UNIT I

# INDIA
# RESOURCES AND THEIR DEVELOPMENT

## RESOURCES

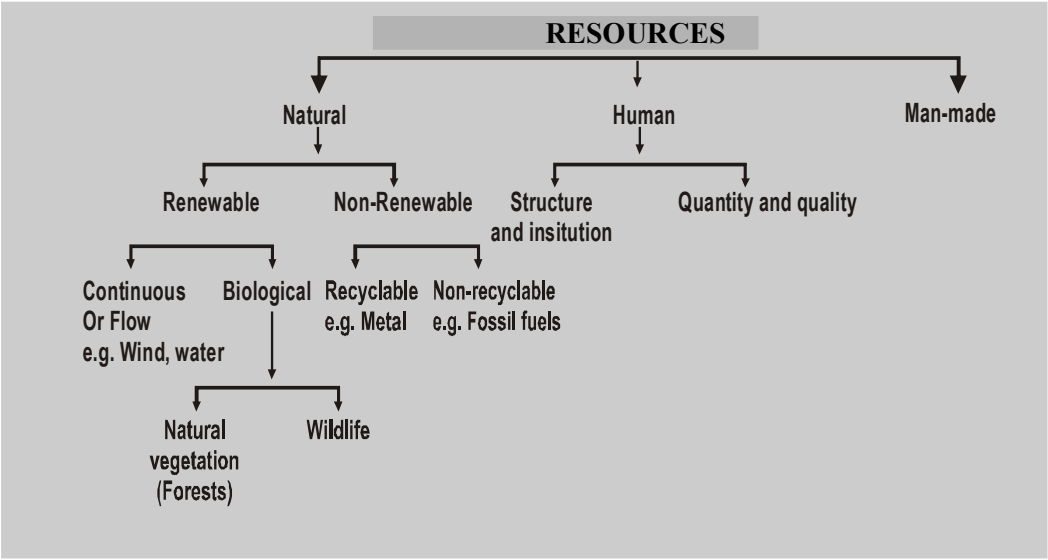
Resources are everything available in our environment which can be used to satisfy man's material needs and desire. These things may be naturally endowed with our physical environment or man-made. They should be technologically accessible, economically feasible and culturally acceptable ones.

Resources are to be created by man. Any thing tangible or non-tangible, becomes a resource only when it is used by humans for their benefit. Thus, resources have become an integral part of human survival and development. Human beings interact with nature and create institutions to accelerate their economic development. Hence, the process of transformation of things available in our environment involves an inter-dependent relationship among nature, technology and institution.

Resources include both human and natural things. No material available in our environment can be transformed into resource without man. Thus, human beings themselves are essential components of resources. Resources are the function of human activities.

## TYPES OF RESOURCES

Resources are of different types. Their classification can be made in the following ways:



**1. Based on origin, resources can be classified into Natural, Human and Man-made Resources.**

**(i) Natural resources** – Natural resources are the gifts of nature which are useful for making the life of human beings comfortable and worth living. They include natural vegetation, soil, water, air, minerals and even rocks. These resources can be sub-divided into two types -biotic and abiotic. The biotic resources are those living things found in biosphere which include forests, animals, birds, marinelife and human beings. Abiotic resources, on the other hand, are those non-living things of the environment like land, soils, rocks and minerals.

**(ii) Human resources** – These are human beings who are made valuable through education, training, experience, etc. so that they may become capable of making use of other resources effectively. Human resources do not merely mean the number of people living in an area but also the quality of the people. This is considered with their knowledge, skill and education.

**(iii) Man-made resources** – With the advancement in man's culture, new resources are created by human beings interacting with nature such as vehicles, machinery, tools equipments, etc. that are used in different aspects of our life. They are called man-made resources.

**2. Based on exhaustibility, resources are classified into Renewable and Non-renewable**

**(i) Renewable resources** – These are the resources which can be renewed or reproduced by physical, chemical and mechanical processes. They do not get exhausted, e.g. wind, solar energy, water, forest, wildlife etc. These resources may further be sub-divided into continuous or flow and biological resources.

