

213 Social Science book- 1

1. INTRODUCTION TO SOCIAL SCIENCE

Imagine that you owned a time machine and that you travelled back to those days when your great grandparents were children. You found that your home and the surroundings look very different. If you travel back further, you will be even more surprised and fascinated by the food, clothes and even the language that your ancestors were using. Wouldn't it be interesting to know what happened in the past?

Do you realize that we can relate with our past even today. Does it not sound like a mystery that we must solve? In order to do this, we will use sources to understand how human life progressed from pre-historic times till today.

OBJECTIVES

After studying this lesson you will be able to:

- establish that study of Social Science includes disciplines like History, Geography, Economics, Political Science and Sociology;
- appreciate that all these subject areas are interconnected and together form the knowledge mass of Social Science;
- discuss the different stages through which human societies evolved and
- identify opportunities and challenges of our present day society.

0.1 SOCIAL SCIENCE AS AN ACADEMIC DISCIPLINE

As the name itself suggests, Social Science is concerned about society. It aims at understanding all aspects of society as well as finding solutions to deal with social problems. It is a broad area of knowledge and includes several different disciplines under its domain. The main ones that you need to know at this stage are:

- History and Archaeology
- Geography

- Political Science
- Sociology
- Economics

The various modules and units of this course in Social Science are connected with these very subjects. In this Unit, we will try to understand the discipline of Social Science, especially History. We will understand the importance of studying Social Science and how closely it is related to our lives. We will see how, as human beings, we have gone through several stages to evolve from when we lived in caves to today's modern world of cities. We will read about History not simply as a set of facts about our past but also learn from them. Social Science also helps us to acquire a capacity to make inter connections between various subjects. We will learn to draw linkages between events and processes of development across the times. This will help us to draw connections between our past, present and future. Let us study more about

these subjects to understand their impact on our lives.

How do you think studying the subject of Social Science at secondary level will help you to understand better the society around you? Explain with at least two reasons.

0.2 STUDY OF SOCIAL SCIENCE

An academic discipline, or a field of study, is a branch of knowledge that is taught at various levels of education and researched at university level. Any field of study has several sub-disciplines or branches. These may at times overlap. Some important branches or sub-disciplines of Social Science are Economics, History and Archaeology, Geography, Political Science and Sociology.

You would be surprised to know that in the beginning, there was only one discipline, i.e. Philosophy. Philosophy means love for wisdom or knowledge. That is why even now the highest Degree in any subject is Ph.D. (Doctor of Philosophy). Later, when knowledge started increasing and expanding, a need was felt to classify knowledge into different disciplines. Science and Social Science came to be differentiated. Both refer to different aspects of our reality. Environment Science deals with knowledge regarding the natural and physical world. Social Science on the other hand deals with knowledge concerned with all aspects of society and human beings themselves. Let us begin with History.

0.2.1 History and Archaeology

What is History? History is an account of events that have happened in the past. It is about the real people and the real things. It does not deal with mere ideas and ideals or what should have been. On the other hand, it is a study of what has been. History does not deal with individuals alone. It is concerned with nations and societies. It is not limited to kings and queens, but all human beings. It includes all men and women, rich and poor irrespective of their background in terms of religion caste etc. Have you ever wondered how and what happened to our ancestors in ancient times? You will learn about them in this book. While going through this course, note down all the events which seem interesting to you. Go to the libraries and search the internet to see if you can get more information on them. We will also help you in your search

for more knowledge.

Why do we study History? The study of History helps us to know our roots, strengths and achievements and gives us a sense of pride as well as direction. What we call progress would be non-existent if we do not have proper knowledge and understanding of our past. There is a general belief that history deals with the past, which we think is dead. In reality, our past has important lessons for the present and the future. History records this legacy that has an important bearing on our lives. In essence, history relates the story of cooperative actions of a large number of men and women in their quest for a better life. When we think of how we can know about our past, we get connected to Archaeology. Often these past activities and achievements bring a sense of pride. Let us keep them safe for our future generations.

Archaeology is the study of the ancient times with respect to society and culture. The traces of those events can be found in material remains i.e. the artifacts, burials, ruined buildings, monuments, etc. and are studied by archaeologists. They interpret them to provide knowledge about the times to which these artifacts belong. The study of Archaeology also includes the written records that are very ancient and cannot be easily deciphered or understood. These sources give more reliable and authentic information.

Most of the time, such traces are found buried underground and have to be dug out. This is called archaeological excavation. Mohenjo-daro, Harappa and Nalanda are some well known sites where excavations have been undertaken and valuable material found. Such excavations are often carried out and reported in the newspapers. A very interesting recent discovery is that of the remains of a city found under the sea near Gujarat. It is believed to be Hindu God Krishna's city Dwarka. Rakhigarhi, in Haryana, is another very recent excavation site.

A trip to such a site will transfer you back to those times. You must visit such sites whenever you get an opportunity. Also, find out more about such sites in other countries too.

Archaeological sources also include inscriptions, pillars, metal plates, coins, seals, monuments, tools, pottery, toys, pictures etc. Works of art like paintings, sculptures, architecture, etc. tell us about the culture of particular periods. Look around your city or town for a museum or visit somebody's house which has a collection of some of these items. Make a list and then try and find out which period they belong to. For this you can search on the internet or visit a library to know more about them. Today, a lot of information can be got from books, magazines and newspaper.

Do you know?

The Archaeological Survey of India (ASI), under the Ministry of Culture, is the premier organization for the archaeological researches and protection of the cultural heritage of the nation. Maintenance of ancient monuments and archaeological sites and remains of national importance is the prime concern of the ASI. For the maintenance of ancient monuments and archaeological sites the entire country is divided into 24 Circles. The organization has a large work force of trained archaeologists, conservators, epigraphists, architects and scientists for conducting archaeological activities and researches. Explore more about it on the website of the organization i.e. www.asi.nic.in

INTEXT QUESTIONS 0.1

1. List the main subjects that build up the knowledge area of Social Science.
2. Do you think studying History is necessary and important? Give two reasons for your stance.
3. Give one difference between History and Archaeology.
4. List five sources which can help us to study our past.
5. Find out at least four archaeological sites in India other than those mentioned in the text.

0.2.2 Geography

The study of History and Archaeology remains incomplete without knowing something about the Geography of the area being studied. Geography is the study of the earth's landscapes, people, places and environment. In simple terms, it is knowing about the world in which we live. Geography is unique in bridging the social sciences (human geography) with the natural sciences (physical geography).

Geography plays an important role in shaping the life and history of any society. It helps us to recognise the differences in cultures, political systems, economies, landscapes and environments across the world. It also helps us to establish links among them. Geography provides an ideal framework for relating to other fields of knowledge, too. If we know the geography of a country, we can understand what happened in history. In this lesson, you will read that early humans made bows, arrows and other small tools. It is from studying Geography that you get to know why. After ice age, changes in environment must have taken place. As a result, many dense forests might have become grasslands. Can you imagine what must have happened? Yes, it led to a growing population of grass eating animals like the deer, goat, sheep and the antelope. You also know that these animals can run fast. So hunting them was not easy with heavy weapons. These light stone weapons, which the early humans had invented, helped them in their survival.

Do you know that the Indo-Ganga Plain is the most fertile land in India? This is because big rivers like the Ganga brings an abundant supply of fresh water for drinking and irrigation. That is why this land became the place for establishing big empires like those of the Mauryas, the Guptas and the Mughals. Availability of iron in abundance further helped in expansion of these empires. Can you guess why? You will learn more about this in lesson-4.

ACTIVITY 0.1

Major cities such as Agra, Nasik, Patna and Kolkata are developed on the banks of big rivers. You will be surprised to find that history has been virtually created on them. Provide three reasons for the growth of these cities as major centres of trade and administration

0.2.3 Political Science

Government is a word with which you are familiar. You often hear or read about it in the newspapers or on the television. Have you ever thought about what a government is? Do you know the role it plays in our lives and the important things it does for the people. The government of a country makes laws and everyone living in the country has to obey these laws. In democracy, it is the people who give power to the government when they elect them. In this way people help the Parliament of that country to make laws. While in a monarchy, it is the monarch or king/queen who has the powers to take decisions and enforce them. Social Science also deals with how we are governed. It also helps us to understand the role of people like us in the running of nations and governments. This discipline is called Political Science.

Political Science is a social science concerned with the theory and practice of politics and the analysis of political systems and political behavior. It tells us how the government is elected. Political scientists study the relationship between the political events and the conditions. They try to understand general principles about the way the world of politics works. It includes studies on governments, public policies, political processes, systems and political behaviour. If you decide to study Political Science in senior secondary you will learn more about political theory, political philosophy and political economy, which are the important branches of this subject.

0.2.4 Sociology

Sociology is yet another very important part of Social Science. It is the study of human behavior in societal context. Sociology focuses on the study of human groups. Sociology comes from the Latin word 'sociologie'. It literally means the study of companion. Sociology seeks to understand the structure of a society and how it works. It also seeks to define and understand the different factors that have shaped our society. This includes race, class, gender, culture, religion, belief systems and government. Sociology also studies the way individual and group behaviours impact on the running of our society.

0.2.5 Economics

Living in a society also means that we must know how to organize our lives. We must know how to economise our income, time and resources because all of them are limited. You must also learn to organise your time in such a way so that you can manage to do things you want. Similarly, when we make a budget for our home, we make the best use of the resources which are available to us. We can avoid many problems in this way. We call this study Economics. It is much more than making a budget. It is the scientific study of the ways in which humans make choices about production, consumption and wealth. This becomes very important when we are faced with limited means. It is the social science of striking a balance between needs and available resources. Studying this subject will be more interesting if you apply the learning to real life situations. One such activity could be to make your household budget or time table.

All these subjects help us to understand how the entire process of human progress and development takes place. For this let us go back into our past. Step by step we will get to know about the evolution of human beings on this earth. Do you know that we study about evolution in Science, too? But over there we learn how evolution took place in nature. How plants and animals evolved. It is an interesting story of how the most highly evolved species, i.e. human beings, developed from less evolved

animals. Do you know that the biological name of our species (human beings) is homo sapiens. We are going to read more about these homo sapiens in the next section.

INTEXT QUESTIONS 0.2

1. Can you explain how geography contributes to the understanding of History?
2. List the main components of Political Science.
3. What does Sociology as a subject focus on?
4. What does the study of economics deal with?
5. How do you think subjects like Political Science, Sociology and Economics help you to understand the functions of the society better?

0.3 EVOLUTION OF HUMAN BEINGS

The first human-like beings are believed to have emerged about two million years ago. They resembled apes. Biologists called them Homo sapiens (wise human beings in Latin). They did not know how to cultivate land and grow food. Nor did they know how to build a house for shelter. They lived in caves or on tree tops. Do you know that human beings had started living on earth much earlier than they learnt to write? The invention of writing was an important landmark, as written records became the main source of our knowledge of the past. Do you know what is not recorded in writing is called Prehistory? You will be surprised to know that the period of prehistory is much longer than the recorded time, which we term as history. So to re-construct the life of prehistoric humans, historians and anthropologists study tools, weapons, ornaments, cave dwellings and cave paintings made by our ancestors. History refers to that period of human evolution for which written records are available. Such writings are found on rocks, pillars, copper plates and more recently paper.

0.3.1 Nomadic Life: The Stone Age

The primitive human beings were nomads. They kept moving from one place to another in search of food from the environment. They moved in groups to ensure safety from wild animals, for social security and for companionship. They also started making tools with stones. So we call that period in human evolution as the Stone Age. In each stage human beings used stones as implements which were better than the earlier ones. This helped them to progress to a better and safer life. It had the following main stages:

(i) The Old Stone Age - Paleolithic Age (500,000 B.C. -10,000 B.C.)

During the old stone ages, (Paleolithic Age) human beings lived in the foothills of the mountains preferably near a river. Rivers provided them with drinking water as well as food in the form of animals that came there to quench their thirst. They could find caves for shelter on the foothills. So, their basic needs of food, water and shelter were satisfied easily at such spots. Do you know that early humans had to push out wild animals, specially the giant bears, from the caves in order to make a home for themselves? Just imagine how difficult and dangerous life the primitive people lived.

To cover and protect their bodies from heat and cold, these primitive humans wore bark from the trees and the skin of animals, which they dried under the sun. You must appreciate the role environment plays in sustaining the human beings even today. There are some places in India like the Andaman and Nicobar Island where certain tribals live like the early humans even today.

Early humans lived in caves and made paintings depicting hunting scenes on the walls of these caves. Paintings of animal-chase, especially big animals like bison and reindeer can still be seen in the Bhimbetka caves in Madhya Pradesh. It is quite possible that this practice of drawing on the walls was some kind of a ritual that ensured that they would be successful in their hunting expeditions. It is also possible that it was a creative expression to make their surroundings beautiful by making an artistic expression of their hunts.



Figure 0.1 Bhimbetka Cave Paintings

Figure 0.1 Bhimbetka Cave Paintings

Do you Know?

Bhimbetka is an archaeological World Heritage site located in Raisen District in Madhya Pradesh. The Bhimbetka shelters exhibit the earliest traces of human life in India which is of prehistoric times. A number of analyses suggest that at least some of these shelters were inhabited by man for in excess of 100,000

years. Some of the Stone Age rock paintings found among the Bhimbetka rock shelters are approximately 30,000 years old.

The Paleolithic humans also developed certain practices which we think must be their religious beliefs. They worshipped their ancestors after their death and buried them with tools and eatables for a comfortable journey to the next world. They were afraid of natural phenomena like lightning and thunder. They could not understand facts like the rising and setting of the sun. But they knew that when the sun rose in the east, it gave heat during the day time, whereas the moon gave peace and coolness at night. To them it was something supernatural, because they could not understand the cause. So they worshipped the Sun, the Moon, Thunder and Lightning. Moreover, they were wise enough not to destroy nature and its balance. They took from nature only as much as they needed and preferred to live in harmony with it. Don't you

think that the world would be a nice place to live in if people followed what the early humans did? The Old Stone Age was followed by the Middle Stone Age or the Mesolithic age. The Mesolithic age was regarded as the transitional age between the Paleolithic age and the Neolithic age.

(ii) The Middle Stone Age – Mesolithic Age (10,000 B.C. – 8,000 B.C.)

Let us see how the humans during the Mesolithic age discovered the use of fire. It is quite possible that when two pieces of flint stone were struck together they produced a spark. This spark may have fallen on some dry leaves and caused a fire. This could have frightened or surprised the early humans. The intelligent humans learnt to use this discovery to their advantage. They found that fire frightened the animals and so could provide them safety if kept burning near the caves. It also provided light during the night. Even the food became softer and tastier when cooked on fire. It also warmed up the cold caves by providing heat. Even today, people warm themselves sitting near a fire on a cold winter night. This must have been really a great event in the life of early humans. Can you imagine how the progress of early humans from living on the treetops to the discovery of fire took place? It could not have happened overnight. Obviously, it took several thousand years. No wonder that fire became an object of wonder as well as worship.

ACTIVITY 0.2

Imagine that you are visiting a place where there is no electricity. It is a cold winter night and you are scared. Recall what the early humans must have done to keep themselves warm. Now write three different ways in which you could keep yourself warm.

Just like fire the use of tools was another important discovery for the early humans. The tools found in this period were called 'Microliths'. They were sharper and more effective. Bones of animals were also used to make tools and weapons like borers, scrapers, arrows, hooks, arrowheads and hammers. They made hammers, choppers

and hand axes with which they cut down small trees. They used it to kill animals for food or build small huts for themselves. They clipped smaller stones to make them as sharp as a knife. By attaching them to bows and spears, they made these tools more effective. Now they were able to hunt animals from a safer distance. Some of these stone implements have been found in Punjab, Kashmir Valley in the foothills of the Himalayas and in the Narmada Valley among other places. If you can visit the library and refer to some books or search the internet, you will be able to locate some other sites where these tools can be found across the world.



Figure 0.2 Mesolithic Flint Weapons

(iii) The New Stone Age – Neolithic Age (8,000 B.C. – 4,000 B.C.)

In the beginning, human beings were mere hunters and food gatherers. It took them hundreds of thousands of years before they could become food producers. This was the beginning of the Neolithic Age. Humans could grow their own food and they no longer depended on the uncertainty of hunting or searching and gathering more food. How do you think this happened? It is quite possible like the discovery of fire this could also have been an accident. May be some seeds fell on the ground and plants came out. These plants soon became a regular supply of food. They started sowing these seeds and harvesting them. Now, they had to look after the plants they had sown. This was because there was a gap of at least six months between sowing and harvesting the grains. This was the beginning of agriculture. It led to a settled life for humans for now they had a regular source of abundant food. They also had a better chance of survival as they no longer had to go hunting for food. Agriculture brought many advantages and changes in the lives of the human beings. They built huts for themselves which were probably protected by a wall. Their fields lay outside the walls. Now they had a regular place to live which soon took the form of a village. This village consisted of many families which provided protection to each other.

Around the same time the early humans realized that they could keep some animals with them. This was possible because of agriculture. Now they kept grain for themselves and the husk was kept for animals. They had learnt to domesticate animals. Do you know that the dog was the first animal to be domesticated? Later, early humans started keeping goats, cattle and sheep for various uses especially for meat and milk. They used wool and skin from animals for clothing. This was the beginning of mixed farming. Agriculture provided plant - food while domesticated animals gave meat, milk and also wool.

The early humans had seen plants coming out of seeds and giving food like the mother who feeds and sustains the life of her children. They started worshipping Earth as a symbol of mother. The Neolithic Age human beings continued to remain in awe of the forces of nature like the Paleolithic Age people.

Gradually as the knowledge of their environment increased, a desire for a comfortable life also developed. The early humans realized that it was important to have better tools and implements. So they made them sharper. The axe was used for cutting and felling trees. It was made of hard stone, chipped and ground to an edge, after which it was nailed to a wooden stick. Similarly, a sickle was used for harvesting the grain. These tools were also polished to make them last longer. These polished tools helped them to clear the land for agriculture and for cutting and gathering crops. Do you know that such tools are used for gardening and farming by small farmers even today?

Another important discovery of this period was the wheel. Nobody could have believed the innumerable ways it could affect and change human life. Wheel was used for drawing water from the well in the form of pulley; for spinning of thread and making clothes in the form of spinning wheel or the charkha; to make pottery in the form of the potter's wheel. The invention of the potter's wheel helped them to make cooked food. The pots were made with twig baskets, which were plastered with clay. These pots were of different sizes and had beautiful patterns on the outside. The greatest use of the wheel was in the cart for transportation. This enabled human beings to carry themselves and their goods from one place to another. Even today, the wheel is used for many important activities.



Figure 0.3 Neolithic Age Pottery-

ACTIVITY 0.3

As you read along you must have realized how human beings progressed steadily from the Paleolithic to the Neolithic Age. Compare the situation of the Early Humans of the past with your situation today. Use the given clues:

Fire, tools, agriculture, mixed farming, wheel, religion, harmony with nature.

INTEXT QUESTIONS 0.3a

1. Why were the early humans called nomads?
2. Write two differences between the tools of Old Stone Age and New Stone Age.
3. Mention two important discoveries of the Neolithic Age.
4. Describe three ways in which the discovery of wheel was significant for human civilization.

0.3.2 Use of Metals: Chalcolithic Age

Humans had come a long way from their food gathering and stone implement days. Yet they were not satisfied. Soon they discovered a metal called copper. This period now came to be called the Chalcolithic Age. In this age people began to use copper for making implements. Do you remember reading that in order to make clay pottery, the early humans used fire? It is used till today in the form of furnaces. Copper was the first metal to be melted by heat in order to make implements.



Figure 0.4 Chalcolithic Age Metal Weapons

As the early humans started discovering new materials they started experimenting with them. Copper was mixed with other metals like zinc, tin and lead to produce bronze. The age in which people started using bronze came to be called the Bronze Age. The tools made of metal proved to be much more effective than the earlier stone implements. Metallic knives and axes were helpful in cutting down

trees and more land was cleared for agriculture. The period when humans used both metals and small pieces of stone, is called the Chalcolithic age. Implements of this age have been found at Brahmagiri in Mysore, Nawab Toli near Narmada River as well as in the Chhota Nagpur Plateau. If you happen to be anywhere near this area, try to see the excavated sites and make notes. Compare this information with any other sites which you might have seen or read.

0.3.3 Beginning of Community Life

Agriculture, mixed farming, development of tools and discovery of wheel all led to a settled life which we may call the beginning of a village life. By now, the groups of human beings that had settled together had become larger. And a large group needed someone who could maintain law, order and some discipline. So, it was natural that they chose one such person amongst themselves who could lead them. Various groups decided their own method of choosing a leader. The leader was more often the oldest person in the group and sometimes it could be the strongest person in the community. The leader looked after the law and order of the settlement. If a dispute arose between any two members of the group, the leader would act as the mediator. Gradually, these settlements became even larger. Towns and cities started coming up. Do you know that the area around the rivers Saraswati and Indus

were the places where the first Indian cities came up around 2500 B.C.? It was the Indus Valley Civilization (called Indus-Saraswati Civilization by some historians after the discovery of sites in Harappa).

Religion: Human beings all over the world have fear of the unknown. Any event, which was not understood by them, was held in awe and soon became sacred. The same happened with the early humans. The earth assumed the status of a mother figure, which provided food for all living beings – her children. The sun gave life and warmth. It was also reassuring after the dark night. It was the same for the moon, stars, rains etc. People started worshipping them. They started sacrificial rites and sang songs in praise of these natural objects. There were magic practitioners, who claimed they could prevent people from coming to harm by them. Some individuals decided to perform sacrificial rites and pray for the community. Such persons came to be known as priests.

People had realized that death was a journey from which people never returned. So they began to follow the practice of making graves for burying their dead. They covered the graves with large stones called megaliths. Sometimes, various articles

of everyday use were also placed, keeping in mind the requirement of the dead on their last journey.

Does it strike you that this reverence for the departed souls persists even today? In fact, you will be surprised to see how many things we have in common with our ancestors.

0.3.4 Iron Age and beyond

As you have learnt, human culture and civilization has undergone several phases of development. The earliest human beings started making tools with stone. Later, human beings discovered metals, which proved to be more useful for making tools. Copper, Bronze and Iron were discovered in that very chronological order.

The discovery of iron was a very important landmark in human civilization. It helped in making tools that were more lasting and durable. Later, other materials came to be used. People learned to make alloys, which are made up of two or more metals in fixed ratios. Brass is an example of an alloy. Then, we learnt how to make steel by adding Carbon to Iron. And much later, modern science gave us a very useful material called plastic. Plastic is still used for making all kinds of tools and objects of everyday use. It has many advantages over other materials. However, lately, it has been found to have a negative impact on our environment. Therefore, its use is being restricted. I am sure you have heard about the ban on plastic bags. The scientists are now trying to discover biodegradable plastic. So, you must realize that every age of human development presents its own set of challenges. These have to be addressed as humans evolve to the next stage. Let us now study the various stages of human development.

ACTIVITY 0.4

Make a list of some religious rituals that we perform. Discuss these rituals with your family and friends. Based on these discussion write a letter to your friend living in another city about the new things about the rituals that you have learnt. Identify also the relevance of these rituals in today's life.

INTEXT QUESTIONS 0.3b

1. Why do we say that the tools made during the Chalcolithic age were better than the tools of the Stone Age?
2. Enlist the basic factors which led to settled life of early age humans. What is the importance of those factors today?

3. How did community life and religion shape the functioning of society in the early age?

4. List the changes in the life of early humans brought by the discovery of iron.

0.4 DIFFERENT STAGES OF HUMAN DEVELOPMENT

Now, based on the above narrative, we can trace the development of human civilization in different stages that are common for people all over the world in all the countries. We will also find the certain discoveries from the past are still relevant today, e.g. the use of wheel.

(a) Hunting Stage: Many clues that have been provided to us by archaeology have helped us to reconstruct our prehistory. This type of life was called primitive because people depended on nature for their livelihood. These early human beings began life as hunters preying upon beasts, birds, fish and insects for food, just as wild animals in the jungle do. They lived only as hunters for hundreds of thousands of years. This stage in history was called the Stone Age. This period was also marked by tending of domesticated animals. This gave people an assured food supply and also some new food items like milk, butter and cheese. For the people, life was much more secure now than it had been when they were hunters. Besides tending of animals was a much lighter work than hunting. People had leisure to think about other matters. But they still had to live like nomads, moving from one place to another in search of food. They had to look for new pastures for their cattle when the previous ones became bare, eaten up by the animals.

(b) Village Life (Rural): With the advent of agriculture came the opportunity for settled life. People discovered that they could sow seeds in the soil and make them grow into plants. This technique enabled them to grow their own food at one place. Now they could have permanent settlements, which later took the shape of villages where civilization, in the modern sense, was born. This can also be termed as the rural stage.

(c) Town Life (Urban): From rural life in villages and agriculture, human beings moved towards urbanization. At this stage, there was an immense growth in the population. Human beings were no longer food gatherers. They were now food producers. The groups of families became larger and societies were formed. Now there was no need for every family to work in the fields and produce their own food. Those who were weavers, potters or carpenters exchanged their products for food. There was a great improvement in their lives. Discovery of metals had led to specialization in preparing crafts. Some artisans had better skills than the others did. This led to the society's stratification into skilled and semi-skilled craftsmen depending on the skills they possessed. By this time, metals like copper and bronze had been discovered. These were being used in producing articles essential for a comfortable life. Human beings used these

skills in making crafts like Pottery, leather-work and masonry. People would get together at a convenient place to exchange their products. Even the farmers would come to sell their surplus grains and buy other necessities. These activities happened at a central place. At this stage of civilization, people looked for more than just satisfying their need for food and engaged in other activities such as weaving, pottery and metal works. It was also the stage when iron was being discovered. Now there arose a need for structure and categorization into smaller and specialized groups. Division of labour took place on the basis of the work performed by them. Humans were now ready to move to the next stage of their existence and development. The invention of writing was a great step forward. Knowledge could now be passed forward from one generation to another. Writing was also needed for keeping records by the traders as also by the people who were looking after law and order in the villages, towns and cities.



Figure 0.5 *Harappan Inscriptions*

Figure 0.5 Harappan Inscriptions

(d) City Life: Later, people started growing surplus grain and storing it for the future. This resulted in a lot of leisure time, which led to the progress of civilization and culture. Arts like painting, music, sculpture and architecture developed. More decorative crafts like metalwork and ornament making were introduced. Now that people had security and their basic needs were fulfilled, they could cater to their higher social and aesthetic needs. It was also the beginning of the concepts of caste and class. From towns developed more advanced and urbanized cities. The earliest cities to be discovered were Harappa and Mohenjo-daro which are now in Pakistan. In India some important sites for these cities were at Ropar near Chandigarh, at Lothal near Ahmedabad, and a third at Kalibangam in Rajasthan. These cities were well planned and had all facilities that were available at that time such as roads that

cut each other at right angles, drainage system and use of burnt bricks.



Figure 0.6 Ruins of Indus Civilization at Lothal, Gujarat

Figure 0.6 Ruins of Indus Civilization at Lothal, Gujarat

With the advancement in science and technology, progress in material sphere was accelerated manifold. Life became more comfortable and later luxurious, at least for some people. Soon cities gained importance too. Some of them came to be called metropolitan cities in which we find high rise buildings, important offices, big business houses and factories. Life has changed for the better for some of us. We have made many discoveries, inventions and innovations to make our lives not only comfortable but also meaningful. But there are many of us who do not have access to clean drinking water, electricity and basic facilities like education and health. This in turn has created many problems for which we have to find solutions. We shall read more about them in this lesson.

INTEXT QUESTIONS 0.4

1. Identify two features from every stage of human development.
2. How was the hunting for animals for food by the humans different from the hunting practices of human today?
3. What factors were responsible for the formation of towns?
4. How did writing help to contribute towards human progress?

0.5 SOCIAL SCIENCE AND PROBLEMS OF PRESENT DAY SOCIETY

It has been a long journey from the times when we were hunters in forests to the, modern times when we explore other planets and send out satellites into outer space. Information can now be stored and communicated with the help of computers and robots. We have stepped into the age of information and communication technology. Cities have given way to the metropolis. But we are still changing, developing evolving and progressing.

You may have by now understood how humans have evolved from hunting and food gathering stage to the present day modern society. It has been a very long journey

with many new discoveries and challenges and opportunities. The relationship of humans with self, society, and nature should inspire us to create a society in which all of us rather than only a few could lead a gainful life.

Even though we have made good progress, we still need to overcome several challenges. You will read about many of these issues in the Modules and Units that follow in this course. We will go through them and see what possible solutions we can have for the following:

- (a) Poverty and Hunger
- (b) Inequitable distribution of wealth
- (c) Unemployment and underemployment
- (d) Parallel economy, tax evasion & Black money
- (e) Corruption in public life
- (f) Pollution and environmental degradation
- (g) Lack of nationalism and love for the country
- (h) Gender based problems: discrimination against women, crime against women, dowry system, infanticide and foeticide, human trafficking, prostitution.
- (i) Violence: Terrorism, Naxalism
- (j) Hurdles to National Integration – Linguism, Regionalism, Casteism, Communalism

INTEXT QUESTIONS 0.5

1. Make a list of some problems which you face in your society which are not listed in this lesson.
2. Discuss how subjects in Social Science can help you in finding solutions to your problems.
3. “With the progress of human civilization, the problems also increased” Can you identify some problems which have arisen with urbanization and industrialization.

WHAT YOU HAVE LEARNT

- Understand the importance of studying Social Science and how it helps us to acquire a capacity to make inter connections between various subjects.
- History relates the story of human life in their quest for a better life for themselves.
- Archaeologists study material remains – the artifacts, burials, ruined buildings, monuments, while Geography is the study of the earth’s landscapes, peoples, places and environments.

- Political Science analyses political systems and political behavior.
- Sociology deals with the structure of a society and how it works while Economics is the scientific study of the way in which humans make choices about production, consumption and wealth.
- We learn that in the various Stone ages, humans discovered the use of fire. They made hammers, choppers and hand axes with which they—cut down small trees, killed animals and hunted for survival. They worshipped their ancestors after their death and buried them with tools and eatables for a comfortable journey to the next world. Later they made their tools sharper and more effective.
- In the Neolithic Age they made their life more comfortable. Invention of wheel and its advantages were known to them. Agriculture led to mixed farming and a settled life. It became the foundation for a community life. Soon villages were formed followed by towns and cities.

TERMINAL EXERCISES

1. How are different disciplines under social science interlinked with each other? Discuss with the help of examples.
2. Do you think studying History is necessary and important? Give reasons for your stand.
3. What is the relationship between Archaeology and History?
4. How do other sub-disciplines of social science contribute in the understanding of human civilisation?
5. Write a short note on the factors that led to the rise of community and social life during Chalcolithic and Bronze Age.
6. What was the importance of the discovery of fire?
7. Explain briefly the subject matter of economics.
8. Economists are very important for a country. Do you agree? Why?
9. Find out why plastic bags need to be banned. Prepare a Project bringing out the advantages and disadvantages of metal and plastic.

ANSWER TO INTEXT QUESTIONS

0.1

1. Economics, History and Archaeology, Geography, Political Science and Sociology.
2. The study of history helps us to know our roots, strengths and achievements and gives us a sense of direction.

3. History is the story of human beings and of what happened in the past while archaeology helps us to understand our past through scientific study of the material remains.

4. Inscriptions, coins, monuments, seals and excavated sites.

5. Harappa, Mohenjo-daro, Rakhigarhi, Dwarka and Nalanda.

0.2

1. Geographical characteristics of a region are very important for its historical development such as Indus river valley for the Indus civilization.

2. Political Science is a social science concerned with the theory and practice of politics and the analysis of political systems and political behavior.

3. Sociology focuses on the study of human groups.

4. Economics is the scientific study of the way in which humans make choices about production, consumption and wealth.

5. They are inter-related to each other and together they give a holistic understanding of Social processes.

0.3a

1. Because they kept moving from one place to another in search of food.

2. The tools of the New Stone Age were sharper and polished to make them last longer which was not the case with the Old Stone Age.

3. Discovery of wheel and mixed farming.

4. For transportation and potter's wheel.

0.3b

1. The tools made of metal proved to be much more effective than the earlier stone implements. Metallic knives and axes were helpful in cutting down trees and more land was cleared for agriculture.

2. Discovery of fire, wheel and metal, Practice of agriculture led to settled life. They more relevant for advanced human progress in Industrial society.

3. They led to the formation of family life, creation of common beliefs and interactivities and interdependency like trade, politics, security etc.

4. Equipment became stronger and long lasting. Work efficiency increased.

0.4

1. Refer section 1.3 and 1.4

2. Relate with hunting for survival of life and hunting for sole pleasure.

3. Central place for trade and commerce as well as administration
4. To communicate for long distance, to take account and keep records, etc.

0.5

1. Education of the girl child, Violence against the weaker sections of the society etc.
2. They add to the body of knowledge which we need to solve our problems. They help to analyze the problems which we face in our day to day life. They help us to locate these facilities as well as how to use them for ourselves.
3. Write the answer with analyzing the advantages and disadvantages of progress.

1. ANCIENT WORLD

Go to the market or to the railway station, sit in your home or stand on the road and look around you. You will find many things where metal is being used. This metal could be copper, bronze, iron or any other may be steel. Steel is a refined form of iron only. Discovery of metals brought profound and dramatic changes in the lives of people.

You have read about pre-history in the introductory lesson. You have learnt that during the Stone Age human learnt to make tools and weapons of stone, bone and wood. They lived in caves and found food by hunting and food-gathering. Later, they learnt about agriculture, domestication of animals and led a settled life. The Stone Age was followed by the Metal Ages – Bronze Age and Iron Age. It was with the discovery of metal that human civilisation became highly evolved. During the Bronze Age, advanced civilisations came up in Mesopotamia, China, Egypt and India. We will read about these civilisations in some detail in this lesson. We will also read about the Iron Age Civilisations in Greece, Rome and Persia, as well as India.

Isn't it surprising that the use of iron started so long back. We still use iron in some way or the other, don't we? Look around you and you will find many things made of iron and steel. We all have steel utensils in our homes. Steel is a refined form of iron.

Further, we will read in detail about Ancient India, about the emperors and dynasties that ruled India during that period. You will realize that India's contribution to human civilisation is immense. Isn't it interesting and exciting to know about our glorious past? Let us start the journey into our past and know how we humans have travelled through the ages and evolved into sophisticated, advanced and highly civilised people.

OBJECTIVES

After reading this lesson, you will be able to:

- describe the contributions of ancient Bronze Age Civilisations—Mesopotamian, Chinese, Egyptian and Indus Valley;

- recognize the contributions of the Iron Age Civilisations – Greek, Roman and Persian;
- explain the important developments in Indian history from the Vedic Age down to the time of Harsha;
- examine the different aspects of India's contribution to world civilisation;

1.1 THE BRONZE AGE

Towards the end of the New Stone Age, began the use of metal. Copper was the first metal used by them. The cultures based on the use of both stone and copper are called Chalcolithic Cultures. This is also called Bronze Age because of the invention of bronze in this period which is an alloy of copper and tin. Gradually copper and bronze replaced stone, wood, and bones to some extent for making weapons and implements. People learnt how to make bricks and use them in construction. These bricks were baked and sun dried. Town-based civilisations came up for the first time in different river valleys. These towns became centers of trade, commerce and administration. The Bronze Age people had built up great civilisations and made significant contributions. In this section, we will read about four major Bronze Age Civilisations of the world, that is, Mesopotamia, Egypt, India and China.

1.1.1 Mesopotamian Civilisation

Mesopotamia was the land lying between two rivers, Tigris and Euphrates, which lie in modern day Iraq. These rivers were often in flood and in this process they deposited a lot of silt which made the land around them very fertile. This resulted in increased food production. The abundant agricultural produce enabled the growth of a number of crafts persons like smiths, potters masons, weavers and carpenters. They sold their products and got their necessities from others in exchange. They carried on trade with far-off places like India. Carts, wagons, boats and ships were used for transport and communication. They also developed the art of writing. Their script was a collection of symbols and pictures. They drew wedge-like lines and so this script came to be known as Cuneiform script.

The earliest cities of Mesopotamia were like small states, each with its own administration. The ruling class consisted of priests, kings and aristocrats. Besides them there were merchants, ordinary people and the slaves. The people of Mesopotamia worshipped many gods and goddesses like sky, sun, moon, fertility, etc. Each city had its own patron god or goddess.

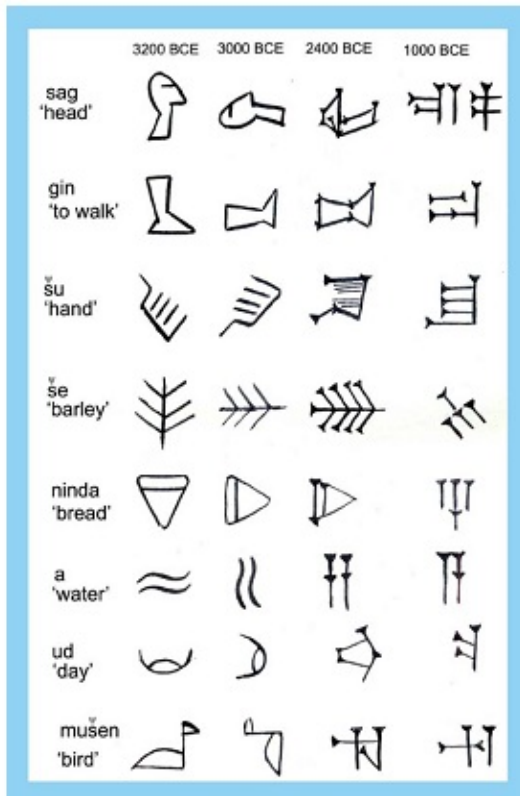


Figure 1.1 Cuneiform Script

Figure 1.1 Cuneiform Script

1.1.2 Egyptian Civilisation

Another civilisation arose in Egypt, along the River Nile, which made the land very fertile. The Egyptian kings were called Pharaohs. They had ministers and officers in their service that administered the land and collected taxes for them. The priests enjoyed a very high and honorable position in society. Temples were dedicated to a particular god in each town or city. The ancient Egyptian script was called Hieroglyphics. Traders and merchants carried on their business both on land and water. There were skilled workers like stone-cutters and carpenters. Egyptians had considerable knowledge of weights and measures.

The Pharaohs built the great monuments of the ancient world – the Pyramids. Since the Egyptians believed in afterlife, they preserved the dead bodies. These were called mummies. The pyramids were built as tombs to keep the mummified bodies of the dead kings.



Figure 1.2 Hieroglyphics Script

Figure 1.2- Hieroglyphics Script

1.1.3 Chinese Civilisation

The Chinese civilisation grew up in the Hwang Ho valley in North China. The first rulers known were the Shangs (1523 BC to 1122 BC), who built China's first cities. They also contributed to art and culture. The Chinese writing system was developed during this period. Craftspersons of this period, especially the bronze workers were great experts in their fields.

The Shang dynasty was overthrown by the Zhous, who built strong forts and walled towns to defend themselves from invaders. It was during the later phase of the Zhou rule that iron was introduced, thus ending the Bronze Age in China.

In 221 BC, the Chin rulers came to power in China. They ordered the use of common language, common laws and common weights and measures throughout their empire.

Do you know that they were the rulers who built the famous Great Wall of China?

After the Chins, the Han dynasty came to power, who ruled till AD 220. It was during this period that Chinese traders had contact with the West through the famous Silk Route, crossing Central Asia and Persia.

The people of China worshipped a number of deities. Worship of ancestors, nature and spirits were very common. In China a famous religious preacher named Confucius advocated a system of right behavior, which greatly influenced Chinese society and government. He laid emphasis on good moral character, respect to elders and loyalty to the family and obedience to the laws of the State.

ACTIVITY 1.1

Did you notice that all the major civilisations arose on the banks of rivers? Identify some important towns which rose on the banks of some rivers. Can you think of at least two reasons what made these towns more successful than those which were not on any river bank?

1.2 INDIA: INDUS VALLEY CIVILISATION

Do you know that India was also part of the Bronze Age Civilisations, which flourished in the valley of river Indus and neighboring regions? This ancient civilisation was discovered when archaeologists began excavating the sites connected with it in the 1920s. The first sites to be excavated were Harappa and Mohenjo-Daro. That is why it is also called Harappa Civilisation. At present, hundreds of sites of this culture are known. The most important cities were Harappa (Western Punjab), Mohenjo-Daro (Sindh), Lothal (Gujarat), Kalibangan (Rajasthan), Ropar (Punjab), Banawali and Rakhigarhi (Haryana), and Dholavira (Gujarat).

1.2.1 Town Planning

One of the most interesting features of this civilisation was the emergence of the first urban societies in South Asia. The most remarkable aspect was the high level of sophistication in town planning, crafts and culture. The people lived in well-planned cities. A general feature of the cities was the presence of a fortified citadel which housed public buildings. The cities had wide roads, which cut each other at right angles. The houses were brick – built and most of these were two-storied. There were wells, baths, drains and sewage in each house. Paved roads and street lightings were also known. Apart from the living houses in the lower town, big multi-pillared halls have also been discovered at the citadel area in Mohenjo-Daro. Here, the most striking feature was the Great Bath (180 ft long and 108 ft long and 108 ft wide). The bathing pool in it was 39 feet long, 23 feet wide and 8 feet deep. The Great Granary of Harappa was another important building. The surplus produced by the peasants was stored here.

1.2.2 Society and Economy

The people practiced agriculture, animal husbandry, art and crafts, trade and commerce. Main crops were wheat, barley, rye, sesame and pea. Evidence of rice has been found at Lothal and Rangpur. Furrow marks found at Kalibangan show that ploughing was known to them. Sickles were used for harvesting. Various forms of irrigation were practiced. Cotton was a known product. Animals like cows, goats, sheep, humped bulls, dogs, cats, camels and donkeys were domesticated. The people

consumed cereals, fish, meat, milk, egg and fruit. Tools and weapons made from copper and bronze were mostly used. Ornaments were made of gold, silver, precious and semi-precious stones, conch and ivory. Iron was not known to them. Among artisans and craftspeople, there were potters, weavers, masons, carpenters, smiths, jewelers, sculptors, stone cutters, brick-makers and terracotta manufacturers. Trade and commerce were also very important economic activities. Both inter-regional trade and external trade were carried out. Several evidences point to Harappa trade with Mesopotamia. Main imports consisted of metals like gold, tin, copper and various kinds of precious and semi-precious stones. Among the exports were agricultural products, cotton goods, potteries, jewellery, ivory products and other crafts. Harappa seals were probably used for commercial purposes. The society was divided into classes.

1.2.3 Religion and Culture

The cult of Mother Goddess seems to have been very popular among them. Many figurines of Mother Goddess have been found. One male deity has also been found at Mohenjo-Daro which has been called the prototype of Lord Shiva (Pashupati). This deity is represented in a seal, sitting in a yogic posture and surrounded by animals.

Lingam worship and nature worship of trees were prevalent. Can you see the similarities in the religious practices among the Hindus in India even today? When you visit a Shiva temple, you can see that Shiva lingam is worshipped. You must be aware that Hindus also worship trees like Peepal.

1.2.4 Technical Skills

They had also acquired high levels of technical skill. They had knowledge of urban engineering, weights and measures, health and hygiene. They also knew how to write. They used a script which has not yet been deciphered.

1.2.5 Decline

It is difficult to say what actually caused the ultimate decline of this civilisation. Natural calamities seem to be the most important cause of the decline of this civilisation. Recurring floods, drying up of rivers, decreasing soil fertility, deforestation due to constant consumption of wood, earthquakes, scanty rainfall, extension of desert seem to have played havoc with this civilisation. According to some scholars, the decline of overseas trade with Mesopotamia may have contributed to the decline of this civilisation. With its decline, literacy and urban life disappeared in India for more than a thousand years.

INTEXT QUESTIONS 1.1

1. Fill in the blanks:

(a) Society in Bronze Age civilisation was divided into ————.

(b) ————. seems to be the most important cause of the decline of Harappa Civilisation.

(c) The Harappa people had overseas trade with ————.

2. Which was the first metal used by human beings?

3. Name the rivers between which the Mesopotamian Civilisation was founded.

4. Name the ancient Egyptian script.

5. Name at least four sites of the Harappa Civilisation situated in India.

1.3 IRON AGE CIVILISATION

Iron Age began about 3000 years ago when it came to be produced on a large scale and its use became common. It was much cheaper and stronger than copper and bronze. So, the use of iron tools and implements enabled our forefathers to clear forests and to reclaim lands for the extension of cultivation. Agricultural production thus increased considerably. This brought radical changes in the social and economic life of the people.

The use of iron had a great impact on transport and communication. Iron rims and spokes were used in wheels to make them stronger. Iron nails and sheets were widely used for making boats and ships. Trade and commerce flourished. This trade brought prosperity. New weapons of war like the use of long, heavy sword, sabre/saber, iron-shield, spear and lance changed the methods of warfare.

The Iron Age was also a period of intellectual progress. The most important development was the beginning of alphabets. This replaced the old pictographic style of writing about which you have already read in the Bronze Age Civilisations of Egypt, Mesopotamia and China. The Civilisations that flourished during the Iron Age were Greece, Rome, Persia and India. They were much more advanced than the earlier civilisations. Let us now read about them in some detail in this section.

1.3.1 Greek Civilisation

Greek Civilisation flourished in Greece more than 2000 years ago. There arose many independent city-states, which developed a remarkable system of government. The development of city-state was a unique feature of Greek civilisation. Each city was enclosed by a wall for protection. Inside the city, there was a fort called Acropolis which was situated on a hill top.

Among the Greek city-states, the most famous were Athens and Sparta. Athens was rich and cultured. Athenian citizens included writers, philosophers, artists and thinkers. The society was based on slave labor, but the citizens enjoyed a democratic form of government. You will read about Democracy in detail the later lessons. Sparta was almost like an army camp, where everyone was expected to obey the superiors. Sparta had the best army in Greece. Training in warfare was considered to be the most important thing here.

There was considerable rivalry between Athens and Sparta. But they fought side by side to drive off the mighty Persian army of Darius I and Xerxes, who tried to conquer Greece. Under Pericles, Athens enjoyed a 'Golden Age'. But a long war between Athens and Sparta, called the Peloponnesian War, which lasted for 27 years resulted in the defeat of Athens.

Do you know that Ancient Greece had the distinction of being called the birth place of Western Civilisation? They were pioneers in art and learning, science, literature and sculpture. Socrates, Plato and Aristotle were great philosophers whose works are studied even today. Herodotus and Thucydides were famous historians. Archimedes, Aristarchus and Democritus were great scientists. Aeschylus, Sophocles and Aristophanes were great dramatists. Homer was the author of the famous epics - Iliad and Odyssey.

The Greeks also had great knowledge of architecture. They built many beautiful temples and palaces. The Greeks believed in many gods. Each city had its own protector god or goddess. The gods were believed to live on Mount Olympus. The Olympic Games, first recorded in 776 BC was held every four years at a place called Olympia. Sports and athletic events were held to honor Zeus, the king of gods.

The Greek towns were the centers of administration as well as cultural and economic activities. The farmers mainly grew grapes, olives and grain. Wine and olive oil were important products. The Greeks, at one time, also established vast empires. Alexander of Macedonia, better known to history as Alexander the Great, led his army out of Europe and conquered Syria, Mesopotamia, Egypt, Afghanistan and even parts of Central Asia and North-Western India. This led to the spread of Greek ideas and learning. Alexander died at an age of thirty-three only. After his death, his empire broke up into smaller kingdoms. Later, Greece was conquered by the Romans.

1.3.2 Roman Civilisation

In 510 BC, the Romans set up a Republic on the city of Rome which is on river Tiber in Central Italy. The Roman Republic was ruled by the senate, which consisted of a group of elders called senators. They elected two Consuls each year to lead them. By 200 BC, Rome became the leading power of Italy. It was able to defeat rivals like Carthage for the control of the Mediterranean world.

In the early Roman society, there were three classes of people – the patricians (aristocrats), the plebeians (commoners) and the slaves. Roman economy was based on slave labor. Rich Romans owned slaves. These slaves were often trained for the gladiators' fight, which was a fight between the slaves and wild animals. There were also frequent slave revolts in Rome. One such revolt was led by Spartacus in 74 BC.

Although Rome was a Republic, strong and influential leaders fought for power. Julius Caesar was one such leader who got enormous power and became a dictator. In 44 BC, Caesar was murdered and a civil war broke out. After the war, Augustus Caesar became the first emperor of Rome. The Roman Empire spread to three continents – Europe, Asia and Africa. Do you know that it was during the rule of Augustus, the great prophet, Jesus Christ appeared? He was the founder of Christianity. He was born in Bethlehem. According to him, all men and women are the children of God. He taught people to love each other. After his death, the followers of Christ spread his teachings among the people. At its peak, the Roman Empire stretched from Mesopotamia in the east to Gaul and Britain in the west. People throughout the Empire adopted Roman way of living. Towns with baths, temples, palaces and theatres were built. In the countryside, the Romans built huge, comfortable farmhouses called villas. Roman rulers used to preside over victory parades, religious ceremonies and games in the arenas and amphitheatres. Gladiator's fight, chariot racing, and theatre were some of the common amusements.



Figure 1.4 *Roman Colosseum/Amphitheatre*

Figure 1.4 Roman Colosseum/Amphitheatre

The Roman Empire was divided into several provinces, each ruled by a governor. He had a number of officers under him who looked after different affairs of

administration. The main fighting forces of the Roman army were the legions. Each legion had 5000 soldiers headed by a commander. The Roman Empire was governed by the personal will of the emperor. But his power depended on the army. Weak emperors were often overthrown by the army generals.

By 395 AD, the huge Roman Empire was divided into two halves for better governance. The Eastern part with capital at Byzantium survived even after the fall of the Western Roman Empire in the face of barbarian invasion in 476 AD. Emperor Constantine gave Byzantium a new name – Constantinople. It became the home of Eastern Orthodox Christian faith and the capital city of the Byzantine emperors.

ACTIVITY 1.2

You have read about the famous gladiators' fight in this lesson. You must have also watched some of them on television or in the movies. Did you feel good watching them? Do you think it is a human practice to watch people suffer and find amusement from it? What would your thoughts be on the same? Write in about 50 words.

1.3.3 Persian Civilisation

In the Iron Age, Persia (Modern Iran) was inhabited by the Aryan communities. One branch of them, known as the Medes, settled in the western part of the country. Another branch occupied the southern and eastern parts and was called the Persians. The Medes built up a powerful kingdom covering a vast area of Iran. At first, the Persians also had to acknowledge the supremacy of the Medes. One of the Persian kings, Cyrus, united the Persians in 550 BC. He built a powerful army and successfully conquered Babylon, Assyria and Asia Minor. Darius I was the greatest emperor of Persia. He belonged to the Achaemenian dynasty. His empire stretched from River Indus to the Eastern shores of Mediterranean Sea. He made Persepolis his capital in 518 BC. During his reign, Persian art, architecture and sculpture flourished. He also built a powerful navy.

The Persian emperors were able administrators. They divided their empire into provinces, each governed by a Satrap or Governor. The Persians were good soldiers with strong cavalry, navy and had iron weapons. Though the Persians were defeated by Alexander the Great in 331 BC, their civilisation did not come to an end. Their culture and civilisation continued to flourish under the Parthian and Sassanian emperors. But ultimately they were conquered by the Arabs in 7th century AD.

Like the Indo-Aryans, the early Persians worshipped the forces of nature. They believed in the sun god, sky god and other gods. They considered fire to be a symbol of holiness. They also performed fire rites and practiced animal sacrifices. Later, a

religious preacher Zoroaster found the religion called Zoroastrianism. He taught them about Ahura-Mazda, the Lord of Heaven and Light, who gives men strength

and energy. According to Zoroaster, life was a constant struggle between good (light) and evil (darkness). The holy scripture of the Persians is called Zend – Avesta.

INTEXT QUESTION 1.2

1. Name the three spheres where the impact of iron implements were felt the most.
2. Name two important city states in Greece.
3. Name the river on which the city of Rome is situated.
4. Complete the sentences below:
 - a) Constantinople was the capital of the _____.
 - b) The Persian king who united the Persians was _____.
 - c) The Indo-Aryans and the early Persians worshipped the _____.

1.4 INDIA: THE VEDIC AGE

The Vedic Age marks a new phase in ancient Indian History which began with the arrival of the Aryans in India around 1500 BC. It lasted for almost a thousand years, in the course of which a number of economic, social, political and religious developments took place. The Vedic Age is accordingly divided into two periods of about equal duration - Early Vedic Period and Later Vedic Period.

Have you heard of the Vedas? They are the most important source of information on the Vedic Age. The Early Vedic period is known mainly from the Rig Veda, which was the first Veda to be composed. For this period, when the Vedic tribes lived in northwest part of the subcontinent including Punjab and Afghanistan, we do not have much archaeological evidence. This was probably because the Early Vedic people generally led a nomadic life and did not stay for long at any place. Their economy was mainly pastoral. Cattle-rearing was the chief means of livelihood. Horses, goats and sheep were also important. A little agriculture was also practiced. Family, clan and tribes (called Janas) were the social units, and there were no castes. The chief of the tribe was called Raja. Popular assemblies of all members of the Janas, called Sabhas and Samitis, had an important say in public affairs. A number of deities were worshipped, Indra being the most important of them.

The Later Vedic period is known in much greater detail from the vast corpus of Later Vedic literature as well as from archeological material. The Later Vedic literature comprised of the following books, that is, the three Vedas – Sama Veda, Yajur Veda and Atharva Veda. There were also commentaries on all the four Vedas called Brahmanas, Aranyakas and Upanishads.

A large number of sites belonging to this period have also been excavated. They are all marked by a typical pottery called Painted Grey Ware (PGW), and so are known as PGW sites.

During the Later Vedic period, there was a large scale eastward movement of the Aryan communities to Indo-Gangetic Doab and Upper Ganga plains. Towards the end of the period, three important kingdoms came up further East: Kashi, Koshala and Videha. Agriculture was now the main occupation, and number of crops including rice, wheat and sugarcane were grown. Crafts also multiplied, iron weapons and tools were introduced. People now led a settled life in villages. Castes began to emerge and crystallise in the form of four Varnas - Brahmanas, Kshatriyas, Vaishyas and Shudras. The powers of the king and his men increased, and those of the assembly were proportionately undermined. Sacrifices now became very elaborate. The importance of the god Indra receded; new gods such as Prajapati figured prominently. Towards the end of this period, a reaction to the sacrificial ritual could also be observed which we find mentioned in the Upanishads.

ACTIVITY 1.3

Read the passage given below and answer the questions that follow:

The Various Means of Livelihood (Extract from Rig Veda, IX, 112)

We all have various thoughts and plan, and diverse are the ways of men.

The Brahman seeks the worshipper; the carpenter/takshan looks for the cracked (wood, to repair); the physician/bhishaj, the injured (to treat).

The smith/karmara with ripe and seasoned plants, and with birds' feathers,

With stones and with enkindled fire, seeks one who has a store of gold.

I am a poet/karu, my father's a physician, and my mother grinds grain upon the stone.

1. List the various occupations mentioned in the passage.
2. What kind of society does it depict?
3. Are the occupation hereditary based? Why or why not?
4. What kind of work did the women folk engaged in?

1.4.1 The Post-Vedic Age

In the 6th century BC there came up large territorial states in northern and eastern India known as the Mahajanapadas. There were sixteen such states namely Anga, Magadha, Vajji, Kashi, Koshala, Malla, Kuru, Panchala, Vatsa, Avanti, Kamboja,

Gandhara, Assaka, Chedi, Matsya, and Shurasena. Among them Magadha, Kosala and Avanti were the most powerful. The extension of agriculture, growth of trade and industries, rise of territorial states and beginning of urbanization gave rise to new forces in the society. Thus the 6th century BC was also a period of socio- religious transformation. People expressed their dissatisfaction against the ritualistic Brahmanism and Vedic sacrifices. There emerged numerous sects and reformatory movements. This period called the Ancient Period in History saw the rise of two important religions called Jainism and Buddhism.

1.4.2 Buddhism

Gautama Buddha, the founder of Buddhism, was born in 563 BC at Lumbini which is situated near the Indo-Nepal Border. He was the son of Shuddhodhana, the chief of Shakya of Kapilavastu. At the age of 29, Gautama left home and attained Bodhi (enlightenment) at Bodhgaya under a pipal tree. He delivered his first sermon at Sarnath near Varanasi. His teachings included four Noble Truths (Arya Satya) and Eightfold Path (Ashtangika Marga).

According to Buddha:

- (i) the world is full of misery (dukkha);
- (ii) desire (trishna) is the cause of this misery;
- (iii) if desire is conquered, then all sorrows can be removed;
- (iv) this can be done by following the Eight fold Path; which included:
 - (a) right memory (b) right aim (c) right speech
 - (d) right action (e) right livelihood (f) right efforts
 - (g) right memory and (h) right meditation

Buddha suggested a 'Middle Path' - away from both extreme luxury as well as extreme austerity. He also laid down a code of conduct such as non-killing and non-stealing for his followers. He died at the age of 80 (483 BC) at Kushinagar in Uttar Pradesh.

1.4.3 Jainism

Rishabhanath, the first Tirthankara, is known to be the founder of Jainism.

Vardhamana Mahavira was the 24th Tirthankara of this sect, Parshvanath being the 23rd one. Mahavira was born in 540 BC at Kundagram near Vaishali (Bihar). His father was the Chief of Jhatrika Kshatriya clan. Mahavira became an ascetic at the age of 30 years and died at Pawapuri in 468 BC near Rajagriha. His followers came to be known as 'Jainas'.

Jainism had no place for a supreme creator. It recognized the existence of gods, but placed them lower than the Jaina teachers. The main aim of Jainism is the attainment of freedom from worldly bonds. Like Buddhism, Jainism opposed the ritualistic

practices and evils of Vedic Brahmanism. It also opposed the caste system and accepted the doctrine of Karma and rebirth. Jainism has five cardinal principles:

- (i) Ahimsa or non-violence, (ii) Truthfulness,
- (iii) Abstention from stealing, (iv) Non-attachment, and
- (v) Celibacy or Brahmacharya.

The three jewels (Triratna) of Jainism are:

- (a) Right vision (Samyak Darshana),
- (b) Right knowledge (Samyak Jnana), and
- (c) Right Conduct (Samyak Charita)

ACTIVITY 1.4

Reflect on the teachings of Lord Buddha and Lord Mahavira. Think of at least three teachings which you find to be relevant and can be practiced in your daily life. Share your thoughts and experiences with your family and friends.

1.5 THE MAURYAN AGE (322 BC-184 BC)

Out of the sixteen Mahajanapadas, it was Magadha that expanded considerably under powerful rulers like Bimbisara, Ajatashatru and Mahapadmananda. The last king of the Nanda dynasty was defeated by Chandragupta Maurya in 322 BC. He established the Maurya Empire uprooting Greeks from the Punjab and Nandas from the Gangetic Plains. By a continuous process of conquest and annexation he was able to unify almost the whole of India. Chandragupta ruled from 322 BC to 297 BC. He embraced Jainism under the influence of Bhadrabahu. He died at Sravanabelgola near Mysore.

Bindusara (297 BC-272 BC), the son and successor of Chandragupta Maurya, was also known as Mitraghata (slayer of enemies). He is said to have conquered Deccan, extending Mauryan control as far as Mysore. He also had contacts with Antiochus I, the Greek ruler of West Asia. It appears from the Buddhist literature that after the death of Bindusara, there was a struggle for the throne among his sons.

Ashoka (272 BC-236 BC) emerged victorious in this fratricidal war of succession and ascended the throne of Magadha. An important event of his reign was the famous Kalinga War in 260 BC mentioned in his Rock Edict XIII. Later, Ashoka, embraced Buddhism, and gave up war. He was a benevolent ruler and did many things for the welfare of his subjects. His policy of 'dhamma' was based on religious toleration, respect to elders, care for the old, kindness, truthfulness and purity. It was through his efforts that Buddhism spread beyond the boundaries of India. The rock edicts and pillar edicts inscribed by him give a detailed account of his reign.

After Ashoka's death, his empire disintegrated into pieces. There was also the danger of foreign invasion. The economic condition of the country deteriorated. The last king of the Maurya dynasty was Brihadratha.

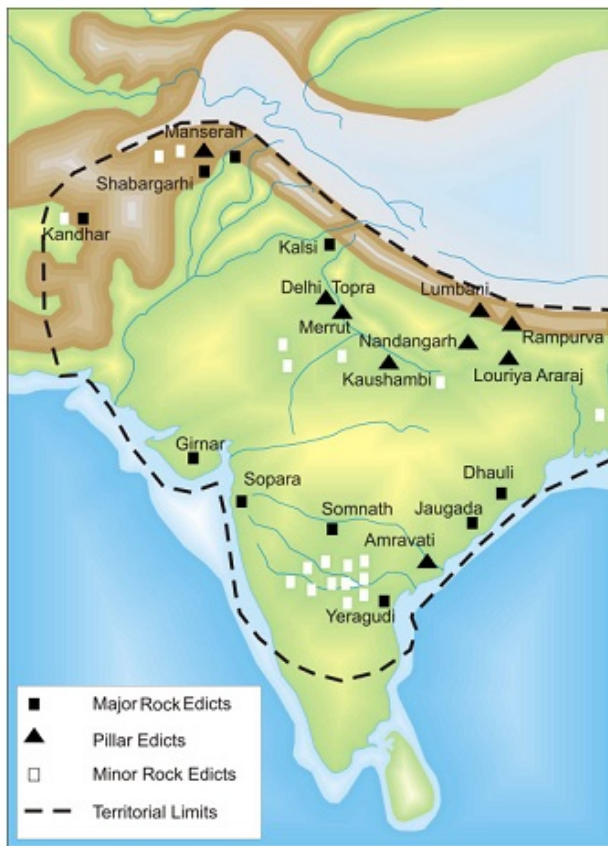


Figure 1.4 Locations of the Various Edicts of Ashoka

Figure 1.4 Locations of the Various Edicts of Ashoka

1.6 THE SANGAM AGE (300 BC-200 AD)

With the Sangam Age, the historical period began in South India. The word 'Sangam' means an assembly of scholars of literacy figures, held under the royal patronage of Pandyan kings of Madurai. Early Tamil literature comprised works such as Tolkappiyam, the Eight Anthologies (Ettutogai) the 'ten Idylls' (pattupattu), the 'Eighteen Minor Works' and the three Epics (Shilappadikaram, Manimekalai and Sivaga Sindamani). The Sangam Age extends roughly between 300 BC to 200 A.D. Sangam literature refers primarily to Pandyan Kingdom. But it also contains valuable information about the Chola and Chera kingdoms. The Pandyas ruled over an area

comprising southern Tamil Nadu. Madurai was their capital. The Cheras ruled over Kerala and the Cholas occupied Northern Tamil Nadu and Southern Andhra Pradesh.

1.7 THE KUSHANA AGE

After the fall of the Mauryan Empire, a number of foreign powers like the Bactrian Greeks, the Shakas, the Parthians and the Kushanas invaded India. They ruled in the western and north-western parts of India. The Kushanas were a branch of the Yue-Chi tribe of Central Asia. The first ruler of the Kushanas was Kujula Kadphises. He was succeeded by Vima Kadphises.

The greatest ruler of the Kushana dynasty was Kanishka, who became king after Vima. Kushana conquered Kashmir and established his supremacy over the Indo-Gangetic plains. He occupied Kashgar, Yarkhand and Khotan in Central Asia. Punjab and Afghanistan were also parts of the empire. Kanishka was a devoted Buddhist. Through his efforts Buddhism spread to China, Central Asia and other countries. He was also a great patron of art and learning. Purushapura (Peshawar) was his capital. Kanishka's successors were Vashishka, Huvishka, Kanishka II and Vasudeva. Vasudeva was the last great ruler of the Kushanas. After his death the mighty Kushana Empire quickly disintegrated. The fall of Kushana Empire marked the beginning of political uncertainty in north India which continued for about a century.

1.8 THE GUPTA AGE (319AD-550 AD)

The rise of Gupta Power in the 4th century AD marked the beginning of a new era in Indian history. Confusion and political disunity were replaced by integrity. Under the leadership and patronage of the powerful Gupta monarchs, considerable progress was made in different aspects of Indian life. There was also a high material prosperity, as mentioned by Fa-hien, the Chinese traveler (4th–5th century AD).

Maharaja Shri Gupta is said to be the founder of the Gupta dynasty. He was succeeded by Ghatotkacha Gupta. But Chandragupta I (319-355 AD), who assumed the title of Maharajadhiraja, was the first important Gupta Monarch. Another important Gupta emperor was Samudragupta. The eulogy, composed by his court poet Harisena, which is available as Allahabad Pillar Inscription, gives a vivid account of Samudragupta's military exploits. Besides being a great conqueror and ruler, he was also a poet of high order, patron of art and learning and a musician. He also performed 'Ashwamedha yajna' – a symbol of imperial authority.

Samudragupta was succeeded by Chandragupta II (380-415 AD) who assumed the title of Vikramaditya after his victory over the Shaka rulers of western India. In order to consolidate his power, Samudragupta made important matrimonial alliances. His daughter Prabhavati was married to the Vakataka ruler Rudrasena

II. The son and successor of Chandragupta II was Kumaragupta I (415-455 AD), whose reign was marked with peace and prosperity. He was succeeded by his son Skandagupta

(455-467 AD), who repulsed the Hun invasion several times. The successors of Skandagupta (Purugupta, Budhagupta, Narasimhagupta) were not so powerful and competent. This gradually led to the decline and fall of the Gupta Empire.

Monarchy was the prevailing system of government during the Gupta Age. The king was assisted by a Council of Ministers and other officials in day to day administration. The Guptas had a powerful army. The provinces were ruled by governors. The Governors had under them a number of officers who administered the districts and towns. Village administration under the village headman (Gramika) enjoyed considerable autonomy. The Guptas also developed an efficient system of judicial and revenue administration.

1.8.1 Post Gupta Age (550AD-750 AD)

The period between the downfall of the Gupta Empire and the rise of Maharaja Harshavardhana of Thaneshwar is considered to be a period of confusion and disintegration. During this time India was broken into several small independent states. Besides the Huna power, there were four other kingdoms in Northern India. These were the later Guptas of Magadha, the Maukharis of Kanauj, the Pushyabhutis of Thaneshwar and the Mitrakas of Vallabhi (Gujarat). Among the important South Indian Dynasties were the Chalukyas of Badami and the Pallavas of Kanchi. Pulakesin II (609-64 AD) and Narasimhavarman I (630-668 AD) are considered to be the greatest of the Chalukya and the Pallava rulers respectively.

It was Harshavardhana who again made an attempt to raise an empire. He was called Sakalottarapathanatha because he had established his hold practically over the whole of North India. During this time, the political unity of India was, to some extent, restored. Harsha patronised Banabhatta, the author of Kadambari and Harshacharita. Hiuen Tsang, the Chinese scholar-traveler, visited India during Harsha's reign. Shashanka, the king of Bengal, was a contemporary of Harsha.

This period of history witnessed the consolidation of Hinduism. Hiuen Tsang writes about the existence of caste system in Indian society. There was the rise of several mixed and sub-castes. Hiuen Tsang also mentions the existence of untouchables and outcastes. The position of women had also declined considerably during this period. In the religious field, the ascendancy of Brahmanism brought about the decline of Buddhism. Vaishnavism, Shaivism and Jainism were also practiced.

1.9 INDIAN CIVILISATION: AN OVERVIEW

Indian civilisation has a very important place in world history. As in Early Greece and Rome, in India also some kind of democratic and republican form of government

existed in ancient times. We also made tremendous progress in philosophy and various branches of science. Indian contribution to the fields of Mathematics,

Astronomy, Chemistry, Metallurgy and Medicine is worth mentioning. Aryabhatta and Varahamihira were famous mathematicians-astronomers. Charaka and Sushruta were great physicians. Nagarjuna was a famous chemist as well as pharmacist. The concept of zero and the decimal system first evolved in India.

The ancient Indians also showed great skill in art, architecture, painting and sculpture. Ashokan Pillars, Caves of Ajanta and Ellora, South Indian Temples, the famous Stupa at Sanchi, Buddha's images of Mathura are only a few examples from the vast ocean of Indian art. Many great centres of learning were developed in Ancient India, like Taxila, Nalanda, Vikramshila, Vallabhi, Kashi and Kanchi which imparted education to both Indian and foreign students. Famous scholars and teachers taught in such centre. Indian learning

and scholarship was highly appreciated abroad by the Arab Muslims.



Figure 1.5 Sanchi Stupa

Figure 1.5 Sanchi Stupa

Many great works of literature were produced in ancient India. Rig Veda is the earliest specimen of Indo-European literature. The four Vedas, Sutras, the two Epics-Ramayana and Mahabharata, Smritis, Puranas, Tripitakas, Jaina Agamas and other religious texts are the products of ancient India. Moreover, there are a number of drama, prose and poetic works. Great literacy figures like Kalidasa, Banabhatta, Harisena, Vishakhadatta, Bhasa, Bhairavi, Shudraka and many others belonged to this period. Sanskrit, Pali and Prakrit literature made great progress in ancient India.

INTEXT QUESTION 1.3

1. What were the main occupations of people in the Later Vedic Period?
2. Which religion did Ashoka embrace after the Kalinga war?
3. Name at least four great centers of learning in Ancient India.
4. Name two great physicians of Ancient India.
5. Fill in the blanks:
 - (a) The Tamil work Tolkappiyam belonged to the ———.
 - (b) ———. was the capital of the Pandyas.
 - (c) Kanishka belonged to the ———. Dynasty.

