel long distances. In big cities, it also becomes important to have enough place for people to walk or ride a bicycle. Even when there are pavements, you may find them occupied by shopkeepers. Sometimes the height of the road and pavement could be so different that persons who use wheelchairs cannot use them and take the risk of riding them along the motorised vehicles.

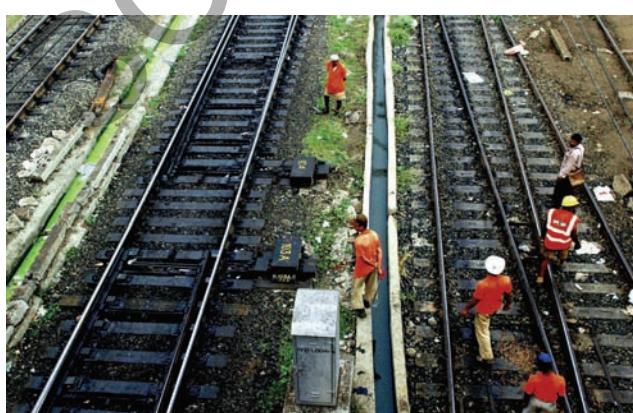


Fig 10.4 Railway workers

- ◆ Umar and Ibrahim study in the same class. They live in different places but the distance from their house to school is three kilometers. Ibrahim comes to school in city bus whereas Umar travels by school bus. What could be reasons for these students to travel by different bus services?

Congestion and Pollution

Most cities in our country are now experiencing congestion and traffic blocks. If the public transport system is not efficient, people buy private vehicles, which can further increase the traffic blockages in urban areas because the roads may not be broad enough to accommodate all these vehicles. Let us try to understand this with the help of an example. The number of people living in six big cities in India increased by two times during 1981 to 2001 whereas the number of motor vehicles went up by eight times during the same period.

Motorcycles and cars are used in a big way. This has led to the increased use of petrol and diesel, which has increased air pollution. To reduce pollution, we should consume less of these petroleum products. Public transport is more efficient in this aspect as it carries more people with minimum cost.

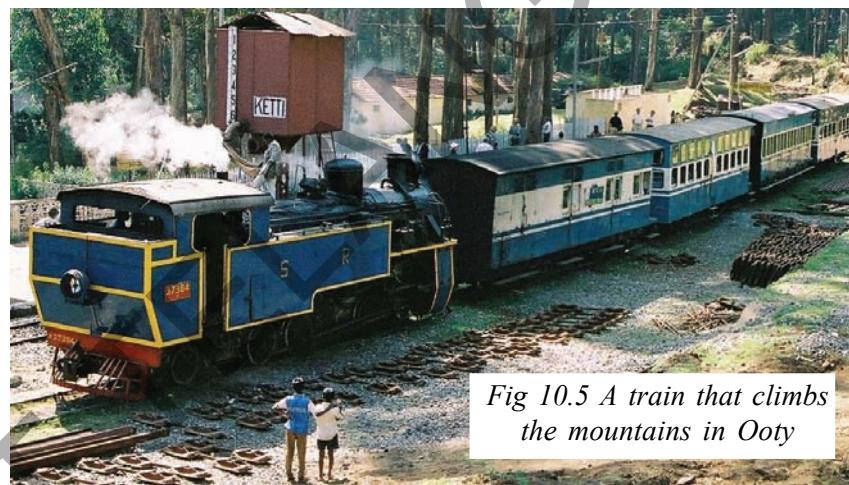


Fig 10.5 A train that climbs the mountains in Ooty

Travelling safety

Road travel now-a-days has become more risky. The road accidents, deaths, and injuries affect low income families as many of those killed or injured tend to be cyclists, pedestrians or pavement dwellers. Accidents can occur not on roads alone. There is risk involved in other means of transport too. In places where roads and railways cross (level crossing), there are often gates to stop the vehicles while the

trains are passing. These are called railway gates. However, if there are no such gates at level crossings, it is important for people and vehicles to stop and look in both the directions before crossing the railway line.

Road Safety Week

In the first week of every year, the Road Transport departments all over the country celebrate Road Safety Week. On this occasion, they give guidelines to the people to follow traffic rules. The government-run companies such as the Telangana State Road Transport Corporation conduct

awareness campaigns among drivers and give them training to drive safely. They also go to schools, to organise essay writing, debate and other competitions for students and encourage them to travel safely following traffic rules. Every person using the transport system – roads, railways or airways and those working in them are required to follow specific safety rules. This will reduce the deaths, injuries and other casualties that occur due to transport.



Fig 10.6 Visakhapatnam port

- ◆ Contact the nearest traffic police office or driving school in your locality or a person who has a driving licence. Find out about how drivers are trained. Identify the details of symbols & signs displayed in the driving school premises.
- ◆ Discuss the basic rules and regulations in using roads and how to travel safely on roads. In your classroom, display a list of traffic rules & symbols.

Keywords :

- | | |
|----------------------|------------------------|
| 1. Safety travelling | 7. State Highway |
| 2. Roadways | 8. Village/Rural roads |
| 3. Airways | 9. Urban roads |
| 4. Waterways | 10. Border roads |
| 5. Railways | 11. TSRTC |
| 6. National Highway | 12. Congestion |

Improve your learning

1. How is the transport system essential for producing agricultural goods? Illustrate with examples.
2. How is the use of buses different from trains?
3. Why is it important to provide transport facilities to villages?
4. Why do you think are waterways important for a country?
5. How does the transport system become a means of livelihood?
6. What will happen if there is a rise in transport cost for goods made in factories? Illustrate with an example.
7. Write a few slogans on ‘Prevention of road/rail accidents’.
8. Congestion and traffic blocks occur due to the use of vehicles in a big way. What measures do you suggest to prevent this?
9. Draw outline map of Telangana State and locate Hyderabad.

Discussion: Organise a demonstration/discussion with the Police Inspector/Constable to the students on the topic “Road accidents-preventive measures”.

Project:

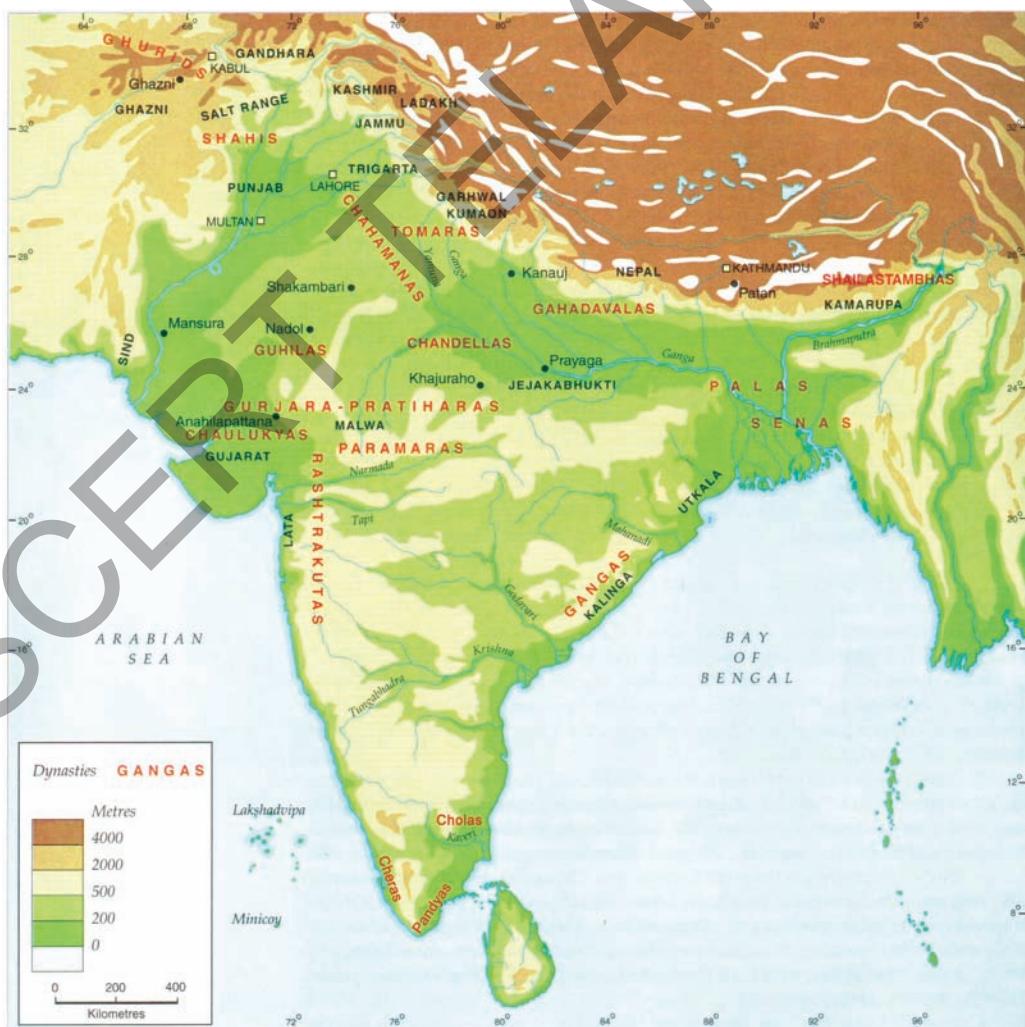
Interact with a driver and obtain information about the dangers and other aspects of his job.

New Kings and Kingdoms

PART - I

Many new dynasties emerged after the seventh century. Map 1 shows the major ruling dynasties in different parts of the subcontinent between the seventh and twelfth centuries.

- Locate the Gurjara-Pratiharas, Rashtrakutas, Palas, Cholas and Chahamanas (Chauhans).
- Can you identify the present day states over which they exercised control?



Map 1: Major Dynasties of Northern, Central and Eastern India, c.700-1100 CE

The Emergence of New Dynasties

By the seventh century, there were many influential landlords or warrior chiefs in different regions of the subcontinent. Existing kings often acknowledged them as their subordinates or *samanthas*. They were expected to bring gifts for their kings or overlords, be present at their courts and provide them with military support. As *samanthas* gained power and wealth, they declared themselves to be *maha-samantha*, *maha mandaleshvara* (the great lord of a “circle” or region) and so on. Sometimes, they asserted their independence from their overlords.

One such instance was that of the Rashtrakutas in the Deccan. Initially, they were subordinate to the Chalukyas of



Fig 11.1 Wall relief from Cave 15, Ellora, showing Vishnu as Narasimha, the man-lion. It is a work of the Rashtrakuta period

Karnataka. In the mid-eighth century, Dantidurga, a Rashtrakuta chief, defeated his Chalukya overlord and performed a ritual called *hiranya-garbha* (literally, the golden womb). It was thought to lead to the “rebirth” of the sacrificer as a Kshatriya, even if he was not a kshatriya by birth.

- ◆ Do you think being born in a particular *varna* was important in order to become a ruler during this period?

In other cases, men from enterprising families used their military skills to carve out kingdoms. For instance, the Kadamba Mayurasharman and the Gurjara-Pratihara Harichandra were brahmins who gave up their traditional professions and took to arms, successfully establishing kingdoms in Karnataka and Rajasthan respectively.

Prashastis and Land Grants

The invocation part of an inscription is *Prashasti*. *Prashastis* contain details about the ruling family such as their predecessors and the period to which they belonged. They also contain encomiums of rulers and their achievements. But they tell us about how rulers wanted to depict themselves, for example valiant, victorious warriors. These were composed by learned brahmins, who occasionally helped in the administration.

The “achievements” of Nagabhata

Many rulers described their achievements in *prashastis*.

One *prashasti*, written in Sanskrit and found in Gwalior, Madhya Pradesh, describes the exploits of Nagabhata, a Pratihara king, as follows:

The kings of Andhra, Saindhava (Sind), Vidarbha (part of Maharashtra) and Kalinga (part of Odisha) fell before him Even as a prince ...

He won a war over Chakrayudha (the ruler of Kanauj) ...

He defeated the king of Vanga (part of Bengal), Anarta (part of Gujarat), Malva (part of Madhya Pradesh), Kirata (forest peoples), Turushka (Turks), Vatsa, Matsya (both kingdoms in north India)

Find these areas in Map 1.



Fig 11.2 This is a set of copper plates recording a grant of land made by a ruler in the ninth century, written partly in Sanskrit and partly in Tamil. The ring holding the plates together is secured with the royal seal, to indicate that this is an authentic document

Kings often rewarded brahmins and others who served them by grants of land. These were recorded on copper plates, which were given to those who received the land.

In the twelfth century, a long Sanskrit poem containing the history of kings who ruled over Kashmir, was composed by an author named Kalhana. He used a variety of sources, including inscriptions, documents, eyewitness accounts and earlier histories, to write his account. Unlike the writers of *prashastis*, he was often critical about rulers and their policies.

What was given with the land?

This is a part of the Tamil section of a land grant given by the Cholas:

We have demarcated the boundaries of the land by making earthen embankments, as well as by planting thorny bushes.

This is what the land contains: fruit-bearing trees, water, land, gardens and orchards, trees, wells, open spaces, pasture-land, a village, anthills, platforms, canals, ditches, rivers, silt-laden land, tanks, granaries, fish ponds, bee hives, and deep lakes.

He who receives the land can collect taxes from it. He can collect the taxes imposed by judicial officers as fines, and the tax on betel-leaves, woven cloth, vehicles etc.

He can build large rooms, with upper storeys made of baked bricks, he can get large and small wells dug, he can plant trees and thorny bushes, if necessary, he can also get canals constructed for irrigation. He should ensure that water is not wasted, and that embankments are built.

- ◆ List all the possible sources of irrigation mentioned in the inscription, and discuss how they might have been used.

Administration in the Kingdoms

Many of these new kings adopted high-sounding titles such as *maharaja-adhiraja* (great king, overlord of kings), *tribhuvana-chakravarti* (lord of the three worlds) and so on. However, in spite of such claims, they often shared power with their *samanthas* as well as with the associations of peasants, traders and brahmins.

In each of these kingdoms, resources were obtained from the producers – that is, peasants, cattle-keepers, artisans and traders were made to surrender a part of what they produced and sold. Sometimes, these were claimed as “rent” due to a lord who asserted that he owned the land. Revenue was also collected from traders.

These resources were used to finance the king’s establishment, as well as for the construction of temples and forts. They were also used to fight wars, which were in turn expected to lead to the acquisition of wealth in the form of tribute, and access to land as well as trade routes.

The functionaries for collecting revenue were generally recruited from ruling families, and positions were often hereditary. This was true about the army as well. In many cases, close relatives of the king held these positions.

- ◆ In what ways was this form of administration different from the present day system?

Warfare for Wealth

You may have noticed that each of these ruling dynasties was based in a specific region. At the same time, they tried to control other areas. One particularly prized area was the city of Kanauj in the Ganga valley. For centuries, rulers belonging to the Gurjara-Pratihara, Rashtrakuta and Pala dynasties fought for control over Kanauj. As there were three “parties” in this long-drawn conflict, historians often describe it as the “tripartite struggle”.

Look at Map 1 and suggest reasons for the rulers wanting to control Kanauj and the Ganga valley.

Mahmud Ghazni :

One of the rulers, *Sultan Mahmud* of Ghazni, Afghanistan, ruled from 997 Common Era (CE) to 1030 CE, and extended control over parts of Central Asia, Iran and the north-western part of the subcontinent. He raided Northern India many times and plundered and destroyed wealthy temples, including that of Somnath in Gujarat. Much of the wealth that Mahmud looted was used to build the capital city at Ghazni.

Sultan Mahmud was also interested in finding out more about the people he conquered, and entrusted a scholar named Al-Biruni to write an account of the subcontinent. This Arabic work, known as the *Kitab al-Hind*, is an important source for historians. Al-Biruni consulted Sanskrit scholars to prepare this account.

Chahamanas (Chowhans)

Chahamanas, later known as the Chauhans, ruled over the region around Delhi and Ajmer. They attempted to expand their control to the west and the east, where they were opposed by the Chalukyas of

Gujarat and the Gahadavalas of western Uttar Pradesh. The best-known Chahamana ruler was Prithviraja III (1168 CE-1192 CE), who defeated an Afghan ruler named Sultan Muhammad Ghori in 1191 CE, but lost to him the very next year, in 1192 CE.

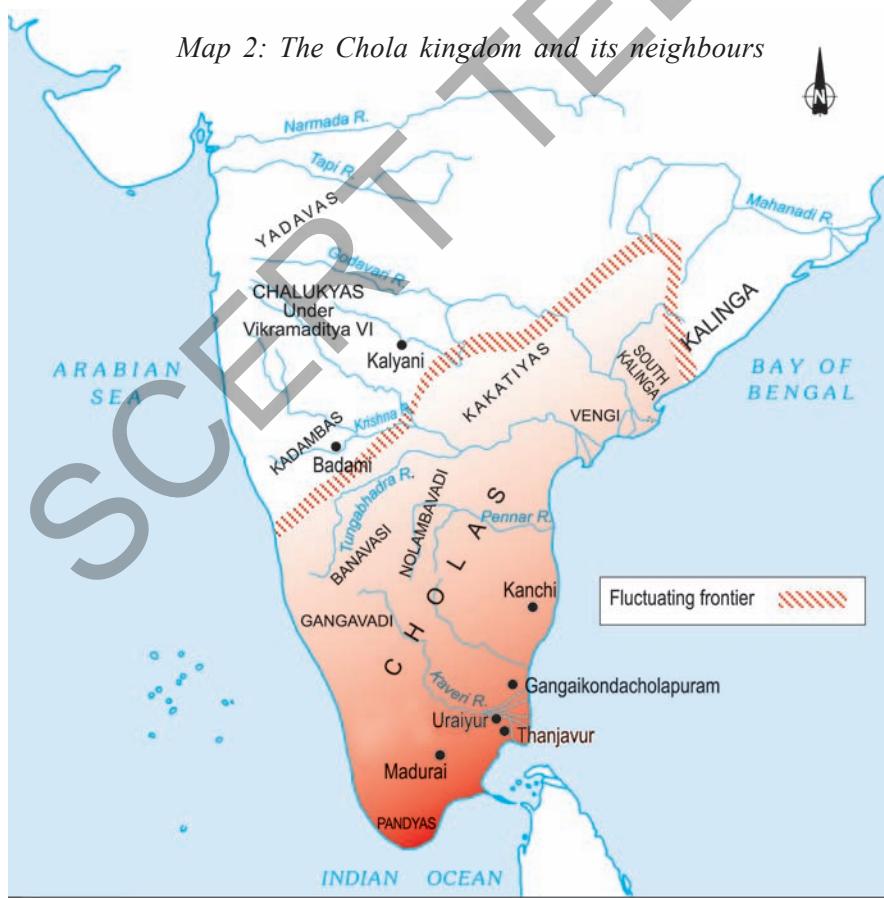
Look at Map 1 again and discuss why the Chahamanas may have wanted to expand their territories.

PART - II

The Cholas

Let us take a look at Southern India now.

Chola rule is one of the well documented in the history of the South. Let us see how they became successful rulers.



From Uraiyur to Thanjavur

How did the Cholas rise to power? A minor chiefly-family known as the Muttaraiyar held power in the Kaveri delta. They were subordinates to the Pallava kings of Kanchipuram. Vijayalaya, who belonged to the ancient chiefly-family of the Cholas from Uraiyur, captured the delta from the Muttaraiyar in the middle of the ninth century. He built the town of Thanjavur and a temple for goddess Nishumbhasudini there.

The successors of Vijayalaya conquered neighbouring regions and the kingdom grew in size and power. The Pandyan and the Pallava territories to the south and north were made part of this kingdom. Rajaraja I, considered the most



Fig 11.3 The temple at Gangaikonda-Cholapuram. Notice the way in which the roof tapers. Also, look at the elaborate stone sculptures used to decorate the outer walls

powerful Chola ruler, became the king in 985 CE and expanded his control over most of these areas. He also reorganised the administration of the empire. Rajaraja's son Rajendra I continued his policies and even conquered the Ganga valley, Sri Lanka and countries of Southeast Asia, developing a navy for these expeditions.

Splendid Temples and Bronze Sculpture

The big temples of Thanjavur and Gangaikonda-Cholapuram, built by Rajaraja and Rajendra, are architectural and sculptural marvels.

Chola temples often became the nuclei of settlements which grew around them. They were also the centres of craft production. Temples were also endowed with land by rulers as well as by others. The produce of this land went into maintaining

the specialists who worked in the temple and very often lived near it – priests, garland makers, cooks, sweepers, musicians, dancers etc. In other words, temples were not only places of worship, but also the hub of economic, social and cultural life as well.

Amongst the crafts associated with temples, the making of bronze images was the most distinctive.

Chola bronze images are considered to be the finest in the world. While most images were of deities, some images of devotees were made as well.

Agriculture and Irrigation

Many of the achievements of the Cholas were made possible through new developments in agriculture. Look at Map 2 again. Notice that the river Kaveri branches off into several small streams before emptying into the Bay of Bengal. These streams overflow frequently, depositing fertile soil on their banks. Water from the streams also provides the necessary moisture for agriculture, particularly the cultivation of rice.



Fig 11.4 A Chola bronze sculpture. Notice how carefully it is decorated

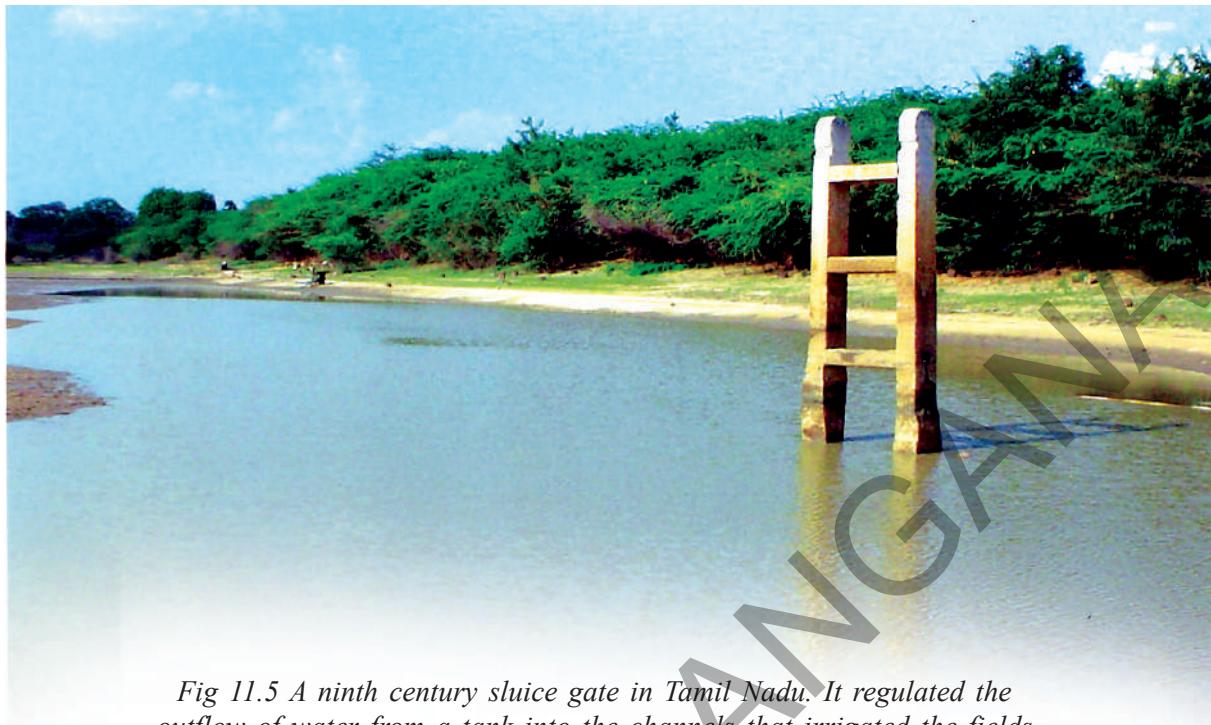


Fig 11.5 A ninth century sluice gate in Tamil Nadu. It regulated the outflow of water from a tank into the channels that irrigated the fields

Although agriculture had developed earlier in other parts of Tamil Nadu, it was only from the fifth or sixth century that this area was opened up for large-scale cultivation. Forests had to be cleared in some regions; land had to be levelled in other areas. In the delta region, embankments had to be built to prevent flooding and canals had to be constructed to carry water to the fields. In many areas, two crops were grown in a year.

In many cases, it was necessary to water the crops artificially. A variety of methods were used for irrigation. In some areas, wells were dug. In other places, huge tanks were constructed to collect rainwater. Remember that irrigation works require planning—organising labour and resources, maintaining these works and deciding on how water is to be shared. Most of the new rulers, as well as people living in villages, took an active interest in these activities.

The Administration of the Empire

How was the administration organised? The king had a council of ministers to help him. He had a strong army and navy. The empire was divided into *mandalams* or provinces, further subdivided into *valanadus* and *nadus*.

Settlements of peasants, known as *ooru*, became prosperous with the spread of irrigated agriculture. Groups of such villages formed larger units called *nadu*. The village council and the *nadu* performed several administrative functions including dispensing justice and collecting taxes.

Rich peasants of the Vellala caste exercised considerable control over the affairs of the *nadu* under the supervision of the central Chola government. The Chola kings gave some rich landowners titles like *muvendavelan* (a *velan* or peasant serving

three kings), *araiyar* (chief) etc. as markers of respect, and entrusted them with important offices of the state at the centre.

Types of land

Chola inscriptions mention several categories of land:

vellanvagai

land of non-brahmin proprietors

brahmadeya

land gifted to brahmins

shalabhoga

land for the maintenance of a school

devadana, tirunamattukkani

land gifted to temples

pallichchhandam

land donated to Jaina institutions

We have seen that brahmins often received land grants or *brahmadeya*. As a result, a large number of Brahmana settlements emerged in the Kaveri valley as in other parts of South India.

Each *brahmadeya* was looked after by an assembly or *sabha* of prominent Brahmana landholders. These assemblies worked very efficiently. Their decisions were recorded in detail in inscriptions, often on the stone walls of temples. Associations of traders known as *nagarams* also occasionally performed administrative functions in towns.

Inscriptions from Uttaramerur in Chingelput district, Tamil Nadu, provide details of the way in which the *sabha* was

organised. The *sabha* had separate committees to look after irrigation works, gardens, temples etc. Names of those eligible to be members of these committees were written on small tickets of palm leaf; these tickets were put into an earthenware pot from which a young boy was asked to take out the tickets, one by one for each committee.

Inscriptions and texts

Who could be a member of a *sabha*? The Uttaramerur inscription lays down:

All those who wish to become members of the *sabha* should be owners of land from which land revenue is collected.

They should have their own homes.

They should be between 35 and 70 years of age.

They should have the knowledge of the Vedas.

They should be well-versed in administrative matters and be honest.

If anyone has been a member of any committee in the last three years, he cannot become a member of another committee.

Anyone who has not submitted his accounts, including details of his relatives, cannot contest the elections.

- ♦ Do you think women participated in these assemblies? In your view, are lotteries useful for choosing members of committees?

While inscriptions tell us about kings and powerful men, here is an excerpt

from the *Periyapuram*, a twelfth-century Tamil work, which informs us about the lives of ordinary men and women.

On the outskirts of Adanur was a small hamlet of *Pulaiyas*, studded with small huts under old thatches and inhabited by agrarian labourers engaged in menial occupations. In the thresholds of the huts covered with strips of leather, little chickens moved about in groups; dark children who wore bracelets of black iron were prancing about, carrying little puppies ... In the shade of the *marudu* (arjuna) trees, a female labourer put her baby to sleep on a sheet of leather; there were mango trees from whose branches

drums were hanging; and under the coconut palms, in little hollows on the ground, tiny-headed female dogs lay after whelping. The red-crested cocks crowed before dawn calling the brawny *Pulaiyar* (plural) to their day's work; and by day, under the shade of the *kanji* tree spread the voice of the wavy-haired *Pulaiya* women singing as they were husking paddy ...

- ◆ Describe all the activities that were taking place in the village.

Keywords :

- | | | |
|--------------------|------------|-----------|
| 1. <i>Samantha</i> | 2. Temple | 3. Nadu |
| 4. Sabha | 5. Kingdom | 6. Sultan |

Improve your learning

1. Who were the parties involved in the “tripartite struggle”?
2. What were the qualifications to be a member of a committee of the *sabha* in the Chola empire?
3. Which two major cities were under the control of the Chahamanas?
4. How did the Rashtrakutas become powerful?
5. What did the new dynasties do to gain acceptance?
6. What kind of irrigation works were developed in the Tamil region?
7. What were the activities associated with Chola temples?
8. Contrast the “elections” in Uttaramerur with the present-day panchayat elections.
9. Collect the pictures of ancient temples and make an album.
10. Read the first two paragraphs of the section titled ‘Agriculture and Irrigation’ and comment on them.

Project:

1. Look at Map 1 and find out whether there were any kingdoms in Telangana.
2. Compare the temple shown in this chapter with any present-day temple in your neighbourhood.
3. Find out more about taxes that are collected now a days. Are these in cash, kind, or labour services?

The Kakatiyas - Emergence of a Regional Kingdom

You may have listened to many ballads and stories about the bravery and martial skill of Brahma Naidu, Balachandrudu and the 66 heroes. You may also have participated in Jataras dedicated to Sammakka and Sarakka - they fought against armies of kings to protect the rights of the tribal people. You might have enjoyed the popular story of Katama Raju who fought with the Kings of Nellore in defence of the right of animal herders.

Find out from your parents and elders about the stories of the Palnati Virulu, Sammakka-Sarakka and Katama Raju. Relate these stories in the class.

All these stories relate to the period from 1000 to 1350 CE. This was a very important period in our history. In the previous chapter, we read about the new ruling families that emerged all over India. These rulers sought to establish small kingdoms over agricultural villages and to enable their herder-followers to settle down as agriculturalists. These ambitious warriors and kings fought against each other constantly. Amidst this situation, the Kakatiya kingdom arose in Warangal.

This was also the time when the first books in Telugu were written. According to the tradition, Srimad-Andhra Mahabharatam is the first poetic work in Telugu which was composed by *Kavitrayamu*, the Trinity of Poets - Nannaya, Tikkana and Erra Pragada between 1000 and 1400 CE.

We have a large number of inscriptions (Bayyaram, Thousand Pillars temple,

Nagulapadu, Pillalamarri, Palampet, Kondaparthi, Bhuthpur) which tell us about the activities of the kings, queens, chiefs, farmers, herders and traders. There are also a number books written about them in Sanskrit and Telugu. Vidyanaatha wrote *Prathaparudra Yashobhushanam* during the Kakatiya rule. Some works were also written after the end of their rule (Vinukonda Vallabharaya's *Kridabhiramamu*, Ekamranatha's *Prataparudra Charitramu*).



Fig 12.1 Kirti Torana entrance of Svayambhu Siva Temple - built by Kakatiya kings in Warangal.

Having read the above passage, can you identify the two important sources of information about the Kakatiya kings?

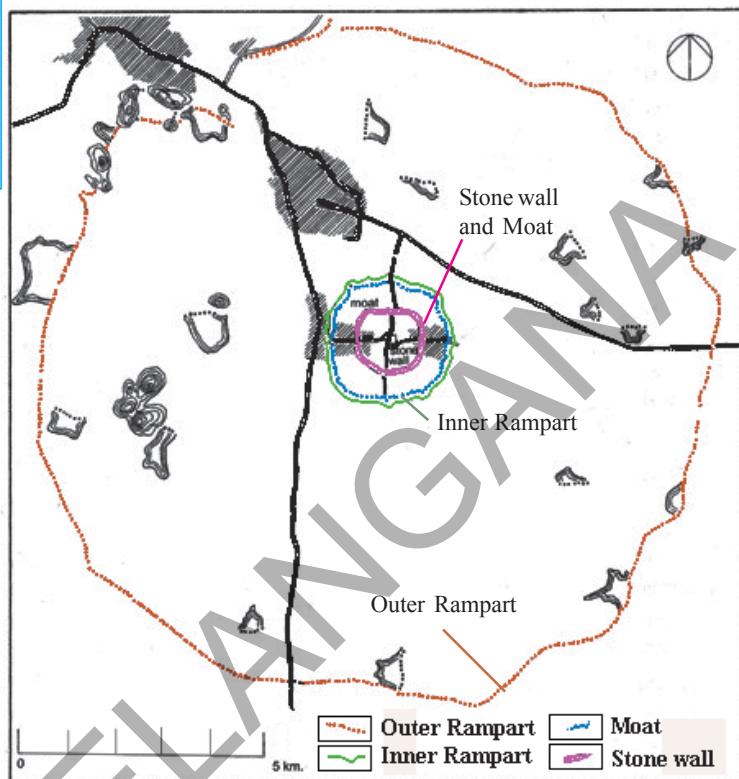
According to inscriptions and literature, the Kakatiyas traced their lineage to certain Durjaya. They also adopted Telugu as the favoured language of the court. Most of their inscriptions are in Telugu and they called themselves as ‘Andhra Rajas’. They also sought to bring together the three regions in which Telugu was spoken - the present coastal regions, Telangana region and Rayalaseema region. In this manner, the Kakatiya kings tried to build a Telugu regional consciousness. To some extent, they were also successful, as even to this day, they are remembered fondly in these regions.

Important Kakatiya Rulers

Prola II	1116 - 1157CE
Rudradeva	1158 - 1195CE
Ganapati Deva	1199 - 1262CE
Rudramadevi	1262 - 1289CE
Prataparudra - II	1289 - 1323CE

The early members of the dynasty began their career as warriors and *samanthas* of Rashtrakuta and Chalukya kings who were ruling in Karnataka. They held the posts of village heads called *Rattadi* and through their military skills became army chiefs, *samanthas* etc. and gradually gained control over Anmakonda in Telangana. The

Map 1: Orugallu Fort



Kakatiyas emerged as independent rulers after the fall of the Western Chalukyas.

During Rudradeva's rule (1158-1195 CE), the capital was shifted from Anmakonda (Hanumakonda) to Orugallu (Warangal). The new city was laid out with a plan to accommodate the growing city population and to address the needs of an imperial capital. Rudradeva built a big fort, a tank and a temple called Thousand Pillared Temple in Anmakonda (Hanumakonda).

Look at the map of Orugallu Fort. You can see an outer fort wall with four gates. This wall protected the agricultural lands and several water tanks within it. In this area, there were huts of many artisans like basket weavers. After crossing these, we come to the centre where there was another moat and a fort wall made of mud.

Further towards the centre was another moat and fort wall made of stone. The city buildings and palaces were within this stone wall. It had four gates opening out into the east, west, north and south. From each gate, a main road went to the centre of the city, where there was a temple of Svayambhu Siva. This temple too had four gates in the four directions.