**(ii) Non- renewable resources –** These resources get exhausted after use and cannot be reproduced or replenished. Metallic minerals like iron, copper, aluminium ore etc can be used more than once and are referred to as recyclable resources whereas, non-metallic minerals like coal, petroleum, natural gas etc. get exhausted at once and are termed as non-recyclable resources.

**3. Based on ownership, resources are of the following types.**

**(i) Individual resources** – The resources which are owned privately by individual such as houses, plots, farmlands, pasturelands, ponds, wells, etc. are known as individual resources.

**(ii) Community resources** – There are resources not owned privately by individuals but are accessible to all the members of the community. They are community resources. For example, playgrounds, grazing grounds, burial grounds, village ponds, public parks, picnic spots etc.

**(iii) National resources** – In fact, all resources belong to the nation. They even include those owned by individual or community. So, private properties can be acquired by the nation for public good whenever they are required. For example, roads, railways, canals, etc. are being constructed on fields owned by some individuals. This is because the country has legal powers to acquire them at any time. Moreover, national resources include water resources, forests, wildlife, land within the political boundary and oceanic area up to 21.9 km from the coast which is termed as "territorial water" of the country.

**Do you know ?**

**India has the rights for fishing and mining within the limit of 21.9 km from the coast. Some important minerals like oil and natural gas are found in the territorial water of India.**

**(iv) International resources** – There are some resources which cannot be used without the concurrence of international institutions such as the resources in open ocean beyond 200 km of the exclusive economic zone of a country. Such resources are known as international resources.

**4. Based on the status of development, resources are classified into Potential, Developed, Stock and Reserves.**

**(i) Potential resources** – They are the resources found in a region but have not been put to proper utilisation. For example, there are enormous potentials for the development of wind and solar energy in the western parts of India and hydro electricity in Manipur and other north-eastern states of India. But, they are not yet developed properly.

**(ii) Developed resources** – These are the resources which have been surveyed and determined their quality and quantity for utilisation. But, their development depends on technology and level of their feasibility.

**(iii) Stock** – These are the materials in the environment which have the potentials to satisfy human needs or wants. But, they are not exploited properly due to lack of the technical know-how required for exploiting them. Thus, they remain as it is as natural endowments and are known as **stock**. For example, hydrogen in the atmosphere has not been used as a fuel due to lack of technical know-how for harnessing it.

**(iv) Reserves** – The resources that can be developed and exploited profitably with the existing technology and kept to meet the future requirement are termed as **Reserve resources**. For example, the water in dams, forests etc. are reserve resources which can be used in the future.

## RESOURCE DEVELOPMENT

The process by which people use resources available in their biophysical environment is called **resource utilization.** As the culture of man advances, new resources are discovered and as the technology advances, better methods of resource utilization are adopted. This is called resource development.

In the past, considering the natural resources to be mere gift of nature, human beings used them indiscriminately without giving a thought that resources would become exhausted too soon. Even now, with the use of improved methods of resource development resources are being depleted rapidly beyond the capacity to replenish themselves through natural processes. As a result, ecological, cultural and economic problems like global ecological crisis such as global warming, ozone layer depletion, environmental pollution, land degradation, etc. are created. Again, resources are collected and accumulated by a few individuals or nations. That is why we have problems of rich and poor in various nations. It divides the society into two segments – haves and have nots. These considerations call for a proper resource planning.

## NEED FOR RESOURCE PLANNING

Resources must be used wisely for survival and development of the human race i.e. sustainable existence of all life forms. Sustainable existence is a component of sustainable development for which a resource planning is essential.

**Do you know ?**

Sustainable development means the process of development that takes place without damage to the quality of environment. Such development in the present should not compromise with the needs of the future generation.

Resource planning must be conducted for achieving sustainable development in the 21st Century by adopting 'the Agenda 21 of the Rio Convention 1992.'

The Agenda 21 is the declaration signed by world leaders in 1992 at the United Nations Conference on Environment and Development which took place at Rio de Janerio, Brazil. It is an agenda to combat environmental damage, poverty, disease through global co-operation on common interests, mutual needs and shared responsibilities. The major objective of 'the Agenda 21' is that every local government should draw its own local Agenda to protect the environment.