WHAT YOU HAVE LEARNT

- Human civilisation has evolved through various phases - each phase contributing something unique.
- The Stone Ages was followed by the Metal Ages – Copper, Bronze and Iron.
- Town based civilisations came in the Bronze Age.
- The art of writing was developed during the Bronze Age Civilisations.
- The Indus Valley Civilisation was known for its town planning, crafts and culture.
- The Iron Age brought radical changes in the social and economic life of the people in different countries at different times.
- Significant contributions were made in various fields such as polity, philosophy, art, architecture and sculpture by the Greeks, Romans, Persians and Indians.
- Buddhism and Jainism were the first reformatory movements in 6th century BC India.
- Indian Civilisation in its long course went through a number of significant developments. It did not remain one and the same throughout.
- India has made tremendous contributions in the fields of Mathematics, Astronomy, Chemistry, Metallurgy, Medicines, Art, Architecture, Literature and Learning.

TERMINAL EXERCISES

1. How did the Bronze Age mark a shift from the New Stone Age?
2. What were the important features of the Harappa Civilisation?
3. Discuss how did the discovery of iron bring in radical changes in the lives of the people?
4. Describe the Roman society and economy during 5th century BC
5. Describe the social, religious and economic life of the Early Vedic people.
6. What is 'dhamma' according to Ashoka?
7. Write a short note on India's contribution to World Civilisation.
8. On the given outline map of the world mark the following:
 - (i) Rivers - Tigris, Euphrates, Nile, Hwang Ho, Indus.
 - (ii) Places - Egypt, Greece, Rome, Iran, Nalanda.



FIGURE : PHYSICAL OUTLINE MAP OF THE WORLD

ANSWER TO INTEXT QUESTIONS

1.1

1. (a) classes
- (b) Natural calamities
- (c) Mesopotamia

2. Copper

3. Tigris and Euphrates

4. Hieroglyphics

5. Lothal (Gujarat), Kalibangan (Rajasthan), Banawali (Haryana), Dholavira (Gujarat), Ropar (Punjab)

1.2

1. Agriculture, Transport and Warfare

2. Athens and Sparta

3. Tiber

4. (a) Byzantine Empire

(b) Cyrus

(c) forces of nature

1.3

1. Agriculture and Crafts

2. Buddhism

3. Taxila, Nalanda, Kashi, Vikramshila, Vallabhi

4. Charaka and Sushruta

5. (a) Sangam Age

(b) Madurai

(c) Kushana

2. MEDIEVAL WORLD

We have just finished reading about the different civilisations of the ancient world. Have you wondered what happened to these civilisations when the Ancient Period came to an end? Did civilisations also come to an end? Or were the ancient civilisations succeeded by equally significant ones during the Medieval Period? Let us look for answers to such queries here. In this lesson we shall read about the transformation of European society after the downfall of the Roman Empire. We shall also see how the birth of a new religion called Islam led to the founding of a vast empire that originated in West Asia and spread out over a large part of the world. We shall also take a look at India's medieval past to see what happened after the decline of Harsha's rule.

OBJECTIVES

After studying this lesson, you will be able to:

identify the Medieval Period as an important stage in the evolution of human society; describe the changes in political organization that took place after the collapse of the Roman Empire; explain the political, military and socio-economic aspects of Feudalism as it existed in Western Europe; describe the evolution of Islamic religion, society and polity in West Asia; recognise the features of political organization during the Medieval Period in India describe the main features of Medieval Indian economy; and analyse how cultural and religious life during the Medieval Period in India represented a unique tradition of synthesis.

2.1 EUROPE IN MEDIEVAL TIMES

The Medieval Period is also called the Middle Ages. As the name suggests, it refers to the period which succeeded the Ancient Period and came before the Modern Period. But was it only a 'Middle' age caught in between two great ages with no significance of its own? Not really since the Medieval Period constitutes an important stage in the evolution of human society that needs to be studied for its own interest.

What is more, the achievements and glories of the Medieval Period were also important steps towards the Modern Period.

You may find it interesting to know that the term 'Middle Ages' was coined by Europeans in the 17th century because they saw it as a long and dark period of interruption between the Classical Period of Ancient Greek and Roman Civilisations and their own Modern Age. However, the Medieval Period was not necessarily a dark period or an interruption. For the Islamic world, it was a period when a civilisation flowered and reached the height of its glory. In India, the Medieval Period was an age of synthesis. It saw a fusion of old and new political, economic and social systems. Out of this fusion emerged a unique cultural pattern of co-existence and acceptance that became the hallmark of the Medieval Period of India. Even in Europe, the picture does not appear as gloomy as it is sometimes thought. In the early part of the Medieval Period the level of material and cultural accomplishment was no doubt somewhat low. However, during the later part the Europeans greatly improved their standard of living. They also developed new institutions of learning and new modes of thought and reached very high standards in literature and art. In fact, the new ideas that emerged during this time not only transformed Europe but also had a deep impact on the rest of the world in the times to come. Let us then find out what was happening in the different parts of the world during the medieval ages.

2.1.1 Decline of the Roman Empire

We have read in the previous lesson about the strength and greatness of the Roman Civilisation. We also read how the Roman Empire had come to be divided into Western and Eastern territories. The Western provinces had their capital in Rome while the Eastern provinces had their capital in Constantinople. The Roman Emperor Constantine had set up the new capital of the Eastern territories in the ancient Greek city of Byzantine in 330AD. It came to be known as Constantinople after his name. The Roman Empire continued to exist in the east for almost a thousand years after it had collapsed in the west. It was known as the Eastern Roman or the Byzantine Empire. This Eastern Civilisation of Greek speaking people reached very high standards of economic and cultural life at a time when Western Europe was in a relatively backward condition. The Roman Empire in the west came to an end following attacks by various Germanic tribes like the Goths, Vandals, Visigoths and

Franks. After overthrowing the Roman Emperor in the West in 476 AD, these invaders established separate successor states.

Did all this political upheaval result in a complete change? Did the political and economic systems built by the Romans disappear? Well, the new Germanic rulers did not completely replace the earlier systems with their own. In fact, Roman and Germanic societies came into close contact and merged with each other. As a result of this and the prevailing political and economic conditions, a new type of society was born in Europe, with institutions and systems that were quite different from either Roman or Germanic ones. The most important institution of this new society was Feudalism. It completely transformed the existing social, political and economic organizations. Let us see how this system evolved and what its characteristics were.

2.2 FEUDALISM: POLITICAL, MILITARY AND SOCIOECONOMIC ASPECTS

The successor states of the Germanic peoples in the West managed to restore political stability after the collapse of the Roman Empire. In fact, one of these states managed to create a sizeable empire under the famous king Charlemagne, which began to collapse after about mid-9th century under the impact of fresh waves of invasions. The resulting political chaos led to the emergence of a new kind of political order called Feudalism. It was a hierarchical or graded organization of political sovereignty. This hierarchical structure can be understood easily if we visualize a ladder or a flight of steps. At the top of the ladder stood the King, below him stood the big lords known as the Dukes and Earls. Below these lords were a number of lesser lords known as the Barons. Below these were the Knights, who were perhaps the lowest category of lords. The lords derived their authority from and owned their loyalty to the lord just above them and were known as the vassals of their lord. This pattern of relationship between lords and vassals, that is, between bigger lords and lesser lords was the same from the top of the ladder to the bottom. These lords were all powerful in their respective local areas. Thus political power was widely dispersed unlike in the Roman Empire where it was concentrated mainly in the hands of the king. This was the political aspect of Feudalism.

A unique feature of the new feudal political structure was the personal nature of the bond that linked a lord and his vassal. An elaborate ceremony would be organized to establish this bond. In this ceremony, a vassal would take a vow to serve the lord all his life. Simultaneously, he also accepted the protection of the lord. Protection was important since these were politically unstable times. In return for the protection that a vassal received he was bound to perform various services for his lord. This mainly included military services which meant that the vassal had to provide a certain number of troops whenever required by the lord. In his turn the lord was expected to make a grant usually in the form of land for the

sustenance of the 'fief' or 'fiefdom'

from which the word Feudalism is derived. The lords used to mobilize armed supporters in their own areas who had personal loyalty directly to him. With this armed strength, he would provide military support to the lord whenever required.

With this military power, the lords also became complete masters of their own area and could not be challenged even by the state.

In a period of political turmoil, just as the lords sought protection, so did the peasant. These peasants had no land of their own, no implements and could not afford to buy seeds. For these well as for protection the free peasants now turned to the lords. These dependent peasants of Medieval Europe, tied to the soil and completely subject to the authority of the lord were called serfs. A major portion of the wealth generated during this period was through their exploitation. To understand how this happened, let us see how agriculture was organised during this period.

The entire landed estate over which a feudal lord had control was known as the manor. The land surrounding the manor house was divided into three parts - land for the use of the lord, the arable land granted in parcels to the peasants and the meadowlands used by everyone as grazing land for livestock. The serfs who occupied these parcels or holdings were regarded tenants of the lord of the manor. Being tenants, they had to give something to the lord as rent. This rent was paid by peasants in the form of labour services to the lord. They also worked on the lands of the lords for a certain number of days in the week. The serfs had to put in extra labour during agricultural seasons when plugging, harvesting or threshing was required. Such unpaid labor services also included other heavy tasks such as construction work, hewing and cutting of fire wood. In the later phase of Feudalism, these labor services were gradually substituted by those payable in money.



Figure 2.1 Feudal Manor

The serfs also had to pay some dues or taxes in kind which came from the share of their own produce. These were often introduced arbitrarily whenever the lord wanted more resources. The lords also extracted from the peasants in an indirect

manner. The manor was a self-sufficient economic unit. This means that almost all articles of everyday use were produced and consumed on it. For this there were various facilities like smithies for turning out iron object, flour mills for grinding wheat or corn, ovens for baking bread, wine presses for making wine from grapes and various workshops for making products of everyday use. All of these were owned by the lord. The peasants were forced to use these facilities and the charges for these would of course be fixed by the lord according to his own will.

ACTIVITY 2.1

You have already read about the Roman slaves in the previous lesson. Find out the conditions of present day Indian farmers who don't own lands and work in other people fields through newspaper or by speaking to your elders. Now compare the lives of the feudal serfs with the Roman slaves and the present day Indian farmers.

What conclusions can you draw? Write a brief report about your findings.

2.2.1 Changes in Feudal Economy: Prosperity and Crisis in Medieval Europe

We have just finished reading about the various aspects of the feudal system. But did this system remain the same throughout the Medieval Period? Not at all! Indeed, the feudal system was not a static system. It witnessed several changes and the feudal economy underwent a pattern of prosperity and crisis. Let us trace this pattern from the beginning.

The few centuries after the collapse of the Roman Empire were marked by a low level of economic life. As we already know, this was also a period of political change and turmoil. There was a decline in town life, trade and monetary exchange. Some cities did survive from Roman days but these were only empty shells which had no real economic role. Roads deteriorated. Barter widely replaced the use of money. European economy was based almost entirely on agriculture and very limited local trade. The main economic unit was the self-sufficient landed estate, or the feudal manor that we have read about. Technology used in agriculture was backward and agricultural yields were low. These conditions lasted till about the 10th century AD.

After the 10th century, the feudal system of production underwent significant changes. There was an increase in agricultural fields as the system became more and more stable. Another factor that helped in increasing agricultural productivity at this time was a significant improvement in agricultural techniques. A new plough was introduced which was heavier, had wheels and

was drawn by a team of oxen. This helped in

cultivating the heavy and sticky soil of Northern Europe more effectively. Agriculture was later replaced by the Three Field System in which 1/3rd of the land was left fallow; 1/3rd was used for cultivating autumn crop and 1/3rd for a spring crop. By leaving only a third part of the land fallow, the Three Field System helped greatly in increasing the cropped area. The new plough, Three Field

System and other innovations in agricultural techniques helped in increasing the agricultural yield by several times.

Along with the expansion in agriculture the period from the 10th to the 12th century also witnessed the revival of trade and the growth of town life. Trade ranged from the small trade at local markets where peasants sold their excess grain or eggs and bought long distance trade products like wine or cotton. Improvements in road building helped road transport. Rives and sea routes were also used for trade. The revival in trade made necessary new patterns of payment since barter was inadequate for this purpose. As a result, money economy made a tremendous advance. This led to agricultural prosperity of the surrounding rural areas. The towns soon began to specialize in certain enterprises. One of these was cloth making which became one of the most important industries of these towns. Guilds became important. Both merchant activities and craft production came to be organized around guilds. These medieval towns continued to grow in importance and ultimately became an important factor in the breakdown of feudal relations of the countryside.

The tendency towards growth reached its limits by the end of the 12th century. Significant changes could be noticed in the feudal system by the 13th century which witnessed a reversal of the process of growth. The period of economic growth and prosperity resulted in a rise of population. This meant an increase in the supply of

labour for the landlords. They, therefore, no longer found it necessary to retain their demesnes. Also due to abundant labor, labor-serving technology found few investors. As demesne lands were gone, the need to extract labor services from the peasants also went. The reduction in labor services and technological stagnation in agriculture together with other factors brought down agricultural yield very sharply. Food shortage and famines began to occur. Epidemics of plague broke out. All this resulted in an overall decline in the agricultural economy whereas there was growth of a money economy, urban centers and trade. However, European society was able to overcome this crisis more easily than the pre-10th century crisis and by around 1450 the economy started moving towards recovery.

Do you know

The portion of the entire landed estate of the lord which was managed directly by him was called the DEMESNE.

We now have some idea about the conditions in which people in Medieval Europe lived. We have also been able to trace the pattern of change in these conditions over a period of several centuries. How did these changes in the material conditions affect the society and culture of medieval Europe? Let us see for ourselves.

Given the relatively low level of economic life in the period before the 10th century,

we should not be surprised to know that it was not a prosperous time for learning or the arts. During this period learning remained a privilege of the few. The masses received no formal education. In fact, the language of learning was Latin which was known only to the priestly class. However, even this little bit of education was of a very narrow kind. It consisted mostly of memorization, without any reasoning or questioning. All learning was dominated by blind faith. In such conditions, naturally, there was hardly any development in the sciences. There was some attempt at a revival, but even this did not result in any real intellectual creativity. However, the educated members of the priestly and monastic orders did try to recopy and preserve some major works of Roman literature. This, at least, served as the basis of a revival of learning that began in the 11th and 12th centuries. This period saw very little significant production in the area of literature because of the low level of literacy.

The same is the case with artistic productions in this period. However, a unique style that developed in this field was that of manuscript illustrations. On the whole it may be said that in this period cultural attainment was minimal and sparse. European Civilisation at that time was much backward in comparison with other contemporary neighboring civilisations like the Byzantine and the Islamic world.

The prosperity and relative peace of the period from the 10th century brought about a consequent change in the cultural life of the period. This period witnessed rise in literacy with the spread of primary education and the opening of universities. There was an attempt at the acquisition of classical knowledge as well as knowledge from the Arab Civilisation. Thus, this period saw a progress in knowledge and thought in Europe. It was an important step towards the intellectual flowering that took place during the Modern Period.

INTEXT QUESTIONS 2.1

1. Describe the bond between the feudal lord and his vassal in about 30 words.

2. Who were the serfs?

3. Justify the following statements giving reasons for the same:

(a) The period from the 10th to the 12th century witnessed a revival of trade and growth of town life.

(b) From the 13th century onwards there was a reversal in the trend of growth of feudal economy.

(c) The cultural life before the 10th century was a prosperous time for learning and the arts in Europe.

2.3 ARAB CIVILISATION DURING THE MEDIEVAL PERIOD

Arabia is a peninsula of deserts. Before the founding of Islam, most Arabs were Bedouins, that is, wandering camel herdsman. Their main source of livelihood was pastoralism and the produce of the desert oases such as dates. Craft production was very limited; trade was sluggish and urban development minimal. In the second half of the 6th century, the economy picked up some momentum due to a shift in long distance trade routes. There was an ongoing war between the two dominant neighboring empires of Arabia, namely the Roman and the Persian. Because of these wars, Arabia became a safer transit route than others for caravans going between Africa and Asia. This encouraged the growth of some important towns that took advantage of this trade. The most prominent of these was Mecca which lay on the junction of some major trade routes. Mecca's position also derived from its local religious importance since the Kabah, a pilgrimage shrine was located here. The Kabah at that time served as a centre of worship for diverse Arabian clans and tribes.

This shrine was controlled by the Quraysh tribe which played a powerful role in the economic life of Mecca. A brilliant civilisation arose in Arabia in the Medieval Period which influenced a large section of the world population. It owed its emergence to the birth of Islam, which was a significant development in world history.

Prophet Muhammad who spread Islam was born in Mecca into the Quraysh tribe in 570 AD. He was brought up by his uncle since he was orphaned early in life. He grew up to be a prosperous trader, entering the service of a rich widow Khadija, whom he later married. Polytheism or belief in many Gods was replaced by a strict monotheism or belief in one God which became the basis for this new religion known as Islam and Muhammad was hailed as a 'Prophet'. At first, he was not very successful in gaining many converts amongst the Quraysh, except for a limited few including his wife Khadija. Meanwhile, representatives of another town in the north called Yathrib invited Prophet Muhammad to come and resolve their local rivalries.

In 622 AD, Muhammad with his followers migrated to that town. That year of migration was called Hijrah and the town was renamed as Medina. He continuously began to organize his converts into a political as well as religious community. In an attempt to spread his faith to Mecca, he and his followers conducted raids on

caravans of the Quraysh. He finally succeeded in 630 AD and entered Mecca after defeating the Quraysh. The Quraysh submitted to the new faith and the Kabah henceforth became the main shrine of Islam. After the defeat of Mecca, other tribes throughout Arabia accepted the new faith.

Islam has simple doctrines. The word 'Islam' means absolute submission to God and adherence to faith. The followers of this faith are known as Muslims. Islam teaches that there is only one God. Prophet Muhammad is believed by Muslims to be the last and greatest prophet of God. They also recognize the prophets of the Jews and Christians. Muslims believe in the Day of Judgment when the pious would be granted eternal life in paradise and the wicked would be damned. Quran is the holy book of the Muslims which is a compilation of the revelations that Prophet Muhammad was believed to have received from God. These steps include dedication to a life of morality and compassion, adherence to some set religious observances like prayer and fast at stipulated times, charity, pilgrimage to Mecca and frequent recitation from the Quran. Apart from the Quran, the Sunna or Practices of the Prophet and Hadis or Sayings of the Prophet also set the norms for desirable behavior among Muslims. In Islam, there are no intermediaries between the individual and God. Instead of priests there are only religious scholars who have the authority to comment on the religion and religious laws. Islam also preaches equality of all. Islam has similarities in doctrine and beliefs with Judaism and Christianity.

2.3.1 Society and Culture

Arab Philosophy was based on the study of earlier Greek thought. Greek Philosophy was cultivated by philosophers who believed in rationality. These philosophers apart from their philosophical speculation were also distinguished in studying Natural Sciences. They practiced Astrology and Medicine. Their astrology was based on accurate astronomical observation. In medicine, they not only studied the medical writings of the Greeks carefully but went much beyond that. Ibn Sina, known to the

West as Avicenna, discovered the infectious nature of tuberculosis and described several types of nervous ailments. Al-Razi, known to the West as Rhazes, one of the greatest clinical physicians of the Medieval World discovered the difference between measles and smallpox. Other Arabic physicians also diagnosed cancer of the stomach and prescribed antidotes for cases of poisoning. An interesting feature about the Arab people is that they excelled over all other medieval cultures in the organization of hospitals. There seems to have been at least 34 hospitals located in important cities of Persia, Syria and Egypt organized on remarkably modern lines.

The Arabs also excelled in Optics, Chemistry and Mathematics. Physicists founded the Science of Optics and drew a number of significant conclusions regarding the velocity, transmission and refraction of light. In chemistry, these

people are credited with the discovery of various new substances and compounds like carbonate of soda,

alum, saltpeter, nitric and sulphuric acids among other things. There were also the first to describe the chemical processes of distillation, filtration and sublimation. In mathematics, the greatest accomplishment of Arabs was to bring together the Geometry of the Greeks and the Number System of the Indians. In fact, the use of the Indian Number System spread so widely through the Arabs that the west named them 'Arabic Numerals'. With a synthesis of all this existing knowledge, the Arabs were able to make great progress in Arithmetic, Geometry and Trigonometry. These Indian numerals are even now used all over the world. They have not now come to be known as European numerals.



Figure 2.2 Number System

The Arab Civilisation was also noted for its Literature particularly poetry. The Rubaiyat of Omar Khayyam is an example of poetry that is remembered to this day. Just as in other fields, Arab Art also represented a beautiful synthesis of various styles like the Byzantine and the Persian. Architecture was the most important of the Arab arts. Examples of Arab architecture include mosques, palaces and madrasas. Its principal features were domes, minarets, arches etc.

In short it may be said that at a time when the West was lagging far behind, Arab Civilisation was at its peak intellectually and artistically. The establishment of a vast empire brought the Arabs into contact with diverse cultures such as Arab, Persian, Turkish, Indian and African. With these diverse elements it created a splendid society leaving behind a legacy of discoveries and achievements.

ACTIVITY 2.2

Recollect and make a list of at least 5 monuments you have visited or seen on books or magazines which reflects Arab architecture, in India as well as outside India. What were the distinct features of these monuments? Where were they located? What were your thoughts on viewing them? Suggest ways to conserve them.

2.4 MEDIEVAL INDIAN CIVILISATION

In the previous lesson we have read about the Gupta Empire. After the reign of King Harshavardhana, began a prolonged period of political decentralization between the

8th and 10th centuries during which several kingdoms struggled for supremacy. In Northern India, the three major kingdoms were those of the Palas, the Pratiharas and the Rashtrakutas. Smaller kingdoms or principalities were established by the Rajput Dynasties of the Chauhans, Paramaras, Gahadavalas, etc. In the South, it was the Chola Dynasty that had control over most of the peninsular part of the country. This situation of fragmentation of political authority was greatly favourable for an invader like Mahmud of Ghazni. After several successful conquests in Western and Central Asia, Mahmud turned toward India. His Indian conquests began in 1000 AD, after which he made repeated invasions over Punjab, as far as Kashmir and Eastern Rajasthan and then into the fertile area of the Gangetic Plains. However, Mahmud was not interested in establishing his rule over this country.

2.4.1 Political Events

Mahmud's invasions were followed by the coming of the Turks. The Turks established their rule over most of Northern India by the 13th century. The Turkish rulers were known as Sultans and ruled from their capital at Delhi. Their Empire is thus called the Delhi Sultanate. Its most powerful dynasties were those of the Khaljis and the Tughluqs. Most of these rulers had to face the threat of invasions by the Mongols. Meanwhile in the South, the two powerful kingdoms of Vijayanagar and Bahmani were constantly competing with each other for political supremacy. The coming of the Mughals in early 16th century marked a new era in Indian History.

Politically, it saw the consolidation of an all India Empire on a scale that had not been witnessed in India for a long time. Socially and culturally, this was a period of fusion of various traditions. Out of this fusion was born a unique tradition which could be seen in the social life, religious practices and beliefs, and in the various arts.

It was based on mutual acceptance and a harmonious coexistence.

Parallel to these centralized empires such as the Delhi Sultanate and the Mughal Empire, there flourished several smaller regional and provincial independent ruling dynasties. Some of these were the Ilyas Shahi and Husain Shahi Dynasties of Bengal, the Ahoms of Assam, the Gajapati Dynasty of Odisha, the Dynasties of Mewar and Marwar in Rajasthan and the Sharqi Dynasty of Jaunpur. The reign of these independent regional dynasties witnessed the growth of strong and flourishing regional and sub-regional languages, literature and cultures.

2.4.2 Political Institutions

The coming of the Turks and the Mughals brought in new ideas of sovereignty and governance. In the first place, kingship itself had no clear-cut legitimate place in the Islamic conception of polity which was based on the notion of a community of equals. Initially power was shared between the Sultan and the powerful Turkish chiefs or nobles. But the reign of Balban saw an elevation of the position of the

Sultan, so much so that he assumed absolute power in all matters of state and governance. The

power of the Turkish nobility was considerably downsized. The Mughals established the power and prestige of the king at an unprecedented level.

The Sultans of Delhi and the Mughal Emperors made some innovations in the administrative system. The Mughal Emperor came to be regarded as the Emperor of India. In the Delhi Sultanate, military commanders were assigned territorial units known as iqtas. These territories were transferable. The assignees of these iqtas were not given ownership of the land but only control over the revenues collected from them. This revenue was to be used by the iqtadar, that is, the assignee to meet his own requirements as well as for the maintenance of his troops. He would then be expected to provide military support with these troops whenever called upon by the emperor to do so. However, the pre-existing structure of control over land and the hierarchy in the landed system of the village continued largely undisturbed.

The Mughal system was more penetrative with control over the revenue and landed network going much deeper right to the village level. The Mughals appointed mansabdars who performed military and civil duties. The mansabs were actually ranks of position which was fixed according to the position of the officers in Mughal bureaucracy and the military contingents under their command. These mansabdars were mostly paid through land assignments called jagirs which were frequently transferable. These were similar to iqtas, with the difference that while iqtas combined administrative charge, jagirs did not. The Mughal system was crucially dependent on the smooth functioning of Mansabdari and Jagirdari Systems.

2.4.3 Economy

The Delhi Sultanate as well as the Mughal Empire was based on the surplus of agricultural produce of the peasants that was extracted in the form of revenue. In the Mughal Empire, particularly in the reign of Akbar, far reaching changes were made in the system of revenue collection. Land was measured and land revenue was fixed according to the exact area of land. Fertility of the land was also taken into account.

The cash value of the state's share of the produce was then calculated according to prevailing market prices and the revenue was fixed in cash terms accordingly. The state encouraged payment of revenue in cash. This was a period of commercialization of agriculture and the state encouraged cash crop production. The state also took a lot of interest in the extension of cultivation into zones which were hitherto uncultivated or forest areas. It gave various incentives to pioneer agriculturists. The state also advanced to peasants loans as well as revenue relief in times of crop failure.

Trade and commerce which had declined greatly following the period of the Guptas saw a revival during this time. Urban centers flourished after a

considerable period of decline. Inland trade increased in the 13th and 14th centuries as a result of this new urbanization. A vast network of road connecting these urban centers came up which also facilitated trade. Cities like Delhi, Agra, Lahore, Multan, Dhaka,

Ahmadabad, Surat and Bombay rose in importance. The merchandise from Punjab was sent to markets in West and Central Asia. Political stability and relative peace established by the Mughals made it possible to travel with considerable ease among the cities of the empire. Coastal trade also flourished. There were a large number of trading classes and commercial practices were of high standard and integrity. The seths, bohras and modis were engaged in long-distance trade, while beoparis and baniks dealt in local and retail trade, the sarafs or shroffs were money changers who issued hundis or Bills of Exchange. The hundi was a letter of credit that could be paid at a later date at the designated place. This facilitated the movement of goods from one part of the country to another as it made the transaction of money over long distance remarkably easy.

2.4.4 Cultural and Religious Life

In the sphere of religion and culture, the Medieval Period witnessed a great synthesis of traditions. The Bhakti Movement and Sufism in the religious sphere are examples of this. The Bhakti Movement which stressed on oneness with god through personal devotion came very close to the everyday lives of ordinary people. It stressed on love, purity and devotion rather than rituals and sacrifices. It questioned the caste system and the authority of Brahmans. Bhakti saints, like Ramananda, Kabir,

Ravidas, Mira Bai, Guru Nanak, Tukaram and Chaitanya Mahaprabhu had a deep impact on the minds of the common people and this influence continues even today.

In fact, some of these saints developed large following. For example, Guru Nanak had deep influence over the people of Punjab. His large following led him to found a new religion called Sikhism whose followers are called Sikhs.

Do you know

Kabir ke Dohe:

Dukh mein simran sab kare, Sukh mein kare na koye

Jo sukh mein simran kare, Tau dukh kahe ko hoye

(Translation)

In anguish everyone prays to Him, in joy does none

To One who prays in happiness, how sorrow can come

In a similar manner, the Sufi saints also stressed on devotion and love as the only way to realize the divine. They preached tolerance and compassion. They lived lives of austerity and shared the sorrows and anxieties of the common masses. As a result their influence over the masses, both Hindus and Muslims, was very strong. There was also a lot of interaction between the Sufi and Bhakti saints and exchange of philosophical idea took place. Both traditions in fact acted as a bridge between the two communities.

ACTIVITY 2.3

Try to find out if any Bhakti and Sufi saints lived in your state or your neighborhood.

Try to find more about them. Visit their shrine, if any. What did you see? Write your experience in about 80-100 words.

Collect pictures of at least 3 Bhakti and Sufi saints each. Find out about them and their teachings. Do you find similarities and differences in their teachings? Reflect and write a few lines about each of them. What did you learn? Do you find their teachings relevant? Share your thoughts with family and friends.

Language, literature, art, architecture, music and dance also bore out this trend of synthesis between different traditions. In the area of language and literature, classical languages like Persian and Sanskrit flourished. But, the real remarkable development was in the growth of regional languages.

Under the Mughals, painting was organized in the royal karkhanas and painters were on government payroll. The Mughal School of painting represented a complete assimilation of the Persian and Indian styles. This to some extent was a result of the fact that the artists of this school brought with them elements of the various traditions to which they belonged like Rajputana, Gujarat, Malwa, etc. Some famous painters were Daswant, Basavan, Mukund and Kesav. The supervision of the Persian masters

like Abdul Samad and Sayyid Ali brought in an element of Persian style as well.

Manuscript Illustration was another hallmark of Mughal painting.

Another fascinating aspect of cultural life in Medieval India is visible in its Indo-Islamic architecture. It is characterized by the adaptation of Indian resources, expertise, motifs and designs to Persian styles. New features like the arch and the dome were combined with the use of Hindu motifs like bell, lotus, swastika and kalash/water pot. The Qutub Minar, the Allai Darwaza and various monuments of the Tulghlaq

Period like the Tomb of Ghiyasuddin Tughlaq are fine examples of architecture during the Delhi Sultanate period. The monuments of the Mughal Period reflect a deeper sense of fusion and assimilation of Indo-Islamic styles. For example, the monuments in Fatehpur Sikri, like Panch Mahal, Birbal's Palace and Ibadat Khana, as well as the Tomb of Humayun in Delhi, Akabar's famous Tomb at Sikandra, Itmadudaulah's Tomb in Agra and, of course, the Taj Mahal are outstanding examples of Mughal architecture.

Music was also patronized by most medieval rulers in India. Indian system of vocal and instrumental musical interfaced with Arab, Iranian and Central Asian traditions

of music. New ragas came to be composed. The Bhakti and Sufi traditions also gave an impetus to new devotional styles of music.

The Medieval Period of Indian history, quite distinct in its characteristics of political economic and cultural life, was thus another important outstanding period after the Ancient Period.

INTEXT QUESTIONS 2.2

1. Give reasons why Mecca arose into prominence.
2. Enlist at least 5 fields in which we can see the contribution of Arab Civilisation.
3. Fill in the blanks:
 - (a) In the South, it was the _____- Dynasty that held way over most of the Peninsular India.
 - (b) The Mughal System was based on the smooth functioning of the _____ and _____- Systems.
 - (c) The _____- were money changers who issued hundis or Bills of Exchange.
 - (d) The Bhakti Movement stressed on oneness with God though _____

WHAT YOU HAVE LEARNT

The Medieval Period cannot be called a Dark Period since so many important developments and growth in various spheres of life took place in different parts of the world.

The most important institution of the society of Europe in the Medieval Period was Feudalism.

The feudal system comprised a hierarchical of graded organization of political authority.

An economic aspect Feudalism was characterized by serfdom and the manorial system of production.

The feudal system was not a static one. It underwent patterns of prosperity and crisis.

The period before the 10th century of Europe was marked by low level of cultural achievements. Cultural life improved, learning and intellectual development began to flourish after the 10th century.

Islam was a new faith spread by Prophet Muhammad around the 7th century.

It has simple doctrines.

Islam spread to large parts of the world

Up to about 1500 AD, Islamic culture and society was remarkably cosmopolitan and dynamic. It witnessed great strides in cultural and scientific development.

The coming of the Turks and the Mughals brought new ideas of sovereignty and governance to India. The iqta, jagirdari and mansabdari systems were important administrative innovations.

The Medieval Period in India was a period of economic growth.

The cultural and social life in Medieval India was marked by a unique synthesis of different traditions.

TERMINAL EXERCISES

1. Explain why the Medieval Period is a significant period that needs to be studied to understand the evolution of human society?
2. Describe the changes that took place in the political and economic life in Western Europe after the downfall of the Roman Empire.
3. Examine the main features of Medieval Indian economy.
4. What are the main teachings of Islam? Discuss in about 100 words.
5. 'Arab Civilisation in the Medieval Period left behind a legacy of discoveries and achievements'. Justify this statement.
6. Differentiate between Iqtadars and Mansabs.
7. What were the important teachings of the Bhakti Movement and Sufism? How did it act as a bridge between the Hindus and the Muslims?
8. Illustrate how Medieval Indian culture represented a harmonious synthesis of traditions in the fields of arts, architecture and music.

ANSWER TO INTEXT QUESTIONS

1. The lord and his vassal shared a personal bond which was established through an elaborate ceremony. The vassal would take a vow to serve the lord while the lord protects the vassal in return.
2. Serfs were dependent peasants of Medieval Europe, tied to the soil and completely under the authority of the lord.
3. (a) Yes. Due to the increase in agricultural yield, people could now sell the excess produce and buy products of long distance trade.
(b) Yes. The reduction in labor services and technological stagnation led to lesser agricultural produce.

(c) No. Education was a privilege of the few with the masses given no education, and learning was dominated by blind faith.

2.2

1. Mecca rose into prominence because it lay on the junction of some major trade routes and it was a place of an important religious shrine, first with the diverse Arabian clans and tribes, and later with the spread of Islam.

2. Astrology, Medicine, Natural Sciences, Literature, Mathematics, Architecture.

3. (a) Chola

(b) Mansabdari, Jagirdari

(c) sarafs or shroffs

(d) personal devotion

3. Modern World-1

From the 14th century onwards, Europe witnessed many profound changes in its cultural and intellectual life that helped to usher in the modern period. This was the Renaissance, the awakening, that encouraged thinking and reasoning in social and political fields and affected every aspect of life. A period of rationality and scientific enquiry had already begun in the Arab world, but the changes that took place during renaissance in Europe affected the whole world. These changes began with the disintegration of the feudal system, about which you have read, in detail, in the previous lesson. In this lesson, we will discuss some of these changes and developments which transformed medieval society into the modern world. We will also trace the events that took place in the modern world till the 20th century.

OBJECTIVES

After reading this lesson, you will be able to:

- Discuss the impact of decline of the feudalism;
- explain the meaning and features of Renaissance;
- explain the causes of Reformation and its impact;
- describe the development of science;
- mention the main scientific discoveries of the age and some of the main voyages of discoveries;
- explain significance of the Industrial Revolution for Europe and the rest of the world;
- explain the causes and effects of the American Revolution and the French Revolution;
- discuss the struggle for National Unification in Germany and Italy; and
- examine the growth of socialist ideas and Russian Revolution.

3.1 IMPACT OF DECLINE OF FEUDALISM

During the Medieval Age, one of the most important institutions was Feudalism. You have read about it in detail in the previous lesson. Feudalism as an institution flourished in Europe for many centuries. But with the rise of the middle class, it started to decline. Rise of powerful kingdoms as well as warfare between the feudal lords further led to its decline. Emergence of new towns and cities and a revival of trade also led to the disintegration of the feudal system. These towns were centers of production and were governed by elected representatives. The atmosphere of the towns was free from feudal restriction and control as people were free to go anywhere and to take up any profession. Towns attracted artisans and peasants from rural areas because they provided better prospects of living and acting as a refuge from feudal exploitation. These towns and cities encouraged the production of many crops such as cotton and sugarcane. Peasants were paid in cash for their product. The manufactured goods were sold in the markets where money was the medium of exchange. The lords began to accept money from their vassals instead of services as they also needed money to buy various luxurious commodities. This led to the rise of a powerful merchant class. They now began to aspire for a higher status in the social hierarchy. They began to support the powerful monarchs to undermine the position of the feudal lords which weakened the feudal structure and led to the decline of the feudal order.

The infusion of new ideas created a new awakening. This gave birth to a new movement called the Renaissance about which we are going to read now.

3.2 RENAISSANCE

The modern period ushered the end of the Age of Faith and the beginning of the Age of Reason. It witnessed movements like the Renaissance and the Reformation. These movements brought many changes in cultural, intellectual, religious, social and political life of the people all over the world. This period is also characterised by urbanisation, faster means of transport and communication, democratic systems and uniform laws based on equality.

The literal meaning of Renaissance is 'rebirth'. It started in Italy around 14th Century AD. Italy was divided into small city states at that time. Many of them were built on the ruins of ancient Roman buildings. The geographical position of Italian cities made them great trading and intellectual centers. Moreover, the position of Italian cities such as Venice made them centers of trade and intellectual crossroads. Many great ideas, along with wealth, were brought by merchants from far corners of the globe. The new form of political and social organization gave political freedom and a suitable atmosphere for academic, artistic and cultural advancement. People had more leisure time for study and other activities.

This was also a period of great economic expansion. Many commercial and financial techniques were developed for trade practices like book keeping, bills of exchange and public debt. This enabled Italy to become the centre of Renaissance. The major developments of this time were the revival of urban life, commerce based on private capital, banking, formation of nation states, explorations to find new routes and territories and the development of vernacular literature which was popularized by the printing press. This new mercantile society was less hierarchical and more concerned with secular objectives. It was in sharp contrast to the earlier rural, tradition bound society. The adventures and explorers played a significant role in opening a world economic system. Many new commodities were brought from America, Asia and Africa after the discovery of trade routes. These goods enriched the life of Europeans and inspired them to develop new ways of producing them in large numbers to make profit. The result was that merchants, entrepreneurs and bankers joined hands and 'Capital' came to enjoy an important position in the political life as well as in relations with other countries.

The new ideas that were generated in this period like humanism, rationalism and the spirit of inquiry brought a profound change in the thinking pattern of the people. There was a renewed interest in the cultural achievements of the Classical Greek and Roman Civilisations. Human beings became the central concern of the new scholars. They believed in the creative potential of the human beings and their right to seek joy and pleasures in this world itself. This was contrary to the belief of the Medieval Church which opposed worldly pleasures. This respect for human beings encouraged interest in art, history, language, literature, ethics, etc. Do you know that it was at this time that the disciplines grouped under 'humanities' were born?

The spirit of Humanism also found expression in the field of art and literature. The greatest achievements of Renaissance artists were in the field of paintings. Painters studied the anatomy and proportions of the human body. They wanted the human beings to be painted in realistic form and proportion. Some of the outstanding artists were Leonardo da Vinci, Michelangelo, Raphael, Botticelli and Titian. Even in the field of sculpture, artists began to make free standing statues. These sculptures now stood apart from the building or background and were separate works of art. The first great Renaissance sculptor was Donatello who made the statue

'David'.

The Renaissance spirit also marks the rise of Nationalism in Europe. People now began to free themselves of medieval religious restrictions and



Figure 3.1 Leonardo da Vinci's Monalis

bonds. National identities grew stronger and this was reflected in the development of modern European languages such as Italian, Spanish, French, German, English etc. as the languages of literature. Now the writers used local languages in poetry, drama, prose, etc., instead of Latin. The works of Renaissance authors became accessible to a large number of people due to the use of vernacular languages and the introduction of printing press. The Bible was printed and read by a large number of people. Several works that were produced in Modern European languages were Dante's Divine Comedy, Erasmus, In Praise of Folly; Machiavelli's The Prince and Cervantes' Don Quixote.

Two major developments took place in the history of Europe towards the later part of the Renaissance. The first was the Protestant Reformation which resulted in the split in Christianity. The second development concerned reforms within the Roman Catholic Church, generally referred to as Catholic Reformation or Counter Reformation. Reformation was a part of the socio-religious and political movement which led to the emergence of the modern world.

ACTIVITY 3.1

Rationalism, Humanism, Inquiry, Observation, Experimentation and Reasoning were some of ideas that come up during the Renaissance period. Find their meanings and relate their relevance in our lives today.

3.3 REFORMATION

The Medieval Catholic Church came to be associated with superstitions, corruption and greed for money. Superstitious peasants were convinced by the Church that it possessed the true Cross. People were used to paying fees for seeing a piece of wood as the true Cross because it was believed that sacred relics had healing power. The Church laid more emphasis on blind faith than reason as it was the means to extract money from the devotees. All this changed with the coming of the Renaissance. In the new spirit of the Renaissance nothing could be accepted. Do you know that it was in 1517 AD that a German priest called Martin Luther first challenged the authority of the Roman Catholic Church? According to him, the Bible was the only source of religious authority. He believed that salvation could be attained through faith in Jesus Christ instead of having blind faith on the Church. He protested against some practices of the Church such as the selling of positions in the church, the issuing of the letters of indulgence for works of charity or going on crusades, to the highest bidder. Luther had the protection of the German Princes, primarily because of his desire to seize church property. But on 3 January 1521, he was excommunicated by Pope Leo X after he refused to stop writing against the Church.

Luther's views started the Protestant Reformation in the West and it divided the Christian world into two, the Protestants and the Roman Catholics. According to him, Christians must win salvation by following Christ and not by buying letter of indulgence. Though the Reform Movement in England was influenced by Lutheran ideas, the English Reformation occurred as a direct result of King Henry VIII's efforts to divorce his first wife, Catherine of Aragon. Thomas Cromwell, the King's Chief Minister, helped the Parliament to pass the Act in Restraint of Appeals and the Act of Supremacy. It gave a royal headship to the King over the church. The king was allowed to marry Anne Boleyn, commoner.



Figure 3.2 Martin Luther

Figure 3.2 Martin Luther

The Reformation proved to be a great upheaval for religious revival. A Reform Movement also took place within the Catholic Church. This is known as the 'Counter Reformation'. It aimed to reduce corruption as well as to improve and strengthen Catholic Church. It began in Spain where Ignatious Loyal founded the 'Society of Jesus' which stressed upon service of God, charity, chastity and missionary work. The movement started by Martin Luther spread to other countries of Europe through the efforts of King Henry VIII of England, Huldreich Zwingli and John Calvin.

INTEXT QUESTIONS 3.1

1. Fill in the blanks:

- (a) ———-. expressed its belief in the creative potential of human beings.
- (b) Ignatius Loyal founded the ———-.

2. Define feudalism. Give at least two features of feudalism.

3. What were the main ideas of Renaissance?

4. Enlist at least two teachings of Martin Luther which influenced reforms in the Church.

3.4 DEVELOPMENT OF SCIENCE

During the Renaissance, extraordinary accomplishments were made in the field of science. We have already read that the Renaissance thinkers emphasized more on

reason than on blind faith and stressed that knowledge could be gained by observation and experimentation. They rejected blind faith in tradition and established beliefs. This resulted in a scientific inquiry that had almost disappeared. Renaissance also brought about a scientific revolution. Artists like Leonardo da Vinci made observational drawings of anatomy and nature which were a unique blend of science and art. The period also saw remarkable achievements in medicine and human anatomy. Michael Servetus, a Spanish doctor, discovered the circulation of blood. William Harvey, an Englishman explained the function of the heart in purifying blood and its circulation through veins. The beginnings that were made by the Renaissance scientists paved the way for observation and experimentation in other fields of knowledge.

One of the most remarkable achievements of the Renaissance in science was in the field of astronomy. Have you heard of Copernicus, Kepler and Galileo? They were great astronomers who formulated and tried to prove that the Earth revolves around the Sun. Before the Renaissance, it was believed that the Sun revolved around the Earth and whoever questioned this was denounced as a heretic. Copernicus in his book *On the Revolution of the Heavenly Sphere* argued that the earth and the planets move around the sun in concentric circles. Even though the theory was imperfect, it aroused thinking and reasoning. Kepler further developed this theory and said that the other planets move in elliptical paths around the sun. He also argued that magnetic attractions between the Sun and the planets kept the heavenly bodies in an orbital motion. Further on this assumption, Isaac Newton developed his Law of Universal Gravitation. With his self manufactured telescope, Galileo discovered the moons of Jupiter, the rings of Saturn and spots in the Sun. He also confirmed the findings of Copernicus. Renaissance also developed a curiosity in the minds of Europeans about other lands and other peoples. Let us find out how this happened.

3.5 DISCOVERY OF NEW LANDS

The spirit of inquiry encouraged many adventurers to discover new lands. The new trade routes that were discovered changed the history of the world. It is said that 'God, Glory and Gold' was the main motive behind these discoveries. But the motive of gold or economic need was the most important. Before the geographical discoveries, Europeans obtained articles like spices, cotton, precious gems, silk, etc. from the Eastern part of the world. They travelled through the Arabic and Islamic territories for the supply of these articles. This was not very convenient and also posed uncertainties. So a direct sea route to South East Asia was discovered as it had a potential of a lucrative trade. The explorers also had another motive, which was to convert the people of the newly found areas to Christianity. It also became a means for them to serve God. In addition, the adventurers also hoped to acquire fame by discovering new lands. Some did indeed become very famous. Have you heard about

Vasco da Gama discovering India and Columbus who set out for India but discovered America? Do you know Ferdinand Magellan was the first explorer to lead an expedition around the world? Bartholomew Diaz was another famous explorer.



Figure 3.3 *Vasco da Gama*

Figure 3.3 Vasco da Gama

Why do you think that these great adventures and voyages were sponsored by kings and wealthy people? The tremendous increase in trade and colonization had a great impact on the enhancement of European wealth. One of the most famous kings who sponsored the voyages was the Portuguese King Henry, who is also known as Henry the Navigator. The technological base for these discoveries came from the invention of the compass, astrolabe, astronomical tables and the art of map making. These voyages led to the establishment of trading outpost and colonial empires in different parts Africa, America and Asia. Now commercial focus shifted from Mediterranean Sea to the Atlantic Ocean. Many new commodities were added to trade such as tobacco, molasses, ostrich feathers, potato, etc. It also started the inhuman slave trade in America. Slaves were captured from Africa, transported across the Atlantic Ocean and sold to work in plantations in North America.

These trade practices and new sea routes helped the European merchants to accumulate huge wealth which they invested in the development of new machines. This led to the coming of the Industrial Revolution which made them more powerful and wealthy.

ACTIVITY 3.2

On a world map trace the sea routes taken by Vasco da Gama, Ferdinand Magellan and Christopher Columbus to reach new destinations.

3.6 INDUSTRIAL REVOLUTION

The Industrial Revolution began in England from about 1750 AD. This was possible because English merchants had accumulated huge wealth through overseas trade and her colonies secured the supply of raw materials. The

colonies also acted as potential markets for finished goods. Moreover, England had huge amount of essential resources such as coal and iron which were necessary for running the industries. Thus, the capitalists invested in the development of new machines to speed up the

production with the aim of earning more profits. Now machines began to take over some of the work of humans and animals for production. Though there was new development and the coming in of new machineries to improve production, the society became unequal. It created a division in society with the coming of two groups of people – the capitalist or the bourgeoisie and the worker or the proletariat – as they were later called. You will read more about the Industrial Revolution in the next lesson.

INTEXT QUESTIONS 3.2

1. Choose the correct answer:

(a) Who discovered the sea route to India?

(i) Bartholomew Diaz (ii) Vasco da Gama

(iii) Columbus (iv) None of these

(b) Which of the following was not a result of the voyages of discovery?

(i) Setting up of colonies in Asia and Africa

(ii) Expansion of European commerce

(iii) Rise in the prosperity of the colonies

(iv) Beginning of slave trade

2. Name at least two contributions of the Renaissance in the field of Science.

3. Enlist at least three discoveries which helped the Europeans to find new sea routes.

4. Identify the significant change in the society due to the Industrial Revolution.

3.7 AGE OF REVOLUTIONS

The European Revolution of 1848 brought a series of political upheavals with their opposition to the traditional authority. There was a very strong dissatisfaction with political leadership and people started demanding more participation in the affairs of the states. Political awareness, ideas like liberty, equality and fraternity were popularised by the printing press. The revolutions which were most important occurred in America, France, Germany, Italy and Russia. Britain had already faced a major change with the Glorious Revolution. The United States of America was born after the American War of Independence and Russia experienced a workers' movement which led to the establishment of a socialist government. These upheavals were accompanied by a feeling of nationalism amongst the population of many states which had been encouraged by enlightened ideas. Now we are going to read about these revolutions.

3.7.1 The Glorious Revolution

The Glorious Revolution of 1688 occurred in England much before the Age of Revolutions and proved a source of inspiration for the world. It was called the Glorious Revolution because no blood was shed to achieve its success. The Stuart king James II lost the popular support of his countrymen. This was due to his harsh attitude towards the people. The creation of an expensive standing army and increasing employment of Roman Catholics in the government, army and universities had angered the people. The Parliament removed King James II from the throne in favor of his daughter Mary II and her husband William III, Prince of Orange. The autocratic rule of James II was replaced with a constitutional form of government. It showed that the Parliament had the power to change the monarch.

3.7.2 American War of Independence

It will be interesting for you to know that some of the political rights that we enjoy today are the direct outcome of two very important revolutions that occurred in the later part of the 18th century. They played a crucial role in the shaping of the modern world. These were the American Revolution and the French Revolution. Through these revolutions, people asserted their rights and ended exploitation.

Around the 16th century, many Europeans had settled in America because of religious persecution in England. Some of them were also attracted by economic opportunities. They had formed 13 colonies which had local assemblies to settle their problems. These colonies were suffering due to the British economic policy of mercantilism through which they tried to regulate colonial commerce in the British interest. The colonies were not permitted to set up industries as it would result in competition with the British industries like iron and textile. They had to export sugar, tobacco and cotton only to England, at prices determined by the mother country England. This provoked opposition from the British American colonies.

By the 18th century, the wars with France and in India were proving very expensive for Britain. She needed money to fight these wars, and this was done by collecting taxes from the American colonies. In 1765, the British Parliament passed the Stamp Act on all business transactions like official documents, deeds, mortgages, newspapers and pamphlets. The revenue was used to pay the cost of maintaining 10,000 British troops in America. The Act was opposed by the colonists. Riots broke out in colonial port cities. The colonial assemblies passed resolutions against the Stamp Act. The British Parliament had to repeal the Stamp Act in 1766. However, the Parliament continued the tax on tea. On 16th December, 1773 some Americans disguised as Native Indians descended upon the three ships of the East India Company and dumped the tea into the sea. This incident is known as the Boston Tea Party. The Parliament closed the Port of Boston but the trigger was set for the American War of Independence.

The representatives of the 13 colonies called the meeting of the first Continental Congress at Philadelphia in 1774 and appealed to the King of England not to impose taxes without their consent. The King regarded this as an act of rebellion and declared war. This led to fights and finally to the 'Declaration of Independence' on 4 July, 1776 at a Congress at Philadelphia which proclaimed their independence from Great Britain and the formation of a cooperative union. It inspired the whole world with its emphasis on equality, right to life, liberty and pursuit of happiness. The Bill of Rights granted many freedoms such as freedom of speech, press, religion and justice under law. The American Revolution was a struggle by which the thirteen American colonies won independence from Britain and gave birth to the nation that is now called the United States of America (USA).

ACTIVITY 3.3

Imagine you are a newspaper reporter who was a witness to the Boston Tea Party. You interviewed the English East India Company officials, the Americans who participated and passersby who had seen the act. Write a newspaper article on it bringing out their versions of the story. Also, give your opinion of what must have taken place.

3.7.3 French Revolution

In the 18th century, French society was still feudal in character with the monarch exercising complete authority. It was divided into three classes or estates. The First Estate of Clergy or Church and the Second Estate of Nobility enjoyed all the luxuries and many privileges over religion and the governance of the country. The Third Estate of the Commoners such as peasantry, city workers and the middle class were heavily burdened with taxes.

The internal condition of France made it an ideal stage for a revolution to take place. Louis XVI and his wife Marie Antoinette's luxurious lifestyles had emptied the treasury and made the country bankrupt. Louis XVI was forced to call a meeting of representatives of the three estates- the clergy, the nobility and the commoners in 1789. He wanted to gain approval for new tax law. The third estate demanded equality in taxation and abolition of special privileges enjoyed by the first two estates. It declared itself a National Assembly and took over the sovereign power from the Emperor. The historic French document, 'Declaration of the Rights of Man and Citizen' was adopted. It was later embodied as the preamble in the French Constitution of 1791. This was influenced by the U.S. Declaration of Independence, asserting the equality of all men, the sovereignty of the people and the rights to liberty, property, security, right to education, to free speech, to be informed, right of the poor to public assistance, a ban on torture and slavery, recognition of the right of the people

to choose their government and the eligibility of all citizens for employment in public offices.

The French Revolutionary Wars and the Napoleonic Wars starting from 1789 and lasting for about 15 years resulted in the formation of the French Republic. The French Revolution tore down the medieval structures of Europe and brought in new ideas of liberalism and nationalism. France witnessed a complete change in the government, administration, military, society and culture. France became a republic under Napoleon Bonaparte. The guiding principles of the French Revolution were Liberty, Fraternity and Equality. The revolutionaries were inspired by the ideas of many Enlightenment thinkers and philosophers such as Voltaire, Montesquieu and Rousseau.

The American War of Independence and the French Revolution popularized the feeling of nationalism all over the world. The idea of nationalism from America, France and Britain influenced the Italians. The result was a revolution for a unified kingdom of Italy in 1861.

ACTIVITY 3.4

Given below are the flags of France and America. What role do you think these flags played in the French Revolution and the American War of Independence? Find out what the different colors signify. Do you think the Indian flag played a similar role in the Freedom Struggle?

Count the number of stars in the American map. What do you think it represents?

Count the number of stars in the present day flag of America.



Figure 3.4 Flag of France during the French Revolution



Figure 3.5 Flag of the American War of Independence

3.7.4 Unification of Italy

In the 18th century, Italy was a collection of states, each having its own monarch and traditions. Some of them were Venetia, two Sicilies, Papal States, Sardinia, Tuscany, etc. During the Middle Ages, the Pope increased their influence in both religious and political matters. The Pope established their own political rule in what were called the Papal States. Soon Italy began to grow in importance. They became centers of political life, banking and foreign trade. During the Renaissance, Italy became even more important than the other states, about which you have read earlier. For many years, France and the Holy Roman Empire fought for the control of Italy. The French Revolution of 1789 played an important role in the history of Italy. The Italian rulers sensing danger in their own country drew closer to the European kings who opposed France. After France became a republic, secret clubs favoring an Italian Republic was formed throughout Italy. From 1796 till 1814, when Napoleon Bonaparte was defeated by the European powers many Italians had started seeing the possibility of a united Italy free from foreign control.

Many revolutionaries like Mazzini and Garibaldi along with some secret societies kept spreading the idea of an independent unified republic among the Italians. From 1849 onwards, the Kingdom of Piedmont-Sardinia which was a monarchy under Victor Emmanuel took an active role in this unification. It was significant that the Italian unification was headed by a monarch. Under his leadership, Cavour the Prime Minister ousted the Austrians from Lombardy, Tuscany, Modena, etc. Garibaldi led the revolt and liberated Sicily and Naples. He handed over the charge of the two states to Emmanuel and declared him the King of Italy. Later, Rome and Venetia joined the federation of Italian states. The process of unification of Italy began with the Congress of Vienna in 1815 and ended with the Franco-Prussian War in 1871.

3.7.5 Unification of Germany

After Napoleon's defeat in 1815, many Germans wanted an independent Germany. Germany was a confederation of 39 small states, led by Austria and Prussia. These states were always at war with one another, deterring the economic progress of Germany. The King of Prussia, Kaiser William I, chose a Prime Minister Bismarck to unify Germany under the rule of Prussia, and excluding Austria and France completely. Bismarck was fearless and believed in the urgent need for unification in Germany. He started with the modernisation of the army, defying the parliament in collecting taxes. His policy came to be known as 'Blood and Iron' policy and earned him the nickname of the 'Iron Chancellor'.



Figure 3.6 *Otto Von Bismarck*

Figure 3.6 otto Von Bismarck

With this improved army, Bismarck encouraged the German population of Schleswig and Holstein to revolt against their ruler Denmark. In 1864, Bismarck joined hands with Austria against Denmark. Bismarck's next target was Austria. Prussia defeated Austria and formed the North German Confederation. Bismarck promised the province of Venice to Italy and kept her out of the war. Austria was forced to give Venice to Italy, ending the Austrian control in Italy. He also promised territorial compensation to Napoleon III of France and kept it out of the war. He had already secured Russia's support by helping them in suppressing a revolt in Russian controlled Poland.

The only obstacles to Prussian dominance of Germany were four small German states in Southern Germany and the disapproval of Napoleon III of France. But a disagreement between the two countries led France to declare a war on Prussia. The Franco-Prussian War was quite short. Prussia invaded France in 1871 and defeated the French. Napoleon III abdicated the throne and France was forced to give up Alsace and Lorraine. The remainder of the German states, except Austria, were annexed and joined with Germany. The unification of Germany was complete under Kaiser William I. Soon Germany emerged as the leading power in Europe, building a colonial empire to further German economic interest and increase German influence in the world.

3.7.6 Socialist Movement and the Russian Revolution

The Industrial Revolution had led to an unequal society. On the one hand were the workers who were poor, exploited and without any rights; and on the other were the capitalists who enjoyed all the privileges. At that time, some people began to think about the society that should be based on equality in social and economic terms. Ideas like equality, freedom of speech and democracy gave encouragement in this regard. The idea of socialism, which tries to establish equal society, began to take root. The most powerful and influential ideas of socialism was given by Karl Marx and Friedrich Engels. In the book *Das Capital*, Marx pointed out that history of all societies is the history of class struggle. According to him the capitalists always try to increase their profits by reducing the wages of the workers which leads to class conflict. He predicted that the struggle will be successful with the end of capitalism and the coming of socialism. This will result in the control of the ownership of the means of production in the hands of the state and the birth of an equal society.

The first practical example of this was the Russian revolution which resulted in the establishment of the first socialist government of the world. Russia was industrially backward and was based on an agrarian economy. Tsar was an autocratic and oppressive ruler; hence the workers and the peasants suffered a lot. The Revolution of 1905 led to the formation of a constitutional monarchy with the formation of the Duma; the members of whom were representatives of peasants, townsmen and

gentry. Even after the 1905 Revolution, the civil rights and democratic representation was limited and hence the unrest continued.

In 1917, occurred another revolution in Russia. It happened because the condition of the Russian workers and peasants, and non Russians living in Russia had become quite miserable under the autocratic rule of Tsar Nicholas II. Exploitation along with inhuman working conditions and huge amount of taxes had made the people rise against him. People were also denied any political rights. Russia had also entered World War I for imperialist gains. But she was unequipped to do so. Thousands of Russian soldiers were killed in World War I as they were ill equipped with no proper warm uniforms and arms to fight in the cold desert of Siberia. Many skilled workers were forced to enlist in the army and fight in the battlefields resulting in their deaths. The nobility were also dissatisfied with Tsar Nicholas II due to his autocratic ways. Famines further worsened the situation in the country. This resulted in labor riots and strikes. Striking crowds attacked courts, prisons and office premises. There was widespread unrest among all sections of society. The army lacked ammunition, the cities lacked food while the peasants failed to get proper return for their produce. The government in the meantime had printed millions of Rouble notes leading to inflation. The situation slipped out of Tsar's hands.



Figure 3.7 *Demonstrations by the People on 18 June 1917 at Petrograd. The banner says, "Down with the 10 Capitalist Ministers; All Power to the Soviets of Workers', Soldiers', and Peasants' Deputies; and to the Socialist Ministers, we demand that Nicholas II be transferred to the Peter-Paul Fortress."*

Figure 3.7 Demonstrations by the People on 18 June 1917 at Petrograd. The banner says, "Down with the 10 Capitalist Ministers; All Power to the Soviets of Workers', Soldiers', and Peasants' Deputies; and to the Socialist Ministers, we demand that Nicholas II be transferred to the Peter-Paul Fortress"

This situation was further worsened by the writings of Marx and Tolstoy which influenced the people, especially the workers, and led to their political awakening. This led to the formation of the Council of Workers called the Soviets. In February

1917, Tsar was deposed and a Provisional Government was established under the

control of the Menshevik Party. But the Government failed to fulfill the demands of the people. Another Party called the Bolshevik headed by Lenin organised the Soviets and replaced the Government in October 1917. This October Revolution was the final stage of the Russian Revolution. It brought to an end the rule of the Tsar and led to the formation of the USSR and a new world order.

In the next lesson you will read more about Industrialisation, Imperialism and the World Wars. You will be able to understand how the Industrial Revolution changed the face of the world and brought about tremendous changes in the life of the people. You will also read the impact it had on the non-industrialised countries of the world and how it led to conflicts which are till today considered to be some of the most horrible wars faced by the world.

INTEXT QUESTIONS 3.3

1. Choose the correct answer:

(a) In how many colonies was America divided?

(i) 13 (ii) 14 (iii) 15 (iv) 16

(b) The Third Estate in France comprised of the:

(i) Nobility (ii) Clergy (iii) Commoners (iv) Monarchy

(c) German Unification was successfully carried out under the leadership of:

(i) Cavour (ii) Mazzini (iii) Bismarck (iv) Garibaldi

2. 'The Glorious Revolution of 1688 was a source of inspiration for the world'.

Justify this statement within 30 words.

3. Enlist at least two similarities between the American War of Independence and the French Revolution.

4. The Russian Revolution was inspired by the ideology of socialism. Explain briefly.

WHAT YOU HAVE LEARNT

- The feudal order of Medieval Europe broke down as a result of several factors such as the emergence of towns and cities, the revival of trade, the growth of commercial agriculture and the aspirations of the rising merchant class.
- The Renaissance or Rebirth that took place in Europe around the middle of the 14th century began with a renewed interest in the cultural achievements of Classical Greece and Roman Civilisations. It resulted in a profound change in the thought pattern of the people.

- The idea of humanism stressed on the creative potential of human beings and the human being became the subject of study of the humanists.
- The Reformation was an attempt to question the abuses that had crept into the practices of the Church. It was started in Germany by Martin Luther. It soon led to the division of the Christian World into the Catholics and the Protestants.
- One of the important achievements of the Renaissance was the development of rationality and scientific attitude and the growth of modern science. Copernicus, Kepler, Galileo and Newton are remembered for their contributions in this area.
- The Renaissance spirit of inquiry led to the voyages of exploration and the discovery of new lands. These voyages had far reaching consequences for a large part of the world.
- The Industrial Revolution began in England from around 1750 A.D. The coming of the Industrial Revolution increased the rate of industrial production several times over. It created a class of industrial workers/proletariat who were miserably exploited by the capitalists/bourgeoisie.
- The American Revolution that took place in 1776 inspired the whole world with its ideas of equality and freedom and the rights of people.
- The French Revolution was inspired by the ideas of philosophers such as Montesquieu, Voltaire and Rousseau. It had a deep influence on the modern world with its ideas of freedom, equality and fraternity.
- The rise of the feeling of nationalism led to the movements for unification of countries like Germany and Italy.
- The problems and concerns of the new industrial working class led to the rise of the ideas of socialism. The Russian Revolution was an outcome of the growth of such consciousness and it led to the establishment of the first socialist government in the world.

TERMINAL EXERCISES

1. How did the rise of towns and emergence of trade led to the decline of feudalism?
2. Why do you think Renaissance marks a break from earlier patterns of thought and existence? Write in about 100 words.
3. How did the Reformation impact Europe and the rest of the world?
4. How did the discovery of new lands change the economy and society in the modern world?
5. Enlist the main ideas given in the Declaration of American Independence.

6. Which ideas of the French Revolution had an impact on the world order?
7. Discuss the strategies used by the German and Italian leaders for their unification.
8. Describe the conditions of the industrial workers which influenced the Russian Revolution.

ANSWERS TO INTEXT QUESTIONS

3.1

1. (a) Renaissance scholars
(b) Society of Jesus
2. Feudalism is defined as a system in which people were given land and protection by lords in return for their labor. Its two features were:
(a) The workers worked and fought for their lords.
(b) The king was the most powerful feudal chief.
3. The spirit of humanism, rationalism and inquiry.
4. (a) Martin Luther advocated for salvation through faith on Jesus Christ and not through the blind faith on the church.
(b) The Bible was the only source of religious authority.

3.2

1. (a) (ii)
(b) (iii)
2. (a) The emphasis on reason than on blind faith.
(b) Scientific inquiry based on observation and experimentation.
3. Compass, astrolabe and the art of map making.
4. The society became unequal and was divided into two groups of people – the capitalist or the bourgeoisie and the worker or the proletariat.

3.3

1. (a) (i)
(b) (iii)
(c) (iii)

2. The Glorious Revolution proved to be a source of inspiration for the world because the Parliament was able to replace the autocratic rule of James II with a constitutional form of government without shedding any blood.

3. (a) Both the Revolutions helped assert the rights of the people and spoke against exploitation.

(b) Both popularised the feeling of nationalism all over the world.

4. The French and Renaissance ideas like equality, freedom of speech and democracy, along with the writings of Marx helped in strengthening the idea of socialism. It advocated the control of the ownership of the means of production in the hands of the state which would give birth to an equal society. This influenced people and led to political awakening of the people, especially the workers resulting in the Russian Revolution.

4 MODERN WORLD – II

In the last lesson, you read about the developments during the Renaissance which brought many changes in the European society. Extraordinary accomplishments were made in the field of science. People rejected blind faith and tradition and laid more stress on observation and experiments. The coming of the printing press created political awareness about new values and ideas like liberty, equality and fraternity.

Political conditions in many countries of Europe led the adventurers to discover new sea routes to many territories of the world. Missionaries ventured into new domains to spread Christianity and merchants brought in goods from different parts of the world. The time was right for technological changes that brought the Industrial Revolution and revolutionised the life of the working classes especially in England. Let us now read about the impact of the Industrial Revolution, Imperialism and Colonialism in Asia and Africa. We will also read about the two World Wars and about the formation of the United Nation Organisation in this lesson.

OBJECTIVES

After reading this lesson, the learner will be able to:

- describe the Industrial Revolution;
- discuss the innovations and technological changes brought in by the Industrial Revolution;
- assess the impact of the Industrial Revolution on society;
- identify the factors responsible for the rise of Imperialism and Colonialism;
- discuss the various stages of development of Imperialism in Asia and Africa;

- trace the events which led to the two World Wars; and
- list the objectives of the United Nations Organisation.

4.1 INDUSTRIAL REVOLUTION

In the 18th century came the Industrial Revolution. It brought social and economic changes that marked the transition from a stable agricultural and commercial society to a modern industrial society. Historically, it refers to the period in British History from 1750 to 1850. Dramatic changes in the social and the economic structure took place as inventions and new technology created the factory system of large-scale machine production and greater economic specialisation. The population which was employed in agriculture now gathered in urban factories. Do you know why this happened? Earlier the merchants supplied the family with raw materials and collected the finished products. This system did not meet the growing demands of the markets for long. So by the end of the 18th century, rich merchants set up factories. They installed new machineries, brought raw materials and employed workers on fixed wages to make machine made goods. Thus the factory system was born.



Figure4.1 Early Spinning Machine

The Industrial Revolution started in Britain with the use of steam power. This was made possible with the invention of the Steam Engine by James Watt in 1769. In 1733 John Kay's invented the Flying Shuttle which simplified the process of weaving cloth and which increased the output four times. James Hargreaves invented a hand powered spinning wheel, the Spinning Jenny, to create multiple spools of thread at once. After the invention of the Spinning Jenny, cotton textiles became the key industry of this period. The presence of large quantities of coal and iron proved a decisive factor in Britain's rapid industrial development. The building of canals and roads, as well as the advent of the railroad and steamship, widened the market for manufactured goods. New periods of development came with electricity and the gasoline engine.

Britain had all the resources that were needed to make her an industrialised power. By 1850, the Revolution had been accomplished with industries becoming a dominant factor in British life. The effect of the Industrial Revolution was felt worldwide. France after 1830, Germany after 1850 and U.S. after the Civil War soon started industrialisation. Let us read further how industrialisation was achieved.

Major inventions and reforms gave a boost to agriculture in England. Important innovations took place in farming such as Jethro Tull's Seed Planting Drill which aided in planting seeds at uniform intervals and depths without any wastage. Between 1760

to 1830, the British Parliament passed nearly 1000 Enclosure Acts by which the lands which had earlier belonged to the community were combined into larger areas. Though all this helped to increase agricultural production but at the same time rendered a large number of people landless. Now only a few people were needed to work on the farms so a large number of people started migrating to cities for employment. This provided cheap and abundant labour to work in the factories.

The favorable political conditions in England further helped in the growth of the Industrial Revolution. Acts like the removal of trade barriers and a common market aided the merchants. England was able to capture the overseas markets primarily with the development in transportation. Many European countries had by now started following the Policy of Mercantilism. Under this Policy, governmental control was exercised over industries and trade. It was based on the theory that national strength was indicated by more exports and less imports. This theory also believed that wealth of a nation depends on the possession of gold and silver and the governmental interference in trade should be very limited.

What factors do you think made it possible for England to be the first country to be industrialised? England enjoyed a geographical advantage over other countries. It had a secured island location with an easy proximity to sea. But at the same time it was isolated from the rest of Europe and hence progressed unhindered. Waterways like canals, rivers and sea helped England to have the largest free trade area, without tolls or barriers. These advantages made England a favourable location for the Industrial Revolution.

4.2 INNOVATIONS AND TECHNOLOGICAL CHANGES DURING THE INDUSTRIAL REVOLUTION

Many innovations, inventions and technological changes took place during this period. It helped to make the industrialised countries more powerful and efficient. Now production could be done much faster and in large quantities which made

things cheaper. These inventions had maximum impact on the textile and transport industries which you are going to read now.

4.2.1 Textile Industry

Technological advancements in the textile industry started a series of inventions in iron and steel production. Other countries were inspired to follow the example of England as manufactured goods from England were flooding the world markets. To safeguard their interests Britain passed laws to ban textile workers from leaking out information about industrial technology or to travel to other countries. But in 1789, Samuel Slater slipped out of England to America. He took the knowledge of British textile industry with him which initiated Industrial Revolution in America. Vast new areas were brought under cotton plantations in America which increased the demand for slaves. Similar incidents started Industrial Revolution in France and Germany also.