The city itself was divided into several quarters or *vadas*. People of one profession lived in one distinct *vada*.

- ◆ Can you draw a rough map of your village or town and compare it with the map of Orugallu?
- ◆ What are the main differences between modern towns and the cities of the past, like Orugallu?
- ◆ Use the scale shown on the map to find out the breadth of the outer wall from East to West.
- ◆ Also, find out the breadth of the city within the inner stone wall from north to south.
- ◆ If you have ever been to Warangal, describe it to your classmates.
- ◆ Svayambhu Siva was the family god of the Kakatiyas. Why do you think did they build a temple and not a palace or market place in the middle of the city?

As Kakatiya kings became powerful, they were able to persuade many chiefs to accept them as their kings. The Kakatiyas protected their *samantha* subordinates from other warriors and chiefs. They took also the *samanthas* with them when they went to conquer other kingdoms. Many of

the *samantha* chiefs attempted to become independent but the Kakatiya kings sent armies to subdue them.

Rudrama Devi

Have you heard of a brave woman ruler by the name of Rudramadevi? She was a powerful and successful ruler who impressed one and all with her abilities. Rudramadevi ruled from Orugallu (modern Warangal) and belonged to the famous Kakatiya family. She ruled from 1262 CE to 1289 CE for nearly 27 years. In our country, there have been very few women rulers. In distant Delhi too, there was a woman ruler called Razia Sultana some years before. But her nobles did not like to be ruled by a woman and had killed her. A famous traveller from Italy, called Marco Polo visited Rudramadevi's kingdom and said that she was fearless, dressed herself like a man and rode horses with ease. In fact, in inscriptions, Rudramadevi was known as Rudradeva Maharaja. Like Razia



Fig 12.2 Rudramadevi - Riding the Horse.
(Modern representation in Hyderabad)

Sultana, she too faced the opposition of many important chiefs who had been under her father, but Rudramadevi succeeded in subduing them. Rudrama and her grandson Prataparudra faced many revolts and took

several steps to control these chiefs. But Kayastha Ambadeva, one of her subordinates revolted against her. In the war that took place at Chandupatla, in Nalgonda district, Rudramadevi lost her life.



Fig 12.3 A segment of the inner earthen wall with its (dry) moat at right

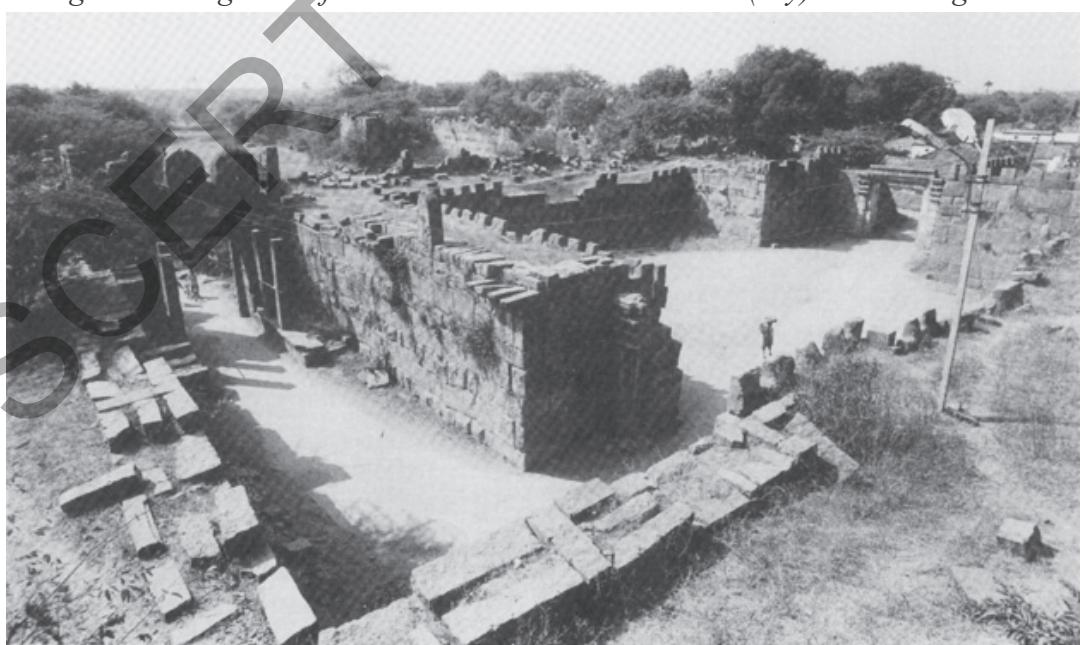


Fig 12.4 Aerial view of the eastern gateway in the city's inner stone wall, showing the 'bent entrance' (Vankadari) and open courtyard (anganam). The doorway at right is the 'great city gate' leading to the royal avenue (raja margambu)

Nayakara System

Rudramadevi and Prataparudra encouraged several skilled warriors who were not from any powerful family but were very loyal to the queen and the king. They gave them high positions and the title of Nayaka. They were given the authority over several villages from where they could collect taxes. These villages were called their Nayakara. Each nayaka had to maintain a stipulated amount of army from the income they got from their nayakara for the service of the king. But they did not keep these villages permanently as they could be transferred at the will of the king to a new place. These Nayakas depended upon the queen or the king and remained loyal to them. They were also probably used to subdue the rebellious chiefs. This arrangement was called Nayakara system.

Read here a portion of an inscription by a nayaka of Rudramadevi :

"In the year (1270 CE), on the occasion of Sankranti, Bollinayaka, the guardian of the gate for Kakatiya Rudradeva Maharaja, gave ten measures of land to the temple servants of God Kalyana Keshava of Kranja village in his own nayakaramu for the merit of his master Rudradeva Maharaja."

- ◆ Why do you think Bollinayaka was calling Rudramadevi as Rudradeva Maharaja?



Fig 12.5 The remains of the great temple dedicated to Lord Siva

Encouragement to Agriculture and Temples

The Kakatiyas brought large tracts of land under cultivation by building tanks and digging wells. Apart from the members of the royal family and other feudal families, the rich sections of the society such as merchants and artisans participated in expanding agriculture through the construction of tanks. This enabled the extension of cultivation to the difficult terrains of Telangana and Rayalaseema.

The Kakatiyas also extensively patronised temples by donating to them. Women members of the royal family like Muppamamba, and Mailamma made land

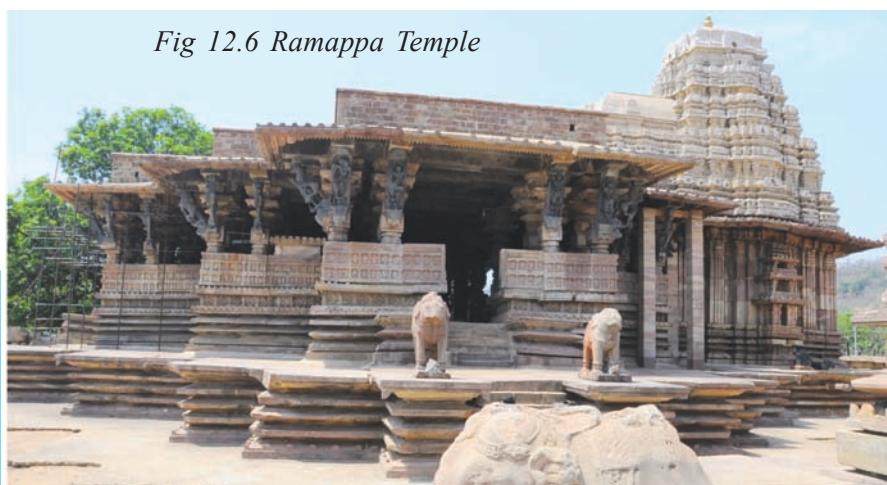


Fig 12.6 Ramappa Temple

grants. Women of other rich sections also made gifts of land, tanks, cash, cattle, jewellery etc. to temples and brahmins. By promoting agriculture, they derived in- come in the form of taxes and agricultural produce.



Fig 12.7 Sri Ahita gaja kesari - Gold coin issued by Kakatiyas

"This Abhaya Shasana has been granted by Ganapatideva to sea traders going back and forth to all continents, countries and towns. In the past, kings forcibly seized all the cargo such as gold, elephants, horses, jewels, etc. when sea going vessels were caught in storms, wrecked and cast on shore. But We for the sake of our reputation and punya and out of pity for those who have incurred the grave risk of a sea voyage, give up all but the customary tax."

The inscription goes on to mention the tax he would collect from the traders on different articles of trade.

- How did the kings treat the traders earlier?
- What was the guarantee granted by Ganapatideva to the traders?
- Why do you think, Ganapatideva gave this protection to foreign traders?



12.8 Motupalli Pillar Inscription

Marco Polo, who visited one of these ports said, that the exports were diamonds and the best and the most delicate clothes, which looked like the tissue of a spider's web. He further said, "There is neither a king nor a queen in the world who would not be glad to wear them".

The End of the Kakatiyas

Sometime around 1190 CE, a new kingdom was established in Delhi. The new kings were called Delhi Sultans and they originally came from Turkistan. They had a powerful army and were able to defeat most of the kings of North India and the Deccan before long. Sultan Mohammad bin Tugluq was able to defeat Kakatiya Prataparudra in 1323 CE. Thus ended the Kakatiya dynasty.

Some years later, two new kingdoms were founded in Karnataka called Bahamani and Vijayanagar Kingdoms about which we will study in the next chapter.

Palnati Vira – Heroes who cut across caste barriers

Palanati Virula Katha written by Srinatha around 1350s helps us to understand how collectives of warriors must have been formed. The leading character in the story, Balachandrudu, has a small war band of devoted companions from diverse backgrounds. One is a brahmin while the others—a blacksmith, a goldsmith, a washerman, a potter and a barber—are drawn from the service and artisan communities. Balachandrudu and his cohorts are so committed to each other that they are called *sodaru* (brothers). Just before they set out for battle, Balachandrudu's mother prepares a meal for all the "brothers". But she serves this food to each one on a different kind of plate (earthen, bronze, leaf, etc.) and is rebuked by her son for making such a distinction, who says that caste must be set aside when one goes to war. And so the "brothers" all eat from each other's plates, in defiance of the convention but in recognition of their joint fate

Keywords :

- 1. Warriors 2. Nayankara System 3. *Samanthas* 4. Artisans

Improve your learning

1. Compare the warriors of those times with what you know about the modern armies. What differences do you see between them?
2. Kings and chiefs built irrigation tanks to improve agriculture in the Kakatiya times. What would they do if they ruled now?
3. How do you think were the Kakatiyas able to gain control over the chiefs?
4. Why do you think did the Kakatiyas not appoint powerful chiefs as Nayakas?
5. Why was it difficult for women to rule in those days? Is it different today? How?
6. In those days, powerful people had their own land and were able to tax other farmers, traders and artisans. Can powerful people do this now? Give reasons.
7. Read the para under the title 'Nayankara System' on page 114 and comment on it.
8. 'Women too manage the administrative affairs effectively'—Do you support this statement? Why?

Project:

1. Prepare a short presentation of any of the three stories in the form of a play.
2. Collect some popular stories that originate from your village or town, prepare a chart and present the same in the class.
3. Visit an old temple of your area, find out about who built the temple, when etc. and look for any inscriptions in it.

The Kings of Vijayanagara

In the previous chapter, we read about warriors and chiefs who had established control over villages and how the Kakatiyas tried to bring them under their control and built a kingdom. The efforts of the Kakatiyas ended when the Delhi Sultans conquered Warangal. But soon, another kingdom was built by a family of warriors who laid the foundations of a large empire called Vijayanagara or Karnataka.

Vijayanagara means the ‘City of Victory’. It was located on the banks of Tungabhadra River in Karnataka. According to history, it was founded by two brothers named Harihara Raya and Bukka Raya around 1336 CE with the blessings of a sage named Vidyaranya. The kings of Vijayanagara worshipped Sri Virupaksha (Shiva). The Vijayanagara empire lasted for above 300 years though it was not ruled by kings of the same family. After the family of Harihara Raya and Bukka Raya of Sangama dynasty, Saluva, Tuluva and Araviti families ruled the empire one after the other. Some of those kings spoke the language Kannada. But Sri Krishna Devaraya gave due importance of Telugu language.

On the north of the Tungabhadra river, some new kingdoms called the Bahamani kingdoms arose. Initially, it was one large kingdom with its capital in Gulbarga. Later on, between 1489 and 1520 CE, it broke up into five smaller kingdoms. Of these five kingdoms, Bijapur and Golconda ruled

over large parts of the present day Karnataka, Telangana and Andhra Pradesh. These kingdoms were ruled by Sultans and warriors, many of whom came from Iran and Arabia. All these kingdoms were constantly at war with each other, trying to enlarge their own kingdoms. They also tried to recruit the local warriors and chiefs about whom we read in the last chapter. With their help, they tried to establish control over the villages and towns and collect revenue from the farmers and traders.

Some Important Kings of Vijayanagara

Harihara Raya	1336-1357 CE
Bukkaraya I	1357-1377 CE
Harihara Raya II	1377-1404 CE
Devaraya II	1426-1446 CE
Saluva Narasimharaya	1486-1491 CE
Krishnadevaraya	1509-1529 CE
Achyutaraya	1529-1542 CE
Aliya Rama Raya	1543-1565 CE
Venkatapati Raya	1585-1614 CE

How do we know?

We know much about Vijayanagara Empire from inscriptions, books and buildings of that period. We get insights into the daily life, the administration and the social organizations of the kingdom. Of particular value are the detailed accounts left by travellers from several countries – Nicolo Conti from Italy who visited Vijayanagara in 1420 CE, Abdul Razzak the Persian trader who visited in 1443 CE, the Portuguese traveller Domingo Paes, who visited it in 1520 CE and Nuniz who wrote in 1537 CE.

The City of Vijayanagara

The city of Vijayanagara was built on the banks of the river Tungabhadra next to the ancient temples of Pampadevi and Sri Virupaksha. Abdul Razzak says that the city had seven rings of fortifications. Some of these have been found by archaeologists.

Read the description of the city by Portuguese traveller, Paes:

"The king has made a very strong city, fortified with walls and towers... These walls are not made like those of other cities, but are made of strong masonry... and inside, very beautiful rows of buildings with flat roofs..."

You have a broad and beautiful street full of fine houses... and these houses belong to merchants, and there you find all sorts of rubies and diamonds, and emeralds and pearls... and clothes of every sort on the earth... In the evening you have a fair where they sell horses, vegetables, fruits, wood, etc."

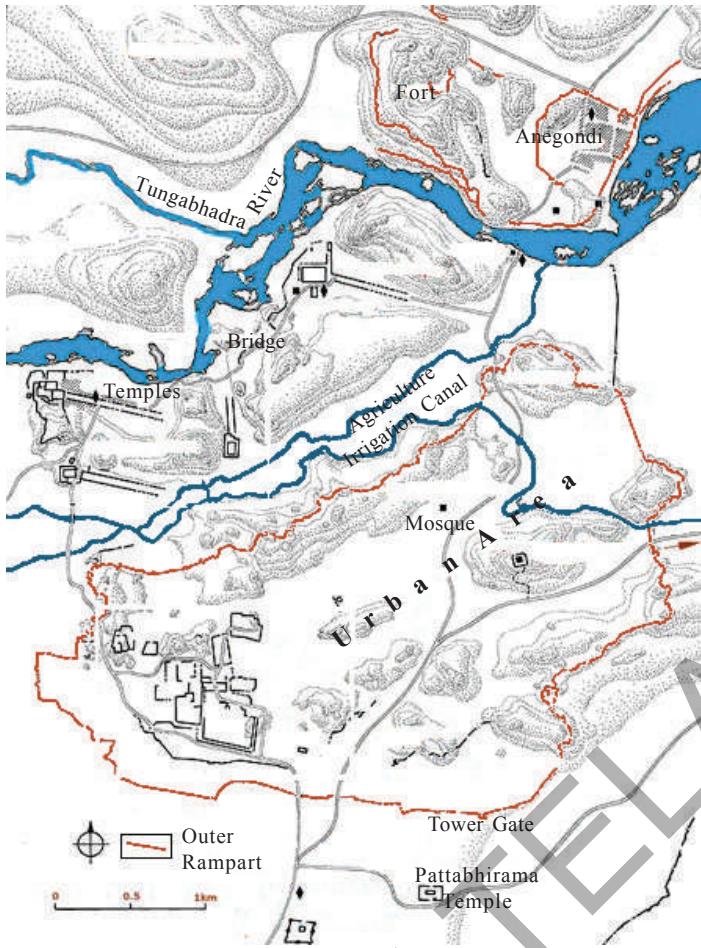


Fig 13.1 Bronze images of Krishnadeva Raya and his two wives installed in Tirumala Temple.

- ♦ Why were vegetables, fruits and horses sold in the evenings?

Archaeologists are of the opinion that the city had four separate divisions – the first one devoted to temples, situated on rocky hills; the second one on the valley, where crops were raised using water from irrigation channels; the third, a royal centre in which royal palaces and residences of important nayakas were located and the fourth one, allocated for the residences of ordinary townsfolk. Each area was separated from the others as shown in the map.

- ♦ Compare Vijayanagara with Warangal to point out the similarities and differences between them.



Map 1: Vijayanagara City

- ◆ Why do you think modern cities do not build fort walls of this kind?

Armies and Military Leaders

You would have heard and read about great wars being fought today and also about the powerful armies.

- ◆ What makes the armies of countries powerful?
- ◆ What kinds of arms and weapons do modern armies use?

Let us find out how it was in Vijayanagara times.

Vijayanagara rulers invested a lot of money in building their military power. They imported a large number of horses from Arabia and Iran, which came in ships to their ports on the west coast. They recruited a large army and built many strong forts. One of the important rulers, Devaraya-II of Vijayanagara, started recruiting Muslim fighters to serve him and to train his soldiers in the new modes of warfare. He also permitted the construction of Mosques in the capital city where the Muslim soldiers were garrisoned. In those days, guns and cannons had been newly introduced. The Vijayanagara kings started using guns and cannons in their forces. The combination of firearms and cavalry (horse-riders) made them one of the most powerful armies in India.

- ◆ Horses in those days were important for fast movement of troops. What do you think has taken their place today?
- ◆ Elephants were slow moving but powerful in attack. What do you think has replaced them today?

'Captains of the Troops' - the Amaranayakas

The entire kingdom was actually controlled and administered by the commanders of these armies. Let us find out who they were and what they did. Read the following account left by Domingo Paes about Vijayanagara during Krishnadeva Raya's period:

"This king has a million fighting troops, which include 35,000 cavalry (horse riders) ready to be dispatched to any quarter whenever necessary... He is the most feared king in these parts..."

The captains of these troops are the nobles of his kingdom and they hold the city, the towns and the villages of the kingdom. There are captains among them who have a revenue of about a million gold coins, others two hundred, three hundred or five hundred thousand coins. The king fixes for each, according to his revenue the number of troops which he must maintain, on foot, on horse, and elephants. These troops are always ready for duty whenever and wherever they may have to go. Besides maintaining these troops, each captain has to make his annual payment to the king.

Besides the troops supplied by the captains, the king has his own troops whom he pays."

Answer the following questions after reading the above passages carefully:

- ◆ Why was Krishnadevaraya the most feared king?
- ◆ Who controlled the towns and villages of Vijayanagara Empire?
- ◆ Did all of them get equal income?
- ◆ What did the captains have to do for



Fig 13.2 Stone Chariot at Hazara Rama Temple

the king in return for these villages?

Did the king depend only on the troops sent by the captains?

The 'captains' mentioned here were the nayakas. These nayakas held *amara* revenue assignments – that is, they were given charge of some villages and cities whose revenue they could collect and use. They had an obligation to maintain a certain number of troops for keeping the revenue of such assignments. They also administered the areas under their control. They had judicial powers too (the power to judge criminals and give punishments). This was quite similar to the system of the Delhi Sultanate, whose nobles or *amirs* were given similar revenue assignments called *Iqtas*.

Most of the *amaranayakas* were Telugu warriors. They recruited their soldiers, usually from among their own villagers or kinsmen, and trained them. These armies were loyal to the Nayakas rather than to the king. Many powerful nayakas like Saluva Narasimha or Narasa Nayaka controlled vast areas and at times,

could even challenge the Vijayanagara kings. In fact, some of them were so powerful that when a king died, they took control of power in their own hands and themselves became kings.

Let us compare

You read about how the villages were administered in Chola kingdom by councils of landholding villagers and how the king collected revenue from villages with the help of these councils. Things had begun to change in Vijayanagara Empire as the power of the armies and nayakas increased. You saw that the control over villages and town was given over to these nayakas.

- ◆ What impact do you think it would have had on the villagers? Discuss in your class.
- ◆ In the VI class, you read about how villages and towns are administered in our country today. Can you compare this with the Vijayanagara system and point out the differences?

Krishnadevaraya - The Ruler

Krishnadevaraya ruled from 1509 CE to 1529 CE. He was a great general who led

the Vijayanagara armies successfully against the Bahmani sultans and also against the Gajapatis of Odisha. He also subdued several chiefs who had revolted in Karnataka, Andhra and Tamil regions. This gave him control over the entire region on the south of river Krishna and especially, the control over the ports of the eastern coast.

During this period, the Portuguese had established their power over some ports of the western coast like Goa. Krishnadevaraya established friendly relations with them in order to get exclusive supply of horses and firearms from them. He also employed Portuguese troops in his wars.

Every year, on the Vijayadashami day, the King organised elaborate festivities and worship, which concluded with a massive parade of his armies. On this day, all the chiefs and *amaranayakas* of the empire brought their tributes to the King.

Krishnadevaraya paid special attention to the temples of his kingdom and personally visited many of them like Tirupati, Srisailam and Ahobilam. He also donated to a large number of temples.

Krishnadevaraya's inscriptions state that he had distributed the great treasure gained



Fig 13.3 Relief on Hazara Rama Temple. Can you write a story based on this image?

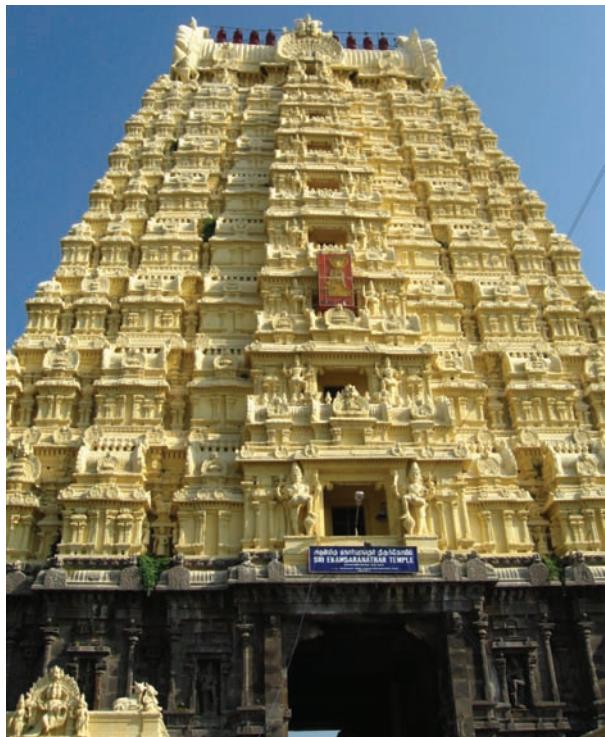


Fig 13.4 Gopuram of Ekambareswar Temple in Kanchipuram.

in his successful wars to all the major temples of southern India. Towering temple gateways called ‘Raya gopuram’ were built in many of these temples in his honour. This generosity assured that his name would be remembered for long among the people of south India. He also built some beautiful temples in Vijayanagara city.

Krishnadevaraya was also a patron of Telugu literature and he himself composed the poetic work *Amuktamalyada* on the life of Andal, the Tamil Bhakta poetess. His court was adorned by eight poets known popularly as “Ashtadiggajas”. They are Allasani Peddana, Mukku Thimmana, Dhurjati, Ramaraja Bhushana, Tenali Ramakrishna, Pingali Surana, Ayyalaraju Ramabadrudu and Madayagari Mallana.

The power of the Vijayanagara kings grew further during the time of Krishnadevaraya’s successors Achyutadeva Raya and Aliya Rama Raya. As the Bahamani rulers were

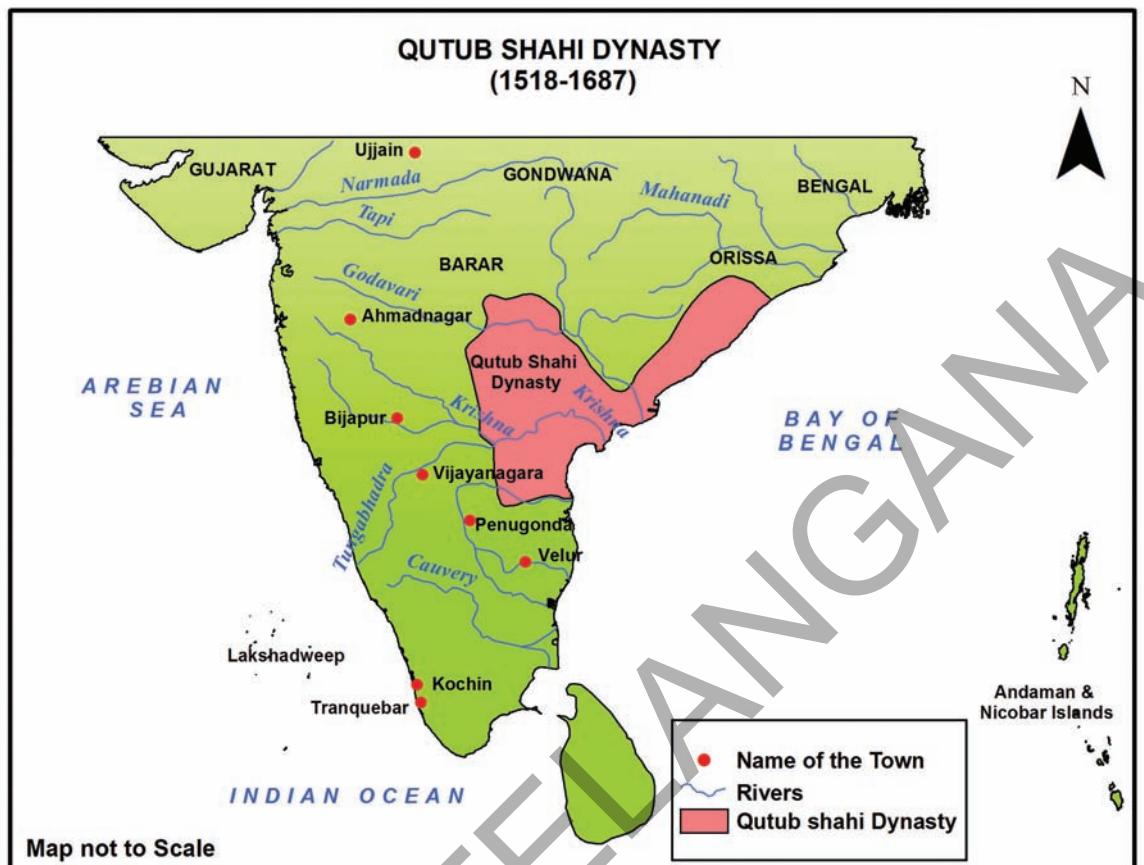
unable to fight the Vijayanagara individually, by 1565 AD, all the five Bahmani kingdoms joined together and defeated Rama Raya in Rakkasi tangadi war also known as Tallikota war. They looted and destroyed the city of Vijayanagara. The emperors who succeeded him shifted their capital to Chandragiri near Tirupati, but never regained the glory of earlier times. While a part of the empire came under the control of the Sultans, the chiefs and Nayakas became independent in other parts.

Qutub Shahis of Golkonda, 1512 – 1687

Qutub Shahis - Timeline

Quli Qutub Shah	(1512-1543)
Jamshed Quli	(1543-1550)
Ibrahim Qutub Shah	(1550-1580)
Mohd Quli Qutub Shah	(1580-1612)
Mohd Qutub Shah	(1612-1626)
Abdullah Qutub Shah	(1626-1672)
Abul Hasan Tanashah	(1672-1687)

In the previous chapter, we read about the Kakatiya kingdom in the Telangana region. After the end of the Kakatiya kingdom, some of their subordinate nayakas established independent kingdoms. Of these, the Velama kingdoms of Rachakonda and Devarakonda were very strong and challenged the authority of the Vijayanagara emperors and the Bahamani kings. Around the year 1512, Quli Qutub Shah who was a governor of the Bahamani in Telangana region declared independence and established the Qutub Shahi dynasty of Golconda. Quli Qutub Shah extended his rule by capturing forts at Warangal, Kondapalli, Eluru, and Rajahmundry. The main part of Golconda State was Telangana. His successors ruled up to 1687.



Map 2: Qutub Shahi Dynasty

Sultan Ibrahim Qutub Shah (1550–80) patronized Telugu literature, supported Brahmins and temples and engaged in large-scale irrigation works like the Kakatiya kings. Famous Telugu poets of Ibrahim Qutub Shah's period were Singanacharyudu, Addanki Gangadharudu, Kandukuru Rudrakavi and Ponnaganti Telaganarya were patronized by Ibrahim Qutub Shah. Ibrahim Qutub Shah was praised by poets as "Malkibha-rama." He also took into his service many *nayaka* chieftains who proudly claimed descent from warrior-supporters of the Kakatiyas, especially those serving Pratapa Rudra. Ibrahim allowed them considerable autonomy in the agrarian sphere while also entrusting them with the command of great forts.

The Qutub Shahi rulers quickly understood the regional ecology and decided to continue the Kakatiya pattern of irrigation system to widen the agrarian base in core region of Telangana. Since they lived in capital Golkonda built Hussain Sagar Lake in 1562 during the reign of Ibrahim Qutub Shah. It was named after Sufi Saint Hazrat Hussain Shah Wali who helped to design it. It was developed as an artificial lake that holds water perennially fed into Musi river. It became main source of drinking water to Hyderabad. Another tank at Ibrahim Patnam was also built by him. It is however well known that puranapul was also built across river Musi.

Ibrahim's son Mohammed Quli was a great visionary and was responsible for the planning and building of Hyderabad city.

Mir Momin Astarabadi, was the Architect of the City of Hyderabad during his time. As the Prime Minister of Quli Qutb Shah he played an important role in preparing the layout plan for the Charminar along with that of the new capital city. Mohammad Quli Qutub Shah built Mecca Masjid and Jama Masjid. It was built on the model of the grand mosque of Mecca. Quli Qutub Shah commissioned bricks to be made from the soil brought from Mecca, and used them in the construction of the central arch of the mosque, thus giving the mosque its name. A room in the Mosque also contains hair of Prophet Mohammed. Quli Qutub Shah also constructed the Charminar, the most recognizable symbol of Hyderabad. He was also an accomplished poet in Persian and Urdu. The Deccani Urdu acquired the status of literary language due to his contributions.

Hayat Bakshi Begum was the daughter of Muhammad Quli Qutub Shah. She built Hayat Bakshi Mosque located in Hayathnagar, near Hyderabad. She was also known as Maa Saheba, Masab Tank is a distorted version of Maa-Sahaba Tank.

Abdulla Qutub Shah was a lover of poetry and music. He invited and honoured Kshetrayya, the famous *padam* writer to his court. Abul – Hasan Tana Shah was the last and the most popular ruler of Qutub Shahi



Fig 13.5 Charminar

Dynasty. He appointed Kancharla Gopanna (also known as Ramadasu) as Tahasildar (head of the revenue department) of Palvancha county. Ramadasu was accused that he diverted the public funds to construct Lord Rama temple in Bhadrachalam and got the jewellery for the idols of Rama, Sita and Lakshmana. Tani Shah found Ramadasu guilty of diverting of public funds and put him in jail and released him after realisation.

During the Qutub Shahi period, Golconda was known all over the world for its famous diamonds. At that time, Machilipatnam became a major port from where trade was carried out with South East Asia, China, Persia, Arabia and Europe. Great caravans travelled from the coastal region to Golconda carrying merchandise, gold and silver from different countries.

The tombs of the seven Qutub Shahi rulers in the Ibrahim Bagh are located close to the famous Golkonda Fort in Hyderabad. The tombs mark a unique architectural style which is a mixture of Persian and Hindu. Shah Jahan, the Mughal Emperor was impressed by the architecture of the Qutub Shahi tombs and built the Taj Mahal with white Marble. The tombs are structures with intricately carved stonework and are surrounded by landscaped gardens.

Right from the times of Ibrahim Qutub Shah, the Mughals were keen on conquering this wealthy kingdom and eventually succeeded under Aurangazeb when he captured the fort of Golconda in the year 1687.

The Mughals did not follow the inclusive

policy of the Qutub Shahis and removed the local people from positions of power and brought in more people from outside. They also tried to extract maximum revenue from this region and adopted the system of revenue contract. Under this system, the government auctioned the right to collect revenue from a region to the highest bidder. These were usually the locally powerful people or moneylenders and they oppressed the peasants and artisans to get maximum income. This caused widespread distress, including famines, migration and depopulation.

- ◆ Look at the map of Qutub Shahi kingdom and identify Golconda, Machilipatnam, Bhadrachalam etc.
- ◆ Why do you think did the economy of Golconda kingdom prosper under Qutub shah while it declined during the early Mughal rule?



Fig 13.6 Golconda Fort

- ◆ Find out about the famous diamond mines of Golconda kingdom and the trade in these diamonds.

Keywords :

1. Amara Nayaka
2. Amir
3. Iktha
4. Archeological Scientists
5. Raya Gopuram

Improve your learning

1. Why did the kings of Vijayanagara live in a separate quarter and not in the middle of the city as in Orugallu?
2. Why were the *amaranayakas* very powerful?
3. Compare the *amaranayakas* with the old chiefs of Kakatiyas. Were they different or similar and in what way?
4. Why was the Vijayanagara army dependent on imports from the western coast?
5. Krishnadeva Raya fought against several enemies in order to consolidate his kingdom. Make a list of all of them.
6. What services were rendered to Telugu literature by the Vijayanagara Kings?
7. Locate the following in the India map.

a) Humpi	b) Bijapur	c) Tirupati
d) Golkonda	e) Kanchi	f) River Tungabhadra
8. Discuss the support of various kingdoms to Telugu literature?
9. Describe the art and architecture of the Qutub Shahis rules.

Mughal Empire

A new dynasty called Mughals began with the invasion of Babar in 1526 CE. They created an empire between 1550 CE and 1707 CE and expanded it from around Delhi to all over the entire subcontinent. Their administrative arrangements, ideas of governance and architecture continued to influence rulers long after their decline. Now, every year, the Prime Minister of India addresses the nation on Independence Day from the ramparts of the Red Fort in Delhi which was once the residence of the Mughal emperors.