Resource planning offers a number of advantages in the process of economic development of a country. It has a great importance in a country like India which has enormous diversity in the availability of resources. In India, there are regions which are rich in certain types of resources but are deficient in other resources. Again, there are regions which are considered to be self-sufficient on one hand but are absent in vital resources on the other. For example, states like Gujarat and Rajasthan have rich potentials of wind and solar energy but lack in water resources. Again, there are abundant water power potentials in Arunachal Pradesh and Manipur but these states are deficient in infrastructural developments.

The availability of resources is of great importance at the initial stage of economic development of a region. But, the economic activities of a country begin actually when the real utilisation of resources is started. Hence, the development of a country is not guaranteed by the abundant availability of resources, unless changes are taken place in technology and in the quality of human resources of the region. Therefore, a proper resource planning with appropriate technological development and institutional changes is essential so as to bring about the desired economic development in that region.

## NATURAL RESOURCES

India is well endowed with a variety of natural resources. These resources occur in the lithospheric, hydrospheric, atmospheric and biospheric zones of the country. They include land, soil, forest, water, air, sunlight, wildlife, minerals etc. The natural resources provide raw materials for the crucial economic development of the country. Among those resources, land and soil are important and they are being discussed in the following paragraphs.

**Land as a resource**

Human beings use land as a natural resource for production as well as residence and recreation purposes. You must have observed that land around you is put to different uses. The building of school, road on which you travel, parks on which you play, fields in which crops are grown and pasture where animals graze represent different uses to which land is put.

The land resources of India include mountains, plateaus and plains. About 30 per cent of the land of the country is made up of mountains. They ensure perennial flow of some rivers, provide facility for tourism and ecological aspects. Plateaus account for 27 per cent of the country's total area and possesses rich mineral reserves, fossil fuel and forests. The remaining 43 per cent is of plain which provides facilities for agriculture and industry. However, the total geographical area of the country may not be available for full utilisation. The different categories of land-use are made only for the 'Reporting area' which is somewhat different from the geographical area.

As per Land Revenue Records, the following categories of land-use are recognised in India.

1. **Forests** – In fact, the area classified as forests is different from the actual forest-cover area. The former implies the area identified and demarcated by the government for forest growth while the later implies the area actually under forests. Thus, the area can be increased in the former category without any increase in the actual forest-cover.
2. **Land put to non-agricultural uses** – Land used in industries, roads, canals, shops, settlement and in other infrastructural developments are included in this category. The increase in development works, the increase will be in this land-use category.
3. **Barren and wastelands** – These are the lands which cannot be brought under cultivation with the available technology, i.e. hilly terrains, deserts, ravines etc.
4. **Area under permanent pasture** – Lands used as community grazing fields in the rural areas fall under this category.
5. **Area under tree crops and groves** – This category of land- use includes lands used

for orchards and fruit trees. Most of such lands are owned privately.

6. **Culturable wasteland** – Lands which are left fallow for more than five years are included in this category. Such lands can be put under cultivation by giving some efforts i.e. reclamation practices.
7. **Current fallow** – These are the lands which are left uncultivated for one or less than one agricultural year. They are left fallow to recoup the fertility through natural procesess.
8. **Fallow other than current fallow** – The cultivable lands which are left uncultivated for more than a year but less than five years are known as permanent fallows.
9. **Net sown area** – The physical extent of land on which crops are sown and harvested is known as net-sown area.

Thus, land as a resource, is used in various purposes and it has become important to us in many ways. The importance of land resource has been increased by the presence of soils on it and its importance can be discussed as follows :

**(i)** Forests exist on land and are useful to us in many ways.

**(ii)** Buildings, roads and factories are all situated on land. Some lands may be barren at the moment but would become useful once the technology becomes available to use them.

**(iii)** Pasture and grazing lands support cattle, the milch cattle in particular.

**(iv)** A number of trees like coconut, groves, fruit bearing trees grow on land and provide useful food products.

**(v)** Agricultural crops are grown on land and are essential for the survival and economic growth.

**Soil as a resource**

The upper layer of the earth's crust is referred to as soil. It is an important renewable natural resource. Being the medium of plant growth, it supports different types of living organisms on the earth. Thus, soil is the associated factor of land that largely influences food, clothing, housing and lifestyle of the people.