Do you know that Arkright was called 'The Father of the Factory System'? He created the first factory that was specially built to house machinery, where the working hours were fixed and the people were employed rather than kept on contractual basis. In 1779, Samuel Crompton invented the 'Spinning Mule' while Edmond Cartwright made the first water driven powered loom. The textile industry stimulated other industries such as dying, bleaching, and printing.

ACTIVITY 4.1

Try to visit a handloom center or a family of weavers near your neighborhood. Find out about the kind of work they do; whether there is division of labour between the men and the women. What kind of technology they use? What are the problems they face? Do they employ children or do their children help them in their work? Write a report on your findings.

The innovations and technological changes which led to advancement in manufacturing, transport and communication industries followed closely with chemical, electrical, petroleum and steel industries. The discovery of trade routes not only gave a boost to Industrial Revolution but also led to a competition among colonial and imperialist powers for expanding their empires to fulfill the need of industries for raw materials, new markets and cheap labour. The imperialist expansions led to struggle for supremacy and the two World Wars. The colonies were exploited; their traditional social, economic and political systems were destroyed. They started opposing the foreign rule and to establish their own nations.

4.2.2. Steam Engine

Another major achievement of the Industrial Revolution was the development and application of steam power. Even the earlier devices were improved upon and developed into machines as the number of industries had increased. So, enormous power was needed for production. In 1705, Thomas Newcomen built an engine for

pumping water from coal mines. In 1764, James Watt improved upon the design and improved the efficiency of Newcomen's engine fourfold. He introduced a

chamber with a jet of cold water to condense the steam and cause vacuum. This was also a period of transfer of one technology to another. Watt used John Wilkinson's drill gun to bore the large cylinder for his engine. The steam engine soon replaced the earlier locomotive coal engines. It increased the demand for railway lines. The steam engine made the technology portable and was in demand by other industries. Now there was no need to locate the factories along rivers or lakes any longer.

4.2.3 Coal and Iron

The steam engine, coal and iron laid the foundation for modern industry. It was believed that only people with 'death wish' worked in mines. Coal was moved along horizontal tunnels in baskets and then hauled up a vertical shaft to the surface. The movement of coal from mines was totally dependent on muscle power – animals, men, women and children. The coal mines had dangerous working conditions. Unfortunately the children were preferred because of their small size.

The demand for coal went up with the increase in the use of steam power. Great progress was made in coal mining such as tunnel ventilation, transportation of coal, use of gunpowder to blast away ridges and the use of safety lamps. But the coal miners suffered from many hazards and health problems like lung disease.

Significant improvements were made in the iron industry during this time. In 1709, Abraham Darby produced pig iron smelted with coke. Earlier pig iron was smelted with charcoal which was derived from wood which resulted in fast depletion of England's forests. In 1784, Henry Cort, an ironmaster, developed a process for producing a less brittle iron. It was called wrought iron. It proved to be a very useful metal in industrial processes. In 1774, John Wilkinson invented a drilling machine that could drill holes with great accuracy. Between 1788 and 1806, the production of iron increased many times and the use of iron spread to farm machinery, hardware, shipbuilding, etc.

The development in the iron and textile industries made it necessary to invent better transportation facilities for cheaper and quicker movement of goods. It was urgently required to fulfill the need of domestic and foreign markets.

4.2.4. Means of Transportation and Communication

The improvement in the means of transport and communication was a great encouragement to the Industrial Revolution. The raw materials, finished products, food and people needed a reliable system of transportation. Improvements in bridges and road construction were made early in the 1700's. They helped to transport the

raw materials and factory made products to their destinations. In 1814, George Stephenson built the first steam locomotive engine to run on railway tracks. Soon the steam engines and railways were transporting goods over tracks throughout England and supporting the canal transportation.



Figure4.2 George Stephenson's 'Rocket, 1829

Do yo know

The first railway line to use locomotive traction and carry passengers as well as freight was between Stockton to Darlington, in the year 1825.

During the mid-19th century wooden steam powered ships took over sailing ship. Soon after iron ship was used for travelling across the ocean. If the first phase of Industrial Revolution depended on steam, then the second phase depended on electricity. Do you know Michael Faraday had the distinction of inventing the first electric motor? Electricity now became commercially available and was used to run the factories. Faster means of transportation and communication speeding up business transactions, contacts between army units, colonies, countries and even common people. The invention of telegraph and telephone made it possible to communicate anywhere in the world instantly.

4.3 IMPACT OF THE INDUSTRIAL REVOLUTION

The Industrial Revolution also encouraged the movement of the masses towards cities which gave birth to an urban society. The workers now lived close to the workshops or the factories where they were provided employment opportunities. But the working

conditions in the factories were miserable along with poor housing, hygiene and health conditions. The factory owners had only one motive and that was to make profit. Hence he forced the workers to work for long hours on low wages – sometimes 12 to 14 hours daily. Women and children were paid very low wages. The factories were poorly ventilated, noisy, dirty, damp and dark. Do you think this situation continued for long? Gradually the workers began to realise their strength. The pressure came from trade unions. A movement began to save the workers from the injustices of the factory system. Many laws were made to reform the working and living conditions. You will read more about it the coming section.

ACTIVITY 4.2

Look around you, in your family or neighborhood or shop or market. Do you see young children, below 14 years, being employed and denied their right to study? What should be done to educate them? Give it a thought and try to find ways to help them.

There was a tremendous increase in production which resulted in lower cost of goods. Human labour was replaced with the machines and the domestic system of production came to an end. Increase in agriculture production decreased the food prices. A new source of wealth rose from the ownership of factories and machinery. This new group of people was known as the capitalists. They also organised the banking system to distribute capital from surplus income areas to those areas where it was needed. In early 1700's the first private banks were opened by goldsmith, merchant and manufacturers.

Very soon Industrial Revolution spread to other countries. The discovery of trade routes encouraged competition amongst colonial and imperialist powers for expanding their empires to fulfill the need of raw materials, new markets and cheap labour. It started a race for colonies among the European countries, rivalry particularly between England and France. Later on Italy, Germany and other countries also joined the race. These imperialist expansions led to struggle for supremacy and the two world wars about which you will read further in the lesson. They exploited the colonies and destroyed their traditional social, economic and political systems. These colonies in turn started opposing the foreign rules and fighting for their independence.

INTEXT QUESTIONS 4.1

1. Which two natural resources played an important role in the birth of Industrial Revolution in England?
2. How the development in the means of transport and communication assisted the merchants?

3. What were the reason to employ children in coal mines and factories?

4. Match the column:

- | | |
|---------------------|---------------------|
| (a) James Watt | (i) Iron Industry |
| (b) Samuel Crompton | (ii) Electric Motor |
| (c) Henry Cort | (iii) Steam Engine |
| (d) Michael Faraday | (iv) Spinning Jenny |
| | (v) Spinning Mule |
| | (vi) Flying Shuttle |

4.4 THE RISE OF IMPERIALISM AND COLONIALISM

In the last section you read about Industrial Revolution and how it spread to the countries of the West. By the turn of the 19th century, most of the European countries were industrialised. These countries needed constant supply of raw materials and a ready market for selling the finished goods. So they began to extend control over areas which were not industrialised. The capitalists too needed new places and new industries to invest their surplus capital since these needs could not be fulfilled in their own countries or in neighboring areas. This practice of extending control or rule over the political and economic life of another country is known as Imperialism. This may be done through military or other means. Colonialism meant to acquire colonies and making them dependent by conquest or other means. It was the need for raw materials, markets and places for investment of capital which prompted the imperial nations to conquer lands outside their country. The main feature of Imperialism was economic domination of colonies by an imperial nation through military conquest, political rule or by any other method. The wealth and resources were drained out from the colonies to the imperial countries. The interest of the colonies was subjected to the interests of the imperial country. The country which conquers another land is known as the Imperial Country while the conquered land is known as a Colony. By the end of the 19th century almost all countries of Asia and Africa were under the control of one or the other European nations.

Why do you think these industrialised countries chose Asia and Africa to extend their dominance? This was because these countries were rich in resources but were politically and militarily weak and industrially backward. Unfortunately, they were too far and distant. Without good means of communication, no countries would be able to make profit from them. The growth of Imperialism coincided with the growth of transport and communication. Good roads, steamships, railways and canals were being built by industrialised nations in their own countries and in the colonies. Easy transportation of goods to and from the colonies made things

easier for these countries. Troops could also be easily sent to colonies. With the development of telegraph and telephone, messages could be sent easily. Almost every country now came within the easy reach of imperial countries.

Extreme Nationalism became a major force in the extension of Imperialism. For pride, prestige and glory, some countries like Italy and Germany conquered lands belonging to others. By this time, the Europeans who had developed a feeling of racial superiority considered the people of Asia and Africa as backward. According to them, it was 'the white man's burden' to civilise the 'backward people'. So it was their duty to conquer these countries, spread Christianity and bring enlightenment to them. This feeling provided a moral justification for the conquest of these lands.

This was not difficult as adventurers and explorers played a significant role in inciting a desire among Europeans for conquering lands. They brought back valuable information about the lands they discovered and described the wealth and resources they saw in these remote lands. Do you remember reading the names of many explorers such as Christopher Columbus, Vasco da Gama and Ferdinand Magellan?

4.4.1 Imperialism in Africa

Do you know that once upon a time Africa was known as the Dark Continent? Very little information was available about this continent. The missionaries and the explorers were the first to venture into the interiors. There they discovered an immense treasure of ivory, gold, diamond, timber and people who could be made slaves. Africa also had weak political systems, a backward economy and society as well as weak armies. A competition started amongst the European nations to gain power and prestige as well as raw materials and markets for their manufactured goods. The Europeans on the other hand had technologically advanced weapons which helped in their conquests. Till 1875, European possessions in Africa were limited to some forts and trading posts along the coast and a few small colonies. But between 1880 and 1910, the whole of Africa was divided up amongst the Europeans. All important decisions related to Africa and its people were taken on the conference tables of London, Paris, Lisbon and other European capitals for the next 50 years!

Do you know?

France ruled the maximum number of colonies in Africa while Britain ruled over the greatest number of people.

France acquired a huge empire in North and West Africa. Algeria, Tunisia, Morocco, Ivory Coast, Dahomey, Mali and other areas in West Africa came under the French rule. Britain ruled Gambia, Sierra Leone, Gold Coast, Nigeria, South Africa, Rhodesia, Uganda, Kenya, Egypt, Sudan, Eritrea, parts of Somaliland and Libya. Germany ruled over Southwest Africa, Tanganyika, Togoland and Cameroon until German was defeated in World War I. By the time the war started in 1914, only two independent countries were left in Africa - Liberia and Ethiopia. But Ethiopia was taken over by Italy in 1935.

An interesting feature about Imperialism was the slave trade in Africa. The

Europeans started importing slaves from Africa to work on the plantations in their colonies in America. There was a regular slave market in Lisbon, the capital of Portugal. Between 1500 and 1800, nearly 15 million Africans were captured and sold as slaves.

ACTIVITY 4.3

A person is discriminated and looked down upon based on his/her color, race, class, caste or region. We have many incidents of verbal and physical abuse both in India and abroad regarding the same. Do you think we are acting sensitively and maturely when we take part in such acts? How would the other person feel? Suggest some steps you can take to stop this.

4.4.2 Imperialism in Asia

As in Africa so in Asia, the Europeans started colonising here also. The British and the French did not like the prosperous trade carried on by Portugal and Holland, whom they ultimately threw out from India. Soon the English and the French Companies made settlements here. In 1763, the British ended the French influence in India and established their own control. You will read more about the British rule in India in the next lesson. Countries like Japan and China refused to accept the western culture and way of life because of their belief in their traditional ways. The Boxer Rebellion and the Opium War gave the power to the industrialised countries to get involved in China. Gradually they accepted industrialisation and western influence. Let us read how it happened.

4.4.3 China

Chinese goods were in great demand in European countries but there was no demand for European goods in China. This one-sided trade was not profitable for European merchants so they started smuggling opium to China to demoralise the Chinese youth and exchange Chinese goods. This led to the First Opium War between China and Britain in which China was easily defeated and Britain gained many concessions for herself. She succeeded in getting all five ports of China opened for British traders. The Chinese government could not impose any tariff on foreign goods. They could not carry out any trial against British subjects in Chinese courts. The island of Hong Kong was handed over to Britain.

The Second Opium War was fought to revenge against the insult of British flag and the murder of a French missionary. China was defeated by the two European powers and was forced to concede extra territorial rights.

The Boxer's Rebellion was an organised terror against the Christian missionaries and exploitation of China after the division of China into spheres of influence. Chinese

youth tortured 'foreign nationals' with their fists. They had the secret support of the royal court.

4.4.4 Japan

The Meiji Restoration began in 1868 with an era of 'enlightened rule' which transformed Japan from a closed feudal society to the first industrialised nation. She had little natural resources of her own and needed both overseas markets and sources of raw materials.

In 1871, a group of Japanese politicians toured Europe and US. Japan framed a state led industrialisation policy. In 1877, the Bank of Japan was founded. Many steel and textile factories were set up, education was popularised and Japanese students were sent to study in the West. By the year 1905, under the slogan of 'Enrich the Country, Strengthen the Military', Japan rose as a formidable industrial and military nation. She was successful in conquering Formosa, Southern Sakhalin, Korea, Manchuria, Indo-China, Burma, Malaya, Singapore, Indonesia and the Philippines.

4.4.5 Imperialism in South and South-East Asia

South and South-East Asia includes Nepal, Burma, Sri Lanka, Malaya, Indonesia, Indo-China, Thailand, Indo-Philippines. Even before the rise of the New Imperialism, many of these countries were already dominated by the Europeans. Sri Lanka was occupied by the Portuguese then by the Dutch and later by the British. England introduced tea and rubber plantations, which came to form 7/8ths of Sri Lanka's exports.

Other countries of South East Asia also suffered under Imperialism. French troops attacked Vietnam claiming that they were protecting the Christians of Indo-China. Gradually Vietnam, Laos and Cambodia were added to the French Colonial Empire. The British added Burma and the port of Singapore to gain control over the Malaya states.

Do you know

Thailand or Siam remained an independent state even though it was sandwiched between the French conquests in Indo-China and the British in Burma.

4.5 IMPACT OF IMPERIALISM

Some of the positive effects of Imperialism on the colonies were the introduction of transportation and communication like railway lines, canals, telegraphs and telephones. It also led to the growth of political consciousness and the feeling of nationalism in

the colonies. It led to development in modern education and science which helped the nations to develop after they gained their independence.

Imperialism had a disastrous effect on the colonies. The indigenous industries were ruined and the natural resources ruthlessly exploited. China was divided into spheres of influence and thrown open to international trade. The whole of Africa, except for Liberia and Ethiopia, was divided amongst the European nations. A large numbers of Africans were sold as slaves. In South Africa, the 'white' European community ill-treated the 'black' on the basis of their dark skin. This is called racial discrimination or apartheid which was the worst impact of Imperialism.

The negative impact of Imperialism outweighs its positive one as it drained both the Asia and Africa of their wealth, raw materials and exploited their markets by selling their industrial goods thereby destroying the economy of these colonies. Their policy of racial discrimination made the people lose their self respect as well as their confidence. You will read more of about it in the next few lessons on India. In India, the Europeans came as traders but became rulers. They destroyed our prosperous economy. India which was an exporter of textile became a buyer of finished goods and exporter of raw materials. Besides, heavy taxation led to poverty of the masses.

The 20th Century saw more scientific discoveries and inventions than any other period in the human history. Starting with the steam-powered ships it ended with human visit to space, moon landings and of course the network of computers. The world shrunk with instant communication and speedy transport. Unfortunately the whole world was affected by imperialist rivalries and economic motive. This created a tension among European countries, US and Japan which entangled them in two World Wars about which you will read in the coming section.

INTEXT QUESTIONS 4.2

1. Define Imperialism.
2. Mention two advantages of the growth of transportation in the colonies which helped in the spread of Imperialism.
3. What was the Slave Trade?
4. Choose the right answer:
 - (a) Which of the following was known as the Dark Continent?
(i) Africa (ii) Asia (iii) Europe
 - (b) Meiji Restoration took place in which country?
(i) Cambodia (ii) Sri Lanka (iii) Japan
 - (c) Opium War was fought in?

(i) India (ii) China (iii) Burma

(d) Which was not a French colony?

(i) Vietnam (ii) Morocco (iii) Kenya

4.6 WORLD WAR I

Industrialisation, Colonialism and Imperialism created intense rivalry among the European nations over their possessions of colonies in Asia and Africa. This competition became more acute by the end of the 19th century when colonies were no longer available in Asia and Africa. Compromise was not possible due to mutual distrust and hostilities and in 1914 a war began in Europe which soon engulfed the entire world. It involved all the major countries of the world and their colonies. The damage caused by this war had no precedent in history. For the first time in history all the resources of the warring states were mobilised. It involved their army, navy and air force. The civilian population suffered tremendous casualties because of indiscriminate bombing. Since the war was spread over a very large part of the world for the first time, it is known as World War I. It marked a turning point in world history. It was not a sudden occurrence but the culmination of a large number of forces and developments covering a long period before 1914.

4.6.1 Causes of World War I

Imperialist rivalries among the different nations like England, France, Germany and others were a major cause of the war. Earlier wars were averted because possibilities of acquiring more colonies were still there. But the situation had now changed. Most of Asia and Africa had already been divided up and possibilities of further expansion were not there. It was possible only by dispossessing some imperialist country of their colony. This division of colonies created conditions of war. In the last quarter of the 19th century, Germany had made tremendous economic and industrial progress and left England and France far behind in industrial production. She needed colonies as much as Britain to fulfill her economic needs. In the imperial race, Germany became the main competitor of England. British naval supremacy was also challenged when Germany built the largest warship 'Imperator' and built the Kiel Canal connecting the North Sea and Baltic Sea endangering the English coast line. Germany also built a railway line connecting Berlin with Baghdad which made it easier for Germany to send troops or suppliers to the East. But it posed a threat to British colonies there.

Like Germany, all other major powers of Europe and Japan also had their imperialistic ambitions. Italy after her unification wanted Tripoli in North Africa which was under the Ottoman Empire. France wanted to add Morocco to her conquest in Africa while Russia had her ambitions in Iran. Japan had her ambitions in the Far East where she was able to extend her influence after the Russo-Japanese War of 1905. Austria had her ambitions in the Ottoman Empire while the United States of America was slowly emerging as a powerful nation. Her main interest was to preserve the independence of trade as it was increasing at a fast pace. The expansion of influence of any great power was posing a major threat to world peace.

4.6.2 System of Alliances

Conflicts and confrontations for more colonies prompted the imperial powers to look for allies. In 1882, Germany, Austria and Italy signed the Triple Alliance pledging mutual military assistance against rival powers. England, Russia and France signed the Triple Entente in 1907. Emergence of two mutually opposed groups divided Europe into hostile camps leading to tension and conflicts among European powers.

These countries competed with one another in producing deadly weapons which led to a race for armaments. Mutual hatred and suspicion disturbed the atmosphere of peace. The propaganda which was created made it clear that if war broke out the whole of Europe would be drawn into it.

4.6.3 Pan Slav Movement and the Balkan Politics

Balkan region of Eastern Europe consisted of many states such as Greece, Romania, Bulgaria, Serbia, Montenegro and many other smaller states. Originally these states were under the control of the Ottoman Emperor or the ruler of Turkey. By the beginning of the 20th century, the Ottoman Empire began to decline. European powers including Austria and Russia rushed for obtaining a foothold in the region.

The matter got complicated with the resurgence of Nationalism among the people in most of these states. They were called Slavs. Since they were scattered in many of the east European states, they started a National Movement called the Pan Slav movement. Their main demand was to unite the Slavs in one state under Serbia, the state which had the largest Slav population in this movement. Serbia was supported by Russia, whereas Austria opposed Serbia and their National Movement. This resulted in rivalry between Russia and Austria. Austria did not want a strong Serbian state which would hamper her ambition of expansion. In 1908, Austria annexed two Slav states, Bosnia and Herzegovina, leading to hostility between Serbia and Austria.

Between 1912 and 1914, four Balkan States fought two wars against the Ottoman Emperor for independence. Turkey was defeated and lost all her possessions in Europe. Austria hurriedly set up an independent state of Albania against the Serbian ambition of Greater Serbia. Hostility mounted between Austria on one side and Serbia and Russia on the other.

As you can see by 1914, the atmosphere in Europe was explosive. Against this background, Archduke Francis Ferdinand the heir to the Austrian throne went to Sarajevo, the capital of Bosnia, on a state visit. As he was getting down from his car, he was assassinated by a Serbian youth on 28 June 1914. The murder of Archduke Francis Ferdinand became the immediate cause of the war. Austria held Serbia responsible for the assassination of their prince and served her with an ultimatum with various conditions. Assured of Russian help, Serbia refused to accept the ultimatum and started mobilising her troops on the border. On 28 July

1914, Austria declared war on Serbia. On 1 August 1914, Germany declared war on Russia. On 3 August 1914, Germany declared war on France. As German troops

entered Belgium, England declared war on Germany on 4 August 1914. Thus a minor incident in Europe triggered the war with all the countries joining in which soon took the shape of World War I.

4.6.4 The Course of the War (1914-1918)

World War I which started in August 1914 continued till November 1918. During this period many important battles were fought such as the Battle of Marne in 1914, Battles of Verdun, Battle of Somme and Battle of Jutland in 1916. The year 1917 saw two important developments – one was the entry of USA into the war in April and second was the withdrawal of Russia from the war in November.

In 1915, a British passenger ship Lusitania was sunk by German U Boats killing 128 US civilians who were travelling in the ship. The US Senate took a very serious view of this. Besides becoming a powerful nation, Germany would pose a threat to US supremacy. Moreover, USA being the major supplier of arms and ammunition, the continuation of war would result in economic advantage for the US. Keeping all these in view, she decided to join the war in 1917.

Do you remember reading about the October Revolution of 1917 in Russia? One of the main demands of the revolutionaries was peace. So immediately after the Revolution under the leadership of Lenin, Russia withdrew from the war and signed a peace treaty with Germany in 1918.

By July 1918, Germany began to collapse. Bulgaria and Turkey surrendered in September and October respectively. On 3 November 1918, the Austrian Emperor surrendered due to widespread unrest in Austria. After similar revolts by the German people, German Emperor Wilhelm II fled to Holland and Germany was proclaimed a Republic. The new government signed an armistice on 11 November 1918, bringing an end to World War I.

In the course of the war, many new weapons such as machine guns, poison gas, liquid fire, submarine and tanks were used. New strategies and military techniques were experimented by both sides. England used naval and economic blockade, tanks and air raids. The French used trench warfare and Germany used U Boats and submarines to sink ships under the sea.

4.6.5 Immediate Consequences of World War I

World War I was one of the most disastrous and frightening events the world had witnessed. A million people including innocent civilians lost their lives. There was a large scale damage of property in most of the European countries. The total expenditure was estimated at a staggering figure of 180 billion dollars. The economy of most of the countries was shattered resulting in social tension, unemployment and poverty.

Between January and June 1919, the Allied Powers met at a conference in the palace of Versailles, Paris to decide the future of the defeated powers. Though the representatives of nearly 27 countries attended the conference, the decisions were taken by Heads of State of Britain, France and USA. Russia was excluded and the defeated powers were not allowed to attend. The Allies signed different treaties with the defeated powers. The most important of them were the Treaty of Versailles signed with Germany, the Treaty of St. Germain with Austria and the Treaty of Serves with Turkey.

The Treaty of Versailles shattered Germany politically, economically and militarily. Germany was held guilty of aggression and was asked to pay a huge amount of money as compensation for the war. Alsace and Lorraine which were taken from France in 1871 were to be returned to France. Rhineland, the land between France and Germany, was demilitarised and brought under the control of the Allied powers. The coal rich Saar Valley was given to France for 15 years. German army was disbanded. Ships were sunk and the army was restricted to 100,000 soldiers only. Germany was deprived of all her colonies. Much of her territories in Europe were given to Belgium and Poland.

The Treaty of St. Germain separated Hungary from Austria and Hungary was made an independent state. Austria had to recognise the independence of Hungary and had to give part of her territories to Czechoslovakia, Rumania and Yugoslavia. The Treaty of Sevres broke up the Ottoman Empire. Some of its states were given to the Allied Powers as mandates. For example, Palestine and Mesopotamia were given to Britain and Syria to France. The Allied Powers were to look after these countries till they became self-reliant.

The war and the peace treaties transformed the political map of the world, particularly Europe. After the October Revolution in Russia, the ruling dynasty of the Romanovs was overthrown. By the end of the war, Hohenzollern Dynasty of Germany and Hapsburg Dynasty of Austria were removed and Republic Government was set up. Monarchy was also abolished in Turkey after a Revolution in 1922. Two new states- Czechoslovakia and Yugoslavia - were created out of the territories taken from the defeated powers. Hungary emerged as an independent state. Baltic States such as Estonia, Lithuania, Latvia and Finland were made independent states. The states of Rumania and Poland were enlarged in size. All this changed the boundaries of most of the states of Europe.

It was evident that the peace settlements were dictated and unequal settlements which were imposed upon the defeated powers. They had no say in the deliberations. The end of the war saw the end of European supremacy and emergence of USSR and USA as major powers. The period also saw the strengthening of National Movement in the countries of Asia and Africa. Even before the war ended in November 1918, the US President Woodrow Wilson had proposed a peace program known as the

Wilson's Fourteen Points. The most important point was the proposal for the establishment of an international organisation maintaining peace and security in the world. On the basis of this proposal, the League of Nations was set up in 1920.

4.6.6 The League of Nations

The League was the first international organisation set up in 1920 with its headquarters at Geneva. Its main aims were to maintain peace and security in the world, prevent future war, promote international co-operation, settle international disputes peacefully and improve the conditions of labourers in member countries. But unfortunately, the League failed to prevent war and conflict for which it was set up. When Italy attacked Ethiopia in 1935 and Japan attacked Manchuria in 1936, the League could do nothing. Also, mutual rivalries among nations for the possession of colonies continued exposing their imperial ambitions.

ACTIVITY 4.4

“Earth provides enough to satisfy every man's need, but not every man's greed” Mahatma Gandhi. Do you think this quote holds true? Why or why not? Justify with the help of examples.

4.7 THE WORLD BETWEEN THE TWO WORLD WARS

The period of twenty years between the two World Wars experienced tremendous changes. There were positive developments like national awakening in countries of Asia and Africa and popularity of Socialist Movement in the Soviet Union and in other countries. The world also saw the worst form of dictatorship in many countries of Europe, especially in Italy and Germany. A major economic crisis took place which affected almost every part of the world, particularly the most advanced countries of the West. The period also witnessed the worst economic depression in USA in 1929, which affected the economy of the entire world.

4.7.1 Causes for the Growth of Fascism and Nazism

After the war, a number of political movements arose in Europe which was given the name Fascism. They had a number of features which were common that is hostility to democracy and socialism, and the aim to establish dictatorship. They were supported by the rulers, the upper class aristocrats and the capitalists because they promise to save them from the danger of socialism. They let loose a systematic campaign of terrorism and murder which the government showed little interest in curbing.

The dictatorship introduced in Italy by Mussolini is referred to as Fascism. The term Fascism is derived from Latin word *fascis* which stood for 'symbols of authority' in Ancient Rome. In 1922, Mussolini came to power with the support of the Italian King and ruled like a dictator from 1925 to 1943. Mussolini banned all political parties and introduced some reforms to get the support of the people. The arrogance of Victorian powers, the inability of the existing governments to cope up with postwar problems, the helplessness of the League of Nations and failure of democratic forces to check fascism made the rise of dictatorship possible.

The German version of Fascism is known as Nazism. It was established by Adolf Hitler. He promised to reverse post-war settlements and restore German power and glory. His vision of rebuilding Germany into a great nation inspired many Germans to join him. It acted like a balm on the wounds caused by the humiliation after World War I. Many people supported Nazism because it seemed to offer a way out of the economic decline. The success of the Nazis proved disastrous not only for the German people but for the entire Europe and many other parts of the world. It led to dictatorships being established in Hungary, Rumania, Portugal and Spain. The growth of anti-democratic government in so many countries led to World War II.

4.7.2 Developments in Other Parts of the World

England and France too had to face severe economic crisis, scarcity and unemployment but they continued with their democratic governments. Despite workers' strikes and other disturbances in England, the problems were sought to be solved by forming a Coalition Government consisting of Labour, Liberal and Conservative Parties in 1931. In France, a Popular Front Government consisting of Left Wing Parties was set up in 1936.

Soviet Union emerged as the first Socialist State of the world. Under the new government, socialist principles were introduced in economy and it was the only country to remain unaffected while all the Western capitalist countries suffered due to the Economic Depression in 1929.

Though USA participated in World War I, the country did not suffer much material loss. Industrial prosperity, political stability and economic growth made it a super power. However, she suffered the worst economic crisis in 1929 due to overproduction. Prices of commodities declined leading to the fall in share prices. The banks closed down and people lost their lifelong savings. The loan which USA had given to the European countries after World War I had to be withdrawn. It resulted in economic instability in the European countries also. The new government that came to power in USA under Franklin Roosevelt introduced a program of economic recovery called the New Deal. Under this, many reforms were introduced such as creating new employment opportunities, giving help to the farmers, etc.

Japan was the only country in Asia which emerged as an imperialist country. You have already read that it defeated Russia in 1905. During the period between the two World Wars, Japan became a strong military power and supported Fascism.

She signed the Rome-Berlin-Tokyo Axis with the fascist powers. She also signed the Anti-Comintern Pact to check the spread of communism along with Germany and Italy, indicating their hostility to Soviet Union.

4.8 WORLD WAR II

We have read about the League of Nations and how it failed in its aim within twenty years after its formation. Even though it was set up with the aim of preventing future war, World War II started on September 1939. Let us find out why the war took place.

4.8.1 Causes of World War II

World War II, like the earlier war, started in Europe and assumed the character of a world war. The fascist countries wanted to re-divide the world for imperialist gains and thus came into conflict with the established power. We know that Germany was politically, militarily and economically shattered by the Treaty of Versailles. She sought revenge and was ready to have a trial of strength with the Allied Powers. The position of Italy was no better. Though Italy joined the Allied Powers during World War I with the hope of imperial gain, she did not gain any colonies after the war. She lost nearly 600,000 people during the war. Both the Fascist and Nazi Parties glorified war and promised to their people that they would bring back the lost glory of their countries through war. They began to follow an aggressive policy of expansion through conquests. Germany annexed Rhineland in 1936, Austria in 1938 and Czechoslovakia in 1938, while Italy attacked Ethiopia. This resulted in social tension and conflicts among European nations.

You have read about the rise of Japan as a military power and also her support for fascist powers. By signing the Rome-Berlin-Tokyo Axis, these three powers committed support to each other. Japan was given a free hand to expand control in Asia and the region of the Pacific while Germany and Italy would have a free hand in Europe.

The success of the Soviet Union alarmed the Western Powers. Being capitalist countries, they wanted to check the spread of Communism. So they adopted a systematic policy of favoring Italy and Germany, who were anti-communists. This policy is referred to as the Appeasement Policy. German army which was restricted to 100,000 soldiers after World War I increased her strength to 800,000 soldiers without any protest from the western powers. Even when Hitler put aside the Treaty of Versailles and annexed Rhineland and Austria, the western powers remained silent

spectators. In 1937, Civil War began in Spain between the popularly elected

Government and the fascist leader under General Franco. Hitler supplied arms and ammunition to overthrow the democratically elected Government in Spain. Soviet Union appealed to England for collective action against General Franco. When the whole world sent support to the existing government, England and France did not take any action. This Appeasement Policy reached its climax when Hitler invited the Prime Ministers of Britain and France to Munich in August 1938. The Munich Pact was signed by them in 1938, allowing Germany to annex Sudetenland in the Northern part of Czechoslovakia. Later, the whole of Czechoslovakia was annexed. The Policy of Appeasement strengthened the fascist powers.

It was now clear that Britain and France wanted Germany and Italy to act against the Soviet Union. To stall these plans, Soviet Union signed a pact with Germany by which both agreed not to attack one another. This gave her some time to prepare for future confrontation while Germany obtained the neutrality of the Soviet Union.

The scene was set for World War II when Germany attacked Poland on 1 September 1939. Britain declared war on Germany on 3 September 1939.

4.8.2 Consequences of the War

The war came to an end in September 1945. This was the most destructive war in human history. It caused unprecedented loss of life, property and resources. Big buildings were razed to the ground and thousands of people were uprooted from their homelands. The German Jews were either exterminated or sent to concentration camps. The Japanese cities of Hiroshima and Nagasaki were almost wiped off when atomic bombs were dropped on them. The danger of nuclear holocaust was one of the major consequences of the war. Germany was divided into four zones, each under the control of one of the victorious powers. The Nazi Party was banned and the German army disbanded. Japan was placed under US supervision. In 1949, when monarchy was re-established, US troops were withdrawn.

Imperialism weakened with USA and Soviet Union emerging as super powers. The world was now divided into two power blocs – the Communist Bloc headed by Soviet Union and the Western Bloc headed by the USA. The tension and unarmed conflict that developed between these blocs started the Cold War which continued for a very long time.

A major impact of the war was the foundation of United Nations Organisation (UNO) about which you will read in the next section. The world has since then undergone many changes. Its political map has changed. A large number of nations of Asia and Africa who had suffered under colonial rule are now independent. Together they are now a major force in the world.

ACTIVITY 4.5

The world has seen devastating world wars and continues to witness conflicts and struggles till today. Enlist at least five problems which come in the way of world peace. Suggest ways to address these issues and how you as an individual can contribute to make the world a better place to live in.

4.9 FOUNDATION OF UNITED NATIONS ORGANISATION

The horrors of the war made the world leaders realise the need for an international organisation for peace. World leaders such as British Prime Minister Winston Churchill, Soviet Leader Stalin and US President Roosevelt met at various conferences to decide about the formation of this organisation. Finally, on 24 October 1945 at a conference in San Francisco, the United Nations Charter was adopted by the members of 50 nations and the United Nations Organisation (UNO) was formed. Since then 24 October is celebrated every year as UN Day, all over the world. The UNO is based on the principle of sovereignty and equality of all nations.

The main aims of the UNO are to maintain peace and security in the world, to prevent future war, to solve international disputes peacefully and to promote international cooperation.

Do you know

The UN flag consists of the official emblem of the organisation - a circular world map, as seen from the North Pole, surrounded by a wreath of olive branches in white centered on a light blue background.

4.9.1 Objectives of United Nations Organisation

Like the League of Nation, which was established after World War I, the UN too had a major objective of maintaining international peace and security. It also had another major objective to develop friendly relations among nations on the basis of equality and achieve international cooperation in solving economic, social, cultural and humanitarian problems. To promote human rights and fundamental freedom for the people of the world was one of the aims of the UN. It was also to act as a common platform for harmonising the activities of various nations for the attainment of the objectives of the UN.

INTEXT QUESTION 4.3

1. Name at least four Balkan states.
2. Which countries formed the Triple Alliance?
3. Give at least three causes of World War I.
4. Name two countries which adopted dictatorial governments after 1920.
5. What was the main cause of the Great Depression of 1929?
6. When and where the UN was formally constituted?

WHAT YOU HAVE LEARNT

- The new wave of Colonisation known as New Imperialism in the last quarter of the 19th century.
- The main factors behind colonial expansion were the needs created by the Industrial Revolution, growth of transport and communication, desire for power, extreme nationalism and an urge to civilise men.
- Japan was the only Asian country to rise as an imperialist power.
- The intense imperialist rivalry among European countries and formation of military alliances resulted in the outbreak of World War I in 1914.
- The consequences of the war included harsh and humiliating treatment to Germany in the form of the signing of the Treaty of Versailles, defeated powers losing their colonies, major territorial changes in Europe, breaking up of the Ottoman Empire, independence of Hungary and setting up of the League of Nations.
- Growth of Fascism in Italy led by Mussolini and Nazism in Germany led by Hitler suppressed democracy, freedom, socialism and communism between 1919-1939.
- The Policy of Appeasement of the western powers towards Germany and Italy led to the outbreak of World War II.
- Formation of the UN, division of Germany, weakening of imperial powers and the emergence of independent states in Asia and Africa were some of the consequences of World War II.
- The post-war situation witnessed the emergence of two super powers – the USA and the Soviet Union - and the beginning of a bitter Cold War between the two military power blocs.
- United Nations Organisation was formed for peace and harmony in the world at the end of the war.

TERMINAL EXERCISES

1. How the inventions in the textile industry revolutionised the production of cotton cloth?
2. What were the various factors – political, economic, geographical and technological – which contributed to industrialisation in England?
3. State both the advantages and the disadvantages in the society with the coming of the Industrial Revolution.
4. Why did the industrialised countries start fighting amongst themselves for the control of the areas where Industrial Revolution had not taken place?
5. What made Japan join the race for colonies?
6. Mention both the positive and the negative effects of Imperialism on the colonies.
7. Examine the consequences of World War I.
8. How did the Appeasement Policy by the western powers led to the rise of Fascism in Italy and Nazism in Germany?
9. Describe the course of events during World War II.
10. What are the main objectives of the United Nations?
11. Mark the following places on the given outline map of the world:
 - (a) Any two colonies each of Britain and France.
 - (b) The Triple Allies and the Triple Entente of World War I.
 - (c) The Allies and the Axis Powers of World War II.



Fig. Physical Outline Map of World

ANSWERS TO INTEXT QUESTIONS

4.1

1. Coal and Iron.

2. They provided a faster and reliable means of transporting raw materials and factory made products to their destination, speeding up business transactions.

3. Children were employed because their small size helped them move better in the horizontal and narrow coal mines. Plus, they were paid very low wages compared to older men and hence were preferred in factories.

4. (a) i

(b) iii

(c) ii

(d) iii

4.2

1. Imperialism is defined as the practice of extending control or rule over the political and economic life of another country.

2. The two ways were:

(a) It made easier the flow of goods to and from the colonies to the imperial country.

(b) Troops could be easily sent to colonies and keep them under control.

3. The importing of people from Africa by the Europeans to work as slaves on their plantations in their colonies in America was the Slave Trade.

4. (a) i

(b) iii

(c) i

ii

(d)

iii

4.3

1. Greece, Romania, Bulgaria, Serbia, Montenegro.

2. Germany, Austria and Italy.

3. The main causes of World War I were:

(a) The rise of Germany as an industrial nation led to its growing need for raw materials, hence imperialist rivalry for colonies began with England and France.

(b) System of Alliances divided Europe into two hostile camps – Triple Alliance and Triple Entente – leading to tension and conflicts.

(c) The resurgence of nationalism in the Balkan States known as the Pan Slav Movement. People now wanted to be independent and remain under foreign control.

4. Italy and Germany.

5. Overproduction resulted in the declining prices of commodities, leading to the fall in share prices. The banks closed down and people lost their lifelong savings.

This was the Great depression of 1929.

6. The UN was formally constituted on 24 October 1945 at a conference held in San Francisco, USA.

5 IMPACT OF BRITISH RULE ON INDIA: ECONOMIC, SOCIAL AND CULTURAL (1757-1857)

Around the 18th Century a number of significant events took place in the world. One such event was the Industrial Revolution which took place in England. It gradually spread to other countries of Europe also. You must have read about the Industrial Revolution that took place in England, and also read about the discovery of new sea and trade routes. One such sea route to India was discovered by a Portuguese called Vasco da Gama in 1498. As a result, the English, French, Portuguese and the Dutch came to India for trade. They also used it to spread missionary activities in India. Do you know that the beginning of modern period in Indian history began with the coming of these European powers to India? In this lesson you will be reading about the coming of the British to India and the impact it had on the economic, social and cultural spheres as well.

OBJECTIVES

After studying this lesson, you will be able to:

- discuss the reasons for the British to come to India;
- identify the various methods used by the British to colonize India;
- study the economic impact during the British rule;
- describe the British impact on Indian society and culture; and
- identify the reasons for the protest movements that took place under their rule before the revolt of 1857.

5.1 REASONS FOR COMING TO INDIA

The European and the British traders initially came to India for trading purposes. The Industrial Revolution in Britain led to the increase in demand for raw materials for

the factories there. At the same time, they also required a market to sell their finished goods. India provided such a platform to Britain to fulfill all their needs. The 18th century was a period of internal power struggle in India and with the declining power of the Mughal Empire, the British officials were provided with the perfect opportunity to establish their hold over Indian Territory. They did these through numerous wars, forced treaties, annexations of and alliances with the various regional powers all over the country. Their new administrative and economic policies helped them consolidate their control over the country. Their land revenue policies help them keep the poor farmers in check and get huge sums as revenues in return. They forced the commercialisation of agriculture with the growing of various cash crops and the raw materials for the industries in the Britain. With the strong political control, the British were able to monopolise the trade with India. They defeated their foreign rivals in trade so that there could be no competition. They monopolised the sale of all kinds of raw materials and bought these at low prices whereas the Indian weavers had to buy them at exorbitant prices. Heavy duties were imposed on Indian goods entering Britain so as to protect their own industry. Various investments were made to improve the transport and communication system in the country to facilitate the easy transfer of raw materials from the farms to the port, and of finished goods from the ports to the markets. Also, English education was introduced to create a class of educated Indians who would assist the British in ruling the country and strengthen their political authority. All these measures helped the British to establish, consolidate and continue their rule over India.



Figure 5.1- Currency Used by East India Company-picture shows two coins.



Figure 5.2 Currency used by East India Company

5.2 METHODS OF COLONISATION IN INDIA

Look at the map of Europe. You will find many big and small states on it. When the industrial revolution started in Europe these small states did not have sufficient raw materials for their industries, or markets for their finished goods. These countries now started looking for markets in Asia and Africa. England succeeded in controlling trade with India and established the East India Company in 1600. This company was supported by the British government. With its help England was able to extend her territorial frontiers to the Indian subcontinent. The first factory was established at Surat in 1613. In 1615, Sir Thomas Roe got permission from the Mughal emperor Jahangir to open more factories at Agra, Ahmadabad and Broach. Their most important settlement on the southern coast was Madras where they built a fortified factory called Fort St. George. This was the first proprietary holding acquired by the company on Indian soil. Gradually the company expanded its trading network. By that time the company was well established in India. It had also succeeded in eliminating the other rival European powers from India. They also started interfering in the political affairs of the Indian rulers.

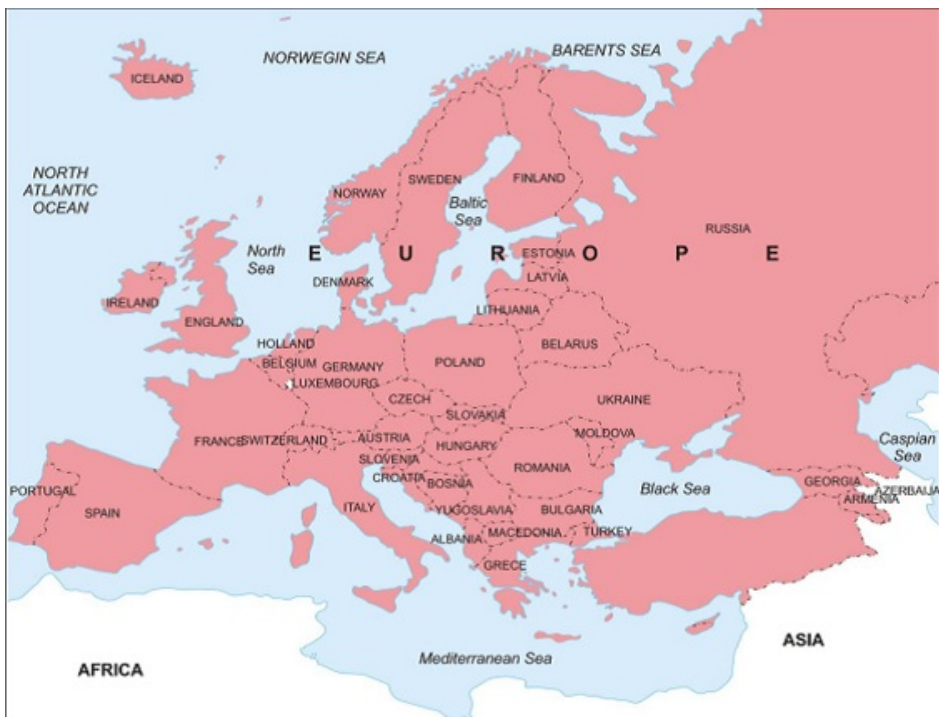


Figure 5.3 Present Day Map of Europe.

Do you Know

In 1696, the company developed three villages into a city in Bengal and named it Kolkotta. They also built a fort around this city known as Fort William.

Look at the map of the 19th century India. What do you see? You will locate many big and small independent states. These states had their own rulers, economy, language and culture. These states were constantly at war with each other. It was not surprising that they fell an easy prey to the European powers especially the British. It was the battles of Plassey (1757) and Buxar (1764) which provided the ground for the British success in India. Through these battles, a long era of British political control over India began. The Battle of Plassey was won by the English in Bengal. The British made Mir Jafar, the new Nawab of Bengal, in return for which they receive an enormous sum of money as well as the territory of 24 Parganas from the Nawab. But Mir Jafar was not able to make further payments to them. As a result he was replaced by Mir Qasim who proved to be a strong ruler. Mir Qasim was not ready to meet their demands for more money or control. As a result, Mir Qasim was removed and Mir Jafar was made the Nawab again. Mir Qasim then joined hands with the Nawab of Awadh, Shiraj-ud-daula and the Mughal emperor Shah Allam

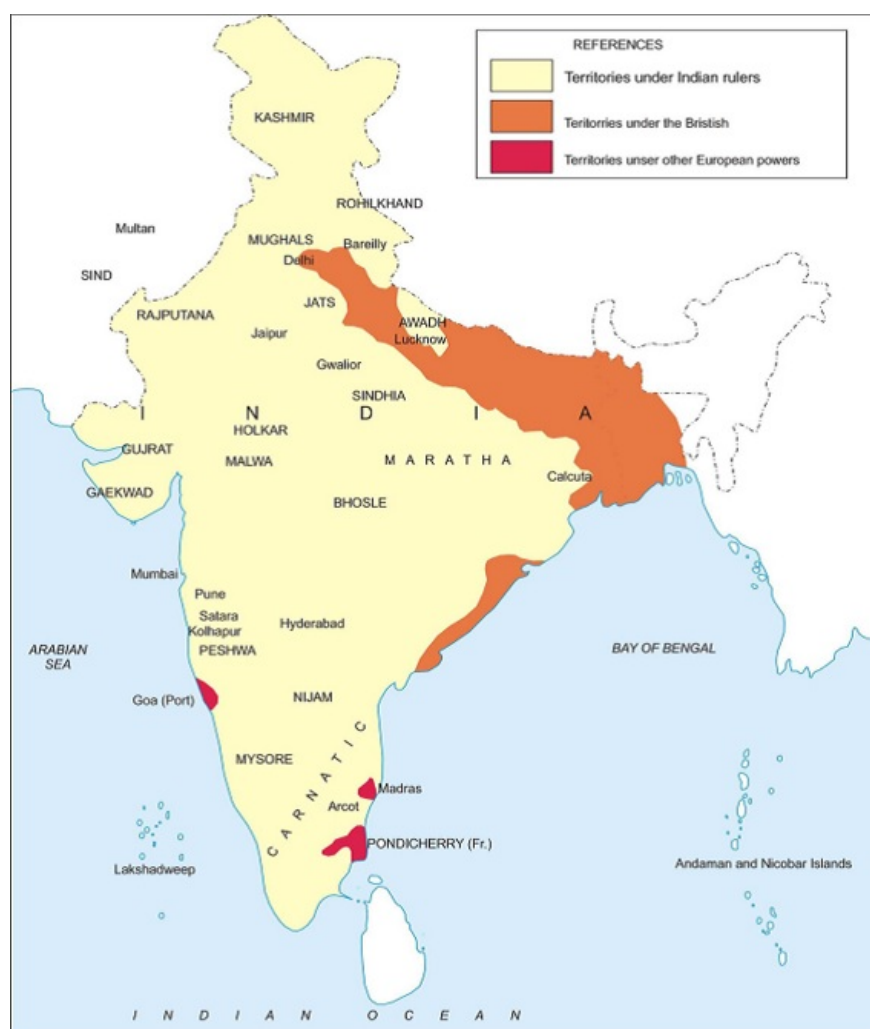


Figure 5.4 Map of 19th century India

II in plotting against the British, the battle took place at a place called Buxar on 22 October 1764. Their defeat proved to be decisive.

Though the British successfully gained control over Bengal, the imposition of British rule throughout India was not an easy task. A number of regional powers opposed them and tried to resist the efforts of territorial expansion of the British. Let us read about the various wars waged by the British against the Indian states.

(i) Anglo-mysore Wars

Mysore emerged as a powerful state under an able leadership of Haider Ali and his son Tipu Sultan in the second half of the eighteenth century. Four wars took place between Mysore and the British. Finally the Fourth Anglo-Mysore War (1799) ended in the heroic defeat and death of Tipu Sultan. With this a glorious chapter of struggle between Mysore and the English came to an end. Large ports like Kanara, Coimbatore and Seringapatam were secured by the British.



Figure 5.5 A picture of Tipu Sultan

(ii) Anglo-maratha Wars

The Marathas were another formidable power in western and central India during the second half of the eighteenth century. But the struggle for power among themselves gave the British an opportunity to intervene in their internal matters. Many wars took place between the British and the Marathas mainly on account of the Subsidiary Alliance (which you will read in 5.2.1). The Third Anglo-Maratha War (1817-19) was the last war between them. The English defeated the Peshwa, dethroned him and annexed all his territories. The Peshwa was pensioned off and sent to Bithur near Kanpur, Uttar Pradesh.

(iii) Anglo-sikh Wars

In north-west India, the Sikhs under their able leader Maharaja Ranjit Singh (1792-1839) became an effective political and military force. The British power in India

viewed the rise of the Sikhs as a potential threat. The British thus wanted to bring the Sikhs under control. After the death of Ranjit Singh in 1839, lawlessness prevailed in Punjab. The British took advantage of this and the First Anglo-Sikh War broke out in 1845 which ended with the defeat of the Sikhs. In the Second Anglo-Sikh War in 1849, the British finally defeated them in the battle of Gujarat, a town on river Chenab (1849). The Sikh chiefs surrendered and Punjab was annexed by Lord Dalhousie. Maharaja Dalip Singh, the son of Maharaja Ranjit Singh was pensioned off and sent to England.



Figure 5.6 A picture of Maharaja Ranjit Singh

5.2.1 Other Conquests, System of Alliances and Annexations

The Third Battle of Panipat against the Marathas in 1761 had already provided the stage for the success of British in India. Soon many more native states came under British control. This was done by a system of alliances called the Doctrine of Lapse and Subsidiary Alliance. Doctrine of Lapse led to a number of independent kingdoms being annexed to the British Empire. These were the states that were enjoying British protection but their rulers had died without leaving a natural heir to the throne. Their adopted sons could now no longer inherit the property or the pension which was granted to them by the British. In this way Dalhousie annexed the Maratha States

of Satara (1848), Sambalpur (1850), Udaipur (1852), Nagpur (1853), Jhansi (1854) and Awadh (1856). In Subsidiary Alliance, the Indian States that were under British protection had to suspend their armies and instead maintain British troops. They also surrendered their control on their foreign affair and let go of their right to make alliances with other foreign states for any purpose, economic or political. In return, they were given protection by the British from their rivals.

The policy of annexation affected not only the Indian rulers, but all those who were dependent upon them such as soldiers, crafts people and even nobles. Even the traditional scholarly and priestly classes lost their patronage from these rulers, chieftains, nobles and zamindars, and were thus impoverished. Thus, by the midnineteenth century, no single Indian power was there to challenge or resist the British. Assam, Arakhan, North Eastern region and portions of Nepal and Burma were already annexed (1818 to 1826). The British also occupied Sind in 1843.



Figure 5.7 A picture Rani Lakshmibai of Jhansi

ACTIVITY 5.1

Imagine you are 15 years old and the nephew/niece of a ruler of a princely state in 19th century India. Your uncle has no child of his own, so you are made the heir to the throne. What steps would you take if the British imposed Doctrine of Lapse in your kingdom and didn't allow you to succeed after your uncle?

INTEXT QUESTIONS 5.1

1. Tick the correct answer:

(a) The British came to India as

(i) conquerors (ii) travellers (iii) invaders (iv) traders

(b) Mir Jafar was the nawab of

(i) Mysore (ii) Punjab (iii) Bengal (iv) Berar

2. Why did the British come to India? Give at least two reasons.

3. What were the two main methods that the British used to annex the native states?

5.3 ECONOMIC IMPACT

The Industrial revolution has helped the English merchants accumulate a lot of capital from the countries of Asia, Africa and America. They now wanted to invest this wealth in setting up industries and trade with India. The mass production of goods through machines that we witness today was pioneered through the Industrial Revolution which occurred first in England during the late 18th and the early 19th century. This led to a massive increase in the output of finished products. The East India Company helped in financing and expanding their industrial base. During this time there was a class of manufacturers in England who benefited more from manufacturing than trading. They were interested in having more raw materials from India as well as sending their finished goods back. Between 1793 and 1813, these British manufacturers launched a campaign against the company, its trade monopoly and the privileges it enjoyed. Ultimately, they succeeded in abolishing the East India Company's monopoly of Indian trade. With this India became an economic colony of Industrial England. Let us learn more about the economic impact on various Indian industries and trade.

5.3.1 Textile Industry and Trade

Earlier, Indian handloom had a big market in Europe. Indian textiles such as cotton, linen, silk and woolen goods already had markets in Asia and Africa. With the coming of industrialisation in England, the textile industry there made important headway. There was now a reverse of the direction of textile trade between Britain and India. There was a massive import of machine made clothes from English factories to Indian markets. This import of large amount of products manufactured by mechanical looms in England led to increase threat for the handicraft industries as the British goods were sold at a much cheaper price.

The British succeeded in selling their goods at a cheap price as foreign goods were given free entry in India without paying any duty. On the other hand, Indian handicrafts were taxed heavily when they were sent out of the country. Besides, under the pressure of its industrialists, British government often imposed a

protective tariff on

Indian textiles. Therefore, within a few years, India from being an exporter of clothes became an exporter of raw cotton and an importer of British clothes. This reversal made a huge impact on the Indian handloom weaving industry leading to its virtual collapse. It also created unemployment for a large community of weavers. Many of them migrated to rural areas to work on their lands as agricultural laborers. This in turn put increased pressure on the rural economy and livelihood. This process of uneven competition faced by the Indian handloom industry was later dubbed by the Indian nationalist leaders as de-industrialisation.

Do you know

Duty: Taxes which are paid to the government on goods that are bought or sold.

Tax: A sum of money demanded by a government for its support for specific facilities or services, levied upon incomes, property, sales.

Tariff: An official list or table showing the duties or custom imposed by a government on imports or exports.

The main aim of the British was to transform India into a consumer of British goods. As a result, textile, metal work, glass and paper industries were soon out of work. By 1813, the Indian handicrafts lost both their domestic as well as foreign market. Indian goods could not compete with the British factory-made products where machines were used. These markets were now captured and monopolised by Britain by means of war and colonisation. From an exporter India became an importer of these goods. They extracted money from the Indian rulers, merchants, zamindars and even the common people. Added to this drain were the profit made through trade and also the salaries of the officials. It was evident that their economic policies were meant to serve the interests of the East India Company and later the British Empire.

ACTIVITY 5.2

Case Study of Behriyar-Gareriya nomads:

This community of 75 sheep wool weavers' in Jharkhand from the Gaya district in Bihar has almost given up weaving blanket due to lack of funds as reported in the news (The Sunday Tribune-Spectrum, March 11, 2012). One weaver says, 'we cannot compete with the blankets being sold in the markets'. Another says, 'we are forced to sell our products in villages because of limited access to urban markets'.

Compare the situation of the weavers in British India and in the present times. Is it same or different? What steps would you suggest to improve their conditions?

5.3.2 Land Revenue Policy and Land Settlements

Since ancient times, the main source of livelihood for the people were agriculture. Hence, land tax had formed a principal source of revenue for all the emperors all over the world. In the 18th century, the main occupation of the Indian people were agriculture. During British rule, revenue from land kept on increasing, and the reasons for this were many. Earlier the British had come to trade with India. Gradually they wanted to conquer the vast territory of India for which they needed a lot of money. They also needed money for trade, projects of the company as well as for the cost of running the administration. The British carried out a number of land revenue experiments which caused hardship to cultivators. They extracted taxes from the farmers to finance their policies and war efforts. Direct and indirect means were carried out to bring about this collection of revenue for the British. This affected the lives of the people who could not meet their daily needs because they had to provide the landowners and the collectors their share in the produce. Local administration failed to provide relief and natural justice to the rural poor.

Lord Cornwallis introduced the Permanent Settlement in Bengal and Bihar in 1793. It made the landlord or zamindar deposit a fixed amount of money in the state treasury. In return they were recognised as hereditary owners of land. This made the zamindar the owner of the land. The amount of revenue to be paid to the Company was fixed for a period of time which made the British financially secured. Now they knew in advance as to how much revenue was coming in from the State. The zamindar also knew how much revenue was to be paid. So to get surplus revenue for themselves they asked the peasants to increase production. But, if the zamindar failed to pay the fixed revenue on time his land was sold off to another zamindar. The British stood to benefit from this settlement as the new class of zamindars that emerged became their political allies. They supported the British in times of need and acted as a buffer between them and the peasants. This class, in fact, supported the British against the freedom movement.

In 1822, the British introduced the Mahalwari Settlement in the North Western Provinces, Punjab, the Ganga Valley and parts of Central India. Here the basis of assessment was the product of a mahal or estate, which may be a village or a group of villages. Here all the proprietors of mahal were jointly responsible for paying the sum of revenue assessed by the government. Unfortunately it brought no benefit to the peasants as the British demands were very high.

The Ryotwari Settlement was introduced in the beginning of the 19th century in many parts of Bombay and Madras Presidencies. Here the land revenue was imposed directly on the ryots, the individual cultivators, who actually worked on the land. The peasant was recognized as the owner of the land as long as he was able to pay the revenue but the exploitation continued with the high revenue demands.

5.3.3 Commercialisation of Agriculture

Another major economic impact of the British policies in India was the introduction of a large number of commercial crops such as tea, coffee, indigo, opium, cotton, jute, sugarcane and oilseed. Different kinds of commercial crops were introduced with different intentions. Indian opium was used to balance the trade of Chinese tea with Britain in the latter's favor. The market for opium was strictly controlled by British traders which did not leave much scope for Indian producers to reap profit. Indians were forced to produce indigo and sell it on the conditions dictated by the Britishers. Indigo was sent to England and used as a dyeing agent for cloth produced in British towns. Indigo was grown under a different system where all farmers were compelled to grow it on 3/20th part of their land. Unfortunately cultivation of Indigo left the land infertile for some years. This made the farmers reluctant to grow it. In the tea plantations ownership changed hands quite often. The workers on these plantations worked under a lot of hardships.

Commercialisation of agriculture further enhanced the speed of transfer of ownership of land thereby increasing the number of landless laborers. It also brought in a large number of merchants, traders and middlemen who further exploited the situation. The peasant now depended on them to sell their produce during harvest time. Because the peasants now shifted to commercial crops, food grain production went down. So, less food stock led to famines. It was therefore not surprising that the peasants revolted. You would read about it in detail in the coming chapters. There was an enormous drain of wealth from our country to Britain due to the various economic policies. Additional financial burden was placed on India due to expenditures on salaries, pensions and training of military and civilian staffs employed by the British to rule India. If this wealth was invested in India it could have helped enormously improved the economy in this country. Let us learn how the economic policies implemented by the British changed the social structure of Indian society.

5.3.4 Rise of the New Money-lending Class

Time bound and excessive demand of revenue by the British government forced the peasants to take loans from the moneylenders. These moneylenders often exploited the peasants by charging high interest rates. They often used unfair means like false accounting, forged signatures and thumb impressions. The new legal system and the policy introduced by the British only helped the moneylenders who were either local merchants or landlords. In most cases, the peasants failed to pay back the loan with full interest. Thus, their lands gradually passed into the hands of the money-lending class.

5.3.5 Rise of the New Middle Class

A major impact of the British rule in India was the beginning of a new middle class. With the rise of the British commercial interests, new opportunities opened to a small

section of the Indian people. They often acted as the agents and intermediaries of the British traders and thus made huge fortunes. The new landed aristocracy, which came into being after the introduction of Permanent Settlement, also formed a part of this new class. A major section of the old landowning aristocracy lost ownership of their land and in many cases were replaced by a new class of land owners. These people got some English education and became the new elite. With the spread of British power, new job opportunities were also created. Indian society witnessed the introduction of new law courts, government officials and commercial agencies. The English educated people naturally got the necessary patronage from their colonial rulers. Thus, a new professional and service-holding middle class was also created by the British, apart from those with landed interests.

5.3.6 Transport and Communication

The means of transport in India at that time were bullock carts, camels and pack animals. England on the other hand needed railways that connected the raw material producing areas with the exporting ports and to facilitate the movement of British goods to different parts of the country as well as bring raw materials to the ports. The vast network of railways that you witness today was pioneered during the latter half of the 19th century. This opened avenue for British bankers and investors to invest surplus wealth and material in the construction of railways. Railways benefited the British capitalists in two important ways. First, it made trading in commodities much easier and profitable by connecting the internal markets with the ports. Secondly, the rail engines, coaches and the capital input for building of rail lines came from Britain. The British capitalists who invested in railways were also guaranteed a minimum profit of 5% by the government. These companies were also given free land with a lease of 99 years.

Although the railways were set up for the advantage of British trade, they also played an important role in the national awakening of the country. Though the British had never anticipated, the extensive transport network and improved education brought people and ideas closer.

During British rule, India took ideas of liberty, equality, human rights, science and technology from the West. This accelerated the process of modernisation. Now we will read about the impact of modern idea on Indian society.

Do you know

The first railway line was the Red Hill Railroad line, Madras. It opened in 1837 and was use for the carriage of granite stone. While the first passenger railway line ran from Bombay to Thane in 1853. The same year Dalhousie opened the first telegraphic line from Calcutta to Agra and also introduced the postal service to India.

INTEXT QUESTIONS 5.2

1. State true or false and justify your statement:

(a) Duty free entry of foreign goods was good for Indian economy.

(b) All land settlements benefit the British.

(c) Indigo, rice, wheat, tea and opium were the five major commercial crops introduced by the British.

(d) Some of the money lending class became the new landowners.

2. Provide any two reasons why the British built an extensive network of railways in India?

5.4 BRITISH IMPACT ON SOCIETY AND CULTURE

Indian society underwent many changes after the British came to India. In the 19th century, certain social practices like female infanticide, child marriage, sati, polygamy and a rigid caste system became more prevalent. These practices were against human dignity and values. Women were discriminated against at all stages of life and were the disadvantaged section of the society. They did not have access to any development opportunities to improve their status. Education was limited to a handful of men belonging to the upper castes. Brahmins had access to the Vedas which were written in Sanskrit. Expensive rituals, sacrifices and practices after birth or death were outlined by the priestly class.

When the British came to India, they brought new ideas such as liberty, equality, freedom and human rights from the Renaissance, the Reformation Movement and the various revolutions that took place in Europe. These ideas appealed to some sections of our society and led to several reform movements in different parts of the country. At the forefront of these movements were visionary Indians such as Raja Ram Mohan Roy, Sir Syed Ahmed Khan, Aruna Asaf Ali and Pandita Ramabai. These movements looked for social unity and strived towards liberty, equality and fraternity. Many legal measures were introduced to improve the status of women. For example, the practice of sati was banned in 1829 by Lord Bentinck, the then Governor General. Widow Remarriage was permitted by a law passed in 1856. A law passed in 1872, sanctioned inter-caste and inter-communal marriages. Sharda Act was passed in 1929 preventing child marriage. The act provided that it was illegal to marry a girl below 14 and a boy below 18 years. All the movements severely criticized the caste system and especially the practice of

untouchability.

The impact of the efforts made by these numerous individuals, reform societies, and religious organisations was felt all over and was most evident in the national movement. Women started getting better education opportunities and took up professions and public employment outside their homes. The role of women like Captain Laxmi Sehgal of Indian National Army (INA), Sarojini Naidu, Annie Besant, Aruna Asaf Ali and many others were extremely important in the freedom struggle.



Figure 5.8 Captain Lakshmi Sehgal (in the middle, front row) and other INA Cadres with Netaji Subhas Chandra Bose (left, front row)

5.4.1 Social and Cultural Policy

The British had come to India with the idea of making immense profits. This meant buying of raw materials at very cheap rates and selling finished goods at much higher prices. The British wanted the Indians to be educated and modern enough to consume their goods but not to the extent that it proved detrimental to British interests.

Some of the Britishers believed that Western ideas were modern and superior, while Indian ideas were old and inferior. This was, of course, not true. Indians had a rich traditional learning that was still relevant. By this time in England there was a group of Radicals who had a humanistic ideology towards Indians. They wanted India to be a part of the modern, progressive world of science. But the British government was cautious in undertaking rapid modernisation of India. They feared a reaction among the people if too much interference took place with their religious beliefs and social customs. The English wanted perpetuation of their rule in India and not a reaction among the people. Hence, though they talked about introducing reforms, in reality very few measures were taken and these were also half-hearted.

5.4.2 Education Policy

The British took a keen interest in introducing the English language in India. They

had many reasons for doing so. Educating Indians in the English language was a part of their strategy. The Indians would be ready to work as clerks on low wages while for the same work the British would demand much higher wages. This would reduce the expenditure on administration. It was also expected to create a class of Indians who were loyal to the British and were not able to relate to other Indians. This class of Indians would be taught to appreciate the culture and opinion of the British. In addition, they would also help to increase the market for British goods. They wanted to use education as a means to strengthen their political authority in the country. They assumed that a few educated Indians would spread English culture to the masses and that they would be able to rule through this class of educated Indians. The British gave jobs to only those Indians who knew English thereby compelling many Indians to go in for English education. Education soon became a monopoly of the rich and the city dwellers.

The British Parliament issued the Charter Act of 1813 by which a sum of Rupees One lakh was sanctioned for promoting western sciences in India. But a controversy soon arose. Some wanted the money to be spent on advocating western ideas only. There were others who placed more emphasis on traditional Indian learning. Some recommended use of vernaculars (regional languages) as the medium of instruction, others were for English. In this confusion people failed to notice the difference between English as a medium and English as a subject for study. The British, of course, decided in favor of teaching western ideas and literature through the medium of English language alone. Another step in this direction was the Woods Despatch of 1854. It asked the Government of India to assume responsibility for the education of the masses. As part of the directive given by the Woods Despatch, Departments of Education were instituted in all provinces and Affiliated Universities were opened in Calcutta, Madras and Bombay in 1857. A few English schools and colleges were opened instead of many elementary schools. They ignored the education of the masses. But in reality, it was not sufficient to cater to the needs of the Indian people.

Though the British followed a half-hearted education policy in India, English language and western ideas also had some positive impact on the society. Many reformers like Raja Ram Mohan Roy, Ishwar Chandra Vidyasagar, Swami Dayanand Saraswati, Sir Syed Ahmad Khan, and Swami Vivekananda absorbed western ideas of liberalism and democracy and used it to reform some of the non-humanitarian social and religious practices of the time. Though education did not reach the masses but some ideas of anti-imperialism, nationalism, social and economic equality took root through political parties, discussions and debates on public platform and the press.

The spread of English language and western education helped Indians to adopt modern, rational, democratic, liberal and patriotic outlook. New fields of knowledge

in science, humanities and literature open to them. English became the lingua franca of the educated people in India. It united them and gradually made them politically conscious of their rights. It also gave opportunity to the Indians to study in England and learn about the working of democratic institutions there. The writings of John Locke, Ruskin, Mill, Rousseau and many others instilled in them the ideas of liberty, equality, fraternity, human rights and self-government. The French and the American Revolutions, and the unifications of Italy and Germany further strengthened their appreciation of these ideas. Cavour, Garibaldi and Mazzini became their favorite heroes. They began to aspire for these ideals for India.

Western thinkers like Max Mueller and Annie Besant encouraged vernacular languages and literary works to instill a sense of pride in Indian heritage and culture. It enabled Indians to revive India's cultural past. Also, the important role of press in arousing political awakening and exchange in ideas is noteworthy. The newspapers and journals gave opportunities to share ideas and problems. Similarly, novel, drama, short story, poetry, song, dance, theatre, art and cinema were used to spread views and express resistance to colonial rule. They spoke the language of the people, showcasing their everyday lives, joys and sorrows. Along with newspapers and journals, they promoted the feelings of self confidence, self respect, awareness and patriotism, thereby developing a feeling of national consciousness.

Do you know

Indian People's Theatre Association (IPTA) was founded in 1943. It used music as an integral medium to express dissent and resistance, and continuing its cultural movement even after Independence. Songs ranged from the awareness of exploitation, immortalising the sacrifices of peasants, the revolt of 1857 and the people killed in the Jallianwala Bagh in Amritsar. They cited the meaninglessness of war and violence and also protested against the partition of India through their songs.

The British devised several strategies to make their rule effective. The early British administrators in India like Warren Hastings, William Jones, Jonathan Duncan and others glorified India's ancient past. These scholars and administrators were called Orientalists. They thought that a better understanding of Indian languages, literature and culture would make it easier for them to rule India. Important institutions that came to be identified with their efforts were the Calcutta Madarsas founded by Warren Hastings (1781), the Asiatic Society of Bengal founded by William Jones (1784), the Sanskrit College at Banaras founded by Jonathan Duncan (1794) and the Fort William College founded by Wellesley (1800). These institutions, especially the Asiatic Society and the Fort William College became the epicenter of the study on Indian culture, languages and literature. For the first time great ancient Sanskrit writers like Kalidasa became known to the world through translation of their monumental work into English.