A Coin with the picture of Jahangir

Who were the Mughals?

The Mughals were from ruling families of Central Asian countries like Uzbekistan and Mongolia. Babur, the first Mughal emperor (1526 - 1530 CE), was forced to

leave his ancestral throne due to an invasion by another ruler. After years of wandering, he seized Kabul in 1504 CE. In 1526 CE, he defeated the Sultan of Delhi, Ibrahim Lodi and captured Delhi and Agra.

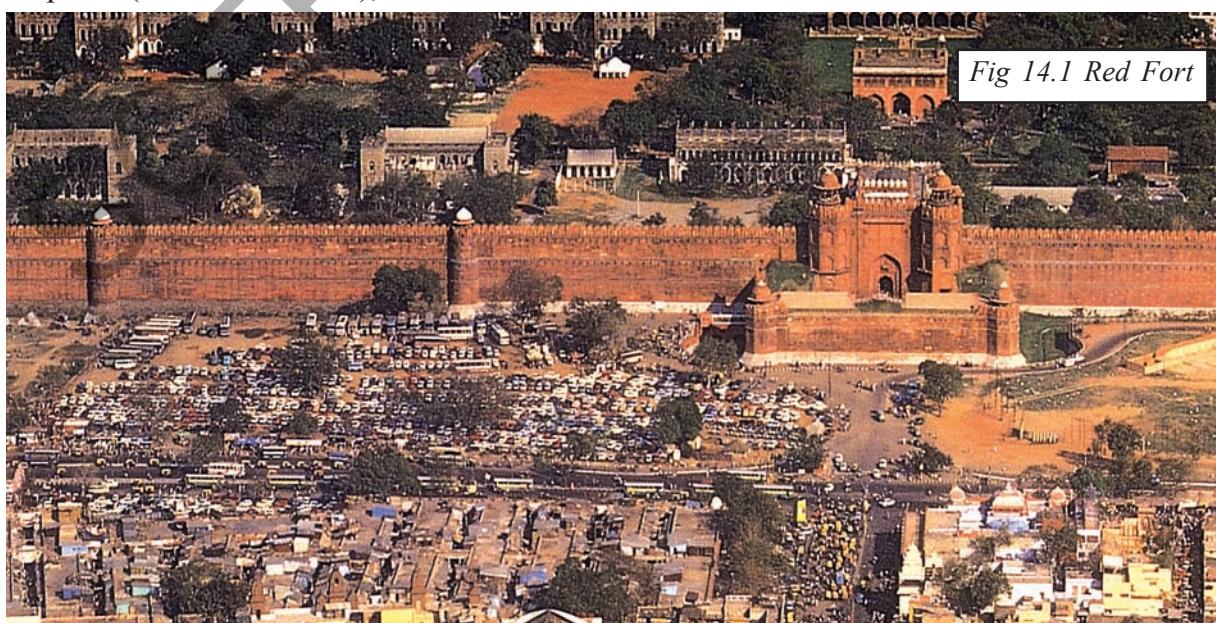


Fig 14.1 Red Fort

Important Mughal emperors - Major campaigns and events



Babur 1526-1530 CE (Left)

1526 CE – defeated Ibrahim Lodi and established control over Agra and Delhi.



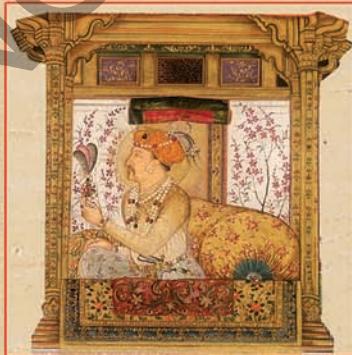
(Right) Humayun 1530-1556 CE

Sher Khan defeated Humayun, forcing him to flee to Iran. In Iran, Humayun received help from the Safavid Shah. He recaptured Delhi in 1555 CE but died in an accident the following year.



Akbar 1556-1605 CE (Left)

Akbar was 13 years old when he became the emperor. He rapidly conquered Bengal, Central India, Rajasthan and Gujarat. Thereafter, he also conquered Afghanistan, Kashmir and portions of the Deccan. Look at his empire in Map 1.



Jahangir 1605-1627 CE (above)

Military campaigns started by Akbar continued. No major conquests.

Shah Jahan 1627-1658 CE
(Left Below) Mughal campaigns continued in the Deccan. He faced many

revolts by nobles and chiefs of his empire. In 1657-1658 CE, there was a conflict over succession amongst Shah Jahan's sons. Aurangzeb was victorious and his three brothers were killed. Shah Jahan was imprisoned for the rest of his life in Agra.



(Right) Aurangzeb 1658-1707 CE

Tried to conquer Assam but faced a large number of revolts all over his kingdom from Afghanistan, Assam, Rajasthan, Punjab, Deccan, etc. Guru Tej Bahadur, Govind Singh, Shivaji and his own son, Akbar revolted against him. Shivaji succeeded in establishing an independent Maratha kingdom. Aurangzeb conquered Bijapur in 1685 CE and Golconda in 1687 CE. His death was followed by a succession conflict amongst his sons.



Relationship of the Mughals with other Rulers

Around the time when Mughals came to India, there were several kings and chiefs in all parts of the country. The Mughals sought to bring them under their control. They allowed the older rulers and chiefs to continue to rule over large parts of their old kingdoms and collected revenues from them. But these rulers could not wage wars against each other and had to keep an army ready for the use of the Emperor.

Mughal rulers campaigned constantly against rulers who refused to accept their authority. But, as the Mughals became powerful, many other rulers had to surrender their sovereignty. Some Rajput kings also entered into matrimonial alliances with them. But many resisted as well. The Sisodiya Rajputs of Chittor

refused to accept Mughal authority for a long time. Once defeated, however, they were given their lands back as assignments. Mughals also employed the method of not removing their opponents after defeating. This helped them to extend their influence over many kings and chieftains. As a political strategy Mughals married princesses of the local rulers. Jahangir's mother was the daughter of the Rajput ruler of Amber (modern Jaipur). Shah Jahan's mother was the daughter of the Rajput ruler of Jodhpur.

Mansabdars and Jagirdars

As the empire expanded to encompass different regions, the Mughals recruited diverse kinds of people. From a small nucleus of Turkish nobles, they expanded to include Iranians, Indian Muslims, Afghans, Rajputs, Marathas and other

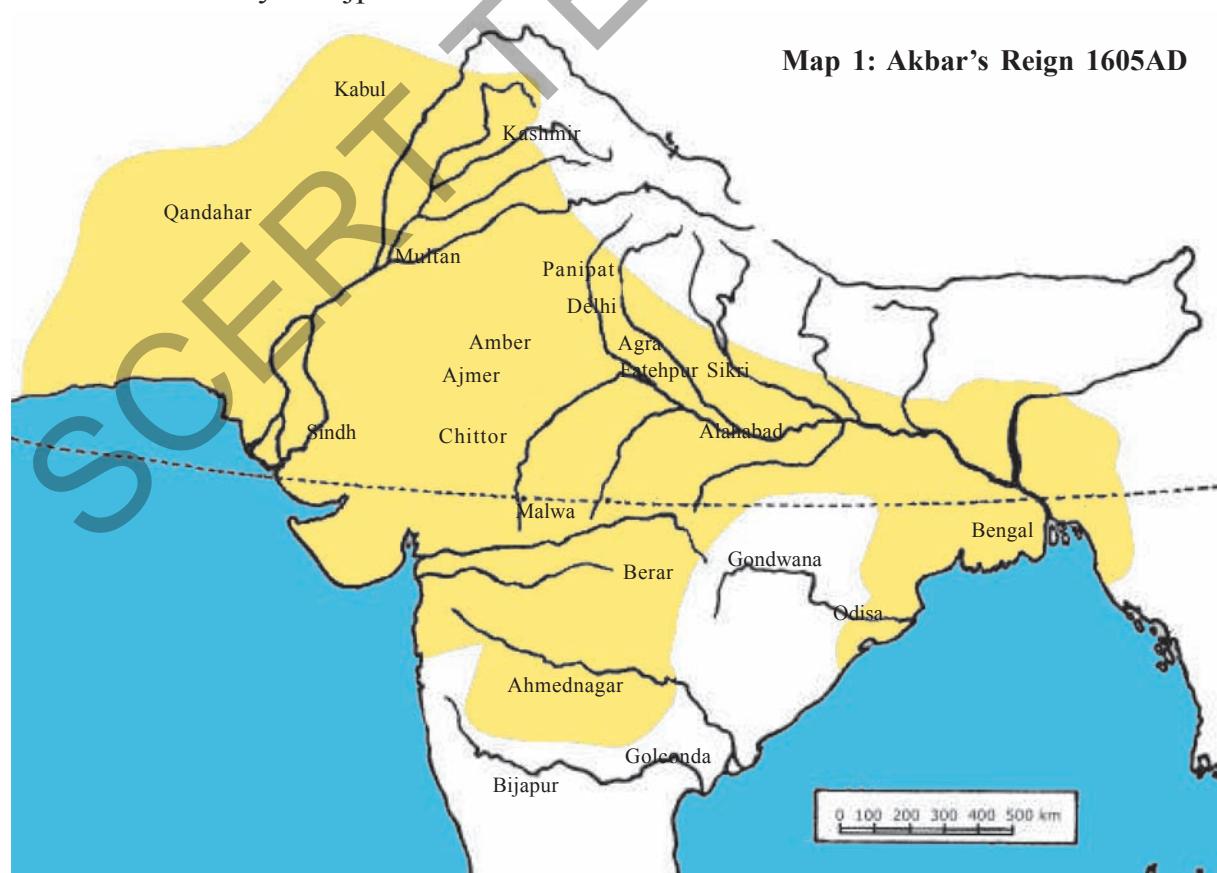




Fig 14.2 A mansabdar on march with his sawars (A miniature painting)

groups. Those who joined the Mughal service were enrolled as *mansabdars* (or rank holder). They worked directly under the control of the emperor, who could allocate any work for them to do – like guarding his palace, governing a province, conquering a new kingdom or suppressing a rebellion.

The Mughals designed a political system in which the *mansabdars* could not act independently but had to follow the orders of the emperor. You may remember that the Nayakas in Vijayanagara empire could become independent and powerful enough to declare themselves the kings. The Mughals prevented this by constantly transferring the *mansabdars* from one place to another every two or three years. Thus, a *mansabdar* could not get settled and powerful in any one place.

The *mansabdar*'s military responsibilities required him to maintain a specified number of horse riders or cavalrymen. The *mansabdar* brought his cavalrymen for review, got them registered, their horses

branded and then received money to pay them as salary.

A *mansabdar*'s son could not become a *mansabdar* automatically. That is the transfer of power was not hereditary. The emperor decided whether to appoint the son as a *mansabdar* or not. In fact, he even took over all the property of the *mansabdar* on his death.

Mansabdars received their salaries as revenue assignments called *jagirs*, which were somewhat like Vijayanagara Amaranayakas. But unlike the Amaranayakas, most *mansabdars* did not actually reside in or administer their *jagirs*. They could only collect the revenue due from their *jagir* villages and send them to the emperor. This was collected for them by their servants while the *mansabdars* themselves served in some other part of the country. The *jagir* was administered by other officials directly under the emperor. These officials tried to ensure that the *jagirdars*' agents did not collect more from the farmers than permitted. The *jagirs* too were constantly transferred every two or three years.

In Akbar's reign, these *jagirs* were carefully assessed so that their revenues were roughly equal to the salary of the *mansabdar*. By Aurangzeb's reign, there was a huge increase in the number of *mansabdars*, which meant a long wait before they received a *jagir*. These and other factors created a shortage in the number of *jagirs*. As a result, many *jagirdars* tried to extract as much revenue as possible while they had a *jagir*. Aurangzeb was unable to control these developments in the last years of his reign and the farmers, therefore, suffered tremendously.

Zabt and Zamindars

The main source of income available to Mughal rulers was taxes on the produce of the peasantry. Akbar's revenue minister, Todar Mal, carried out a careful survey of crop yields, prices and areas cultivated for a period of ten-years, 1570-1580 CE. On the basis of this data, tax was fixed in cash for each crop. Each province was divided into revenue circles with its own schedule of revenue rates for individual crops. This revenue system was known as *zabt*. It was prevalent in those areas where Mughal administrators could survey the land and keep very careful accounts. This was not possible in provinces such as Gujarat and Bengal.

In most places, peasants paid taxes through the rural elite i.e., the headman or the local chieftain. The Mughals used one term – *zamindars* – to describe all the intermediaries, whether they were local headmen of villages or powerful chieftains. The *zamindars* were not appointed by the Mughal Emperors but existed on hereditary



Fig 14.3 Details in a miniature from Shah Jahan's reign showing corruption during his father's administration 1. A corrupt officer receives a bribe and 2. A tax collector punishes poor peasants

basis, that is, sons succeeded when the fathers died. They too had contingents of armed followers. They received a share of the revenue collected by the *jagirdars* from the area and also some dues from the farmers and others. They often acted as representatives of the local people in dealing with the Mughal officials.

In some areas, the *zamindars* exercised a great deal of power. The exploitation by Mughal administrators could drive them to rebellion. Sometimes *zamindars* and peasants allied in rebelling against the Mughal authority. These *zamindar*-peasant revolts challenged the stability of the Mughal Empire from the end of the seventeenth century.

- ◆ What was the difference between a *mansabdar* and a *zamindar*?
- ◆ Who was under the greater control

- of the emperor?
- ◆ Compare the position of a *Nayaka* and a *mansabdar*.

A Closer Look at Akbar's Policies

The broad features of administration were laid down by Akbar and were elaborately discussed by his friend and member of his court, Abul Fazl in his book the *Akbar Nama*.

While Akbar was at Fatehpur Sikri (near Agra) during the 1570s, he initiated important discussions on religion with the Muslim scholars, Hindu scholars, Jesuit priests who were Roman Catholics, and Zorastrians. He was interested in the religion and social customs of different

people. Akbar wanted to bring together people of diverse faiths. This eventually gave Akbar the idea of *sulh-i kul* or “universal peace”. This idea of tolerance did not discriminate among people of different religions in his kingdom. Instead, it focused on a system of ethics – honesty, justice, peace – that was universally applicable. Abul Fazl helped Akbar in framing a vision of governance around this idea of *sulh-i kul*. The Emperor would work for the welfare of all subjects irrespective of their religion or social status. This principle of governance was followed by Jahangir and Shah Jahan as well. Aurangzeb deviated from this policy and tried to project himself as favouring only *Sunni* Muslims. People of other religions felt anguished by this policy of Aurangzeb.



Fig 14.4 Akbar holding discussions with learned individuals of different faiths in his ibadat khana

Sulh-i kul

Jahangir, Akbar's son, described his father's policy of *sulh-i kul* in the following words:

*“As in the wide expanse of the divine compassion, there is room for all classes and the followers of all creeds, so ... in his Imperial dominions, which on all sides were limited only by the sea, there was room for the professors of opposite religions, and for beliefs, good and bad, and the road to intolerance was closed. Sunnis and Shias met in one mosque and Christians and Jews in one church to pray. He consistently followed the principle of ‘universal peace’ (*sulh-i kul*).”*

The Mughal Empire in the 17th Century and thereafter

The administrative and military efficiency of the Mughal Empire led to economic and commercial prosperity. International travellers described it as the fabled land of wealth. But the same visitors were also appalled at the state of poverty that existed in contrast to the greatest

wealth. The inequalities were glaring. Documents from the twentieth year of Shah Jahan's reign inform us that the highest ranking *mansabdars* were only 445 in number out of a total of 8,000. This small number – a mere 5.6 per cent of the total number of *mansabdars* – received 61.5 per cent of the total estimated revenue of the empire as salaries for themselves and their troopers.

Sardar Sarvai Papanna

Sarvai Papanna, who belongs to the Warangal district, fought against the Mughal rule in Telangana. He lived during the period of Aurangzeb. He supported the lives of many poor people who were backward and downtrodden.

Papanna occupied the telangana area from Mughal rule between 1687 to 1724 CE, and built a fort in Khilashapur which was also considered the capital city in Warangal district.

Having seen the oppressions and atrocities committed by Mughals during that time, he raised a small army and trained them in guerrilla attacks.



Papanna, controlled the forts at Bhuvanagiri, Kolanupaku of Nalgonda, Thatikonda, Cheriyala of Warangal, Huzurabad, Husnabad of Karimnagar. He constructed his first fort in Sarvaipeta with the aim of expanding his rule. He constructed forts in Thatikonda, Vemulakonda and Shahpuram. Existing check Dam constructed during the rule of Papanna in Thatikonda shows that he was a development oriented king to develop the region under his control.

Papanna mostly raised the funds for war and army by guerrilla attacks on Subedar, Zamindars and landlords. Upon hearing the news of Papanna's popularity, Aurangzeb advised Rustum-dil-Khan to suppress Papanna. Rustum-dil-Khan then sent Khasim Khan first to Papanna and then to conquer shahpura fort. Having Khasim Khan defeated and slayed by Papanna, Rustum-dil-Khan himself entered the war and it went on for almost three months. Rustum-dil-Khan finally fled from the war and Papanna lost his friend and close associate, Sarvanna in this war.

After the death of Aurangzeb, in 1707 C.E., the then Deccan Subedar Kambaksh Khan started losing the control of Deccan. Having seen the weak administration of Kambaksh Khan, Papanna attacked Warangal for on April 1 in 1708 C.E. However in a long battle at Thatikonda later at Khilashapur he escaped. He was caught and beheaded in 1712 C.E.

The Mughal emperors and their *mansabdars* spent a great deal of their income on salaries and goods. The scale of revenue collection left very little for money for investment in the hands of the primary producers – the peasant and the artisans. The poorest amongst them had barely enough resources for existence and could hardly invest in tools and supplies to increase productivity.

The wealthier peasantry and artisanal groups, the merchants and bankers profited in this period.

The enormous wealth and resources commanded by the Mughal nobility made them an extremely powerful group of people in the late seventeenth century. As the authority of the Mughal emperor slowly declined, his subordinates emerged as powerful centres of power in the regions. They constituted new dynasties and held command of provinces like Hyderabad and Awadh. Although they continued to recognise the Mughal emperor in Delhi as their master, by the eighteenth century the provinces of the empire had consolidated their independent political identities.

Asaf Jahis of Hyderabad

1724-1948

Asaf Jahis - Timeline

Nizam-ul-Mulk - 1 st Nizam	(1724-1748)
Nasar Jung -	(1748-1751)
Muzafar Jung -	(1751-1751)
Salabat Jung -	(1751-1762)
Nizam Ali Khan - 2 nd Nizam	(1762-1803)
Sikandar Jah - 3 rd Nizam	(1803-1829)
Nasir-ud-Dowla - 4 th Nizam	(1829-1857)
Afzal-ud-Dowla - 5 th Nizam	(1857-1869)
Meer Mahaboob Ali Khan - 6 th Nizam	(1869-1911)
Mir Osman Ali Khan - 7 th Nizam	(1911-1948)

After the weakening of the Mughal Empire in 1720s , the Mughal Governors asserted their independence. One of them was the Subedar of the Deccan, Chin Qulich Khan, also known as the Nizam-Ul- Mulk. He was the founder of the Asaf Jahi dynasty of the Hyderabad State in 1724. Nizam-Ul- Mulk ruled for 24 years (1724-1748). The Asaf Jahi rulers were ten kings, who ruled from 1724 to 1948. Among them seven kings got the title 'Nizam' from the Moghals. Nazar Jung, Muzafer Jung and Sabath Jung were not received the title 'Nizam'. The Nizams constantly fought the Marathas and the rulers of Mysore to carve the independent state of Hyderabad. Due to these reasons, they became dependent on the British and lost their independent status.

They undertook the colonial modernisation under the influence of the British Officials. The British loved the Hyderabad culture. During late 19th Century Hyderabad embarked on development. Salar Jung was the Prime Minister of the Nizams between 1853 and 1883, who imbibed colonial development schemes. (You will read more about him in the next lesson).

The sixth Nizam, Mir MahabubAli Khan's period marked with a number of reforms. The Asafia Library, Victoria Memorial Orphanage, Mahabubia Girls School were established. During the Musi floods in 1908 he personally supervised the relief operations, offered prayers to the god and provided shelter to the victims.



Salar Jung

However, the VII Nizam determined to protect the feudal power structure despite the popular movement for liberal administrative reforms. (About his achievements you will read more in class-8).

Keywords :

- | | | |
|---------------------|--------------------|----------------------|
| 1. <i>Mansabdar</i> | 2. <i>Jagirdar</i> | 3. <i>Zabt</i> |
| 4. <i>Elite</i> | 5. <i>Zamindar</i> | 6. <i>Sulh-i-kul</i> |

Improve your learning

1. What was the relationship between the *mansabdar* and his *jagir*?
2. What was the role of the *zamindar* in Mughal administration?
3. How were the debates with religious scholars important in the formation of Akbar's ideas on governance?
4. Why did the Mughals allow the earlier rulers to continue in their old kingdoms as before?
5. Why was the policy of *sulh-i-kul* important for the Mughals to control their vast empire?
6. Read the first para under the title 'Zabt and Zamindars' on page 130 and comment on it.
7. Collect and fill in the table with the particulars of the Moghal emperors.

S.No.	Name of the emperor	Ruling period	Important features
1			
2			
3			
4			
5			
6			

Establishment of the British Empire in India

Aurangzeb was the last of the powerful Mughal rulers. He established control over a very large part of the territory that is now known as India. After his death in 1707 CE, many Mughal governors (*subedars*) and big zamindars began asserting their authority and establishing regional kingdoms.

Consequently, Delhi could no longer function as an effective centre. By the second half of the eighteenth century, however, a new power was emerging on the political horizon – the British. Did you know that the British originally came to India as a small trading company? How then did they become the masters of a vast empire?

East India Company Comes to East

In 1600 CE, the East India Company acquired a charter from the ruler of England, Queen Elizabeth I, granting it the sole right to trade with the East. This meant that no other trading group in England could compete with the East India Company. With this charter, the Company could venture across the oceans, looking for new lands from which it could buy goods at a cheap price, and carry them back to Europe to sell at higher prices.

Mercantilism

Mercantile is a business enterprise that makes profit primarily through trade. Trading companies in those days made profit primarily by excluding competition, so that they could buy cheap and sell at higher rates.

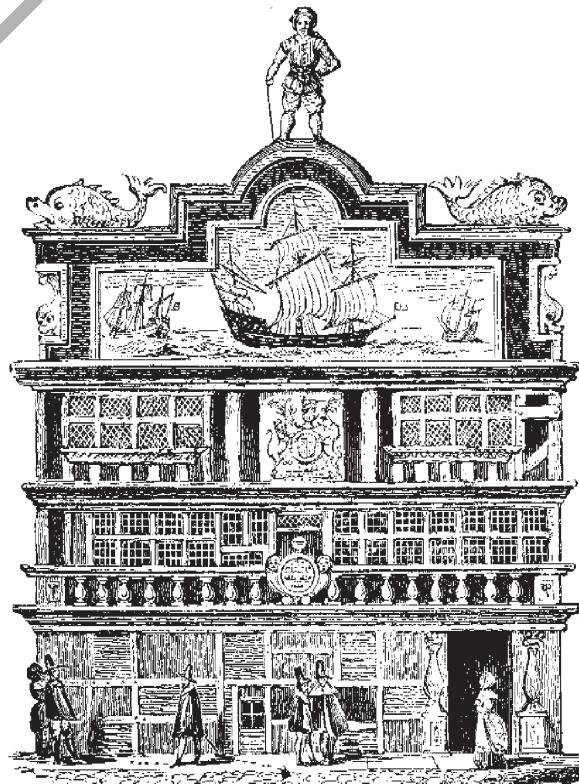


Fig 15.1 The headquarters of East India Company in London



Fig 15.2
Vasco da Gama

The royal charter, however, could not prevent other European powers from entering the Eastern markets. By the time the first English ships sailed down the west coast of Africa, round the Cape of Good Hope,

and crossed the Indian Ocean, the Portuguese had already established their presence in the western coast of India, and had their base in Goa. It was Vasco da Gama, a Portuguese explorer, who had discovered this sea route to India in 1498. By the early seventeenth century, the Dutch (Holland) too were exploring the possibilities of trade in the Indian Ocean. Soon the French traders arrived on the scene.

The problem was that all the companies were interested in buying the same goods. The fine qualities of cotton and silk produced in India had a big market in Europe. Spices like pepper, cloves, cardamom and cinnamon too were in great demand. Competition among the European companies inevitably pushed up the prices at which the goods were purchased. Trade was carried out with arms and trading posts were protected through fortification. This effort to fortify settlements and carry on profitable trade led to intense conflict with the local rulers.

Armed Traders

European traders formed their own companies to trade in India. The English traders formed the English East India Company while traders from France formed the French East India Company. Both companies fought against each other for many years to capture the trade in India. Each made efforts to drive the other away. They

brought armies from England and France to help them in their fight. The kings of England and France also backed their respective companies and helped them in many ways. The companies acquired land in India and built their own forts to wage battles against each other.



Fig 15.3 A drawing of Machilipatnam from 1676

The wealth that was accumulated in this way was one of the most important factors that enabled England to develop industries and establish their dominance in the world.

This was the time when England as well as some other European countries like Spain, Portugal, France, Holland and Germany were acquiring colonies in North and South America, Africa, and Asia. The colonies contributed to the power and wealth of these European countries.

The Mughal emperors as well as many rajas and nawabs began to realise how dangerous it was to let such traders maintain armies, build forts, fight battles and use military force to establish their economic power in their kingdoms.

As long as the Mughal empire was strong, it had not been possible for the European companies to establish their own military power in India. In fact, Emperors Shahjahan and Aurangzeb had fought and defeated the European companies on a number of occasions. However, some years after the death of Aurangzeb, the different provinces of the empire became almost independent and were ruled by their respective governors. Thus Bengal, Awadh (Lucknow) and Hyderabad became independent kingdoms which only nominally acknowledged the Mughal Emperor as their supreme.

Once the Mughal empire broke up into these small kingdoms, the companies found their chance to assert their power. Though the rajas and nawabs wanted more trade,



Fig 15.4 Mughal Emperor Shah Alam granted Robert Clive the right to rule Bengal they also tried to check the growing military strength of the companies.

For example, in 1764 CE, Nawab Anwaruddin Khan of Arcot (in northern Tamil Nadu) sent his army to fight against the French company. However, to everyone's astonishment, the small French army managed to defeat the large army of the Nawab. The European traders became bolder after this victory and felt that they could do whatever they wanted in India because of the strength of their armies.

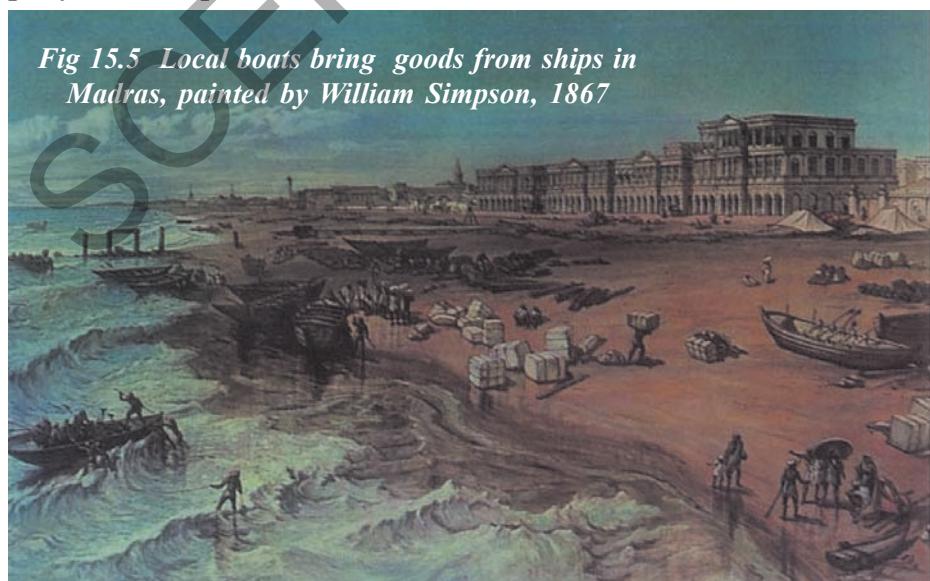
How were the European armies different from the armies of Indian rulers in the 1700's? The soldiers of European armies were better trained and received higher and more regular salaries. They also had better cannons and guns. The European armies held parades and drills every day. With such regular exercise, Indian soldiers enrolled in these armies also became quite skilled in battle.

Growing European Interference in the Kingdoms of India

The companies used their military advantage to increase their profits from trade. On many occasions, when they saw two Indian rulers fighting among themselves, they would take sides and get involved in the fight. They would lend their army to one side to help them defeat their rivals. But, in return, the companies would demand and extract many trade concessions from the rulers. The rulers also ‘gifted’ the companies large amounts of money in return for their military help. This money helped the companies increase their trade even more.

For example, Dupleix, a governor of the French East India Company, helped Muzaffar Jang to become the Nizam of Deccan. In return, Muzaffar Jang gave the French some territories near Pondicherry and the town of Machilipatnam. He also gave Rs. 50,000 to the Company, Rs. 50,000 to the French troops, and Rs. 20,00,000 and a *Jagir* worth Rs. 1,00,000 per year to Dupleix.

Fig 15.5 Local boats bring goods from ships in Madras, painted by William Simpson, 1867



The companies also began to acquire small parts of kingdoms as ‘gifts’ from the local rulers. They would collect land tax from the villages and towns in these areas and use the money for their trading activities. They also used this money for maintaining and improving their army.

Slowly, the English Company began emerging victorious over the French Company in the struggle for dominance in India.

Misuse of the Company’s Power

The Indian rulers soon found that the burden of giving ‘gifts’ to the English East India Company and bearing the expenses of its army was becoming very heavy. They were also troubled by many other activities of the company.

Some Indian rulers exempted the company from paying taxes on many of the goods it purchased from their kingdoms. However, people began taking advantage of these concessions. For example, employees

of the company would do their own private trading. But they would show their own goods as belonging to the company to escape paying taxes.

In this way, while the company got richer, its employees and officers also made a lot of money in India and

returned home wealthy. Many Indian traders and *seths* helped the company in its trade. They too showed their goods as belonging to the Company to escape paying taxes.

Thus, there was much looting and swindling taking place in the kingdoms under the Company. So proud was the Company of its military strength that it began working with great impudence. It forced craftsmen to sell their goods at low prices. In the areas it had acquired, the company tried to squeeze revenue from the peasants beyond reasonable limits. When the rulers protested against such practices, the English fought against them. They even went to the extent of dethroning the kings and anointing successors who would be only too willing to remove any obstacles in the way of their trade.

- ◆ Traders need money to buy the goods they sell to others. List three sources of money that helped the English to buy goods in India.
- ◆ What advantages did the Indian rulers get from the English?

The English Impose their Rule

The English gradually began to feel that they could make fuller and freer use of India for trade if they themselves ruled the country. So they started removing the nawabs and rajas and started ruling themselves.

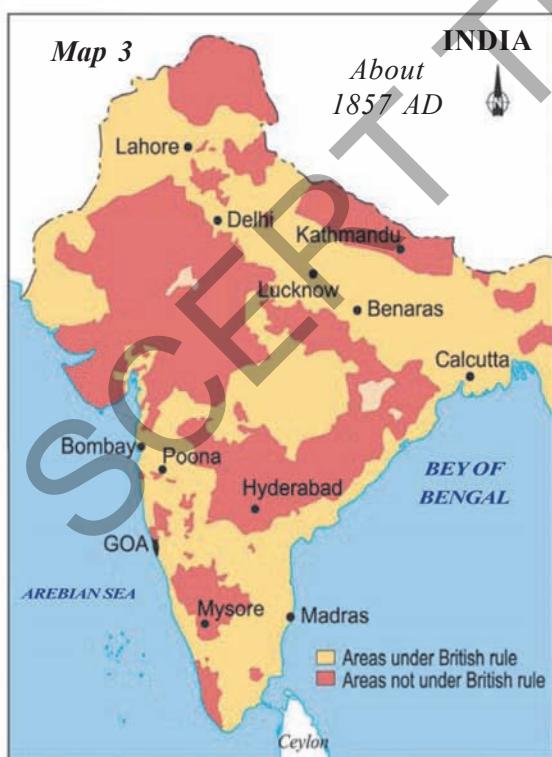
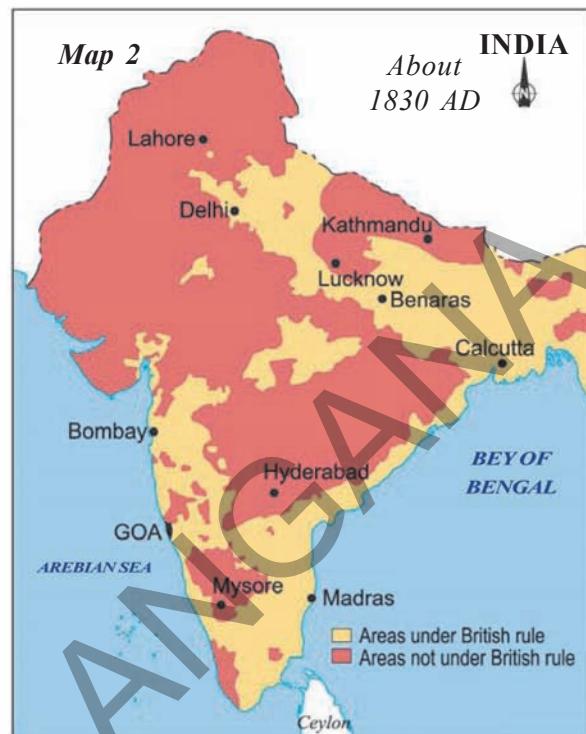
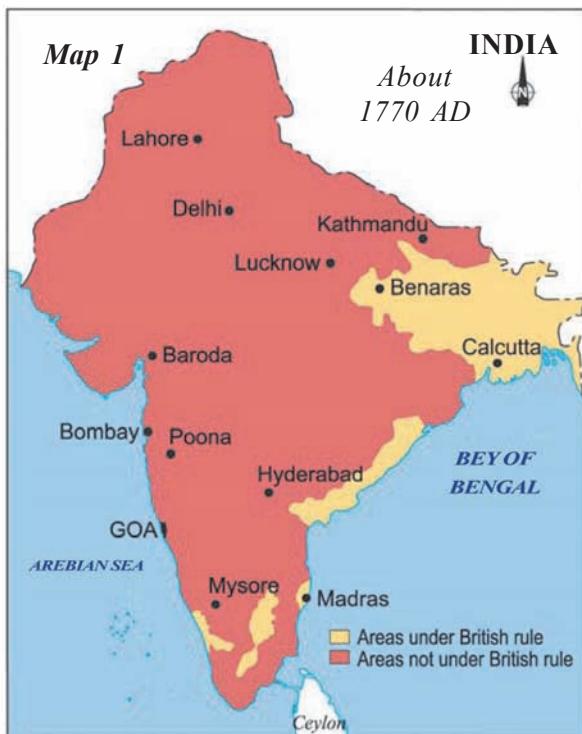
In 1757 CE, the English defeated Sirajuddaula, the Nawab of Bengal, at a place called Plassey and established their rule over Bengal. The Battle of Plassey is an important event in the Indian history. After that, the English started conquering many other kingdoms of India, big and small.