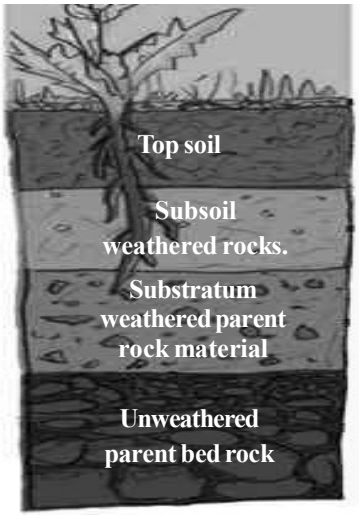


*Fig. : 1.1 Soil Layers*

**Soil formation**

The process of weathering and agents of erosion such as change of temperature, running water, wind, glacier etc, break rocks into small pieces and convert them into fine inorganic materials. These materials are termed as **Regolith**. They are then, mixed with organic matters (humus) produced by the activities of decomposers. Thus, soils are formed. But, the formation of soil is a time taking

process. It takes millions of years to form soil of a few centimetre in thickness. Relief, parent rock or bed rock, climate, vegetation and other forms of life and time are the factors that influence the formation of soils.

**Soil types and distribution**

On the basis of colour, thickness, texture, age, chemical and physical properties, the soils of India can be classified into different types viz, i) Alluvial ii) Regur or Black iii) Red and Yellow iv) Laterite v) Arid or Desert vi) Mountain or Forest soils.