ACTIVITY 5.3

During this period there were some individuals who played a major role in glorifying India's culture, knowledge and tradition. Listed below are some personalities whose contribution have been recognised worldwide. Search for more information in the library/internet on their works.

1. Aryabhatta _____
2. Charaka _____
3. Maitreyi _____
4. Gargi _____

How do you think it must have helped the Indians to take pride in their past history and regain self respect?

5.4.3 Impact of the Reform Movement

How did the socio-religious reform movements led to the national movement? The persistent efforts of the reformers had immense impact on the society. The religious reform movements instilled in the minds of Indians greater self-respect, selfconfidence and pride in their country. These reform movements helped many Indians to come to terms with the modern world. The reformers felt that modern ideas and culture could be best imbibed by integrating them into Indian cultural stream. They helped other countrymen to appreciate that all modern ideas were not against Indian culture and values. The introduction of modern education guided the Indians towards a scientific and rational approach to life. People became more conscious of their identity as Indians which was ultimately responsible for their united struggle against the British in the freedom movement of India.

5.4.4 British Administration and Judicial System

The Indians found it difficult to adjust to the new system of administration introduced by the British. The Indians were denied political rights and the British officers treated them with contempt. Indians were excluded from all higher positions in the civil administration and military.

The British also introduced a new system of law and justice in India. A hierarchy of civil and criminal courts was established. The laws were codified and attempts were also made to separate the judiciary from the executive. Efforts were made to establish the 'Rule of Law' in India. But this only helped the British to enjoy arbitrary powers and to interfere with the rights and liberties of the Indians. The law courts were not easily accessible to the common people. Justice became a costly affair. The new judicial system also discriminated between Europeans and Indians.

INTEXT QUESTIONS 5.3

1. Match the following:

(a) Widow Remarriage Act (i) 1857

(b) Charter Act (ii) 1794

(c) Department of Education (iii) 1813

(d) Sanskrit College of Banaras (iv) 1856

(v) 1855

2. Name at least two centers of Indian culture and languages founded by the British.

3. Briefly explain at least two legal measures which helped improve the status of women in British India.

5.5 PROTESTS MOVEMENTS

The adverse impact of the British rule on the political, economic and social spheres resulted in sharp reaction of the Indian people against the foreigners. This led to a series of the anti-British movements throughout the country. Peasants and tribes rebelled against exploitative rulers. This has been dealt in greater detail in the next few lessons. During the British rule, the number of famines recorded in India was unprecedented. During the first half of the 19th century, 7 big famines were recorded which led to the death of 15 lakh people. Similarly, in the latter half of the 19th century there were 24 famines causing over 200 lakh deaths. The most devastating was the Bengal Famine of 1943 which killed 3 to 4 million Indians. Peasants burdened with taxation, eviction from land and survivors from the Bengal famine joined the rebel groups of Sanyasis and Fakirs. In 1783, rebels stopped paying revenues to company agents. However, rebels were finally forced to surrender. Similarly, Poligars of Tamil Nadu, Malabar and Coastal Andhra, Mappilas of Malabar revolted against the colonial rule. In North India, the Jats of western Uttar Pradesh and Haryana revolted in 1824. In Maharastra and Gujarat, the Kolis revolted.

Tribes in different parts of country also rebelled as colonial government extended their authority to tribal lands. The tribes were subjected to various extortions. Tribal leaders such as Bhils of Khandesh and Kolis of Singhbhum revolted against British rule. However, British suppressed them ruthlessly. Oppressed Santhals on the border of Bengal, Bihar and Orissa also revolted against Britishers as they were being evicted from their lands. They even set up their own government but British suppressed their revolt. Though these rebels did not succeed, they exposed the unpopular character of colonial rule. Even today, we witness many disparities in our society. At least onethird of the country's population barely manages to survive. If you compare this situation with that at the time of

independence, we have made good progress but we still have a long way to go.



Figure 5.9 Santhal Rebellion: Fight between Railway Engineers and Santhals (Illustrated from London News, 1856)

ACTIVITY 5.4

According to expert analysis, more than 17,500 farmers killed themselves between 2002 and 2006. Farmers' suicides have been reported from Maharashtra, Andhra Pradesh, Karnataka, Gujarat, Kerala, Punjab, Chhattisgarh and Tamil Nadu. The reasons are mainly crop failure and debts. Also, the number of farmers is also falling due to their abandonment of farming. Collect more information either from newspapers, magazines and internet, or by talking to 5-6 farmers on the possible reasons for taking such an extreme step? Share your thoughts.

Have you seen the movie Peepli Live? Do watch it if you can.

5.5.1 Impact of the Revolt of 1857

The economic decline of peasantry and artisans were reflected in 12 major and numerous minor famines from 1770 to 1857. All these factors only helped to spread anti-British feeling which ultimately culminated in the revolt of 1857. The British were not very sensitive to the feelings of the masses they ruled ruthlessly. Hence, reforms introduced by them to put an end to some social customs made the people believe that the Government wanted them to be converted to Christianity. As a result, the English East India Company's rule in India witnessed a large number of uprisings and rebellions. In a later lesson you will read about some important and popular uprisings and also analyse the nature and significance of these uprisings. You will also read about the Revolt of 1857 which had a major impact on our national movement. For the first time it unified and brought together people having different ethnic, religious and class background against the British rule.

The revolt brought an end to East India Company's rule, along with changes in the British policy towards Indian States. One of the most important outcomes of the revolt was that it gave rise to nationalism. Indian people became more aware of their heroes, who sacrificed their lives for the country so that others might live in free India in times to come. The revolt however scarred the relationship between Hindus and Muslims with the Divide and Rule Policy which was adopted by the British. They felt that if they wanted to continue their rule in India, it was important to divide the Hindus and Muslims.

5.5.2 Impact Today

After reading this lesson, you would become more aware of how British rule affected every bit of Indian life. This political control also meant a long drawn interaction between two distinct cultures. Some changes were deliberately introduced to strengthen the British political and trading interests. But there were others that occurred as a byproduct of the interaction between the Indian and the western cultures. A large number of British and Europeans stayed in our country during this period which also brought cultural transformation.

We should also understand that our present life is shaped to a great extent by our immediate past. In this immediate past, the British control over a large part of the country becomes an important determining factor. Some of the cultural and legal changes that took place as a result of British rule continue to affect our life even today. The rails, the club life, the imperial buildings like the Rashtrapati Bhavan and the Parliament are reminiscent of the British rule in India. Many food items like bread, tea and cake that we consume today are a direct result of our interaction with Europeans during the British rule. If you look around yourself, you will be surprised to know that a large number of costumes prevalent in urban India were adopted during the British rule, for example, trousers, coats and ties. The idea of introducing Indian civil service started during this period. The Indian armed forces still retain many aspects of European training and culture. The medium of our instruction or learning itself is predominantly English. The Supreme Court and the High Court pass their judgments in English. This language itself is a legacy of the British rule and continues to be the lingua franca of Indians seeking employment in their own country.

INTEXT QUESTIONS 5.4

1. Identify two reasons for protest movements by peasants and tribal groups in India.
2. How did the British policy of Divide and Rule affect the national interest of the country? Explain in 30 words.

WHAT YOU HAVE LEARNT

- The British came to India as traders, but also had territorial ambitions. They gradually gained control over the whole of India by using various means like direct conquest, annexation and diplomacy.
- The Battle of Plassey in 1757 marked the beginning of the political dominance of the British in India. British rule had a deep impact on the political and social life of the Indians.
- The economic impact of British rule was most far-reaching. It destroyed the traditional economy of India and drained India's wealth to Britain. The economic policies of the British also affected the classes of peasants, artisans very adversely.
- The discontentment that resulted from British Rule gave rise to a series of resistance movements against the British. The Sanyasi and Fakir uprisings, the Farazi movements, the Wahabi movement and the Santhal rebellion are some examples of resistance to British rule.
- The war of 1857 had to end in defeat due to the military and political weaknesses of the Indians.

TERMINAL EXERCISES

1. How did the land revenue policies of the British affect the life of the peasants?
2. Distinguish between Permanent Settlement and Mahalwari System.
3. How did English education contributed in the rise of nationalism in India?
4. Examine the reasons for the success of the English language in the country?
5. Do you agree with the fact that British impact could be seen even today? If yes, how?

ANSWERS TO INTEXT QUESTIONS

5.1

1. (a) (iv)

(b) (iii)

2. To find raw materials for their industries in Britain and markets for their finished goods.

3. Doctrine of Lapse and Subsidiary Alliance.

5.2

1. (a) No because the cheap foreign goods were a threat to Indian handloom. Also, Indian weavers suffered much loss.

(b) No because the high revenue rates led many peasants to revolt against the British rule. Though the British Empire benefitted economically, it had to suffer politically in the long run.

(c) No because rice and wheat are food crops.

(d) Yes because when the peasants failed to pay back their loan their lands passed into the hands of the money lending class.

2. The main purpose was to connect trading ports and industrial towns to villages from where they got their raw materials, that is, cash crops. It ensured its easy and fast transport. Also, finished goods from the trading ports could be taken to various markets.

5.3

1. (a) (iv)

(b) (iii)

(c) (i)

(d) (ii)

2. Asiatic Society of Bengal founded by William Jones in 1784.

Fort William College founded by Lord Wellesley in 1800.

3. The practice of sati, wherein the wife had to jump at her husband's funeral fire, was banned in 1829.

Sharda Act, which raised the marriageable age of girls to 14 and boys to 18 thereby preventing child marriage, was passed in 1929.

5.4

1. (a) The exploitative nature of the British with their heavy taxation and high revenue rates on the peasants.

(b) Various extortion policies and extension of British authority to tribal lands.

2. The British policy of Divide and Rule led to the division of the country on the basis of religion. The relationship between the Hindus and the Muslims suffered with the British pitching native against native to continue their rule.

6 RELIGIOUS AND SOCIAL AWKENING IN COLONIAL INDIA

Read a conversation between Mimi, a thirteen year old girl, and her grandmother.

Mimi: “Which college did you go to read Grandma?”

Grandmother (smiling): “I never went to college, my dear. I only studied up to class 6 and was married when I was of your age.”

Mimi (shocked): “Married at thirteen! That is illegal, Grandma! Did you not protest?”

Grandmother: “Things were different at that time besides many of my friends got married at the same age.”

This made Mimi curious about the practices prevalent in the society when her grandmother was a child. She also wondered how things changed over a period of time. Who were the people responsible for bringing this change? Mimi wanted to know all this and more. In this lesson you will read how reforms were introduced in the 19th and 20th century in India. You will also read about the impact of these reforms on the society.

OBJECTIVES

After reading this lesson, you will be able to:

- identify the social practices that existed in our society during the 19th century;
- discuss the importance of socio-religious reform movements during the 19th and early 20th century in raising awareness about prevalent social practices;
- explain the efforts of the reformers to deal with issues like caste system, child marriage, sati pratha, through legislation and other means;
- discuss the role of reformers from the 19th century onwards in promoting school education in India;
- analyse the impact of the reform movement on Indian society.

6.1 SOCIETY IN THE EARLY 19TH CENTURY

The Indian society, which you see in 2012, is very different from the one in the first half of the 19th century. Two major social causes prevented the society's progress. These were lack of education and subordination of women. Many sections of the Indian society were rigid and followed certain practices which were not in keeping with humanitarian values.

6.1.1 Lack of Education

Majority of people in those days were illiterate. All over the world education was in the hands of a very small number of people. In India also, education was limited to a handful of men belonging to the upper castes. Brahmins in India had access to the Vedas which were written in Sanskrit. It was a language known only to them. Religious texts were also controlled by these people. So they interpreted them in a way that benefitted them. Expensive rituals, sacrifices and practices after birth or death were outlined by this priestly class. It was mandatory for everyone to perform these rituals in the belief of a better life after death. Nobody could question the Brahmin priests because nobody knew what was written in the scriptures. Similarly in Europe, the Bible was written in Latin. It was the language of the Church and their priests interpreted the religious texts accordingly. And that is why, as a reaction, Europe saw the Renaissance and the Reformation Movement about which you have read earlier in this book. Even ideas like liberty, equality, freedom and human rights were introduced in Europe by various revolutions which took place there.

6.1.2 Position of Women

Girls and women today have better opportunities for their development. They have more freedom to study and work outside of home. However, way back in the 19th century the life was much harder for majority of the women. Certain social practices like female infanticide, child marriage, sati pratha and polygamy were prevalent in some sections of Indian society. Female infanticide or killing of a girl child was a very common practice. Girls who survived were often married at a very young age and often to men who were much older. Polygamy, a practice of a man having more than one wife was an accepted norm among many castes and religion. In some parts of the country Sati Pratha was practiced in which a widowed woman was compelled to burn herself on the funeral pyre of her husband. Those women who could escape the practice of Sati had to live a very miserable life. Women had no right to property. They also had no access to education. Thus, in general, women had a subordinate position in the society. The fear of the invader and loss of family honor was one reason. The other reasons were dowry and sharing of ancestral property which further deteriorated their status.

It was evident that certain practices and superstitions were preventing Indians from progressing. Reforms were needed to bring a change in the social and religious lives of the people.

Do you know

Infanticide: The killing of an infant born alive; the killing of a newly born child;

Child Sex Ratio: The number of girls per 1000 boys in the 0-6 years age group.

In India, the ratio has shown a sharp decline from 976 girls to 1000 boys in 1961 to 914 girls to 1000 boys as per the 2011 census. As per global terms, the normal child sex ratio should be above 950.

ACTIVITY 6.1

According to the 2011 census, the states with the highest and the lowest sex ratio is Kerala with 1084 females per 1000 males, and Haryana with 877 females per 1000 males. Find out any 5 states having sex ratio of less than 914 females per 1000 males.

Visit the website www.censusindia.gov.in for information.

6.2 A DESIRE TO CHANGE: SOCIO-RELIGIOUS AWAKENING

What do you think could be the reasons that led to the awakening of the people against discrimination and inequality? Reformers like Raja Rammohan Roy, Ishwarchandra Vidyasagar, Swami Dayanand Saraswati, Jyotiba Phule, Sir Syed Ahmed Khan and Pandita Ramabai understood that ignorance and backwardness in the society was responsible for hindering its progress and development. This realisation was reinforced when they came in contact with the Europeans and found that life was very different in other parts of the world. When the British missionaries started spreading Christianity, they criticized and questioned many of our social and religious practices. Many of their ideas were accepted by our reformers. The desire to reform the society was so strong that these reformers were now ready to face challenges as well as resistance from the orthodox Indians. They started several movements to bring desirable changes in the society.

These were made possible by enlightened people like Swami Dayanand Saraswati and Raja Ram Mohan Roy. They studied the religious scriptures and criticized the prevalent religious and social practices. According to them, society should be based on the concepts of liberty and equality both for men and women and this was possible

only by the spread of modern and scientific education especially among the women. These movements came to be called socio-religious movement because the reformers felt that no change is possible in a society without reforming the religion. We will read further to know why education and other privileges were available to only the upper classes in society.

6.2.1 The Caste System

Since ancient times, Indian society had a caste system which was originally occupation based. Over a period of time, interpretation of religious texts by the upper caste and lack of access to religious scriptures by the lower caste led to several superstitious practices in the name of religion. This also resulted in power being concentrated in upper caste and exploitation of the lower caste.

Hindu society was based on the Varna system, that is, Brahmin, Kshatriya, Vaishya and Shudra. According to this system people were divided on the basis of their occupation. The people who were engaged in praying and worshipping the Gods were categorized as Brahmins. Those who were engaged in wars were called Kshatriyas. Those whose occupation was agriculture and trading were known as Vaishyas and those who used to serve the upper three Varnas were known as Shudras. This caste system, which was purely based on occupation, had become hereditary. A person born in a particular caste could not change his/her caste even though they might have changed their work. This created inequality in society. It also led to the exploitation of the lower castes. Therefore, caste system had become a major hindrance in the development of a healthy, democratic and progressive society.

Many socio-religious reformers and organizations stepped forward to fight against this social practice. Organizations, such as Brahmo Samaj, Arya Samaj, Prarthana Samaj, Ramakrishna Mission and reformers like Jyotiba Phule, Pandita Ramabai, Sri Narayana Guru, Periyar, Vivekananda, Mahatma Gandhi and many others strongly protested against its rigidity. Most reformers considered the prevalent caste practices as against the original spirit of the Vedas and other scriptures. They considered the caste system as irrational and unscientific. They felt it was against the basic rules of humanity. The untiring and relentless efforts of the social reformers helped people to become more tolerant towards each other.

Do you know

Article 14 of the Constitution states that, 'it shall not discriminate against any citizen on the grounds of religion, race, caste, sex, place of birth or any of them.' This constitutional provision has facilitated the participation of the marginalized in the social, political and economic development of the country.

6.2.2 The Prevalent Religious Practices

Most of the social practices were done in the name of religion. Hence, social reform had no meaning without religious reform. Our reformers were deeply rooted in Indian tradition and philosophy and had a sound knowledge of the scriptures. They were able to blend positive Indian values with western ideas and the principles of democracy and equality. On the basis of this understanding, they challenged the rigidity and superstitious practices in religion. They cited the scriptures to show that the practices prevalent during nineteenth century find no sanction in them. The enlightened and the rationalistic amongst them questioned the popular religion which was full of superstitions and was exploited by the corrupt priests. The reformers wanted society to accept the rational and scientific approach. They also believed in the principle of human dignity and social equality of all men and women.

6.2.3 The Educational Scenario

In the 19th century, many children, especially girls, were not sent to school. Education was imparted in traditional Paathshalas, Madrasas, Mosques and Gurukuls. Religious Education was imparted along with subjects like Sanskrit, Grammar, Arithmetic, Religion and Philosophy. Science and technology had no place in the curriculum. Many superstitious beliefs existed in the society. In certain communities girls were not allowed to be educated. It was thought that educated women would soon become widows after marriage! But in reality lack of education and awareness was the root cause of social and religious backwardness among the Indians. So it was important to promote modern education.

All socio-religious reformers whether Hindus, Muslims, Sikhs or Parsis aimed at the spread of modern education. They believed that education was the most effective tool to awaken and modernize our society.

INTEXT QUESTIONS 6.1

1. List any two social practices against which the reform movement began.
2. Why the caste system was considered irrational and unscientific?
3. What was the basis of the reformers' criticism of rigidity in religion?
4. Read the excerpt below and answer the given question:

Dr. Bhim Rao Ambedkar belonged to a poor Mahar family, considered an untouchable caste. He had his college education in India and later earned degrees and doctorates for his study and research from Columbia University

and the London School of Economics. Dr. Ambedkar was the Chairman of the Drafting Committee of the Indian Constitution. Despite facing social and financial hardships, Dr. Ambedkar spent his whole life fighting against social discrimination and was awarded the Bharat Ratna posthumously in 1990.

(i) In addition to education, which other attributes (qualities) enabled Dr. Ambedkar to withstand the discrimination and contribute to the society?

ACTIVITY 6.2

Cite at least two instances where you observed caste-based discrimination. Note down your reactions in 50 words.

6.3 SOCIO RELIGIOUS REFORMERS OF THE 19TH CENTURY

Many Indian thinkers and reformers came forward to bring reforms in society.

According to them society and religion were interlinked. Both needed to be reformed to achieve positive growth and development of the country. Hence our reformers took the initiative to awaken the Indian masses. Some of these reformers founded organizations to spread the awareness about which you will read now. Another major contribution of these reformers was in the field of education.

6.3.1 Raja Ram Mohan Roy

Raja Ram Mohan Roy was born in a Brahmin family of Bengal. He knew many languages and had read Quran, Bible and the New Testament along with Hindu scriptures in great depth. Liberal education exposed him to different cultures and philosophies. Deeply moved by the plight of his brother's widow, who had been forced to commit Sati, he was determined to uproot this social practice. This led him to challenge other unfair social and religious practices prevalent at that time. He founded Brahmo Samaj in 1828. He was the first person to take an initiative to challenge the practice of Sati and it soon became his life-long crusade. He mobilized public opinion and cited the scriptures to show that this practice had no sanction in Hindu religion. In the process he faced displeasure and enmity of orthodox



Figure 1Raja Ram Mohan Roy

Hindus. In his efforts he was supported by the then Governor General of India, Sir William Bentinck. A law was passed in 1829 making Sati illegal and punishable. He also made efforts to advocate widow re-marriage and condemned child marriage.

He represented a synthesis of the Eastern and the Western thoughts. An authority on the Vedas, Vedantas and Upanishads, he also took up the best in all religions as he was well versed in the scriptures. He advocated the importance of Vedas in reforming religion and upheld the fundamental unity among all religions. He held that all the principal ancient texts of the Hindus preached Monotheism (worship of one God) and opposed Polytheism (belief in more than one God). He was critical of idol worship and observance of meaningless rituals.

He strongly advocated the learning of English language, literature, scientific advancement and technology to modernize India. He maintained an English school in Calcutta at his own cost. Subjects like mechanics and philosophy were also taught among other subjects. A Vedanta college was opened in 1825. Raja Ram Mohan Ray helped in the opening of the Hindu college in Calcutta for higher learning.

6.3.2 Ishwar Chandra Vidyasagar

A great scholar and reformer, Ishwar Chandra Vidyasagar dedicated his entire life to the cause of social reforms. The first Hindu Widow Remarriage Act was introduced in 1856 owing to his relentless efforts. He also protested against child-marriage and campaigned against polygamy. Though he did not concern himself much with religious questions, he was against all those who opposed reforms in the name of religion.

Though he was a Sanskrit scholar, his mind was open to the best in Western thought. His major contribution was in the field of education. He encouraged the study of Sanskrit and Bengali literature. He also introduced the study of Western thought in the Sanskrit college to inspire the Indians to shake off their age-old beliefs and modernize their ideas. He believed that condition of women could be improved only through their education. His efforts in this direction were praise worthy. He helped in opening approximately 35 girls' school in Bengal. He was a champion of women's education. The admission of non-Brahmin students in the Sanskrit College was made possible through his efforts.



Figure 6.2 Ishwara Chandra Vidyasagar

6.3.3 Swami Dayanand Saraswati

The Arya Samaj founded by Swami Dayanand Saraswati in 1875 undertook the task of reforming Hindu religion in North India. He considered Vedas to be infallible and

the foundation of all knowledge. He rejected all those religious thoughts which were in conflict with the Vedas. He believed that every person had the right to have direct access to God. It started the Shuddhi Movement to bring back those Hindus who had converted to Islam and Christianity. Satyarth Prakash was his most important book.



Figure 6.3 Swami Dayanand Saraswati

Arya Samaj advocated social reform and worked to improve the condition of women. It fought untouchability and the rigidities of the hereditary caste system and promoted social equality. The use of Hindi language in which he wrote and preached made his ideas accessible to the people of Northern India. Arya Samaj also had a major role to play in the national movement as it inculcated a spirit of self respect and self reliance among the people.

The role of Arya Samaj was commendable in promoting education among the masses. Some of Swami Dayanand's followers later started a network of schools and colleges called D.A.V. (Dayanand Anglo Vedic) in the country to impart education on western lines without compromising on the Vedic teachings. They encouraged teaching of English and modern science along with Sanskrit and Vedic education.

6.3.4 Ramakrishna Paramhansa and Swami Vivekananda

Ramakrishna Paramhansa (1836-1886) highlighted the essential unity of religions and the need to lead a spiritual life. He believed that the different religions of the world are only different ways to reach the same god. Swami Vivekananda (1863-1902) was his foremost disciple.

The history of the world is the history of a few men who had faith in themselves. That faith calls out the Divinity within. You can do anything. You fail only when you do not strive sufficiently to manifest infinite power. As soon as a man or a nation loses faith in himself or itself, death comes. Believe first in yourself, and then in God.

– Swami Vivekananda.

Vivekananda was the first spiritual leader who thought beyond religious reforms. He felt that Indian masses needed secular as well as spiritual knowledge to empower them to believe in themselves. Vivekananda established the Ramakrishna mission after the name of his guru Ramakrishna Paramhansa. Through his speeches and writings, he brought out the essence of Hindu culture and religion. He believed in the spirit of Vedanta and the essential unity and equality of all religions. He laid stress on the removal of religious superstitions, obscurantism, and outdated social customs. He tried to remove caste rigidities, and untouchability. He motivated the people to respect women while he himself worked for women's upliftment and education. Vivekananda attached primary importance to the removal of ignorance among the people.



6.3.5 Sir Syed Ahmed Khan

Sir Syed Ahmed Khan believed that the religious and social life of the Muslims could be improved only by imbibing modern western scientific knowledge and culture. His major concern was the removal of social and educational backwardness among the Muslims. He worked hard to raise the status of the Muslim women. He was against

the purdah system, polygamy, easy divorce and lack of education among the girls. Though he was opposed by the orthodox Muslims, he made commendable efforts in promote women's education. He tried to interpret the Quran in the light of reason and spoke out against fanaticism and ignorance. He also initiated social reforms for the upliftment of Muslim society.

Throughout his early life, he advocated the study of English language even against the opposition of the orthodox Muslims. He considered that only modern education could lead Muslims towards progress. He established an English school in Ghazipur (present day Uttar Pradesh) in 1864. He started the Mohammadan Anglo-Oriental College (M.A.O.) at Aligarh in 1875 which later developed into the Aligarh Muslim University. It provided education in humanities and science through English medium. He also established a scientific society for translating English books. He also published a journal for spreading awareness among the Muslims towards social reforms especially towards modern education. He started the Mohammadan educational conference for spreading liberal ideas among the Muslims. The movement for reform started by him is known as the Aligarh Movement which proved to be an important step towards social and political awakening among the Muslims.

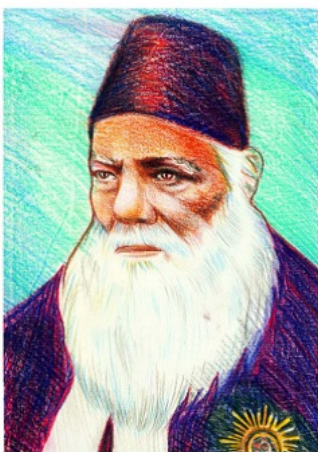


Figure 6.5 Sir Syed Ahmed Khan

6.3.6 Jyotirao Govindrao Phule

Jyotirao Govindrao Phule from Maharashtra worked to attain equal rights for peasants and the lower caste. He and his wife, Savitribai Phule, are most known for their efforts to educate women and the lower castes as well as the masses. He first educated his wife, after which both of them opened a school for girls in India

in August 1848 took up the cause of women and started a girls' school in Poona (Pune) in 1851. He is also remembered for his efforts towards promoting widow remarriage. In September 1873, Jyotirao along with his followers formed the Satya Shodhak Samaj (Society of Seekers of Truth) with the main objective of liberating the lower castes and protecting them from exploitation and atrocities. He was popularly known as Jyotiba.

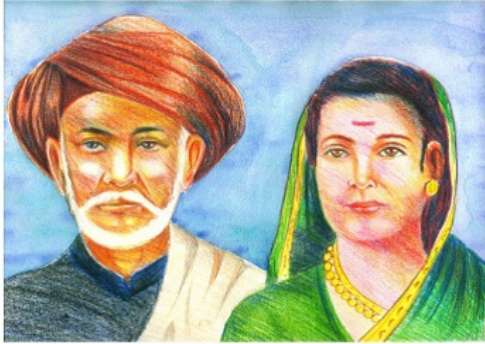


Figure 6.7 Jyotiba Phule and his wife Savitribai Phule

6.3.7 Justice Mahadev Govind Ranade

Justice Mahadev Govind Ranade established the Poona Sarvajanic Sabha and the Prarthana Samaj in 1867 in Bombay to bring about religious reforms. It sought to remove caste restrictions, abolish child marriage, the shaving of widows' heads, the heavy cost of marriages and other social functions; encourage education of women and promote widow remarriage. Like Bramho Samaj, it advocated the worship of one God. It condemned idolatry and the domination of the priestly castes in religious matters. He introduced vernacular languages in the University curriculum which made higher education accessible to Indians. He attempted to reform the rigid traditions in the society without destroying the social atmosphere of India's rich cultural heritage. He was also a founding member of the Indian National Congress.

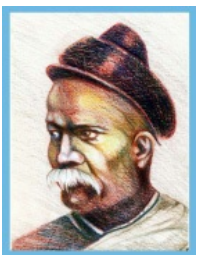


Figure 6.8 Justice Mahadev Ranade

6.3.8 Pandita Ramabai

In Maharashtra, Pandita Ramabai, a renowned social reformer, fought for the rights of women and spoke against the practice of child marriage. She promoted girls

education and started the Arya Mahila Samaj in 1881, in Pune, to improve the condition of women, especially child widows. In 1889, she established the Mukti Mission, in Pune, a refuge for young widows who had been deserted and abused

by their families. She also started Sharda Sadan which provided housing, education, vocational training and medical services to widows, orphans and the visually challenged. She also wrote many books showing the hard life of women, including child brides and child widows. The Pandita

Ramabai Mukti Mission is still active today.



Figure 6.9 Pandita Ramabai

6.3.9 Annie Besant

Annie Besant was a member of the Theosophical Society and came to India for the first time in 1893. This movement was led by Westerners who glorified Indian religious and philosophical traditions and encouraged vernacular languages and literary works to instill a sense of pride in Indian heritage and culture. It aroused political awakening and helped Indians recover their self-confidence and get a sense of pride in their own country. The society also preached the universal brotherhood of man. It made immense contribution towards the development of Modern India. Annie Besant became the President of the Theosophical Society in 1907. Besant opened a college for boys, the Central Hindu College at Banaras based on Theosophical principles with the aim to build a new leadership for India. The students studied religious texts along with modern science. The college became a part of the new University, the Banaras Hindu University from 1917.



Figure 6.10 Annie Besant

ACTIVITY 6.3

Identify any two social practices or superstitions which are still prevalent despite several reform movements and government regulations. What can you, as an

individual do to challenge these social practices or superstitions?

Clue: Social practices or superstitions like dowry, gender discrimination, illiteracy, child marriage, female infanticide.

Possible Action: Lead by personal example, organise group discussion; write a letter to the newspaper, assist people in distress in public places etc.

6.3.10 Muslim Reform Movement

A few movements were launched which aimed to spread modern education and removing social practices like the polygamy. The Mohammedan Literacy Society of Calcutta was founded by Abdul Latif in 1863. It was one of the earliest organisations that promoted modern education among the upper and middle class Muslims. It also played an important role in promoting Hindu-Muslim unity. Shariatullah of Bengal, leader of the Faraizi movement in Bengal,

took up the cause of the peasants. He also condemned the evils of the caste system among the Muslims.

There were several other socio-religious movements which in one way or the other helped the national awakening of the Muslims. Mirza Ghulam Ahmed had founded the Ahmediya Movement in 1899. Under this movement, a number of schools and colleges were opened all over the country. They emphasised the universal and humanitarian character of Islam. They favoured the unity among Hindus and Muslims.

One of the greatest poets of Modern India, Muhammad Iqbal (1876-1938)

influenced the philosophical and religious outlook of several generations through his poetry.



Figure 6.11 Muhammad Iqbal

Do you know

Muhammad Iqbal wrote the famous song 'Saare jahaan se achcha hindustaan hamaara...'

6.3.11 The Akali Reform Movement

The formation of the two Singh Sabhas at Amritsar and Lahore in the 1870's was the beginning of religious reform movement among the Sikhs. The setting up of Khalsa College in Amritsar in 1892 helped promote Gurmukhi, Sikh learning and Punjabi literature. The college was set up with help from the British. In 1920, the Akali movement which rose in Punjab, started the cleansing of the management of the Gurudwaras or Sikh shrines. A powerful Satyagraha in 1921 against the Mahants forced the Government to pass a new Gurdwara Act in 1925. With the

aid of this act and by direct action, they freed the sacred places from the control and domination of corrupt Mahants.

6.3.12 Reform Movement among the Parsis

Narouji Furdonji, Dadabhai Naoroji, S.S. Bengalee and others began religious reforms among the Parsis in Mumbai in the middle of the 19th century. In 1851, they founded the Rahnumai Mazdayasnan Sabha or Religious Reform Association. They played an important role in the spread of education, especially among girls. They also campaigned against the orthodox practices in Parsi religion. In course of time, the Parsis became one of the most progressive sections of Indian society.



Figure 6.12 Dadabhai Naoroji

ACTIVITY 6.4

Make a list of 10 eminent personalities who have contributed towards making our society a better place to live in. Also find out the field in which they have contributed.

INTEXT QUESTIONS 6.2

1. Fill in the blanks with correct answer:

(i) He did not represent the synthesis of the thought of East and West

- (a) Swami Vivekananda (b) Rammohan Roy
(c) Dayanand Saraswati (d) Iswarchandra Vidyasagar

(ii) He did not emphasize the infallibility of the Vedas

- (a) Swami Vivekananda (b) Ramakrishna Paramhans
(c) Dayanand Saraswati (d) Syed Ahmed Khan

(iii) The movement started to free the sacred places from the control and domination of corrupt Mahants

- (a) Akali Movement (b) Caste reform movement
(c) Shuddhi movement (d) Satyagraha movement.

2. Match the following:

(i) Bramho Samaj (a) Swami Vivekananda

(ii) Arya Samaj (b) Annie Besant

(iii) Ramakrishna Mission (c) Swami Dayanand Saraswati

- (iv) Theosophical Society (d) Jyotiba Phule
- (v) Akali Movement (e) Pandita Ramabai
- (vi) Satya Shodhak Samaj (f) Raja Ram Mohan Roy
- (vii) Aligarh Movement (g) Sikhs
- (viii) Arya Mahila Samaj (h) Justice Mahadev Govind Ranade
- (i) Sir Sayed Ahmed Khan
- (j) Dadabhai Naoroji

3. Write any two limitations of the reform movements.

4. Read the excerpt below and answer the given questions:

Ramvati is working as a peon in NIOS office. She got married at the age of 21, but unfortunately her husband passed away when she was 28. She was offered her husbands' job at NIOS because she had completed her secondary school education. With this job Ramvati is now able to look after her children and herself. She leads a dignified life and her children are proud of their mother.

(a) What could have happened if Ramvati had got married as a child?

(b) If Ramvati was not allowed to work outside home, what could have happened to her and her family?

6.4 IMPACT OF THE REFORM MOVEMENTS ON INDIAN SOCIETY

The reform movements were able to create socio-religious consciousness among the Indians during the 19th century. All these movements laid stress on rational understanding of social and religious ideas and encouraged a scientific and humanitarian outlook. The reformers felt that modern ideas and culture could be best imbibed by integrating them into Indian cultural streams. The introduction of modern education guided the Indians towards a scientific and rational approach to life. All the movements worked to improve women's status and criticized the caste system especially the practice of untouchability. These movements looked for social unity and strived towards liberty, equality and fraternity.

Importance was given to education especially women's education. Some legal measures were introduced to raise the status of women. For example Sati Pratha and infanticide were declared illegal. Widow Remarriage was made possible by a law passed in 1856 and condition of widows improved. A law passed in 1872, sanctioned inter-caste and inter-communal marriages. Marriageable age of girls was raised to ten by a law passed in 1860. Further, Sharda Act was passed in 1929 preventing child marriage. According to it, a girl below 14 and a boy below 18 cannot

be married. The impact of the efforts of these reformers was most evident in the National Movement. A large number of women came out to take part in the freedom struggle. The role of women like Captain Laxmi Sehgal of Indian National Army, Sarojini Naidu, Annie Besant, Aruna Asaf Ali and many others was extremely important in the freedom struggle. Women now came out of the purdah and took up jobs.

The persistent efforts of the reformers had immense impact on the society. The religious reform movements instilled in the minds of Indians greater self-respect, selfconfidence and pride in their country. These reform movements helped many Indians to come to terms with the modern world. People became more conscious of their identity as Indian. It was ultimately responsible for their united struggle against the British in the freedom movement of India.

In the 20th century and especially after 1919, the Indian National Movement became the main propagator of social reform. Indian languages were used to reach the masses. They also used novels, dramas, short stories, poetry, the press and in the 1930's used the cinema to spread their views. The movements promoted the feelings of self-confidence, self-respect, awareness and patriotism and thereby developed a feeling of national consciousness. Do you remember reading some of the novels and seeing some films related to Independence Movement. For a beginning start making a list of some such authors and their book. Make a list of some films also. Also make a list of some songs. May be this clue will help you "Insaf ki dagar pe, Bachhon dikhao chal ke, yeh desh hai tumhara, neta tumhi ho kal ke", or "Vande Mataram" sung by Lata Mangeshkar in the same film.

These reform movements had certain limitations. It affected a very small percentage of the population, mostly the educated class and could not reach the vast masses of the peasantry and urban poor who continued to live in the same conditions.

Humanitarian: Having the concern for or helping to improve the welfare and happiness of all people.

Liberty: Freedom to act or think as you chose.

Fraternity: A group of people with something in common.

WHAT YOU HAVE LEARNT

- The Indian society was challenged by issues like superstitious beliefs, backwardness and evil practices such as Sati or widow immolation and untouchability.
- Some educated Indians like Raja Rammohan Roy, Iswarchandra Vidyasagar, Jyotiba Phule, Swami Dayanand Swaraswati, Sir. Syed Ahmed Khan, Swami

Vivekananda took the initiative to reform the society by introducing reforms in the religion first as the social practices were often driven by religious beliefs.

- All the socio-religious reformers emphasized upon modern education and scientific knowledge to reform the society. Women's education has been specially emphasized upon to improve the position of the women in the society.
- The impact of the reform movements in the society was immense. Due to the persistent efforts of the social reformers many such practices like Sati, untouchability was abolished by law. Widow-remarriage was introduced. Modern education was encouraged in the society.
- Despite all the efforts, India still require more involvement of the educated people in spreading awareness. The role of media is very crucial in this regard.

TERMINAL EXERCISES

1. Explain the social practices that existed in 19th century India.
2. Why do you think reforms were needed to awaken our society?
3. Why do you think that the social reform movement had no meaning without religious reforms?
4. Do you think the reformers were able to bring change in the Indian society?
5. How did the socio-religious reform movements lead to the National Movement?
6. Explain the role of following reformers in challenging caste system and advocating widow remarriage:
 - (a) Raja Ram Mohan Roy
 - (b) Ishwar Chandra Vidyasagar
 - (c) Jyotiba Phule
7. Identify the common features amongst the following reformers:
 - (a) Theosophical Society and Ramakrishna Mission
 - (b) Akali Movement and Arya Samaj
8. Explain the hindrances in the growth of women's education in the 19th Century India.
9. Who introduced English education among the Muslims? Explain his/her contribution in this area.
10. Study the map carefully and answer the questions that follow:
 - (a) Name the places where Brahmo Samaj, Arya Samaj, Prarthana Samaj and M.A.O. College became popular.

(b) Name the social reformers who were active in Western India and also mark the places where they were active.



Figure 6.13 Map of india

ANSWERS TO INTEXT QUESTIONS

6.1

1. Sati, Caste System, Child Marriage, Plight of Widows.
2. Because it was against the basic tenets of humanity.
3. Courage, determination, motivation and a vision to achieve goals.
4. They found that the scriptures do not sanction rigidity and superstitions.

6.2

1. (i) (c) (ii) (d) (iii) (a)

2. (i) (f) (ii) (c) (iii) (a) (iv) (b) (v) (g) (vi) (d)

(vii) (i) (viii) (e)

3. (a) She would have been illiterate, would have been married at an early age, would have many children and possibly had been suffering due to ill health as a result of child-birth at a very early age. She would probably have been dependant on her parents or in-laws for her survival.

(b) She would be dependent on others resulting in low socio-economic status.

4. (a) It affected a very small percentage of the population, mostly the educated class.

(b) It did not reach the masses.

7 POPULAR RESISTANCE TO THE BRITISH RULE

British colonial rule had a tremendous impact on all sections of Indian society. Can you imagine being ruled by some strangers year after year? No, we cannot. Most of us were born after 1947 when India had already become independent. Do you know when the British conquered India and colonised its economy they faced stiff resistance from the people. There were a series of civil rebellions. These rebellions were led by rulers who were deposed by the Britishers, ex-officials of the conquered Indian states, impoverished zamindars and poligars. It brought together people having different ethnic, religious and class background against the British rule. In this lesson, we will read about some important popular uprisings, their nature and significance. We will also read about the uprising of 1857 which had a major impact on our National Movement.

OBJECTIVES

After reading this lesson, you will be able to:

- discuss the causes of the popular resistance movements against the colonial rule before 1857;
- explain the nature and significance of the peasant and tribal revolts;
- identify the issues that led to the Revolt of 1857; and
- analyse the importance and significance of the Revolt of 1857.

7.1 THE EARLY POPULAR RESISTANCE MOVEMENTS AGAINST COLONIAL RULE (1750-1857)

Can you think of a reason why these resistance movements are called popular? Was it because of the large number of people who participated in them? Or was it because of the success they met with? After reading this section you will be able to arrive at a conclusion.

7.1.1 Causes of Popular Resistance Movements

Why do people resist? They resist when they feel that their rights are being taken away. That means all resistance movements started against some form of exploitation.

British rule whose policies had undermined rights, status and economic position of Indians symbolised this exploitation. The protest and resistance was mainly offered by the displaced ruling classes, peasantry and tribals. For example, when Warren Hastings attacked Banaras and imprisoned King Chet Singh to fulfill his unjustified demand of money and army, the people of Banaras rebelled. In Madras Presidency, Poligars rebelled, when the British tried to snatch away their military and land rights. Interference in religious practices was another cause of these popular rebellions. Often these revolts were anti-Christian. This was due to the socio-religious reforms introduced by the British which were unacceptable to the people.

In some other rebellions, difference between the religion of the ruler and exploited classes became the immediate cause for the rebellion. This happened in Mappila Rebellion of Malabar region. Here the Muslim peasantry fought against the Hindu landlords and moneylenders. In the next section we shall read about the nature of this movement.

7.1.2 Nature of Popular Resistance Movements

Violence and plunder were the two most popular tools used by the rebels to express their resistance against their oppressors. Lower and exploited classes often attacked their exploiters. They were the Britishers or the zamindars or the revenue collecting officials, wealthy groups and individuals. Santhal Rebellion saw mass scale violence where account books of moneylenders and government buildings were burnt and their exploiters punished.

In a previous lesson we read about the land policies of the British. The purpose was to extract as much money as possible from the peasants and tribal people. This caused so much unrest among the peasants and the tribals that they started expressing their resentment against the British.

It is important to know that these popular resistance movements aimed at restoration of old structures and relations which had been done away with by the British. Each social group had its own reasons to raise its voice against the colonial powers. For example, displaced zamindars and rulers wanted to regain their land and estates. Similarly, the tribal groups rebelled because they did not want the traders and moneylenders to interfere in their lives.

7.2 PEASANT MOVEMENTS AND TRIBAL REVOLTS IN THE 19TH CENTURY

You would be surprised to know that beginning with the Sanyasi Rebellion and

Chuar Uprising in Bengal and Bihar in the 1760s, there was hardly a year without an armed

opposition. From 1763 to 1856 there were more than 40 major rebellions apart from hundreds of minor ones. These rebellions were, however, local in character and effects. They were isolated from each other because each rebellion had a different motive. We will now read more about these movements in the next section of this lesson.



Figure 7.1 Map of India citing various places of Peasant and Tribal Revolts in the 19 th century

7.2.1 Peasant Revolt

In an earlier lesson you read about the various land settlements and the adverse effects they had on the Indian peasantry. The Permanent Settlement had made the zamindar the owner of the land. But this land could be sold off if he failed to pay the revenue

on time. This forced the zamindars and the landlords to extract money from the peasants even if their crops failed. These peasants often borrowed money from the moneylenders, who were also called mahajans. The impoverished peasants could never pay back this borrowed money. This led to many hardships like extreme poverty and being forced to work as bonded labourers. Hence the lower and exploited classes often attacked their exploiters. Failure to pay by the zamindars also meant that the land would be taken away by the British. The British then would auction this land to the highest bidder, who often came from the urban areas. The new zamindars from the city had little or no interest in the land. They did not invest money in seeds or fertilizers to improve the fertility of the land but only cared to collect as much revenue as they could. This proved destructive for the peasants who remained backward and stagnant.

To get out of this situation, the peasants now started producing commercial crops like indigo, sugarcane, jute, cotton, opium and so on. This was the beginning of commercialisation of agriculture. The peasants now depended on merchants, traders and middlemen to sell their produce during harvest time. As they shifted to commercial crops, food grain production went down. Less food stocks led to famines. It was therefore not surprising that the hungry peasants revolted. Let's read more about some peasants revolts which took place on account of the British policies:

(i) The Faqir and Sanyasi Rebellions (1770–1820s): The establishment of British control over Bengal after 1757 led to increase in land revenue and the exploitation of the peasants. The Bengal famine of 1770 led peasants whose lands were confiscated, displaced zamindars, disbanded soldiers and poor to come together in a rebellion. They were joined by the Sanyasis and Fakirs.

The Faqirs were a group of wandering Muslim religious mendicants in Bengal. Two famous Hindu leaders who supported them were Bhawani Pathak and a woman, Devi Choudhurani. They attacked English factories and seized their goods, cash, arms and ammunition. Maznoom Shah was one of their prominent leaders. They were finally brought under control by the British at the beginning of the 19th century.

The Sanyasi Uprisings took place in Bengal between the periods of 1770-1820s. The Sanyasis rose in rebellion after the great famine of 1770 in Bengal which caused acute chaos and misery. However, the immediate cause of the rebellion was the restrictions imposed by the British upon pilgrims visiting holy places among both Hindus and Muslims.

(ii) The Indigo Rebellion (1859-1862): The British adopted many ways through which they could increase their profits. They also started interfering with the basic means of livelihood of the people. Not only did they introduce new crops, they also brought new techniques of farming. Heavy pressure was put on the zamindars and peasants to pay high taxes and grow commercial crops. One such commercial crop was Indigo. The cultivation of indigo was determined

by the needs of the English cloth markets. The discontent of the farmers growing indigo was mainly for three reasons:

- They were paid very low prices for growing indigo;
- Indigo was not lucrative as it was planted at the same time as food crops;
- And loss of fertility of the soil because of planting indigo.



Figure 7.2 Areas of Indigo Revolt in Bengal- Malda, Rajshahi, Pahna, Dacca, Nadia, Jessore, Khulna, 24 Parganas

As a result, food stocks declined. The peasants suffered at the hands of the traders and the middleman on whom they depended to sell their goods, sometimes at very low prices. They supported the zamindars to maintain their dominance and deal with their problems in administering those areas.

The peasants launched a movement for non cultivation of indigo in Bengal. Hindu and Muslim peasants together went on strike and filed cases against the planters. They were supported by the press and the missionaries. The government passed orders in November 1860, notifying that it was illegal to force the raiyats to cultivate indigo. This marked the victory for the rebels.



Figure 7.3 Indigo Cultivation in Bengal

(iii) Farazi Movement (1838-1848): This was the first ever no-tax campaign against the British Government led by Shariatullah Khan and Dadu Mian. Their band of volunteers fought heroically with the armed group of Indigo planters and zamindars. It brought together all the cultivators of Bengal against the tyranny and illegal extractions by the landlords.

(iv) Wahabi Movement (1830's-1860's): The leader of the movement was Syed Ahmed Bareilvi of Rae Bareilly who was greatly influenced by the teachings of Abdul Wahab of Arabia and Shah Waliullah, a Delhi saint. The movement was primarily religious in its origin. It soon assumed the character of a class struggle in some places, especially in Bengal. Irrespective of communal distinctions, peasants united against their landlords.

7.2.2 Significance of Peasant Revolt

The aggressive economic policies of the British shattered the traditional agrarian system of India and worsened the condition of peasants. The peasant revolts taking place in various parts of the country were mainly directed at these policies. Though these revolts were not aimed at uprooting the British rule from India, they created awareness among the Indians. They now felt a need to organise and fight against exploitation and oppression. In short, these rebellions prepared the ground for various other uprisings such as Sikh Wars in Punjab and finally the Revolt of 1857.

ACTIVITY 7.1

Resistance is shown by all of us in our day to day life. How is this resistance different from the resistance movements? What makes some resistance movements popular? Discuss these questions with your friends, peer group or family. Write a note of not more than 50 words on the discussion.

7.2.3 Tribal Revolts

Another group of people who revolted against the British rule were the tribals. The tribal groups were an important and integral part of Indian life. Before their annexation and subsequent incorporation in the British territories, they had their own social and economic systems. These systems were traditional in nature and satisfied the needs of the tribals. Each community was headed by a chief who managed the affairs of the community. They also enjoyed independence regarding the management of their affairs. The land and forests were their main source of livelihood. The forests provided them with basic items which they required for survival. The tribal communities remained isolated from the non-tribals.

The British policies proved harmful to the tribal society. This destroyed their relatively self-sufficient economy and communities. The tribal groups of different regions revolted against the Britishers. Their movements were anti-colonial in nature because they were directed against the colonial administration. The tribals used traditional weapons, mainly bows and arrows and often turned violent. The Britishers dealt severely with them. They were declared criminals and anti-social. Their property was confiscated. They were imprisoned and many of them were hanged. The tribal movement in India remained confined to some regions only. But it did not lag behind other social groups as regards participation in the anti-colonial movements. We shall now read about some major tribal revolts that took place against the British rule:

(i) The Santhal Rebellion (1855-57): The area of concentration of the Santhals was called Daman-i-Koh or Santhal Pargana. It extended from Bhagalpur in Bihar in the north to Orissa in the south stretching from Hazaribagh to the borders of Bengal. The Santhals like other tribes worked hard to maintain their lives in the forests and wild jungles. They cultivated their land and lived a peaceful life which continued till the British officials brought with them traders, moneylenders, zamindars and merchants. They were made to buy goods on credit and forced to pay back with a heavy interest during harvest time. As a result, they were sometimes forced to give the mahajan not only their crops, but also plough, bullocks and finally the land. Very soon they became bonded labourers and could serve only their creditors. The peaceful tribal communities were now up in arms against the British officials, zamindars and money lenders who were exploiting them. Sidhu and Kanu were leading Santhal rebel leaders.

They gave a heroic fight to the British government. Unfortunately, the Santhel Rebellion was crushed in an unequal battle but it became a source of inspiration for future agrarian struggles.



Figure 7.4 Tirka Manjhi Shows the picture of a man with bow and arrow

(ii) Munda Rebellion (1899-1900): One of the most important and prominent rebellion which took place after 1857 was the Munda Rebellion. The Mundas traditionally enjoyed certain rights as the original clearer of the forest which was not given to the other tribes. But this land system was getting destroyed in the hands of the merchants and moneylenders long before the coming of the British.

But when the British actually came into these areas they helped to destroy this system with a rapid pace when they introduced contractors and traders. These contractors needed people to work with them as indentured laborers. This dislocation of the Mundas at the hands of the British and their contractors gave birth to the Munda Rebellion. The most prominent leader of this rebellion was Birsa Munda who was more aware than the others as he had received some education from the Missionaries. He encouraged his tribe people to keep the tradition of worshipping of the sacred groves alive. This move was very important to prevent the Britishers from taking over their wastelands. For this, Birsa Munda fought against the moneylenders/mahajans and English officials.

He attacked Police Stations, Churches and missionaries. Unfortunately the rebels were defeated and Munda died in prison soon after in 1900. But his sacrifice did not go in vain. The Chhotanagpur Tenancy Act of 1908 provided some land ownership rights to the people and banned bonded labour of the tribal. Birsa Munda became the architect of Munda Rebellion and somebody who is remembered even today.



Figure 7.5 Birsa Munda- Shows a picture of a man with bow and arrow a simple peasant with dhoti and head gear

Do you know

Indentured: An indentured laborer was one who had to work for others on a contractual basis for a fixed period of time. The person had to work in a foreign/new place and in return would be given payment for travel, accommodation and food.

(iii) Jaintia and Garo Rebellion (1860-1870s): After the First Anglo-Burmese War, the British planned the construction of a road connecting Brahmaputra Valley (present day Assam) with Sylhet (present day Bangladesh). The Jaintias and the Garos in the North-Eastern part of India (present day Meghalaya) opposed the construction of this road which was of strategic importance to the British for the movement of troops. In 1827, the Jaintias tried to stop work and soon the unrest spread to the neighbouring Garo hills. Alarmed, the British burnt several Jaintias and Garo villages. The hostilities increased with the introduction of House Tax and Income Tax by the British in 1860's. The

Jaintias leader U Kiang Nongbah was captured and publicly hanged and the Garo leader Pa Togan Sangma was defeated by the British.



Figure 6.6 U-Kiang Nongbah memorial

(iv) The Uprising of the Bhils (1818-1831): The Bhils were largely concentrated in Khandesh (present day Maharashtra & Gujarat). Khandesh came under British occupation in 1818. The Bhils considered them as outsiders. On the instigation of Trimbakji, rebel minister of Baji Rao II they revolted against the Britishers.

(v) The Kol Uprising (1831-1832): The Kols of Singhbhum in the Chhotanagpur area enjoyed autonomy under their chiefs but the entry of the British threatened their independence. Later the transfer of tribal lands and the coming of moneylenders, merchants and British laws created a lot of tension. This prompted the Kol tribe to organise themselves and rebel. The impact was such that the British had to rush troops from far off places to suppress it.

(vi) The Mappila Uprisings (1836-1854): The Mappilas were the Muslim cultivating tenants, landless labourers and fishermen of Malabar region. The

British occupation of Malabar region and their new land laws along with the atrocities of the landlords (mainly Hindus) led the Mappilas to revolt against them. It took many years for the British to crush the Mappilas.

INTEXT QUESTIONS 7.1

1. Explain the following terms in one sentence each:

(a) Faqirs (b) Mahajan (c) Mappilas

2. In the space given space list three groups involved in the exploitation of the Indian peasantry.

(a)

(b)

(c)

3. List three causes of popular resistance movements in the given space.

(a)

(b)

(c)

7.3 THE UPRISING OF 1857–CAUSES, SUPPRESSION AND CONSEQUENCES

The revolt of 1857 started on 10th May when the Company's Indian soldiers at

Meerut rebelled. Called the Sepoy Mutiny by the British, it is now recognised as the First War of Independence against the British rulers. Indian soldiers killed their European officers and marched towards Delhi. They entered the Red Fort and proclaimed the aged and powerless Mughal Emperor Bahadur Shah Zafar, as the Emperor of India. This rebellion was a major anti-colonial movement against the aggressive imperialist policies of the British. In fact, it was an economic, political and social struggle against the British rule. This severe outburst of anger and discontent shook the foundations of colonial rule in large parts of India. We will now study the causes of dissatisfaction among the Indian people which made them rebel against the British rule.

(a) Political Causes: The nature of colonial expansion through annexation became a major source of discontent among the Indian rulers. British wanted to acquire land and collect as much wealth for England as they could. Their policy of annexation called Doctrine of Lapse and Subsidiary Alliance led to a number of independent kingdoms being annexed to the British Empire. These were states that were enjoying British protection but their rulers had died without leaving

a natural heir to the throne. As a result their adopted sons could now no longer legally inherit the property or receive the pension which was granted to them by the British. In this way Lord Dalhousie annexed the Maratha States of Satara, Nagpur, Jhansi and several other minor kingdoms. On the death of Baji Rao II, the pension granted to him was abolished and the claim of his adopted son, Nana Saheb, to receive this pension was denied to him. This interference by the East India Company was disliked by many Indian rulers. Before the policy of Doctrine of Lapse, the Indian ruler had a right to adopt an heir to his throne even if he was childless, but now they had to take prior consent from the British.



Figure 7.7 Map of India citing the major cities participating in the Revolt of 1857

The policy of annexation affected not only the rulers but affected all those who were dependent upon them namely, soldiers, crafts people and even the nobles.

Even the traditional scholarly and priestly classes lost the patronage which they were getting from these rulers. Thousands of zamindars, nobles and poligars lost control over their land and its revenues. The annexation of Awadh on grounds of misgovernment was also resented by the Nawab who was loyal to the British. No alternative jobs were provided to the people who lost their jobs when the British took over Awadh. Even the peasants had to pay higher taxes and additional land revenue.

The continuous interference of the British in the basic way of living, traditional beliefs, values and norms was seen by the masses as a threat to their religion. The British administrators gradually became arrogant and a gulf between them and the people widened.

(b) Economic Causes: Another important cause of the Revolt was the disruption of the traditional Indian economy and its subordination to the British economy. The British had come to trade with India but soon decided to exploit and impoverish the country. They tried to take away as much wealth and raw material from here as they could. The Britishers kept high posts and salaries for themselves. They used political control to increase their trade as well as export and import of foreign goods. All means were used to drain India of her wealth. Indian economy now suffered under the British policies. Since they worked against the interests of Indian trade and industry, Indian handicrafts completely collapsed. The craftsmen who received royal patronage were impoverished when the states were annexed. They could not compete with the British factory made products where machines were used. It made India into an excellent consumer of British goods and a rich supplier of raw materials for the industries in England. The British sold cheap, machine made clothes in India which destroyed the Indian cottage industry. It also left millions of craftsmen unemployed. The British also sent raw materials to England for the factories there. This left little for the Indian weavers. The Britishers also imposed heavy duties on Indian made goods. Now they could reap huge profits as there was no competition for their goods. Thus, the British drained India of her wealth and her natural resources.

What other measures did the British take to exploit India? To buy raw materials and sell their finished goods they introduced steamships and railways. The railways opened a vast market to the British and facilitated export of Indian raw materials abroad. The railways connected the raw material producing areas with the exporting ports. As a result British goods flooded the Indian market. But do you know that the railways played an important role in the national awakening of the country too? They let people and ideas come closer together, something that the British had never anticipated. In 1853, Dalhousie opened the first telegraphic line from Calcutta to Agra. They also introduced the postal service to India.

Since land was the major source of revenue for them, the British thought of various means to get revenue from land. The colonial policy of intensifying land revenue demand led to a large number of peasants losing their land to revenue farmers, traders and moneylenders. This was done through the Ryotwari and Mahalwari systems. Permanent Settlement of Bengal, Bihar and Orissa did not recognise the hereditary rights of the peasants on land. On the other hand, if they failed to pay 10/11th of the entire produce, their property could be sold off. To prevent this situation the peasants often borrowed money from the moneylenders at a high rate of interest. Sometimes they even sold their property to the moneylenders. Even the officials harassed the peasants who dared not seek justice at the courts for fear of further harassment. The new class of zamindars that were created by the British became their political allies. They supported them in times of need and acted as buffers between the British and the people. Some of them even supported the British against the freedom movement. The economic decline of peasantry and artisans was reflected in 12 major and numerous minor famines from 1770 to 1857. All these factors helped to spread an anti-British feeling which ultimately culminated in the revolt of 1857.

(c) Social and Religious Causes: The British were not very sensitive to the feelings of the vast mass of Indian people. Social reforms against sati, female infanticide, widow re-marriage and education of woman, made many people unhappy. With an objective to convert people the Christian missionaries opened schools and college. They also needed a population which was educated and modern enough to buy their goods, but not enough to prove detrimental to British interests. It made the people believe that the Government was in collusion with the missionaries to eradicate their religion and convert them to Christianity. The passing of Act XXI of 1850 enabled converts to Christianity inherit ancestral property. The new law was naturally interpreted as a concession to Christian converts which further created anxiety and fear among the people.

The religious sentiments of the sepoys were hurt in 1806 in the Madras presidency. The Hindus were asked to remove their caste marks from their foreheads and the Muslims were asked to trim their beards. Though the sepoy uprising was put down, it was evident that the British neither understood nor cared for the Indian soldiers. The loyalty of the sepoys was further undermined

by certain military reforms which required them to serve overseas. This outraged their religious feelings. They had an aversion to overseas services, as travel across oceans meant loss of caste for them.

(d) Discontent in the Army: The soldiers in the East India Company's army came from peasant families which were deeply affected by the governments' policies. Indian soldiers were not given posts above that of subedars. Some sepoys wanted special bhatta/allowance if sent on oversea duty. Sometimes they were paid, but most of the time they were not. They, therefore, started distrusting

their officers. These instances contributed in their own way to the revolt of 1857. The soldiers had other grievances too. They were paid salaries less than their English counterparts. As a result, the morale of the Indian sepoy was very low. On the other hand, when the soldiers refused to cross the 'black water' that is oceans and seas because their religion forbade it, the British were ruthless on them.

(e) Immediate Cause: Strong resentment was rising among the Indians and they were waiting only for an occasion to revolt. The stage was all set. Only a spark was needed to set it on fire. Introduction of greased cartridge in 1856 provided that fire. The government decided to replace the old-fashioned musket, 'Brown Bags' by the 'Enfield rifle'. The loading process of the Enfield rifle involved bringing the cartridge to the mouth and biting off the top. There was a rumour among the Sepoys in January 1857 that the greased cartridge contained the fat of cow and pig. The cow is sacred to the Hindus and the pig is forbidden to the Muslims. The sepoys were now convinced that the introduction of greased cartridges was a deliberate attempt to defile Hindu and Muslim religion and their religious feelings. This sparked off the revolt of sepoys on 29th March 1857.

7.3.2 Course of the Revolt

A sepoy called Mangal Pandey was the first soldier who openly disobeyed orders. He killed two English officers at Barrackpore near Calcutta on 29 March 1857. He was arrested, tried and executed. The regiments of Barrackpore were disbanded. The news of Mangal Pandey very soon reached other parts of the country and resulted in open revolts.



Figure 7.8 Mangal Pandey

The most decisive uprising occurred at Meerut where 85 sepoy of the cavalry regiment were sentenced to 2-10 years imprisonment for refusing to use greased cartridges. The very next day, on 10th May 1857, three regiments broke into open mutiny. They killed British officers and broke open the prison to release their comrades. They began to march towards Delhi, where they were joined by the local infantry and the common people. The rebels captured Delhi and killed many British officers. They declared the Mughal Emperor Bahadur Shah as the emperor of India.

From Delhi the revolt spread to other places. In Kanpur, Nana Sahib was declared the Peshwa. His troops were commanded by Tantya Tope and Azimullah. At Lucknow, Begum Hazrat Mahal was assisted by Maulvi Ahmadullah. In Jhansi, Rani Lakshmi Bai and in Arrah, Kunwar Singh led the revolt. Khan Bahadur Khan was the leader in Bareilly.



Figure 7.9 Begum Nazrat Mahal

The loss of Delhi greatly lowered the prestige of the British. To recover their lost prestige they took help of the loyal forces from Punjab. The siege lasted four months and Delhi was finally recaptured on 10th September 1857. It took another ten months of fighting before the Governor-general, Lord Canning, could proclaim the end of the Mutiny on 8th July 1858.

Stiff resistance had been offered to the British force by the heroic trio of the rebellion – Rani Laxmi Bai of Jhansi, Tantya Tope and Kunwar Singh. Rani Laxmi Bai led the rebel ranks. Mounted on horseback, she boldly faced the British cavalry but when her horse stumbled and fell she was killed. According to the British commander-in-chief, Sir Hugh Rose, she was the best and bravest military leader of the rebels. Kunwar Singh was killed in another battle in Bihar. Tantya Tope was captured while

he was asleep. He was hanged after a trial. This was the end of the heroic trio and the rebellion was finally suppressed by the British.

The old Emperor Bahadur Shah along with his two sons was taken prisoner. After a trial he was deported to Rangoon, where he died in 1862, at the age of 87. His sons were shot dead at Delhi without a trial. We must now look into the causes for the failure of the revolt.

ACTIVITY 7.2

Which personality of the revolt of 1857 inspired you the most? Can you identify any two of their qualities that you may also share?

7.3.3 Nature of the Revolt

A big debate surrounds the revolt of 1857. British historians describe the events of 1857 -1858 as a mutiny by the sepoys. It should perhaps be mentioned here that there were many uprisings by the sepoys prior to 1857. One example is the Vellore mutiny of July 1806 where Indian sepoys had revolted against the East India Company's garrison. Nevertheless, 'order' was restored very soon and this revolt did not go beyond the confines of the cantonment.

But if you look closely into the facts of 1857 you will see the difference. The revolt was started by the sepoys but was joined in large numbers by the civilian population. The participation of peasants and artisans made the revolt a widespread and popular event. In some areas, the common people revolted even before the sepoys. All this shows that it was clearly a popular revolt. It was characterised by Hindu-Muslim unity. Unity between different regions also existed. Rebels in one part of the country helped people fighting in other areas. The revolt should be seen as the first nationalist struggle in India for independence from foreign rule.

You will realise that the Revolt of 1857 was not one movement but many. It was not a class revolt either. The peasantry did not rebel against the landlords. They only directed attacks against money-lending grain dealers or the representatives of the British Indian government. But their policies strongly influenced the way a particular region as a whole was going to react. The Revolt in Awadh as well as in other regions, was popular, in that it pertained to people as a whole and was carried out by them. Talukdars and peasants in Awadh fought together against a common foe. But there is no doubt that the revolt of 1857 was the first time that soldiers of the Indian army recruited from different communities, Hindus and Muslims, landlords and peasants, had come together in their opposition to the British. It also provided the necessary foundation for the later successful anti-colonial struggles against the British.

7.4 FAILURE OF THE REVOLT

Although the revolt was a big event in the history of India, it had very little chance of success against an organised and powerful enemy. It was suppressed within a year of its outbreak. Various causes led to the failure of the Revolt of 1857. There was no unity of purpose among the rebels. The sepoys of Bengal wanted to revive the ancient glories of the Mughals while Nana Saheb and Tanya Tope tried to reestablish the Maratha power. Rani Lakshmi Bai fought to regain Jhansi, which she had lost as a result of British policy of Doctrine of lapse. Secondly, this rising was not widespread it remained confined to North and Central India. Even in the north, Kashmir, Punjab, Sind and Rajputana kept away from the rebels. The British managed to get the loyalty of the Madras and Bombay regiments and the Sikh states. Afghans and Gurkhas also supported the British. Many Indian rulers refused to help the rebels. Some were openly hostile to them and helped the British in suppressing the revolt. The middle and upper classes and the modern educated Indians also did not support the revolt. Thirdly the leadership of the movement was weak. Indian leaders lacked organisation and planning. The rebel leaders were no match to the British soldiers. Most of its leaders thought only of their own interest. They were motivated by narrow personal gains. They fought to liberate only their own territories. No national leader emerged to coordinate the movement and give it purpose and direction. Lakshmi Bai, Tanya Tope and Nana Saheb were courageous but were not good military generals. With the escape of Nana Sahib and the death of Bahadur Shah Zafar came the end of Peshwaship and the Mughal rule.

The rebels were short of weapons and finances. Whatever few weapons existed were old and outdated. They were no match to the sophisticated and modern weapons of the British. The rebels were also poorly organised. The uprisings in different parts of the country were uncoordinated. Often the sepoys behaved in an uncontrolled manner. On the other hand the telegraphic system and postal communication helped the British to speed up their operation. The English mastery of the sea enabled them to get timely help from England and crush the revolt ruthlessly.

7.5 SIGNIFICANCE AND IMPACT OF THE REVOLT

The Revolt of 1857 was the first sign that the Indians wanted to end British rule and were ready to stand united for this cause. Even though they failed to achieve their objective they succeeded in sowing the seeds of nationalism among the Indians. Indian people became more aware of the heroes, who sacrificed themselves in the Revolt. However, it was the beginning of distrust between Hindus and Muslims which the British later exploited to continue their rule in India.

7.6 THE LEGACY OF THE REVOLT

The Revolt of 1857 is unique in a sense that cut across caste, community and class barriers. Indian people for the first time put up a unified challenge to the British rule.

Though the efforts of the rebels failed, the British government was pressurised to change their policy towards India. In August 1858, by the Act for the Better Government of India, both the Board of Control and the Board of Directors were abolished. And the office of the Secretary of State for India was created with an Indian Council of 15 members to assist the Viceroy of India, designation earlier known as Governor General in India. In August 1858 the British crown assumed control of India from the East India Company and in 1877 Queen Victoria was crowned empress of India. This brought to an end the rule of East India Company. In the proclamation of 1st November 1858 the Queen announced a continuation of the Company's policies. India became a colony of the British Empire. The Indian rulers were assured of their rights to succession after adoption. The crown promised to honor all the treaties and the agreements made by the company with the rulers of Indian State.

By now the British had become distrustful of the Hindu Muslim unity. They decided to follow the policy of divide and rule the country. They kept a tight control over key positions both in the civil and military administration. To give expression to this pledge the Indian Civil Service Act of 1861 was passed, which provided for an annual competitive examination to be held in London for recruitment to the coveted Civil Service.

The revolt played a pivotal role in Anglo- Indian history. The British became cautious and defensive about their empire, while many Indians remained bitter and would never trust their rulers again. It was not until the emergence of Indian National Congress in 1885 and Mahatma Gandhi that Indians re-gathered their momentum for home rule. One group which kept away from trouble and opposition to the British was the English-educated Indians. This group owed its rise to the conditions of the new rule. Some of its members were descendants of the new Bengali zamindars, a class created by the Permanent Settlement in Bengal. It is curious to note that some members of this elite group would turn against the British some thirty or forty years after the 1857 Revolt.

The Army had been mainly responsible for the crisis of 1857. Hence, radical changes were introduced in the army. The strength of European troops in India was increased and the number of Indian troops reduced from the pre- 1857 figure. All Indian artillery units with the exception of a few mountain batteries were disbanded, even the artillery was kept with the British soldiers. On the other hand, there were attempts to play native against natives on the basis of caste, religion and region. All the big posts in the army and the artillery departments were reserved for the Europeans. There was mutual distrust and fear between Indians and the British.

It was increasingly realised that one basic cause for the Revolt of 1857 was the lack of contact between the ruler and the ruled. Thus, a humble beginning towards the development of representative institutions in India was made by the Indian Councils Act of 1861. The emotional after effects of the Revolt were perhaps the

most unfortunate. Racial bitterness was perhaps the worst legacy of the struggle.