The English East India Company also forced the Nizam of Hyderabad to hand over the coastal Andhra Pradesh districts (Krishna, East Godavari, West Godavari, Srikakulam, Vijayanagaram, Prakasam Visakhapatnam and Guntur) between the years 1765-1768. These were known as the ‘Northern Sarkars’ of the Madras province of the company. In return, the English agreed to maintain an army contingent for the use of the Nizam. In fact, this army was used more to control the Nizam rather than to help him.

Many rajas and nawabs understood the British plot and fought hard against them. They included Haider Ali and Tipu Sultan of Mysore, the Maratha Sardar Mahadaji Shinde, Nana Phadnavis and others. But their kingdoms were small. One by one, they lost them to the English.

Among those who played an important role in the British success on the battlefield were Generals Robert Clive, Warren Hastings and Lord Wellesley. Slowly, large parts of India came under the direct rule of the English. In many places, the rajas and nawabs continued to rule, but they were under the sovereignty of the English. An English official (known as the ‘resident’) would be assigned to stay in the court of these kings or nawabs so that the British government could keep an eye on how they ran their kingdoms.

- ◆ While carrying on trade with India, why did the English East India Company start thinking of establishing its rule over the country?



Maps showing expansion of the British territorial power in India.

- Look at these maps along with a present day political map of India. In each of these maps, try to identify the different parts of India that were not under the British rule.
- How far did English rule spread by 1857? Make a list of those areas where Indian kings still ruled in 1857.

Discontent with English Rule

The English had to fight with many kings and nawabs to establish their rule. You will learn more about their policies and administration in later years. They constantly faced resistance from the people of India.

The royal families resisted them because the English would anoint or remove rulers as and when it suited their purposes.

Farmers and landowners resisted them because the English imposed very high taxes on them and collected the taxes very strictly. So they lived in constant fear of failing to pay the taxes and losing their lands as a result.

Tribal people also offered resistance, because of the new rules and laws that the

English began implementing in their areas. As a result, many tribal people lost their rights over jungles and land. You will read more about this in the later years.

Many Hindus and Muslims feared that the English would destroy their faiths and convert them to Christianity.

The English faced their toughest battle in 1857 when, for a few months, their rule was uprooted over almost the entire northern Indian region. This revolt was started by Indian *sipahis* or soldiers, who were soon joined by royal families, landowners, farmers, tribal people and craftsmen. The royal families who joined the revolt include Nana Sahib, the adopted son of the peshwa, Tantia Tope, his general, the Begum of Awadh, and Rani Lakshmi Bai of Jhansi. Hindus and Muslims fought together against their common enemy.

The Revolt of 1857

Place: The military cantonment at Meerut, where the British army had camped

Date: Sunday, May 10, 1857

The sun was about to set when the Indian soldiers began firing their guns on their English officers. These were the same soldiers who had helped the English to conquer the kingdoms of India. They were now fed up with the behaviour of the English. They were not getting their salaries on time and they were not treated with respect in the British army. On top of this, the *sipahis* suspected that the cartridges for their new guns (rifles) were coated with cow and pig fat to keep them dry. They felt that their religious faith was being violated. Based on this suspicion, a similar uprising had occurred at Barrackpur, near Kolkata in March 1857. The sense of discontent at

Meerut was widespread and on this day, the soldiers opened fire on their English officers. The rebellious soldiers marched towards Delhi that very night.

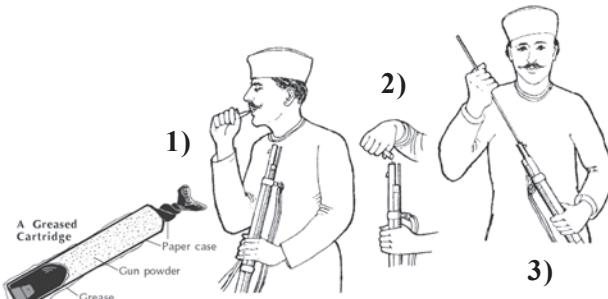


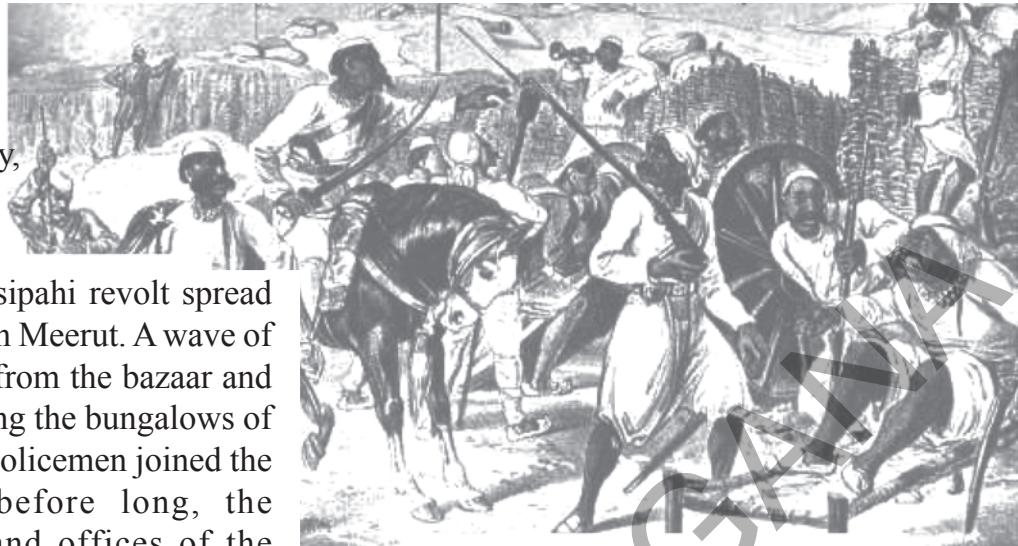
Fig 15.6 A - Loading a gun

- 1) The soldier was supposed to tear open the paper case with his teeth.
- 2) He would pour the gun powder into the rifle.
- 3) He would then ram the bullet wrapped in paper into the rifle.

Place:

Meerut town

Date: Sunday night - Monday, May 10-11, 1857



News of the sipahi revolt spread like wildfire in Meerut. A wave of people came from the bazaar and began attacking the bungalows of the English. Policemen joined the mobs and before long, the bungalows and offices of the English were set on fire. Many English people were killed.

Fig 15.7 A view of Sipahi revolt at Meerut in 1857

Place: Delhi, the Lal Quila

Date: Monday, May 11, 1857

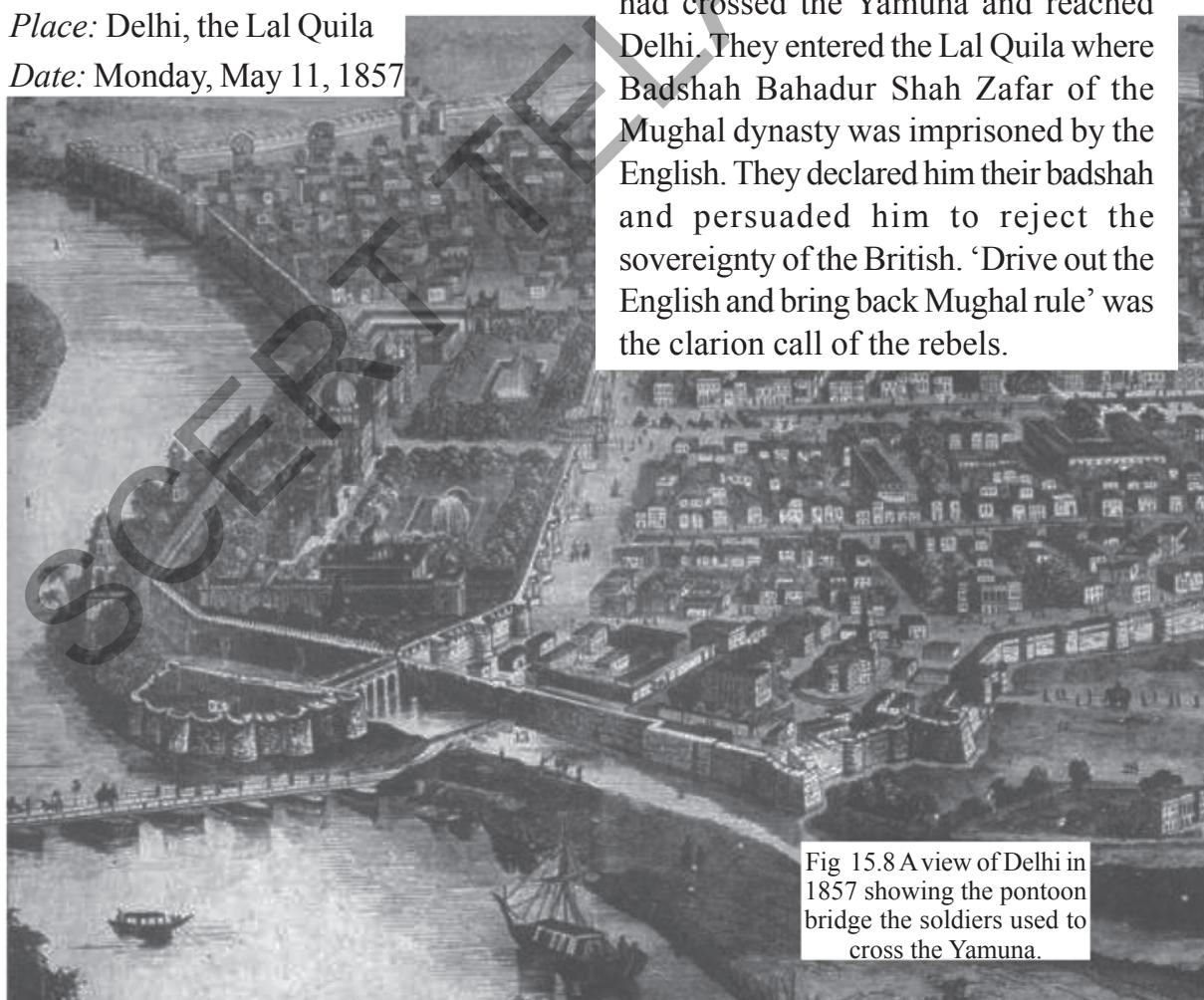


Fig 15.8 A view of Delhi in 1857 showing the pontoon bridge the soldiers used to cross the Yamuna.

By daybreak, the sipahis of Meerut had crossed the Yamuna and reached Delhi. They entered the Lal Quila where Badshah Bahadur Shah Zafar of the Mughal dynasty was imprisoned by the English. They declared him their badshah and persuaded him to reject the sovereignty of the British. ‘Drive out the English and bring back Mughal rule’ was the clarion call of the rebels.

The Revolt Spreads

No sooner did this call go out, revolts against the English erupted in many places. *Sipahis* went on a rampage in the cantonments at Aligarh, Mainpuri, Bulandshahar, Attock and Mathura. The English were badly shaken. Their situation was, indeed, very delicate.

There were a mere 45,000 English officers and soldiers in India. Against this, the number of Indian soldiers in their army was two lakh and thirty two thousand! It was these very *sipahis* who revolted. So, who would now protect the lives and property of the English residents in the towns? The Indian sections of their army could not be relied on. Consequently, many English soldiers were held back to protect the English families. As a result, the revolt could not be suppressed immediately and it spread from place to place.



Fig 15.10 Nana Saheb
Many royal families, whose kingdoms had been taken away by the English, joined the revolt. Among them were the former Nawab of Awadh and the Maratha peshwa Nana Sahib. Armies of rebel *sipahis* and rulers from different corners of the country marched towards Delhi. People were helping them for driving out the English so to establish their rule in their respective provinces.



Fig 15.9 Jhansi Lakshmi Bai - Fighting with the Britishers

Hyderabad was not silent as it suffered under the colonial policies. Among others Turrebaz Khan was a revolutionary who fought against the British in Hyderabad State during the revolt of 1857. He, with the support of Moulvi Allauddin, mobilized 6,000 people and attacked the British Residency, present day Women's College, Koti. He revolted at a time when the Nizam supported the British. However the movement was suppressed and Turrebaz Khan was executed.



Turrebaz Khan

- ◆ Discuss why the idea of the Mughal empire brought the rebelling Indian people together.
- ◆ When you oppose something, you need an alternative in its place. Think of an example from your experience that brings out this need of an alternative.

Revolt in Every Village

The flames of revolt spread from *kasba* to *kasba* and village to village in Uttar Pradesh and Bihar. The peasants and *zamindars* took up arms together and had the English and their officers on the run. They stopped paying taxes to the British government. They tore up railway lines, burnt down police stations, courts, post & telegraph offices and uprooted the telegraph wires. All these were the new services that the English had introduced in India. As defeat stared the English in their faces, the Indian people became more and more courageous in their fight against the British rule.

The rebels looted the houses and burnt the documents of many moneylenders. These moneylenders had become very powerful in the villages with the help of English laws.

The Revolt is Suppressed

Despite the widespread success of the revolt, the English slowly gained control over the situation.

The rebels fought bravely. But, there were two major weaknesses among them.



Fig 15.11 Hanging the rebels.

In every town or region, different groups of rebels fought separately against the English. They did not fight together. There was no combined and well-planned effort. So the English were able to tackle the rebels one by one in each area.

The rebels also faced a shortage of modern arms. The guns and cannons, cartridges and gunpowder they required were brought from outside India. Consequently, the rebels had to fight with old guns, arrows, spears and swords. How long could such weapons last in a contest against the more modern arms?

Even then, the speed with which the revolt spread frightened the English. So they behaved with greater cruelty whenever they suppressed a rebel group. They killed the rebels in a most inhuman ways and hanged their bodies from trees in the villages so that the village folk would 'understand' the consequences of revolt.

They tied some rebels to the mouths of cannons and blew them to bits. Many rebels went into hiding, moving from place to place to avoid being caught by the English. Many of them even went to places like Nepal to hide.

The English deported Emperor Bahadur Shah Zafar to a far away location in Rangoon and it was there that the last Mughal emperor died. The revolt of 1857 was the biggest revolt to challenge the might of the English. After suppressing it, their hold over India became stronger and they ruled the country for the next 90 years.

- ◆ Choose the correct alternative:
a) The rebels of 1857 CE wanted to (restore/remove) _____ Mughal rule.

- b) The weakness of the English army was that most of its soldiers were (Europeans/Indians) _____.
- ◆ What were the weaknesses of the rebel Indian armies?

After the Revolt

It took the English more than a year to suppress the revolt of 1857. During this period, they changed many of their policies and adopted new ones. In 1858, Queen Victoria of England made an important declaration. She said Indian kings should rule their own kingdoms without anxiety because the English would not try to dethrone them.

In this way, they established a close collaboration with the royal families of India. Similarly, the *zamindars*, too, were given many concessions and were assured that their property would be protected.

The *pundits* and *maulvis* were assured that the British government would not interfere in matters relating to Indian religions and would let the old traditions continue. There was also a promise that Indians would be included in the government. The truth is that the English had seen their Indian empire being snatched away in 1857. Now, they directed their efforts towards giving all kinds of concessions to the elite powerful Indians, to conciliate them and ensure that they continued to support the English.

Hyderabad State and the British

As with other kingdoms of the time, Hyderabad too came under the influence of the English East India Company. Eventually, the British placed their Resident in Hyderabad who oversaw the entire administration of the state. The Nizam had to appoint his Prime Minister or Dewan on



Fig 15.12 Bahadur Shah Zafar and his sons being arrested by Captain Hodson. After Aurangzeb, there was no powerful Mughal ruler, but Mughal emperors continued to be symbolically important. When rebellion against British rule broke out in 1857, Bahadur Shah Zafar, the Mughal emperor at the time, was seen as the natural leader. Once the revolt was suppressed by the company, he was forced to leave the kingdom, and his sons were shot down in cold blood.

the advice of the Resident and with the approval of the British Governor General. All the departments had to be headed by ICS (Indian Civil Services) officers selected by the British. In this way, the British were able to gain complete control over the Nizam's state. They gradually pushed the state to adopt the administrative system and policies followed by the British in other areas too.

If you go to Hyderabad, you will see the famous Salarjung Museum which houses the various articles collected by Salar Jang who was one such Diwan of Hyderabad. He introduced many reforms and contributed to the economic development of the Hyderabad state. He divided the kingdoms into Subhas and districts after removing the old Deshmukhs etc. He abolished the revenue farming system and instead organised direct collection of revenue

from the farmers by district officials. The Judicial reforms included the creation of Supreme Court, High court and District courts. Separate Civil and Criminal courts were also established. To facilitate transport, Salarjung improved the railways and roads. Important railway lines connected Hyderabad to Wadi, Madras to Sholapur and Madras to Bombay. English Medium schools, like Dar-ul-Ulm at Chadarghat in 1855, City College, Deccan Engineering College in 1870 and Madarsa-i-Aliya were also established. These reforms helped Hyderabad to emerge as a modern state in line with the rest of the country.

Keywords :

- | | |
|------------------|--------------------|
| 1. Royal Charter | 2. <i>Subedar</i> |
| 3. Sole right | 4. Demand |
| 5. <i>Jagir</i> | 6. Cantonment |
| 7. Colonies | 8. <i>Maulvies</i> |

Improve your learning

1. Why did the European trading companies maintain armies in India? What role did these armies play in the business of the companies?
2. How could the European armies defeat the Indian armies in the 1700's and 1800's?
3. Collect the information of 1857 revolt and fill in the table with the particulars.

S.No.	People participated in the revolt	People stayed away from the revolt

4. In 1857, which soldiers felt their religious faith was being violated, and why?
5. In what ways did people revolt against the British in 1857?
6. What did the people who revolted in 1857 want to achieve?
7. What complaints of the rebels did Queen Victoria try to address in her 1858 declaration?
8. What are the similarities and differences between the ways the Mughals and the English came to power in India?
9. Locate the sea route of Vasco da Gama from Portugal to India in the map.
10. Write a short note on the need of Unity to avert foreign invasion.
11. Express your dissatisfaction towards the rule of Britishers.

Making of Laws in the State Assembly

So far, we have been reading about how people managed their public affairs – how they ruled or were ruled. We studied about tribal societies which were small and which managed all their public affairs through consultation in meetings and had a headman who carried out the decisions. In kingdoms and empires, we saw how these matters were decided by Kings and their officials, how kings fought with each other to gain control over more people and lands. We also saw how chiefs and warriors controlled the lives of people and levied taxes on them at their will. They used the money to build large palaces for themselves, to fight wars and also to build some public utilities like tanks, canals and temples or mosques. We also saw how the British established their power so as to exploit the resources of our country and how this was resisted by our people.

Today, we do not have any kings or warriors ruling us. We became independent of the British rule more than 70 years ago. So how do we rule ourselves now? You know that there are MPs, MLAs, Ministers, Chief Ministers and higher officials. Are they like the kings of olden times? Can they do what they please? No, modern governments are run according to laws. No one is above the law and all ministers and officials have to function according to laws. But who makes the laws?

How are the laws made? Are they made as per the whims of the rulers? No, the laws are made by the Legislative Assemblies and the Parliament. The Constitution of India lays down how these bodies can make laws. They make laws according to some procedures. In this chapter, we will read in detail about how state legislatures make laws.



Fig 16.1 Telangana -Assembly

Here is a news item - let us try to understand what is being said in it about Andhra Pradesh Prohibition of Smoking and Health Protection Act 2002

Bill for ban on public smoking passed

HYDERABAD, MARCH 27.

Our Special Correspondent

The Andhra Pradesh State Legislative Assembly on Wednesday passed a bill providing for prohibition of smoking in places of public work or public use and in public service vehicles. It also provides for conviction and levying of fines ranging from Rs. 100 to Rs. 1,000 on those who contravene the provisions.

Some of the concerns expressed by the Opposition members include implementation of ban on sale of cigarettes within 100

metres of educational institutions, sale to those below 18 years and prohibition of advertisement of cigarettes. Others spoke of the effect it would have on the livelihood of tobacco farmers and pan shop owners. The Minister allayed their apprehensions.

The Minister said the legislation was necessary in view of the harmful effects of smoking on the health of people and in pursuance of the

Supreme Court directions given on November 2, 2001. Those contravening Sections 5, 6 and 10 relating to ban on smoking in public places and public service vehicles and display of no smoking board, would be punishable with a fine, which may extend to Rs. 100 and for second or subsequent offence with a fine of Rs. 200 which may extend to Rs. 500.

Adapted from ***The Hindu***
March 27-02

- ◆ Newspaper articles are often written with the assumption that they are read by adults. So first, find out the meanings of the words – *conviction, allayed, apprehension, pursuance, contravening, implementation*.
- ◆ In the context of the above news item, fill in the following

- 1) A _____ was passed to prohibit smoking in public places (bill, custom, law, rule).
- 2) Prohibition of smoking does not include _____ (place of work, public vehicles, private garden, bus stand).

- 3) The legislation was in order to _____ the directions from Supreme Court (silence, punish, follow, dismiss).
- 4) The bill was passed in the _____ (Supreme Court, Ministry, Collectorate, Assembly).
 - ◆ Does the newspaper article suggest that everyone had the same opinion about the bill?
 - ◆ What are the provisions for punishment mentioned in the newspaper?

The Constitution of India provides for a Legislature for every State. The legislature of every State consists of the

Governor and one or two Houses. The legislatures in the State are either bicameral (consisting of two Houses) or unicameral (consisting of one House). The Lower House is always known as the Legislative Assembly and the Upper House, wherever it exists, as the Legislative Council. At present, very few States have bicameral legislature.

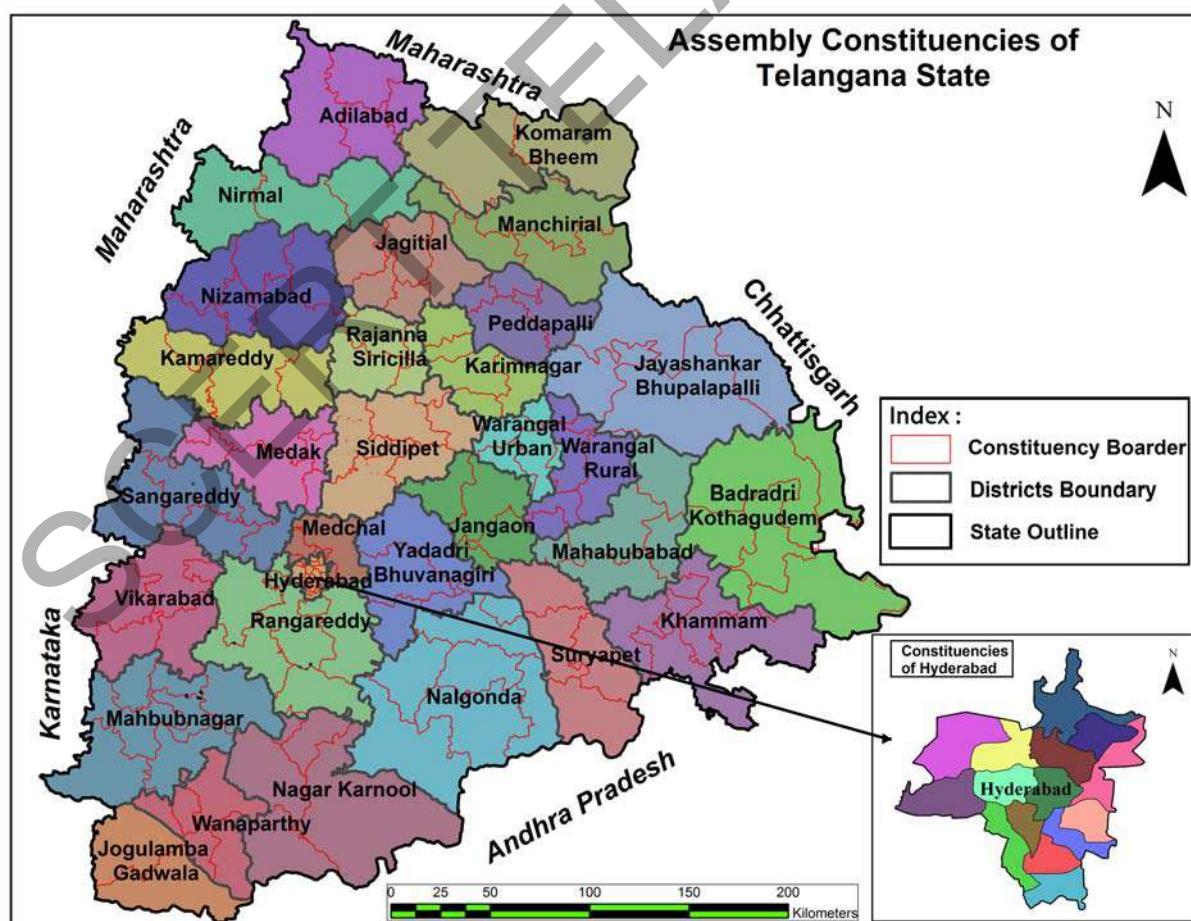
Legislative Assembly

This is the most important body for making laws in a state. State Governments are responsible for implementing these laws and formulating policies for the welfare of the state, is largely composed

of Members of the Assembly. State Assembly members (MLAs) are elected by the people just as panchayat members are elected.

The normal tenure of the Legislative Assembly of every State is for five years but it may be dissolved earlier by the Governor. Likewise, its term can be extended by one year at a time by the Parliament during a National emergency.

The State Legislature must meet at least twice a year and the interval between any two sessions should not be more than six months.



In Telangana, laws are made by the state legislature, which has two chambers:

Chamber	Member	Short Form
Legislative Assembly	Member of Legislative Assembly	MLA
Legislative Council	Member of Legislative Council	MLC

Assembly Constituency

Each member of assembly is elected from a constituency. The number of constituencies in a state will depend upon its population. Telangana State has 119 constituencies. A constituency in Telangana has about 1,70,000 voters. You may remember that all men and women of 18 years of age or above have the right to vote. They have to get their names registered as voters in the area where they live. All voters of one constituency will vote to elect one member for the Assembly.

Each constituency comprises of a number of villages, towns and cities. A big city like Hyderabad is divided into thirteen constituencies. Look at the map of Telangana. You can see that districts which have larger population have more constituencies while those with less population have fewer constituencies.

Election of MLA

Election Commission can conduct the Election of all state assemblies. Usually, election to the state legislative assembly are held once in every five years. Persons aspiring to become MLAs contest these elections. Various political parties field their candidates. There are also individuals who contest the elections but do not belong to any political party. They are known as “Independents”. To contest elections, a person must be a citizen of India, and should

have completed twenty five years of age. He or she should not hold any office of profit under the State or Central government and should possess such other qualifications as may be prescribed by law.

In elections, political parties play a major role. All political parties and candidates come out with election manifestos. These manifestos are descriptions of programmes that they intend to undertake and promises that are relevant to the local context. The candidates and their supporters conduct campaigns by holding meetings and visiting the voters door to door.

- ◆ Make a list of the active political parties in your area and in your state along with their symbols
- ◆ Imagine that you were to contest elections from your district, prepare an Election Manifesto – your promises to the people of the constituency.
- ◆ Some people feel that contesting in elections requires spending huge amounts of money, which is possible only for very rich people. Do you agree with this?
- ◆ If, only rich people are able to contest elections, how will it affect the decisions taken in the Assembly?



Fig 16.2

- ♦ Here are some images (Fig 16.2) from a calendar published by Election Commission. They show different aspects of elections in India from different times. Based on these images, discuss with your teacher or elders the changes that have occurred during the last many years.

On the election day, people vote one by one. The officer in the booth is responsible for checking the identity of the voters. In most cases, the Election Commission has given Voter Identity Cards to all the voters. These cards have to be shown to the officer. The voters do not reveal whom they voted for; it is a secret ballot. Election Commission uses Ballot Boxes or Electronic voting machines in Election Process for casting votes.



Fig 16.3 Model Voter Id & E.V.M.

- ♦ Why do you think voting has to be kept a secret?
- ♦ Examine the Photo Identity Card of your parents and prepare an imaginary Identity Card for you with all the details.

After voting, all votes are counted on a scheduled date and candidate who secures the highest number of the votes is declared elected.

- ◆ Suppose, on a constituency, 1,50,000 votes were polled. Following is the number of votes polled for various candidates. Who do you think will be declared as elected?

Ellamma	45,000
Raghavulu	44,000
Narasimha	16,000
Gulam Mohammad	20,000
Badeyya	15,000
Pooja	10,000

- ◆ To what extent do you think this winning candidate really represents the opinions and needs of the people of the constituency?

Find out with the help of your teacher:

- ◆ The name of your constituency _____
- ◆ Identify three other constituencies in your district _____
- ◆ The name of the MLA _____
- ◆ Identify the reserved constituencies in your district _____
- ◆ Name the members of the family who voted in the last elections _____, _____

Formation of Government

Look at **Table 1**. It shows the results after an assembly election.

We see that the “*Political Party A*” got 75 winning candidates. This party has a majority. Majority in any assembly is more than half of the seats. If any law has to be made, they can easily get it passed, as more than half the members will support it.

The majority members will elect one member among themselves as their leader. He or she will be made the Chief Minister of the state by the Governor. The Chief Minister will select the MLAs from the party to be ministers. Together, they will be called the Cabinet (or ministry). In popular terms, the Cabinet is also called the ‘Government’. The Cabinet is responsible for implementation of the laws, for preparing and passing new laws and welfare schemes in the Assembly.

Table 1	Political Party	No. of Candidates Elected
1	Political Party - A	75
2	Political Party - B	17
3	Political Party - C	10
4	Political Party - D	7
5	Political Party - E	6
6	Political Party - F	4
Total		119

- ◆ Look at **Table 1** showing results of another assembly elections in another state with 119 Constituencies. Which party could have formed the Government?



Website of Telangana Election Commission

<http://ceotelangana.nic.in/>

- ◆ If the seats among various parties are distributed as in **Table 3**, how could a new government be formed? Discuss with your teacher.

Table 3	Political Party	No. of Candidates Elected
1	Political Party - Abcd	45
2	Political Party - Mnop	33
3	Political Party - Wxyz	26
4	Political Party - Stuv	15
	Total	119

In case, no single party gets more than half of the seats, two or more political parties come together to form a Government. It is called coalition Government.

Council of Ministers

The Chief Minister allots different ministries to the members of the Cabinet - he or she makes someone the Finance Minister, the Education Minister or the Home Minister, and so on. The Minister directs the policies in the departments under his or her charge. These policies are implemented according to the rules by officials of the departments. The ministry is responsible for preparing policies and plans which are then submitted to the Assembly for approval. After the approval of the Assembly, the ministry formulates rules and methods for implementing them and takes action to implement them.

While each ministry works independently, major policies are decided upon by the cabinet. So, if anything goes wrong, cabinet and especially the Chief Minister is held responsible for it. The cabinet also takes credit for the good work done during their tenure.

The State Assembly

All the MLAs together elect a person as the Speaker. The Speaker conducts the Assembly meetings – he or she decides what should be discussed, when and who will speak and in what order. If any one disobeys, Speaker has the power to punish them.

As mentioned above, the Assembly has to approve all the laws, policies and levying of taxes by the government. Before giving approval, the members discuss the proposals very carefully and different points of views are expressed. Thus, the benefits and ill-effects of such

measures are discussed in great detail. These are also reported through newspapers and TV to the public.

The MLAs also keep track of all the developments in their constituencies and place the problems of the people before the Assembly. The minister of the concerned department has to make enquiries and find suitable solutions. The ministers and the cabinet, including the Chief Minister, are answerable to the Assembly—that is, they have to answer any questions raised by a member with regard to their work. If the answer is not satisfactory, the members may force the concerned minister to resign.

Legislative Council of Telangana

Until 2014, Telangana and Andhra Pradesh formed a single state. The state of Andhra Pradesh had two houses. The second house is called the Legislative Council. It has been in existence in two spells from 1958-1985 and from 2007 till today. It is a permanent house.

Telangana Legislative Council consists of 40 members. Members of this house, known as MLCs are elected for six years. After every two years, one-third of its members retire. To contest in this house, a person should be a citizen of India and above 30 years of age. He or She should not hold any office of profit under the State or Indian government and must possess such other qualifications as may be prescribed by the Parliament. The *Composition is as follows:*

- ◆ 14 members (1/3) are elected by the MLA's.
- ◆ 14 members (1/3) are elected by the members who were elected to Local Bodies like panchayats and municipalities.
- ◆ 3 members (1/12) are elected from Graduates.
- ◆ 3 members (1/12) are elected from Teachers.
- ◆ 6 members (1/6) are nominated by the Governor.

In order to make any law in the state, it has to be approved by both the houses.

Governor : The Governor of a state is appointed by the President of India. Her/his job is to ensure that the state government functions according to the Constitution of India. The Governor appoints the Chief Minister and other members of the council of ministers. The constitution vests in the Governor all the executive powers of the State government.

Find out who is the governor of Telangana.

The Making of Laws

How do the assemblies make laws? Usually, laws are drafted by the ruling party as it alone has the majority support in the Assembly to pass them. However, on some issues, a member can also propose a law and it can be adopted if the majority supports it. Let us look at the procedure for making a law in detail.

Before a law is passed, the proposed law is called a 'Bill'. After being passed by both the chambers and after the approval of the Governor, it becomes a law and is called an 'Act' of the state legislature.

System of Reservation

It has been observed that it is very difficult for weaker sections of the population, like the dalits or adivasis, to fight and win elections. As such, very few of them get elected to the assemblies. In order to ensure that they are adequately represented in the Assemblies, the Indian Constitution reserve certain constituencies for the Scheduled Castes and Scheduled Tribes.

Reserved Constituencies in Telangana State Legislative Assembly:

Total Number of Constituencies : 119

Constituencies Reserved for SCs : 19

Constituencies Reserved for STs: 12

Nominated Person from Anglo Indian Community : 1

- Many people feel that similar reservation of seats for women too should be ensured.
What do you feel?