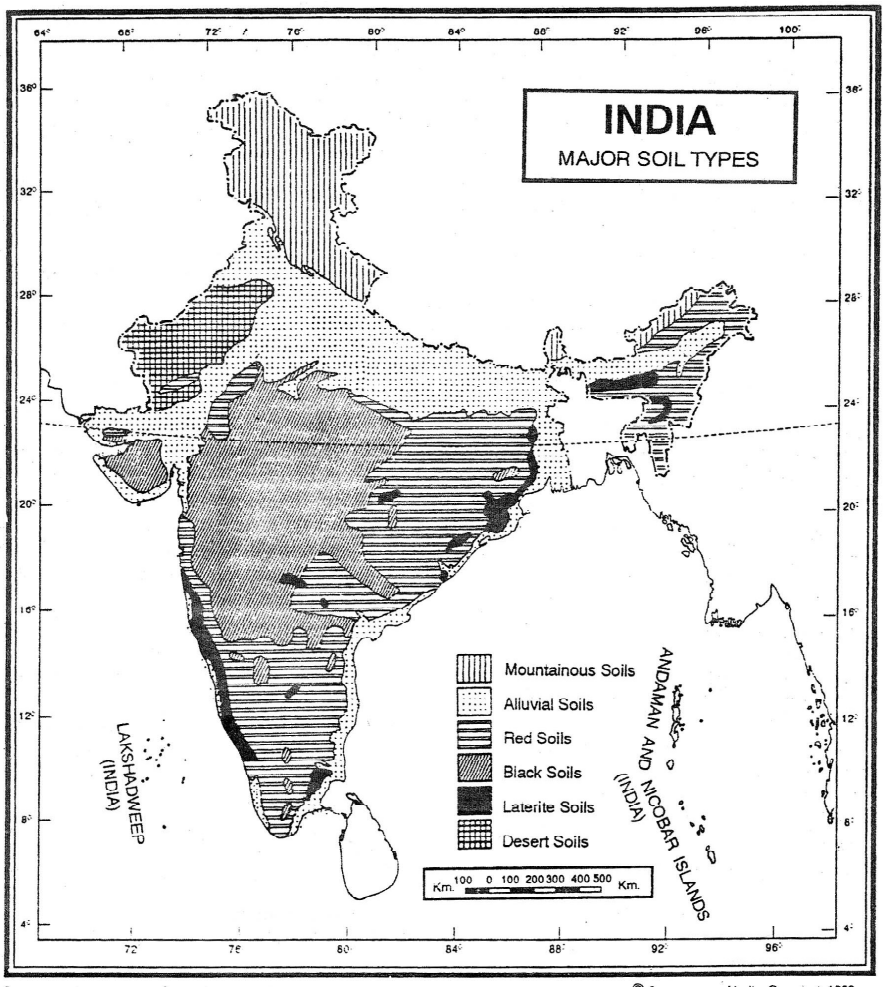



***Fig. 1.2 – India : Major Soil Types***

**(i) Alluvial soils** – Alluvial soils are found in the entire northern plains (Indus-Ganga-Brahmaputra plains). They also extend through a narrow belt in Rajasthan and Gujarat. In the south, alluvial soils are found in deltas of the Mahanadi, the Godavari, the Krishna and the Kaveri. They are very fertile and form the foundation of Indian agriculture.

Various proportions of sand, silt, clay, potash and lime constitute them, but they are deficient in phosphoric, nitrogenous and organic contents. On the basis of their age, alluvial soils are classified as old alluvium (Bhangar) and new alluvium (Khadar). Both of them consist of calcarious concretions known as 'Kankars' which are used for white washing of houses in the rural areas.

**(ii) Regur or Black soils** – These soils occur particularly in Maharashtra, Madhya Pradesh, Chhattisgarh, Andhra Pradesh and Karnataka, They are typical of Deccan Plateau and are black in colour. The parent rock (basaltic) materials and the climatic conditions of the region are responsible for the formation of the soils. They are generally clayey, deep and impermeable and are capable of sustaining moisture for sufficiently long time. They have rich content of calcium carbonate, magnesium, potash and lime but the phosphoric content is poor. Since they are best suited for the cultivation of cotton, these soils are also known as **Black cotton** soils.

**(iii) Red and Yellow soils** – These soils are found in the dry areas of the Peninsular India. They include Tamil Nadu, Karnataka, Andhra Pradesh, south western Maharashtra, Chhattisgarh, Odisha and Jharkhand. They are also found in the north eastern states. Red soils are reddish in colour due to diffusion of iron in crystalline rocks under poor rainfall condition. But, in higher rainfall areas, they occur in hydrated form and look yellow. They are deficient in nitrogenous, phosphoric and organic matter and hence are less fertile.

**(iv) Laterite soils** – They are developed in areas of high temperature and heavy rainfall. As a result of intense leaching, the content of humus and micro organisms is low. They are, therefore, less fertile and support scrub vegetation. These soils occur in Karnataka, Kerala, Tamil Nadu, Madhya Pradesh and in the hilly areas of Odisha and Assam.

**(v) Arid or Desert soils** – These soils occur in western Rajasthan and southern Punjab. They contain fertile wind-borne loess in some parts. Such soils can be made productive to yield good harvest if proper irrigation is provided. Generally, these soils are sandy in texture and saline in nature. They lack in humus and moisture content due to high temperature and faster rate of evaporation.

**(vi) Mountain or Forest soils** – They are found in the hilly and mountainous areas where rainforests are available. The texture and fertility of the soils vary with altitude. In areas of high altitude they are thin and acidic with low humus content, but in the lower parts they contain more humus and are more fertile.

### Soil Erosion and Soil Conservation

Soil erosion is the removal of the earth's soil cover by the forces of nature and human activities. It is caused by natural agents like running water, glacier, wind etc. But, the pace of these natural forces to remove the soil is aggravated by the human activities such as

deforestation, over grazing, faulty methods of cultivation, construction and mining. Running water causes gully and sheet erosion in rainy areas whereas desertification is produced by the winds in arid areas. Thus, soil erosion has become a serious and challenging problem of India which calls for various measures of soil conservation.

For the conservation of soils in India, the government has taken up several steps such as checking of deforestation and over-grazing, encouraging of afforestation programmes, creation of shelter belts, strip cropping, terrace cultivation etc. Besides, a number of environmental regeneration programmes have also been taken up in the country.