INTEXT QUESTIONS 7.2

1. List two grievances of the Indian sepoys against the colonial rulers.
2. Name any three important leaders of the Revolt of 1857.
3. When and how was the East India Company's rule abolished?
4. Enlist any three major causes of the failure of the Revolt of 1857.

WHAT YOU HAVE LEARNT

- Oppression and exploitation of the people were the main reasons for the rebellion and resistance to British rule in India.
- Being evicted from their lands, peasants and tribals became labourers on their own lands. Different form of taxes made their life miserable.
- Those who were engaged in small cottage industries had to close their factories as a result of the import of British manufactured goods. All these changes and unresponsive attitude of the British administration compelled the peasantry to vent their grievances through rebellions.
- Unfortunately these rebellions were not successful before the organised British armed forces but they paved the way for future challenge to the British Raj in India.
- The Revolt of 1857 was a big challenge to British authority. It was led by the sepoys and supported by the common people.
- Economic, political, social, religious and military causes were responsible for the Revolt of 1857. The greased cartridges incident was the immediate cause of the revolt.
- A large part of India was affected by the revolt. The main centres of the revolt were Meerut, Delhi, Kanpur, Lucknow, Jhansi, Bareilly and Arrah. Some important leaders of the revolt were Bakht Khan, Nana Sahib, Tantia Tope, Azimullah, Begum Hazrat Mahal, Maulvi Ahmadullah, Rani Lakshmi Bai, Khan Bahadur Khan and Kunwar Singh.
- The revolt failed to end British rule in India. The major reasons for its failure were – its localised and unorganised nature, weak leadership and lack of weapons and finances.

TERMINAL EXERCISES

1. Explain two common features of the Peasant and Tribal Revolts.
2. How did the political and socio-religious factors led to the Revolt of 1857?
3. Explain the significance of the Revolt of 1857.
4. Make a table listing main leaders of the Revolt of 1857 and the reasons for their joining it.
5. Do you think the Revolt of 1857 made any impact on the British and their rule in India? Analyse the situation and give your inference.
6. History tells us that people normally protest when their means of livelihood are threatened. Do you think this holds true even today? Identify one incident that has happened recently published from the newspaper or magazines and make a report of about 50 words.
7. (a) On the given outline map of India locate the region of the following rebellions:
(i) Faqir and Sanyasis Rebellion (ii) Santhal Rebellion
(iii) Munda Rebellion (iv) Jaintia and Garo Rebellion
(b) Give one cause for each of the rebellion.



Figure Outline map of India

ANSWERS TO INTEXT QUESTIONS

7.1

1. (a) Faqirs were a group of wandering Muslim religious mendicants.
(b) Mahajan was the term used for moneylenders.
(c) Mappilas were the Muslim cultivating tenants, landless laborers and fishermen of Malabar region.
2. The three groups of exploiters were:
(a) Officials of British Government
(b) Landlord
(c) Money lender
3. The four causes of popular resistance movements were:
(a) Exploitation by the British
(b) High revenue rates on the peasants
(c) Compulsory growing of commercial/cash crops
(d) Interference in the religious practices of the people by the British.

7.2

1. (a) Low pay and no bhatta, that is, no extra payment for their duty overseas,
(b) Social discrimination in promotion, pension & in terms of service,
(c) Use of greased cartridge rumored to contain the fat of cow and pig which hurt their religious sentiments.
2. Rani Laxmi Bai, Tantia Tope, Begum Hazrat Mahal, Nana Saheb, Kunwar Singh of Arrah.
3. The East India Company's rule was abolished in 1858 through a declaration of the Queen's Proclamation by the British Parliament.
4. The three major causes of the failure of the Revolt of 1857 were:
(a) The revolt was a big event in the history of India. It had very little chance of success against an organised and powerful enemy.
(b) It remained confined to north and central India.
(c) There was no unity of purpose among the rebels
(d) The leadership of the movement was weak.
(e) The rebels were short of weapons and finances

8 INDIAN NATIONAL MOVEMENT

In the last few lessons, you have been reading about the history of our civilization starting from the Pre-historic Age till the modern period. You have travelled down to this lesson on India's Freedom Movement. Don't you think it was a very interesting journey? You read how people lived in jungles, used crude stones to protect themselves, and got food by killing animals. You also read about the Bronze Age when metals were discovered and were used for cutting down small forests and also how its use made life more comfortable. This led us to the Iron Age and the beginning of Industrialization. You read how as society grew, some people became more powerful than the others. You also read how money and land became a source of greed for powerful nations. This led to protest and resistance against states and nations who tried to control the others by exploiting the natural and human resources and by ruling over them ruthlessly. One of these states happened to be our own country India. You shall read about India's long struggle for freedom in this lesson.

OBJECTIVES

After reading this lesson you will be able to:

- identify the causes that led the rise of Nationalism in India
- trace the emergence of Indian National Congress
- discuss the various stages of the National Movement in India
- list the names of prominent leaders of the Indian National Movement
- discuss the role of Gandhi in this Movement

8.1 ORIGIN OF NATIONALISM

The rise of Nationalism is reflected in the spirit of Renaissance in Europe when freedom from religious restrictions led to the enhancement of national identity. This expression of Nationalism was furthered by the French Revolution. The political

changes resulted in the passing of sovereignty from the hands of an absolute monarch to the French citizens, who had the power to constitute the nation and shape its destiny. The watchwords of the French Revolution - Liberty, Equality and Fraternity - inspired the whole world. Many other revolutions like the American Revolution, the Russian Revolution, etc. (about which you have already read in Lesson 3) also strengthened the idea of Nationalism. In this lesson, you will read about the rise of Nationalism in India which emerged in the 19th Century after the revolt of 1857.

8.1.1 Rise of Nationalism in India

For India, the making of national identity was a long process whose roots can be drawn from the ancient era. India as a whole had been ruled by emperors like Ashoka and Samudragupta in ancient times and Akbar to Aurangzeb in Medieval times. But, it was only in the 19th Century that the concept of a national identity and national consciousness emerged. This growth was intimately connected to the anti-colonial movement about which you have already read in lesson 4. The social, economic and political factors had inspired the people to define and achieve their national identity. People began discovering their unity in the process of their struggle against colonialism.

The sense of being oppressed under colonial rule provided a shared bond that tied different groups together. Each class and group felt the effects of colonialism differently. Their experiences were varied, and their notions of freedom were not always the same. Several other causes also contributed towards the rise and growth of Nationalism. One set of laws of British Government across several regions led to political and administrative unity. This strengthened the concept of citizenship and one nation among Indians. Do you remember reading the lesson Popular Resistance Movements? Do you remember the way the peasants and the tribals rebelled when their lands and their right to livelihood was taken away? Similarly this economic exploitation by the British agitated other people to unite and react against British Government's control over their lives and resources. The social and religious reform movements of the 19th century also contributed to the feeling of Nationalism. Do you remember reading about Swami Vivekananda, Annie Besant, Henry Derozio and many others? They revived the glory of ancient India, created faith among the people in their religion and culture and thus gave the message of love for their motherland. The intellectual and spiritual side of Nationalism was voiced by persons like Bankim Chandra Chatterji, Swami Dayanand Saraswati and Aurobindo Ghosh. Bankim Chandra's hymn to the Motherland, 'Vande Matram' became the rallying cry of patriotic nationalists. It inspired generations to supreme self-sacrifice. Simultaneously, it created a fear in the minds of the British. The impact was so strong that the British had to ban the song. Similarly, Swami Vivekananda's message to the people, "Arise, awake and stop not till the goal is reached", appealed to the Indians. It acted as a potent force in the course of Indian Nationalism.

Do you also remember reading about the establishment of printing press and how it helped in wide circulation of ideas like liberty, equality and fraternity? All these factors helped in the spread of Nationalism among the people of India.

Around this time many organizations were being formed which raised their voices against British rule. Most of these organizations were regional in nature. Some of these organizations were very active such as Bengal Indian Association, Bengal Presidency Association, Pune Public Meeting, etc. However it was felt that if these regional organizations could work jointly it would help the Indian masses to raise their voices against the British Rule. This led to the formation of Indian National Congress in the year 1885. We will discuss about this in the next section of this lesson.

8.2 EMERGENCE OF INDIAN NATIONAL CONGRESS (1885)

The Indian National Congress was founded by Allan Octavian Hume in 1885. Hume was a retired Civil Service Officer. He saw a growing political consciousness among the Indians and wanted to give it a safe, constitutional outlet so that their resentment would not develop into popular agitation against the British rule in India. He was supported in this scheme by the Viceroy, Lord Dufferin, and by a group of eminent Indians. Womesh Chandra Banerjee of Calcutta was elected as the first President. The Indian National Congress represented an urge of the politically conscious Indians to set up a national organization to work for their betterment. Its leaders had complete faith in the British Government and in its sense of justice. They believed that if they would place their grievances before the government reasonably, the British would certainly try to rectify them. Among the liberal leaders, the most prominent were Firoz Shah Mehta, Gopal Krishna Gokhale, Dada Bhai Naoroji, Ras Behari Bose, Badruddin Tayabji, etc. From 1885 to 1905, the Indian National Congress had a very narrow social base. Its influence was confined to the urban educated Indians.



Figure 8.1 together Indian National Congress (Session 1885)

The early aims of this organization were limited only to communicate with British government on behalf of the Indian people and voice their grievances. It was rightly called the era of the Moderates. You will soon find out why?

8.2.1 Initial stages of Indian National Congress

The congress placed its demands before the government always in the form of petitions and worked within the framework of law. It was for this reason that the early Congress leaders were referred to as 'Moderates'. During its first twenty years the Congress made moderate demands. The members placed their demands before the Government always in the form of petitions and worked within the framework of law. It was for this reason that the early Congress leaders were referred to as 'Moderates' They asked for: (a) representative legislatures, (b) Indianization of services, (c) reduction of military expenditure, (d) education, employment and holding of the ICS (Indian Civil Services) examination in India, (e) decrease in the burden of the cultivators, (f) defense of civil rights, (g) separation of the judiciary from the executive, (h) change in the tenancy laws, (i) reduction in land revenue and salt duty, (j) policies to help in the growth of Indian industries and handicrafts, (k) introduction of welfare programmes for the people.

Unfortunately, their efforts did not bring many changes in the policies and administration of the British in India. In the beginning, the Britishers had a favourable attitude towards the Congress. But, by 1887, this attitude began to change. They did not fulfill the demands of the Moderates. The only achievement of the Congress was the enactment of the Indian Councils Act, 1892 that enlarged the legislature by adding a few nonofficial members and passing of a resolution for holding Indian Civil Services Examination simultaneously in London and in India. Many leaders gradually lost faith in the Constitutional process. Even though the Congress failed to achieve its goal, it succeeded in creating national awakening and instilling in the minds of the Indian people a sense of belonging to one Nation. They provided a forum for the Indians to discuss major national issues. By criticizing the government policies, they gave the people valuable political training. Though, They were not ready to take aggressive steps which would bring them in direct conflict with the Government. The most significant achievement was the foundation of a strong national movement.

The Britishers who were earlier supporting the Moderates soon realized that the movement could turn into a National force that would drive them out of the country. This totally changed their attitude. They passed strict laws to control education and curb the press. Minor concessions were given so as to win over some Congress leaders. The British Viceroy, Lord Curzon was a staunch imperialist and believed in the superiority of the English people. He passed an Act in 1898, making it an offence to provoke people against the British rulers. He passed the Indian Universities Act in 1904, imposing stiff control over Indian Universities. Curzon was out to

suppress the rising Nationalism in India. This was evident from what he did in 1905 about which you will read in the next section.

8.3. PARTITION OF BENGAL (1905)

What do you think happened in 1905? Curzon announced the partition of Bengal. The reason for partition was given as an attempt to improve administration. But the real aim was to 'Divide and Rule'. The partition was done in order to create a separate State for Muslims and so introduce the poison of communalism in the country. However the Indians viewed the partition as an attempt by the British to disrupt the growing national movement in Bengal and divide the Hindus and Muslims of the region. Widespread agitation ensued in the streets and in the press. People of different parts of India opposed the partition of Bengal all over the country. This opposition was carried on by organized meetings, processions and demonstrations etc. Hindus and Muslims tied 'rakhi' on each other's hands to show their unity and their protest.

ACTIVITY 8.1

(Do you know what 'rakhi' is? Write a paragraph on it. Connect it with the Indian festival of Raksha Bandhan.)

The use of Swadeshi (made in our own country by our own people) goods, business, national education and Indian languages were encouraged. The new nationalist spirit of self reliance-shed the fear of repression including imprisonment and painful torture by the British rule. It was Bal Gangadhar Tilak who realized the importance of boycott as a weapon that could be used to paralyze the whole British administrative machinery in India. The boycott and Swadeshi movements were instrumental in the establishment of swadeshi enterprises - textile mills, banks, hosiery, tanneries, chemical works and insurance companies. Swadeshi stores were opened. Volunteers supplied goods at the doorstep of every household. The movement spread to all classes and groups of people. Everyone, including women and children, came forward to take part. The most active were school and college students. This made the British reverse the partition of Bengal and unite it in 1911. During this time, the role of Radical Nationalists in the Indian National Congress, who were called the 'Garam Dal', came to be appreciated. They tried to involve people from all classes and groups including peasants, worker, students as well as women. They succeeded in uniting the Indian people against the common enemy - the British. The young people were roused to the highest level of patriotism and zeal to free their country. They helped in making people self confident and self reliant. They also revived the Indian Cottage industry.

8.4 THE RISE OF RADICAL NATIONALISTS

The mild policies of the Moderates in the Congress led to the rise of passionate, radical nationalists, who came to be called the 'Garam Dal'. Thus the first phase of the nationalist movement came to an end with government reaction against the Congress on the one hand and a split in the Congress in 1907 on the other. That is why the period after 1905 till 1918 can be referred to as the 'Era of Passionate Nationalists or Garam Dal'. Lala Lajpat Rai, Bal Gangadhar Tilak and Bipin Chandra Pal (Lal-Bal-Pal) were important leaders of this Radical group. When the Moderates were in the forefront of the action, they had maintained a low profile but now they swung into action. Their entry marked the beginning of a new trend and a new face in India's struggle for freedom. According to them, the Moderates had failed to define India's political goals and the methods adopted by them were mild and ineffective. Besides, the Moderates remained confined to the upper, landed class and failed to enlist mass support as a basis for negotiating with the British.



Figure 8.2 Lal-Bal-Pal

The Garam Dal realized that the British were out to exploit Indians, destroy their self-sufficiency and drain India of its wealth. They felt that Indians should now become free of foreign rule and govern themselves. This group, instead of making petitions to the government, believed in organizing mass protests, criticizing government policies, boycotting foreign goods and use of Swadeshi (home-made) goods etc. They did not believe in depending on the mercy of the Britishers, but believed that freedom was their right. Bal Gangadhar Tilak gave a slogan 'Freedom is our birth right and we must have it'.

In 1916 the two groups were again united with the efforts of Mrs. Annie Besant. Do you remember reading about her in an earlier lesson? She started working for the Home rule movement in 1914. She was convinced that India should be granted Self-Government. In 1916, Muslim League and Congress also came to an understanding with each other and signed the Lucknow Pact. Later, Mahatma

Gandhi, Jawahar Lal Nehru, Subhash Chandra Bose became the eminent figures of Indian National Congress, who led the freedom movement of India forward.

ACTIVITY 8.2

Prepare a time line of the events of the history of Indian National Congress from its establishment to Independence. Collect photographs related to it and arrange them on this chart.

8.5 FORMATION OF THE MUSLIM LEAGUE (1906)

As the radical movement grew stronger the British began to look for ways and means to break the unity among Indian. They tried to do this through the partition of Bengal and by sowing the seed of communalism among Indian people. They motivated Muslims to form a permanent political association of their own. In December, 1906, during the Muhammadan Educational conference in Dacca, Nawab Salim Ullah Khan raised the idea of establishing a Central Muhammadan Association to take care of Muslim interests. Accordingly, on 30th December, 1906, the All India Muslim League was founded. Another prominent person, Aga Khan was chosen as its president. The main objective of the league was to protect and advance the rights of Muslims in India and represent their needs to the government. By encouraging the issue of separate electorates, the government sowed the seed of communalism and separatism among Indians. The formation of the Muslim League is considered to be the first fruit of the British master strategy of 'Divide and Rule'. Mohammad Ali Jinnah later joined the League.

8.6 MORLEY-MINTO REFORMS (1909)

Do you remember reading about the Indian Councils Act 1892, which enlarged the legislature by adding members to the Central Legislative Assembly? The Council Act of 1909 was an extension of the 1892 reforms, also known as the Morley-Minto Reforms after the names of the then Secretary of State (Lord Morley) and the then Viceroy (Lord Minto). It increased the members of the Legislative Assembly from sixteen to sixty. A few non-elected members were also added. Though the members of the Legislative Council were increased, they had no real powers. They remained mainly advisory in character. They could not stop any bills from being passed. Nor did they have any power over the budget.

The British made another calculated move to sow the seed of communalism in Indian politics by introducing separate electorates for the Muslims. This meant that from the constituencies dominated by Muslims only Muslim candidates could be elected. Hindus could only vote for Hindus, and Muslims could only vote for Muslims. Many leaders protested against this communal electorate policy of the British to 'Divide and Rule'.

8.7 THE NATIONAL MOVEMENT DURING THE FIRST WORLD WAR

The First World War started in the year of 1914, about which you have already read in the previous lesson. This War was fought among the nations of Europe to get colonial monopoly. During war time, the British Government made an appeal to the Indian leaders to join hands with them in their time of crisis. Indian leaders agreed but they put their own terms and conditions i.e. after the war was over, the British government would give Constitutional (legislative and administrative) powers to the Indian People. Unfortunately, the steps taken by the British government during the World War I created unrest among the Indian people. This was because the British government had taken a huge loan during war time which they had to repay. They increased rent from the land, i.e. *lagan*. They forcefully recruited Indians in the British Army. They increased the price of necessary goods and imposed taxes on personal and professional income. As a result, they had to face protest from the Indian society. Farmers and workers of Champaran, Bardoli, Kheda and Ahmedabad actively protested against the exploitative policies of British government. Lakhs of students left schools and colleges. Hundreds of lawyers gave up their practice. Women also significantly contributed in this movement and their participation became wider with the emergence of Gandhi. The boycott of foreign cloth became a mass movement, with thousands of bonfires of foreign cloth lighting the Indian sky.

ACTIVITY 8.3

Media played a very significant role in the success of Indian National Movement. Find out the names of some prominent newspapers of that time. Also the kinds of media publicity used during that time. Write a report.

8.7.1 Coming together of Naram Dal and Garam Dal

During the war time, The Naram Dal and Garam Dal came together in 1916 at Lucknow Congress session. The Muslim League and the Congress agreed to separate electorates and decided to give weightage to the other party wherever they were in minority. Both Congress and Muslim League jointly demanded self-

government which could no longer be ignored by the Government. The Lucknow session was also significant as the radical leaders of the Congress were attending it after the split in 1907. It brought Tilak into prominence and he remained an active member in the Movement till his death in 1920. The pact which took place between the Congress and Muslim League aroused great hopes and aspirations in the country. Simultaneously, the work done by the Home rule movement infused confidence and determination among the people. In order to pacify the Indians, the Montague- Chelmsford Reform came in 1919. It introduced Dyarchy - which was a kind of double government in the provinces. The provisional government was to be divided into two parts - one to be responsible to the Indian Electorate through the Legislature, and other to the Governor. The report also laid stress on the Indianization of the services.

In the First World War, Britain and its allied groups won the war. During the War, Muslims supported the government with an understanding that the sacred places of Ottoman Empire would be in the hands of Khalifa. But after the War, a new treaty was imposed on the Turkish Sultan and Ottoman Empire was divided. This angered the Muslims who took it as an insult to the Khalifa. Shoukat Ali and Mohammad Ali started the Khilafat Movement against the British government.

After the end of the First World War, the British government also passed another Act known as the Rowlatt Act. The Act authorized the British government to arrest and imprison any person without trial in a court of law. It also banned Indians from keeping any type of weapon. This angered the Sikhs, who kept a kirpan (a type of small sword) with them as part of their religion. The Indians considered this Act as an insult to them. On 13th April, 1919 on the occasion of Baisakhi fair at Jallianwalla Bagh (Amritsar), people had gathered for peaceful protest against this Act. Suddenly, a British officer, General Dyer, entered into the park with his troops and ordered them to open fire on the crowd with their machine guns. This was done without any warning to the people. The Jallianwalla Bagh gates were closed and the people - men, women and children could not escape to safety. Within a few minutes about a thousand persons were killed. The massacre aroused the fury of the Indian people. Showing his anger and pain, the famous philosopher-poet Rabindra Nath Tagore returned his Knighthood to the British government.

INTEXT QUESTIONS 8.1

1. Explain three causes which led to national consciousness among Indians during the British regime.
2. Why was British government interested in the formation of Indian National Congress in 1885?

3. What were the differences between the Moderates and the Radicals?
4. Why did the Indian leaders support the British during the First World War?
5. Why was the Khilafat movement against British rule?

8.8 EMERGENCE OF GANDHI

Mohan Das Karamchand Gandhi was a lawyer, trained in Britain. He went to South Africa in 1893 and resided there for twenty one years. The treatment of the Indians in South Africa by the British provoked his conscience. He decided to fight against the policy of racial discrimination of the South African Government. During the course of his struggle against the government he evolved the technique of Satyagraha (non-violent insistence for truth and justice). Gandhi succeeded in this struggle in South Africa. He returned to India in 1915. In 1916, he founded the Sabarmati Ashram at Ahmedabad to practice the ideas of truth and non-violence. Gopal Krishna Gokhale advised him to tour the country mainly in the villages to understand the people and their problems. His first experiment in Satyagraha began at Champaran in Bihar in 1917 when he inspired the peasants to struggle against the oppressive plantation system. He also organised a satyagraha to support the peasants of the Kheda districts of Gujarat. These peasants were not able to pay their revenue because of crop failure and epidemics. In Ahmedabad, he organized a movement amongst cotton mill workers.



Figure 8.3 Mohandas Karamchand Gandhi

ACTIVITY 8.4

You are requested by the peasant community to contact Gandhiji and invite him to visit Champaran. Write a letter to him explaining the conditions of the peasants there and what you would like him to do for these people.

8.8.1 The Non-Cooperation Movement (1920-22)

Gandhiji by this time, was convinced that no useful purpose would be served by supporting the government. He was also emboldened by his earlier success in Bihar. In the light of the past events and the actions of British government, he decided to launch a nationwide satyagraha against the proposed Rowlatt Act in 1919. He threatened to start the non-cooperation movement in case the

government failed to accept his demands. Why do you think Gandhiji protested against the Act? It was because the Act gave the government enormous powers to repress political activities

and allowed detention of political prisoners without any trial for two years. Gandhiji wanted non violent civil disobedience against such unjust laws. The government paid no heed to it. Gandhiji, therefore, started his non-cooperation movement in August 1920, in which he appealed to the people not to cooperate with the British government. At this time, the Khilafat movement started by the Muslims and the Noncooperation movement led by Gandhi merged into one common confrontation against the British Government.

For this Gandhi laid down an elaborate programme- (1) Surrender of titles and honorary offices as well as resignation from nominated seats in local bodies; (2) refusal to attend official and non-official functions; (3) gradual withdrawal of children from officially controlled schools and colleges; (4) gradual boycott of British courts by lawyers and litigants; (5) refusal on the part of the military, clerical and labouring classes to offer themselves as recruits for service in Mesopotamia; (6) boycott of elections to the legislative council by candidates and voters; (7) boycott of foreign goods and National schools and colleges.

Later, it was supplemented with a constructive programme which had three principal features: (1) promotion of 'Swadeshi', particularly hand-spinning and weaving; (2) Removal of untouchability among Hindus; (3) promotion of Hindu-Muslim unity.

Due to this appeal of Gandhiji, an unusual frenzy overtook the country. A large number of people, dropping their differences, took part in this movement. Over two-thirds of the voters abstained from taking part in the elections to the Council, held in November, 1920. Thousands of students and teachers left their schools and colleges and new Indian educational centers were started by them. Lawyers like Moti Lal



Figure 4 Gandhi during National Movement

Nehru, C. R. Das, C. Rajagopalachari and Asif Ali boycotted the courts. Legislative Assemblies were also boycotted. Foreign goods were boycotted and the clothes were put on bonfire.

But, during this movement some incidents took place that did not match with the views of Gandhiji. The non-violent Non-Cooperation Movement, which started auspiciously, was marked by violence in August, 1921. The government started taking serious action. Prominent leaders were arrested. In two months, nearly 30,000 people were imprisoned. The outbreak of violence cautioned Gandhi. Mob violence took place on February 9, 1922, at Chauri Chaura village, in Gorakhpur district of UP. This was followed by more violence at Bareilly. Gandhi suspended his noncooperation on February 14, 1922. He was arrested at Ahmadabad on March 18, 1922, and sentenced to six years simple imprisonment. The non-cooperation movement failed to achieve success, yet it succeeded to prepare a platform for the future movements. After taking back the Non-Cooperation movement, Gandhiji and his followers were busy in creative activities in village areas. By this he gave the message to the people to remove the cast based animosity.

ACTIVITY 8.5

In 1922, Gandhiji suspended his non-cooperation movement after Chauri Chaura incident, even when the movement was on its peak. Many people criticized the decision of Gandhi ji. Imagine that you were a journalist at that time and you got an assignment to interview Mahatma Gandhi just after this movement. Write an imaginary dialogue of your discussions with Mahatma Gandhi asking him to justify his decision.

C. R. Das, Motilal Nehru and other like minded persons hatched out a novel plan of non-cooperation from within the reformed councils. They formed the Swaraj Party on January 01, 1923. C. R. Das was the president of the party and Motilal Nehru the Secretary. The party was described as 'a party within the Congress' and not a rival organization. But, they could neither end nor amend the Act of 1919.

In 1927, British government appointed a commission under the chairmanship of Sir John Simon. The Commission was appointed to study the reforms of 1919 and suggest further measures for Constitutional reforms. The Commission had no Indian member in it. The Indians boycotted this all-White commission. Therefore, when this Commission arrived in India, it faced protests all over the country. Black flags were shown, demonstrations and Hartals took place all over the country and the cry of 'Simon go back' was heard. These demonstrators were lathi charged at a number of places by the British Police. Lala Lajpat Rai was severely assaulted by the police

and he succumbed to his injuries. This agitation against the Simon Commission gave a new strength to the National Movement of India.

Meanwhile, Indian political leaders were busy in drafting a Constitution. This is known as Nehru Report which formed the outline of the Constitution. Among its important recommendations were a declaration of rights, a parliamentary system of government, adult franchise and an independent judiciary with a supreme court at its head. Most of its recommendations formed the basis of the Constitution of independent India which was adopted more than twenty years later. At the historic annual session of Congress in Lahore in 1929, the Congress committed itself to a demand for Purna-Swaraj or complete independence and issued a call to the country to celebrate 26th January as Purna-Swaraj Day. On January 26, 1930, the Congress celebrated 'Independence Day'. On the same day in 1950 the Constitution of Independent India was adopted, making India a sovereign, democratic socialist republic. Since then January 26th is celebrated as Republic Day.

8.8.2 Dandi March

Around the same time, the government made a new law. They imposed taxes on the use of salt. This was opposed by the people, as salt was the basic need of the people. But, no attention was paid to demands of the people. During March-April, 1930, Gandhi marched from his Sabarmati Ashram to Dandi on the Gujarat coast for the purpose of raiding the Government Salt. The violation of salt law was his first challenge to the government. It was a peaceful march. Gandhi committed a technical breach of the Salt Law on 6th April, 1930, when he picked up the scattered sea salt from the coast to break this Law. In this movement farmers, traders and



Figure 8.5 Gandhi during Dandi March

women took part in large numbers. The government arrested him in May 1930 and put him in Yervada jail at Poona. The campaign had a significant effect on British attitude toward Indian independence. Gandhi-Irwin Pact in 1931 was one of its examples. Gandhiji also went to London in 1931 and participated in the second round table conference as the sole representative of the Congress but no settlement could be arrived at. Although, Gandhi's arrest removed him from the active leadership of the movement, this civil disobedience continued. Special stress was laid on boycott of foreign goods particularly clothes.

The Civil Disobedience Movement, though a failure, was a vital phase in the struggle for the freedom. It promoted unity among Indians of different regions under the Congress banner. It provided an opportunity to recruit younger people and educate them for positions of trust and responsibility in the organization as also in provincial administration, which was captured in the 1937 elections. It gave wide publicity to political ideas and methods throughout the country and generated political awareness even in remote villages.

8.9 THE REVOLUTIONARIES

The reactionary policy of the British developed a deep hatred towards them among a section of the younger generation of India. They believed that India could achieve independence only by an organized revolutionary movement. As a result, they organized secret groups to launch revolutionary activities against the British. Youths were trained in aggressive methods of violence as a means of strength against the British. They attempted killing of unpopular British officials, committed dacoities to finance their activities and looted arms. Many of them, therefore, chose the path of violence to gain independence for India. They were called the revolutionaries. The centres of their activities were Punjab, Maharashtra, Bengal, Bihar, Uttar Pradesh and Orissa. Prominent among these revolutionaries were Khudiram Bose, Prafulla Chaki, Bhupendra Nath Dutt, V. D. Savarkar, Sardar Ajit Singh, Lala Hardayal and his Gadar Party, Sardar Bhagat Singh, Raj Guru, Sukh Deo, Chandra Shekhar Azad, etc. These revolutionaries organized secret societies, murdered many British officers, disrupted railway traffic, engaged in organized attack on British wealth. In order to overturn the British Rule through arms, Kakori Conspiracy was planned by Ram Prasad Bismil, Ashfaqullah Khan and other team members of the Hindustan Republican Association in 1925. In 1928, Hindustan Socialist Republican Association was formed by Chandrasekhar Azad, Bhagat Singh, Batukeshwar Dutt and others. Bhagat Singh and Batukeshwar Dutt threw a bomb inside the Central Legislative Assembly on 8th April, 1929 protesting against the passage of the Public Safety Bill and the Trade Disputes Bill while raising slogans of Inquilab Zindabad (long live the revolution), though no one was killed or injured in the bomb incident. Following the trial in court of this and other cases, Bhagat Singh, Sukhdev and Rajguru were

hanged in 1931. Their sacrifice provided an incentive to the people. They were regarded martyrs and became the symbol of national unity and aspirations.



Figure 8.6 Bhagat Singh, Sukh Deo, Raj Guru, ChandraShekar Azad

ACTIVITY 8.6

Gather a collection of movies based on Indian Nationalism. See those movies and identify the major issues of Nationalism raised through them. Do these movies really play an important role in sensitizing us towards Nationalism? Put your thoughts down in your diary and discuss this with your family and friends.

8.10 THE DEVELOPMENT OF SOCIALIST IDEAS

A significant feature of the twentieth century was the development of Socialist ideas in Congress and outside it. Peasants now started asking for land reforms, abolition of zamindari system and reduction in the revenue and debt relief. The All India Trade Union Congress which was founded in 1920 worked towards improvement in the workers' working and living condition. It mobilized the workers to the cause of complete independence which helped the movement to be broad based. Some of the prominent socialist and communist leaders were M.N. Roy, S.A. Dange, Abani Mukhopadhyaya, Nalini Gupta, Muzaffar Ahmed, Shaukat Usmani, Gulam Hussain, Singaravelu Chettair, G.M. Adhikari and P.C. Joshi. They outlined the course of the revolution through transformation of individual strike into a general political strike, the development of spontaneous peasant movements, a nationwide movement for complete independence, as well as the spread of revolutionary propaganda amongst the police and the army. Struggle against imperialism was the rallying slogan. In 1936, when Nehru was the President of the Congress, he declared at the Lucknow Session that the solution to India's problems lay in the adoption of socialist ideas. Nehru was deeply influenced by Karl Marx. Even Subhash Chandra Bose was influenced by socialist ideas. Because of differences with Gandhi, Bose resigned from the Congress and formed his own 'Forward Bloc'.

8.11 THE COMMUNAL DIVIDE

The policy of divide and rule was inaugurated right in the days of East India Company when the Britishers were establishing themselves as rulers of India. You have read how the Company set one Indian ruler against the other and ultimately it became the undisputable ruler. You have seen that, in the latter half of the 19th Century, Nationalism started growing. Now the British government found it prudent to vitalize their policies of divide and rule and drive a wedge between the Hindus and Muslims. The British had looked upon the Muslims with disfavor and suspicion since the revolt of 1857. But now they realized that in order to counteract the growing Nationalism, time had come to appease the Muslims. The Government seized every opportunity to set the Indians against one another on the basis of religion and creating hostility between them. Ultimately, in accordance with this policy, separate electorates for Muslims were established. You have read about the formation of the Muslims League which sowed the seeds of communalism. You will remember that the league had been formed on the encouragement of British officials.

The Communal Award of 1932 was a continuance of this policy, because it allowed separate electorates and reservation of seats to the depressed classes also. Separate electorates were first demanded by the Muslims in 1906 and introduced for them under the Morley-Minto Reforms of 1907. This was done with a view to building up Muslim communalism as a counterpoise against Indian Nationalism. Under the Montford Reforms (1919) they were extended for Sikhs, Europeans, Anglo-Indians, Indian Christians, etc. Under the Act of 1935 seventeen separate electorates were constituted. In reality, communal electorates were an unmixed evil. They hampered the growth of national unity. The two-nation theory appeared in 1938 and was clearly communicated by Jinnah in 1940. Once, the demand for Pakistan was made, it received direct and indirect encouragement from British authorities. The immediate cause of the emergence of the demand for Pakistan was the refusal of the Congress to form coalition ministries after the elections of 1937. The country seemed to be drifting towards anarchy and ruin. Under the circumstances, partition was accepted as a 'necessary evil', the only way of getting rid of British rule and preventing a complete breakdown of law and order.

INTEXT QUESTIONS 8.2

1. How was Satyagraha different from the other protests?
2. Why was Simon Commission boycotted by Indians? Give two reasons.
3. Why did Gandhi withdraw the non-cooperation movement?
4. How was the approach of revolutionaries different from the others?
5. What do you understand by 'Purna-Swaraj'?

6. How was communal divide in India promoted by the British?

8.12 ACHIEVEMENT OF INDEPENDENCE (1935-47)

The British Government prepared a White Paper in March, 1933. On the basis of this White Paper, a Bill was prepared and introduced in parliament in December, 1934. The Bill was finally passed as the Government of India Act on August 2, 1935. The most conspicuous feature of the Act of 1935 was the concept of an All India Federation comprising the Provinces of British India and the Princely States. It was compulsory for the Provinces to join the proposed federation. For the Princely States it was voluntary. The members from the provinces were to be elected, while the representatives of the States were to be nominated by the rulers. Only 14 percent of the population in British India had the right to vote. The powers of the Legislature were confined and restricted. It had no control over defense and foreign relations. The Act protected British vested interests, discouraging the emergence of national unity, rather encouraging separation and communalism. All nationalists, including Nehru and Jinnah, condemned the Act.

The Congress session met in Lucknow on 25th April, 1935. Though the Act was condemned, it was decided to contest the elections to resist British imperialism and to end the various regulations, ordinances and Acts, which were initiated against Indian Nationalism. In the 1937 elections the Congress swept the poll. Congress Ministries were formed in seven out of the eleven provinces. On March 18, 1937, the All India Congress Committee adopted a resolution on Congress policies in the legislatures. It claimed that the Congress had contested the elections "with its objective of independence and its total rejection of the new constitution, and the demand for a Constituent Assembly to frame India's constitution. The declared Congress policy was to combat the New Act and end it". The immediate effect of the coming of the Congress Ministries was a feeling of relief. Political prisoners were released and a large measure of civil liberty was established. Agrarian legislation was also passed and this provided considerable relief to the peasantry. Basic education was intended to be made free and compulsory for every child.

8.12.1 National Movement during the Second World War

When the Second World War broke out in 1939, the Congress attitude was one of sympathy, though it refused unconditional cooperation. The Congress demanded that "India must be declared an independent union, and present application must be given to this status to the largest possible extent". The British did not agree and as a result all the ministries resigned in protest in 1939. A demand for Provisional National Government at the Centre was made at the instance of C. Rajagopalachari in 1940. It was turned down by the Viceroy Lord Linlithgow. In October, 1940 was launched the Civil Disobedience Campaign. Acharya Vinoba Bhave was the first to offer individual Satyagraha.

All India Committee of the Cabinet, with Attlee as Chairperson, was set up and a

draft declaration was made. In March, 1942, Sir Stafford Cripps came to India with the draft declaration. It stated the British Government's desire to grant India 'Dominion Status' at the end of the war. Complete Independence was not promised. There was no mention of a national government of the Indian people. The Congress rejected the offer. The Muslim League, opposed to the creation of a single union, found the scheme unacceptable, as it did not unequivocally concede Pakistan. The Cripps Mission failed.

The struggle for independence was carried on by Subhash Chandra Bose from abroad. He found the outbreak of the Second World War to be a convenient opportunity to strike a blow for the freedom of India. Bose had been put under house arrest in 1940 but he managed to escape to Berlin on March 28, 1941. The Indian community there acclaimed him as the leader (Netaji). He was greeted with 'Jai Hind' (Salute to the motherland). He tried to raise an Indian army and urge his country people to rise in arms against the British. In 1942, the Indian Independence League was formed and a decision was taken to form the Indian National Army (INA) for the liberation of India. On an invitation from Ras Bihari Bose, Subhash Chandra Bose came to East Asia on June 13, 1943. He was made president of the Indian Independence League and the leader of the INA popularly called 'Azad Hind Fauj'. He gave the famous battle cry 'Chalo Dilli'. He promised independence to Indians saying, 'tum mujhe khoon do, main tumhe Azadi dunga' (You give me blood, I will give you freedom). In March 1944, the Indian flag was hoisted at Kohima.

Unfortunately, after that the movement collapsed. What happened to Netaji remains a mystery. It is said that he lost his life in an air crash in August 1945. But it could not be ascertained. The INA continued to occupy an honored place in India's freedom struggle. The intense patriotism of Bose and the soldiers of the INA proved a tremendous source of inspiration for the Indian people.

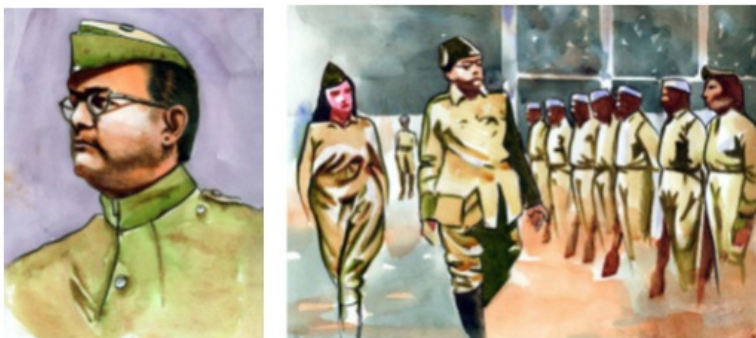


Figure 8.7 Subhash Chandra Bose and Indian National Army

8.12.2 Quit India Movement and After

The failure of the Cripps Mission made the Indians frustrated and embittered. It was felt that time had now come for launching another mass movement against the British rule. Discontent of Indian people was increasing due to wartime shortages and growing unemployment. There was a constant danger of Japanese attack. The Indian leaders were convinced that India would be a victim of Japanese aggression only because of British presence in India. Gandhiji said, “the presence of the British in India is an invitation to Japan to invade India”. Subhash Chandra Bose, who escaped from India in 1941, repeatedly spoke over radio from Berlin arousing anti-British feeling which gave rise to pro-Japanese sentiments.

The Congress under Gandhiji felt that the British must be compelled to accept Indian demands or quit the country. A meeting of the Congress Working Committee in Wardha passed the Quit India Resolution on 14th July, 1942 which was later endorsed and passed on 8th August at the Bombay session of the Congress. The Congress decided to launch a mass struggle on non-violent lines, on the widest possible scale. Addressing the Congress delegates on the night of 8th August, Gandhiji, in his soul stirring speech, said:

“I therefore want freedom immediately, this very night before dawn if it can be hadI am not going to be satisfied with anything short of complete freedom. Here is a ‘mantra’, a short one that I give you. You may imprint on your hearts and let every breath of yours give expression to it. The ‘mantra’ is ‘Do or Die’. We shall either free India or die in the attempt. We shall not live to see the perpetuation of slavery.”

But before the Congress leaders could start the movement formally, all important leaders of Congress were arrested before the dawn of 9th August 1942. Congress was banned and declared as an illegal organization. The Press was censored. The news of the arrest of popular leaders shocked the nation. Their anger and resentment was expressed through numerous agitations, hartals, processions and demonstrations in all parts of the country. With most of the important leaders in jail, the movement took a different shape at different places. The people gave vent to their anger by burning government buildings, police stations, post offices anything that symbolized British authority. Railways and telegraphs lines were disconnected. At some places, such as in Balia district in U.P., Midnapore district of West Bengal and in Satara in Bombay, the revolt took a serious turn. Inspired by the ‘mantra’ of Gandhiji people were ready to make the supreme sacrifice. The British with its army and police came down heavily on the Indian people. The people were shot indiscriminately. The Quit India Movement became one of the greatest mass

movements of historical significance. It demonstrated the depth of national sentiments and indicated the capacity of the Indian people for sacrifice and determined struggle. After this movement there was no retreat. Independence of India was no longer a matter of bargain. It was to be a reality.



Figure 8.8 Quit India Movement (August, 1942)

At the end of the World War in 1945, the British government started to talk about the transfer of power to Indian Hindus and Muslims. The first round of talks could not be successful because Muslim leaders thought that the Muslim League was the only one who could represent Indian Muslims. The Congress did not agree upon it. In 1946, the Cabinet Mission arrived in India to find a mutually agreed solution of the Indian Problem. The Mission held talks with the leaders of all prominent political parties and then proposed its plan of establishing Federal Government in India. Initially the plan was criticized by all political parties, but later all gave their consent to it. When the election to the Constituent Assembly took place, the Congress won one hundred ninety nine seats and the Muslim league won seventy three.

8.12.3 Partition and Independence of India

Differences soon arose between the Congress and the Muslim League concerning the powers of the Constituent Assembly. The League rejected the Cabinet Mission Plan in the middle of 1946. In September 1946, the Congress formed the government at the Centre. The League refused to be a part to it. Muslim League celebrated this day as a 'Direct Action Day' on 16th August 1946 to attain Pakistan. The conflict

resulted in widespread communal riots in different parts of India. Thousands were killed in the riots, lacks of people became homeless. In the mean time, Lord Mountbatten was sent as the Viceroy to India. He put up his plan in June 1947 which included partition of India. In spite of strong opposition by Gandhi, all the parties agreed to the partition and the Indian Independence Act, 1947 came into being. It created two independent states in the Indian sub-continent, i.e. Indian Union and Pakistan. India got its independence on 15th August, 1947. At the stroke of midnight (14th -15th August, 1947), transfer of power took place.

ACTIVITY 8.7

Imagine you were chosen by the British government as a member of the Cabinet Mission to talk to the members of the Indian National Congress and Muslim League and discuss how to transfer power after independence. Make a list of proposals that you would present before them?

INTEXT QUESTIONS 8.3

1. Write two basic features of the Act of 1935.
2. What was the demand of Muslim League?
3. What led to the participation of Congress in the elections after 1935?
4. Why were the Indian leaders concerned about the British presence in India during the Second World War?
5. What were the major causes of the partition of India?

WHAT HAVE YOU LEARNT?

- Renaissance, the French Revolution, American Revolution, Russian Revolution had promoted the idea of Nationalism in the world.
- Anti-colonial movement led to the rise of Nationalism in India in 19th Century. The contemporary social and religious reform movements also contributed to the rise of feelings of Nationalism.
- Indian National Congress was founded in 1885 only to communicate with British government on behalf of the Indian people and voice their grievances.

- In 1905, Lord Curzon announced the partition of Bengal. The Indians viewed the partition as an attempt by the British to disrupt the growing national movement in Bengal and divide the Hindus and Muslims of the region.
- In 1906, Muslim League was formed in Dacca with the objective to protect and advance the rights of Muslims in India and represent their needs to the government.
- Difference in ideas led to split in Congress in 1907. Two groups i.e. Moderates (Naram Dal) and Radicals (Garam Dal) were formed.
- In the First World War, Indian leaders agreed to help the British Government on the condition that the latter would give Constitutional powers to Indians after the war.
- Gandhiji successfully experimented with the technique of Satyagraha in South Africa as well as Champaran, Kheda and Ahmadabad in India.
- Gandhiji started the mass movement in India against the British policies. He was the leader who could encourage and involve all sections of society in this movement.
- The revolutionaries like Bhagat Singh, Chandrashekhar Azad, Sukhdeo, etc. chose the path of aggressive movement against the British government.
- The seed of communal divide in India, sowed by the British, led to the future consequence of partition.
- The struggle for Independence was carried on by Subhash Chandra Bose from abroad. He became the leader of Indian National Army to liberate India from British.
- The Quit India movement paved the way for India's freedom. It was the final call from Gandhiji to 'Do or Die'.
- Muslim League demanded the formation of Pakistan for Muslims which led to the partition. India got its freedom on 15th August, 1947.

TERMINAL QUESTIONS

1. In the initial years of its existence, what types of demands were put by the Indian National Congress before the British government?
2. Why was Lord Curzon interested in the partition of Bengal?
3. What was the significance of the Satyagrah of Gandhi in Africa? What was the nature of his Satyagraha in India?

4. Do you think that the Non-Cooperation movement was successful in its goal? Give two reasons in support of your argument.
5. Why was the Simon Commission asked to leave India?
6. Why did the Dandi March lead to the arrest of Gandhi?
7. What made the revolutionaries throw a bomb in the Legislative Assembly?
8. Discuss the role of Azad Hind Fauz led by Subhash Chandra Bose in the Indian National Movement.
9. How did the 'Quit India' Movement contributed to the independence of India?
10. Mention three causes that forced the Britishers give India independence in the twentieth century.

ANSWERS TO INTEXT QUESTIONS

8.1

1. Anti-colonial movement, political and administrative unity under British rule, revival of ancient India glory.
2. To give a safe and constitutional outlet to Indians, so that their anger would not develop into agitation against British.
3. Moderates believed in petition and requesting the British government to solve the grievances whereas Radicals believed in organizing mass protests, criticizing government policies, boycotting foreign goods and use of Swadeshi goods.
4. In the hope that the British government would provide Constitutional powers to the Indians after winning the war.
5. Because of the division of Ottoman Empire and insult of Khalipha.

8.2

1. Satyagraha means a non-violent insistence for truth and justice. Other protests were violent and aggressive in nature.
2. The Commission had no Indian members.
3. Outbreak of violence during the movement caused its suspension.
4. They chose the path of armed movement against the Britishers. Others were not in favour of this.
5. Purna-Swaraj means complete independence and sovereignty.

6. By promoting separate electorates for Muslims, Sikhs, etc. and encouraging Muslim League to raise communal demands.

8.3

1. Princely States and the British Provinces all had to come under All India Federation. It restricted the power of legislature, i.e. no control over defense and foreign relations.

2. Muslim League demanded a separate nation for Muslims, i.e. Pakistan.

3. To gain constitutional power and change the British laws, Congress decided to participate in the elections.

4. Because British presence in India could lead to Japanese invasion during Second World War.

5. The communal divide, demand of Muslim League and lack of consensus between the political parties.

MODULE -2 India : Natural Environment, Resources and Development

- 9. Physiography of India
- 10. Climate
- 11. Bio-diversity
- 12. Agriculture in India
- 13. Transport and Communication
- 14. Population : Our Greatest Resource

9 PHYSIOGRAPHY OF INDIA

Tutor: Dear learners, you will agree that the place to which we belong has many influences on our thinking and behaviour. Let us try to know which place do we belong to?

Natasha: I belong to Hisar town. Farah is from Fatehabad and Rajinder comes from Bhiwani.

Tutor : Do you know where all these places are located?

Rajinder: Yes, they are in Haryana as well as in India. But, where is India located?

Farah: What is the need to know India's location?

Tutor: Location of a country is the key to its identity. It determines the important aspects like climate, vegetation, agriculture, resources etc. This has a deep impact on the way people of that area live, what they eat and how powerful is their voice on the world stage. Therefore, to understand the various aspects of India, we need to look into its location. Let us discuss more about it in this lesson.

OBJECTIVES

After completing this lesson, you will be able to:

- describe the location of India in terms of latitude and longitude;
- describe with the help of map, the significance of the relative location of India in terms of neighbouring countries;
- illustrate the States and Union Territories with the help of political map of India;
- explain the major physical divisions of India;
- describe the drainage system in India;
- compare and contrast between the Himalayan and the Peninsular drainage system; and
- explain the importance of people's participation in keeping river clean.

9.1 LOCATION

Teacher: Learners, when someone asks where India is, we can answer in two ways, in terms of absolute and relative location. Let us see what we mean by absolute location and relative location. Absolute location is given in degrees of latitude and longitude. Relative location depends upon point of reference, e.g., near, far etc.

Do you know

Latitude: Latitude is the angular distance, north or south from the equator, of a point on the earth's surface.

Longitude: Longitude is an angular distance on the earth's surface, measured east or west from the prime meridian at Greenwich.

Angular distance : The angular distance between the points from the centres is called angular distance.

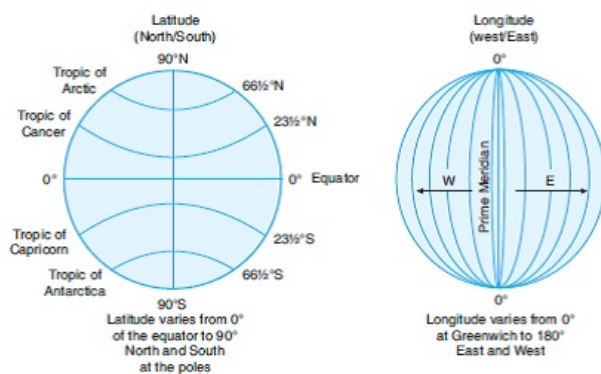


Figure: Figure shows the latitude and longitude, tropic of arctic, tropic of cancer, tropic of Capricorn, tropic of antartica, and the Prime Meridian.

Teacher: With the help of this map can you find out the latitudinal and the longitudinal location of Indian mainland.

Natasha: The Indian mainland extends between 8°4' North and 37°6' North latitudes and from 68°7' East and 97°25' East longitudes. Thus, the latitudinal and the North-south extent is 3214 km and East-west extent is 2933 km. India accounts 2.42% of the total world land area

Teacher: India lies entirely in the northern hemisphere, and eastern hemisphere. The Tropic of Cancer (23°30' North) passes through the centre of the country. It divides the country into almost two equal parts Northward of this latitude is North India and South of it is known as south India. Similarly

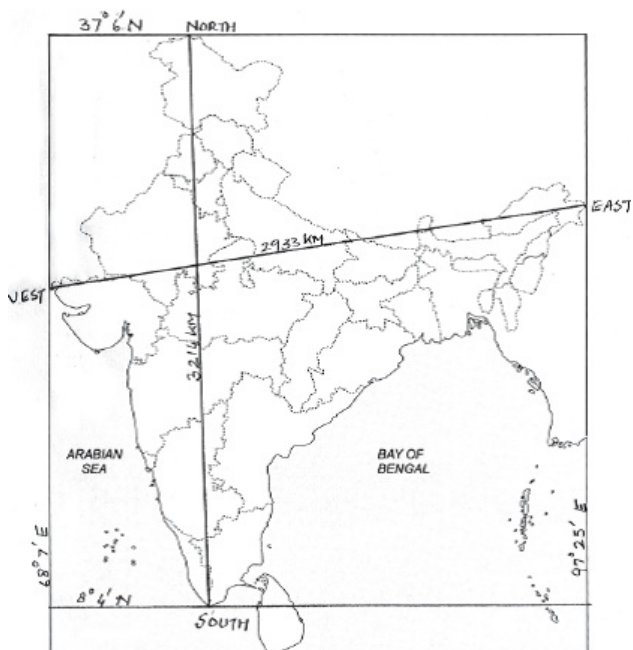


Figure 9.1 Latitudinal and Logitudinal Extent of Mainland of India

82°30' East longitude passes almost from the middle of the country. It is known as Standard Meridian of India.

Teacher: Now determine the relative location of India and then record it in the space given below: Remember relative location is given in relationship to other places (north of, south of, northeast of, next to, across from). India is part of Asian continent. India is surrounded by water from three sides. Arabian sea in west, Bay of Bengal in the east and Indian ocean in the south. Towards its north west is Pakistan and Afghanistan. China, Bhutan, Tibet and Nepal lies to its north. Bangladesh and Myanmar lies to its east. Srilanka and Maldives are located in the Indian Ocean towards its south. The southern most point of the country is Indira Point (Nicobar Islands) which lies on 6°4' N latitudes and Kannya Kumari is southern most point of Indian mainland which lies on 8°4' N latitudes.

Do you know

The $82^{\circ}30'E$ longitude passes through Mirzapur (in Uttar Pradesh). This is the Standard Meridian of the country. The $82^{\circ}30'$ East has been selected as standard Meridian because there is a time lag of almost two hours between Gujarat and Arunachal Pradesh. Therefore, a Central Meridian is selected to determine the time for the whole country.

9.1.1 Locational Significance

Let's observe the Fig. 9.2. What do you notice? India is the largest country in terms of area and population in South-Asia. It is surrounded by ocean. India is strategically located in Indian Ocean. It commands sea routes between Europe and Africa, South- East Asia, far East Asia and Oceania. It is because of this that India shares good trade relation between many countries since ancient times. India has a good location in terms of sea and also well connected by land. Various passes like Nathu-La (Sikkim), Shipki-La (Himachal Pradesh), Zoji-La and Burji la pass (Jammu & Kashmir) have their own importance. The main India-Tibet trade route that connects Kalimpong near Darjeeling with Lhasa in Tibet passes through Jelep La. Several passes have provided a passage to many ancient travelers. These routes are not only important for trade but also to exchange ideas and culture.



Figure 9.2 Location of India with respect to important trade routes

INTEXT QUESTIONS 9.1

1. Look at the map 9.2 and answer the following questions.

- (i) Find out the names of two countries lying to the eastern side of India.
- (ii) Mention the names of two seas located on the eastern and western side of India.
- (iii) Which country is connected to India by Palk Strait?
- (iv) Write the names of two countries having a common border with India.

9.2 STATES AND UNION TERRITORIES OF INDIA

India is the seventh largest country in the world. It has land boundaries of 15,200 km and 6100km long coast line. India's landmass covers 3.28 million square kilometer of area. This accounts for nearly 2.47 percent of the total geographical area of the world.

For good governance, India has been divided into 28 states and 7 union territories. Let us study the Fig. 9.3 given below.

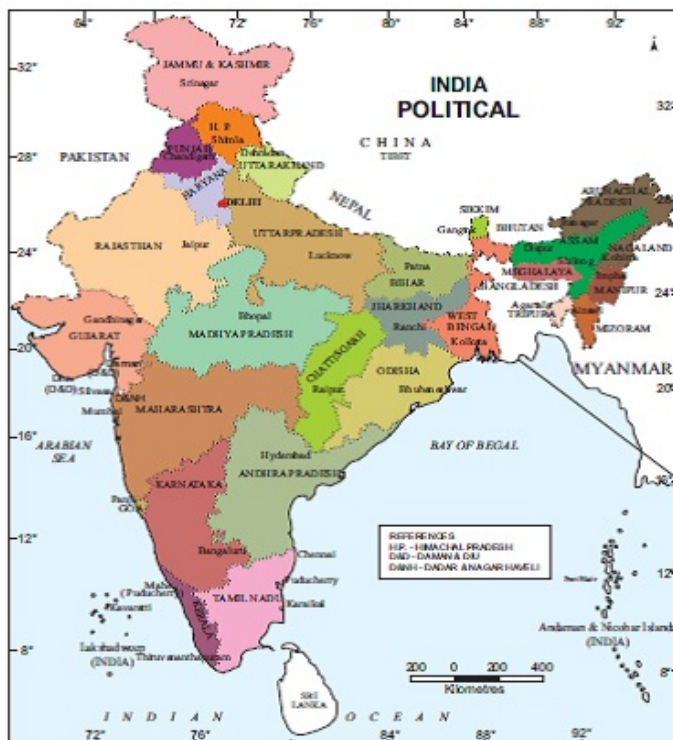


Figure 9.3 Illustrates Political Map of India

This map clearly indicates that each state and union territory has its own capital. It is interesting to note that while New Delhi is the capital of India, Delhi is the capital of Union Territory Delhi. Can you identify any other capital like this? Yes, it is Chandigarh which is the capital of two states Haryana and Punjab and also a Union Territory.

ACTIVITY 9.1

Find out the minimum number of states you need to across, if you want to move between the following places. (Refer Fig. 9.5)

- (a) Kashmir to Mizoram (b) Punjab to Bihar (c) Delhi to Bangalore
(d) Mumbai to Kolkata (e) Chennai to Raipur

INTEXT QUESTION 9.2

1. Look at the map 9.3 and answer the following questions.

- (i) Write the names of two States of South India.
- (ii) Mention the names of two states sharing international boundary.
- (iii) Write the names of two countries sharing their boundaries with Sikkim.
- (iv) Write the names of two union territories along Arabian Sea.

9.3 PHYSICAL DIVISIONS OF INDIA

Natasha: What is terrain?

Tutor: Terrain is an area of land which usually has a particular type of physical feature.

Farah: Like, Mumbai beach is sandy and Shillong is a hilly.

Teacher : Right. Do you know India is a vast country with varied land forms and topography?

Rajinder: What is the meaning of topography?

Teacher: Topography means the features of a place determined by nature. It is the description of various features and landscape on the surface of the earth.

India has the topographical diversity. This includes the Great Himalayas, the Northern Plain, the Thar desert, the coastal plains and the Peninsular Plateau. The reasons for variation in the topography could be:

- Differences in the rock formations. These landmasses have been formed in different geological periods.

- India is a country of physical diversity. There are high mountain peaks in some areas while in others, lie the flat plains formed by rivers. On the basis of physical features, India can be divided into following six divisions:

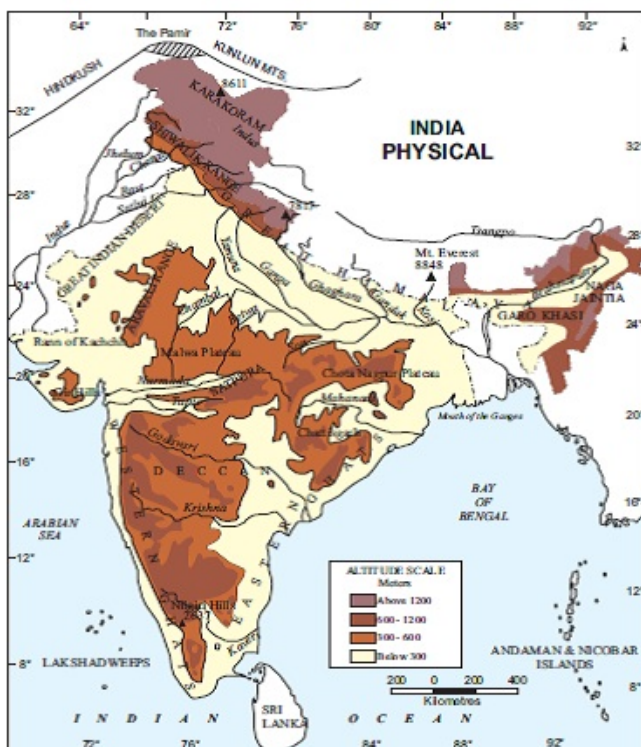


Figure 9.4 Illustrates Physiographic Divisions of India

1. The Northern mountains
2. The Northern Plains
3. The Peninsular Plateau
4. The Indian Desert
5. The Coastal Plains
6. The Islands.

1. The Northern Mountain : It is divided into three groups. They are :

- (i) The Himalayas
- (ii) The Trans Himalayas
- (iii) The Puranchal hills

1. The Himalayan Mountains

Himalayas are the young fold mountains. This is the highest mountain range of the world. Himalayas act as natural barrier. The extreme cold, snow and rugged topography discourage the neighbors to enter India through Himalayas. They run from west-east direction from Indus to Brahmaputra along the northern boundary of India

1. Pass: It is a natural gap or a route between a ridge, hill.
2. Range: large landmass consisting of mountains, ridges and peaks.
3. Peak: highest point or tip of a mountain range.
4. Valley: a depression or a flat land between two elevated areas.
5. Dun: Longitudinal valleys existing between himachal and shiwaliks

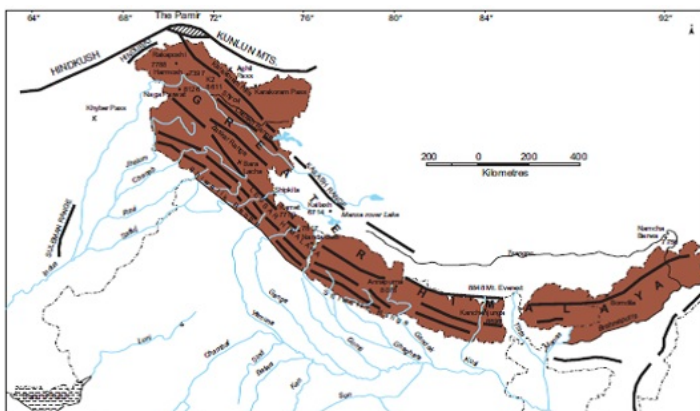


Figure 9.5 Illustrates the Himalyan Mountains

covering a distance of 2500 KM. Their width varies from 400 in the west and 150 KM in the East (Fig. 9.5). The Himalayas may be divided into three parallel ranges:

(a) Greater Himalayas or Himadari

(b) Lesser Himalayas or Himachal

(c) Outer Himalayas or Siwaliks.

(a) The Greater Himalayas or Himadari: The Greater Himalayas comprises of the northern most ranges and peaks. It has an average height of 6000 metres and width lies between 120 to 190 Kms .It is the most continuous range. It is snow bound and many glaciers descend from this range. It has high peaks like Mt. Everest, Kanchenjunga, Makalu, Dhaulagiri, Nanga Parbat etc. having a height of more than 8000 metres. Mt. Everest (8848 m) is the highest peak of the world and Kanchenjunga is the highest peak of Himalaya in India. High Mountain passes also exist in this range, namely, Bara Lacha-La, Shipki-La, Nathu-La, Zoji-La, Bomidi-La etc. The Ganga and Yamuna rivers originates from this Himalayas.

(b) The Lesser Himalayas or Himachal: The altitude of this range lies between 1000 and 4500 metres and the average width is 50 KM. The Prominent ranges in this are Pir Panjal, Dhaul Dhar and Mahabharata ranges.It comprises of many famous hill stations like Shimla, Dalhousie Darjeeling, Chakrata, Mussoorie, Nainital etc. It also comprises of famous valleys like Kashmir, Kullu, Kangra etc.

(c) The Outer Himalayas or the Siwaliks: It is the outer most range of the Himalayas. The altitude varies between 900-1100 meters and the width lies between 10-50 KM. They have low hills like Jammu Hills, etc.The valleys lying between Siwalik and Lesser Himalayas (Himachal) are called 'Duns' like Dehra Dun, Kotli Dun and Patli Dun.

(ii) The Trans-Himalayan ranges

It extends north of greater Himalaya and parallel to it is called Zaskar range. North of Zaskar range lies Ladakh range. The Indus river flows between Zaskar and Ladakh range. The Karakoram range lie extreme north of the country. K2 is the second highest peak of the world.

(iii) The Purvanchal hills

It comprises Mishami, Patkoi, Naga, Mizo hills which are located in eastern side. The Meghalaya plateau is also part of these hills which includes the hills of Garo, Khasi and Jaintia.

INTEXT QUESTIONS 9.3

1. Write the names of the three ranges of the Himalayas.
2. Look at the map (Fig. 9.5) and find out.
 - (i) In which state Nanga Parbat and Nanda Devi are located?
 - (ii) Say Yes or No.
 - (a) Mt. Everest is located in India.....
 - (b) Shipki-La pass is located in Siwalik Range.....
 - (c) Mansarovar lake is located in Kailash Range.....
3. Mention the names of the countries in which the Greater Himalayas are situated.
4. Identify two purvanchal hills.

2. The Northern Plains

Let us try to locate and label the states lying in the Northern Plains of India (refer Fig. 9.5). The Northern Plains are located between south of the Himalayas and north of the Peninsular plateau. It is formed by the deposition of the sediments brought by three main river systems namely : the Indus, the Ganga and the Brahmaputra. From Punjab in the west to Assam in the east, this plain is about 2400 km long. Its width varies from about 300 km in the west to about 150 km in the east. It mainly includes the states of Punjab, Haryana, Uttar Pradesh, Bihar, West Bengal and Assam. This plain is very fertile due to alluvial sediments brought by the rivers from the Himalayas. This plain is one of the largest and most fertile plains of the world. Major crops such as wheat, rice, sugarcane, pulses, oil seeds and jute are grown here. Due to proper irrigation, the plain makes significant contribution in the production of food grains.

The Northern plain is broadly divided into two parts :

- (a) The Western plain
 - (b) The Ganga-Brahmaputra plain
- (a) The Western Plain

This plain is formed by the river system of the Indus. It lies to the west of Aravallis. This plain is formed due to deposits brought by the rivers like the Satluj, the Beas and the Ravi. This part of the plain has doabs.

- (b) The Ganga-Brahmaputra plain

It is also formed by the deposition of the sediments brought by two main river systems, the Ganga and the Brahmaputra. The early civilizations like Mohenjo-Daro and

Harappa also called river valley civilizations, were spread over plain areas. This is because of the availability of fertile land and water through the river networks.

Doab: the alluvial land between two converging rivers. Example doab area in Punjab.

Khadar: The area flooded by rivers almost every year

Banger: The area never flooded by rivers.

3. The Peninsular Plateau

Look at the map (Fig. 9.6) given below, you will find that the Peninsular plateau is a triangular shaped table land. It is part of ancient land mass called Gondwana level. It covers an area of nearly 5 lakh sq.km. It is spread over the states of Gujarat, Maharashtra, Bihar, Karnataka and Andhra Pradesh.



Figure 9.6 Illustrates the Peninsular plateau of India

River Narmada divides the peninsular plateau into two parts : The central highlands and Deccan Plateau

(i) The central Highlands: It extends from Narmada river and the northern plains. Aravallis is the important mountain which extends from Gujrat through Rajasthan to Delhi. The highest peak of the Aravallis hills is Gurushikhar (1722m) near Mt. Abu. The Malwa Plateau and Chhota Nagpur plateau are parts of the central highlands. River Betwa, chambal and Ken are the important river of Malwa plateau while Mahadeo, Kaimur and Maikal are the important hills of chhota Nagpur plateau. The valley of Narmada is lies between the Vindhya and the satpura which flows east to west and joins the Arabian sea.

(ii) The Deccan Plateau: The Deccan plateau is separated by a fault (A fracture in the rock along which rocks have been relatively replaced), from Chota Nagpur plateau. The black soil area in the Deccan plateau is known as Deccan trap. It is formed due to volcanic eruptions. This soil is good for cotton & sugarcane cultivation. The Deccan plateau is broadly divided in two:

(a) The Western Ghats

(b) The Eastern Ghats

(a) The Western Ghats: If you look at map (Fig. No. 9.6), we will see the Western Ghats or Sahyadris lie on the Western edge of the Deccan plateau. It runs parallel to the western coast for about 1600 km. The average elevation of the Western Ghats is 1000 metres. The famous peaks in this area are Doda Betta, Anaimudi and Makurti. The highest peak in this region is Anaimudi (2695m.). Western ghats are continuous and can be crossed through passes like Pal Ghat, Thal Ghat and Bhore Ghat. The rivers like Godavari, Bhima and Krishna flow eastward while the river Tapi flows westward. The streams form rapids & water falls before entering the Arabian Sea. The famous water falls are Jogfalls on Sharavati, Shiva Samudram falls on Kaveri etc.

(b) The Eastern Ghats: The Eastern Ghats are discontinuous low belt. Their average elevation is 600 m. They run parallel to the east coast from south of Mahanadi valley to the Nilgiri hills. The highest peak in this region is Mahendragiri (1501 m). The famous hills are Mahendragiri hills, Nimaigiri hills in Orissa, Nallamalai hills in Southern Andhra Pradesh, Kollimalai and

Pachaimalai in Tamilnadu. The area is drained by the Mahanadi, Godavari, Krishna and Kaveri river systems. The Nilgiri hills join Western & Eastern Ghats in the south.

ACTIVITY 9.2

Trace five main differences between Western and Eastern Ghats.

1. Continuity		
2. Average Elevation		
3. Extent		
4. Highest Peak		
5. Rivers		

4. The Indian Desert

The Indian Desert lies towards the western margin of Aravali Hills. It is also called Thar Desert. It is the ninth largest desert in the world. It spreads over the states of Gujarat and Rajasthan. This region has semi-arid and arid weather conditions. It receives less than 150 mm of rainfall per year. The vegetation cover is low with thorny bushes. Luni is the main river in this area. All other streams appear only at the time of rainfall otherwise they disappear into the sand.



Figure 9.7 Camels in the Indian Desert

I am Thar 'The Indian Desert':

1. I remain dry most of the year. The moisture bearing winds goes parallel to Aravalli so I receive scanty rainfall.
2. I am pierced by cactus and other thorny bushes on my body.
3. If you are thirsty, you will have to walk several kilometers to reach an oasis and sinduates (small water body).