The minister who brings the Bill will describe in detail the reasons for the new law in the Assembly. There will be a lot of discussion and sometimes opposition from different MLAs. There could be suggestions to improve the provisions in the Bill. A small committee consisting of both ruling party and opposition members is set up to discuss these suggestions. After taking all such aspects and necessary changes into account, it will be first approved by the Cabinet. Then, it will be placed before the Assembly for voting. If more than half the members of the Vidhan Sabha accept the bill, it will be passed and taken to the Vidhan Parishad. If the Vidhan Parishad passes it, then it will be sent to the Governor for approval. After his or her approval, the bill will be called an Act and published in gazettee.

Discussions in the Assembly

Let us read an *imaginary* example of the discussions that can take place in the Legislative Assembly.

MLA (1) : Honourable Speaker, due to lack of rain for the past three years, the groundwater level in my constituency has decreased too much. The Government has not taken any steps in this regard. Moreover, there has been an increase in the number of borewells. I wish to know from the Honourable Minister the steps being taken for underground water conservation.

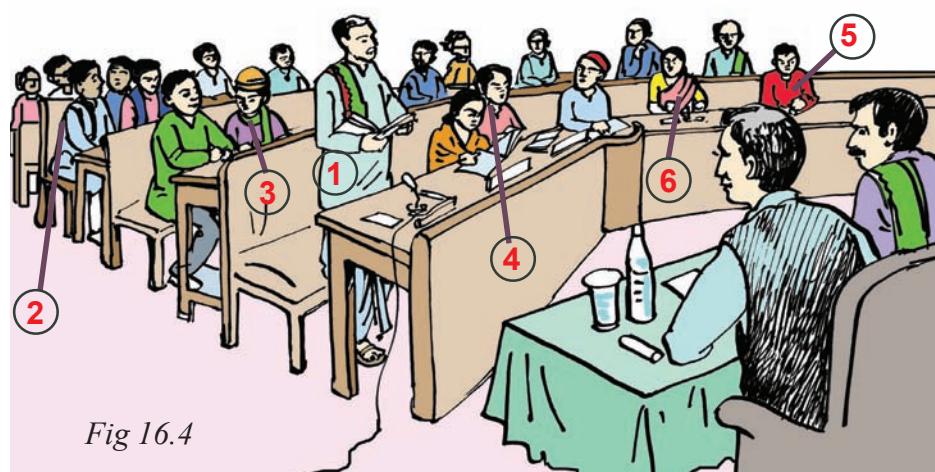


Fig 16.4

MLA (2): Hon. Speaker, yes it is true. The situation in my constituency is no better. The work of the officials is not satisfactory. The people have to walk a long distance to fetch drinking water.

MLA (3): Hon. Speaker, the Government should provide money to strengthen the bunds of the tanks, remove the silt, and should take suitable steps to store the rain water during rainy seasons. Moreover, trees should be planted on the bunds to prevent breaching of the tank bunds.

MLA (4): Hon. Speaker, the Government is aware of the situation. It has already taken up the necessary measures to prevent further damage. The Mandals affected by the depletion of groundwater have been identified.

MLA (5): Hon. Speaker, the opposition should appreciate the steps taken and should offer constructive suggestions. They should not unnecessarily criticise the Government. Bunds were built on the hill slopes in my constituencies and as a result, there has been considerable rise in the level of groundwater in my constituency. Government officials are within the reach of the people.

MLA (6) : Hon. Speaker, the Industrial units in my area are discharging polluted water into the river and it has adverse effects on the health of the people. I would like to know the steps being taken by the government in this regard since drinking water is a serious issue in my constituency.

Minister: Hon'ble Speaker, the Government has great concern for the health of the people. It has taken up all the remedial and protective measures in the drought prone mandals. Development of tanks, plantation of trees, and banning sand mining are some of them. The Government takes into consideration the suggestions of the honourable members and also seeks the support of all for the successful implementation of the programme.

- ◆ What would be your response on the above issue if you were an MLA?
- ◆ What is the difference between the role of a ruling party MLA and an opposition party MLA?

The Government of India passed two acts for the protection of children. They are :

- 1) POCSO Act - 2012 (Protection of children from sexual offences Act, 2012).** This act ensures children's well being and safety.
- 2) The Juvenile Justice (care and Protection of children) Act, 2015.**

This act ensures protection to the children in conflict with law and those in need of care and protection (orphans and others). For such children the act provides education, health, nutrition, counselling etc., to help them assume a constructive role in the society.

Keywords :

1. Manifesto 2. Cabinet 3. Speaker

Improve your learning

1. Name a few areas related to the day to day lives of ordinary people on which laws should be made.
2. Your school belongs to the department of School Education. Find out some laws which are applicable to your school (students, teachers, headmaster/ principal/ PTA).
3. There is a law that no child in the age group of 6 to 14 should remain out of school. What steps should be taken to implement this law? Discuss among yourselves with the help of your teacher.
4. Read the para under the sub heading ‘The making of laws’ and answer the question given below. Suppose you are a member of the Telangana Legislative Assembly, which issue will you raise for the making of law and why? Explain with an example.
5. Suppose there is a state under the name of Purabgarh with MLA seats of 368. After an election, different political parties got seats as shown below:

Party A	=	89
Party B	=	91
Party C	=	70
Party D	=	84
Others	=	34
Total	=	368

Read the above table and answer the following questions:

- a) Of the 368 seats, how many seats are needed for getting a majority to form the government in the state?
- b) Which is the single largest party?
- c) Can the single largest party form the government? If not, what can be the alternatives to form the government?
- d) How would a coalition government be different from a one party government?
6. At present, very few States in our country have a bicameral legislature. Can you name them?
7. Locate the Assembly constituencies of your district in your district map (Take the help of map.1).
8. Write an imaginary dialogue for the following picture in the context of the chapter.



Implementation of Laws in the District

In the previous chapter, we read about how laws are made and how welfare and development programmes are carried out. But how are they implemented? Do you think people elect those who implement laws? Do you think once the laws are made, people implement them themselves? In these chapter, we would read about how these things are done.

- i. Building dams and canals
- ii. Supplying electricity to houses
- iii. Running ration shops
- iv. Running trains
- v. Printing currency notes
- vi. Collecting taxes from people
- vii. Preventing child labour, child sexual abuse and educating all children
- viii. Defending the borders of the country
- ix. Identifying those below the poverty line and implementing schemes for their benefit
- x. Preventing people from stealing from other people's houses

- ◆ You may have heard of many kinds of government functionaries. Can you name a few and discuss what they do?

We saw in the last chapter that there are various departments of the government to carry out various kinds of activities. These departments are under the control of ministers, but they have a large number of officials who carry out the orders of the government. Some of these officials are posted in the state capital like Hyderabad from where they plan the implementation

in all parts of the state. At the same time, the entire state is divided into a number of districts and most departments have their offices for the implementation of the government's laws and plans. There are 31 districts in Telangana.

- ◆ What is the name of your district and where is its headquarters?

Each district has a District Collector and Magistrate who coordinates the work of all the departments in the district. Let us learn more about their work.

The District Collector & Magistrate of Nallavaram

Here is an imaginary district of Nallavaram. This district has the following Mandals - Garipalli, Mallepalli, Narasapet, Gurthur. The office of the district magistrate of the Nallavaram is in Nallavaram town.

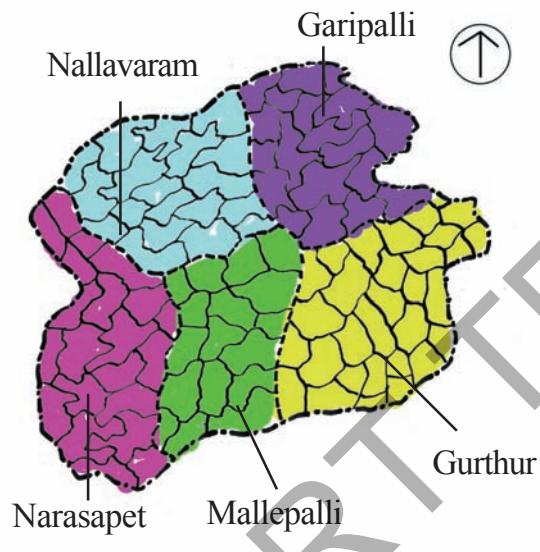


Fig 17.1 Nallavaram District

The district magistrate, Manisha Nagle, reaches her office at 10:30 every morning. At 11:30 today, there is a meeting of the officers of all the departments in the office. The heads of all the departments have come for the meeting. The Collector asks the head of each department about the progress of the work during the previous month. She also asks them about the problems they face in the work. The meeting continued till about 2 O'clock in the afternoon.

After the meeting, Manisha Nagle goes through the files. There is a stack of files.

Each file deals with the activities of different departments. She reads them and writes her comments or orders on them. It is about 3.00 PM when Manisha Nagle finishes looking at the files. From 3.00 PM. to 4.30 PM everyday, she meets the people of the district. People from all the villages come to meet her with their problems.

Some farmers of Mallepalli Mandal had come to discuss the problem of absence of irrigation in their village. Their tanks were dry for two years. The crops failed this year. They wanted to know if their loans could be waived and if they could get some repair work on tank bund. In the neighbouring villages, tank bunds were repaired. They wanted such work to be done in their village as well.

Manisha Nagle told them that since their village was not in the state list of drought affected areas they could not get any loan waiver. Collector suggested that they approach the MLA and present their problems. She promised to instruct the concerned department to attend to the tank bund of the village.

At 5.00 A.M., on the next morning, the Collector received a phone call from a town in Narasapet Mandal. The cotton stored at the ginning mill caught fire in the night. People were trying to put out the fire. The fire service had already reached the area. It was necessary to ensure that fire did not spread to the neighbouring areas. Nagle immediately left for Narasapet Mandal. She called the Superintendent of Police and the civil surgeon and asked them to go along.

The Collector reached Narasapet at around 7.00 AM and went straight to the cotton ginning mill. A lot of cotton had

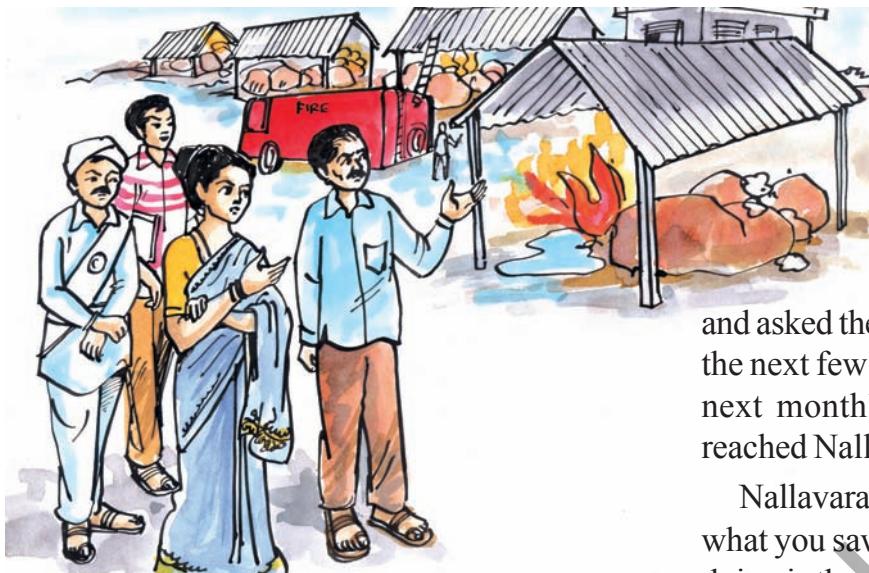


Fig 17.2 District Collector at the cotton factory.

been destroyed but the fire was now under control. The Municipal Chairperson and the police officers were also there. The Collector asked them about the extent of damage. The Chairperson told her that two labourers in the mill had suffered severe burns and had been admitted to the hospital. A few houses nearby had also been burnt down.

Nagle announced a compensation of ten thousand rupees each to the owners of the houses, which were burnt and promised to inquire into the causes of fire. The Collector then visited the injured labourers at the hospital. She also announced a relief payment of twenty thousand rupees each to the two labourers.

On the way back, she visited the Municipal Office. It was pointed out that due to encroachment in many parts of the city, the fire engine arrived late. Sidewalks on the roads were encroached by shop keepers. Many houses and other offices had illegally extended their boundary walls beyond the permitted limits. This was leading to traffic jams in many parts of the town. She talked to the Municipal Officials

and asked them to take strict actions during the next few weeks and report to her at the next monthly meeting. Manisha Nagle reached Nallavaram only after it was dark.

Nallavaram is an imaginary district. But what you saw the Collector of Nallavaram doing is the work that they are expected to do in every district.

- ◆ What explanation did the Collector give for not waiving the loan for the farmers?
- ◆ Who were the other officials mentioned in the incidents?
- ◆ Who were the non-officials mentioned in the above incidents?

Tahsildar (MRO) and Village Revenue Officers

You may have noted that Nallavaram district is divided into different Mandals. There are many villages in each of these Mandals. In the map, you can see that Nallavaram is divided into many Mandals. Many villages together form a Mandal. Just like in the district headquarter, there are different offices at the Mandal. There are Mandal Officers of Development, Revenue, Education, agriculture, and so on.

- ◆ Find out your Mandal in the district map.
- ◆ Find out some of the Mandals in your district map.

Among others, the Revenue Officer keeps the land records. If you live in a village or own land, you may know that your parents have some record for the land that is owned by them. Land all over the country is measured and this information is kept in these offices. They also have maps of the land showing land owned by different people, showing crops, tanks, drainages, wells, neighbouring plots, roads, hillocks, and so on. These documents become extremely useful. If there is a dispute between the boundaries of land owned by two individuals, maps and written documents can be used for settling it. Or, if someone buys or sells the land, this information needs to be written in this office as well. These maps also have records of the forest or uncultivated grazing lands. So if someone encroaches into these lands, they can be evicted.

It is the responsibility of the Village Revenue Officer and Mandal Revenue Officer to keep track of these records of the land. For this purpose, 'mee seva' services are utilized and various certificates are being issued by this centre. They also have the responsibility for updating and issuing ration cards.

How Laws are Implemented?

To understand this, first we need to understand an actual law. In the previous chapters, we have read about the significance of groundwater and how it has



Fig 17.3 Villagers verifying the land records at 'mee seva kendra'

historically been important in our agricultural development. We also have perennial rivers and forest areas. Yet today, we find that in many parts of Telangana, borewells are dug up to 1,500 feet or more. In the long run, it may not be viable to have such system of irrigation, or drinking water.

Andhra Pradesh Water, Land and Trees Protection Act, 2002

It is important to protect these resources for the benefit and survival of the next generations. In this connection, the Government of Andhra Pradesh enacted the Andhra Pradesh Water, Land and Trees Protection Act in 2002. It is being implemented since 19-04-2002. Some of the features of this law are:

- a. Permission from Mandal Revenue Officer is essential to drill/ dig new wells.
- b. Specific depth and distance should be maintained between the wells to avoid unnecessary competition.

- c. Steps to prevent wastage of rain water.
- d. Industrial units should have waste water treatment plants.
- e. Protection of drinking water.
- f. In the regions affected by groundwater depletion, sand quarrying from river beds is prohibited.
- g. Social forestry to be taken up on large scale.
- h. Cutting trees without permission is prohibited. When one tree is cut, two saplings should be planted.

After the law was passed, government formed an authority to implement the act. It was called the Water, Land and Trees Protection Authority or WALTA. If you look carefully, in order to implement a law like this, it is necessary that different departments of the government work together. You can note that the forest department has to be taken into account, because forests are important for saving water and the department in charge of Industry to ensure that the factories are not polluting water.

So we can build a table such as the following to show how different persons in the government could be responsible for implementing the law:

Department	Subject
Groundwater Department	Registration of Rigs, Sand Mining, classification of Groundwater basins, etc.
Municipal Administration & Urban Development Department	Construction of Rain-water harvesting structures, tree planting, permission for construction of new buildings.
Mines and Geology Department	Monitoring Sand Mining in water bodies
Forest Department	Granting permission for felling trees

Now, if this law is properly implemented, what will it mean? Considering the following possibilities, can you identify which departments will be responsible if their activities are to be evaluated – it is possible that there are more than one department which looks at them:

- ◆ Satyavathi is a farmer who wants to dig a new bore well, but there is another bore well in her neighbouring land. What are the rules she has to follow?
- ◆ Padmanabham wants to build a new house and wants to get sand from the river bed near the house. For this, whose permission is required?
- ◆ Apparao is a contractor who wants to start a stone quarry near the forest. From which departments should he take the permission.

Thus, in a democratic country like ours there are different roles played by elected representatives and appointed government officials. In many ways, these are different from the way kings and priests dictated different aspect of our lives. That is not to say that all the different forms of marginalisation, disparities and discrimination have been removed from the society. But we can work towards achieving them.

Keywords :

1. Magistrate
2. Tahsildar
3. Law implementation
4. VRO
5. Ginning

Improve your learning

1. Make a list of activities done by the District Collector.
2. Correct the following statements :
 - a. Law is implemented by the elected representatives.
 - b. The Collector is in charge of a Mandal.
 - c. People approach the Mandal Development Officer to solve the problems of the entire district.
 - d. Tahsildar keeps the record of land revenue.
3. Read the first two paragraphs of (page 160) Tahsildar and Village Revenue officers and answer the question given below.

Why do you think are the land records kept at village and mandal levels?

4. Compare the roles of people who make laws with those who implement them in the following aspects:

a) has to contest elections;	b) are part of different departments of government;
c) responsible for making laws;	d) responsible for implementing laws;
e) usually elected for 5 years;	f) are appointed into jobs;

Member of Legislative Assembly	Persons in Administration

5. Here is another brief description of Manisha Nagle. Read this carefully and compare it with the text given under the head “Mansabdar’s and Jagirdars” in chapter 14 and “Captains of the

troops' - The *amaranayakas*" in Chapter 13 and fill the following table.

Manisha Nagle has been the Collector of Nallavaram for the last 5 months. Earlier, she worked as the Deputy Secretary in the Ministry of Public Health Department in the state capital. It is possible that she may be transferred as a Collector of another district or taken back to the State Secretariat. She is an employee of the Indian Government. Often, some of them have to go to Delhi and work for the central government. All the officers like Manisha Nagle are selected through an examination conducted by the government.

Item	Government employees	Amara Nayakas	Mansabdars
Process of selection			
Paid through			

- Colour the mandals surrounding your mandal in your district map.

Discussion:

Organise a programme of "student's interaction with revenue officials" (Tahasildar/Mandal Revenue Inspector/Village Revenue Office) about - "The implementation of Laws".

Project:

- Interview your teacher, or any government school teacher to get the following details:

When was she or he appointed?

To which department of the government does she/he report?

Has the teacher been transferred?

How are they promoted or punished? Who is responsible for their salaries?

If they have any complaints about their working conditions, whom do they report them to?

- What has been their experience in implementing the new rules/programmes like ensuring enrollment of children, mid-day meals; or any other program? Make a presentation of your findings in the classroom.

Caste Discrimination and the Struggle for Equality

Caste system has created one of the major forms of inequality in our country. For centuries, people have fought against this discrimination and our constitution too strives to end it. Elimination of caste discrimination has been one of the major aims of our governments. Let us read how caste system works and what steps have been taken to end caste discrimination.

A large number of people in our country think of themselves as belonging to some caste or the other. They even put the names of their castes as a part of their own names. Usually, people of a caste follow some common customs and worship a particular deity. Many people who follow the caste rules marry only within their own caste. In olden days, people of one caste followed the same profession or work, though these day, this tradition has been changing fast. Thus, you can see that caste system creates some bonds among a particular group of people and separates them from the other groups.

- ◆ To what extent are the above true statements in your area and to what extent are they changed? Discuss.

However, the caste system has also given rise to great inequalities and discrimination in our society. Let us see how this happens.

People are engaged in different kinds of work like teaching, carpentry, pottery, weaving, fishing, farming etc. to earn their livelihood. However, certain kinds of jobs

are valued more than the others. Activities like cleaning, washing, cutting hair, picking garbage are seen as tasks that are of less value and people who do this work are seen as dirty or impure. This belief is an important aspect of the caste system. In the caste system, communities/ groups of people were placed in a social order where each caste was either above or below the other. Those who placed themselves at the top of the ladder called themselves upper caste and saw themselves as superior. The groups who were placed at the bottom of the ladder were seen as unworthy and were called “untouchables”. Caste rules were set and did not allow the so-called “untouchable” to take on work other than what they were meant to do. For example, some groups were only allowed to pick garbage and remove dead animals from the village. But they were not allowed to enter the homes of the upper castes, take water from the village well or enter the temples. Their children could not sit next to the children of other castes in school. Thus,

upper castes acted in ways which did not give the so-called “untouchables” the same rights as they enjoyed.

- ♦ In what ways do you think did the caste system promote inequality among people?

When some people are not allowed to do what they want to do – like get education, or take up jobs of their choice, we can say that they are facing discrimination. Dr Bhimrao Ambedkar, one of the greatest leaders of India, shares his first experience of caste-based discrimination, which took place in 1901 when he was just nine years old. He had gone with his brothers and cousins to meet his father in Koregaon which is now in Maharashtra. Let us read more about this incident :



**Dr B.R. Ambedkar
(1891-1956)**

Chairperson of the committee for drafting of the Constitution of India and the first Union Law Minister of India.

“Long did we wait, but no one turned up. An hour elapsed and the station master came to enquire. He asked us for our tickets. We showed them to him. He asked us why we tarried. We told him

that we were bound for Koregaon and that we were waiting for father or his servant to come, but that neither had turned up and that we did not know how to reach Koregaon. We were well-dressed children. From our dress or talk, no one could make out that we were children of the untouchables. Indeed, the station master was quite sure we were brahmin children and was extremely touched at the plight in which he found us in. As is usual among the Hindus, the station master asked us who we were. Without a moment’s thought, I blurted out that we were Mahars (Mahar is one of the communities which are treated as untouchables in the Bombay Presidency). He was stunned. His face underwent a sudden change. We could see that he was overpowered by a strange feeling of repulsion. As soon as he heard my reply, he went away to his room and we stood where we were.

Fifteen to twenty minutes elapsed; the sun was almost setting. Our father had not turned up nor had he sent his servant, and now the station master had also left us. We were quite bewildered, and the joy and happiness, which we felt at the beginning of the journey, gave way to a feeling of extreme sadness.

After half an hour, the station master returned and asked us what we proposed to do. We said that if we could get a bullock-cart on hire we would go to Koregaon, and if it was not very far we would like to start straightway. There were many bullock-carts plying for hire. But my reply to the station master that we were Mahars had gone round among

the cart men and not one of them was prepared to suffer being polluted and to demean himself carrying passengers of the untouchable classes. We were prepared to pay double the fare but we found that money did not work. The station master, who was negotiating on our behalf, stood silent, not knowing what to do.

Source: Dr B. R. Ambedkar, Writings and Speeches, Volume 12, Edited Vasant Moon, Bombay Education Department, Govt. of Maharashtra.

- ◆ Despite the children offering money, the cartmen refused them. Why?
- ◆ How did people at the station discriminate against Dr Ambedkar and his brothers?
- ◆ How do you think Dr Ambedkar felt as a child when he saw the station master's reaction to his statement that they were Mahars?
- ◆ Have you ever experienced prejudice or witnessed an incident of discrimination?
- ◆ How did this make you feel?

Imagine how difficult it would be if people could not move easily from one place to the other, how insulting and hurtful it is to have people move away, refuse to touch you or allow you to drink water from the same source as they do.

This small incident shows how a simple task of going from one place to another in a cart was not accessible to the children – even though they could pay the money. All the cart men at the station refused to take the children. They acted

in a discriminatory manner. So, clearly, caste based discrimination is not only limited to preventing dalits from undertaking certain economic activities but it also denies them the respect and dignity given to others.

An example of discrimination in schools

Omprakash Valmiki is a famous dalit writer. In his autobiography, *Joothan*, he writes, “*I had to sit away from the others in the class, and that too on the floor. The mat ran out before reaching the spot I sat on. Sometimes I would have to sit way behind everybody, right near the door...sometimes they would beat me without any reason.*” When he was in Class IV, the headmaster asked Omprakash to sweep the school and the playground. He writes, “*The playground was way larger than my small physique could handle and in cleaning it, my back began to ache. My face was covered with dust. Dust had gone inside my mouth. The other children in my class were studying and I was sweeping.* The headmaster was sitting in his room and watching me. *I was not even allowed to get a drink of water. I swept the whole day, ...From the doors and windows of the school rooms, the eyes of the teachers and the boys saw this spectacle.*” Omprakash was made to sweep the school and the playground for the next couple of days and this only came to an end when his father, who happened to be passing by, saw his son sweeping. He confronted the teachers and then walking away from the school holding Omprakash’s hand, he said loudly for all of them to hear, “*You are a teacher...So I am leaving now. But*

remember this much Master... (He) will study right here...in this school. And not just him, but there will be more coming after him."

- ◆ Why do you think Omprakash Valmiki was treated unequally by his classmates and the teachers?
- ◆ If you were in his place, how would you feel? Write four lines about it.

When people are treated unequally, their dignity is violated. The dignity of Omprakash Valmiki was violated because of the way in which he was treated. By picking on him and making him sweep the school because of his caste, Valmiki's schoolmates and teachers hurt his dignity badly and made him feel as if he was less than equal to all other students in the school. Being a child, Valmiki could do very little about the situation that he was in. It was his father who, on seeing his son sweep, felt angry by this unequal treatment and confronted the teachers.

Today many teachers have been making special efforts to ensure equality of students in the school. They not only encourage dalit students to learn but also ensure their participation in all school activities like welcoming guests, leading prayers, and making speeches in important functions. Such teachers also ensure that all children sit and eat the midday meals together and serve food and water to each other.

- ◆ Have you seen such efforts in your school or nearby schools? Share those experiences with the entire class.

Had caste system always been there?

No, there was a time when there was no caste system. We saw the lives of hunter gatherers and tribes. They did not have any caste system. Some aspects of the *Varna* system emerged in the later Vedic period in which the four major Varnas – Brahmana, Kshatriya, Vaishya and Shudra are mentioned. Later on, many new aspects like untouchability and restrictions on marriage, eating together etc. emerged. It was said that the lower castes should serve and obey the higher castes. These ideas spread all over India including Telangana in the times of the kingdoms you studied in chapters 11 and 12. As these ideas spread, many people criticised them. Thinkers like Buddha, Mahavira, Ramanuja, Basava, Kabir, Vemana, etc. criticised the idea of some people being superior to others by birth. They felt that all people, irrespective of their birth or profession, can perform good deeds and attain salvation. You will read about them in greater detail in later chapters.

Striving for Equality

You read about the establishment of British rule and the beginning of struggle against it. The struggle for freedom from British rule also included within it the struggle of large groups of people who not only fought against the British but also fought to be treated more equally. Dalits, women, tribals and peasants fought against the inequalities they experienced in their lives.

In the nineteenth and the twentieth centuries, several social reformers fought

to create a new social system based on freedom, equality, brotherhood, human dignity and economic justice. They include Jyotirao Govindarao Phule, Savitri Bai Phule, Periyar E.V. Ramasami Naickar, Sri. Narayana Guru and Ayyankali. We shall read about some of them in class 8.

During the colonial period in the Telangana region too, social mobilization emerged. Some of the important people involved in it were P. Venkataswamy, Eshwari Bai, T.N. Sadalakshmi, C.S. Ethirajan, Arigay Ramswamy, M. Venkataswamy, B.S. Venkatrao etc. Let us look at the struggles of one of them.

B.S. Venkatrao (1896-1953)

Bathula Venkatrao was born in Ghasmandi, Hyderabad. He was popularly known as Rao Saheb. His father, Bathula Sayanna, was a domestic servant of the Europeans. B.S. Venkatrao studied upto ninth class and was well versed in English, Urdu, Persian and Marathi apart from Telugu. He worked as a sculptor in Pune before joining the Public Works Department of the Nizam's Government. He rose to a very high position in the government of the Nizam prior to independence.

Having experienced untouchability and its impact on the suppressed classes, he was determined to eradicate it. The Adi-Dravida Sangham was formed with this objective in 1922 with the assistance of people like M. Govindrajulu and M. Venkataswamy. Its main objective, included abolition of the Devadasi system and bringing unity amongst the dalits. Later, they formed the Adi-Hindu Mahasabha in April 1927. A

decade later, after an influential discussion, at Pune, they formed Youth League of Ambedkarites, with the objective of getting educated dalit youth to propagate awareness about the exploitation based on caste. This was later renamed as Hyderabad State Depressed Classes Association.

The leaders of this organization went from place to place and organized meetings among the people to make them aware of caste oppression, the movements taking place in the country for the emancipation of the dalit castes and the need to organize and defend themselves. Some of them also promoted religious reform so that the dalits were freed of the casteist superstitions.

They constructed houses and library in the Ghasmandi area and named it Audi Nagar. Across the Hyderabad city, they also constructed 18 temples for the dalits. B.S. Venkatrao's contribution to the dalit upliftment in Hyderabad was recognised by Dr Babasaheb Ambedkar who invited him to preside over the Bombay Presidency Mahar Conference in 1936 at Bombay. The conference was attended by 10,000 people and unanimously resolved to support the movement initiated by Dr.B.R. Ambedkar.

On 1 April 1947, the Hyderabad Assembly debated on the resolution moved by Palayam Pillai, recommending to the President-in-Council for a grant of twenty lakh rupees for the uplift of the suppressed classes of the State. Shri Venkatrao moved an amendment to the resolution raising the grant to one crore rupees. The House agreed to make a recommendation to the Prime Minister for the grant of one crore to the fund. Accordingly, the Nizam

constituted the depressed classes welfare fund and sanctioned one crore rupees for the same. The Nizam honored him by awarding the title of Khusru-E-Deccan.

He was elected to the Rajya Sabha by the State Legislative Assembly after 1952.

Equality after Independence

When India became a free nation in 1947, our leaders too were concerned about the different kinds of inequalities that existed. The people who wrote the Constitution of India, a document that laid out the rules by which the nation would function, were aware of the ways in which discrimination had been practised in our society and how people had struggled against this. Many leaders of these struggles, such as Dr.Ambedkar, had also fought for the rights of the dalits.

So, these leaders set out a vision and goals in the Constitution to ensure that all the people of India were considered equal. This equality of all persons is seen as a key value that unites us all as Indians. Everyone has equal rights and opportunities. Untouchability is seen as a crime and has been legally abolished by the law. People are free to choose the kind of work they wish to do. Government jobs are open to all. In addition, the Constitution also placed responsibility on the government to take specific steps to realise this right to equality for poor and other such marginal communities.

The two ways in which the government has tried to implement the equality that is guaranteed in the Constitution is through laws and through government programmes or schemes to help the disadvantaged communities. There are several laws in India that protect every person's right to

be treated equally. In addition to laws, the government has also set up several schemes to improve the lives of communities and individuals who have been treated unequally for several centuries. These schemes help to ensure greater opportunities for them.

One of the steps taken by the government includes the mid-day meal scheme. This refers to the programme introduced in all government elementary schools to provide wholesome cooked lunch to all the children. Tamil Nadu was the first state in India to introduce this scheme, and in 2001, the Supreme Court asked all the state governments to begin this programme in their schools within six months. This programme has many positive effects. These include the fact that more poor children have begun attending school. Teachers reported that earlier children would often go home for lunch and then not return to school. But now with the midday meal being provided in school, their attendance has improved. Their mothers, whose work ways interrupted to feed their children at home during the day, now no longer need, to do so. This programme has also helped reduce caste prejudices because both lower and upper caste children in the school eat this meal together. In Telangana, in almost all the rural schools, mid-day meal is prepared by the members of women self help groups, who are invariably from deprived classes, and in quite a few places, dalit women have been employed to cook the meal. The mid-day meal programme also helps to reduce the hunger of poor students who often come to school and cannot concentrate on studies because their stomachs are empty.

- ◆ Can you list three benefits of the mid-day meal programme?
- ◆ How do you think this programme might help promote greater equality?

While government programmes play an important role in increasing equality of opportunity, there is much that needs to be done. While the mid-day meal programme has helped increase the enrolment and attendance of poor children in school, there continues to be a big difference in our country between schools attended by the rich and schools attended by the poor. Even today, there are several schools in the country in which dalit children like Omprakash Valmiki, are discriminated against and treated unequally. These children are forced into unequal situations in which their dignity is not respected. This

is because people refuse to think of them as equal even though the law requires it.

One of the main reasons for this is that attitudes change very slowly. Even though people are aware that discrimination is against the law, they continue to treat people unequally on the basis of their caste, religion, disability, economic status and sex. It is only when people begin to believe that no one is inferior, and that every person deserves to be treated with dignity, the present attitudes can change. Establishing equality in a democratic society is a continuous struggle. Individuals as well as various communities in India should contribute to achieve this.

Keywords :

1. Untouchability
2. Scheme
3. Constitution
4. Autobiography

Improve your learning

1. What is the difference between being punished for a mistake and being discriminated against?
Was the child Ambedkar being punished or discriminated against?
2. Though there are many castes in the society, on what occasions do you find equality among them?
3. Our Constitution abolished the practice of untouchability and declared it a crime. Do you think it has been fully abolished in practice?
4. How can your school help in ending caste based inequalities?
5. Read the paragraphs “The two ways for them” (p.no.170) comment on it.

Project :

1. Find out about a government scheme in your area. What does this scheme do? To whom this scheme intended to benefit.
2. Discuss with your parents or grandparents about how caste system functioned earlier to find out what has changed and what has not. Prepare a report and present it in the class.

Livelihood and Struggles of Urban Workers

In Chapter 9, we read about workers in a paper mill. Most paper mill workers were like Anand – they get high wages, bonus (share of profit of the company), Provident Fund (savings for future) and other allowances. They also get healthcare and housing facilities. Such workers constitute only a small section of all the workers in India. We also learnt about other kinds of workers in the same paper mill - Umar and Pushpa, who get low wages and do not get any other allowances or facilities required for a decent living. Most workers in India are like Umar and Pushpa. In this chapter, we will learn about why and how workers negotiate with their employers for a decent life through their organisations and laws. We will also learn about an organisation working for those who work on their own.

We have learnt that government makes laws in the interest of the people. Laws are also made to protect the welfare of workers employed in fields, factories, private and government offices. Factories which are properly registered with the government are expected to follow these laws and provide better wages and other facilities required for workers. Governments also have Labour Departments, which have the responsibility to ensure that these laws are followed. If the laws are not followed, workers can file cases in courts. At times, factories protect the welfare of only a section of workers who are called the ‘Regular Workers’ or ‘Permanent Workers’ and those known as ‘Casual’ or ‘Contract workers’ are not looked after.