**Landuse Pattern in India**

India has a total geographical area of32,87,263 sq. kms. However, as per land revenue record, only 93 per cent of the country's total area is available for use in different categories of landuse. This is because of the fact that most of the states in the north-eastern region except Assam do not maintain fully the land records. Moreover, some areas in Jammu and Kashmir have also not been surveyed. Considering the reporting area of the country to be 100 per cent, the following Table-1.1 shows the changing landuse pattern of the country from 1960 – 61 to 2002 – 03.

**Table –1.1**

LAND USE PATTERN IN INDIA IN PERCENTAGE

| | Landuse Category | 1960 – 61 | 2002 – 03 |
|---|---|---|---|
| 1. | Forests | 18.11 | 22.57 |
| 2. | Barren and wastelands | 12.01 | 6.29 |
| 3. | Area under non-agricultural lands | 4.95 | 7.92 |
| 4. | Permanent pastures and grazing lands | 4.71 | 3.45 |
| 5. | Area under misc. tree crops and groves | 1.50 | 1.10 |
| 6. | Culturable wastelands | 6.23 | 4.41 |
| 7. | Fallows other than current fallowlands | 3.50 | 3.82 |
| 8. | Current fallow lands | 3.73 | 7.03 |
| 9. | Net -sown area | 45.26 | 43.41 |

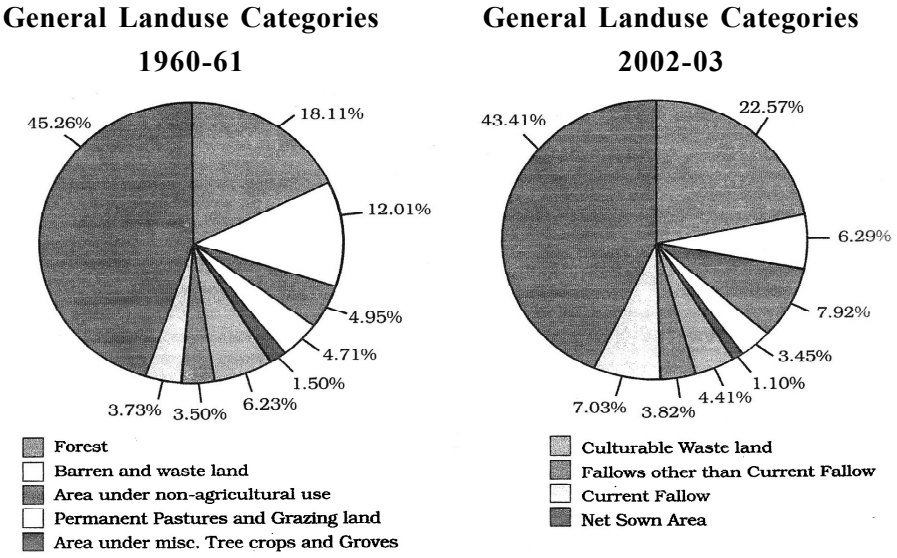



***Fig. : 1.3 India: Land-use pattern***

From the above Table–1.1 and Fig.1.3 , you must have learnt that the landuse pattern in the country is changing with time. There are three categories of landuse which have undergone increases while four have registered declines. Share of area under forest, area under non-agricultural uses and current fallow lands shows an increase. The reasons for such an increase are as follows –

**(i)** Forest area in the country is far lower than the desired 33 per cent of geographical area. But, there was an actual increase in the forest cover of the country. Because, it was considered essential for maintenance of the ecological balance.

**(ii)** Due to the changing structure of Indian economy, the area under non-agricultural land use is increasing. India's economy is increasingly depending on the contribution from industrial and service sectors which are related with infrastructural facilities.

**(iii)** The trend of current fallow fluctuates over years depending upon the variablility of rainfall and cropping cycle. Hence, the reason for such an increase cannot be explained in detail.

On the other hand, the following categories of landuse have registered a decline due to certain factors –

**(i)** The wastelands and culturable wastelands have witnessed a decline over time. This is due to the increasing pressure on land both from the agricultural and non-agricultural sectors.

**(ii)** The share of land under pasture and grazing land has also been decreased due to illegal encroachment of common pasture lands by expansion of cultivation.