4. The sand dunes add to the beauty of my desert.

5. My people follow rich cultures and traditions.

5. The Coastal Plains

The coastal plains in India run parallel to the Arabian Sea & Bay of Bengal along the Peninsular Plateau. The western coastal plain is a narrow belt along the Arabian sea of about 10-20km wide. It stretches from Rann of Kachchh to KanyaKumari. Western coastal plains comprises of three sectors (i) Konkan Coast (Mumbai to Goa), (ii) Karnataka coast from Goa to Mangalore (iii) Malabar Coast (Mangalore to Kanya Kumari). The eastern coast runs along Bay of Bengal. It is wider than the western coastal plain. Its average width is about 120Kms. The northern part of the coast is called Northern Circar and the southern part is called Coromandal Coast. Eastern coastal plain is marked by Deltas made by the rivers Mahanadi, Godavari, Krishna and Kaveri. The Chilka largest salt water lake in India in Odisha is located to the south of Mahanadi Delta. The coastal plains are belts for growing spices, rice, coconut, pepper etc. They are centres of trade & commerce. The coastal areas are known for fishing activities, therefore large number of fishing villages have developed along the coasts. Vembanad is famous lagoon which is located at Malabar coast.

6. The Islands

India has two main groups of Islands. There are 204 islands in Bay of Bengal called as Andaman and Nicobar islands and 43 islands in Arabian Sea called as Lakshadweep islands. The Andaman & Nicobar island extend from north to south in Bay of Bengal. They are bigger in size. An active volcano is located on the Barren Island in Andaman & Nicobar group of islands. Lakshadweep islands are located near Malabar coast of Kerala in the Arabian sea. They cover an area of 32 sq km. Kavarati is the capital of Lakshadweep. These islands are formed by corals and endowed with variety of flora and fauna. These islands are important tourist attraction under water activities like snorkling, such diving, deep sea diving and other sports make these island more popular.

INTEXT QUESTIONS 9.4

1. Answer the following questions briefly (not more than two sentences)

(i) How was Deccan Trap formed?

(ii) State any two economic activities of coastal plains.

(iii) Why does Andman and Nicobar Islands attract more tourists?

(iv) Write the names of the rivers which help to form the western plain.

9.4 DRAINAGE SYSTEMS IN INDIA

The drainage system refers to the system of flow of surface water mainly through rivers. An area drained by a river and its tributaries is called a drainage basin. The drainage system is related to a number of factors like slope of land, geological structure, amount and velocity of water. A river through its drainage system performs several tasks. These are excess water removal from a particular area, transportation of sediments from one place to other, providing natural source for irrigation and maintaining the water table of a region. Traditionally, rivers were useful as a source of abundant fresh water and navigation. In today's world rivers importance has risen to include hydro power generation and setting up water-based industries. These are also important tourist attraction for activities such as boating, river rafting and cliff jumping. Because of their utility, rivers are important for life and hence regarded as lifeline. Many cities are located along the rivers and are densely populated. Delhi on the banks of Yamuna, Patna along Ganga, Guwahati along Brahmaputra, Nasik along Godavari and Cuttack along Mahanadi are some examples (Fig. 9.8). On the basis of the origin the drainage can be divided in to two parts:

- (a) The Himalayan drainage system
- (b) The Peninsular drainage system

Tributary: A stream or river that flows into a larger river. e.g. Yamuna

Delta: A triangular shaped land at the mouth of a river formed from the deposition of silt, sand and small rocks that flow downstream in the river. eg. Ganga delta.

Estuary: A partially enclosed coastal body of water where the salty tidal water mixes with the fresh water of the river. eg. Narmada river makes an estuary.

9.5 MAJOR DRAINAGES SYSTEMS

As mentioned earlier on the basis of origin, the Indian river have been classified into two major drainage systems. Let us discuss the comparision between the two drainage systems.

Himalayan River System

1. They are Perennial rivers originating from glaciers.
2. Rivers form valleys by the process of erosion.
3. The rivers are ideal for irrigation purposes as they pass through plain fertile tracts.
4. These rivers have meandering courses which shift over time.

9.5.1 The Himalayan Drainage System

Most of the Himalayan Rivers are perennial. This means they have water throughout the year. This is because most of these rivers originate from the glaciers and snowy

peaks. They also receive water from the rainfall. The main river system in this category are:

1. The Indus River System Jhelum, Ravi, Beas and Satluj
2. The Ganga Rivers System Yamuna, Ramganga, Ghaghara, Gomti, Gandak and Kosi etc.
3. The Brahmaputra River System Dibang, Lohit, Tista and Meghna etc.

9.5.2 The Peninsular Drainage System

You have already studied about Peninsular Plateau. Most of the Peninsular rivers flow eastwards and enters into Bay of Bengal. Only Narmada and Tapi rivers which flow westwards of the Western Ghats. They are good for generating hydropower because these rivers form rapids & water falls. The major peninsular rivers are Mahanadi, Godavari, Krishna and Kaveri.

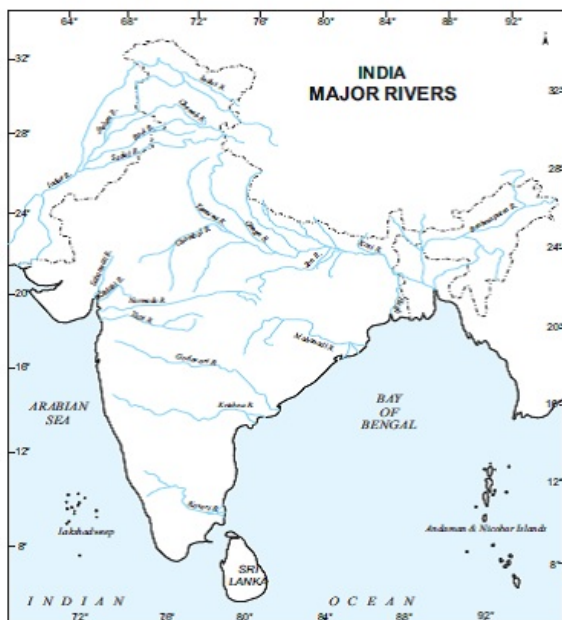


Figure 9.8 Illustrates Major Rivers of India

ACTIVITY 9.3

Look at the physical and political maps of India in an atlas. Given below are four river. Find out the following information and record in the table given below.

Rivers	Main tributaries	Origin	States it passes through	Drains into
Ganga				
Brahmaputra				
Indus				
Satluj				
Kaveri				
Godavari				
Krishna				

ACTIVITY 9.4

Look at the Atlas and name all the cities situated along the Ganga and locate on the physical India map.

9.6 KEEPING RIVERS CLEAN

Do you know that over 97% of all the water on Earth is salty and most of the remaining 3% is frozen in the polar ice-caps? The rain, rivers, lakes and underground water hold less than 1% of all the fresh water. This tiny amount has to provide the fresh water needed to support the entire population of the world. Fresh water is a precious resource and the increasing pollution of our rivers and lakes is a cause for alarm.

You must have seen a river either flowing through your town, village or elsewhere. India has a large number of rivers that are lifelines for the millions of people living along their banks. These rivers can be broadly categorized into four groups:

(i) Rivers that flow down from the Himalayas and are supplied by melting snow and glaciers. This is why these are perennial, that is, they never dry up during the year.

- (ii) The Deccan Plateau rivers, which depend on rainfall for their water.
- (iii) The coastal rivers, especially those on the west coast, which are short and do not retain water throughout the year.
- (iv) The rivers in the inland drainage basin of west Rajasthan, which depend on the rains. These rivers normally drain towards salt lakes or flow into the sand.

Rivers have been given the pride of place in the way of life. Several cities as well as holy shrines are on the banks of rivers, and indeed, rivers such as the Ganga and the Yamuna are sacred to millions. Despite this, they are being polluted with unaccountable and environmentally threatening practices. Only sewage claims for about 70 percent pollution loads in Indian rivers. Heavy loads of biological and chemical pollutants usually enter waterways to be consumed in some manner by the downstream users. This affects the aquatic life and causes various health hazards. Along with the pollutants, the insensitivity of people towards rivers is severely adding to the problem. Urban dwellers identify vaguely with rivers. An example can be the highly contaminated blackish water of Yamuna river in New Delhi which hardly draws attention from capital's citizens.

Since, water issues are assigned to provincial governments in India, each one of them treats a river as its own, with little or no regard to the downstream effects. Ecologists and conservationists have long demanded that rivers need to be treated as one entity and work on a determined, time-specific combination of serious efforts. This could lead to an improvement of water quality of the rivers. The government has come up with ambitious river cleaning initiatives such as the Ganga Action Plan (GAP) and the National River Conservation Plan (NRCP) in the hope of improving water quality. Water harvesting is gaining popularity across the country, through which monsoon waters could be retained in the river basins. Several civic organizations and people movements are also contributing in raising awareness and sensitivity about the critical condition of polluted rivers.

ACTIVITY 9.5

1. Find out the river or natural water source in your locality. Observe the kind of activities that are happening there.
2. What kinds of human activities are causing damage to river systems?
3. Write a letter to the local authority suggesting what you and your friends like to do to stop pollution. Also mention in the letter what help would you like to have from them.
4. Organise a meeting with your friends to discuss what can be done to prevent the negative effects of the human activities

There could be many ways of stopping pollution. Suggests the ways to check the water pollution.

INTEXT QUESTION 9.5

Answer the following question:

1. Mention the name of two tributaries joining Ganga from the north.
2. Which lake is located near Mahanadi?
3. Write the names of the states drained by river Godavari.
4. Which river is tributary of Tungbhabhadra?

WHAT YOU HAVE LEARNT

- India is located between 8°4' North and 37°6' North latitudes and 68°7' East and 97°25' longitudes. India has land boundaries of 15,200 km and 6100 km long coast line. India's landmass covers 3.28 million square kilometer of area.
- India can be divided into mainly six physical divisions: the Northern mountain, The Northern Plain, the Peninsular Plateau, the Indian desert and the coastal plains and Islands.
- The Himalayas may be divided into three parallel ranges: Greater Himalayas or Himadri, Lesser Himalayas or Himachal and Outer Himalayas or Siwaliks.
- The northern plain spreads mainly in the states of Punjab, Haryana, Uttar Pradesh, Bihar and West Bengal. The soil here is rich in nutrients and hence good for cultivation of varieties of crops.
- The Peninsular plateau stretches from the Aravali range till the southern tip of India. It is a table land made of old and metamorphosed rocks.
- The Great Indian Desert spreads over the states of Gujarat and Rajasthan. This region has semi-arid and arid weather conditions.
- The coastal plains in India run parallel to the Arabian sea & Bay of Bengal. They are called Western coastal plains and the Eastern coastal plains.
- India has two main groups of Islands. There are 204 islands in Bay of Bengal called the Andaman and Nicobar Islands and 43 islands in Arabian Sea i.e Lakshadweep islands.
- Indian River System can be divided into two main categories: The Himalayan Drainage System and The Peninsular Drainage System. The three main rivers in Himalayan system are the Indus, Ganga, The Brahmaputra. The main Peninsular rivers are Narmada, Tapi, Godavari, Krishna, Kaveri and Mahanadi.

TERMINAL EXERCISES

1. Explain the location and extends of India.
2. Describe any three characteristics of the Indian Desert.
3. Explain any two points each about the three parallel ranges of Himalayas.
4. Differentiate between Himalayan and Peninsular drainage system by giving any four differences in each.
5. Give reasons:-
 - (i) Northern plains have fertile alluvial soil.
 - (ii) Indian desert has very less vegetation cover.

Project:

- Create a guidebook for visitors to your home region
1. It should describe your region's unique physical and human characteristics.
 2. List elements of the physical landscape, such as climate, landforms, plants, animals, and elements of the human landscape, such as work opportunities, economic activities, recreational activities, regional language, and foods.
 3. The guidebook should include pictures/ drawings and should feature the things that you feel are special about your locality.

ANSWERS TO INTEXT QUESTIONS

9.1

1. (i) Bangladesh, Myanmar.
(ii) Bay of Bengal and Arabian Sea.
(iii) Sri Lanka.
(iv) Pakistan, Bhutan.

9.2

1. (i) Kerala, Tamil Nadu.
(ii) Jammu and Kashmir, Arunachal Pradesh.
(iii) Nepal, Bhutan.
(iv) Daman and Diu, Dadar Nagar Haveli.

9.3

1. the Himadari The Himachal, and Siwalik.

2. A. Jammu and Kashmir.

B. (a) No

(b) No

(c) Yes

3. India, Nepal, Bhutan.

4. Patkoi, Mizo hills

9.4

1. (i) Due to volcanic eruption.

(ii) (i) Agriculture (ii) fishing (iii) trade and commerce (any two)

(iii) Because Islands have developed attractive tourist activities of under water and water sports.

(iv) Satluj, Beas, Ravi

9.5

1. Gandak, Kosi.

2. Chilka.

3. Maharashtra, Andhra Pradesh and Chattisgarh.

4. Krishna.

10 CLIMATE

Mona and Raju were excited about proposed first trip to a hill station, Shimla with their parents. While they were packing their clothes, their mother asked them to pack some woolen clothes also. They reside in Chennai, a city and capital of Tamil Nadu, a state in South India. They were really surprised as it was the month of May and it's very hot in Chennai. Their mother told that although India has monsoon climate but in Shimla, it being a hill station the weather was cool. They were little confused with a few questions in their mind like - what is weather? What is the difference between the weather and the climate? Why do we find different climatic conditions in India? You will find the answers to such questions in the following lesson.

OBJECTIVES

After completing this lesson, you will be able to:

- list the factors that influence the climate of India;
- explain the mechanism of monsoon and its various characteristics;
- recognize the cyclic system of seasons along with their unique features;
- describe the distribution of rainfall in India;
- analyse how our social and cultural life is deeply associated with the cycle of seasons; and
- describe the global environmental changes and its impact on Indian climate.

10.1 FACTORS AFFECTING THE CLIMATE OF INDIA

When Mona and Raju were in the train along with their parents they asked the questions to their parents about the difference between the weather and climate. One of the fellow passengers was a teacher, Mrs. Rupa and she explained that climate

is always for a large area like a country or a big region and generally it does not change, like India has monsoon climate whereas weather is always for a smaller area like that of your city or village where it may frequently change like raining in the morning and sunny in the afternoon. Mrs. Rupa asked them to observe the changes in the weather conditions along the way to Shimla. They realized the changes: it was hot and humid weather in the southern regions and slowly it became hot and dry in the northern plains; and they felt cool on their way when they were close to Shimla. They asked the teacher the reason for it and she explained that there are many factors which affect the climate or weather.

Do you know

Climate refers to the sum total of weather conditions and variations over large area for a long period of time (more than 30 years). Weather is state of atmosphere over an area at any point of time. Similarly weather conditions which last for longer duration are responsible for making a season.

10.1.1 Factors Affecting the Climate of India

1. **Location:** The places which are closer to equator have high temperature. As one moves towards the poles temperature decreases. As our country, India is located in Northern hemisphere closer to equator at $8^{\circ}4'$ and $23\frac{1}{2}^{\circ}$ Tropic of Cancer passes through the central part of India. So in south of this latitude we find tropical climate and towards the north we find sub-tropical climate. For example, Andhra Pradesh would be hotter than Haryana. Broadly speaking parts lying south of the Tropic of Cancer receive more solar heat than those lying north of it.
2. **Distance from the sea:** The southern half of India is surrounded by sea from three sides: the Arabian Sea in the west, the Bay of Bengal in the east and the Indian Ocean in the south. Due to moderating influence of the sea this region is neither hot in summer nor very cold in winter. For example the area of North India which is far away from the sea has extreme type of climate and the area of south India which is nearer to the sea has equable type of climate. We can see the variations in temperature and rainfall at different stations in the given table 10.1.
3. **Altitude:** It means the height above the average sea level. The atmosphere becomes less dense and we feel breathlessness as we go higher from the earth surface and thus the temperature also decreases with the height. For example, the cities located on the hills are cooler like Shimla whereas the cities lying in the plains will have hot climate like Ludhiana.

4. Mountain Ranges: Mountain ranges also affect the climate of any region to a great extent. The Himalaya Mountain is located in the northern part of our country with an average height of 6000m. It protects our country from cold winds of Central Asia. On the other hand, they check rain bearing South-West Monsoon winds and compel them to shed their moisture in India. Similarly, Western Ghats force rain bearing winds to cause heavy rain fall on the Western slopes of the Western Ghats.

5. Direction of surface winds: The wind system also affects the Indian climate. This system consists of monsoon winds, land and sea breeze, and local winds. In winter the winds blow from land to sea so they are cold and dry. On the other hand, in summer wind blow from sea to land bringing the moisture along with them from the sea and they cause wide spread rain in most part of the country.

6. Upper air Currents: Besides surface winds, there are strong air currents called Jet streams which also influence the climate of India. These jet streams are a narrow belt of fast blowing winds located generally at 12,000 metre height above the sea level. They bring western cyclonic disturbances along with them. These cyclonic winds originate near the Mediterranean Sea and move eastwards. On their way, they collect moisture from Persian Gulf and shed it in the North western part of India during winter seasons. These Jet streams shift northwards during summer season and blow in Central Asia. Thus helps in the onset of monsoons.

ACTIVITY 10.1

Temperature (T) and Rainfall (R) of some important stations

Stations	Month												
		J	F	M	A	M	J	J	A	S	O	N	D
Leh	T	-8	-7	-1	9	10	14	17	17	12	6	0	-6
	R	10	8	8	5	5	5	13	13	8	5	0	5
Chennai	T	25	26	28	31	33	33	31	31	30	20	26	25
	R	4	13	13	18	38	45	87	113	119	306	350	135

(i) Write annual range of temperature between two places.

(ii) Which is the rainiest month of the year in each stations?

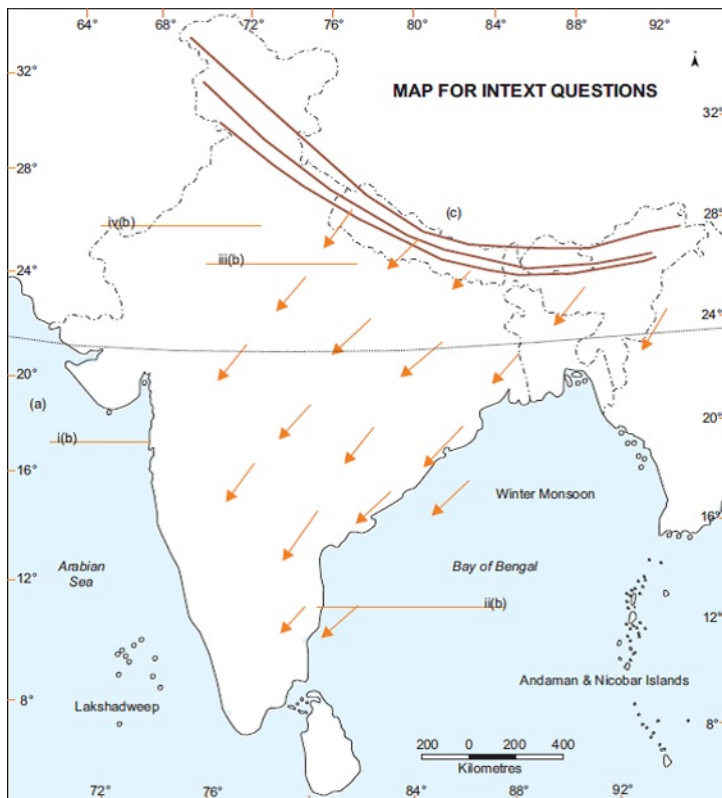


Figure 10.1

Figure 10.1 Map for intext questions

INTEXT QUESTIONS 10.1

Look at the map given above and answer the following questions:

- Name the important latitude drawn on the map which has divided India in two heat zones. Also tell the degree of that latitude.
- Name the cities located on map which are influenced by the sea and cities which are not influenced by the sea.
- Which mountain range protects our country from cold breeze of Central Asia?
- Observe the wind direction given on the map and tell why do we have dry winter season?

Mona and Raju returned from Shimla after five days stay. They were very happy and shared their experience with their friends. Few days later they were surprised to see a news headline that monsoons are coming on time. What is the meaning of

monsoon? They wanted to know the answers of their questions with the help of their teacher. Try to find out answers in the following section.

10.2 MECHANISM OF MONSOON

The word monsoon is derived from the Arabic word 'Mausim' which means season. Monsoon refers to the seasonal reversal in the wind direction during a year. During summer, the interior parts of North Indian Plains covering Rajasthan, Punjab, Haryana, and Western Uttar Pradesh are intensely hot. The daily maximum temperature in some of these parts is as high as 45° to 47° C. Table 10.1 given below indicates the climatic diversity in India. Try to understand the varying temperature that different stations in India have.

Table 10.1: Temperature (in ° Celcius) and Rainfall (in cm) of some important stations in India

STATIONS		MONTHS									
		J	F	M	A	M	J	J	A	S	O
LEH	Temp.	-8	-7	-1	9	10	14	17	17	12	6
	Rainfall	10	8	8	5	5	5	13	13	8	5
SHILLONG	Temp.	10	11	16	19	19	21	21	21	20	1
	Rainfall	14	29	56	146	295	476	359	343	302	1
DELHI	Temp	14	17	23	29	34	35	31	30	29	2
	Rainfall	21	24	13	10	10	68	186	170	125	1
JAISALMER	Temp	16	20	25	30	33	34	32	31	30	2
	Rainfall	0.2	0.1	0.3	0.1	0.5	0.7	0.9	86	14	0
MUMBAI	Temp.	24	24	24	28	30	29	27	27	27	2
	Rainfall	4	2	2	2	18	465	613	329	286	6
CHENNAI	Temp.	25	26	28	31	33	33	31	31	30	2

	Rainfall	4	13	13	18	38	45	87	113	119	3
THIRUVANA NTHAPURAM	Temp.	27	27	28	29	29	27	26	26	27	2
	Rainfall	23	21	39	106	208	356	223	146	138	2

Do you know?

- Air has weight and this weight exerts pressure on us, which is known as air pressure.
- There is an inverse relationship between temperature and air pressure, i.e. if the temperature of any area is high then the air pressure will be low and vice-versa.
- Difference in the air pressure is responsible for the attraction of the winds.

The average maximum temperature is above 33°C in the month of May at Delhi and Jodhpur. Such high temperature heats up the air of that region. Hot air rises, low pressure area is created under it. This low pressure is also known as monsoonal trough. It lies between Jaisalmer in the west and Balasore in Odisha in the East.

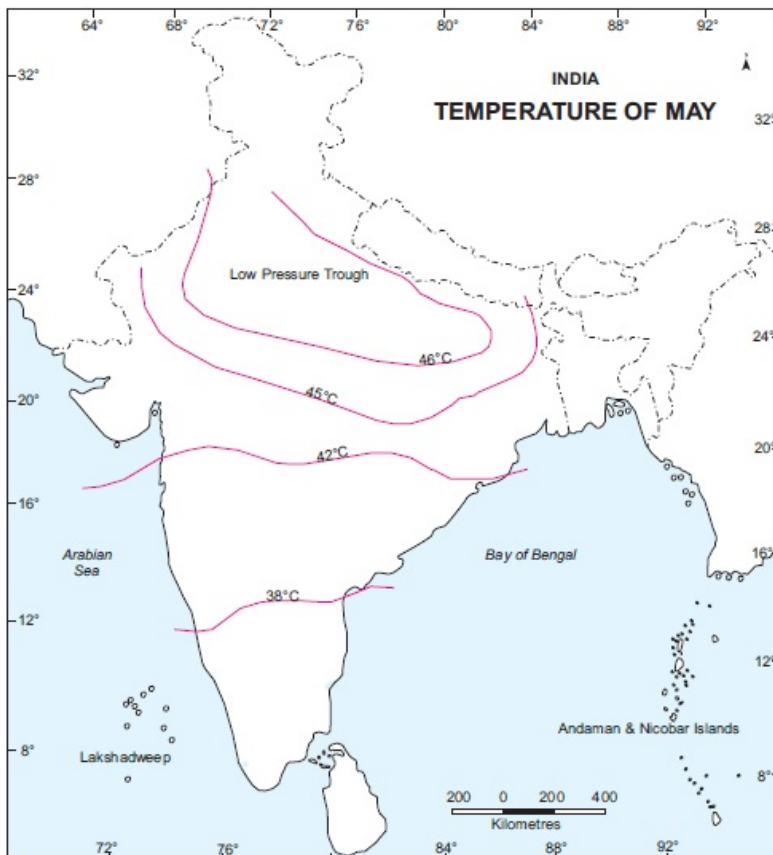


Figure 10.2 Map of Temperatures in May in various parts of India.

On the other hand temperature over Indian Ocean is relatively low, as water needs more time to get heated as compared to land. So a relatively high pressure region is created over the sea. See the map 10.2 given above and try to understand the given phenomenon.

Thus, there is a difference of temperature and resultant pressure over North Central Indian Plains and Indian Ocean. Due to this difference, air from high pressure region of the sea starts moving towards the low pressure region of North India. Thus, by mid June the general movement of air is from equatorial region of Indian Ocean to the Indian subcontinent and the direction of these winds in general is from South- West to North-East. This direction is exactly opposite to that of the trade winds (North – East to South-West) prevailing during winter in India. This complete reversal

of wind direction from North-East to South West and vice-versa is known as monsoons.

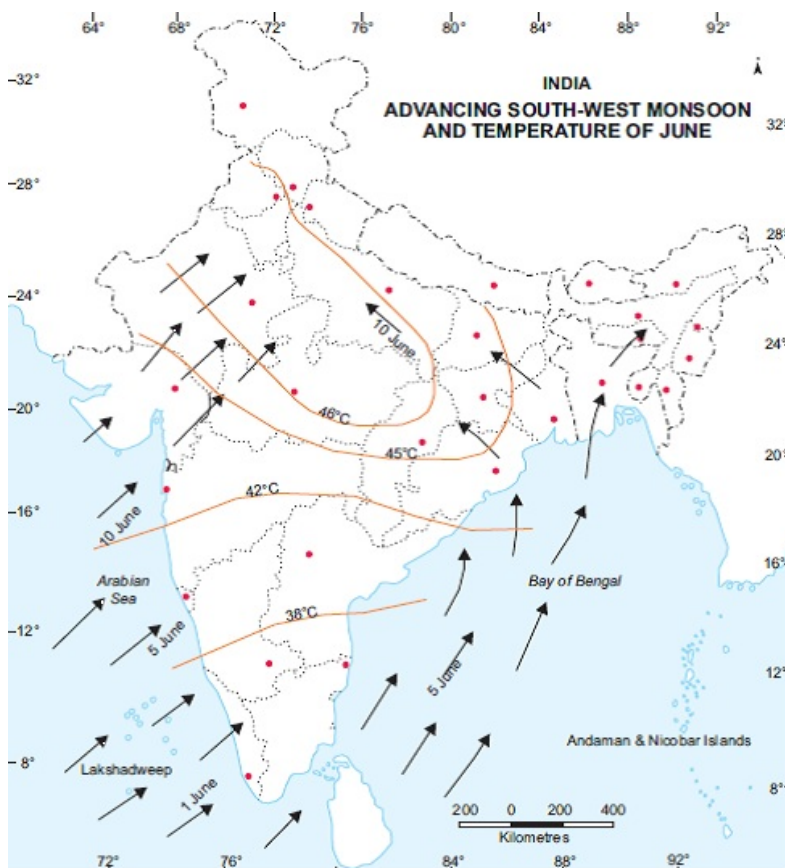


Figure 10.3 Map of India showing Temperature in June-Advancing Southwest Monsoon

These winds originate over warm seas. Therefore, they contain a lot of moisture. When these moisture laden winds move over the Indian sub-continent they cause wide spread rain throughout India and from June to September 80% to 90% of the total rainfall in India is confined to these four months only.

10.2.1 Characteristics of the Monsoon

1. Monsoons are not steady winds. They are irregular in nature affected by different atmospheric conditions i.e. due to regional climatic conditions. Sometimes monsoon early or some times late.
2. Monsoons are not equally distributed. Coastal areas like Kerala West Bengal and Odisha receive heavy rain fall, whereas interior regions like Haryana, Madhya Pradesh, receive less rainfall.

3. When monsoon arrives, it gives heavy rainfall which continues for several days. This is known as 'burst of monsoon'. This occurs mainly at Kerala coast where it reaches first.

ACTIVITY 10.2

Observe the picture and answer the following questions:

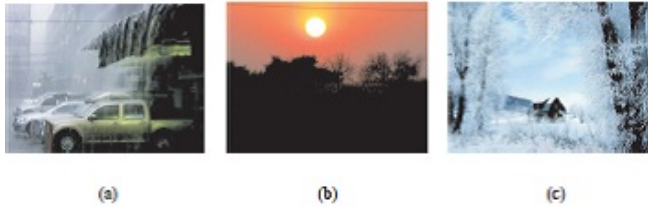


Figure 10.4

Fig. 10.4: Summer, Winter and Rainy Season

1. Identify the seasons in the given pictures (a), (b) and (c).
2. Arrange them on the basis of their occurrence.
3. Which season you like the most and why? Write answer in about 30 words.

INTEXT QUESTIONS 10.2

Look at maps (Fig. 10.2, Fig. 10.3) of advancing monsoon and answer the following questions:

1. Name the states which lie within the low pressure regions.
2. As the monsoon winds are coming from south-west which state they will strike first.
3. When the monsoon winds reach the Bay of Bengal, what is their direction?
4. Observe the rainfall data of the following cities and find out the average duration of monsoon in four cities. Name of the cities are:

- (a) Mumbai (c) Delhi
(b) Jaisalmer (d) Shillong

A few months later Mona and Raju's father was transferred to Delhi. They were excited to live in the capital of India. They shifted to Delhi. New home, new school, new friends and new environment and everything was new for them. They realized

that now they were going to see the real changes of the seasons which they had read in their book. Try to discover the various seasons and how they happen in the following section.

10.3 CYCLE OF SEASONS

Our country, India, enjoys variety of seasons due to geographical locations. Now you will know about the seasons of India and their unique features. We have four seasons:

- (a) Cold weather season (December–February)
- (b) Hot weather season (March–May)
- (c) Advancing South–West monsoon season (June–September)
- (d) Post or retreating monsoon season (October–November).

You will know more about each of them in the following section.

(a) Cold Weather Season: The duration of cold weather season is from December to February. The temperature decreases from the South to the North. December

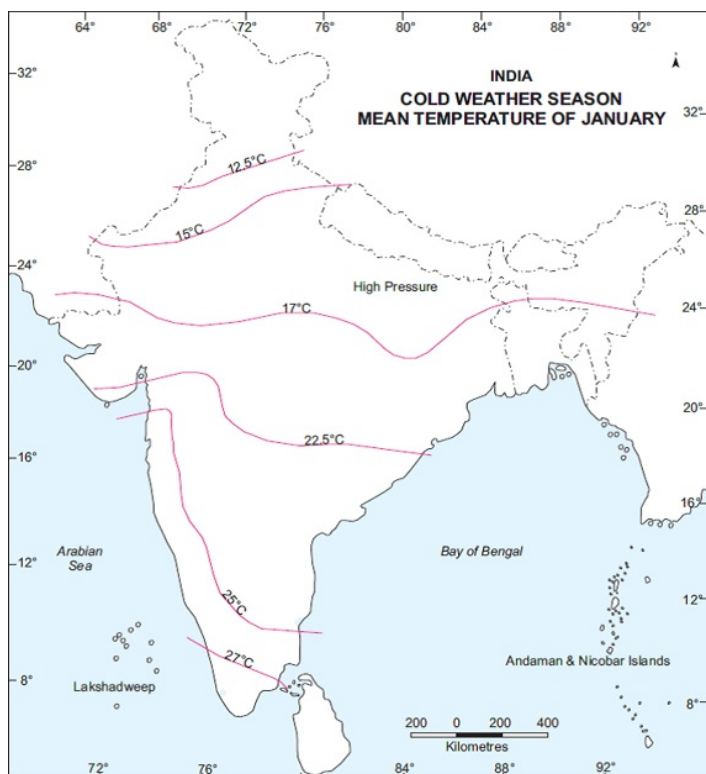


Figure 10.5 Map of India Mean Temperature of January

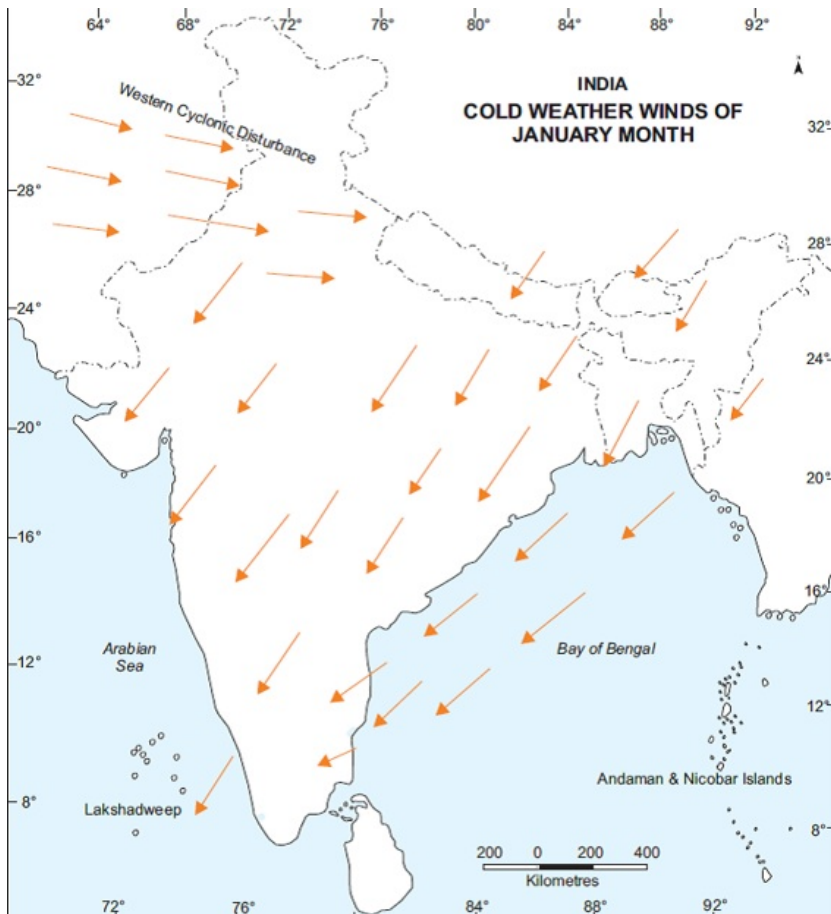


Figure 10.6 Map of India Direction of winds in January

and January are the coldest months and the average temperature in North is (12° to 15°C) and in South (25°C). Frost is common in the North and North- West India. There is light rainfall in this region due to Western disturbances. Higher slopes of the Himalayas experience snowfall. During the winter season, North-East trade winds prevail over India. They blow from land to sea. Hence, for most part of the country, it is a dry season. However, the Tamil Nadu coast receives winter rainfall due to these winds. A part of North-East trade winds blow over Bay of Bengal. They gather moisture which causes rainfall in the coastal Tamil Nadu while the rest of the country remains dry. In the northern part of the country the weather is marked by clear sky, low temperatures and low humidity. The winter rainfall is very important for the cultivation of 'Rabi' crops.

(b) Hot Weather Season: By the end of February the temperature starts rising. So from March to May it is hot weather season. We find high temperature in plains, western part of India and in the central part of peninsular India. In Northern plains, thus, an elongated low pressure which is called monsoonal trough created here, which extends from Jaisalmer in western Rajasthan to Jharkhand and parts of Odisha to the East. However, over Indian Ocean south

of the equator high pressure belt begins to develop in this season. In North- West India, afternoon dust storms are common. During summer, very hot and dry winds blow over North Indian plains. They are locally called 'Loo'. Exposure to these hot winds may cause heat or sun stroke. This is also the season for localized thunderstorms, associated with violent winds, torrential downpours, often accompanied by hail. In West Bengal, these storms are known as the 'KaalBaisakhi' (calamity for the month of Baisakh). Towards the close of the summer season, pre-monsoon showers are common, especially in Kerala and Karnataka. They help in the early ripening of mangoes, and are often referred to as 'mango showers'.

(c) Advancing South West Monsoon Season: After the scorching heat of summer season people eagerly wait for the rains which can give them relief. Farmers wait for the rains so that they can prepare their fields for the next cropping season Kharif. June to September are the months of advancing South- West monsoon season. By the end of May the monsoon trough further intensifies over north India due to high temperature in the region. The General direction of the wind during this season is from South-West to north-east. These winds

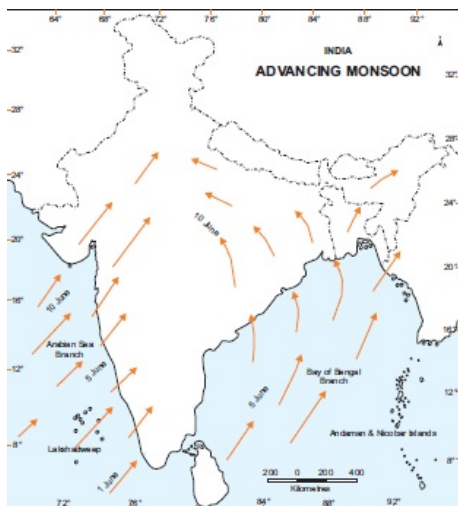


Figure 10.7 Advancing Monsoon of India

are strong and blow at an average velocity of 30 km per hour. These moisture laden winds first hit at Andaman and Nicobar Islands in the last week of May and Kerala coast in the first week of June with violent thunder and lightning. This South-West monsoon that flows in to India brings about a major change in its weather. Two branches of south-west monsoon originate from: (i) Arabian Sea and (ii) Bay of Bengal.

The Arabian Sea Branch obstructed by Western Ghats gives heavy rainfall on the Western side of Western Ghats. It reaches Mumbai by 10th June (See Fig. 10.7). When this branch crosses the Western Ghats and reaches the Deccan Plateau and parts of Madhya Pradesh, it gives less rainfall as it is a rain shadow region. Further, this branch reaches in Northern Plain by 20th June.

The monsoon winds that move from Bay of Bengal strike Andaman and Nicobar islands North-Eastern states and coastal areas of West Bengal and covers the whole of India by the 15th of July. They cause heavy rainfall in the region. However, quantity of rainfall decreases as they move towards West over the Northern plains. For examples rainfall at Kolkata is 120 cm, Allahabad 91 cm and Delhi 56cm. You must have seen that rainfall does not continue for several days. The monsoon tends to have 'breaks' in its rainfall which causes wet and dry spells. This means that monsoon rains occur only a few days at a time. Rainless dry spells occur in between. As the monsoon comes after the hot and dry summer season, the rainfall brings down the temperature. We can see this decline is from 5°C to 8°C between mid June and mid July. This is the time when many parts of India face floods also. This is mainly because of heavy rainfall and our inability to manage our water resources more systematically. On the other hand there are many areas that experience drought conditions during this season.

ACTIVITY 10.3

Collect the information from the newspapers and other sources and find out which parts of India are regularly affected by the floods and droughts. Also paste the newspaper cuttings as a sample. Identify name the reasons and collect the information about the most recent.

(d) Retreating or Post Monsoon Season: October and November are the months of post (or retreating) monsoon season. The temperatures during September-October start decreasing in north India. Monsoonal trough also becomes weak over North-West India. This is gradually replaced by a high pressure system. The South-West monsoon winds weaken and start withdrawing gradually from North Indian Plains by November. In October the weather remains humid and warm due to continuing high temperature and moist land in

month of October. In Northern plains hot and humid weather becomes oppressive at this time. It is commonly called 'October Heat'. However, towards the end of October, temperature starts decreasing, making nights pleasant. This is also the time of cyclonic storms which develop in the Bay of Bengal as the low pressure of North India shifts to this area. These storms create havoc in coastal areas of Odisha, Andhra Pradesh and Tamil Nadu, especially in the deltas of Mahanadi, Godavari and Krishna rivers.

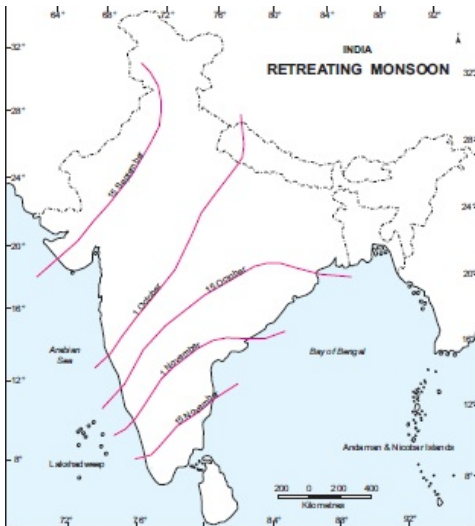


Figure 10.8 Retreating Monsoon

INTEXT QUESTIONS 10.3

Choose the correct answer:

- (i) The hot and dry wind blowing in the northern plain in the summer are called—
(a) KaalBaisakhi (c) Trade winds
(b) Loo (d) All of the above

(ii) Which mountain range acts as a barrier in the path of the Arabian Sea branch?

- (a) Aravallis (c) Western Ghats
(b) Eastern Ghats (d) Raj Mahal hills

(iii) The tropical cyclones of the Bay of Bengal usually occurs during

- (a) South-west monsoon (c) Retreating monsoon season
(b) Hot weather season (d) Cold weather season

(iv) Which place would be the hottest one in March?

- (a) Delhi (c) Deccan Plateau
(b) Shillong (d) Punjab

(v) Monsoons are called

- (a) Seasonal winds (c) Permanent winds
(b) Temporary winds (d) Local winds

Seasons, its cycle, causes and effects were now clear to Mona and Raju. Only one question remained unanswered. If the monsoons came in a particular area for certain duration so it means the rainfall distribution in India was uneven? Try to find the answer with the help of Rainfall distribution map.

10.4 DISTRIBUTION OF RAINFALL

Rainfall in India is highly uneven over a period of time in a year. As we move from East to West in Northern plains, we observe that in central India rainfall decreases. In peninsular region, India's rainfall decreases from coast to interior parts. In North-East India, the rainfall increases with altitude. India is the unique example of rainfall distribution with marked contrasts. Both, one of the rainiest and driest places of the world are located in India itself. Can you think why? Spatial variations in rainfall in India can be shown under the following headings. Observe the given map and find out the states under the given categories –

(a) Areas of heavy rainfall (more than 200cm): Maximum rainfall in India occurs in the western coast, sub Himalayan regions of north-east and Garo, Khasi and Jaintia hills of Meghalaya.

(b) Area of Moderate rainfall (100-200cm): Areas receiving 100 to 200cm rainfall in India include some parts of the Western Ghats, West Bengal, Odisha and Bihar and many states.

(c) Areas of Low rainfall (60 to 100cm): This is the region of low rainfall, which includes parts of Uttar Pradesh, Rajasthan, interior deccan plateau.

(d) Areas of Inadequate rainfall (Less than 60cm): This is region of scanty rainfall. The western part of Rajasthan and Gujarat, Laddakh and south central part

receives a rainfall of less than 20cm.

ACTIVITY 10.4

List out the festivals of India in the table given below. Also find out which season is economically significant in your area and why?

List of festivals	Area where celebrated	Date and month	Season	Economical Signification

Do you see co-relation between seasons of festivals and harvest seasons. Please provide one reason.

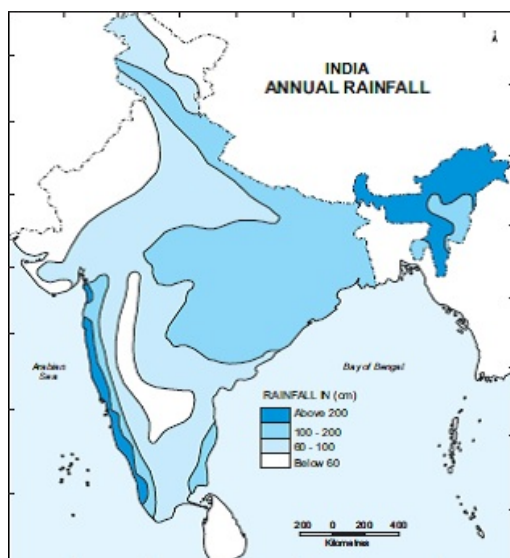


Figure 10.9 MP of India showing Annual Rainfall of India

10.5 SOCIO-CULTURAL LIFE

You are now well aware about the cycle of seasons but a second thought comes to our mind what do the relationship between the seasons and our life? Are they so important that they affect our life? The answer is 'yes'. They do affect our social and cultural life. As India is an agricultural country the main economic activity of agriculture is totally dependent on the cycle of seasons. The time of Kharif crop is advancing monsoon season and harvesting is post monsoon season. Rabi crop is grown in winter and zaid crop is at the end of winter season. Floods and droughts are hindrances in the economic growth of the nation as our economy is agro based economy.

All our activities are related with the seasons. As winter season comes the days become shorter and we start purchasing woolen clothes. Groundnuts, almonds and calorie rich food become very important in our diet. In spite of cold weather people celebrate many festivals like Makar Sankranti in many states, Lohri in Punjab and Pongal in Tamil Nadu in the month of January. Basant Panchami is also celebrated in the month of February in which people pray for good harvest. Summer season is very dry but it reminds us of juicy fruits, ice creams and variety of drinks. What are the fruits available in this season? Holi and Baisakhi are the main festivals of the season. By the end of summer farmers start preparing their fields so that they can welcome the rains. This is the time when people of Kerala celebrate Onam which coincide with their harvest season. Post Monsoon is the harvesting time. It is also a festival time of Dusshera, Durga Pooja and Diwali which are celebrated all over India.

10.6 GLOBAL ENVIRONMENTAL CHANGES AND ITS IMPACT ON INDIAN CLIMATE

After studying this lesson you must have understood that India is fortunate to have four clear seasons' summer, winter, spring and monsoon. However, these days one can notice disturbance in the cycle of seasons. This is due to global warming which is a burning topic of today's world. It has a significant political, social and economic impact that may affect almost every aspect of our lives and lifestyles. The global warming has a serious impact on world's climate and India cannot escape it. Don't you think that it is important for everybody to know about it and think how each one of us can contribute in reducing its extent?

Let us understand what is global warming. During the last decades of urbanization, industrialization and population growth the atmosphere has been polluted. Human activities increase the amount of carbon dioxide, ChloroFloro Carbon (CFC) and other dangerous gases. About 51% of the solar energy is absorbed by the earth's surface, which increases its temperature. The rest of the heat is reflected back in to the atmosphere. This helped in maintaining temperature. But now due to pollution some of the reflected heat is trapped by

green house gases (GHGs), mainly carbon

dioxide. It has increased the temperature of the Earth's surface. There is evidence to show that CO₂ levels are still increasing. Many countries have signed a convention to reduce GHGs under the U.N. framework. However, the current international agreements are still not effective enough to prevent the significant changes in climate.

We already know that 70% of Indians are working in agriculture sector. Any change in temperature will have an adverse effect on agriculture. This will have a serious social and economic impact on India. After reading the chapter we can clearly see that climate plays a very important role in Human life. Our food, our festivals, and our economy everything is closely linked with the cycle of seasons. If the seasons are favourable, human life will be good and comfortable. Since the state of the weather affects agriculture, health, transportation etc it is important that all of us make some change in our lifestyle to reduce CFC and other harmful gases.

ACTIVITY 10.5

Keep a diary of events about natural calamities such as earthquakes, cyclones and geographical events. Record them with name of the event, date and their impact.

INTEXT QUESTIONS 10.4

1. Why do we find the rainfall distribution in India highly uneven?
2. Name the three regions of India receiving lowest rainfall.
3. Name the months of Kharif and Rabi season.
4. When do we have the zaid season?
5. Which human activities are responsible for global warming?

WHAT YOU HAVE LEARNT

- Climate of India is affected by many factors like location, distance from the sea, altitude, mountain ranges, direction of surface winds and upper air currents.
- India has a special system of reversal of winds which is known as monsoon and it comes with a system.
- India has a cyclic system of season and it has four main seasons. They are winter, summer, advancing monsoon and retreating monsoon.
- Seasons play an important role in our day to day life and affect our activities

and eating habits.

Global warming influences Indian climate also.

TERMINAL EXERCISES

1. Describe any five factors which are responsible for affecting the climate? Explain with the help of examples for each factor.
2. Differentiate between climate and weather.
3. How are winds and their directions responsible for affecting the climate? Explain by giving examples.
4. Define monsoon. Identify the main reason which is responsible for moving trade winds in opposite direction?
5. Mention any four characteristics of cold weather season.
6. List any four main features of hot weather season?
7. By giving examples explain the effects of the global warming in India. What are the causes behind it?

ANSWERS TO INTEXT QUESTIONS

10.1

(a) Tropic of cancer, $23\frac{1}{2}^{\circ}$ N

(b)

Influenced by sea

(i) Mumbai

(ii) Chennai

Not influenced by sea

(iii) Lucknow

(iv) Delhi

(c) Himalayan Mountain Ranges

(d) Winds are coming from North-East. Since they are coming from land, they are dry and unable to give rain to the country.

10.2

1. Rajasthan, Punjab, Haryana, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Madhya Pradesh and Chhattisgarh and parts of Odisha.
2. Kerala.

3. South to North and North-East and North-West.

4. (a) Mumbai: 4 months (c) Delhi: 4 months

(b) Nagpur: 4 months (d) Shillong: 6 months

10.3

1. (i) (b) Loo

(ii) (c) Western Ghats

(iii) (c) Retreating monsoon season

(iv) (c) Deccan Plateau

(v) (a) Seasonal Winds

10.4

1. When monsoon winds enter from the coast, they give the maximum rain there. When they reach the central or northern regions, they become dry, resulting less rainfall.

2. Regions of low rainfall –

1. Northern leh-ladakh region

2. Western Rajasthan

3. South-Central part

3. Kharif– June and July Rabi – October and November

4. From the end of the winter season i.e. March to May.

5. Urbanization, Industrialization, Deforestation, burning of fossil fuels, etc.

11 BIO-DIVERSITY

You must have seen variety of grass, plants, bushes, trees, insects, birds, animals or beautiful landscape around you. We rely on this diversity of plants and animals to provide us food, fuel, medicine and other essentials without which we cannot live. These species are the product of more than four billion years of evolution. Yet, this rich bio diversity is being lost at an alarming rate largely because of human activities. However, there are many things that each one of us can contribute in preserving these species, plants, animals and other living organisms. There are lots of things which you can do to help in saving these precious diversities of life. It is very important for us to know about this variety in terms of plants, animals and micro-organisms. In this lesson, we will learn about some of these plants, animals, their importance, their distribution in India and need for their conservation.

OBJECTIVES

After studying this lesson, you will be able to:

- explain the concept of bio-diversity;
- explain the status of bio-diversity in India;
- establish the significance of biodiversity;
- describe natural vegetation and wildlife in India;
- locate forests, wildlife sanctuaries, national parks, biosphere reserves and wetlands in an outline map of India; and
- recognise our role in conserving natural vegetation and wildlife in our region.

11.1 BIO-DIVERSITY

Biodiversity is a short form of biological diversity. In simple terms biodiversity is the total number of genes, species and ecosystems of a region. It includes (i) genetic

diversity, (ii) species diversity and (iii) ecosystem diversity. Plants and animals constitute only a small component of biodiversity. Do you know that the invisible micro-organisms constitute a large component of bio-diversity.



Figure 11.1 Biodiversity

Genes: The basic biological unit of heredity. Genes of an individual belonging to the same species are similar and genes control the characteristics of particular species.

Species: A group of very similar having some common characteristics or qualities and capable of interbreeding.

Ecosystem—Any segment of the landscape that includes biotic (living) and abiotic (non-living) components is known as ecosystem.

11.1.1 Status of biodiversity in India

Biodiversity increases as we move from the poles towards the equator. India is located between 8°4' North and 37°6' North latitudes and 68°7' East and 97°25' East longitude. It is due to this unique position that India has such rich biodiversity. Although India

has only 2.4% of the world's land area but its contribution to the world's biodiversity is approximately 8% of the total number of species which is estimated to be 1.75 million (As per Global Biodiversity Assessment of UNEP of 1995). 6% of the world species are found in India. 45000 plants species comprising about 12 % of world's flora are found in Indian forests. Two of the twelve biodiversity hotspots in the world are in India. They are the North-Eastern region and the Western Ghats.

- A biodiversity hotspot is a region with a high level of endemic species. Endemic species are those species that are found in a certain limited area.
- Mega biodiversity: A unique combinations of different plants and animal species which is not available anywhere else.

11.2 SIGNIFICANCE OF BIODIVERSITY

Biodiversity is fundamental to the existence of life on the earth. Its significance cannot be underestimated. There are varieties of living things that exist in a given physical environment. These are interdependent and interrelated in the form of an ecosystem. Do you know that plants occur in distinct groups of communities in areas having similar climatic conditions? The nature of vegetation in any area determines the animal life. When the vegetation of a place is altered, animal life also changes and simultaneously it affects mankind. Loss of any component in the system adversely affects other components of the system. We are an integral part of the ecosystem. By cutting trees and killing animals, human beings lead to ecological imbalance. How does the ecosystem get influenced by human beings? Collect some articles from the newspaper and magazines which will help you in understanding human impact on ecosystem. We must understand that all plants and animals in an area are interdependent and interrelated in their physical environment? This ecosystem is extremely valuable in different facets of human life which includes the following:

- Providing of food, water, fiber, fuel etc.
- Regulating of climate and disease (For example: people are suffering from cold and cough in winters and stomach infections in monsoon etc.

11.2.1 Causes of Loss of Biodiversity

Increasing population and changing lifestyle leads to commercial exploitation of the natural resources. This results in loss of biodiversity. Consequently it is adversely affecting the ability of the nature to continue delivering the goods and services for human existence. The loss of biodiversity affects not only the physical environment but also the social, cultural, religious and spiritual well being of human life.

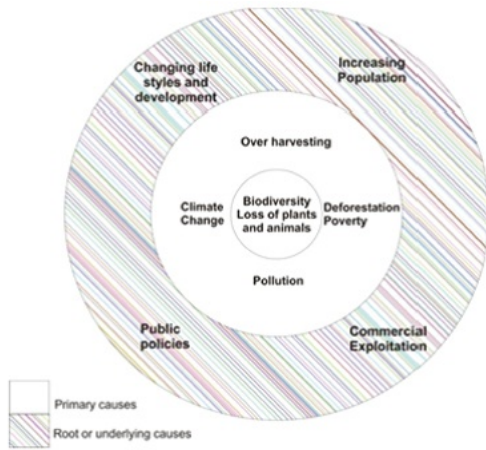


Figure 11.2 Causes of Loss of Biodiversity. The picture has three concentric circles. In the innermost circle is Biodiversity, loss of plants and animals. In the middle circle is Over harvesting, climate change, Pollution, Deforestation and poverty. In the outermost circle is Changing Life styles and development, Increasing population, Commercial Exploitation and Public Policies

Do you know

- United Nations had proclaimed the year 2010, the International Year of Biodiversity.
- According to IUCN (International Union for Conservation of Nature), by 2010 around 18,788 species out of 52,017 so far assessed are threatened with extinction. Of the world's 5,490 mammals, 78 are extinct, 188 critically endangered, 540 endangered and 492 vulnerable. Amphibians are also in danger of extinction, 1,895 of the planet's 6,285, are the most threatened group of species.
- Extinction of individual species, destruction of natural habitats, land-use conversions, climate change, pollution and degradation is continuing at an alarming rate. Do you think this has anything to do with the extinction of various species.

ACTIVITY 11.1

Can you mention the names of three species of plants and animals/birds found in your locality and their importance for the residents of your locality? One example has been done for you.

Sr. No.	Plants	Importance	Sr. No	Animals/Birds	Importance
1.	Neem	Give us medicine, wood, oxygen and shade	1.	Vulture	Keeps environment free of carcasses and waste, restrict spread of diseases, help control a number of pest like rats
2.			2.		
3.			3.		
4.			4.		

INTEXT QUESTIONS 11.1

1. “Bio-diversity is fundamental to the existence of life on the earth” Justify the statement by giving any two reasons.
2. Explain hotspots in 30 words.

11.3 NATURAL VEGETATION AND WILDLIFE

In our ecosystem, vegetation and wildlife are valuable resources. We all know that plants provide us with timber, give shelter to man and animals, produce the oxygen we breathe, prevent soil erosion and natural calamities such as floods, high speed winds and help in storage of underground water, give us fruits, nuts, latex, turpentine oil, gum, medicinal plants and also the paper that is so essential for our studies. These are some of the innumerable uses of plants. Wildlife includes animals, birds, insects, reptiles as well as the aquatic life forms. They provide us milk, meat, hides and wool. Insects like bees provide us honey, help in pollination of flowers and have an important role to play as decomposers in the ecosystem. The birds feed on insects and act as a decomposers as well. Vulture due to its ability to feed on dead livestock is a scavenger and considered a vital cleanser of the environment. So life forms, big or small, all are integral in maintaining a balance in the ecosystem.

11.3.1 Natural Vegetation in India

As in any other part of the world, natural vegetation of India is also determined by climate, physiographic and soil factors. If we look at the figure 11.3, we find that based on factors of temperature, rainfall and topographic conditions, India has diverse vegetation patterns as summarized below. Dense natural vegetation found in North- Eastern region, Western Ghats and Andaman Nicobar. The Northern plain and North-Western Region supports very scanty vegetation and is under cultivation. The

Deccan region is full of scrubs and mixed deciduous forests. Natural vegetation of India can broadly be divided into the following groups:

(i) Tropical Evergreen Forests

(ii) Tropical Deciduous Forests

(iii) Thorn Forests

(iv) Tidal Forests

(v) Himalayan Forests

Forests can also be man-made, it can be created in urban areas. However, in this lesson, only natural forests have been discussed under natural vegetation.

(i) Tropical Evergreen Forests

Trees in these forests remain green all the year round as the climate of the region is warm and wet throughout the year. The leaves of these trees do not fall in any particular season. Hence, they are evergreen. These forests are found in the areas having more than 200 cm of rainfall with a short dry season. The trees reach a height up to 60 meters or even more. It has a dense and mixed vegetation of all kinds including trees, shrubs, climbers, creepers, epiphytes and ferns giving it a multilayered structure. Hence, their economic exploitation is not viable. The number of species of trees is very large in a small area. Rosewood, ebony, mahogany, rubber, jack wood and bamboo are the important species of trees found in Tropical Evergreen Forests. In India, this type of vegetation is found in the areas of heavy rainfall in Western Ghats, upper parts of Assam and islands of Lakshadweep, Andaman and Nicobar. Hardwood from these forests is used for furniture, handicraft etc. The prevent landslides and soil erosion.

ii) Tropical Deciduous Forests

Trees in these forests shed their leaves once in a year. That is why they are called tropical deciduous forests. These are most widespread forests of India. These forests are found in the areas receiving annual rainfall between 75 to 200 cms. As far as the physical distribution of this type of forests is concerned they are found in the entire country excluding some parts of Deccan Plateau, North-Eastern Region, Western Ghats and Eastern coast. These forests have been subject to extensive clearance by man for the purpose of cultivation. Still some patches of natural vegetation are found along the foothills of Himalayas, hilly regions of peninsular and central part of the country. On the basis of the availability of rainfall these forests are further divided into moist deciduous and dry deciduous.

(a) The moist deciduous forests are found in the areas of rainfall between 100 to 200 cm. These are distributed mainly in the eastern parts of the country,

Northeastern states along the foothills of Himalayas, Jharkhand, Odisha and Chhattisgarh, and eastern slopes of Western Ghats. Teak, Bamboo, Sal, Shisham, Sandalwood, Khair, Kusum, Arjun, Mahua, Jamun and Mulberry are the important species of trees found in these forests.

(b) The dry deciduous forests are spread in the areas receiving rainfall between 75 to 100 cms annually. These forests are found in the interior parts of the Peninsular plateau and the plains of Uttar Pradesh, Madhya Pradesh and Bihar. Tree species grow in this vegetation are Teak, Sal, Peepal, and Neem.

(iii) Thorn Forests

The areas with less than 75 cm of annual rainfall are characterized by the natural vegetation of thorny trees and bushes. Climate of this part is mainly dry with occasional wet period, so it does not support dense vegetation. They are mainly found in North-Western India, interior parts of the Peninsular India including semi

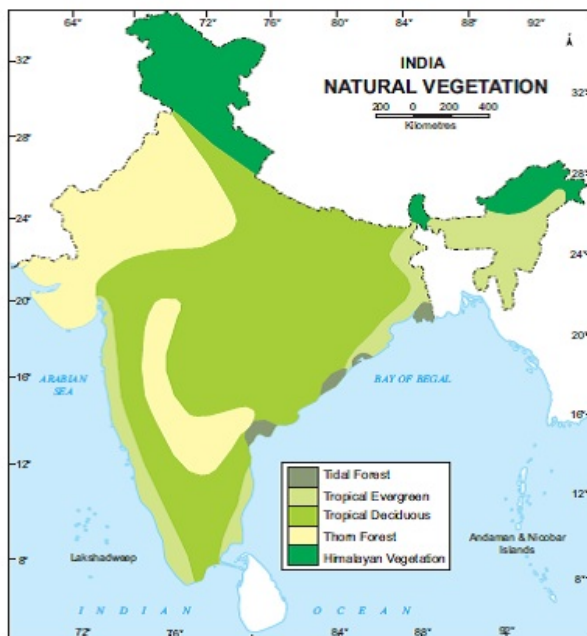


Figure 11.3 Map Illustrating Natural Vegetation of India

arid areas of Gujarat, Rajasthan, Madhya Pradesh, Chhattisgarh, Uttar Pradesh, Haryana, Karnataka, Andhra Pradesh and Maharashtra. Vegetation of these forests is widely distributed in the form of small trees and bushes with deep roots. The stems are succulent to conserve water. Leaves are mostly thick and small to minimize evaporation. Acacia, euphorbias, babul, cacti, khair, date and palms are common variety of trees in this type of vegetation.

(iv) Tidal Forests

As suggested by the name, these forests are found in tidal creeks and swamps influenced by the tides and wetland topography. These areas are characterized by mud, silt and water accumulated on the surface. Roots and branches of the trees are submerged under water for specific period of time. They are also called mangrove forests. Mangroves are practically evergreen with thick leathery leaves. Such types of forests are found in the deltas of Sundarbans, Mahanadi, the Godavari, Krishna, Kaveri rivers and in the Andaman and Nicobar Islands. Mangrove or Sundari is the common tree in sunderbans while palm, coconut, keora, and agar are other important species of tidal forest. It is interesting to know that this type of forests have remained away from the large scale commercial exploitation. These forests are located along the coasts. They provide protection against cyclones.

(v) Himalayan Vegetation

As is evident by the name that these forests are mainly found in the mountainous region of the Himalayas. The decreasing in temperature and increasing in altitude lead to varied types of vegetation depending upon the factors like slope of the mountain and sunrays receiving side. The ecosystem is highly fragile. Himalayan forests have been exploited in many ways in recent decades. Areas with relatively low altitude up to 1000 meters, warm climate and good amount of rainfall are characterized by dense vegetation cover. These areas look like tropical forest. Sal and Bamboo are main species in these areas. Between the elevation of 1000 to 2000 meters evergreen broad leave Oak and Chestnut are the common species found in these forests. In eastern Himalayas the same elevation is occupied by sub tropical Pine forests. Chir is common species found in this part. Moist temperate forest in Himalayas are found between the elevation 1500 to 3500 meters which receives annual rainfall in the range of 100 to 250 cm. Oak, laurel, chestnut, cedar, Silver, Fir, spruce rhododendron and deodar are the main species found in this part of Himalayas. They have been widely exploited for their timber. Last type of vegetation found in Himalayas is known as Alpine vegetation which is found between 3000 to 3800 meters with large and extensive highland grassland and sparsely distributed pine, birch, sliver, fir and rhododendron trees.

INTEXT QUESTIONS 11.2

1. Why are the tropical rain forests called evergreen forests? Explain in 30 words.

2. Give reasons

(i) Tidal Forest areas along the eastern coast experienced severe destruction during cyclones in recent years because

.....
.....

(ii) Himalayan Forests have been economically more exploited in comparison to Tropical Evergreen Forests because

.....
.....

11.3.2 Wildlife in India

You have studied earlier in the lesson that due to its unique geographical position, India is rich in wildlife. Wildlife of India is a great natural heritage. It is estimated that about 80 percent of all known plant and animal species on the earth are found in India. Many plants synthesize substances that are useful to the maintenance of health in humans and other animals. In recent decades, human encroachment has posed a threat to India's wildlife. In response to this, the system of National parks, Wildlife sanctuaries and protected areas, first established in 1935, has substantially expanded the provision to provide for the protection of wildlife animals by wildlife protection Act 1972. Efforts are being made to protect and preserve biological diversity of our country under various programs. India has preserved vast tracts of natural habitats, birds and plants in its 551 Wildlife Sanctuaries, 96 National Parks, 25 Wetlands and 15 Biosphere Reserves spread around in all the states of India. Besides this, there are 33 Botanical Gardens, 275 Zoological Parks, Deer Parks, Safari Parks, Aquaria etc. to make people aware conservation of threatened and endangered wildlife species in their respective areas. In India, for the purpose of effective conservation of natural habitat of wildlife, special schemes like Project Tiger 1973 and Project Elephant 1992 have been launched. These are very important as certain species are at the brink of extinction. However, none of these efforts will be truly successfull unless every Indian recognizes their role in conserving bio-diversity.

(i) Wildlife Sanctuaries: The main objective of the wildlife sanctuaries is to ensure maintenance of viable population of wildlife and their desired habitat. The wildlife sanctuaries in India are home to around two thousand different species of birds, 3500

species of mammals, nearly 30000 different kinds of insects and more than 15000 varieties of plants. These sanctuaries and forest reserves are home to several endangered species of animals and birds like the Asiatic Elephant, the Royal Bengal tiger, the Snow Leopard and the Siberian Crane. Many of the forest reserves and wildlife sanctuaries of India are famous for some particular species of animals. For instance, the Kaziranga in Assam is known for the Indian Rhinoceros, while Periyar in Kerala is famous for its elephants. There are 551 wildlife sanctuaries in India. India is also home to several migratory animals and birds like Olive Ridley Sea Turtles, Siberians Cranes and Flamingos.

(ii) National Parks: The purpose of establishing national parks is “to conserve the natural and historic objects and the wild life and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” By 1970, India only had five national parks. In 1972, India enacted the Wildlife Protection Act to safeguard the habitats of conservation reliant species. The two main objectives of the act are; to provide protection to the endangered species listed in the Act and to provide legal support to the conservation area of the country classified as national park.

Table 11.1 Rare Species of Animals Found in National Parks

National Parks (wild life sanctuaries)	Rare species of wild animals protected
1. Dachigram (J&K)	Hangul , Musk deer
2. Corbett (Uttrakhand)	Tiger, Elephant, Panther , Deer
3. Dudhwa (U.P.)	Elephants and Tiger
4. Kanha (M.P.)	Tiger, Barasingha
5. Badipur (Karnataka)	Tiger and Barasingha
6. Periyar (Kerala)	Elephants
7. Bharatpur (Rajasthan)	Different types of water birds
8. Deset Park (Rajasthan)	Desert wolf, Fox
9. Gir (Gujarat)	Lion, Panther, Chital
10. Kaziranga (Assam)	Rhino, Wild Buffalo

11. Manas (Assam)	Elephant, Rhino, Wild Buffalo
12. Nam Dafa (Arunachal Pradesh)	Tiger, Gaur, Wild buffalo
13. Sundarbans (West Bengal)	Royal Bengal Tiger

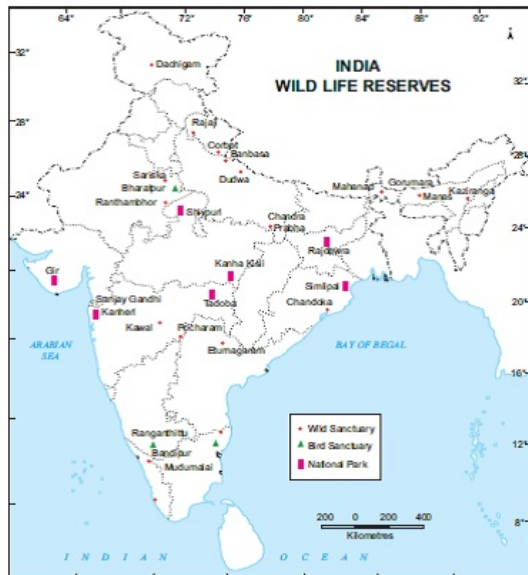


Figure 11.4 Map of India showing National Park, Wildlife Sanctuaries and Bird Sanctuaries in India

(iii) **Wetlands:** A wetland is an area of land whose soil is saturated with moisture either permanently or seasonally. Such areas may also be covered partially or completely by shallow pools of water. Wetlands include swamps, marshes, and bogs, among others. The water found in wetlands can be saltwater, freshwater, or brackish. Most importantly wetlands also serve as natural wastewater purification systems. Wetlands are considered as biologically the most diverse of all ecosystems. Plant life found in wetlands includes mangrove, water lilies, cattails, sedges, tamarack, black spruce, cypress, gum, and many others. Animal life includes many different amphibians, reptiles, birds, insects, and mammals. Wetlands perform two important functions in relation to climate change. They have mitigation effects through their ability to sink carbon, and adaptation effects through their ability to store and regulate water. The Convention on Wetlands of International Importance, or Ramsar Convention, is an international treaty designed to address global concerns regarding wetland loss and degradation. The primary purpose of the treaty is to list wetlands of international importance and to promote their wise use with the ultimate goal of preserving the world's

wetlands. Methods include restricting access to the majority portion of wetland areas, as well as educating the public to combat the misconception that wetlands are wastelands.

Do you know

About 25 wetlands or Ramsar sites have been identified of significance in India.