However, there are many factories which do not get properly registered with the

government. Let us look at the conditions of workers in such factories closely.

Working as ‘Permanent Workers’ in Factories

Read the following accounts of two factories in Kothur, which is a new industrial town, located about 30 kilometres from Hyderabad in Mahabubnagar district. This was recorded in 2002.

Fibrotex (not a real name), a large scale factory producing fibre glass was setup in 1976. In 2002, out of 570 workers, 140 were permanent workers; 60 workers were employed on casual basis and they were called badli workers, i.e. they replaced permanent workers in case of their absence and about 300 workers were employed daily on contractual basis.

(A permanent worker cannot be dismissed without a proper procedure and a payment of compensation while other workers can be removed easily.)

This factory has a Trade Union. Initially, it was set up with the encouragement of the company, which wanted a union that would be more agreeable to its policies. Soon, the Union developed into a strong workers' organisation as workers participated in the union actively. It negotiated with the management to fix wages etc.

All workers get wages fixed through agreements with the union and medical facilities through Employees' State Insurance (ESI) and Provident Fund (PF). The Trade Union secured other benefits also – health checkup in big private hospitals, leave in case the workers become sick, safety-wear in the work place, safe drinking water in the factory, educational allowance for workers' children, conveyance allowance and also Leave Travel Allowance (LTA). They also get loans from the company when needed and the company has also provided quarters for them to live in. The company also took interest in training workers who have been working for long in the factory, sending them to foreign countries to improve production quality. The Trade Union also made agreements with factory owners to regularize contract labourers after a definite period of work.

The Trade Union of Fibrotex was quite active in the town as well. This had helped many other small Trade Unions in other factories to grow their bargaining power with their employers.

Trade Union

A Trade Union is an organisation formed by workers to protect their interests. If every single worker has to negotiate with the employer separately, they will not be in a strong position. However, if all of them negotiate together, their position will become stronger. Trade Unions negotiate on the behalf of all workers with government and the employers. They seek to ensure proper wages, other benefits and decent working conditions for their members. Collectively, with their member workers, they secure social security benefits, medical facilities, houses, Provident Fund and pension for working. If any worker is harassed or is in need of help, the Trade Union takes up his or her cause. Unions adopt a variety of measures like negotiations, filing cases in the law courts and even strikes or stoppage of work to pressurise the employers in democratic principles.

The details of workers' salaries (in 2002) in Fibrotex are as follows:

<i>Permanent worker</i>	<i>Rs.4500 - 10,000 per month</i>
<i>Badli workers</i>	<i>Rs.3000 - 4000</i>
<i>Contract / casual labourers</i>	<i>Rs.58 per day for eight hours</i>

available only to the 140 ‘Permanent Workers’. About 360 workers, called badlis and contract workers, get low salaries along with PF, ESI.

- ◆ What is the difference between a permanent worker and a *badli* worker?
- ◆ Calculate the difference between the monthly salary of a permanent worker and casual labourer.
- ◆ Invite one or two factory workers who are getting ESI and PF benefits to class and collect more details about how these facilities are made available to her / him and the steps a worker has to follow to get these benefits. You may also invite a parent of any of your classmates also to talk about these things.

KRS Medicines Factory

This company (not a real name) mixes and packs medicines for another big medicine company. It employed about 118 workers of whom about 104 workers were employed as daily casual workers. That is only 14 workers were regular and permanent and were used for the skilled work of mixing the chemicals to prepare the medicine powder. They were paid about Rs. 1500 to Rs 2500 per month and had a security of employment. They also got ESI and PF. The remaining 104 workers who were engaged on a daily basis mainly did the packaging and labelling of the medicine.

About 56 of them were women. These daily workers were engaged by a labour contractor who was told everyday by the manager as to how many workers to engage. These workers mainly came from nearby villages and were usually illiterate. The women workers had to work for about 12 hours a day and were paid just Rs.30 whereas the men were paid Rs.42 for the same work. This is much below the minimum wage fixed by the government for there kind of factories. The managers do not allow the workers to form any Trade Union and threaten that they will close down the factory if any union is formed.

These days, a large number of companies are adopting policies similar to this company, reducing the number of regular workers and replacing them with contract and casual workers.

- ◆ Why was no Trade Union allowed to form in KRS Medicines Factory?
- ◆ Why do you think were there more women in the ‘contract worker’ category rather than in the category of ‘permanent workers’?
- ◆ Is it fair to pay women workers less than men for the same kind of work?
- ◆ Do you think it would have been different if the workers had been educated and literate?

Working on Construction Sites and Brick Kilns

Bindhani, her husband and ten year old daughter work in a brick kiln in a village in Ranga Reddy district. She comes from a village in Odisha where they have a small plot of land. They had taken a loan of Rs. 20,000 and could not repay it. They were at the verge of selling their land when a contractor who was recruiting workers for brick kilns in Telangana approached them. He offered them an advance of Rs. 10,000 so that they could repay a part of their debt. They would have to work for six months in a brick kiln and they would also be paid additional wages and provided with a hut to live in. The work would start in December and end in June when they could return to work on their land. That is how Bindhani and her family came to work in the kiln. They are not alone. About two lakh such workers from Odisha come to Telangana to work in brick kilns. It is also common to see thousands of worker families from Telangana go to other states like Karnataka and Maharashtra to work in kilns of those states.



Fig 19.1 Construction Labour

Bindhani wakes up around four o'clock in the morning to prepare some kanji. Her husband is still sleeping as he worked till 2 o'clock in the morning. She wakes her daughter up and both of them get ready to work. They have to fetch water and mix sand and clay and prepare the clay for making bricks. They begin work around 5 AM in the morning and work non-stop till about 9 o'clock when they take a break for tea. By then, her husband too joins them and he puts the clay in moulds. Once the clay has been shaped into bricks, the daughter smoothens them and marks the seal of the company on the bricks. These are then allowed to dry, then loaded on bullock carts and taken to kilns for baking. The work goes on continuously till about 2 o'clock in the night. Bindhani and her husband work for nearly 14 to 16 hours. They don't want to stop work

because they are paid according to the number of bricks they make. They are paid about Rs 108 per every thousand bricks they make. They normally manage to make about 1000 bricks a day. If they fall ill, they will not be able to earn anything. In this way, they work day and night for nearly six months – on some days they just can't work as they grow too tired or ill. They usually eat broken rice and dal and on some days some vegetable. At the end of the six month, they often just manage to clear the advance they got and actually have to go back empty handed. Sometimes, they manage to take home about four or five thousand rupees.



Fig 19.2 Cotton Pickers

Such is the story of lakhs of brick makers and other labourers who engage in different activities all over the world. They are given advance by a contractor; they are taken to far off states whose languages they do not know; they work day and night for five to six months with their family and children and earn just enough to clear the advance they had taken. In some cases, even when people are too tired to work, they are forced by the contractor to work. They live like bonded slaves. Whenever these workers bring their plight to the government, government officials intervene and ‘free’ these ‘bonded labourers’ from brick kilns and contractors and send them home. Since they have no other employment opportunity at home, they are again forced to take advances from the contractor and come back to the kilns again. There are no Trade Unions that fight for their rights as they are migrant workers spread out in a number of sites.

- ◆ Can you calculate how many days will it take them to clear the advance of Rs 10,000 they got from the sardar (Contractor)?
- ◆ What is the average wage for one person per day in this work?
- ◆ Why are there no Trade Unions in brick kilns?
- ◆ Do you think that the government should help workers to form Trade Union among brick kiln workers?
- ◆ In what way can the government help brick kiln workers to improve their working conditions?

- ◆ What kind of machines, tools and sources of power are used in brick production?
- ◆ What kinds of skills are needed for this job? How are they acquired?
- ◆ Why do you think are they made to work in distant states?

Ensuring Workers' Rights - A Global Concern

Ever since the Industrial Revolution about which you had studied in Chapter 8, workers all over the world have been fighting for a dignified life and a just share of their produce. They have fought for several kinds of securities and rights:

1. **Right to productive and safe employment:** so that every worker can work according to his or her skill and capacity and work under safe conditions without endangering their health.
2. **Right to leisure and rest:** so that they have time to rest from their tiring work and also have time to attend to other cultural and social interests.
3. **Right to employment security:** so that every worker knows that he/she has an employment which will ensure her/him a livelihood and will not be arbitrarily thrown out of work. If it is inevitable for a company to remove a worker, he or she should be paid adequate compensation for the loss of work.
4. **Income security:** so that every worker has adequate and regular income to take care of the needs of their families and savings for living a dignified life in their old age.

5. **Work security:** so that when they fall ill or meet with an accident, they can get proper care and get paid for the period of illness.
6. **Skill improvement:** so that they can improve their skills and capabilities while at work.
7. **Collective voice:** so that they can form unions to express their problems and needs without fear and negotiate with the employers as a group rather than as individuals.



Fig 19.3 Knife Sharpeners

Over the last two hundred years, workers all over the world have fought to get these rights recognized, even though they may not be implemented in all places. In most countries, the governments have agreed that these are basic needs of workers and made laws that ensure workers these rights.

Read the previous sections again and colour the whole box (in the next page) against rights and benefits available to workers. If only a part of workers are covered, shade a part of the box depending on the proportion of coverage. Cross mark the box if no right/ benefit is available.

S.No	Rights	Fibrotex	KRS Medicine Factory	Brick Kilns
1.	Right to Productive and Safe Employment			
2.	Right to Leisure and Rest			
3.	Right to Employment Security			
4.	Income Security			
5.	Work Security			
6.	Skill improvement			
7.	Right to Collective Voice			

Informal Work and Workers in Towns

In Telangana and other Indian states, towns and cities are becoming bigger and bigger. People are rapidly shifting from villages to these towns. But many of them do not get sufficient regular employment there and do a variety of odd jobs. They sell vegetables or other items, make and sell snacks, work in tea stalls, or small factories, stitch clothes, load and unload in markets, work as domestic maids etc. Many of them produce goods at home – weaving clothes, papads, pickle, doing embroidery, etc. and are engaged through ‘puttingout’ system. Most of these activities do not get registered with the government. Workers of these kinds can be called informal workers and the nature of such work is called informal work.

What is common about all these areas of employment is that



Fig 19.4 Workers laying cables

they require very little capital or skill training but the employment is both irregular and very low paying. As such, these workers are in a very vulnerable position. Unlike ‘permanent workers’ in factories and offices who get employed and paid regularly, these workers do several jobs in a day - they may distribute newspaper in the morning, work in a tea shop during the day time and cook in some houses in the night. This keeps them busy throughout the day without any rest. In most cases, all members of their families, including children, work to earn. So, the children usually remain uneducated. When faced with financial problems, they try to cut their expenditure by taking children out of schools or cutting down on food or medicines. Even after all this, they are not able to meet their needs. They are forced to take small loans from friends and relatives and at times, from moneylenders. Almost all of them are heavily indebted to these moneylenders and often have to work for them.



Fig 19.5 Road Laying Work

Most of them do not have any Trade Unions to defend their rights. As we mentioned earlier, the number of such workers is constantly increasing in the country. They are increasing not only because people are moving in from villages, but also due to the closing down of large factories and mills. The workers of these factories now have to join the ranks of the casual workers.

Looking at these problems, some trade unionists of Gujarat formed what is considered the largest trade union of the informal workers in the world. Let us find out more about it.

Self Employed Women’s Association (SEWA)

In 1971, a small group of migrant women cart-pullers in Ahmedabad’s cloth market approached Textile Labour Association (TLA) to help them in improving their housing facilities. TLA was the oldest and the largest textile workers’ union with which Mahatma Gandhi was closely associated. The Union helped these women to form SEWA in 1971, which later became a Trade Union in 1972.

Since then SEWA grew continuously, with women working in different occupations becoming its members. SEWA members have no fixed employee employer relationship and depend on their own labour for survival. They barely have any assets or working capital.

Any self-employed women can become a member of SEWA by paying Rs.5 as membership fee. The SEWA helps self-employed women in addressing their grievances, improving their work culture and to become financially self-reliant in running their businesses. Hawkers/vendors selling vegetables, fruits, fish, eggs, food items, household goods, new and old clothes, workers working in houses like weavers, potters, bidi and agarbatti workers, papad rollers, readymade garment workers, artisans; manual labourers and service providers like agricultural labourers, construction workers, contract labourers, handcart pullers, head-loaders, domestic workers, laundry workers, cattle rearers, salt workers, gum collectors etc. can become members of SEWA.

About 13 lakh workers in 9 states in India are now members of SEWA. SEWA also runs a bank cooperative for its members and provides health insurance facility. SEWA also helps its members in marketing their produce and ensuring them fair wages. Do you think such organisations could be of some help in improving the conditions of hundreds of women who are self-employed in selling vegetables on roadsides, in market places and on the streets in Telangana?

Keywords :

- 1. Compensation 5. Casual Worker
- 2. Provident Fund 6. E.S.I.
- 3. Badli Worker 7. Regular Worker
- 4. Wages

Improve your learning

1. Compare the condition of a worker in brick kiln, a permanent worker and a contract worker in a factory.
2. Can you make a list of jobs done by casual and self employed workers in your area?
3. Make a list of different types of unions discussed in this chapter. Fill in the table:

Sl. No.	Company in which union was working	Type of labour	Main problems	Suggested solution
1.				
2.				
3.				

4. Talk to a Trade Union member (leader) and find out why did he/ she join the union, what are their rights and duties as a union member.
5. Write a letter to the Labour officer of your Locality, complaining about the conditions of workers at their work places.

Folk - Religion

Discuss the following questions in your class.

1. Which gods / goddesses are worshipped in your area?
2. Which saints, pirs and babas do your family respect?
3. Which animals and trees are worshipped by people?
4. Do you know how people worship?
5. How are the deities worshipped and who performs the worship?
6. In which languages are the deities addressed by the worshippers?

You may have listened to conversations like the following:

Lakshmi: In recent months, my children have been falling ill repeatedly.

Sammakka: My husband also had been unwell for one month.

Yellamma: I think our goddess Muthyalamma is angry with us. We should offer her a special worship to appease her. Let us take Bonalu and sacrifice a cock to the Goddess.

Ramaraju: My daughter is very weak and does not eat properly.

Suresh: Why don't you go to the Pir Baba's dargah and ask the Maulvi to tie a tawiz ? She will become all right.

Many people in our country worship and pay reverence to gods in large temples, churches or mosques. On the other hand, people also worship many village deities.

Who are these popular deities and how, when and by whom are they worshipped?

There are a large number of village deities – some of them belong to particular castes, or particular villages or even particular families. Some of the more common goddesses are as follows:

Pochamma: Pochamma is the most popular folk goddess of Telangana. In many villages, there is a small shrine dedicated to her. This is different from the temples of Gods like Rama or Shiva. A very simple temple is built under a neem tree with a goddess in the form of a stone inside. In modern towns and cities, these temples are built with some architecture and with a stone idol inside.

In villages, people of all castes go to the shrine with *bonalu* on special occasions. They wash the deity and clean the shrine area. There are no priests and people pray according to their customs and traditions



Fig 20.1 & 20.2 Here are two idols of Pochamma.

with flowers, etc. in their own language: “Mother, we have seeded the fields, now you must ensure good crop.” “My daughter is sick, you must cure her.” “Mother, keep away all infectious diseases and evils from our family.” They offer a part of the *bonam* and sometimes also offer a chicken or a sheep.

Maisamma: She is believed to protect the cattle. Among the cattle sheds, a niche is whitewashed and decorated with “*Kumkuma*” and called as ‘Maisamma Goodu’. In many places, Katta-Maisamma is also worshipped as a goddess of water in the form of a small stone on the tank bund. People believe that she will ensure that the tank is full. Thus, the crops would flourish due to her blessings.

Gangamma: She is a water goddess who protects fishermen who go out into the sea. It is believed that the poor and the orphans are protected by the goddess Gangamma.

Yellamma: Yellamma is also called as Poleramma, ‘Maridamma’, ‘Renuka’ Mahankali, Jogamma, Somalamma and by



Fig 20.3 Maisamma

other names. It is believed that she guards the boundaries of the village and will not allow any disease or evil to enter the village. People mainly pray to her to prevent epidemics like cholera.

Potharaju: The farmers of Telangana believe that Potharaju looks after their agricultural lands and crops and protects the crops from dreadful diseases, thieves and



Fig 20.4 Yellamma

animals. The farmers keep a small stone painted in white in a corner of their fields. The worship of Potharaju is very simple. Prayers are offered to the deity when the crop is harvested. He has sisters who are called by various names like Peddamma.

Beerappa and Katama Raju: They are worshipped by cowherd and shepherd communities. They are considered protectors of cattle and sheep. Have you heard of the story of Beerappa and Akkamankali – how Beerappa, a poor shepherd, worked and fought to marry Kamarathi and how his sister helped him? Have you heard of the story of Katama Raju who fought against the kings of Nellore for the grazing rights of the animal herders?

- ◆ You may have participated in the worship of many of these village and community deities and may also have been to some of the temples of Shiva or Vishnu. Can you compare how the worship is conducted in these places? What are the similarities and differences? Discuss them in the class.



Fig 20.5 Potharaju

It is a general practice to offer animal sacrifice in most of the folk festivals. This results in the killing of thousands of such animals. To prevent this, the sacrifice of any animal or bird in any religious worship is banned in Telangana.

Community Worship of Folk Deities

Many of the folk gods and goddesses were actually local heroes who either died fighting in defence of their people or were themselves wronged by the powerful people of their times. Common people believed that such persons attained special powers to help people or cause problems if not worshipped. Two such folk heroines who laid down their lives in defence of the tribal people were Sarakka and Sammakka in whose honour a *Jatara* is conducted.

Sammakka and Sarakka (Medaram) *Jatara*:

It is a celebration by the tribal people of Taadwai mandal in Jayashankar District at Medaram village. People from Telangana, Andhra Pradesh, Maharashtra, Madhya Pradesh, Odisha, Chattisgarh, and Jharkhand assemble to celebrate the *jatara*. Nearly one crore people attend it.

The Story: ‘Medaraju’, was a contemporary of the Kakatiya king Rudradeva (Prataparudra-I). He ruled Polavasa kingdom located at present in Jagityal district. He married his daughter, Sammakka, to ‘Pagididda Raju’, who ruled Medaram. The couple had three children; Saralamma, Nagulamma and Jampanna. As a part of extension of his kingdom, Rudradeva declared war on Medaram. Pagididdaraju’s entire family led the men and women of the tribe in the fierce battle. All of them got killed in the battle. Jampanna also fought bravely till his last breath and died in ‘Sampenga Vaagu’ to prevent the Kakatiya army from crossing the stream. Hence, it is called ‘Jampanna Vaagu’. Sammakka and Sarakka fought against the army and sacrificed their lives for the sake of their tribe.

The tribal people of the entire region honoured them for their courage and sacrifice and to this day, the people celebrate the Medaram *Jatara* in their honour.

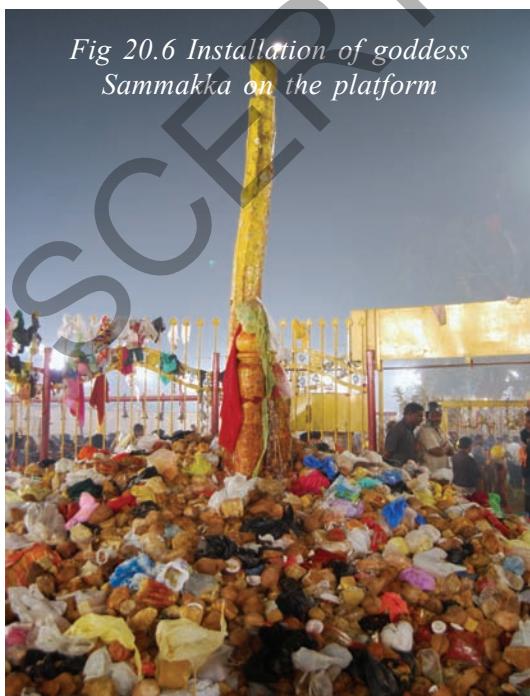


Fig 20.6 Installation of goddess Sammakka on the platform



Fig 20.7 Scene from Medaram Jatara

The Medaram *Jatara* is organised once in two years. It is a three day fair. Sammakka and Sarakka are the formless goddesses. Caskets representing them are brought from the forests in an elaborate procession, brightly decorated and placed on the platform under a tree. At that time, devotees feel the spirits or the goddess possesses them. The people offer ‘bangaram’, jaggery, to the goddess.

Moharram (*Peerilu*) and Urs

The Muslims also pay their respects to the heroes who fought against evil. One such festival is Moharram, which commemorates the battle of Karbala (in Iraq) in which the grandson of Prophet Mohammad was killed. Processions (*Peeri*) with decorated Tazias are taken out in which people of all communities participate. A *peeri* is prepared with bamboo strips in a dome shape. It is covered with glittering clothes. A bamboo pole is fixed in the dome to handle the *peeri* and at the top, metallic crescent or palm shape is attached to it. Finally, it is garlanded with flowers and coconuts.

Similarly, Urs or anniversaries of Muslim saints, who lie buried in various parts of the state, are celebrated. People



Fig 20.8 Ajmeer Dargah

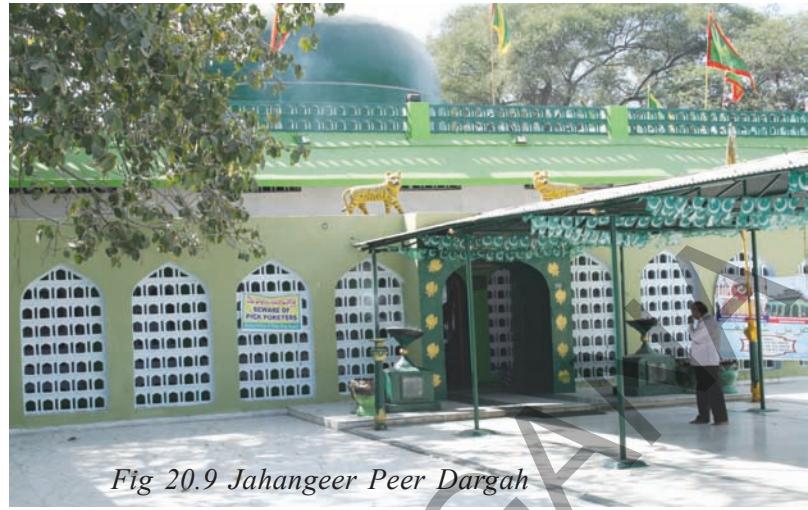


Fig 20.9 Jahangeer Peer Dargah

visit the *dargahs* in large number, offer flowers and *chadars* (sheets on the grave) and listen to the singing of Qawwalis. They believe that they will receive the '*barkat*' or blessings of the *pir* or saint. People who seek some specific blessings like children or job, etc. come to the dargahs and pray there.

Dargah is generally built on the tombs of Sufi saints who propagated Sufism. The tomb or dargah of a sufi saint becomes a place of pilgrimage to which thousands of people of all faiths throng. Often, people attribute sufi masters with miraculous powers (*Karamaths*) that could relieve others of their illnesses and troubles.

Jahangeer Peer Dargah - A Symbol of Religious Tolerance

Jahangeer Peer dargah is located in Kothur mandal of Ranga Reddy district. It is said that in the late 15th century two brothers from Iraq named Sayyed Gousuddin and Sayyad Buranoddin came here, then it was a forest area, spent in the devine thought for some years and ended their lives. Some of their followers constructed a small dargah on their tombs. In 17th century when Mughal emperor

Aurangazeb visited this dargah, he came to know the holiness and appointed Ibrahim as a quazi of this dargah. This quazi developed it as a place of pilgrimage.

Everyday numerous visitors around Hyderabad visit this dargah. Devotees from different states visit on Thursdays and Sundays when special offerings are made. Every year annual Urs celebrations held for three days beginning on the Thursday coming after Sankranthi festival. Offerings of sandal wood paste (Gandhapu Puja) on the first day, offering of lights (Deeparadana) on the second day and Qawwali programme on the third day. Visitors from not only different parts of India but also from abroad attend the Urs Celebrations. Thousands of devotees including Hindu and Muslim religions offer flowers, sweets and chadars. This dargah has become a symbol of religious tolerance.

Bonalu

Bonalu is one of the folk festivals popular in the Telangana state. The Goddesses are worshipped and offered food, which is later shared among the family members.

Women folk participate in the procession carrying '*Ghatams*' or



Fig 20.10 Bonalu

ornamented pots filled with flowers on their heads. The women devotees also carry brass vessels or clay pots filled with cooked rice and decorated with neem leaves. The male dancers who accompany them are known as Pothurajus, who lead the procession by lashing whips and holding neem leaves.

- ◆ If you have participated in any of these *jataras* or *urs* or *bonalu*, describe them in your class and discuss their important features.
- ◆ How are these festivals different from the worship of village deities or worship in large temples or mosques?

The antiquity of Folk Traditions

Many historical books tell us that such folk gods were worshipped in very old times too. We learn about the worship of *nagas* (snakes), trees, *yakshas* and *yakshinis* even some 2500 years ago. The *Palnati Virula Katha* written by Srinatha around 1450s mentions the worship of Potharaju. In turn, Vallabharaya's *Kridabhiramamu* written around the same time describes in detail the worship of the

Palnati Veeras, *Mailara* and many mother goddesses in Warangal.

You may have noticed by now that the folk deities are worshipped quite differently from the Gods in large temples, mosques or churches.

Most of these deities are worshipped by all people irrespective of their caste or religion or economic status. For example, even Muslim farmers participate in many of the rituals of village gods. Similarly, people of all religions throng to the dargahs to seek the blessing of the *peers*. They tie strings on a tree or on the walls of the dargah making a vow in return for the wishes granted. They request the *pirzadas* to prepare *tawiz* for them to drive away evil spirits.

The intermixing of Village deities and High Religious traditions

In India, there has been a constant process of interaction between different kinds of people and their religions leading to intermixture of traditions. Thus, religious beliefs which originate in folk worship and folk wisdom are gradually adopted by higher religions and the folk religious beliefs also adopt a lot from the higher religions.

Thus, high religious traditions too worship *peepul* tree, snakes and the mother goddess. This is how the integration of snakes, trees, animals, and birds in the present Puranic religion took place. Gradually, the village deities became part of the worship of deities like the Buddha, Shiva or Vishnu or Durga. You can see snakes, lions, nandi, and trees being worshipped as part of their worship too.

In the case of Islam, this took a different form. The high religion of Islam believes in strict monotheism or worship of one and only God – Allah. However, the folk followers of Islam began to revere Sufi saints and believed that worshipping at the darghas would solve their problems. So, a very strong tradition of pilgrimages to darghas and urs developed in which people of all faiths participate.

Folk Wisdom and Higher Religion

Many saints like Kabir, Yogi Vemana and many sufi saints who came from the common people expressed their deeper religious ideas. They also combined the ideas preached by the higher religions with that of the common people. Read the following lines of Yogi Vemana who lived about 300 years ago and composed poems of great wisdom in Telugu.

“Without personal experience, the mere repetition of scriptures will not remove fears just as darkness is never dispelled by a mere painted flame.”

“The six tastes are diverse, but taste is one; various are the creeds regarding the truth, but truth is one; and saints differ among themselves, while he on whom they meditate is one.”

“Bald heads, matted hair, daubing ashes, recitations, religious dress! No man is a saint who is not pure in heart.”

Such ideas and wise sayings became part of ordinary people’s thinking.

Keywords :

- 1. Folk Deities 2. *Jatara*
- 3. Urs 4. *Peeri*
- 5. *Bonamu*

Improve your learning

1. What are the common elements in the worship of most of the village deities?
2. When people go to towns and settle there, do they continue to worship their old village deities? How do they do it?
3. Do you think the way people worship the village deities is changing now? What kind of changes do you see?
4. Point out the main places of important jataras and urs in Telangana Map?
5. Read the paragraph “Most of these spirits.” of page 186 and comment on it.
6. Collect the following particulars by talking to the people of different religions of your area.

S.No.	Name	Religion practised	God worshipped	Festivals celebrated

Project :

1. Get detailed information from your grand parents about any *Jatara* of your area. Prepare a report.
2. Collect stories about any of the folk deities of your area and prepare a small booklet about it.

Devotional Paths to the Divine

You may have seen people perform rituals of worship, or singing *bhajans*, *kirtans* or *qawwalis*, or even repeating the name of God in silence. Haven't you noticed that some of them are so moved that they burst into tears? Such intense devotion or love of God is the legacy of various kinds of *bhakti* and Sufi movements that have evolved since the eighth century. In class VI, you had read about the Bhakti poems of Alvars and Nayanars who worshipped Vishnu and Siva respectively. Soon kings and chiefs built large temples for these gods, made land grants, and other gifts to perform various rituals. Temple worship became elaborate, complex and expensive. Specially trained priests performed the rituals. People belonging to some castes were not allowed to enter the temples. Soon, a reaction set in against such rituals and inequalities. New ideas on devotion to god emerged. Read on to know more about them.

Philosophy and *Bhakti*

Shankara, one of the most influential philosophers of India, was born in Kerala in the eighth century. He was an advocate of *Advaita* or the doctrine of the oneness of the individual soul and the Supreme God, which is the Ultimate Reality. He taught that Brahman, the only or Ultimate Reality, was formless and without any attributes. He preached about renunciation of the world and adoption of the path of knowledge to understand the true nature of Brahman and attain salvation.

Ramanuja, born in South India in the eleventh century, was deeply influenced by the Alvars. According to him, the best means of attaining salvation was through intense devotion to Vishnu. Vishnu, in his grace, helps the devotee to attain the bliss of union with him. Ramanuja also ensured a place for people of lower castes in temple worship. He propounded the doctrine of *Vishishtadvaita* or qualified oneness according to which the soul even when united with the Supreme God remained distinct. Ramanuja's doctrine greatly inspired the new strand of *bhakti*, which developed in North India subsequently.

Basavanna's Virashaivism

We earlier noted the connection between the *bhakti* movement and temple worship. We now see another level of *bhakti* movement called *Virashaivism*. This movement was initiated by *Basavanna* and his companions like *Allama Prabhu* and *Akkamahadevi* in 12th century in Karnataka. They have represented the ideas about caste and the treatment of women arguing strongly for the equality of all human beings.

These are *vachanas* or sayings attributed to Basavanna:

*The rich
Will make temples for Shiva.
What shall I,
A poor man
Do?
My legs are pillars,
The body the shrine,
The head a cupola
Of gold.
Listen, O Lord of the meeting rivers,
Things standing shall fall,
But the moving ever shall stay.*

- ♦ What were the major ideas expressed by Basavanna?
- ♦ What is the temple that Basavanna is offering to God?

The Saints of Maharashtra

From the thirteenth to the seventeenth centuries, Maharashtra saw a great number of saint-poets, whose songs in simple Marathi continue to inspire people till date. The most important among them were Jnaneshwar, Namdev, Eknath and Tukaram as well as women like Sakkubai and the family of Chokhamela, who belonged to the “untouchable” Mahar caste. This regional tradition of *bhakti* focused on the Vitthala (a form of Vishnu) temple in Pandharpur, as well as on the notion of a personal god residing in the hearts of all people.

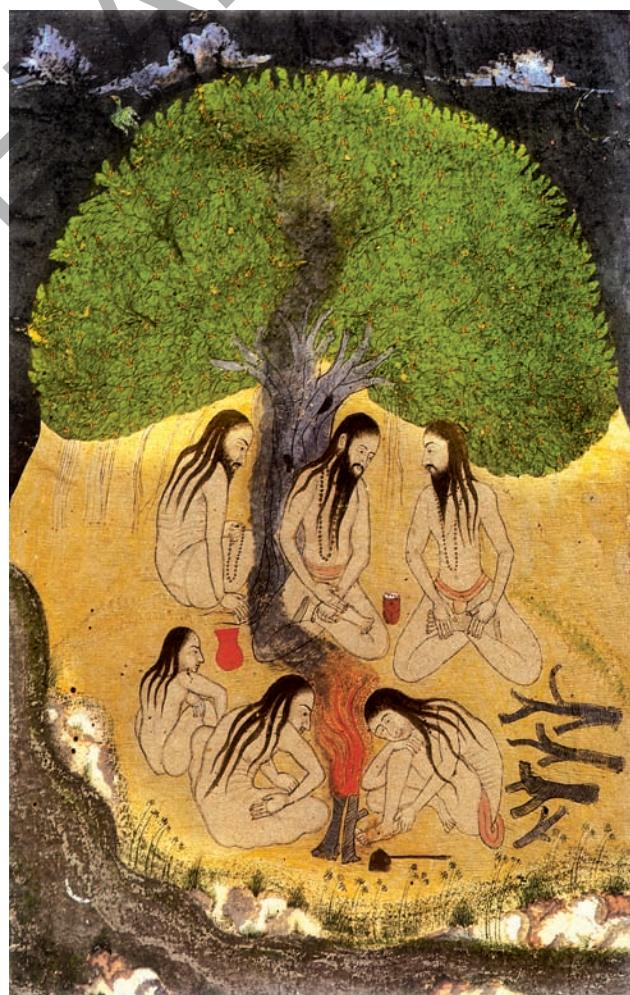


Fig 21.1 A fireside gathering of ascetics.

These saint-poets rejected all forms of ritualism, outward display of piety and social differences based on birth. In fact, they even rejected the idea of renunciation and preferred to live with their families, earning their livelihood like any other person, while humbly serving fellow human beings in need. A new humanist idea emerged as they insisted that *bhakti* lay in sharing others' pain. As the famous Gujarati saint Narsi Mehta said, "Vaishnavas are those who understand the pain of others."

This is an *abhang* (Marathi devotional hymn) of Sant Tukaram:

*He who identifies
with the battered and the beaten,
Mark him as a saint,
For God is with him.
He holds
Every forsaken man
Close to his heart,
He treats
A slave
As his own son.
Says Tuka,
I won't be tired
to repeat again,
Such a man
Is God
In person.*

- ♦ Why do you think Tukaram considers the friends of the poor and suffering as the real devotees of God?

Here is an *abhang* composed by Chokhamela's son:

*You made us low caste,
Why don't you face that fact, Great Lord?
Our whole life – left-over food to eat.
You should be ashamed of this.
You have eaten in our home.
How can you deny it?
Chokha's (son) Karmamela asks
Why did you give me life?*

- ♦ Discuss the ideas related to social order expressed in these compositions.