**(iii)** The decline in net-sown area is a recent phenomenon that started in the late nineties. The increased pressure on agricultural lands from non-agricultural activities such as infrastructural constructions results in the decline of the net-sown area.

**Land degradation and conservation measures**

Land is the natural resource that provides us 95 per cent of our basic needs for food, shelter and clothing. Continuous use of land over a long period of time without taking appropriate measures of conservation has resulted in land degradation. It reduces the quality and usability of land. Land degradation is brought about by the aggravated pace of natural forces which has been accelerated by human activities such as deforestation, over-grazing, mining, quarrying etc.

The total degraded land in India, at present, is estimated to be 130 million hectares. Of this, 56 per cent and 28 per cent are water eroded and forest degraded areas respectively. The remaining 16 percent is shared by the saline (6 p.c.) and wind eroded (10 p.c.) areas. In our country, severe land degradation has been caused by overgrazing in the states of Gujarat, Rajasthan, Madhya Pradesh and Maharashtra. In Punjab and Haryana, it is caused by over-irrigation. Deforestation due to mining is responsible for land degradation in Jharkhand, Chhattisgarh, Madhya Pradesh and Odisha. Besides, discharge and disposal of industrial effluents and urban wastes have also caused land degradation in different parts of the country.

Land degradation is a part of environmental degradation for which certain measures are to be taken up in our immediate environments. The following measures will help in solving the problem.

**(i)** Taking up of afforestation programmes at different levels.

**(ii)** Setting up of shelter belts by planting trees across the wind direction particularly in drier parts.

**(iii)** Proper management of wastelands.

**(iv)** Control of mining activities, quarrying and over-grazing.

**(v)** Proper discharge of industrial effluents and scientific disposal of urban and other human wastes.

# EXERCISES

**1. Choose the correct answer from the given alternatives.**

**(i)** Which of the followig is a renewable resource?

(a) Coal (c) Petroleum

(b) Forest (d) Natural gas.

**(ii)** Under which of the following resource types, can wildlife be put ?

(a) Abiotic (c) Non-recyclable

(b) Replenishable (d) Recyclable.

**(iii)** The largest share of land in India is occupied by

(a) mountains (c) plains

(b) plateaus (d) deserts

**(iv)** Which of the following soil types is connected with '**Kankar**' ?

(a) Alluvial (c) Red

(b) Regur (d) Laterite

**(v)** Which of the following causes land degradation in Punjab and Haryana ?

(a) Intensive cultivation (c) Over-grazing

(b) Over-irrigation (d) Deforestation.

**2. Answer the following questions briefly.**

**(i)** Which factor is mainly responsible for the transformation of resources ?

**(ii)** Why has resource planning become essential in a country ?

**(iii)** Why are regur soils capable of sustaining moisture sufficiently for a long time ?

**(iv)** What is Regolith ?

**(v)** Why is share of net-sown area decreasing in recent years in India ?

**(vi)** What factor is responsible for degradation of land in Jharkhand ?

**3. Distinguish between**

**(i)** Natural and Human resources.

**(ii)** Biotic and Abiotic resources.

**(iii)** Geographical area and Reporting area of landuse.

**4. Answer the following questions in about 40 words.**

**(i)** What is the difference between developed and potential resources ?

**(ii)** What are the factors that determine for the utilisation of resources in the economic development of a country ?

**(iii)** How should we conserve resources ?

**(iv)** What are the main causes of soil erosion ?

**(v)** Suggest three measures that will help to protect land from degradation.

**5. Answer the following questions in about 150 words.**

**(i)** Explain the fertility of the different soil types of India.

**(ii)** Write an account of the different steps to be taken up for a proper resource planning.

**(iii)** Explain the changing patterns of landuse in India that takes place in recent years.

**6. Give the appropriate term of the following statement.**

**(a)** Natural endowment that includes things like land, water, rocks, and minerals.

**(b)** Plantation of trees on a large scale to prevent soil erosion.

**(c)** Soils that constitute the great plains of India.

**(d)** The typical soil of the Deccan plateau.

**(e)** Soils that have been intensely leached.

**Project work/Activity**

**1. On an outline map of India, show therein the following:**

**(a)** Areas where land degradation is caused by over-grazing.

**(b)** Areas of alkaline and saline deposits due to over-irrigation.

**(c)** Areas of alluvial soils in southern India.

**2. Draw a pie-diagram using the data of land degradation of India.**

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UNIT

# II

# FOREST AND WILDLIFE RESOURCES

Forest and wildlife are the important renewable natural resources of India which form an essential component in this immense biodiversity where we live in.