Table 11.2 Wetlands in India

No.	Name	State	Area(km)
1.	Ashtamudi	Kerala	614
2.	Bhitarkanika Mangroves	Odisha	650
3.	Chilika Lake	Odisha	1165
4.	East Calcutta Wetlands	West Bengal	125
5.	Kolleru Lake	Andhra Pradesh	901
6.	Loktak Lake	Manipur	266
7.	Point Calimere	Tamil Nadu	385
8.	Pong Dam Lake	Himachal Pradesh	157
9.	Sambhar lake	Rajasthan	240
10.	Tsomoriri	Jammu and Kashmir	120
11.	Upper Ganga canal	Uttar Pradesh	266
12.	Vembanad-Kol Wetland	Kerala	1512
13.	Wular Lake	Jammu and Kashmir	189
14.	Harike Lake	Punjab	41
15.	Bhoj Wetland	Madhya Pradesh	32

(iv) Biosphere Reserves

Biosphere Reserves are multipurpose protected areas to preserve the genetic diversity in representative ecosystems. The Indian government has established 15 Biosphere Reserves, which protect larger areas of natural habitat (than a National Park or Wildlife Sanctuary), and often include one or more National Parks and/or preserves along buffer zones that are open to some economic uses. Protection is granted not only to the flora and fauna of the protected region, but also to the human communities who inhabit these regions, and their ways of life. The main objectives to establish them are: (i) to conserve diversity and integrity of the life of plants, animals and micro-organisms, (ii) to promote eco friendly sustainable life in the areas, and (iii) to promote

ecological conservation, research, education, awareness and training in the life of such areas.

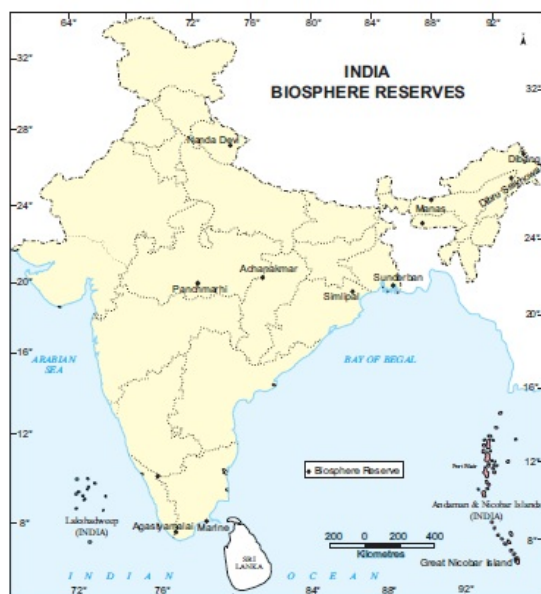


Figure 11.5 Map of India Illustrating Biosphere Reserves in India

Table 11.3 Biosphere Reserves

No.	Name	State
1.	Nilgiri	Tamil Nadu, Kerala and Karnataka
2.	Gulf of Mannar	Tamil Nadu
3.	Sundarbans	West Bengal
4.	Nanda Devi	Uttarakhand
5.	Dihang-Dibang	Arunachal Pradesh
6.	Pachmarhi	Madhya Pradesh
7.	Simlipal	Odisha
8.	Achanakmar Amarkantak	Madhya Pradesh and Chhattisgarh

9.	Manas	Assam
10.	Kanchenjunga	Sikkim
11.	Agasthyamala	Kerala
12.	Great Nicobar	Andaman & Nicobar Islands
13.	Nokrek	Meghalaya
14.	Dibru-Saikhowa	Assam
15.	Rann of Kachchh	Gujarat

11.4 NEED OF CONSERVATION OF BIO-DIVERSITY

In section 11.1 we have described bio-diversity as the total number of genes, species and ecosystems of a region. We have also learnt that biodiversity is fundamental to our existence on the earth. We look for food, water, shelter and fibre in nature. All these are interrelated and interdependent. If any one component is disrupted, it would have multiple impacts on other components of biodiversity. If we want to conserve our natural vegetation and wildlife we need to relook at the way we exploit these. It is time to re-look at our lifestyle and bring it in harmony with nature. Vegetation is an integral part of our life. Let's see how plant life and vegetation impacts us:

- (i) Vegetation is a key component of biodiversity. Without vegetation, the animals and some micro-organisms would die for lack of habitat, food and oxygen.
- (ii) Plant's root systems hold the soil together, protecting it from being blown away by the wind or washed away by water.
- (iii) Vegetation plays a major role in the water cycle. Plants provide a link between the ground and the atmosphere by drawing water up from the ground and releasing it through the leaves into the air as water vapour.
- (iv) Vegetation is a natural barrier and slows down the flow of water over the surface of the ground.
- (v) Through photosynthesis, vegetation removes carbon dioxide from the air and replaces it with oxygen. Other pollutants can also be filtered out of the air by vegetation.
- (vi) Vegetation acts as a stabilising influence in the greenhouse effect. Conversely,

clearing of vegetation releases high amounts of carbon dioxide – the main greenhouse gas.

(vii) Wildlife plays an important role in maintaining balanced food. This role helps in maintaining ecological balance resulting in healthy biodiversity.

(viii) The invisible micro-organisms play an important role of scavengers, improving soil fertility and are of immense medicinal value.

You can now feel that conservation of biodiversity is of great significance not only to the world or national heritage but also for the survival of local people in any part of the globe. We as a responsible citizen of the world need to understand our positive role in making responsible living choices. This would be our contribution in conserving biodiversity.

Peoples Participation in Conserving Biodiversity

(A Case Study)

Twenty-five years old Rajender Singh left his job and committed himself to rural development. With four companions he boarded a bus and travelled to a desolate village near Alwar. At this time Alwar had been opened to miners and loggers, who decimated its forests and damaged its watershed. Its streams and rivers dried up, then its farms. Dangerous floods now accompanied the monsoon rains. Overwhelmed by these calamities, villagers abandoned their Johads. As men shifted to the cities for work, women spirited frail crops from dry grounds and walked several kilometers a day to find water. This was Alwar when Rajendra Singh first arrived in 1985. Before that he worked with nomadic tribes and tried to understand issues in natural resources management in rural areas.

Upon advice of a local village elder, he began organizing villagers to learn how to repair and deepen old johads. He initiated an awareness campaign for Gram Swawlamban, which is organised every year during the summer months for forty days in different hundreds of villages. In this campaign discussion on Gram Swawlamban, soil conservation, improved seeds, collection of herbal medicine and shramdan were the activities undertaken. Singh coordinated all these activities to mesh with the villager's traditional cycle of rituals. He played a catalyzing role in the building of 8600 johads (water harvesting structures) in 1058 villages spread over 6500 sq.km. Out of these 3500 were built by TBS and as an after effect of these the community was motivated to build the remaining 5100 structures.

Through his determination, vision, hard work and dedication, he has transformed the life of people in 1058 villages of Aravali hills. He has turned the arid land cultivable, densely afforested large tracts making a wild life sanctuary by water management, made the dry rivers flow throughout the year. Aquatic life and bird sanctuary have flourished. Animal life has become lively, with desert beaming with life all around.

Do you know?

There is so much we can do to save nature. Think what we give back to nature in lieu of what we take away. If we cut down a tree, we should plant two small ones in its place. Buy only those products which have not been tested on animals. Do not waste paper. Try to use recycled paper.

ACTIVITY 11.2

Find out if there are any wetlands in your state and its distance from your place of residence.

INTEXT QUESTIONS 11.3

1. Fill in the blanks correctly from the alternatives provided in the bracket:-

(i) At present there are wild life sanctuaries (441/551)

(ii) in Assam is known for the Indian Rhinoceroses.

(Manas/Kaziranga)

(iii) HarikeWetlands is located in (Punjab/ Himachal Pradesh)

(iv) biosphere reserve is in the state of Tamil Nadu.

(Gulf of Mannar/Pachmarhi)

2. Define Wetlands

.....
.....

3. Make a list of any three efforts you can make to safeguard Biodiversity of your surroundings?

(i)
.....

(ii)
.....

(iii)
.....

WHAT YOU HAVE LEARNT

- We are fortunate to have such a great biodiversity on the planet we live on.
- Being an integral part of nature, it is important for us to save it.
- People all over the world are working to safeguard this irreplaceable natural wealth and biodiversity.
- Natural vegetation and wildlife are important aspects of biodiversity.
- India is among the twelve mega biodiversity countries of the world having rich wildlife heritage and great range of natural vegetation.
- It is really important to know about the threats and the need of conservation of this natural wealth.

TERMINAL EXERCISES

1. Define biodiversity. Explain the interrelationship between natural vegetation, wildlife and micro-organisms.
2. Describe in brief the characteristics and distribution of Tropical Evergreen Forests in India.
3. Give any two differences between the moist deciduous forests and the dry deciduous forests in India.
4. State three objectives for establishment of biosphere reserves in India.
5. What are the main causes of loss of biodiversity? State any four.
6. Justify the need for conservation of natural vegetation, wildlife and microorganisms with suitable reasons.
7. Study the table given below and answer the following questions.

Natural Parts/Wild life Sanctuary	Protected Wild Animals
1. Kaziranga	1. Tiger
2. Manas	2. Elephant
3. Periyar	3. Musk Deer
4. Corbett	4. Lion
5. Dachigram	5. Rhino
6. Wild Buffalo	
7. Panther	
8. Bear	

- (a) Match the name of the animal to the national park in which they are protected?
 - (b) Encircle the animal which are not protected in any national park?
 - (c) Write the name of the animal which is protected in more than one National Park?
8. Refer to Figure No.11.3

- (a) Find out the type of vegetation in your state.
- (b) Which areas have thorn forests?
- (c) Which areas have tidal forests and why are they restricted to those areas?

ANSWER TO INTEXT QUESTION

11.1

1. Biodiversity is fundamental to the existence of life on the earth because this is extremely valuable in different facets of life which includes providing of food, water, fiber, fuel etc. and regulating of climate and diseases.

2. A biodiversity hotspot is a region with a high level of endemic species. Endemic species are those species that are found in a certain limited area.

11.2

1. Trees in these forests remain green all the year round as the climate of the region is warm and wet throughout the year. The leaves of the trees do not fall in any particular season. Hence they are evergreen.

2. (i) Tidal forests along the eastern coast provide protection against cyclones. But in recent years due to massive deforestation of these forests, these areas have been experiencing severe destruction during cyclones in recent years

(ii) Tropical evergreen forest has a dense and mixed vegetation of all kinds and hence, their economic exploitation is not viable whereas species in Himalayan vegetation are less dense and found in pure stand.

11.3

1. (a) 551

(b) Kaziranga

(c) Punjab

(d) Gulf of Mannar

2. A wetland is an area of land whose soil is saturated with moisture either permanently or seasonally. Such areas may also be covered partially or completely by shallow pools of water.

3. Some of the efforts you can make to safeguard Bio diversity of your surroundings are: (i) stop cutting trees; (ii) plant more trees; (iii) protect all animals; (iv) establishment of hospitals for injured birds or animals; (v) stop throwing garbage and polluting environment.

12 AGRICULTURE IN INDIA

In the previous lessons, we have studied physiography, climate and natural vegetation in India. Now, we will study about agriculture which is the backbone of Indian economy. In India around 70% of the population earns its livelihood from agriculture. It still provides livelihood to the people in our country. It fulfills the basic need of human beings and animals. It is an important source of raw material for many agro based industries. India's geographical condition is unique for agriculture because it provides many favourable conditions. There are plain areas, fertile soil, long growing season and wide variation in climatic condition etc. Apart from unique geographical conditions, India has been consistently making innovative efforts by using science and technology to increase production.

In this lesson we will discuss about various types of farming, cropping patterns and establish their relationship with various geographical factors. We will also discuss some of the major issues and challenges faced by Indian Agriculture in this lesson.

OBJECTIVES

After studying this lesson you will be able to:

- explain various types of farming in India;
- describe salient features of Indian agriculture;
- list the major crops grown in India along with their utility;
- establish relationship of crops with the types of soil and climatic conditions;
- locate major crop producing areas on the outline map of India, and
- analyse challenges faced by farmers in Indian agriculture.

12.1 TYPES OF FARMING IN INDIA

You know that India has diversified topography. You have already learnt about it in the lesson on physiography of India. The country has Himalayan mountain ranges

extending from Jammu and Kashmir in the west to Arunachal Pradesh in the North-East. They have hill ranges in the form of Eastern Ghats and Western Ghats. Do you know India has one of the largest plain areas of the world in the form of Indo-Ganga plain? Central part of India is dominated by plateau area. Apart from variation in landform, the country has varieties of climatic conditions, and soil types. These physical variations along with other factors like availability of irrigation, use of machinery, modern agricultural inputs like High Yielding Varieties (HYV) of seeds, insecticides and pesticides have played their respective roles in the evolution of different farming practices in India. Some of the major types of farming are discussed below.

1. Subsistence and commercial farming:

Majority of farmers in India practises subsistence farming. This means farming for own consumption. In other words, the entire production is largely consumed by the farmers and their family and they do not have any surplus to sell in the market. In this type of farming, landholdings are small and fragmented. Cultivation techniques are primitive and simple. In other words there is a total absence of modern equipments like tractors and farm inputs like chemical fertilizers, insecticides and pesticides. In this farming, farmers mostly cultivate cereals along with oil seeds, pulses, vegetables and sugarcane.

Commercial farming is just the opposite to subsistence farming. In this case, most of the produce is sold in the market for earning money. In this system, farmers use inputs like irrigation, chemical fertilizers, insecticides, pesticides and High Yielding Varieties of seeds etc. Some of the major commercial crops grown in different parts of India are cotton, jute, sugarcane, groundnut etc. Rice farming in Haryana is mainly for commercial purpose as people of this area are predominantly wheat eaters. However in East and North-Eastern states of India, rice cultivation would be largely of subsistence type.

2. Intensive and Extensive Farming:

The basic difference between these two types of farming is the amount of production per unit of land. In comparison with temperate areas of USA, Canada, and former USSR, India does not practise extensive cultivation. When we use large patch of land for cultivation then we call it extensive farming. Here, total production may be high due to larger area but per unit production is low. In India extensive cultivation can be observed in Punjab, Haryana and Western Uttar Pradesh. Intensive Farming records high production per unit of land. Best example of intensive cultivation is in Japan where availability of land for cultivation is very limited. Similar kind of situation can be observed in the state of Kerala in India.

3. Plantation Farming:

Plantation farming is an artificial and established form. It is an estate where a single cash crop is grown for sale. This type of agriculture involves growing and

processing of a single cash crop purely meant for sale. Tea, coffee, rubber, banana and spices are all examples of plantation crops. Most of these crops were introduced in India by the Britishers in the 19th Century.

4. Mixed Farming:

It is a situation in which both raising crops and rearing animals are carried on simultaneously. Here farmers engaged in mixed farming are economically better off than others.

All classifications are based on nature and purpose of farming. It may overlap. For example: Banana is a plantation type of farming. It can also be classified as commercial farming.

Do you know

Green Revolution: It stands for a major technological breakthrough in India based on (i) improved seeds of high yielding varieties, (ii) adequate and assured supply of water for irrigation, and (iii) increased and appropriate action of chemical fertilizers for increasing agricultural production.

White Revolution: It stands for remarkable increase in milk production and establishment of a national milk grid, removing regional and seasonal imbalances. Among the technological inputs are (i) crossbreeding of indigenous cows with high milk yielding European breed; (ii) pasteurization of milk for keeping it for a longer duration; (iii) collection of quality milk from members in rural areas; and (iv) refrigerated transport system which helps sending milk to far off metropolitan centres both by road and rail.

Blue Revolution: It refers to big rise in catching of fresh water and marine fish.

Yellow Revolution: It refers to remarkably steady and assured supply of poultry products.

Pink Revolution: It refers to a considerable rise in the production of quantity of apples particularly in the states of Himachal Pradesh and J&K.

ACTIVITY 12.1

Conduct a survey within 1 km radius of your residence and find out which types of crops are grown in that specific area. Record your findings in the table given below and give reasons for the same.

Name of crop	State	Type of farming	Reasons
Hint: Apple	HP	Commercial	Suitable climatic conditions, grown in large quantities for high demand in the market

12.2 SALIENT FEATURES OF INDIAN AGRICULTURE

(a) Subsistence Agriculture:

As mentioned earlier, most parts of India have subsistence agriculture. This type of agriculture has been practised in India for several hundreds of years and still prevails in a larger part of India in spite of the large scale change in agricultural practices after independence.

(b) Pressure of population on Agriculture:

Despite increase in urbanization and industrialization, about 70% of population is still directly or indirectly dependent on agriculture.

(c) Mechanization of farming:

Green Revolution took place in India in the late sixties and early seventies. After more than forty years of Green Revolution and revolution in agricultural machinery and equipments, complete mechanization is still a distant dream.

(d) Dependence upon monsoon:

Since independence, there has been a rapid expansion of irrigation infrastructure. Despite the large scale expansion, only about one third of total cropped area is irrigated today. As a consequence, two third of cropped areas is still dependent upon monsoon. As you know, monsoon in India is uncertain and unreliable. This has become even more unreliable due to change in climate.

(e) Variety of crops:

Can you guess why India has a variety of crops? As mentioned in the beginning of the lesson, India has diversity of topography, climate and soil. Since India has both tropical and temperate climate, crops of both the climate are found in India. There are very few countries in the world that have variety comparable to that of India. You would realize that when we would discuss the different type of crops in detail. Look at the table No.1 to get an idea.

(f) Predominance of food crops:

Since Indian agriculture has to feed a large population, production of food crops is the first priority of the farmers almost everywhere in the country. However, in recent years, there has been a decline in the share of land used for food crops due to various other commercially most advantageous uses of these land.

(g) Seasonal patterns:

India has three distinct agricultural/cropping seasons. You might have heard about kharif, rabi and zaid. In India there are specific crops grown in these three seasons. For example rice is a kharif crop whereas wheat is a rabi crop.

INTEXT QUESTIONS 12.1

1. Differentiate between intensive and extensive farming by giving two points of difference each.

2. Based on the salient features studied above, identify the one applicable in your area. (example : The farming is largely mechanized in harayana and well irrigated. So that there is less dependance on monsoon.)

12.3 MAJOR CROPS OF INDIA

India grows almost each and every crop. Can you think why? If we consider the varieties of crop grown from Kashmir to Kanyakumari and western coast of Gujarat to extreme north eastern states of Arunachal Pradesh, then there would be hundreds of crops. We group all these crops into four broad types. Let us discuss the main crops under each type in detail:

Table 12.1

Sl. No	Types of Crops	Meaning	Major Crops
1.	Food Crops	Crops that are used for human consumption	Rice, Wheat, Maize, Millets and Pulses
2.	Cash Crops	Crops which are grown for sale either in raw form or in semi-processed form	Cotton, Jute, Sugarcane, Tobacco and Oilseeds
3.	Plantation Crops	Crops which are grown on Plantations covering large estates	Tea, Coffee, Coconut and Rubber
4.	Horticulture	Sections of agriculture in which Fruits and Vegetables are grown	Fruits and Vegetables

1. Food Crops

(i)Rice:

Rice is the most important food crop of India. It is predominantly a Kharif or summer crop. It covers about one third of total cultivated area of the country and provides food to more than half of the Indian population. Maximum population of India is of rice consumers. Do you know what types of geographical conditions are required for rice cultivation? If you look at rice grown areas of India, you should find that this is the only crop in India which is grown in varied conditions as illustrated below..

Some of the geographical conditions are as follows:

(a)Temperature: Rice requires hot and humid conditions. The temperature should be fairly high i.e. 24°C mean monthly temperature with average temperature of 22°C to 32°C.

(b)Rainfall: Rainfall ranging between 150-300 cm is suitable for its growth in areas of Punjab, Haryana and Western Uttar Pradesh where rainfall is less than 100 cm, rice is cultivated with the help of irrigation.

(c)Soil: Rice is grown in varied soil conditions but deep clayey and loamy soil provides the ideal conditions. Rice is primarily grown in plain areas. It is also grown below sea level at Kuttinad (Kerala), hill terraces of north eastern part of India and valleys of Kashmir.

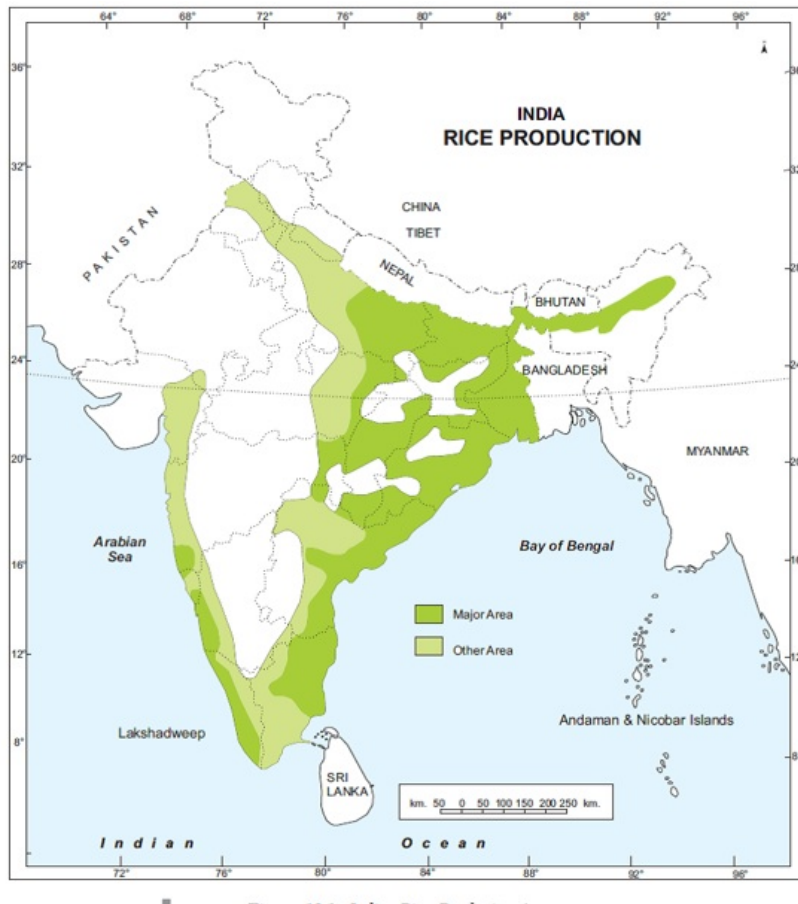


Figure 12.1 Rice producing areas of India –shows, Tamil Nadu, West Bengal, Andhra Pradesh,Bihar, Jharkhand, Uttarkhand, Chhatisgargh, Punjab, Odisha, UttarPradesh, Karnataka, Assam and Maharashtra , Haryana, MadhyaPradesh, Kerala, Gujrat and Kashmir Valley

(d)Labour: Rice cultivation requires easily available labour because most of the activities associated with it are labour orientated and are not very well suited for mechanization.

(e)Distribution: Rice is grown in almost all the states of India. The main rice producing states are Tamilnadu, West Bengal, Andhra Pradesh, Bihar, Jharkhand, Uttarakhand, Chhatisgarh, Punjab, Odisha, Uttar Pradesh, Karnataka, Assam and Maharashtra. It is also grown in Haryana, Madhya Pradesh, Kerala, Gujrat and Kashmir Valley (See figure 12.1).

(ii)Wheat: Wheat is the second most important food crop of India next to rice. It is a Rabi winter crop. It is sown in the beginning of winter and harvested in the beginning of summer. Normally (in north India) the sowing of wheat begins in the month of October-November and harvesting is done in the month of March-April. This is the staple food of millions of people particularly in the northern and north-western regions of India. Unlike rice, wheat is grown mostly as a rabi or winter crop.

Some of the geographical conditions are as follows:

(a)Temperature: It is primarily a crop of mid-latitude grassland. It requires cool climate. The ideal temperature is between 10°C to 15°C at the time of sowing and 21°C to 26°C at the time of ripening and harvesting.

(b)Rainfall: Wheat thrives well in areas receiving annual rainfall of about 75cm. Annual rainfall of about 100cm is the upper limit for wheat cultivation. As you know areas receiving more than 100cm of rainfall are suitable for rice cultivation. Like rice, wheat can also be grown by irrigation method in areas where rainfall is less than 75cm. Light drizzles at the time of ripening help in increasing the yield. But on the other hand, frost at the time of flowering and hailstorm at the time of ripening can cause heavy damage to the wheat crop.

(c)Soil: Although wheat can be grown in a variety of soils but well drained fertile loamy and clayey loamy soil is best suited for wheat cultivation. Plain areas are very well suited for wheat production.

(d)Labour: Wheat is extensive and highly mechanized and requires less labour.

(e)Distribution: The main regions of wheat production in India are U.P., Punjab, Haryana, Rajasthan, Madhya Pradesh, Gujrat, Maharashtra. U.P., Punjab and Haryana together produce more than 66% of the total wheat of the country (See figure 12.2).

(iii)Millets: Millets are short duration warm weather crops. These are coarse grain crops and are used for both food and fodder. These are kharif crop. These

are sown in May-August and harvested in October-November. Today millets are mostly consumed by poor people as their staple food. In India, lots of millet is grown and these are known by various local names. Some of these are Jawar, Bajra, Ragi, Korra, Kodon, Kutki, Hraka, Bauti, Rajgira. In India, Jawar, Bajra and Ragi are grown on large areas. But unfortunately area under these crops has drastically reduced over the years.

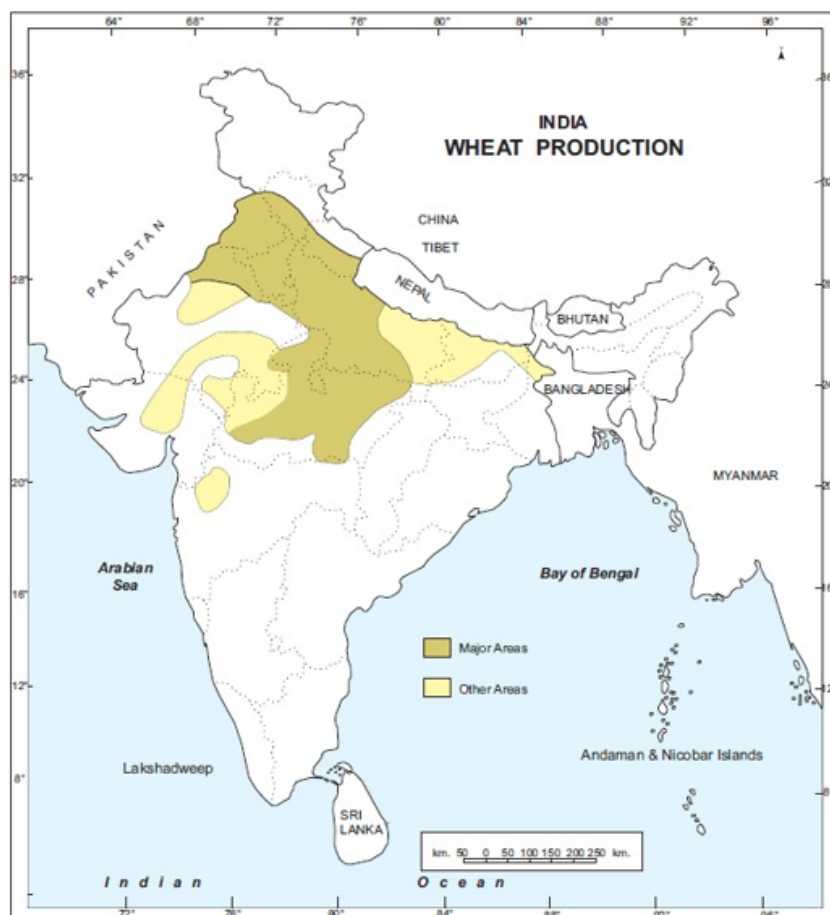


Figure 12.2: India: Wheat Producing Areas . Map shows U.P. Punjab, Haryana, Rajasthan, Madhya Pradesh, Gujarat, Maharashtra

Some of the geographical conditions for growing these crops are as follows:

(a)Temperature: These crops are grown where the temperature is high which ranges between 27°C to 32°C.

(b)Rainfall: As mentioned earlier that millets are 'dry land crop', therefore, rainfall ranging from 50 to 100cm is ideal for their cultivation.

(c)Soil: Millets are less sensitive to soil deficiencies. They can be grown in inferior alluvial or loamy soil.

(d)Distribution: Jawar, Bajra, is grown both in north and south India whereas ragi is generally concentrated in the southern India. Jawar, Bajra, is grown in Madhya Pradesh, Gujarat, Rajasthan, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Haryana and Punjab. Ragi is generally concentrated in the southern India i.e. Tamilnadu, Karnataka and Andhra Pradesh.

(iv)Pulses: It includes a number of crops which are mostly leguminous and provide invaluable proteins to the vegetarian population of India. As they have fewer sources of proteins in comparison to those who consume meat and fish. They also serve as excellent forage and grain concentrates in the cattle feed. Apart from that these leguminous crops have the capacity to fix atmospheric nitrogen in the soil and are normally rotated with other crops to maintain and restore soil fertility. A large variety of pulses are found in India. These are gram, tur or arhar (Pigeon Pea or Red Gram), urd (black gram), mung (green gram), masur (lentil), kulthi (horse gram), matar (peas) etc. But among these above mentioned varieties only gram and tur or arhar are more important pulses.

Gram: It is the most important of all the pulses. It accounts for about 37% of the production and about 30% of the total area of pulses in India. It is a rabi crop which is sown between September and November and is harvested between February and April. It is either cultivated as a single crop or mixed with wheat, barley, linseed or mustard.

Some of the geographical conditions are as follows:

(a)Temperature: It is grown in a wide range of climatic condition. Mild cool and comparatively dry climate with 20°C-25°C temperature.

(b)Rainfall: 40-45 cm rainfall is favourable for gram cultivation.

(c)Soil: It grows well on loamy soils.

(d)Distribution: Although gram is cultivated in several parts of the country, however, 90% of the total production comes from five states. These states are Madhya Pradesh, Uttar Pradesh, Rajasthan, Haryana and Maharashtra.

Do you know

1. Rice and wheat are climate sensitive crops whereas millets are climate resistant crop.
2. In India there was a strong tradition of eating various millets as staple food. But over the years majority of the population uses either rice or wheat as staple food.
3. As lifestyle related diseases become pandemic in nature, various millets are now prescribed as an essential food to control these diseases as they contain a lot of fibers.

ACTIVITY 12.2

1. Find out the areas/states where rice, wheat, and millets are staple foods in India. Mention the staple foods (rice, wheat, millets) in each of the following states of India

States	Staple Food
Rajasthan	Wheat, Bajara
Karnataka	
Your state	

2. On an outline map of India show the states (in two different shades) where rice and wheat are staple foods.

2. Cash Crops

As mentioned in the beginning of the lesson, cash crops are those crops which are grown for sale either in raw form or semi processed form. In this section we will learn more about selected cash crop i.e. sugarcane, cotton and jute; two beverage tea and coffee; three oil seeds i.e. groundnut, mustard and rapeseed.

(i) Sugarcane: Can you think life without sugar in your everyday life? It is almost impossible to think of life without sugar. Do you know sugarcane belongs to bamboo family of plants and is indigenous to India? It is a Kharif crop. It is the main source of sugar, gur and khandasari. It also provides raw material for the manufacturing of alcohol. Bagasse, the crushed cane residue, has also multiple uses. It is used for manufacturing of paper. It is also an efficient substitute for petroleum products and a host of other chemical products. A part of it is also used as fodder.

Some of the geographical conditions for the growth of sugarcane are as follows:

(a)Temperature: It requires hot and humid climate with an average temperature of 21°C to 27°C.

(b)Rainfall: 75-150 cm rainfall is favourable for sugercane cultivation. Irrigation is required in those areas where rainfall is less than the prescribed limit.

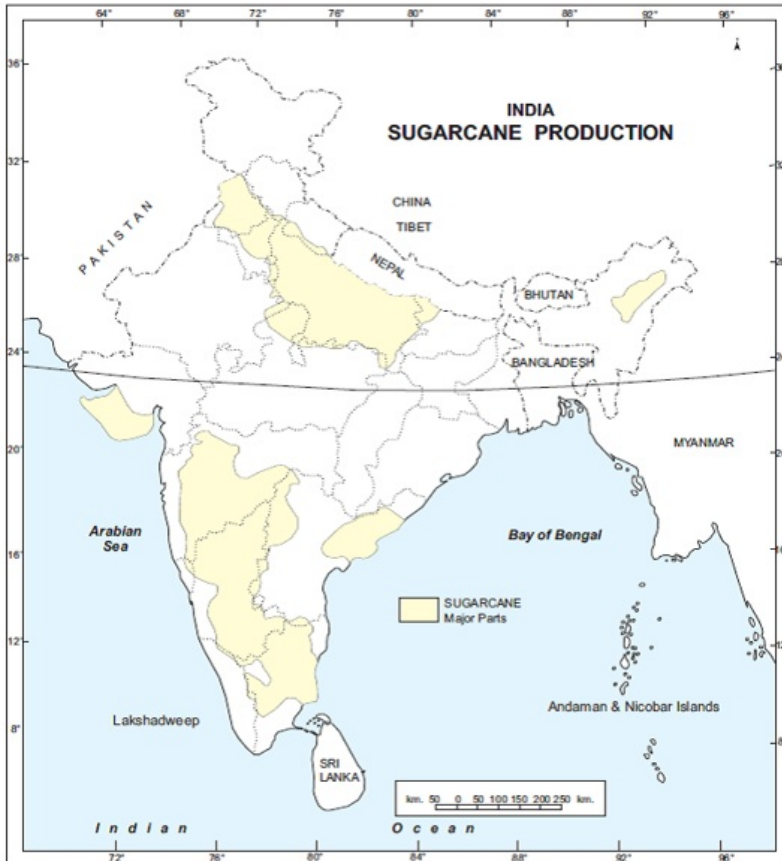


Figure 12.3: Major Sugarcane Producing Areas . Map shows the Satluj-Ganga plain from Punjab to Bihar , the black soil belt from Maharashtra to Tamil Nadu along the eastern slopes of the western ghats and coastal Andhra Pradesh and Krishna river valley

(c) Soil: It can grow in a variety of soils. In fact sugarcane can tolerate any kind of soil that can retain moisture. But deep rich loamy soil is ideal for its growth. The soil should be rich in nitrogen, calcium and phosphorous but neither it should be too acidic nor alkaline. Flat, plain and level plateau is an advantage for sugarcane cultivation because it facilitates irrigation and transportation of cane to the sugar mills. Sugarcane cultivation requires heavy manures and fertilizers because it exhausts the fertility of soils quickly and extensively.

(d) Labour: It is a labour orientated cultivation and requires cheap labour. Ample human hands are required at every stage i.e. sowing, hoeing, weeding, irrigation, cutting and carrying sugarcane to the factories

(e) Distribution: India has the largest area under sugarcane cultivation in the world and the second largest producer next to Brazil. As far as distribution of sugarcane cultivation in India is concerned, there are three distinct geographical regions in the country. These regions are:

(i) The Satluj-Ganga plain from Punjab to Bihar containing 51% of the total area and 60% of the country's total production.

(ii) The black soil belt from Maharashtra to Tamil Nadu along the eastern slopes of the western Ghats.

(iii) Coastal Andhra Pradesh and Krishna river valley.

(ii) Cotton: Cotton is the most important fibre crop not only of India but also of the entire world. It not only provides a raw material for cotton textile industry but also its seed is used in Vanaspati oil industry. The cotton seed is also used as part of fodder for milch cattle for better milk production. Cotton is basically

an kharif crop and grown in tropical and sub-tropical areas.

Some of the geographical conditions are as follows:

(a) Temperature: Cotton is the crop of tropical and sub-tropical areas and requires uniformly high temperature varying between 21°C and 30°C.

(b) Rainfall: It grows mostly in the areas having at least 210 frost free days in a year.

It requires modest amount of rainfall of 50 to 100cm. However, cotton is successfully grown with the help of irrigation in the areas where rainfall is less than 50 cm. High amount of rainfall in the beginning and sunny and dry weather at the time of ripening are very useful for a good crop.

(c) Soil: Cotton cultivation is very closely related to Black soils of Deccan and Malwa plateau. However, it also grows well in alluvial soils of the Satluj-Ganga plain and red and laterite soils of the peninsular region.

(d) Labour: As picking of cotton has not been made mechanized till now, therefore a lot of cheap and efficient labour is required at the time of picking.

(e) Distribution: India has the largest area under cultivation and third largest producer of cotton next only to China and the USA. Within the country two third of total area and production is shared by four states. The main states for cotton production are Panjab, Maharashtra, Gujarat and Haryana.

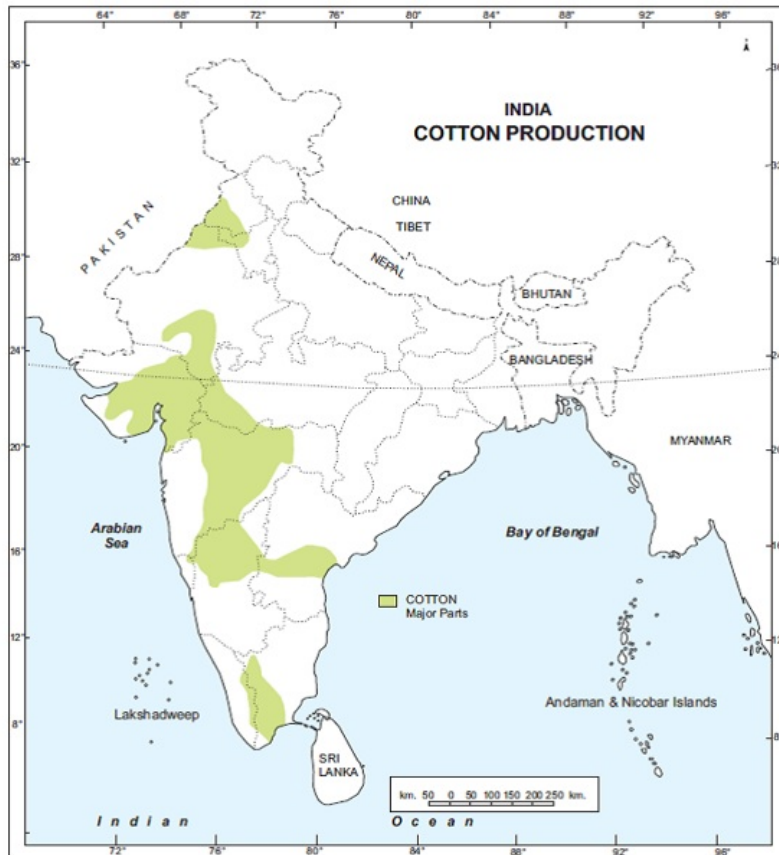


Figure 12.4: India: Major Cotton Producing Areas .Map shows Panjab, Maharashtra, Gujarat and Haryana.

(iii) Oilseeds: It is one of the important groups of commercial crops in India. In fact, India has the largest area and production of oilseeds in the world. Oil extracted from oilseeds not only forms an important item of our diet but also serves as raw material for the manufacturing of hydrogenated oils, paints, varnishes, soaps, lubricants etc. Oil-cake (the residue after the oil is extracted from the oilseeds) forms an important cattle feed and manure.

Groundnut: It is the most important oilseed of India. Groundnut is grown both skharif and rabi crop but 90-95% of the total area is devoted to kharif crop. Some of the geographical conditions are as follows:

(a) Temperature: It thrives best in the tropical climate and requires 20°C to 30°C temperature.

(b) Rainfall: 50-75 cm rainfall is favourable for groundnut cultivation. It is highly susceptible to frost, prolonged drought, continuous rain and stagnant water. Therefore dry winter is needed at the time of ripening.

(c) Soil: Well drained light sandy loams, red, yellow and black soils are well suited for its cultivation.

(d) Distribution: It is the most important oilseed of India and accounts for about half of the major oilseeds produced in the country. India is the largest producer of groundnut in the world and accounts for about one third of the world's to the production. Andhra Pradesh, Tamil Nadu and Gujarat are three main producer of groundnut in India and account for about 60% of the total production. Another 30% of the total production comes from Maharashtra, Karnataka and Odisha.

3. Plantation Crops

(i) Tea: India is famous for its tea gardens. You must have heard about tea gardens of Assam and Darjeeling in West Bengal. It is being said that tea plantation in India was started by the Britishers in 1923 when wild tea plants were discovered by them in the hilly and forest areas of Assam. Tea is made from tender sprouts of tea plants by drying them. At present, India is the leading tea producing country in the world. China and Sri Lanka are respectively second and third largest producers of tea.

Some of the geographical conditions for the growth of tea are as follows:

(a) Temperature: It requires hot and wet climate. The ideal temperature for the growth of tea bushes and leaf varies between 20°C to 30°C. If temperature either rises above 35°C or goes below 10°C, it would be harmful for the growth of tea bushes and leaves.

(b)Rainfall: As mentioned above tea requires a good amount of rainfall ranging between 150-300 cm and the annual rainfall should be well distributed throughout the year. Long dry spell is harmful for tea.

(c)Soil: Tea bush grows well in well drained, deep, friable loamy soil. However, virgin forest soils rich in humus and iron content are considered to be the best soils for the tea plantation. Tea is a shade loving plant and grows better when planted along with shady trees.

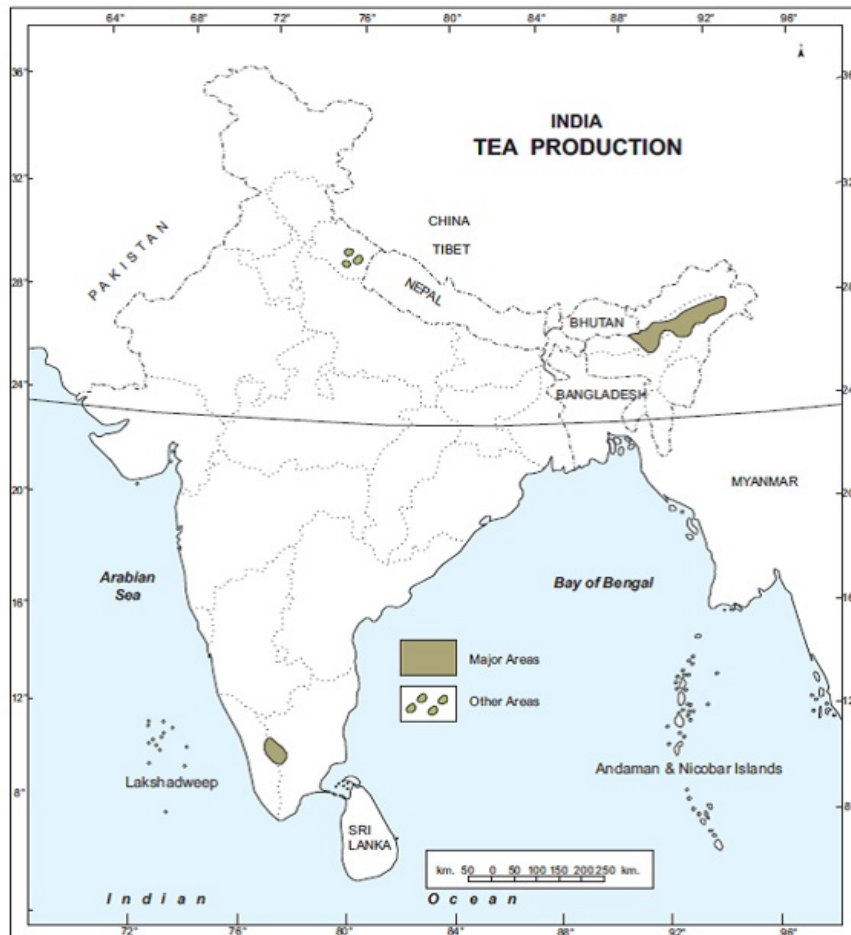


Figure 12.5: India: Tea Producing Areas . Map shows areas of Assam ,WestBengal and Nilgiri Hills of TamilNadu.

(d)Labour: Cheap and efficient labour is required for tea production

(e)Distribution: Assam is the leading producer that accounts for more than 50% of tea production of India. Tea producing areas of Assam are the hill slopes bordering the Brahmaputra and Surma valleys. West Bengal is the second largest producer of tea where tea is mostly grown in the districts of Darjeeling, Siliguri, Jalpaiguri and Cooch Bihar districts. Tamil Nadu is the third largest producer where tea growing areas are mostly restricted to Nilgiri hills.

(ii) Coffee: Do you know from where coffee was brought to India? It is the indigenous crop of Ethiopia (Abyssinia Plateau). From Ethiopia, it was taken to Arabia in 11th Century. From Arabia, the seeds were brought by Baba Budan in 17th Century and were raised in Baba Budan hills of Karnataka. But it was British planters who took keen interest and large coffee estates were established in the hills of Western Ghats.

Some of the geographical conditions for the growth of coffee are as follows:

(a)Temperature: It requires hot and humid climate with temperature varying between 15°C and 28°C. It is generally grown under shady trees. Therefore, strong sun shine, high temperature above 30°C, frost and snowfall are harmful for coffee cultivation. Dry weather is necessary at the time of ripening of berries.

(b) Rainfall: Rainfall between 150 to 250 cm is favourable for coffee cultivation.

(c)Soil: Well drained, rich friable loamy soil containing good deal of humus and minerals like iron and calcium are ideal for coffee cultivation. The soil must be properly manured to retain and replenish fertility and to increase productivity.

(d)Labour: Like tea, coffee cultivation also requires plenty of cheap and skilled labour for various purposes like sowing, transplanting, pruning, plucking, drying, grading and packing of coffee.

(e)Distribution: Karnataka, Kerala and Tamil Nadu are the main states of coffee production in India.

INTEXT QUESTIONS 12.2

1. Explain any three geographical conditions required for the cultivation of cotton?
2. How will India cloth its billion + population if cotton crop fails for successive number of years?
3. Why are commercial crops known as cash crops?

12.4 MAJOR CHALLENGES FACED BY INDIAN AGRICULTURE

If we look at the challenges faced by Indian agriculture, we can broadly group them into two categories. One category belongs to the problems that have been long standing. Second category of problems is new and has been emerging from the prevailing agricultural practices, system, changing climate and economy. Let us discuss the major challenges in detail:

1. Stagnation in Production of Major Crops:

Production of some of the major staple food crops like rice and wheat has been stagnating for quite some time. This is a situation which is worrying our agricultural scientists, planners and policy makers. If this trend continues, there would be a huge gap between the demand of ever growing population and the production. Nobody wants India to go back to a situation that was prevailing in our country prior to Green Revolution. Try to find out what was the situation during pre-Green Revolution period.

2. High cost of Farm Inputs:

Over the years rates of farm inputs have increased manifold. Farm inputs include fertilizer, insecticide, pesticides, HYV seeds, farm labour cost etc. Such an increase puts low and medium land holding farmers at a disadvantage.

3. Soil Exhaustion:

On one hand green revolution has played a positive role in reducing hunger from India. On the other hand it has also led to negative consequences. One of which is Soil exhaustion. Soil exhaustion means loss of nutrients in the soil from farming the same crop over and over again. This usually happens in the rain forest.

4. Depletion of Fresh Ground Water:

The second major negative consequence of green revolution is depletion of fresh ground water. You would remember that areas where green revolution was successful, it was due to the use of chemical fertilizers and irrigation. Most of the irrigation in dry areas of Punjab, Haryana and Western Uttar Pradesh was carried out by excessive use of ground water. Today fresh ground water situation in these states is alarming. In the coming few years if this type of farming practice continues, these states are going to face water famine.

5. Adverse impact of Global Climatic Change:

Among various challenges, global climatic change is the recent one. It has been predicted that its impact on agriculture would be immense. Since, 70% of Indian population is engaged in agricultural activities, you can imagine the consequences. It is predicted that due to climate change, temperature would increase from 2°C to 3°C, there would be increase in sea level, more intense cyclones, unpredictable rainfall etc These changes would adversely affect the

production of rice and wheat. Specifically, rise in temperature in winter would affect production of wheat in north India.

Production of rice would be affected in coastal areas of India due to ingress of saline water and increase of frequency of cyclones.

6. Impact of Globalisation:

You can see the effect of globalisation on the farm sector in India. All developing countries have been affected by it. The most evident effect is the squeeze on farmer's income and the threat to the viability of cultivation in India. This is due to the rising input costs and falling output prices. This reflects the combination of reduced subsidy and protection to farmers. Trade liberalization exposes these farmers to competition from highly subsidized production in the developed world.

Globalisation refers to the increasingly global relationships of culture, people and economic activity. Subsidy: A subsidy is money given by government to help support a business or person. Liberalization: liberty to establish any kind of economic activity at any time any where in the country without anticipating any kind of so called private or public restrictions.

7. Providing Food Security:

Before the introduction of green revolution in India, we were not self sufficient in terms of our food grain production. Due to partition of India in 1947 the network of canal irrigation system, cotton belt and wheat bowl meant to West Pakistan which is now Pakistan. Similarly the jute belt and rice bowl was awarded to East Pakistan, which is now Bangladesh. With the introduction of green revolution, production of food grains increased substantially and India became self sufficient. However, during the last one decade the total production has become stagnant. On the other hand we have added another 16 to 18 million population over this period. Although India has become self sufficient in food it is yet to ensure food security which is dependent upon accessibility, affordability as well nutritional value of the food available. One of the biggest challenges facing India is Providing Food Security to its population.

8. Farmers Suicide:

Every suicide has a multiple of causes. But when you have nearly 200,000 of them, it makes sense to seek broad common factors within that group. The suicides appear concentrated in regions of high commercialization of agriculture and very high peasant debt. Cash crop farmers seemed far more vulnerable to suicide than those growing food crops. Yet the basic underlying causes of the crisis remained untouched. Commercialization of the countryside along with massive decline in investment in agriculture was the beginning of the decline. Withdrawal of bank credit at a time of soaring input prices and the crash in farm incomes compounded the problems. Shifting of millions from food crop to cash crop cultivation had its own risks. Privatization of many resources has also compounded the problems.

The devastation lies in the big 5 States of Maharashtra, Andhra Pradesh,

Karnataka, Madhya Pradesh and Chhattisgarh. These states accounted for two-thirds of all farm suicides during 2003-08. Some of the major factors responsible are indebtedness,

crop failure and deterioration in economic status. Decline in social position, exorbitant charges by local money lenders for the vulnerable farmers, chronic illness in the family, addiction etc. have made life of farmers difficult.

ACTIVITY 12.3

If you are assigned political leadership of the country, what measures would you adopt to address the challenges that are mentioned above? Which two changes would you address and how?

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INTEXT QUESTIONS 12.3

1. How would climate change would affect agriculture in India? Explain any two situations.

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WHAT YOU HAVE LEARNT

- There are different types of farming practised in India. Some of these practices are subsistence and commercial farming, intensive and extensive farming, plantation farming and mixed farming.
- The major salient features of Indian agriculture are subsistence agriculture, highly dependent on monsoon and animals, variety of crops and predominance of food crops.
- Major crops in India can be broadly divided into four categories i.e. food crops, cash crops, plantation crops and fruits.

- Some of the major challenges faced by Indian agriculture are Stagnation in production, high cost of farm inputs, soil exhaustion, depletion of fresh ground water, climatic change, globalization and liberalization of economy, food security and farmer's suicide.

TERMINAL EXERCISES

1. Explain any four salient features of Indian agriculture.
2. Compare the geographical conditions required for the growth of rice and the growth of wheat cultivation.
3. Identify and write any four similar geographical conditions required for both tea and coffee.
4. Analyse any four major challenges confronted by Indian Agriculture.
5. Explain the concept of food security. How is it different from self sufficiency in food.
6. On the outline map of India locate the production areas of:
 - (i) Two labour intensive crops
 - (ii) Two crops that are grown in varied terrains

ANSWERS TO INTEXT QUESTIONS

12.1

1. The basic difference between these two types of farming is the amount of production from per unit of land. USA, Canada, former USSR are the major countries where extensive farming is practiced whereas Japan is the leading example of intensive farming.
2. As per the learners experience.

12.2

1. (i) Uniformly high temperature varying between 21°C and 30°C (ii) It grows mostly in the areas having at least 210 frost free days in a year; (iii) It requires modest amount of rainfall of 50 to 100cm. However, cotton is successfully grown by the help of irrigation in the areas where rainfall is less than 50 cm (iv) high amount of rainfall in the beginning and sunny and dry weather at the time of ripening are very useful for a good crop; (v) cotton cultivation is very closely related to Black soils. However, it also

grows well in alluvial soils of the Satluj-Ganga plain and red and laterite soils of the peninsular region; (vi) as picking of cotton has not been made mechanized till now, therefore a lot of cheap and efficient labour is required at the time of picking (Any three)

2. As per the learners' experience.

3. Commercial crops are known as cash crops because most of the produce is sold in the market for earning money.

12.3

1. Due to climatic change, temperature would increase by 2 to 3 degree Celsius, increase in sea level, more intense cyclone, unpredictable rainfall etc These changes would adversely affect the production of rice and wheat. Specifically rise in temperature in winter would affect production of wheat in north India. Production of rice would be affected in coastal areas of India due to ingress of saline water and increase of frequency of cyclone.

13 TRANSPORT AND COMMUNICATION

Rakesh and his wife lived in a small village. One evening there was heavy rain and thunder storm. His wife had severe stomachache. The village nurse advised him to take her to the nearest hospital. Since there was no communication facility available, it was not possible for Rakesh to contact any doctor, hospital or ambulance. Rakesh requested his friend to take them to the nearest hospital. Unfortunately their tractor couldn't go beyond a few hundred metres as the road was broken and submerged in rain water. What should Rakesh do? What would have been the solution to the problem? This incident highlights the importance of transport and communication in our life. In this lesson, we plan to bring before you the various modes of transport and communication and their importance for the development of a nation.

OBJECTIVES

After completing this lesson, you will be able to:

- establish that modes of transport and communication help in connecting people and facilitate the socio-economic growth of a region;
- classify roads on different parameters and appreciate the role and importance of road transport in our daily life and national development;
- examine the factors affecting the distribution and density of railway network in India and recognise the technical advancement that has taken place in this sphere;
- explain the importance of various means of water transport;
- recognize the growing importance of air transport and its ever growing economic significance; and
- realize the role of communication in connecting people and reducing distance

13.1 TRANSPORT AND COMMUNICATION – LIFELINES OF A COUNTRY

Transport and means of communication are integral part of our life today. Can we imagine our life without them? Just imagine if one day you come to know that all the modern means of transport and communication have been stopped due to unavailability of fuel. Also imagine the problems you are going to face!

ACTIVITY 13.1

List your problems:

-
-
-
-
-

13.1.1 The Role of Transport and Communication

Transport facilitates trade and commerce by carrying goods from the areas of production to that of consumption. Goods from the areas that have surplus are shifted to those areas which are deficient in those items. Movement of people from one place to another place in search of job, education and emergency through transport facility. Communication keeps us informed about the world's events and trends. It brings in positive changes in the life of the people and thereby enhancing their economic conditions.

13.2 THE MODES OF TRANSPORT

The modes of transport on which the countries depend for connecting people, growth and development are as under:

Modes of Transport:

Land: Roadways, Railways

Water: Oceanic, Inland

Air: Domestic, International

13.2.1 Land Transport can be broadly divided into two types:

1. Roadways
2. Railways

1. Roadways

Look at the pictures in Fig. 13.1. Can you imagine the changes in the manner we have moved from ancient to modern time from these pictures? Suppose, you have to go to your friend's house just 500 metres away from your house, or a visitor or a relative living 200 km away from your house. A villager has to catch a bus to come from a village to a city. Of course, the roads will be used. Now, you must

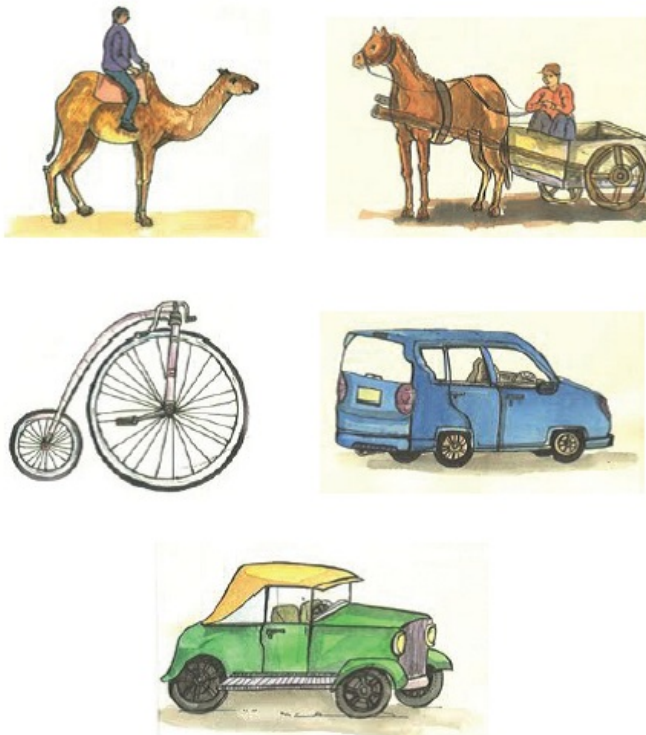


Fig 13.1 Illustrates different modes of transportation. Figure shows a Camel, Horse Cart, Unicycle, Van and a Car.

have understood that roads are most commonly used means of transport. Roads play an important role in connecting people and also in ensuring socio-economic growth of a country as under:

- Roads provide door to door service by means of a rickshaw, car, bicycle, bus, scooter or a truck.
- The construction, repair and maintenance cost is less than other means of transport.
- It is the cheapest and the most convenient mode of transportation for a few people and relatively smaller amount of goods over shorter distances.
- It is through roads that we reach railway stations, airports and seaports.
- Perishable goods like milk, fruits and vegetables are quickly carried from nearby villages to the cities or metropolis or to other destinations.
- Roads connect rural areas to the urban areas and can be constructed in all types of terrains like hills, deserts, mountain and plateaus.

Classification of Roads

Do you find same kind of roads everywhere? Obviously not, some roads may be kuchcha, and others pakka, then narrow while others broad. Roads are classified on the basis of:

- (i) Materials used for construction.
- (ii) Constructing and maintaining authority.

(i) Material used for construction

Roads can be classified on the basis of materials used for construction as metalled and un-metalled roads. Metalled roads are usually made by bricks, concrete, cement and charcoal. Un-metalled roads are made of sand, mud and straw.

ACTIVITY 13.2

Identify the materials used for the construction of the roads.

Metalled Roads (Pucca Roads)	Un-metalled Roads (Kuchha Roads)

(ii) Constructing and maintaining authority

Have you ever wondered as to who constructed these roads and where did they get the money from? They are constructed by using public money paid as taxes by people. Various government authorities are responsible for balanced development of roads and better management.

- The development of village roads are undertaken by the scheme known as PradhanMantri Gram SadakYojnalaunched by the Central government.

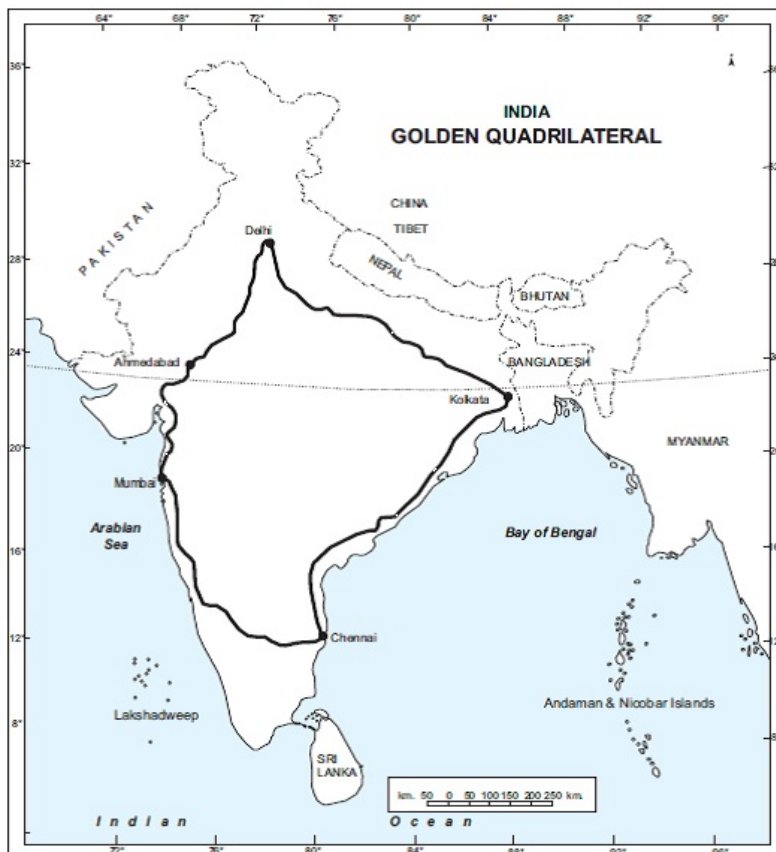


Figure 13.2: Map of India Indicating the Golden Quadrilateral

These provide links from village to village and village to main road in the rural areas. About 80% of the total road length in India is categorized as rural roads.

- Zila Parishads have been made responsible for constructing roads that connect district headquarters with other cities and towns of the district. These District Roads account for 14% of the total road length in India.
- State Public Works Department (SPWD) constructs and maintains roads that link state highways, state capitals with district headquarters. They constitute 4% of the total road length in the country.

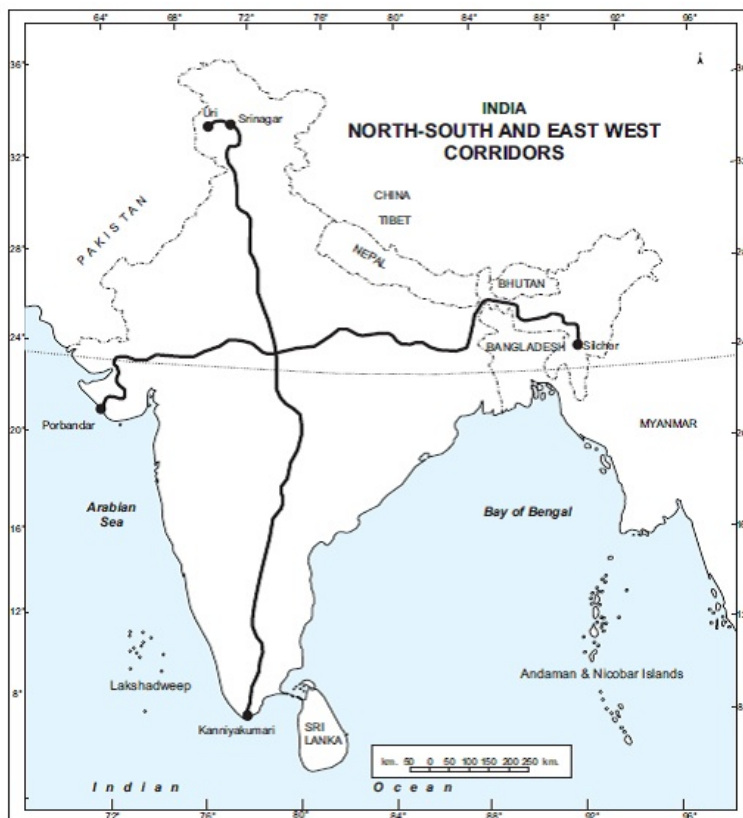


Figure 13.3: Map of India indicating North-South and East-West corridors

- National Highway Authority of India constructs and maintains the National Highways [NH], important roads linking different parts of the country and connecting state capitals to the main cities of India. They constitute only 2% of the total road length but carry 40% of the road traffic. The government has launched a major road development project linking north, south, east and west India. This will reduce time and fuel. Then it will also help to maintain fast flow of traffic between mega cities of India. It is implemented by National Highway Authority of India. The major super highways are:

(a) Golden Quadrilateral connects Delhi, Mumbai, Chennai and Kolkata which forms a geometrical figure of Quadrangle.

(b) North-South Corridor links Srinagar to Kanyakumari.

(c) East-West Corridor connecting Silchar in the east to Porbandar in the west.

- Border Roads are constructed along the bordering areas of the country for easy accessibility of goods and other requirements of defence personnel during the time of war and emergency and for the benefit of people living in those areas. They are constructed and maintained by Border Road Organization (BRO).

Do you know?

The oldest and the longest road in India was built across Gangetic plain from the north-west to the east on orders of Pashtun emperor, Sher Shah Suri in 16th century which was renamed as Grand Trunk Road. It is presently divided into NH-1 (Amritsar to Delhi) and NH-2 (Delhi to Kolkata). Today India has about 330 lakh kms of road network whereas in 1947 it was only 4 lakh kms.

ACTIVITY 13.3

Look at the maps (Fig. 13.2 and 13.3) and find out which super highway is nearest to your home and which organization maintains it.

2. Railways

“This has become an easy way to place their demands and there is no strict punishment” said Anu’s father while reading the newspaper. Anu asked, “what had happened”. Father replied, “Nothing new, a group of protestors have blocked the

railway tracks. They stopped the trains and have burnt two bogies on Agra Delhi route". Anu asked her father "why he was upset". Father said, "Don't you know that millions of rupees, efforts of thousands of people and many years are spent in building railway tracks and manufacturing railway coaches. This is for our convenience and quick movement of passengers and freights. Such an act causes inconvenience to the passengers, loss of millions of rupees, and affects business."Anu has realized the importance of railways as stated below:

- This is the cheapest transport by which thousands of people can travel together from one corner of the country to another for the purpose of ducation, business, siteseeing, pilgrimage or visiting friends or relatives.
- People of all income groups can travel by train as it has different types of coaches like General, Sleeper and AC chair car.
- One can have comfortable night journey as it has berths and washrooms in sleeper coaches.
- It carries country's largest amount of bulky goods like coal, cement, food grains, fertilizer, petroleum, automobiles etc. from mines to industries and from industries to the areas of consumption.

That is why we should all help in maintaining this important resource of country. Railways facilitate the movement of both freight and passengers and contribute to the growth of our economy.

Do you know?

Indian Railways started in 1853 from Bombay to Thane covering a distance of 34 km.

At present, Indian Railway network is the largest in Asia and the fourth largest in the world with the length of more than 64000 kms.

It is the largest government undertaking employing 1.6 million people and a separate budget is presented for it.

It has been divided into 16 zones for better administration and management of work.

When Anu and her father were talking about the importance of railways, one of her friends Jiya came to her house. She was studying in Delhi University but her native state was Sikkim. Jiya understood the logic, but question in her mind was why Sikikim

never be well connected with the other parts of the country. She stood for a while and said, "Uncle, why are there few railway lines in my state whereas other states have good network of railways?" He explained the factors which are responsible for the development of railways:

- The construction of railways is very difficult and costly in mountainous region whereas it can be easily done in areas of flat land. Therefore, India has denser railway network in the Gangetic plain whereas desert, hills, marshy regions, floodprone areas, dense forest, areas with rapids and rivers have not been developed much.
- The states of Uttar Pradesh, Bihar, West Bengal, Punjab and Haryana, are well connected by railways because these states are located in the plains. He also told that these areas are food bowl of India and most of the crops grown here are taken to other parts of the country through railways.
- Areas where mining and industries are more developed tend to have better facilities of railways for easy transportation of goods. Areas with less industrial development cannot compensate the cost of construction of railways, therefore have less railway network.
- Regions which are densely populated and have more movements are definitely well connected with railways.
- Urban areas or large cities attract more people for jobs, business, education, trade, banking have high density railway network for quick movement of people.

Anu's father smiled and said "No Jiya, the government is aware of the importance of connecting different part of the country specially in remote areas. This is being done on priority now". Jiya understood that any one can be connected anywhere in the world on the internet.

Technical advancement provided by Indian Railways

There is a direct rail link available from the north to the south of the country (i.e. from Jammu to Kanyakumari) covering a distance of 3751 km in 71 hours. Facilities to travel in 1st A.C., 2nd A.C., 3rd A.C., A.C. Chair Car, 2nd Class sleeper and General class are available to cater to the needs of the people of different economic strata. Only diesel and electric locomotives are used on broad gauge providing pollution free journey. The passengers can avail the facility of booking electronic tickets easily from home. The trucks loaded with goods are delivered directly to the consumers or factories in special rail wagons.

ACTIVITY 13.4

Search the headquarters of the major railway zones in the grid given below.

P	O	R	I	T	S	M
U	P	N	K	J	O	U
K	L	M	T	R	P	M
Q	U	W	A	I	T	B
K	O	L	K	A	T	A
J	A	I	P	I	N	I
Z	V	D	U	X	Y	R
C	H	E	N	N	A	I
T	K	L	J	Q	R	J
I	T	H	Q	X	Z	U
N	P	I	T	O	J	K

INTEXT QUESTIONS 13.1

1. Complete the following statements;

(a) East-West corridor links and as

(b) Super Highway connecting four metro-cities is known asas it forms

2. (a) Explain briefly the main factor affecting density of railways. Identify the following two groups of states where there is high and low density of railways and give reasons for your answer.

(b) Identify two advantages and two disadvantages in each roadways and railways transport.

3. "A few states of India lack a good railway network". Justify the statement in 30

words.