Nathpanthis, Siddhas and Yogis

Many religious groups of this period criticised the rituals and other aspects of conventional religion and social order using simple, logical arguments. Among them were the *Nathpanthis*, *Siddhacharas* and *Yogis*. They advocated renunciation of the world. To them, the path to salvation lay in meditation on the formless Ultimate Reality and the realisation of oneness with it. To achieve this, they advocated intense training of the mind and body through practices like *yogasanas*, breathing exercises and meditation. These groups became particularly popular among low castes. Their criticism of conventional religion created the ground for devotional religion to become a popular force in northern India.

Islam and Sufism

The saints had much in common with the Sufis, so much so that it is believed that they adopted many ideas from each other. Sufis were Muslim mystics. They rejected outward religiosity and emphasised love and

devotion to God and compassion towards all fellow human beings.

Islam propagated strict monotheism or submission to one God. It also rejected idol worship and considerably simplified rituals of worship into collective prayers. At the same time, Muslim scholars developed a holy law called *Shariat*. The Sufis often rejected the elaborate rituals and codes of behaviour demanded by Muslim religious scholars. They sought union with God much as a lover seeks his beloved with a disregard for the world. Like the saint-poets, the Sufis too composed poems expressing their feelings, and a rich literature in prose, including anecdotes and fables, developed around them. Among the great Sufis of Central Asia were Ghazzali, Rumi and Sadi. Like the *Nathpanthis*, *Siddhas* and *Yogis*, the Sufis too believed that the heart can be

trained to look at the world in a different way. They developed elaborate methods of training using *zikr* (chanting of a name or sacred formula), contemplation, *sama* (singing), *raqs* (dancing), discussion of parables, breath control, etc. under the guidance of a master or *pir*. Thus emerged the *silsilas*, a genealogy of Sufi teachers, each following a slightly different method (*tariqa*) of instruction and ritual practice.

A large number of Sufis from Central Asia settled in Hindustan from the eleventh century onwards. This process was strengthened with the establishment of the Delhi Sultanate, when several major Sufi centres developed all over the subcontinent. The *Chishti silsila* was among the most influential orders. It had a long line of teachers like Khwaja Moinuddin Chishti of Ajmer, Qutbuddin Bakhtiar Kaki of Delhi, Baba Farid of Punjab, Khwaja Nizamuddin Auliya of Delhi and Bandanawaz Gisudaraz of Gulbarga.

The Sufi masters held their assemblies in their *khanqahs* or hospices. Devotees of all descriptions including members of the royalty and nobility, and ordinary people flocked to these *khanqahs*. They discussed spiritual matters, sought the blessings of the saints in solving their worldly problems, or simply attended the music and dance sessions.

Often, people attributed Sufi masters with miraculous powers that could relieve others of their illnesses and troubles. The tomb or *dargah* of a Sufi saint became a place of



Fig 21.2 Mystics in ecstasy.

pilgrimage to which thousands of people of all faiths thronged.

- ◆ If you have ever been to a *Dargah*, describe it to your friends in the class. How do people show respects to the *Pir* and what do they pray for?

New Religious Developments in India

The period after the thirteenth century saw a new wave of the *bhakti* movement in North India. This was an age when Islam, Hinduism, Sufism, various strands of *bhakti*, and the *Nathpanths*, *Siddhas* and *Yogis* influenced one another. We saw that new towns and kingdoms were emerging, and people were taking up new professions and finding new roles for themselves. Such people, especially crafts persons, peasants, traders and labourers; thronged to listen to these new saints and spread their ideas. Some of them like Kabir and Baba Guru Nanak rejected orthodox customs and beliefs.

Poets like Bammerra Potana, Annamacharya, Chaitanya Mahaprabhu, Tulsidas and Surdas accepted existing beliefs and practices but wanted to make them accessible to all.

Potana, who lived the life of a peasant in the village Bammerra near Warangal, composed the famous *Mahabhaagavatamu* in Telugu. Potana was called a ‘*Sahaja Kavi*’, a natural poet. He wrote lucid poetry to express his natural devotional feelings.

Thallapaka Annamacharya (1408–1503) was a popular saint-composer of Andhra Pradesh and is revered as ‘*pada kavita pitamaha*’. Annamayya dedicated his life to composing and singing the glories of Lord Venkateswara of Tirupati. His compositions were mostly extempore in spoken dialect, unlike the classics of the age, which were written in the classical (*Grandhika*) style. In ‘*Annamacharya Charitramu*’, it is said that Annamayya composed thirty two thousand *keertanas* on Lord Venkateswara.

In his *keertanas*, he took up subjects such as morality, dharma and righteousness. He was one of the first few who opposed the social stigma towards the untouchable castes in his era. In his sankeertanas, “*Brahmam Okkate Parabrahmam Okkate...*” and “*E Kulajudainanemi Evvadainanemi...*”, he describes that the relationship between God and human beings is the same irrespective of the later’s color, caste and financial status, in beautiful yet powerful usage of words.

తందనాన ఆహీ – తందనానపురె

తందనాన భజా – తందనాన

బ్రహ్మమొక్కటే పరబ్రహ్మమొక్కటే పర

బ్రహ్మమొక్కటే పరబ్రహ్మమొక్కటే ...

నిండార రాజు నిదించు నిదయు నొకటే

అండనే బంటు నిద అదియు నొకటే ...

మెండైన బ్రహ్మాళడు – మెట్లుభూమి యొకటే

చండాలుడుండేటి సరిభూమి యొకటే ...

- *Annamacharya Keertana*

Chaitanya Mahaprabhu (1486–1534) was a Vaishnava saint and social reformer in eastern India (present day Bangladesh and West Bengal). Chaitanya was a notable proponent of the Vaishnava school of *Bhakti yoga* (meaning loving devotion to Krishna/God) based on the philosophy of the *Bhagavata Purana* and *Bhagavad Gita*. He propagated community singing of Bhajans and dancing with devotion. He worshipped the forms of Krishna and popularised the chanting of the ‘*Hare Krishna*’ mantra.

Kancherla Gopanna (1620 - 1680), popularly known as Bhakta Ramadasu, was a 17th century devotee of Sri Rama and a composer of Carnatic music. He is among the famous *vaggeyakaras* (same person being the writer and composer of a song) in the Telugu language. He is renowned for constructing a famous temple for Sri Rama at Bhadrachalam. He composed devotional lyrics dedicated to Rama, which are popularly known as *Ramadaasu Keertanalu*. He wrote *Dasarathi Shatakamu*, a collection of nearly 108 poems dedicated to Lord Rama.

ఏ తీరుగ నను దయ చూచెదవో, ఇన వంశోత్తమ రామూ
నా తరపూ భవ సాగరమీదను, నలిన దళేక్కణ రామూ
శేరఫునందన సీతా రమణ, శ్రీతజన పోషక రామూ
కారుణ్యాలయ భక్త వరద నిను, కన్నది కానుపు రామూ...

- Ramadasu Keertana

- ♦ Can you name some *vaggeyakaras* and their *Keertanas*?

Tulsidas conceived of God in the form of Rama. Tulsidas’s composition, the *Ramcharitmanas*, written in Awadhi (a language used in eastern Uttar Pradesh), is important both as an expression of his devotion and as a literary work. He was a contemporary of Shankaradeva of Assam (late fifteenth century) who emphasised on devotion to Vishnu, and composed poems and plays in Assamese. He began the practice of setting up *namghars* or houses of recitation and prayer, a practice that continues to date.

This tradition also included saints like Dadu Dayal, Ravidas and

Mirabai. Mirabai was a Rajput princess married into the royal family of Mewar in the sixteenth century. Mirabai became a disciple of Ravidas, a saint from a caste considered “untouchable”. She was devoted to Krishna and composed innumerable *bhajans* expressing her intense devotion. Her songs also openly challenged the norms of the “upper” castes and became popular with the masses in Rajasthan and Gujarat.

A unique feature of most of the saints is that their works were composed in regional languages and could be sung. They became immensely popular and were handed down orally from generation to generation.



Fig 21.3 A painting of Mirabai.

Usually the poorest, the most deprived communities and women transmitted these songs, often adding their own experiences. Thus, the songs, as we have them today, are as much a creation of the saints as of generations of people who sang them. They have become a part of our living popular culture.

- ◆ Have you listened to any such old *bhajans* in your mother tongue? Find out who composed them. Write down some of them and discuss their meaning in the class.

A Closer Look: Kabir

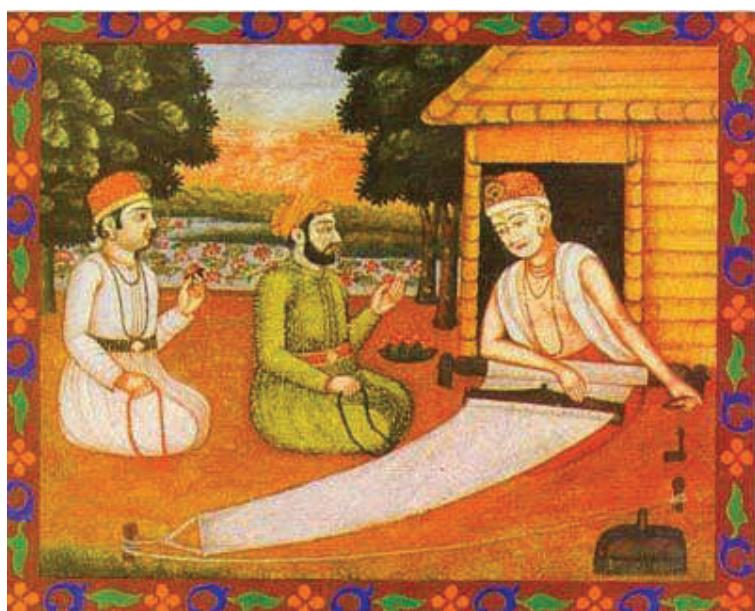
Kabir, who probably lived in the fifteenth-sixteenth centuries, was one of the most influential saints. He was brought up in a family of Muslim *julahas* or weavers settled near the city of Benares (Varanasi). We have very little reliable information about his life. We get to know of his ideas from a vast collection of verses called *sakhis* and *pads* said to have been composed by him and sung by wandering *bhajan* singers. Some of these were later collected and preserved in the *Guru Granth Sahib*, *Panch Vani* and *Bijak*.

Kabir's teachings were based on a complete, indeed vehement, rejection of the major religious traditions. His teachings openly ridiculed all forms of external worship of both Hinduism and Islam, the pre-eminence of the priestly classes and the caste system. The language of his poetry was a form of spoken Hindi, widely understood by ordinary people.

Kabir believed in a formless Supreme God and preached that the only path to salvation was through *bhakti* or devotion. Kabir drew followers from both Hindus and Muslims.

Here is a composition of Kabir:

*O Allah-Ram present in all living beings
Have mercy on your servants, O Lord!
Why bump your head on the ground,
Why bathe your body in water?
You kill and you call yourself "humble",
But your vices you conceal.
Twenty-four times the Brahmana keeps
the ekadasi fast,
While the Qazi observes the Ramzan.
Tell me why does he set aside the eleven
months
To seek spiritual fruit in the twelfth?
Hari dwells in the East, they say
And Allah resides in the West,
Search for him in your heart, in the heart
of your heart;
There he dwells, Rahim-Ram*



21.4 A painting of Kabir working on a loom.

Guru Nanak

We know more about Guru Nanak (1469-1539 CE) than Kabir. Born at Talwandi (Nankana Sahib in Pakistan), he travelled widely before establishing a centre at Kartarpur (Dera Baba Nanak on the river Ravi). Irrespective of their form creed, caste or gender, his followers ate together in the common kitchen (*langar*). The sacred space thus created by Guru Nanak was known as *dharmsal*.

The number of Guru Nanak's followers

increased through the sixteenth century under his successors. They belonged to a number of castes, but traders, agriculturists, artisans and craftsmen predominated. This may have something to do with Guru Nanak's insistence that his followers must be householders and should adopt productive and useful occupations. They were also expected to contribute to the general funds of the community of followers.

The ideas of Guru Nanak had a huge impact on this movement from the very beginning. He emphasised on the importance of the worship of one God. He insisted that caste, creed or gender was irrelevant for attaining liberation. His idea of liberation was not that of a state of inert

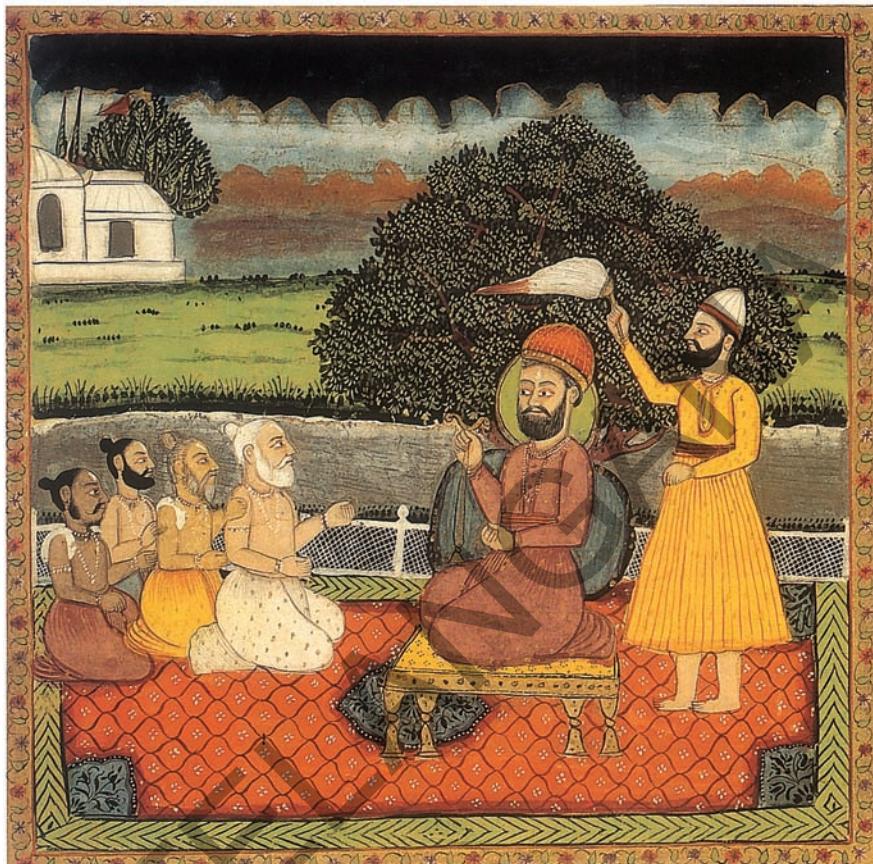


Fig 21.5 Guru Nanak as a young man, discussion with holy men.

bliss but rather the pursuit of active life with a strong sense of social commitment. He himself used the terms *nam*, *dan* and *isnan* for the essence of his teaching, which actually meant right worship, welfare of others and purity of conduct. His teachings are now remembered as *nam-japna*, *kirt-karna* and *vand-chhakna*, which also underline the importance of right belief and worship, honest living, and helping others. Thus, Guru Nanak's idea of equality had social and political implications. This might partly explain the difference between the history of the followers of Guru Nanak and the history of the followers of the other religious figures of the medieval centuries, like Kabir, Ravidas and Dadu whose ideas were very similar to those of Guru Nanak.

Keywords :

- | | |
|--------------------|---------------------|
| 1. <i>Advaita</i> | 5. <i>Bhakti</i> |
| 2. Salvation | 6. <i>Yogasanas</i> |
| 3. <i>Alvars</i> | 7. <i>Bijak</i> |
| 4. <i>Nayanars</i> | 8. <i>Abhang</i> |

Improve your learning

1. Describe the beliefs and practices of the *Nathpanthis*, *Siddhas* and *Yogis*.
2. What were the major ideas expressed by Kabir? How did he express them?
3. What were the major beliefs and practices of the Sufis?
4. Why do you think many teachers rejected prevalent religious beliefs and practices?
5. What were the major teachings of Guru Nanak?
6. For either the *Virashaivas* or the saints of Maharashtra, discuss their attitude towards caste.
7. Why do ordinary people still remember Mirabai?
8. Read the second para under the title ‘A closer look: Kabir’ on page 194 and comment on it.
9. Write about a festival celebrated by the people in your area.

Project :

1. Visit any dargahs, gurudwaras or temples associated with saints of the *bhakti* tradition and describe what you saw and heard about them.
2. Get information about other works of the saint-poets mentioned in this chapter. Find out whether they are sung, how they are sung and what the poets wrote?

Rulers and Buildings

Figure 22.1 shows the first balcony of the Qutb Minar. Qutbuddin Aybak had constructed this monument in Delhi around 1199 CE. Notice the pattern created under the balcony by the small arches and geometrical designs. Can you find two bands of inscriptions under the balcony? These are words written in Arabic. Notice that the surface of the minar is curved and angular. Placing an inscription on such a surface requires great precision. Only the most skilled craftspersons could perform this task. Remember that very few buildings were made of stone or brick 800 years ago. What would have been the impact of a building like the Qutb Minar on observers in the thirteenth century?

Between the eighth and the eighteenth centuries, kings and their officers built two kinds of structures: the first were forts, palaces and tombs – safe, protected and grandiose places of rest and the second were structures meant for public activity including temples, mosques, tanks, wells, caravan *serais* and *bazaars*. Kings were expected to look after their subjects, and by making structures for their use and comfort, rulers hoped to win their praise. Construction activity was also carried out by others including merchants. They built temples, mosques and wells. However, domestic architecture – large mansions (*havelis*) of merchants – has survived only from the eighteenth century.

Fig 22.1

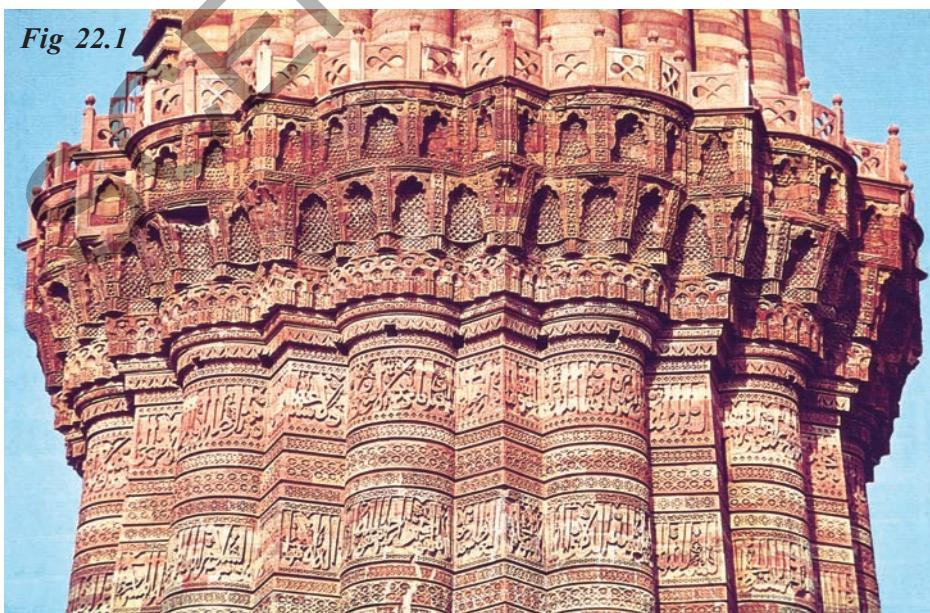


Figure 22.1: Qutb Minar is five storeys high. The band of inscriptions you see are under its first balcony. The first floor was constructed by Qutbuddin Aybak and the rest by Iltutmish around 1229. Over the years, it was damaged by lightning and earthquakes and repaired by later kings.



Fig 22.2a Screen in the Quwaat al-Islam mosque, Delhi.

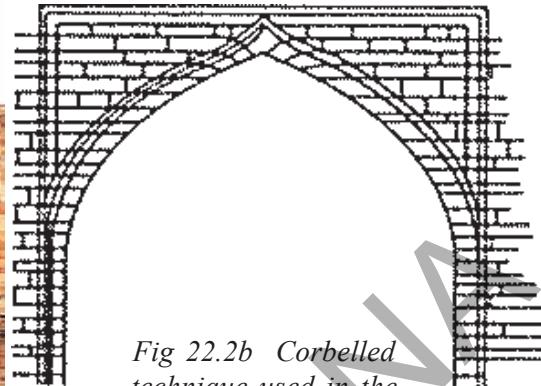


Fig 22.2b Corbelled technique used in the construction of an arch.

Engineering Skills and Construction

Monuments provide an insight into the technologies used for construction. Take something like a roof for example. We can make it by placing wooden beams or a slab of stone across four walls. But the task becomes difficult if we want to make a large room with an elaborate superstructure. This requires more sophisticated skills.

Between the seventh and tenth centuries, architects started adding more rooms, doors and windows to buildings. Roofs, doors and windows were still made by placing a horizontal beam across two vertical columns, a style of architecture called “trabeate” or “corbelled”. Between the eighth and thirteenth centuries, the trabeate style was used in the construction of temples, mosques, tombs and buildings attached to large stepped-wells.

- Visit some old temples or Masjids near your place and look for examples of trabeate style (style in which the roof is supported by beams placed on pillars).

- This style of supporting the roofs required placing pillars near each other and large open halls could not be built. Can you figure out why?

Temple Construction in the Early Eleventh Century

The Kandariya Mahadeva temple dedicated to Shiva was constructed in Khajuraho, Madhya Pradesh 999 CE by King Dhanga Deva.

Fig. 22.3b is the plan of the temple of the Chandela dynasty. An ornamented gateway led to an entrance and the main hall (*mahamandapa*) where dances were performed. The image of the chief deity was kept in the main shrine

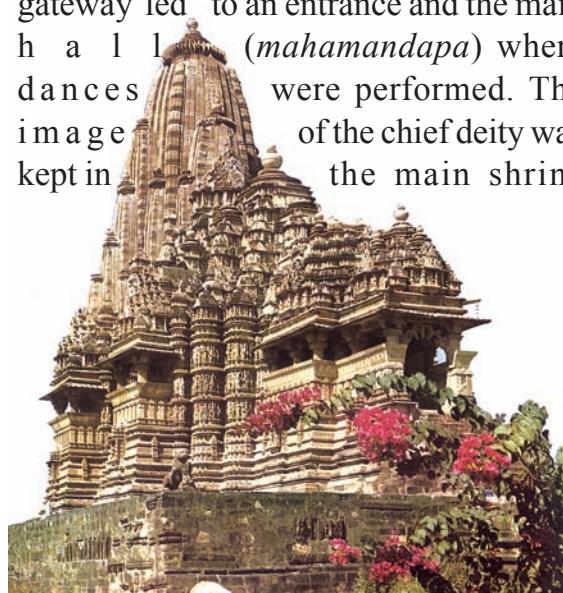


Fig 22.3a The Kandariya Mahadeva Temple of lord shiva in Khajuraho.

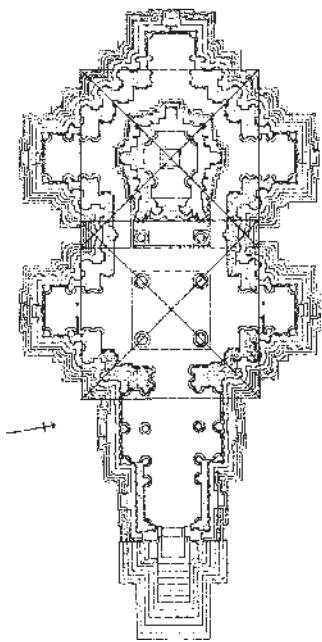


Fig: 22.3b The Kandariya Mahadeva Temple of lord Shiva ground plan.

(*garbha-griha*). This was the place for ritual worship where only the king, his immediate family and priests gathered. The Khajuraho complex contained royal temples where common people were not allowed to enter. The temples were decorated with elaborately carved sculptures.

The Rajarajeswara temple at Thanjavur had the tallest *shikhara* amongst the temples of its time. Constructing it was not easy because there were no cranes in those days and the 90 tonne stone for the top of the *shikhara* was too heavy to lift manually. So, the architects built an inclined path to the top of the temple, placed the boulder on rollers and rolled it all the way to the top. The path started more than four kilometres away so that it would not be too steep. The path was dismantled after the temple was constructed.

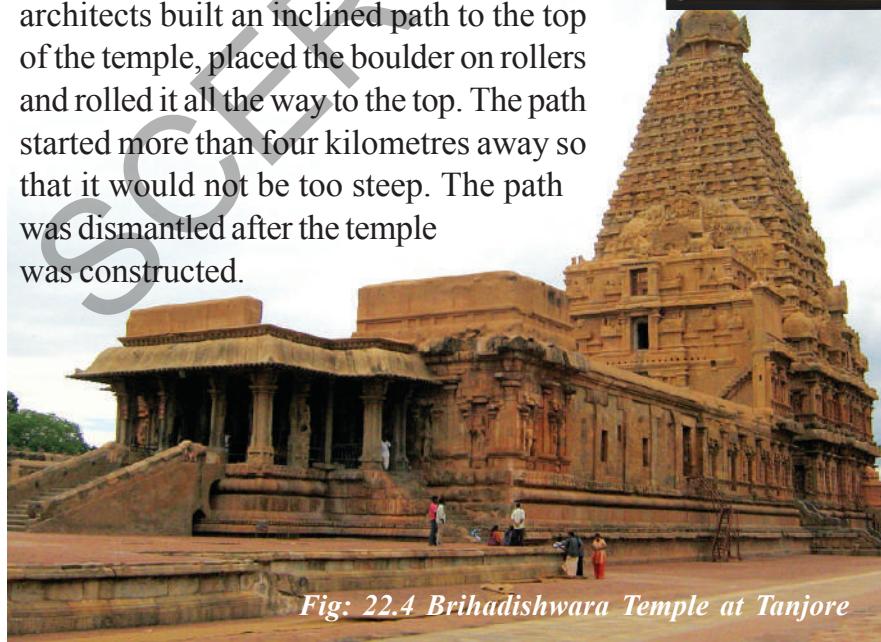


Fig: 22.4 Brihadishwara Temple at Tanjore

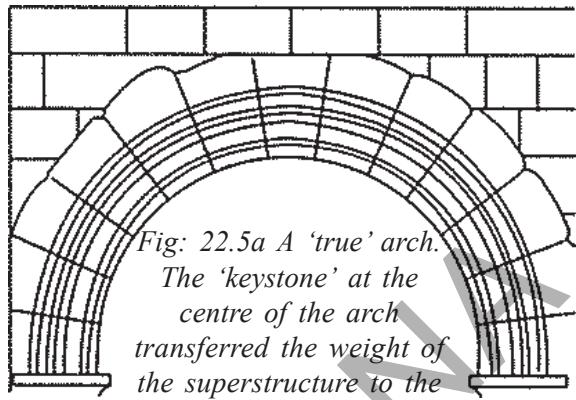


Fig: 22.5a A ‘true’ arch. The ‘keystone’ at the centre of the arch transferred the weight of the superstructure to the base of the arch.



Fig: 22.5b True arch; detail from the Alai Darwaza (early fourteenth century). Quwwat al-Islam mosque, Delhi.

A new way of building

Two technological and stylistic developments are noticeable from the twelfth century:

(1) The weight of the superstructure above the doors and windows was sometimes carried by arches. The roof too used this principle and was converted into vaults and domes. This architectural form is called “arcuate”.

- ♦ Compare Figures 22.2a and 22.2b with 22.5a and 22.5b.

(2) Limestone cement was increasingly used in construction. This was very high quality cement, which, when mixed with stone chips hardened into concrete. This made construction of large structures easier and faster. Arches, domes and limestone mortar were used extensively in the buildings after 1190 CE. Take a look at the construction site in Figure 22.6.

- ♦ Describe what the labourers are doing, the tools shown, and the means of carrying stones.



Fig: 22.6 A painting from the Akbar Nama (dated 1590-1595), showing the construction of water gate at Agra Fort.

- ♦ Do you think these new techniques could be used to build large halls and tall buildings?

Building Temples, Mosques and Tanks

Temples and mosques were beautifully constructed because they were places of worship. They were also meant to demonstrate the power, wealth and devotion of the patrons. Take the example of the Rajarajeshvara temple. An inscription mentions that it was built by King Rajarajadeva for the worship of his god, Rajarajeshvara. Notice how the name of the ruler and the god are very similar. The king took the god's name because it was auspicious and he wanted to appear like a god. Through the rituals of worship in the temple, one god (Rajarajadeva) honoured another (Rajarajeshvara).

You may recall that the Kakatiya capital city – Orugallu was so designed as to have the temple of Svayambhu Shiva at the centre. This was built by the Kakatiyas to proclaim their power and status as independent kings.

The largest temples were all constructed by kings. The other, lesser deities in the temple were gods and goddesses of the allies and subordinates of the ruler. The temple was a miniature model of the world ruled by the king and his allies. As they worshipped their deities together in the royal temples, it seemed as if they brought the just rule of the gods on earth.

The kings and nobles endowed the temples with land, gold and jewels so that the worship of the gods could be carried

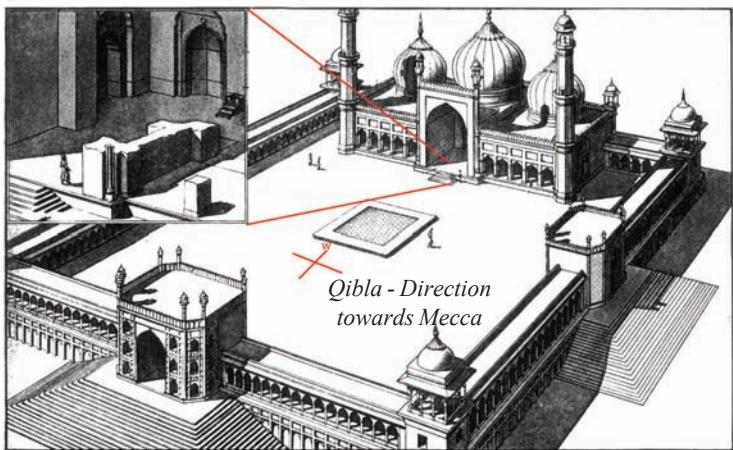


Fig 22.7 Plan of the Jami masjid built by Shah Jahan in his new capital at Shahjanabad 1650-1656.

out on a grand scale. By 1200 CE, most of these temples had become elaborate institutions, which employed hundreds of artisans, dancers, musicians, priests, administrators, servants etc. They collected taxes from the villages, lent money on interest to traders, organised fairs and markets to which buyers and sellers of goods came. Several *religions* of Shaiva and Vaishnava sects were established around these temples. These temples thus became centres of political and economic power. Kings and rulers wanted to associate their names with these temples by organising their coronation ceremonies in the temples and by giving expensive and elaborate gifts to them and adding to the constructions.

Muslim Sultans and Badshahs did not claim to be incarnations of god but Persian court chronicles described the Sultan as the “Shadow of God”. An inscription in the Delhi mosque explained that God chose Alauddin as a king because he had the qualities of Moses and Solomon, the great law-givers of the past. The greatest law-giver and architect was God Himself. He created the world out of chaos and introduced order and symmetry.

As each new dynasty came to power, kings wanted to emphasise their moral right to be the rulers. Constructing places of worship provided rulers with the chance to proclaim their close relationship with God, especially important in an age of rapid political change. Rulers also offered patronage to the learned and pious, and tried to transform their capitals and cities into great cultural centres that brought fame to their rules and realm.

It was popularly believed that the rule of a just king would be an age of plenty when the heavens would not withhold rain. At the same time, making precious water available by constructing tanks and reservoirs was highly praised. Sultan Iltutmish won universal respect for constructing a large reservoir just outside *Dehli-i kuhna*. It was called the *hauz-i Sultani* or the “King’s Reservoir”.

Rulers often constructed tanks and reservoirs – big and small – for use by ordinary people.

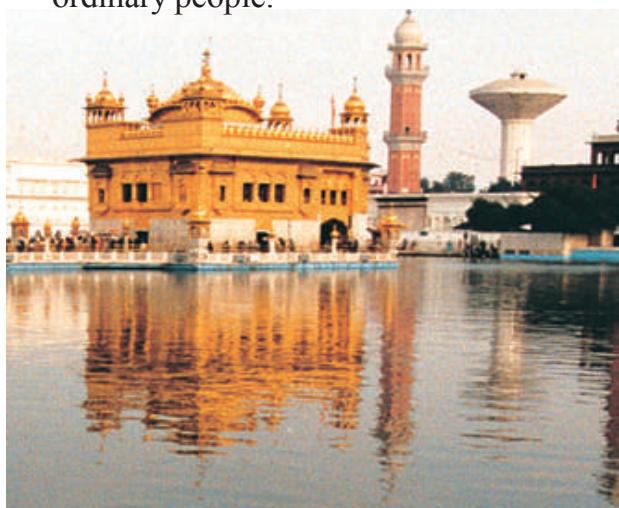


Fig 22.8 Harmandar Sahib (Golden Temple) with the holy tank in Amritsar.

- ◆ You have read about both, the shrines of village gods and elaborate temples and mosques – why do you think are they so different?

Why were Temples Destroyed?

Since the kings built temples to demonstrate their devotion to God and their power and wealth, it is not surprising that when they attacked one another's kingdoms, they often targeted these buildings. In the early ninth century, the Pandyan king Shrimara Shrivallabha invaded Sri Lanka and defeated the king, Sena I (831-851). The Buddhist monk and chronicler Dhammadikittī, noted: "he removed all the valuables... The statue of the Buddha made entirely of gold in the Jewel Palace... and the golden images in the various monasteries – all these he seized." The blow to the pride of the Sinhalese (Srilankan) ruler had to be avenged and the next Sinhalese ruler, Sena II, ordered his general to invade Madurai, the capital of the Pandya. The Buddhist chronicler noted that the expedition made a special effort to find and restore the golden statue of the Buddha.

Similarly, in the early eleventh century, when the Chola king Rajendra I built a Shiva temple in his capital, he filled it with prized statues seized from defeated rulers. The list included: a Sun-pedestal from the Chalukyas, a Ganesha statue and several statues of Durga; a Nandi statue from the eastern Chalukyas; an image of Bhairava (a form of Shiva) and Bhairavi from the Kalingas of Odisha; and a Kali statue from the Palace of Bengal.

Sultan Mahmud of Ghazni was a contemporary of Rajendra I. During his campaigns in the subcontinent, he also attacked the temples of defeated kings and looted their wealth and idols. Sultan Mahmud was not a very important ruler at that time. But by destroying temples – especially the one at Somnath – he tried to win credit as a great hero of Islam. In the political culture of the Middle Ages, most rulers displayed their political, might and military success by attacking and looting the places of worship of the defeated rulers.

- ◆ In what ways do you think were the policies of Rajendra I and Mahmud of Ghazni a product of their times? How were the actions of the two rulers different?