ACTIVITY 13.5

Show the railway reservation form given below to your family. Try to fill it up discussing the meaning and the importance of the columns given below:

- Medical Practitioner
- Senior Citizen
- Choice of berth
- Meals available in some trains

RAILWAY RESERVATION / CANCELLATION REQUISITION FORM

If you are a Medical Practitioner Please tick () in Box Dr <input type="checkbox"/> (You could be of help in an emergency)					
If you want Sr. Citizen concession, please write Yes/No in box <input type="checkbox"/> (at yes, please carry a proof of age during the journey to avoid inconvenience of penal charging under extant Railway Rules)					
Do you want to be upgraded without any extra charge? Write <input type="checkbox"/> Yes/No in the box. (If this option is not exercised, full fare paying passengers may be upgraded automatically)					
Train No & Name:			Date of Journey:		
Class:			No. of Berth / Seat:		
Station From:			Station To:		
Boarding At:			Reservation Upto:		
S.No.	Name in Block Letters (not more than 15 chars)	Sex (M/F)	Age	Concession / Travel Authority No.	Choice if any
					Lower / Upper Berth
					Veg / Non-veg Meal for Rajdhani / Shatabdi Express only
CHILDREN BELOW 5 YEARS (FOR WHOM TICKET IS NOT TO BE ISSUED)					
S.No.	Name in Block Letters	Sex	Age		

ONWARD / RETURN JOURNEY DETAILS

Train No & Name _____ Date _____
 Class _____ Station From _____ To _____
 Name of Applicant _____
 Full Address _____

Signature of the Applicant

FOR OFFICE USE ONLY

S.No. of Requisition _____ PNR No. _____
 Berth/Seat No. _____ Amount Collected _____

Signature of Reservation Clerk

- Note: 1. Maximum permissible passengers are 6 per requisition.
 2. One person can give one requisition form at a time.
 3. Please check your ticket and balance amount before leaving the window.
 4. Forms not properly filled or in illegible forms shall not be entertained.
 5. Choice is subject to availability.

Figure of Railway Reservation/Cancellation Requisition Form

13.2.2 Water Transport

Have you ever wondered why people in ancient times settled down near the rivers? How was trading possible between far off lands? Yes, it was through rivers and seas. From olden days till now waterways had been an important means of transportation. It is because:

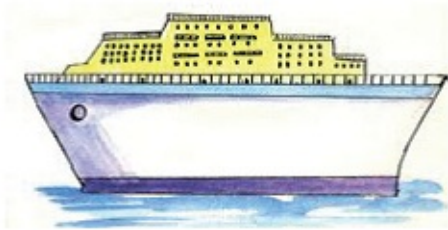


Figure 13.4: Mode of Water Transport, Picture of a Ship

- It is the cheapest means as compared to other means of transport because it involves no expenditure on construction other than maintenance.
- It is very useful for transporting heavy and bulky goods. A ship can carry lakhs of tonnes of goods at a time.
- It is a better mode of transportation for petroleum and its products as it involves cross-continental transfers. India lacks in petroleum deposit and most of it is imported from Middle East countries.
- It is fuel efficient and environment friendly means of transportation.

Water ways have been classified into two types – Do you know them? Find out why are they called Inland waterways and Ocean routes?

1. Inland Waterways: India has inland navigable waterways measuring 14,500 km which include canals, rivers, backwaters and narrow bays etc. But only 3,700 km of river length is suitable for mechanized boats in river Ganga and Brahmaputra in the north and Godavari, Krishna and Kaveri in the south. A good network of inland waterways is able to reduce the traffic on the highways. It also helps transportation of goods.

2. Inland Waterways Authority of India was constituted in 1986 and looks after the development, maintenance and management of inland water ways in the country. The following three waterways have already been declared as National Waterways,

NW 1– River Ganga from Allahabad, Uttar Pradesh to Haldia, West Bengal (1620 km)

NW 2– River Brahmaputra from Sadiya to Dhubri in Assam (891 km)

NW 3– Kollam to Kotapuram stretch of canal in Kerala (205 km)

2. Oceanic Waterways: If you look at the map of India, you will find that India is surrounded on three sides by the Arabian Sea, the Bay of Bengal and the Indian Ocean with a coastline of 7516 km India had only 49 ships in 1946 with a capacity of 1,27,083 tonnes. After independence, the Government has taken various measures resulting in procurement of 616 ships in 2004 with a gross tonnage of 700,000 tonnes of carrying capacity.

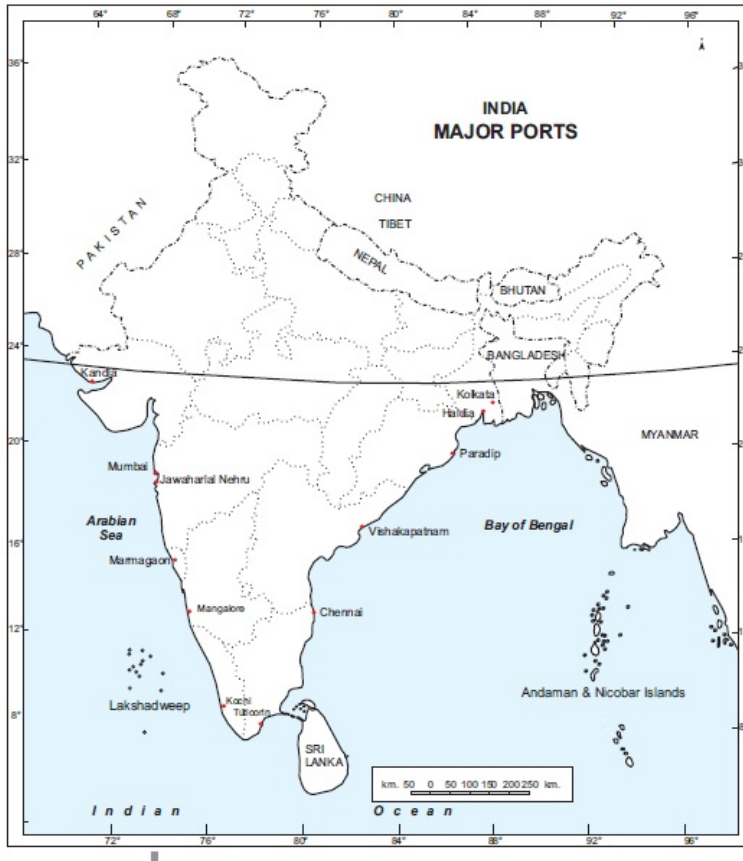


Figure 13.5 Map of India illustrating major ports

The two categories of Indian Sea Waterways are:

(a) Coastal shipping: Transporting passengers and cargo between the ports located along the coast of the country is done by coastal waterways. Ships of about 100 navigation companies are engaged in coastal waterways handling about 7 lakh tonnes of cargo through 12 main ports and 189 small and medium class ports.

(b) International shipping: Most of the shipping capacity of India is used in international trade. Through the ports of the east coast to Myanmar, Malaysia, Indonesia, Australia, China, Japan and from the west coast ports to the U.S.A., Europe and Asia, are used for export and import.

INTEXT QUESTIONS 13.2

1. (a) Complete the given table with the help of the map given below.

Port	State	Coast
Mumbai	Maharashtra	Western

(b) Point out the areas where there are no ports. Give one reason for the same.

13.2.3 Air Transport

Do you wish to fly like a bird? By airways, you can reach at the destination quickly and without encounter any cring traffic. Our modern day airplane was designed by the Wright Brothers in 1903. Air transport in India began in 1911. Today it is one of the important means of transportation like roadways and railways. India has facilities of both domestic as well as international airways. Let us discuss its importance in the modern age.



Figure 13.6: Mode of Airways, picture of an airplane

- Air transport is considering that world is becoming a global village. It is the fastest means of transport and one can reach the destination in a few hours covering the distance of hundreds of kilometers.
- It is free from surface hindrances such as inaccessible mountains, dense forests, marshy lands or flooded areas.
- It is most important due to its utility in national defense.
- It also connect countries of different continents making earth a global village.
- It is suitable for transporting fruits, vegetables or high value goods like costly drugs and sophisticated machines in desired time frame.
- It is very useful at the time of natural or any other calamities for saving people or supplying goods of their basic requirements immediately.

The only drawback is the high cost of travelling or transportation. That is why, it is still out of reach for the common man. In the last few years, the use of air transport has recorded a rapid increase.

Air transport services in India can be classified into the following categories:

13.2.4 Domestic and International Services

Domestic and International services are provided by government and private provider. Pawanhans Helicopter Ltd. (government undertaking) – This Company provides air transport to the Oil and Natural gas Corporation, Indian Oil and in the North-Eastern part of the country.

INTEXT QUESTIONS 13.3

1. Which states has more than one international airport?
2. Mention two states which do not have international airport?
3. Which is the closest or nearest Domestic and International airport from your house?

13.3 COMMUNICATION AND ITS IMPORTANCE

Your sister's marriage has been fixed and you want all your relatives and friends to be present at the wedding. How would you like to inform them? Suddenly, your grandfather suffered from a heart attack and your father is in his office. How will you inform him immediately? How did you come to know about tsunami in Japan or about the incident where millions of people were protesting against the President

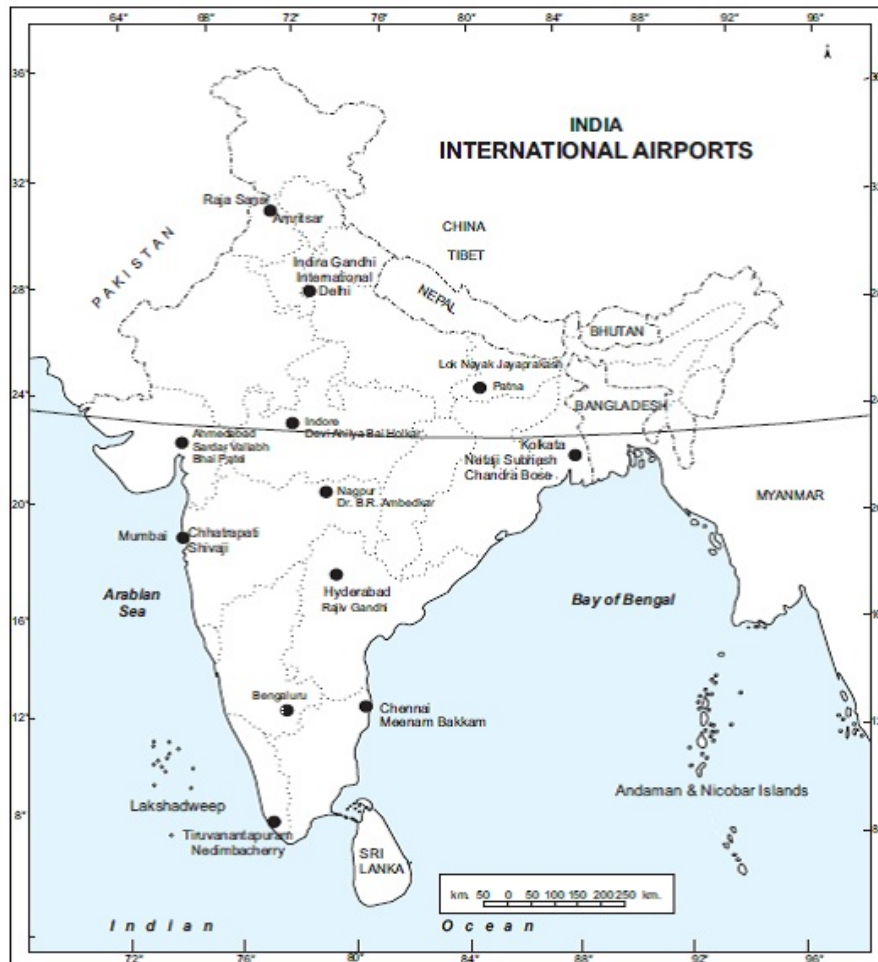


Figure 13.7: Map of India indicating major international airports

in Egypt? Your response to the above situations must have classified the importance of communication in everyday life, its need and various means of carrying it out. Thus, communication is a system of carrying messages to exchange thoughts, ideas and information and also to share your sorrows and pleasures with your family members or friends.

Now you must have understood that the means of communication change suiting the purpose of communication. There are various means of communication. People communicate with each other by writing letters, sending telegrams, radio, T.V., computer technology, newspapers, magazines and pamphlets; messages can be sent by telegram, facsimile machine (FAX) and E-mail (Electronic mail) for business trade and other services. E-mail has emerged as the fastest means of communication and is almost free.

It is also important to know that the choice of a particular means of communication depends on purposes.

Now, let us classify different means of communication into two groups:

1. Means of Personal Communication

2. Means of Mass Communication

1. Means of Personal Communication: We classify means of personal communication into two parts:

(i) Postal Service

(ii) Telephone Service

(i) Postal Service: Postal service is a very old means of communication.

Though letter writing is not that popular any longer, it is still important even today. Indian Postal Network is the largest in the world. In 2001, India had 1,55,000 post offices providing different services like – letters, money orders, parcels, postal saving schemes, etc.

(ii) Telephone Service: It has emerged as one of the most important and widely used means of communication in today's world. It is quick and affordable, serving our need seamlessly.

2. Means of Mass Communication: The means by which information can be communicated to a very large number of people are called Media or Mass Communication, such as radio, television, newspaper, cinema, books, magazines, traditional folk modes and satellite communication.

(i) **Radio:** Radio transmission in India started in 1927 from Mumbai and Kolkata to entertain, educate and apprise the people of the country with important information. Today the program of All India Radio (AIR) are available to 90% parts of the country to 98.8% of our people.

(ii) **Television:** The national television transmission service of India started in 1959 is one of the biggest ground transmission organizations of the world. Today, 87% of population can watch it. Television program telecast by National, Regional and local Doordarshan and a large number of private channels are available for education, information and recreation.

(iii) **Computer (Information Technology):** Today, computer has become the basis of communication and economic development as it is used everywhere from homes, offices to shops, hospitals, railways, airports, banks, educational institutions, etc.

13.3.1 Newer communication Technology

In recent years, there is revolution of new technology that has helped people in much better way such as:

(a) **Internet:** It provides access to several kinds of information. It connects all types of computers across the world to obtain information at the click of a button.

(b) **Video Conferencing:** People sitting at far off places can talk and express their views with the help of telecommunication and computer.

(c) **E-Commerce:** Facility available for sale and purchase of goods through internet and fax.

(d) **Internet Telephony:** It is a software programme which makes a computer to work like telephone. This facility has reduced the call rates drastically.

(e) **E-Mail:** It is a method of sending letters or information through internet to anyone in the world in the blink of an eye.

(f) **Tele-Medicine:** Using this technology, doctors can advise his patients sitting at a distance of thousands of kilometers from them.

Thus, scientific advancement and technology has revolutionized the system of communication and brought people very close to each other, to be in touch all the time and making the world a global village.

ACTIVITY 13.6

Take a pack of old playing cards. Cut pictures of various modes of communication from old newspapers or magazines. Stick one picture on each card. On the back side write one question about it. Now you have your own set of Communication Cards. Play it with your friends and family.

Hints: Which communication aid can deliver one message at the same time throughout the country? (Ans. T.V.).

INTEXT QUESTIONS 13.4

Categorize the following into personal communication, Mass Communication and others;

Electronic monitor, utility van, tractor, telegram, metro rail, mobile, postcard, fax, news bulletin, radio, ambulance, facebook, twitter and magazine, bulk SMS.

2. Give one word for each of the following statement:

- (a) A system of carrying messages to exchange thoughts, ideas and information.
- (b) The service through which letters, parcels and money-orders are sent.
- (c) A system of writing letters through internet.
- (d) The authority responsible for transmission of programs through radio in India.
- (e) The most common and popular means of personal communication in India at present.

WHAT YOU HAVE LEARNT

- Need and importance of means of transport and communication
- Types of roads constructed in India

- Role of railways in the development of a country
- Types of waterways and their importance in a country's trade
- Need of airways and its importance in a country like India
- Modern means of communication and their relevance in our lives

TERMINAL EXERCISES

1. Why are the means of transport and communication regarded as the lifelines of a country and its economy?
2. State three merits and three demerits of roadways?
3. What is the importance of water ways for India?
4. Study the map of Major Ports and answer the following questions:
 - (a) Count and tell how many ports are there on the eastern coast.
 - (b) List the states that have two ports.
 - (c) Name the state in which Paradeep port is located.
 - (d) Name the port located in Goa.
 - (e) Name the southernmost port of India.
5. What are the benefits of airways over other means of transport?
6. State the importance of communication in your day-to-day activities?
7. Differentiate between personal communication and mass communication.
8. List five problems that you faced during your last journey by train. Suggest at least one remedy for each of the problems you faced.
9. On the outline map of India, identify the states of high, moderate and low rail density and name them. Why do they have such density?
(**Hints:** Difficult terrain, climatic conditions, economy, etc)

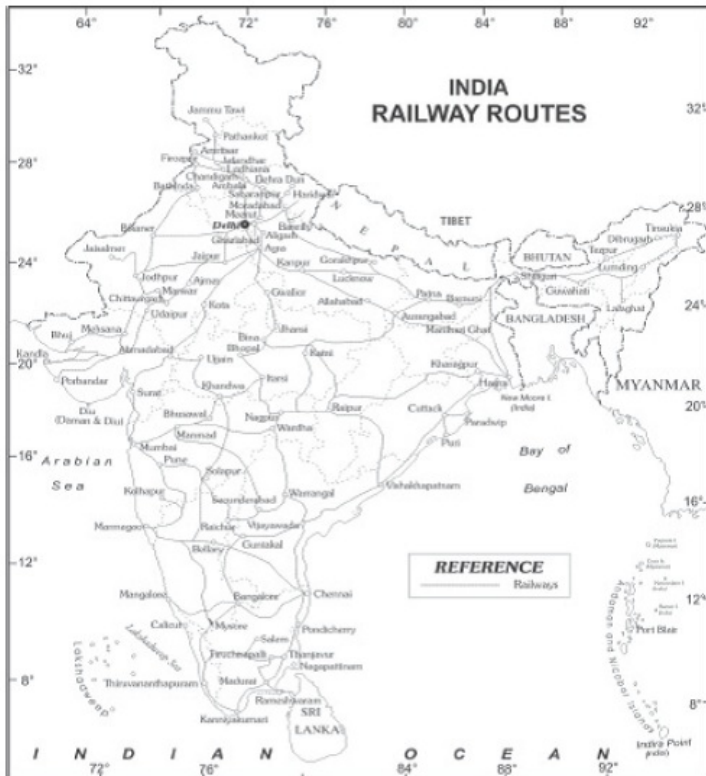


Figure: illustrating various Indian railway zones

Project:

Interview at least five people in your locality who have been staying there for the last ten years, and ask them what changes have occurred over a period of time due to construction of new roads/railways.

OR

In your area, find the authority responsible for the construction of roads. You may need to go to that office to find the details of it.

ANSWERS TO INTEXT QUESTIONS

13.1

1. (a) Silchar, Porbander, they are located in the eastern and western edge of the country

(b) Golden quadrilateral, a geometrical quadrilateral, of various types of relief features across the country

2. (a) These regions have a high railway density due to the following reasons,

Punjab and Haryana– due to agricultural productions

Maharashtra and Gujarat– due to industrialization

Jharkhand and Chhattisgarh– due to mineral deposits

(b) Both are important means of transport of the masses.

Both are essential for the development of a region.

Railways are generally used for long distances.

Roadways are generally preferred over shorter distances.

Railways can carry very large volumes.

Roadways can carry lesser volume.

Railways involve high construction and maintenance cost.

Roadways involve lesser cost in construction and maintenance.

3. Because of high mountains and rugged topology. For example, Sikkim and Arunachal Pradesh.

13.2

1. (a) Table

Port	State	Coast
Kandla	Gujarat	Western
Mumbai	Maharashtra	Western
Jawaharlal Nehru	Maharashtra	Western
Marmagao	Goa	Western
New Mangalore	Karnataka	Western
Kochi	Kerala	Western
Tuticorin	Tamil Nadu	Eastern

Chennai	Tamil Nadu	Eastern
Vishakapatnam	Andhra Pradesh	Eastern
Paradip	Orissa	Eastern
Haldia	West Bengal	Eastern
Kolkata	West Bengal	Eastern

(b) Rajasthan, Haryana, Punjab, Bihar etc. do not have any port as those states are far away from the ocean.

13.3

1. Maharashtra
2. Haryana and Rajasthan
3. As per the learners' experience

13.4

1. Means of transport: Utility van, tractor, metro rail, ambulance, trolley, bicycle.

Means of communication: Telegram, mobile, postcard, fax, facebook, twitter.

2. (a) Communication

(b) Postal service

(c) Email

(d) All India Radio (AIR)

(e) Mobile Phones

14 POPULATION: OUR GREATEST RESOURCE

All of us hear many people saying that the population of India is a great problem. You also may be feeling the same. You may be aware that the population of India is more than a billion and it is still growing. It may overtake the population of China within the next couple of decades, eventually making India the most populous nation of the world. It is in this way the population is quite often seen as a liability, a major hindrance to development and quality of life of the people. But is it true? Let's think and understand. Has population not been an asset, a resource for the country? Today, India is considered as a leading nation in the world in terms of human power. One of the major contributory factors for this global standing has been the young, educated and productive people of our country. They are contributing to the development of not only our country, but many of the foreign countries also. In this context, population is an asset for the economy, the greatest resource of the country rather than a liability. In this lesson, you shall know how population of our country can be viewed as the greatest resource.

OBJECTIVES

After completing this lesson, you will be able to:

- analyze population not in terms of simple numbers and a problem, but as the greatest resource of the country;
- explain factors that make population a human resource;
- identify areas of high, moderate and low density of population and locate the same on the outline map of India;
- analyze the factors affecting the distribution and density of population;
- examine the implications of the population change and population composition, rural-urban composition, age composition, sex composition and literacy;

- appreciate needs of adolescents as a critical population group and the growing potential human resource;
- recognize the need for empowerment of women in India; and
- evaluate population policies adopted by the Government of India, especially in the context of human resource development.

14.1 POPULATION AS A RESOURCE

Generally, we understand that population means a collection of people. Let us go through the meanings of population stated in the box below. This term has been defined differently in different contexts. You may find that the meaning of population stated in a science or biology textbook is different from how it has been used in a social science, geography, economics or sociology textbooks. You will learn later on that in statistics this term has yet another meaning. Will you like to find out what it is? You may do it by consulting books on Statistics. However, in the present lesson we will be using population to mean the collection of people living in a given geographic area or territory. This is how it is used in the census. The collection of people is seen and understood primarily in terms of number. But population is also considered as a resource, a human resource.

What does population mean?

- Total number of people inhabiting a specified area or territory (e.g. population of a village, city, state, country, world).
- Total number of people of a particular group, race, class or category (e.g. population of Scheduled Castes, Scheduled Tribes, or religious groups like Hindus, Muslims, Christians, Sikhs)
- In biology, collection of inter-breeding organisms of a particular species (e.g. population of tigers, deer, etc.)

What is resource? It is something that can be used and reused. Let us look around the room. We find things like furniture, books, notebooks, pen, cups and others. We consider them as our resources and use and reuse them in our daily life.

Now, let us try to trace their origin. These are made out of the resources which we get from nature. The furniture is made from timber that we obtain from the forest. Books and notebooks are made from the wood pulp which comes from the forest. The pen is made up of plastic which is the by-product of petroleum. The cup is made of clay found in the soil. These and many more things which are part of our daily life are extracted, processed or manufactured from the natural resources. It is the people who with their physical and mental efforts convert the natural resources into various goods of utility.

The Government of India created a Ministry of Human Resource Development in 1985, in place of its earlier Ministry of Education and Culture. Some of the States also have done so. This suggests that the idea of people being a human resource has gained acceptance.

If resources are things that are used and reused, how can population be considered a resource? We all know that the grains which are cultivated in the fields, the minerals that are mined, and the goods which are manufactured in factories are all produced by people. People of the country produce and develop various facilities and services to make their lives comfortable. The facilities, whether these are means of transport and communication, schools, colleges, hospitals, electricity producing units, infrastructure for irrigation and others, play a significant role in the development of a country.

For producing and developing all such facilities and converting them into useful resources, human beings play the role of the best resource. Without human beings, other resources cannot be developed and utilized properly. Therefore, the number as well as the quality of people, collectively, is the real and ultimate resource of a country. In view of the above, the sheer number of people, which is determined by census conducted at periodic intervals, may be a liability, but the qualitative population becomes the human capital of a country. For converting the number into capital, the country has to invest a lot in the form of improving the health and nutritional status of the people, their education and specialized training and their overall quality of life. The investments for improving the quality of the people made by the state as well as the society matter a lot. It is essential that every individual develops to the fullest capability and is engaged in the development process of the country. It is therefore important to understand that people as human resource are both an object of development and also a participant in development. As we discussed earlier the number of people may not be called resource, but there are certain factors which convert these numbers into a useful resource.

Do you know

Human capital: Over the years, the terms used to describe staff and employees in businesses have changed. We have moved from 'personnel' to 'human resources' to 'human capital'. Human capital represents attributes of a person that are productive in the economic context. It refers to the stock of productive skills and technical knowledge embodied in labour.

Census: The procedure of systematically acquiring and recording information about the members of a given population. The term is used mostly in connection with 'national population and door to door censuses' to be taken every 10 years. The Government of India, with the assistance of States, has been conducting census to collect data about various demographic and socio-economic aspects of our population.

Factors making population a Human Resource

What are the factors that influence the role of population as the human resource? You may infer from the above discussion that the education, health and nutritional status of the people, and their specialized training determine the quality of population as a human resource. But besides these, there are key socio-demographic factors that have significant impact on the role of population as a resource. These are: (i) Distribution of Population; (ii) Population Change; and (iii) Population Composition. We shall try to understand these three factors. Let us begin with Distribution of Population.

INTEXT QUESTIONS 14.1

1. What is meant by resource?
2. Enumerate qualities that are essential for making human beings a resource.

14.2 DISTRIBUTION OF POPULATION

You may be knowing that resources, whether natural or any other, are not equally distributed. For example, natural resources like forests or iron ore or coal are not found equally in the world and also within our own country. The same is the case with human resources. They are not evenly spread everywhere in the world and their numbers keep on changing. The spread of population over an area, may be in a state or the entire country, is known as the distribution of population.

You will find it very interesting when you look at the following map of India (Figure 14.1). It shows how the population of India is spread across various States and Union Territories (UTs). This has been shown through dots. Each dot represents five lakh persons. As you see, in some States, the number of dots is less, even if the area is substantially large. It means that the population in these States is either widely spread or moderately spread. But in some other States, the dots are very close to one another, so close that those parts in the map look almost painted. In them, the spread of population is very dense. Let us prepare a list of sparsely populated, moderately populated and densely populated States and Union Territories (UTs) of India.

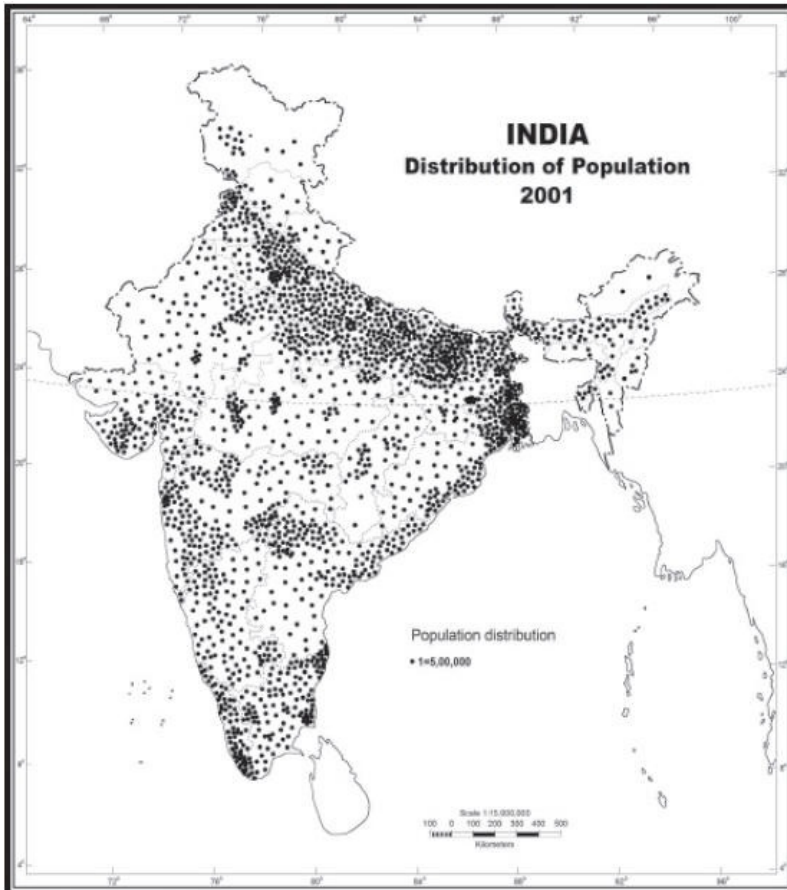


Figure 14.1: Distribution of Population in India

14.3 DENSITY OF POPULATION

Based on the above figure, a comparison of population distribution in any two States will be quite interesting. Let us look at the States of Maharashtra and West Bengal in the map (Figure 14.1). The patterns of the spread of population in them are different. From the simple look at the map, it appears that West Bengal has more population than Maharashtra. But it is not true. Maharashtra has more population than West Bengal, but Maharashtra is thinly populated because its land area is larger than that of West Bengal. Hence, we can not compare the population situation of two States in terms of only the number without considering their areas. That is why, the comparison of population of regions and countries is done through density of population.

Do you know

Density of Population: Do you Know. The density of population is the number of persons living per unit of an area. It is usually expressed as number of people per square kilometre (sq km). The formula for its computation is:

Density of population = Number of people in a defined area unit/Total area in square km of that particular area

For determining the density, the number of people living in a specific territory is divided by the total area of that territory. This provides an average number of persons living per sq km in the territory. For example, let us assume that the population of a district is 250,000 and its area is 1000 square km. The density of population of this district can be calculated as follows:

Density of Population = = 250 persons per sq km.

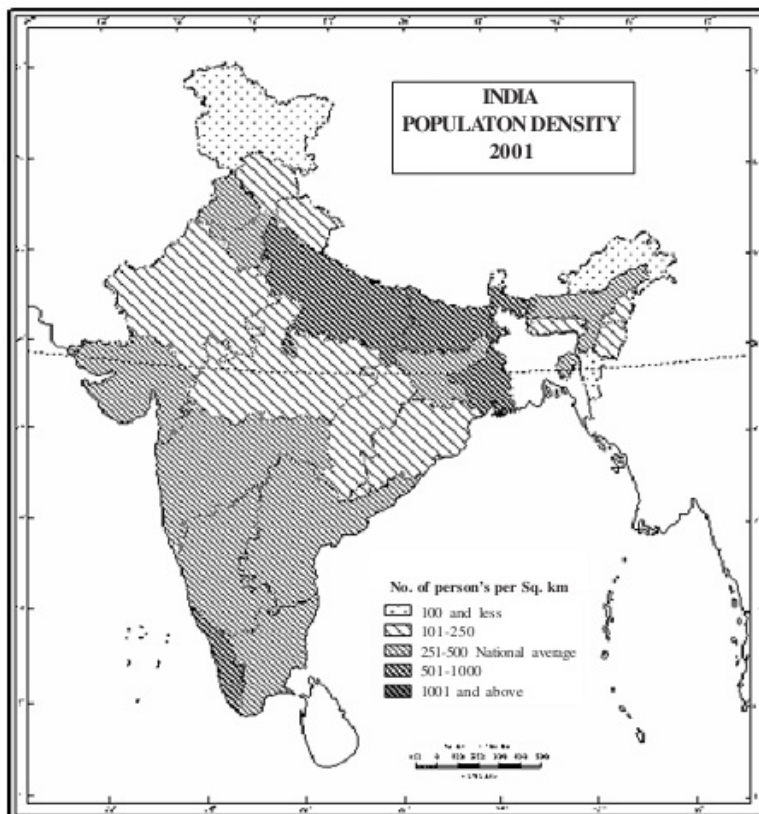


Figure 14.2: Density Of Population in India

The map (Fig. 14.2) shows that the density of population in India is uneven. It varies from one state to another.

ACTIVITY 14.1

Look at the Figure 14.2. Identify and name the States having high (more than 500 persons per sq km), moderate (100-500 persons per sq km) and low (less than 100 persons per sq km) density.

States having high density

States having moderate density

States having low density

Can you state the reasons for such a variation in density among States?

Hints: Unfavorable/harsh climatic conditions, rugged terrain and poor soil fertility are mainly responsible for the low density. Rich soil, abundance of rainfall, developed irrigational facilities, moderate climate and urbanization support high density of population. The areas of average fertility, modest rainfall, less developed irrigational facilities and, to some extent, stony/sandy surface sustain moderate density of population.

It also keeps on changing. As you may find in figure 1.3 the density of population in India was as low as 77 persons per sq km in 1901. It has steadily increased from 90 persons per sq km in 1931 to 325 persons per sq km in 2001. You would be interested to know, which is the most densely populated State/UTs of India. For that you may have to see the Census Reports. According to Census 2001, the NCT of Delhi has the highest density of population (9340 person per square km) followed by UT of Chandigarh (7900 persons per sq km). Arunachal Pradesh has the lowest density, 13 persons per sq km. Among the States, West Bengal has the highest density of population, i.e., 903

persons per sq km.

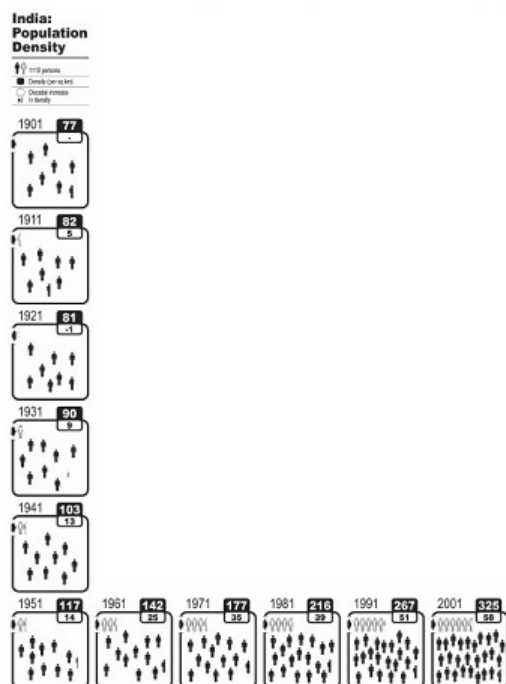


Figure 14.3: Density of Population in Decades (1901-2001)

Figure 14.3: Density Of Population in Decades (1901-2001)

Factors affecting distribution and density of population

Why is the distribution of population uneven? It is human nature that people like to live in the areas where resources are easily available. These resources may be fresh water, fertile soil, food and shelter, opportunities of work and others. The availability of these resources is influenced by geographical features which cause uneven distribution. And therefore, density and distribution of population are also uneven. We can divide the factors which affect distribution and density of population into two broad categories: Physical and Socio-economic.

A. Physical Factors

Three important physical factors influence the distribution and density of population, namely relief, climate and soil.

(i) Relief: you may have visited a mountainous area or a valley and also a plain area and observed that the mountains are less populated than the plains. Relief which represents the differences in elevation and slope between the higher and lower parts of the land surface of a given area, directly affects the accessibility of the area. The areas, which are easily accessible, are most likely to be inhabited by people. that is why, we find that the plains are densely populated and areas of rugged relief like mountains and plateaus are not. If you compare the density and distribution of population in northern plain and those in Himalayan areas, you can find the effects of relief.

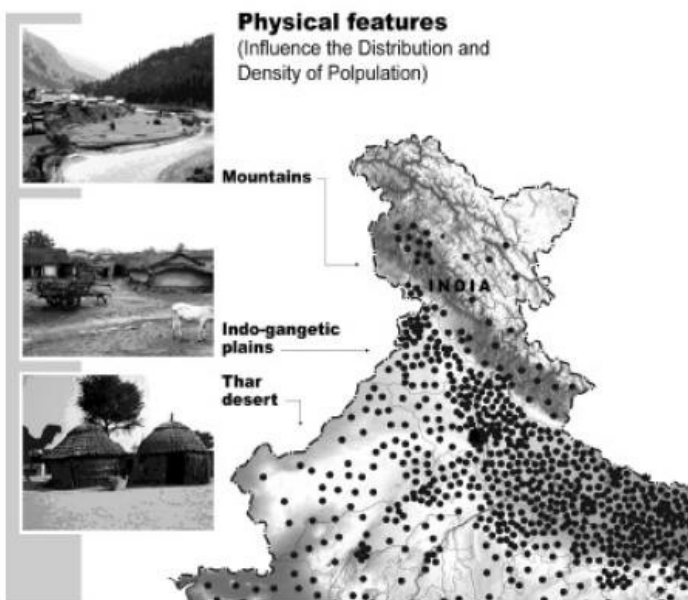


Figure 14.4 : Factors affecting Distribution of Population

Figure 14.4: Factors affecting Distribution of Population

Relief: Elevations of land; the variations in height of a land surface and its being shaped into hills and valleys.

(ii) Climate: Climatic condition is one of the most important factors which affects density and distribution of population. Favourable climate provides convenient living conditions for human beings. The higher density of population is found in the areas where the climate is favorable. But areas with harsh climate, i.e., areas that are too hot, too cold, too dry or too wet have lower density of population. In India, the area having dry climate such as Rajasthan and the areas with extreme cold climate such as the Valley in Jammu and Kashmir, or Himachal Pradesh and Uttarakhand have low density of population.

(iii) Soil: Human beings depend upon the quality of soil for agriculture. Areas of fertile soil can, therefore, support larger population. That is why, the regions of fertile soil such as the alluvial plains of North India and coastal plains have higher density of population. On the other hand, the areas with less fertile soils like parts of Madhya Pradesh, Rajasthan and Chhattisgarh have lower density of population.

B. Socio-economic Factors

The density and distribution of population also depend on the following socioeconomic conditions of the area:

(i) Industrialization and Urbanization: As you always find, large number of people reside in the area having industries. They also prefer to live in the urban areas, towns and cities. The areas which are rich in mineral resources also attract large population. The mining areas in Jharkhand are very densely populated. This is so because these areas support several economic activities and offer lots of employment opportunities. Moreover, the education and health facilities are better in these areas. We are aware that all large cities of India like Delhi, Mumbai, Bangalore, Hyderabad, Chennai, Kolkata and many more have high density of population.

(ii) Transport and Communication: Some parts of the country have better transport and communication facilities and other public utility services than the other parts. Areas of northern plain are very well connected, whereas north eastern areas have comparatively poor connectivity. All such areas where the public facilities are well developed have a comparatively higher density of population. Sometimes we find that the places of cultural and religious significance are also densely populated.

All the above mentioned factors operate in combination. We can take the example of the high density population in the Ganga plain. It is caused by a combination of factors: level land, fertile soils, a favorable climate, industrialisation and urbanisation,

and comparatively well developed means of transport and communication. On the

other hand, factors like rugged hilly terrain, unfavorable climate, poor means of transport and communication together cause low density of population in areas like those in Arunachal Pradesh.

ACTIVITY 14.2

Study the maps of physiographic divisions of India, the great northern mountains and the peninsular plateau of India in lesson 11. The smiling face of our Mother Land. Read these maps along with the data given in the figure numbers 14.1, 14.2 and 14.4 showing the distribution and density of population, respectively.

Co-relate and analyze the maps and identify the areas where physical conditions are favourable for people.

INTEXT QUESTIONS 14.2

1. Which one of the following States has the highest density of population according to 2001?
A. West Bengal B. Kerala
C. Tamil Nadu D. Uttar Pradesh
2. The population of a district is 3, 00,000 and its area is 1000 square km. What would be the density of population?
A. 150 persons/sq. km B. 200 persons/sq. km
C. 250 persons/sq. km D. 300 persons/sq. km
3. Mention four important factors that are responsible for high density of population in big cities like Delhi, Mumbai, Kolkata and Chennai.
4. Why is density of population of Uttarakhand low? Give two reasons.

14.4 POPULATION CHANGE

The quality of population as a human resource in any country is greatly influenced by the pattern of population change. The change can be in terms of population growth or population decline. Although the population of the world is still growing, there are countries where it is declining. Both the situations of population change have their impact on the quality of human resources. If population grows at a faster rate, it results into an imbalance between population growth and resources of a country. This situation has an adverse impact on the quality of human resources.

The Indian population has been growing since long. From a population of 238 millions in the year 1901, it increased to 1028 millions in 2001 and is still growing. This increase in population is more than four times within a span of a century. On the other hand there are countries in Western Europe where population is declining. Why it is so? Let us identify those factors which are responsible for population growth.

Factors of Population Change

Population of any country increases or decreases because of three main demographic factors: (a) birth rate, (b) death rate, and (c) migration. A number of socio-economic factors also influence birth rate and death rate which ultimately affect population change. However, you may find in figure 14.5 that in our country the main reason for rapid increase in population is high birth rate and low death rate. The migration as a factor has rather negligible influence on population growth at the national level.

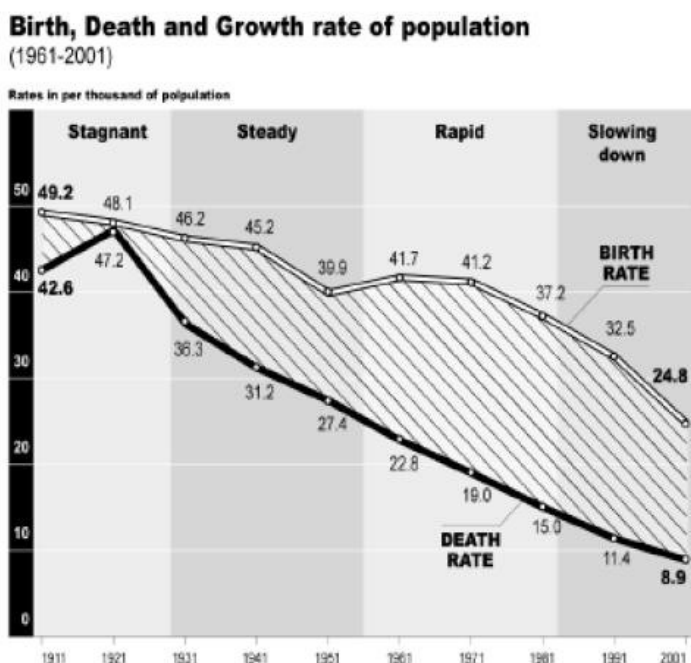


Figure 14.5 : *Growth of Population*

Figure 14.5 : Growth Of Population

If you study figure 14.5 carefully, you will find that death rate has been declining since 1921. The birth rate also started declining during the same period. However, the decline in death rate has been faster than that of the birth rate. That is why, the gap between birth rate and death rate has been widening, leading to increase in population.

The population growth is also visible when you look at the decadal growth given in figure 14.6. The decadal growth rate have declined marginally between 1981 and 1991 and again between 1991-2001. It is a happy sign. But you may be surprised to know that in spite of decreasing growth rates, the absolute population has been increasing continuously over the successive years. Based on the outcome of birth rate and death rate, the entire period since 1901 to 2001 has been divided into four groups – stagnant, steady, rapid and slowing down stages of population growth.

Do you know

Birth Rate: The number of births per thousand of population in a given year under a particular territory is called Crude Birth Rate (popularly known as birth rate). Thus,

Birth Rate = No. of live births in a year under an area/ Mid-year population of that area multiply 1000

Suppose in a district, the total live births are 800 in a year and its mid-year population is 25000. So,

Birth Rate = $800/25,000$ multiply 1000 multiply 10.0 = 32 per thousand of population **Death Rate:** The number of deaths per thousand of population in a given year under a particular territory is called Crude Death Rate (popularly known as death rate). Thus,

Death Rate = No. of deaths in a year under an area/Mid-year population of that area multiply 1000

Suppose in a district, the total deaths are 600 in a year and its mid-year population is 25000. So,

Death Rate = $600/25000$ multiply 1000 = 24 per thousand of population

Natural Growth Rate: Natural growth rate is the difference between birth rate and death rate. Therefore, natural growth rate = birth rate - death rate.

Suppose the birth rate of a particular year within an area is 32 and death rate is 24. Therefore, natural growth rate is $32 - 24 = 8$ per thousand of population
Formula for Birth Rate, Death Rate and Natural Growth Rate

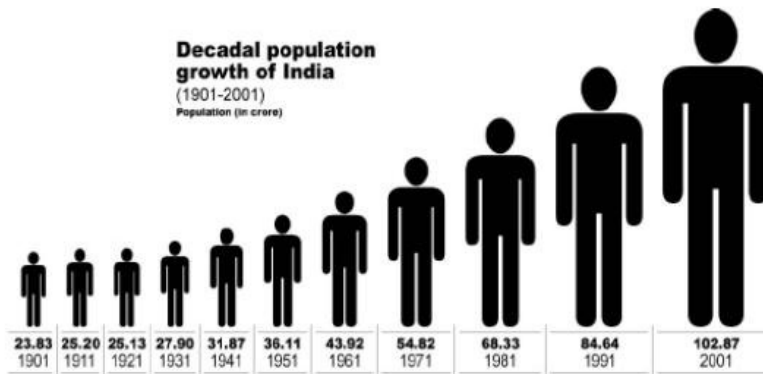


Figure 14.6 : Decadal Population Growth of India (1901-2001)

Figure 14.6 : Decadal Population Growth Of India (1901-2001)

As we find right from the beginning of the 20th century, the population of India has been increasing in absolute numbers except during 1921 when there was a decline in absolute number. After 1921, there has been a continuous rising trend. That is why, the census year of 1921 is called the year of “The great divide” in the demographic history of India.

Let us try to understand the reasons for the fast rate of population growth in india. The most significant factors are illiteracy and low level of education, unsatisfactory health and nutritional status and poverty. There are some other crucial socio-cultural factors like preference for male child, early marriage, religious beliefs and low status of women.

INTEXT QUESTIONS 14.3

1. If in an area, birth rate is 45 per thousand and death rate is 25 per thousand, what would be the natural growth rate?
A. 15 per thousand B. 18 per thousand
C. 20 per thousand D. 25 per thousand
2. Which one of the following is the main reason for rapid increase in population of India?
A. High birth rate and high death rate
B. Low birth rate and low death rate
C. High birth rate and low death rate
D. Low birth rate and high death rate
3. Why is 1921 called the year of “The great demographic divide”?

14.5 POPULATION COMPOSITION

We have studied the distribution, density and growth of population so far. You would have been able to understand that the net effect of the difference between birth rate and death rate determines the pace and trend of population change. This net effect also demonstrates the composition of population which is an important factor influencing not only the pace of population growth but also the quality of population as a human resource. What is population composition? Population composition is the description of population defined by characteristics such as age, sex, rural-urban or literacy status. We shall, therefore, try to understand the following aspects of the population composition in India:

- (i) Age composition,
- (ii) Sex composition,
- (iii) Rural-urban composition, and
- (iv) Literacy

(i) Age Composition

The age composition of population has significant implications for the current and future development of a country. Population has been traditionally divided into three broad age groups: children (0-14 years), adults (15-60 years) and old (more than 60 years). Figure 14.7 shows age composition of Indian population in the above mentioned groups. If we compare the data from 1971, it is obvious that the child

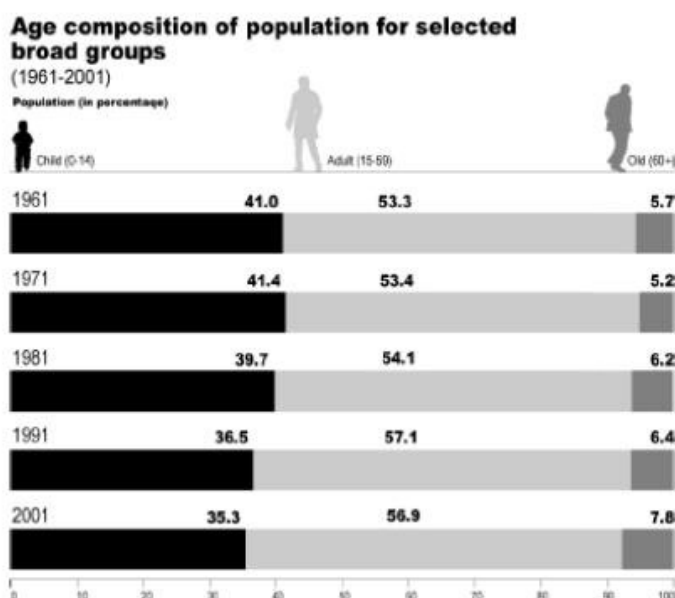


Figure 14.7 : Age Composition

Figure 14.7 : Age Composition

population is declining and the population of adults has been increasing. However, population of the old is also increasing. In this way, the share of dependent population is increasing. Population of the old and children put together constitutes the dependent population. When the number of dependent population increases, the dependency ratio goes up. As a result, the country has to invest more on the growth and development of children and welfare of the old people; otherwise the same resources can be used for other productive purposes.

Do you know

Dependency Ratio

Dependency Ratio = $\frac{\text{Dependent population (0-14 yrs. plus more than 60 yrs. old)}}{\text{Working population (15-59 years)}} \times 100$

Suppose in a district, dependent population (0-14 years plus more than 60 years) is 7000 and working population (15-59 years) is 18000. Thus,

Dependency Ratio = $7000/18,000 \times 100 = 38.89$

That means out of every 100 persons, 38.89 persons are dependent and 61.11 persons are working persons.

Think and ponder

Your grandparents, being in the age-group of 60 years and above, belong to the dependent population group. Do you think they are a burden? Are they not contributing towards the welfare of the family and society? If 'yes', how are they contributing? If 'no' why are they not contributing?

Adolescents as a Distinct Population Group

The latest approach to understand the age composition emphasises the need to treat adolescents as a distinct population group. Traditionally, we have been dividing population in three phases: childhood, adulthood and old age. But as we observe, there are many individuals who are neither children nor adults. If you yourself are in that phase of life, you must have experienced your parents or other adults telling you, "Why are you doing this? You are no longer a child". On another occasion the same adults would be telling, "How can you do this? You are not an adult". In fact, the phase of life between childhood and adulthood, say between 10 years and 19 or a few more years, is known as adolescence and the persons in this age group are identified as adolescents. You may go through the text in the Box to understand meaning of adolescent better.

Do you know

What does Adolescent Mean?

United Nations definitions are based on number of years as follows:

- Adolescents: 10-19 years olds
- Youth: 15-24 years olds
- Young People: 10-24 years olds

But adolescents as a population group may not be seen only in association with the precise number of years, as its periodicity varies from person to person. Adolescents belong to “a developmental period which extends from the end of childhood to the beginning of adulthood”.

Adolescence is defined as the period of physical, psychological and social maturation from childhood to adulthood, the period extending from puberty to the attainment of full reproductive maturity.

As shown in Table 1.1, adolescents as a distinct population group constitute almost 22.0 per cent of total population of India. This was their share in 2001. Their number is still growing and currently (in 2009) their percentage share has increased. The National Population Policy 2000 identifies them as an “under-served population group”, because their needs have not been specifically addressed so far. The Policy describes various strategies to address different needs of adolescents. These are: (i) provide accurate information about physical, physiological, psychological and social changes and developments that take place during adolescence; (ii) develop the needed life skills to empower them to avoid risky situations and to attain sound physical, mental and social health; (iii) provide food supplements and nutritional

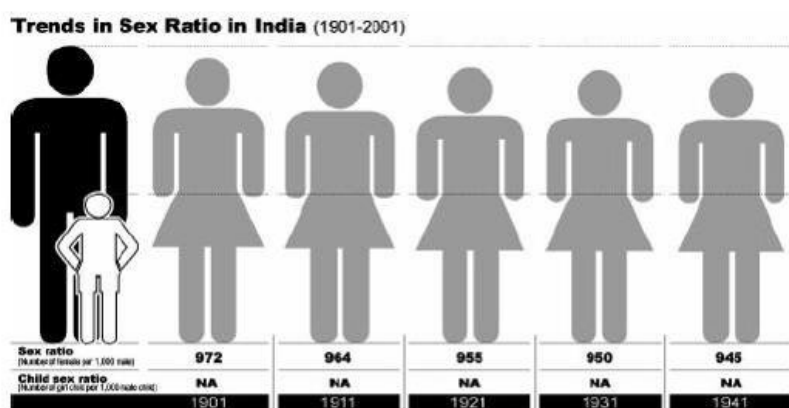


Figure 14.8(a) : Trends in Sex Ratio in India

Figure 14.8(a) : Trends in Sex Ratio in India

services; and (iv) make available the needed health and counselling services available to them.

Table1.1 : Adolescents (10-19 Years) by Sex (in thousands) in India, 1991 and 2001

Census Year	Total No. of Adolescents	% of Total Population	Male	% of Total Male	Female	% of Total Female
1991	181,419	21.4	95,969	21.9	85,450	21.0
2001	225,061	21.9	119,571	22.4	105,490	21.2

ACTIVITY 14.3

Look into the data given in Table 1.1 and search answers for the following:

1. Why is the number of adolescent girls less than adolescent boys, though biologically the number of girls should have been more?
2. What is the trend in terms of percentage of male and female adolescents during 1991 and 2001?
3. Why are the adolescents considered as under-served population group?
4. Can you prepare a list of the needs of adolescents that must be addressed by the society?

(ii) Sex Composition

Sex composition is a very significant indicator of the quality of population of a country as a human resource. In fact, primarily it is understood on the basis of sex ratio. Sex ratio is defined as the number of females per 1000 males. It is an important

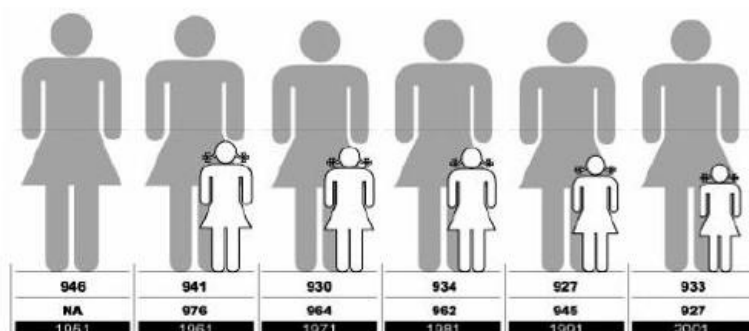


Figure 14.8 (b) : Trends in Sex Ratio in India

Figure 14.8 (b): Trends in Sex Ratio in India

social indicator to measure the extent of prevailing equity between males and females at a given point of time. Sex ratio should be favourable. But in our country, sex ratio has always remained unfavorable to females, and the matter of concern is that it has been declining. In the year 1901, there were 972 females per 1000 males. In 2001, it has come down to 933 only. This trend is shown in figure 14.8 (a) and (b).

Do you know

Sex Ratio is calculated as follows:

Sex Ratio = Total number of females in a particular area/Total numbers of the male in same area multiply 1000

Suppose in a district, the total number of females is 12000 and total number of males is 13000. Thus,

Sex Ratio = $12,000/13,000$ multiply 1000 = 923 females per thousand male

Let us think why sex ratio is unfavorable in our country? It is primarily because of the prevailing discrimination against the females in our society. The favourable sex ratio is available only in one State and one Union Territory. It is 1058 in the State of Kerala and 1001 in the Union Territory of Pondichery, now known as Puducherry.

Child Sex Ratio

The trend of decline in child sex ratio in the country is a matter of great concern. The sex ratio in 0-6 year population (child population) is continuously decreasing. Whereas the 1991 and 2001 Census Reports showed some improvement in overall sex ratio, the sex ratio of 0-6 year population has decreased sharply. Out of 28 States and 7 Union Territories, only in four States, namely Kerala, Mizoram, Sikkim, Tripura and Union Territory of Lakshadweep the child sex ratio is in tune with the overall sex ratio. The worst affected States are Haryana, Himachal Pradesh, Gujarat, Punjab, and Uttarakhand, and the Union Territory of Chandigarh and National Capital Region of Delhi. This decline in child sex ratio suggests the prevalence of the practices of female foeticide and female infanticide in these States. These practices are against the norms of a civil society.


(iii) Rural-urban Composition

India has been a land of farmers and a country of villages. At the beginning of the twentieth century nine out of ten persons used to live in villages. More than three

fourths of our population still lives in rural areas. The urban area in India is defined as one, in which three-fourth of the population depends directly or indirectly on nonagricultural pursuits, with a minimum of 5000 population and the density being not less than 400 persons per sq. km.

It seems, (see figure 14.9) we are moving rather fast towards urbanization along with its consequences such as shortage of housing, water, electricity, and encroachment on environment.

Rural and Urban population
(1951-2001)



Year	Population (million)		% of population	
	Rural	Urban	Rural	Urban
1951	299	62	82.7	17.3
1961	360	79	82.0	18.0
1971	439	109	80.1	19.9
1981	524	159	76.77	23.3
1991	629	218	74.3	25.7
2001	742	285	72.2	27.8

Figure 14.9: Rural - Urban Change

Figure 14.9: Rural - Urban Change

(iv) Literacy

Literacy is an indicator of development of any society. As defined in the Census Report, 'a person aged seven and above, who can both read and write with understanding in any language is treated as literate'. Literacy rate in our country was 18.83 percent in 1951. It has increased to 5.38 percent in 2001. Among various States of our country, Kerala has the highest literacy (90.86 percent) followed by Mizoram (88.49 percent) and Lakshdweep (87.52 percent). But the literacy rate, in general, is lower among females as compared to males (figure 14.10)

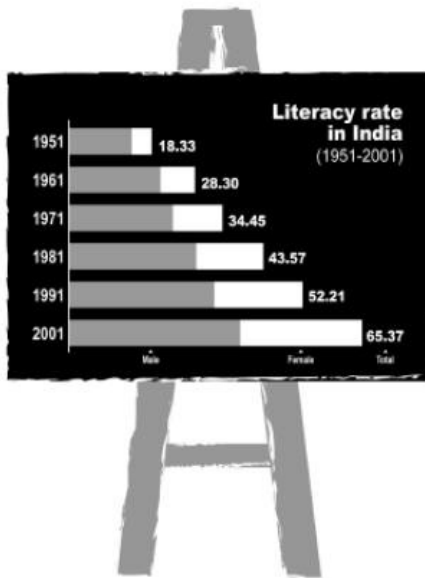


Figure 14.10: Literacy

Figure 14.10: Literacy

ACTIVITY 14.4

Collect the following information from your vicinity for about 10-15 households:

1. Name of the person interviewed
2. Age Years
3. Academic Qualification
4. Number of persons earning in the family
5. Total no. of members M F6. Members of family in the age groups
 - (a) Up to 14 years
 - (b) 15 years to 60 years
 - (c) More than 60 years
7. Based on the data collected above, compute and analyze :
 - (a) Sex-ratio
 - (b) Dependency ratio
 - (i) Below 14 years and its percentage
 - (ii) More than 60 years and its percentage

We have been thus able to understand that the population of any country cannot become its greatest resource only by virtue of its number. The country has to invest to improve the quality of demographic characteristics and convert the number into a resource. For converting the number into human resource, India like many other countries of the world has been adopting and implementing policies and programmes. In the next section, therefore, we shall try to understand policies of Government of India in respect of population and empowerment of women.

INTEXT QUESTIONS 14.4

1. According to 2001 census, the sex ratio of India is:
A. 920 B. 927
C. 933 D. 943
2. The percentage of urban population, according to 2001 census is:
A. 27.8 B. 26.7
C. 25.7 D. 24.0
3. What would be the result if the dependency ratio is more?
4. State any two reasons responsible for unfavourable sex ratio in India.

14.6 POPULATION POLICIES IN INDIA

Do you know that discussions on population growth and the need to adopt a population policy had begun in India even before Independence? A Sub-Committee on population was set up by the National Planning Committee appointed in 1938 by the Interim Government. This Committee, in its resolution in 1940 said, “in the interest of social economy, family happiness and national planning, family planning and a limitation of children are essential”.

In 1952, India was the first country in the world to launch a national population programme emphasizing family planning. The aim of the programme was to reduce birth rates “to stabilize the population at a level consistent with the requirement of national economy”. Since then India has been reformulating its population policy from time to time, the details of which you can get from relevant books or when you study in higher classes. At present we shall try to understand the latest population policy which was adopted by Government of India in 2000.

National Population Policy (NPP) 2000

The National Population Policy 2000 has made a qualitative departure in its approach to population issues. It does not directly lay emphasis on population control. It states that the objective of economic and social development is to improve the quality of lives that people lead, to enhance their well-being, and to provide the opportunities and choices to become productive assets (resources) in the society. Stabilizing population is an essential requirement for promoting sustainable development. The immediate objective of the NPP 2000 is to address the unmet needs for contraception, health care infrastructure, and health personnel, and to provide integrated service delivery for basic reproductive and child health care. The mediumterm objective is to bring the total fertility rate (TFR) to replacement levels by 2010 through vigorous implementation of inter-sectoral operational strategies. The longterm objective is to achieve a stable population by 2045 with sustainable economic

growth, social development, and environmental protection.

Do you know

Total Fertility Rate at Replacement Level: It is the total fertility rate at which newborn girls would have an average of exactly one daughter over their lifetimes. In more familiar terms, every woman has as many babies as needed to replace her. It results into zero population growth.

Stable Population: A population where fertility and mortality are constant over a period of time. This type of population will show an unvarying age distribution and will grow at a constant rate. Where fertility and mortality are equal, the stable population is stationary.

Women Empowerment in India

The empowerment of women is very crucial for improving the quality of population as a human resource. Women, in India, although making up almost 50% of the total population, have been looked down upon and subjected to discrimination. By simple logic, this has deprived the nation of the contribution of half of its population as human resources. This is quite opposite of what is seen and observed in the developed world. The role of women in our country has been limited to looking after their families, also being mute spectators to all kinds of discrimination, ill treatments and crimes against them.

If you go through the Indian Constitution, you will find that in its Articles 14, 15, 16, 19, 39, 42, 51 provisions have been made to ensure justice and equality to all. Many laws have been passed like Special Marriage Act 1954, Medical Termination of Pregnancy Act 1971 and Child Marriage Restraint Act (Amendment) 1978. Yet the status of women continues to be a matter of great concern.

Some steps have been taken and it is hoped that there will be qualitative change in the status of women. The empowerment of women received a major boost when the 73rd and 74th Constitutional Amendments providing 33 percent reservation of seats for Women in Panchayati Raj institutions and Urban Local Bodies were passed by the Parliament. Another Constitution Amendment Bill has been introduced, which aims at providing 33 percent reservation for women in the House of the People and State Legislative Assemblies. A National Commission for Women came into existence in 1992, through an Act passed in 1990. Wide ranging functions have been assigned to the Commission to look into and investigate into any ill treatment brought to their notice against women and to safeguard their interest.

The ultimate objective is to facilitate the advancement, development and empowerment of women and to eliminate all forms of discrimination. These steps will also ensure their active participation in all spheres of life and activities. You can read, learn and understand about the need of women empowerment and its efforts made more in detail in the lesson 'Socio –Economic Development and Empowerment of Disadvantaged Groups'.

INTEXT QUESTIONS 14.5

1. Suppose a particular district has an area of 200 square Km. The same district records the total number of persons as 17400, 26200, 36200, 47200, 59800, 75200 according to 1951, 1961, 1971, 1981, 1991 and 2001 census, respectively.
 - A. Calculate the density of population for all six censuses.
 - B. Find out the decadal change in density.
 - C. Can you find any trend from your calculation of population density?

WHAT YOU HAVE LEARNT

- Population is the total number of people living in a country at a given time. The data regarding various socio-economic and demographic aspects of our population is collected by the Government of India at the beginning of each decade and it is called census.
- The total population of India according to the 2001 census is 1028.7 millions which is more than four times to that of 1901 (238.3 millions). The difference between the birth rate and death rate is called natural growth rate.
- Density of population is defined as the number of persons per square kilometer. Its distribution in India is highly uneven. NCT of Delhi has the highest density of 9294 persons/sq. km. and Arunachal Pradesh has the lowest 14 persons/sq. km.
- Sex ratio is defined as the number of females per 1000 male in the total population. Sex ratio is unfavorable in India. It is 933 according to the census of 2001. The sex ratio can be improved by empowering women.
- Population of India is divided mainly into three age-group; (i) children (0-14 years), (ii) adults (15-60 years) and (iii) old (60+years). Children and old form the dependent population and their percentage in the total population is about 43.
- For an awakened society, literacy is an important indicator. As per the census 'a person aged seven and above should be able to read and write with understanding'. Literacy rate in our country has improved a lot. It was only 18.33 in 1951 which has gone up to 65.37% in 2001. Kerala has the highest literacy rate 90.86 percent.
- The main objective of the National Population Policy is to improve the quality of life of the people by reducing birth and death rates, family welfare, stabilizing population, economic growth, social development and environmental protection. By making appropriate investment in improving the quality of life, our large population can be transformed into a productive resource of our country.

TERMINAL EXERCISES

1. Define sex-ratio. Why is the sex-ratio in India unfavorable?
2. Define population growth rate and explain how it is arrived at.
3. What inferences can we draw from the age composition data of India?
4. How can we turn our huge population into a resource?

5 Define the following terms

(i) Density of population

(ii) Birth rate, Death rate and Growth rate.

(iii) Literacy

6 Explain the National Population Policy?

7 What is meant by women empowerment? How does women empowerment empower the whole society/community?

ANSWER TO INTEXT QUESTIONS

14.1

1. Something that can be used or reused by us.

2. Education, health and nutrition, specialized training.

14.2

1. A. West Bengal

2. D. 300 persons/square km

3. Industrialization; (ii) Urbanization; (iii) Employment opportunities; (iv) Means of transport and communication.

4. (i) Rugged topography

(ii) Harsh climatic condition

14.3

1. C. 20 per thousand

2. C. High birth rate and low death rate

3. The year 1921 shows decline in population but after that it has been increasing continuously.

14.4

1. C. 933

2. A. 27.8

3. Government has to invest more for the welfare of dependent population and hence less available fund for greater developmental works in country.

4. (i) Discrimination against females.

(ii) Female foeticide and infanticide.

14.5

1.

Year	A Density	B Decade change in density	C
1951	87	—	Continuously increasing trend in the density of population
1961	131	44	
1971	181	50	
1981	236	55	
1991	299	63	
2001	376	77	

CURRICULUM OF SOCIAL SCIENCE AT SECONDARY LEVEL

Rationale

The study of human society is a complex one. It involves study of the network of social relations. Understanding society requires inputs from a number of subjects.

Hence, the curriculum of social science attempts to take an integrated approach drawing upon the knowledge inputs of anthropology, sociology, history, geography, economics and political science.

Social Science seeks to enable the students to gain knowledge and understanding of the historical, sociocultural, economical, political and physical aspects of society. It helps them, also, relate the knowledge acquired to the real life situations. This experiential learning helps them acquire important values and prepares them to grow as responsible citizens. It motivates the learners to effectively participate in and contribute to the process of nation building and development.

Objectives

The Curriculum aims:

- to draw appropriate lessons from the struggles and experiences of our previous generations;
- to underline the need to judiciously use the country's resources and conserve them;
- to establish that India as a functioning democracy is inspired by the values enshrined in our constitution; and
- to take stock of various socio-political problems in contemporary India and to identify the contribution each one of us can make in

addressing these problems

Evaluation

Both formative (time to time) and summative (at the end of course) evaluation will be used. Formative evaluation will be in the form of Tutor Marked Assignment (TMA) and summative evaluation will be in the form of external examination, which is conducted twice in a year i.e. in the month of March and October for 100 marks. There will be 3 TMAs for 20 marks each. Apart from these two, certain in-built components for self-evaluation such as in-text questions, terminal exercises and activities etc. would also be integral part

of each lesson.

Course Description

Module I: India and the World through the Ages

Weightage: 32 Marks Study Hours: 76 Hours

Approach: The module aims at familiarising learners with the making of India and the world through the ages. The following events and processes represent new political and economic forces although they may be markedly different from each other. While the French Revolution promoted liberalism and democracy, the Russian Revolution resulted from, and helped to create socialist ideas. Nazism in Germany is a case study of the negation of both democracy and socialism. It also aims at acquainting learners with the impact of colonialism on India with social reform and resistance to British rule and with the making of the Indian national movement. It shows how a notion of popular sovereignty and equal citizenship were developed by the freedom struggle. It also seeks to familiarise learners with many different visions of the future of India as envisaged by leaders and participants of the national struggle. The treatment of themes of lessons will pay special attention to the development of life skills such as thinking skill, communication skill and negotiation skill as may be appropriate by way of giving examples, activities, surveys, case studies etc.

Introduction to Social Science

1. Ancient World
2. Medieval World
3. Modern World – I
4. Modern World – II
5. Impact of British Rule on India: Economic Social and Cultural (1757-1857)
6. Religious and Social Awakening in Colonial India
7. Popular Resistance to the British Rule
8. Indian National Movement

Module II: India: Natural Environment, Resources and Development

Weightage: 27 Marks Study Hours: 64 Hours

Approach: The module is designed to acquaint the learner with the inter-relationship between natural environment, resources and development. This module enables the learners to understand the basic elements of environment and its dynamism. It will also highlight the maintaining of ecological balance on the earth so that the total life of which human is a part, continues to exist and flourish on the earth.

This module is also designed to acquaint the learner with the concept of natural resource base in its totality and scientific development on a sustainable basis.

This module will mainly discuss various natural and manmade resources their distribution, utilisation, and need for conservation and management. The module is to be developed with reference to India and help learners to understand the physical and cultural diversities of the country and their underlying unity. The physical diversities include landforms, climate, soil, vegetation and wild life. Cultural aspects include the meaning of culture especially in the context of India, cultural diversity and its relationship with the physical environment. It emphasises the richness of the country's heritage both natural and cultural and the need to preserve it for future generations. The treatment of themes of lessons will pay special attention to the development of life skills such as thinking skill, communication skill and negotiation skill as may be appropriate by way of giving examples, activities, surveys, case studies etc.

1. Physiography of India.
2. Climate
3. Bio-Diversity
4. Agriculture in India
5. Transport and Communication
6. Population Our Greatest Resource

Course Structure

Module No.	Module Name	Weightage	Study Hours
Module I	India and the World Through the Ages	32 Marks	76 Hours
Module II	India: Natural Environment, Resources and Development	27 Marks	64 Hours
Module III	Democracy at Work	28 Marks	68 Hours
Module IV	Contemporary India: Issues and Goals	13 Marks	32 Hours
	Total	100 Marks	240 Hours