Imperial Style of the Vijayanagara Period

The city of Vijayanagara was developed by the Rayas to act as the imperial capital of the entire South India. Thus, they wanted it to reflect all the important imperial building traditions. They built large temples



Fig: 22.9 Virupaksha Temple in Hampi.



Fig 22.10a Lotus Temple.



Fig 22.10b Queen's Bath.

for Sri Virupaksha, Ramachandra, Krishna and Vitthala using a style that had been developed by Chola and Pandya emperors of Tamil Nadu. This included the *Vimanas* and the *Gopurams*. The Rayas paid special attention to the *Gopurams*, which were now built on a scale and height as never before.

It consisted of a first floor usually built of solid granite and a series of upper floors made of brick and *chunam*. These structures of immense scale must have been a mark of imperial authority that often dwarfed the towers on the central shrines, and signaled the presence of the temple from a great distance. They were also probably meant as reminders of the power of kings, able to command the resources, techniques and skills needed to construct these towering gateways. Other distinctive features include *mandapas* or pavilions and long, pillared corridors that often ran around the shrines within the temple complex. Let us look closely at the Virupaksha temple.

The Virupaksha temple was built over many centuries while inscriptions suggest that the earliest shrine dated to the ninth-tenth century. It was substantially enlarged with the establishment of the Vijayanagara Empire. The hall in front of the main shrine

was built by Krishnadevaraya to mark his accession. It was decorated with delicately carved pillars. He is also credited with the construction of the eastern *Gopuram*. These additions meant that the central shrine came to occupy a relatively small part of the complex.

The halls in the temple were used for a variety of purposes. Some of the halls were spaces in which the images of gods were placed to witness special programmes of music, dance, drama etc. Others were used to celebrate the marriages of deities. And yet others were meant for showing the replica of deities, which were distinct from those kept in the small central shrine.

While the Vijayanagara rulers built these temples on the Tamil Nadu model, they also built elaborate secular royal buildings, which were modelled on the style and techniques of the Sultanate architecture. The famous Lotus Mahal (named so by British visitors), Queen's Bath and the Elephant Stables are examples of this style. You can notice the use of arches and domes in these buildings. They were covered with *chunam* plaster and decorated with elaborate floral and bird designs. It appears that the kings and their nobles lived in these buildings and displayed their wealth and

cosmopolitan taste. However, these buildings did not just copy the designs of the sultanate buildings. They combined designs and features of southern temples with the arches and domes. The best example of this style is in the Lotus Mahal, which was probably a palace where the kings held their meetings.

The most impressive remain of Vijayanagara, the Mahanavami Dibba, is a high platform of 55 feet, that is, as tall as a five floor building, and spread over 11000 Sq. feet in area. Its height was increased at least three times during two hundred years. The sides of the platform were covered with sculptures of various kinds. It did not have a complete building on the top. The platform was covered by cloth shamiana or pandal supported by wooden pillars. The Vijayanagara kings held their Navaratri Puja and Dussera court on this platform. All their subordinate chiefs, *nayakas* and officers paid their tributes to the Emperor in these programs. Ambassadors from Europe and other sultanates also attended the festival.



Fig 22.10c Elephant stable.

- ♦ Why do you think did the emperors of large kingdoms try to use different styles of buildings?

Gardens, Tombs and Forts

Under the Mughals, architecture became more complex. Mughal emperors were personally interested in literature, art and architecture. In his autobiography, Babur described his interest in planning and laying out formal gardens, placed within rectangular walled enclosures and divided into four quarters by artificial channels.

These gardens were called *chahar baghs*, four gardens, because of their symmetrical division into 4-quarters. Beginning with Akbar, some of the most beautiful *chahar baghs* were constructed by Jahangir and Shah Jahan in Kashmir, Agra and Delhi.

There were several important architectural innovations during Akbar's reign. For inspiration, Akbar's architects turned to the tombs of his Central Asian ancestor, Timur. The central towering dome and the tall gateway (*pishtaq*) became



Fig 22.10d Mahanavami dibba

important aspects of Mughal architecture, first visible in Humayun's tomb. The tomb was placed in the centre of a huge formal *chahar bagh* and built in the tradition known as "eight paradises" or *hasht bihisht* – a central hall surrounded by eight rooms. The building was constructed with red sandstone, edged with white marble.

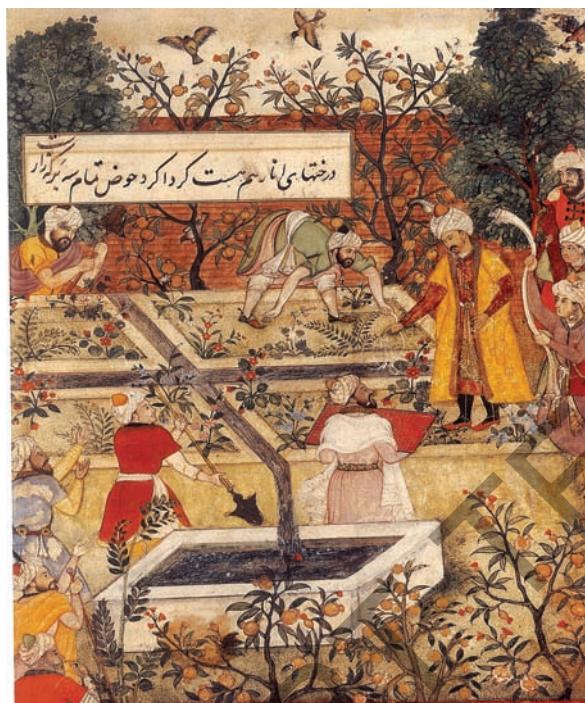


Fig: 22.11 A painting of Babur supervising workers laying out a chahar bagh in Kabul. Note how the intersecting channels on the path create the characteristic chahar bagh design.

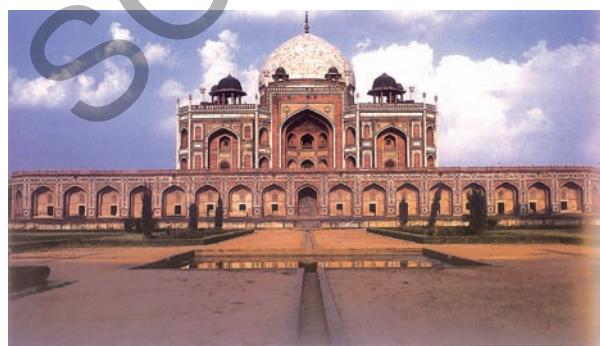


Fig: 22.12 Tomb of Humayun, Can you see the water channels?

It was during Shah Jahan's reign that the different elements of Mughal architecture were fused together in a grand harmonious synthesis. His reign witnessed a huge amount of construction activity especially in Agra and Delhi. The ceremonial halls of public and private audience (*diwan-i-khas* or *diwan-i-aam*) were carefully planned. These courts were also described as *chihil sutun* or forty-pillared halls, placed within a large courtyard.

Shah Jahan's audience halls were specially constructed to resemble a mosque. The pedestal on which his throne was placed was frequently described as the *qibla*, the direction in which Muslims pray, since everybody faced that direction when court was in session. The idea of the king as a representative of God on earth was suggested by these architectural features.

The connection between royal justice and the imperial court was emphasised by Shah Jahan in his newly constructed court in the Red Fort at Delhi. Behind the balcony of the emperor's throne, there were a series of *pietra dura* inlays that depicted the legendary Greek god

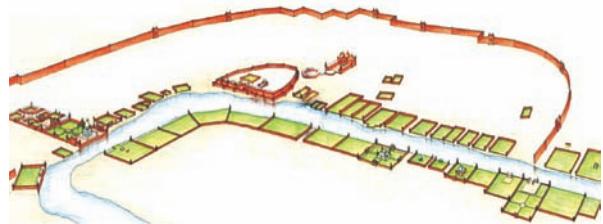


Fig: 22.13 A reconstruction from a map of the river-front garden city of Agra. Note how the garden palaces of the nobles are placed on both banks of the Yamuna. The Taj Mahal is on the left.



Fig: 22.14 Tajmahal in Agra.

Orpheus playing the flute. It was believed that Orpheus's music could calm ferocious beasts until they resided together peacefully. The construction of Shah Jahan's audience hall aimed to communicate that the king's justice would treat the high and the low as equals where all could live together in harmony.

In the early years of his reign, Shah Jahan's capital was at Agra, a city where the nobility had constructed their homes on the banks of the river Yamuna. These were set in the midst of formal gardens constructed in the *chahar bagh* format. The *chahar bagh* garden also had a variation that historians describe as the "river-front garden". In this garden, the dwelling was not located in the middle of the *chahar bagh* but at its edge, close to the bank of the river.

Shah Jahan adapted the river-front garden in the layout of the Taj Mahal, the grandest architectural accomplishment of his reign. Here, the white marble mausoleum was placed on a terrace by the

edge of the river and the garden was to its south. In the new city of Shahjahanabad that he constructed in Delhi, the imperial palace commanded the river-front. Only specially favoured nobles – like his eldest son Dara Shukoh – were given access to the river. All others had to construct their homes in the city away from the River Yamuna.

- ◆ You are an artisan standing on a tiny wooden platform held together by bamboo and rope fifty metres above the ground. You have to place an inscription under the first balcony of the Qutb Minar. How would you do this?

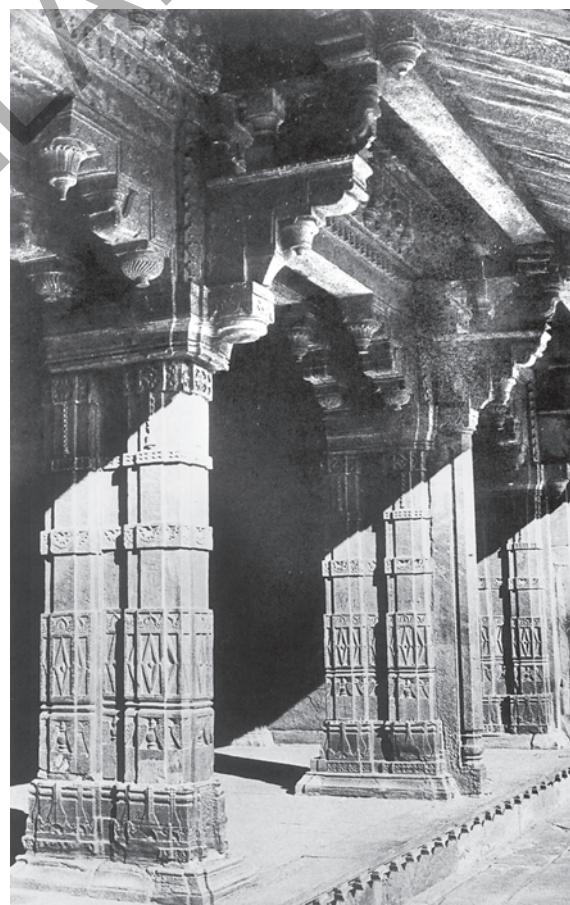


Fig: 22.15 Decorated pillars and struts holding the extension of the roof in Jodh Bai palace in Fatehpur Sikri. They follow the architectural traditions of the Gujarat region.

Around the same time as the Mughals, the Qutb Shahi rulers of Golconda (Hyderabad) engaged in extensive building activities. These included construction of Husain Sagar lake, the Golconda fort, a large number of gardens with water channels and fountains, and beautiful tombs for themselves. The famous Charminar and Mecca Masjid were built during their rule. They blended Persian, Mughal and Deccani styles.

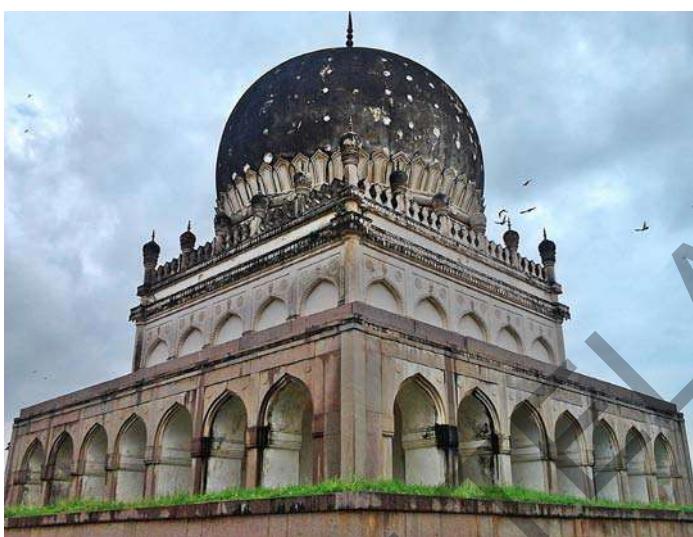


Fig: 22.16 View of Qutb Shahi Tomb

Keywords :

- 1. Inscriptions
- 2. Monuments
- 3. Dynasty
- 4. Architecture
- 5. Coronation Ceremony

Fig: 22.16a Tomb of Hayath Bakshi Begum

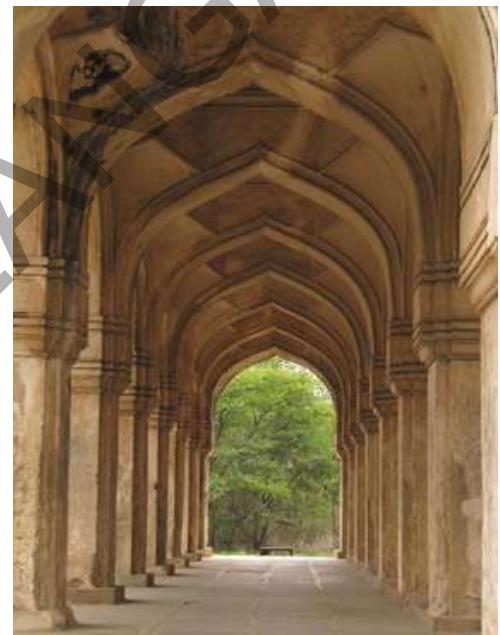


Fig: 22.16b The archways at the Qutb Shahi Tombs.

Improve your learning

1. How is the “trabeate” principle of architecture different from “arcuate”?
2. What is a *shikhara*?
3. What are the elements of a Mughal *chahar bagh* garden?
4. How did a temple communicate the importance of a king?
5. Read the second para of introduction part of page 198 and comment on it.
6. Is there a statue or a memorial in your village or town. Why was it placed there? What purpose does it serve?
7. Visit and describe any park or garden in your neighbourhood. In what ways is it similar to or different from the gardens of the Mughals?
8. Locate the following in the map of India.
 - a) Delhi b) Agra c) Amritsar d) Tanjavur e) Humpi f) River Yamuna

ACADEMIC STANDARDS (AS)

Time should be spent in making sure that children comprehend the passages given in text. In between questions are useful in this context. These questions are of different types that would include the aspects reasoning, cause and effect, justification, mind mapping / concept mapping, observation, analysis, thinking and imagination, reflection, interpreting etc. The key concepts have been discussed subconceptwise in every chapter with examples and also given in the form of keywords.

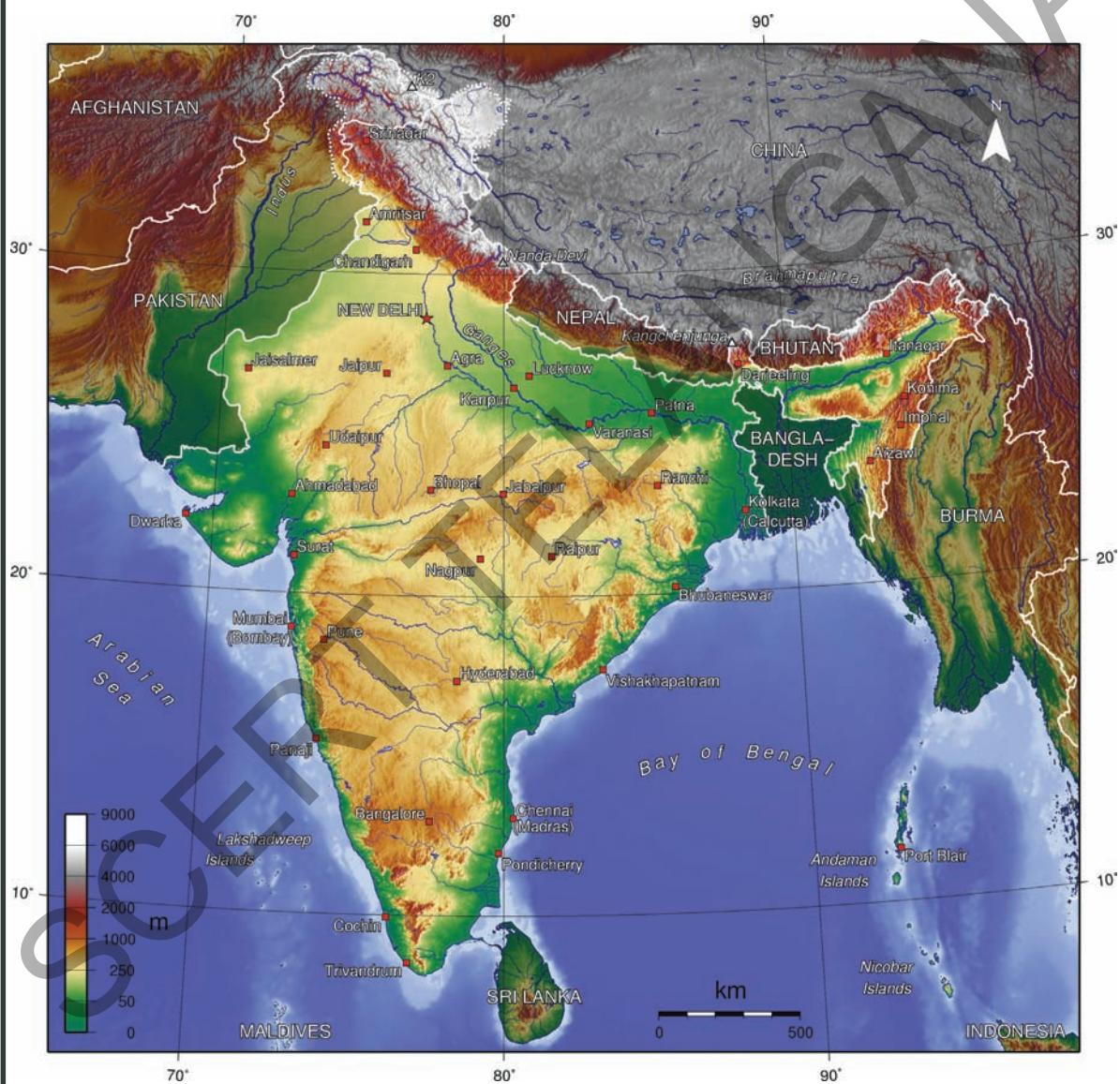
- 1) **Conceptual understanding (AS1) :** Promoting learning of basic concepts through inquiry, discussion, reflection giving examples through case studies interpreting, observation etc.
- 2) **Reading the text (given), understanding and interpretation (AS2) :** Occasionally there are case studies about farmers, labourers in factory, or images that are used in text which do not directly convey the concept. Time should be given for children to grasp the main ideas, interpret images etc.
- 3) **Information skills (AS3):** Textbooks alone cannot cover all different aspects of social studies methodology. For example, children living in an urban area can collect information regarding their elected representatives or children living in the rural area can collect information about the way irrigation / tank facilities are made available in their area. This information may not exactly match with that of the textbooks and will have to be clarified. Representing the information that they have collected through projects are also an important ability. For example if they collect information about a tank – they may decide to draw an illustration or map etc along with written material. Or represent the information collected through images or posters. Information skill includes, collection of information tabulation / records and analysis.
- 4) **Reflection on contemporary issues and questioning (AS4):** Students need to be encouraged to compare their living conditions along with that of different regions or people from different times. There may not be a single answer to these situations of comparison. Giving reasons for certain happening process and justification of informative and interpretative.
- 5) **Mapping skills (AS5) :** There are different types of maps and pictures used in the textbook. Developing ability related to maps as abstract representation of places is important. There are different stages of developing this ability, from creating a map of their classroom to understanding height, distance as represented in a map. There are illustrations, posters and photographs used in the textbook, these images often relate to the text and are not merely for visual effect. Sometimes there are activities like ‘write a caption’ or ‘read the images’ that are about architecture etc.
- 6) **Appreciation and Sensitivity (AS6) :** Our country has vast diversity in terms of language, culture, caste, religion, gender etc. Social studies does take into consideration these different aspects and encourages students to be sensitive to these differences.

Appendix

This additional Information and the maps are to be used wherever necessary.

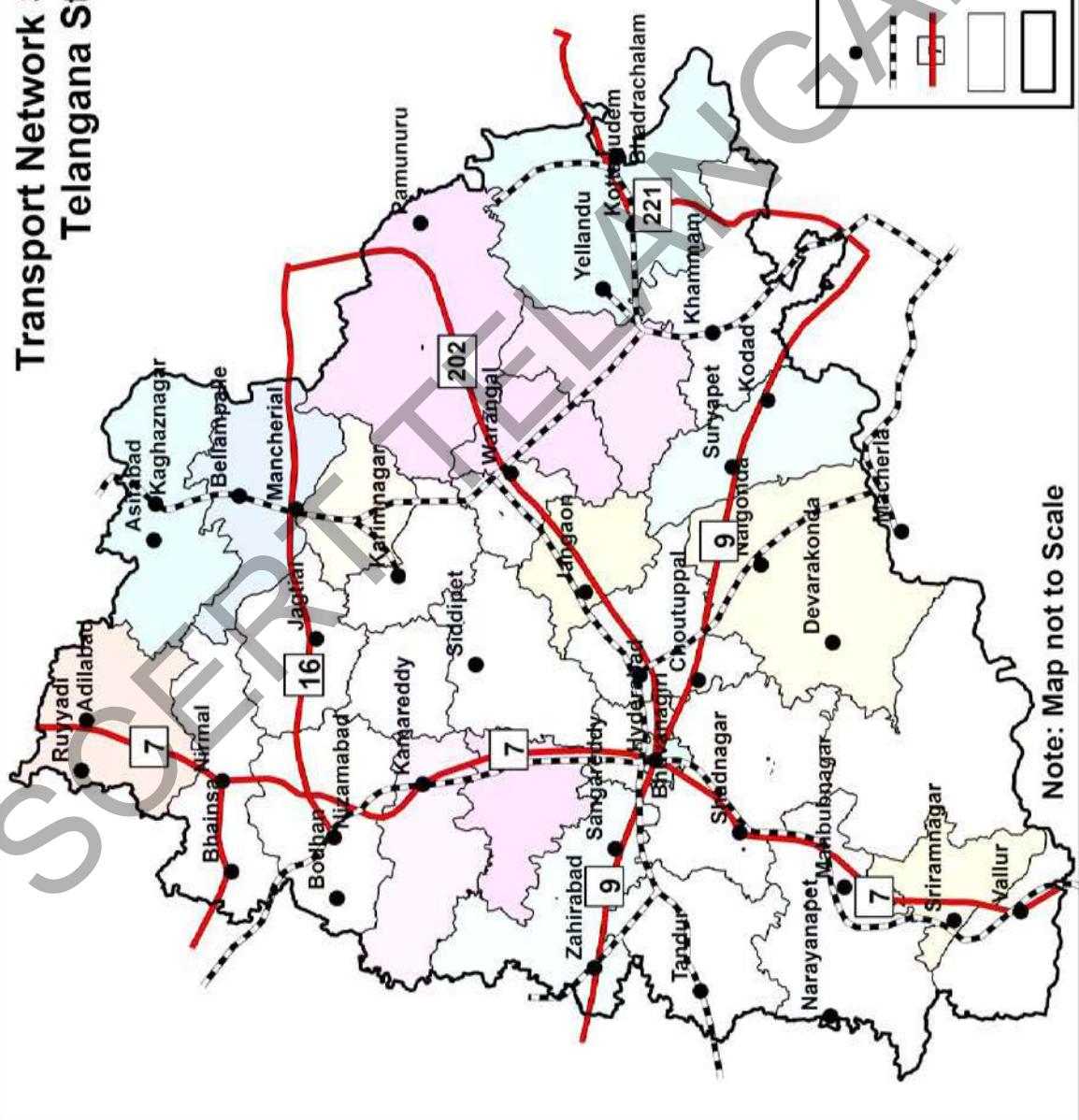
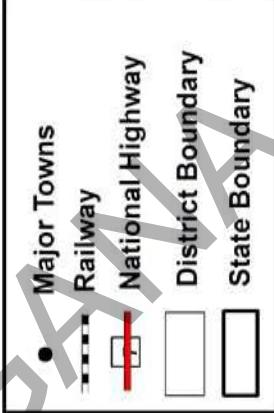


India Physical Map



Transport Network System in Telangana State

N

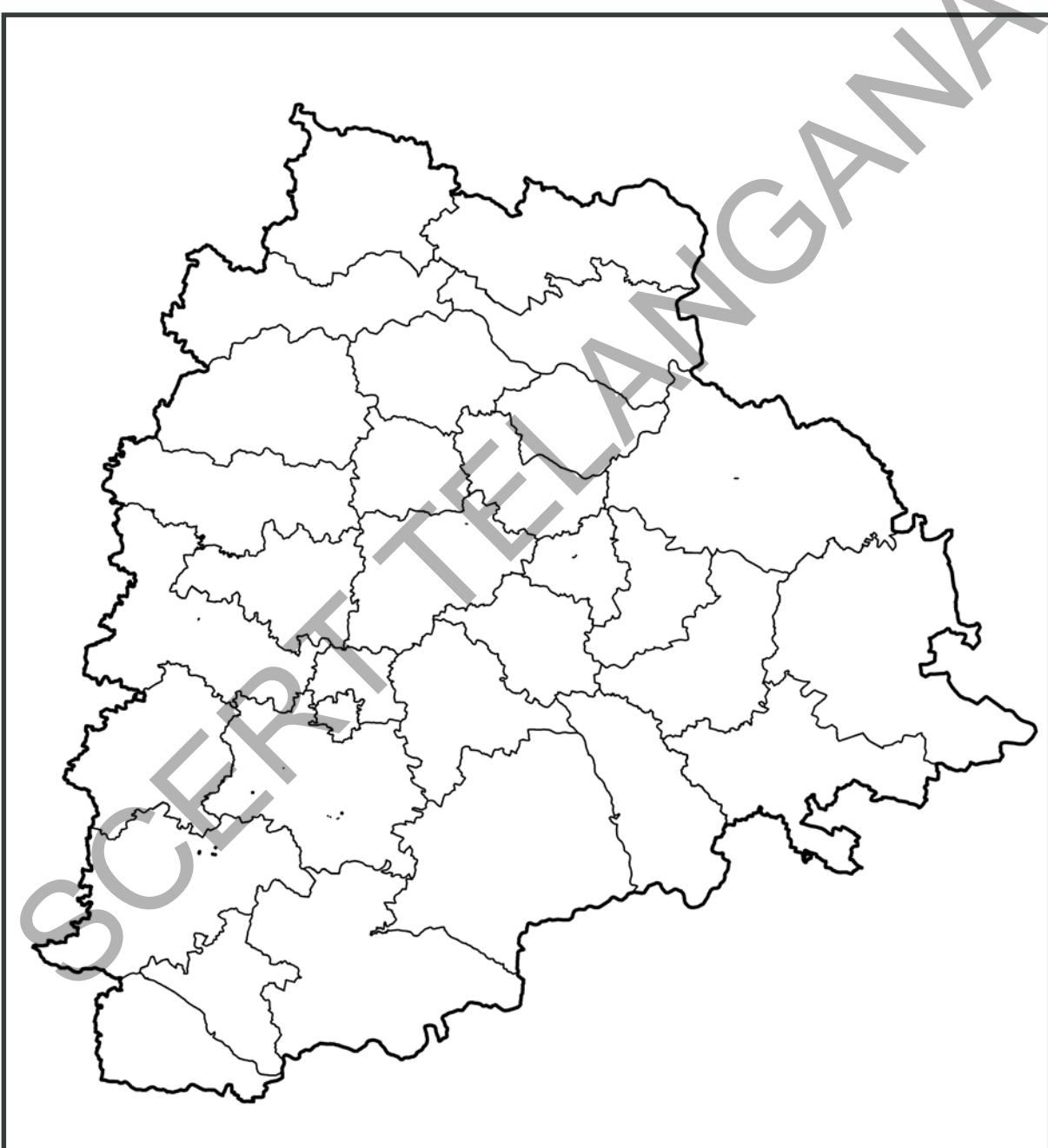


Note: Map not to Scale

World Outline Map



Telangana Political Map



Telangana State Symbols

Sl. No.	State Symbol	Common Name	Telugu Name
1.	State Animal	Spotted Deer	Jinka
2.	State Bird	Indian Roller	Pala Pitta
3.	State Tree	Jamm Chettu	Jammi
4.	State Flower	Tangedu	Tangedu



State Animal



State Bird



State Tree



State Flower



State Logo

National Symbols of India

National Flag :

Designed by
Sri Pingali Venkaiah



National Language :

Hindi



National Anthem :

Written by Sri
Ravindranath Tagore.



National Calendar :

Based on Shaka Samvatsara (Chaitra masam to Phalgunam masam). We follow the Gregorian Calendar officially.

National River :

Ganges



National Song : Vande Mataram
Written by Sri Bamkum Chandra Chaterji

Indian National Calendar (Saka calendar)

S. No.	Month	Length	Start date (Gregorian calendar)	Ritu	Season
1	Chaitra	30/31	March 22	Vasanta	Spring
2	Vaisakh	31	April 21		
3	Jyaiishtha	31	May 22	Grishma	Summer
4	Ashadha	31	June 22		
5	Shrawana	31	July 23	Varsha	Monsoon
6	Ehadrupad	31	August 23		
7	Ashwin	30	September 23	Sharat	Autumn
8	Kartik	30	October 23		
9	Agrahayana	30	November 22	Hemant	Winter
10	Paush	30	December 22		
11	Magh	30	January 21	Sishira	Cold & dry season
12	Phalgun	30	February 20		

National Symbol :

Lion
Capital - Adopted from the Emperor Asoka's dharma stupa established at Sarnath.



National Tree :

Banyan tree

National Flower :

Lotus



National River :



National Fruit :

Mango



National Animal :

Royal Bengal Tiger



National Bird :

Peacock



National Aquatic Animal :

Dolphin



National Heritage Animal :

Elephant



Indian Standard Time (IST) :

Based on 82 1/2 degrees East Longitude. Our local time is 5hrs.30min. ahead of Greenwich mean time(GMT).

Timeline of Satavahana Kings (230 BCE - 225 CE)

Srimukha	271 BCE - 248 BCE
Krishna	248 BCE - 230 BCE
Satakarni - I	230 BCE - 220 BCE
Satakarni - II	184 BCE - 128 BCE
Hala	42 CE - 51 CE
Goutamiputra Satakarni	62 CE - 86 CE
Vasishtaputra Pulomavi	86 CE - 114 CE
Sivasri Satakarni	114 CE - 128 CE
Yagyasri Satakarni	128 A.D. - 157 CE

Timeline of Chola Kings (900 CE - 1279 CE)

Vijayalaya	850 CE - 871 CE
Aditya Chola	871 CE - 905 CE
Parantaka - I	905 CE - 907 CE
Rajaraja - I	985 CE - 1016 CE
Rajaraja Chola	1016 CE - 1044 CE
Rajadhi Raja	1044 CE - 1052 CE
Veera Rajendra	1064 CE - 1069 CE
Kuluthonga Chola	1070 CE - 1121 CE
Rajaraja - II	1173 CE - 1178 CE
Kuluthonga Chola -III	1178 CE - 1219 CE
Rajendra - III	1256 CE - 1270 CE

Telangana Fact Sheet

❖ Telangana Area	:	1,12,077 sq km
❖ Density	:	307
❖ Latitude extent	:	15°46' N - 19°47' N
❖ Longitude extent	:	77°16' Eastern longitude 81°30' Eastern longitude
❖ Country	:	India
❖ Region	:	South India
❖ Formed on	:	June 2 nd , 2014
❖ Capital	:	Hyderabad
❖ No. of Districts	:	31 (Adilabad, Komarambheem, Bhadrabdi, Jayashankar, Jogulamba, Hyderabad, Jagital, Janagoan, Kama Reddy, Karimnagar, Khamma, Mahabubabad, Mahabubnagar, Manchiryal, Medak, Medchal, Nalgonda, Nagarkurnool, Nirmal, Nizamabad, Ranga Reddy, Peddapalli, Rajanna, Sanga Reddy, Siddipet, Suryapet, Vikarabad, Wanaparthy, Warangal Urban, Warangal Rura, Yadadri.)
❖ Official Languages	:	Telugu, Urdu
❖ No. of Assembly seats	:	119
❖ No. of Council seats	:	40
❖ No. of Lok Sabha seats	:	17
❖ No. of Rajya Sabha seats	:	7
❖ Important Rivers	:	Godavari, Krishna, Manjira, Musi
❖ No. of Zilla Praja Parishats	:	9
❖ No. of Mandal Praja Parishats	:	443
❖ No. of Municipal Corporations	:	6
❖ No. of Municipalities	:	38
❖ No. of Revenue Mandals	:	464
❖ No. of Gram Panchayats	:	8778
❖ Total Population (as per 2011 census)	:	351.94 Lakhs
❖ No. of Males	:	177.04 Lakhs
❖ No. of Females	:	174.90 Lakhs
❖ Sex Ratio (No. of Females per 1000 Males)	:	988
❖ Density of Population (per Sq.k.m.)	:	307
❖ Literacy Rate	:	66.46%
❖ Male Literacy Rate	:	74.95%
❖ Female Literacy Rate	:	57.92%

LEARNING OUTCOMES

SOCIAL STUDIES

CLASS 7

The learner....

- Explains preventive actions to be undertaken in the event of disasters like floods and explains the reasons of the disasters.
- Explains the military strategies and administration of Kakatiyas, Mughals and Vijayanagara Kings.
- Describes distinctive developments in style and technology, uses for construction of temples, tombs and Mosques.
- Analyses the reasons for emergence of various religious movements.
- Locates their constituency in the state map.
- Classifies the maps and explains the uses of it.
- Makes a table showing the particulars of differences between the people living in high lands and shallow lands.
- Explains Hydrocycle (water cycle)
- Reflects on living conditions of Fishermen.
- Collects the details of European rivers and makes a table.
- Locates the African desert in Africa Map and explains about it.
- Prepares a pamphlet for Child Labour system.
- Analyses the changes that came in production due to industrialisation.
- Analyses the reasons for 1857 revolt.
- Explains the process of making laws in Assembly.
- Explains the conditions of labourers working in Brick kilns.
- Reflects on demolition of temples.