Forests refer to a community of plant species which grow naturally under the influence of climatic conditions and the nature of soil. This term is generally used to denote a large tract covered by trees and shrubs. Forests are beneficial not only to our living but also for the maintenance of ecological balance. We obtain a wide variety of commodities from them such as timber, firewood, woodpulp, medicinal plants and other produces of industrial and commercial use. Forests also play an important role in checking soil erosion and air pollution. Besides, they provide natural habitat to a variety of wildlife too. Thus, forests re-create the quality of air we breathe, the water we drink and the soil that produces our food without which we cannot survive.

India has a wide variety of plant and animal species that make the country one of the richest countries in flora and fauna in the world. It is estimated that about 1.6 million species of flora and fauna are found in India which is 8 per cent of the total species of the world. There are more than 81,000 species of fauna and 47,000 species of flora in this country. Out of the total estimated plant species, about 15,000 flowering plants are of indigenous variety.

**Do you know ?**

**Biodiversity or Biological Diversity is immensely rich in wildlife and cultivated species, diverse in form and function but closely integrated in a system through multiple network of interdependencies.**

## FOREST COVERAGE IN INDIA

The forest coverage in India has been estimated to be around 637,293 sq km. which occupies 19.39 per cent of the total geographical area. Out of this, 11.48 per cent and 7.76 per cent are of dense and open forests respectively and the remaining 0.15 per cent is shared by mangroves. According to the National Forest Policy, 1988, the minimum desired area under forest cover was 33.3 percent of the total geographical area. And, the country could have a forest cover of about 23.3 percent of its total area in 1999. Since 1997, there has been an apparent increase in the dense forest cover of the country which was estimated to be 10,098sq.km. That was mainly due to the plantation by different agencies. However,

the country's forest resources are being depleted due to the expansion of several activities, mostly by agricultural expansion.

## DISTRIBUTION OF FOREST

India is a vast country which has a very wide range of climate and soil. As far as its spatial distribution of forest is concerned, the whole country may be divided into the following forest zones. However, these zones are not watertight compartments and they are overlapping.

**(i) Regions with 60 per cent and above forest area** – It includes Manipur, Arunachal Pradesh, Himachal Pradesh, Tripura, Uttarakhand, Mizoram and the Andaman and Nicobar islands.

**(ii) Regions where forest cover ranges between 40 to 60 per cent** – This region comprises the state of Nagaland and Meghalaya.

**(iii) Regions which have forest cover between 20 to 40 per cent** – These regions include Assam, Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha, Andhra Pradesh, Karnataka, Kerala and Maharashtra.

**(iv) Regions with less than 20 per cent forest area** – These regions cover the states of Jammu and Kashmir, Punjab, Haryana, Rajasthan, Gujarat, Uttar Pradesh, Bihar, West Bengal, Sikkim and Tamil Nadu.

## FOREST TYPES

You must have learnt that India is a land of great variety of natural vegetation. On the basis of certain common features such as predominant vegetation type and climatic regions, Indian forests can be classified into the following groups.

**(i) Tropical evergreen and semi-evergreen forests**– The tropical evergreen forests are found in western slopes of the Western Ghats, hills of the north eastern region, coastal Tamil Nadu, Lakshadweep and Andaman and Nicobar islands where the climate is characterised by high temperature and heavy rainfall i.e above 300 cm annually. They appear green throughout the year as there is no definite time for trees to shed their leaves. Ebony, rosewood, mohogany etc. are the important species of trees. Semi evergreen forests are found in the less rainy parts of these regions. These forests have a mixture of evergreen and moist deciduous trees. Main species include white cedar, hollock, oak, chirpine etc. In the regions of these forests, plantation of rubber, tea and coffee have also been introduced.

**(ii) Tropical deciduous Forests** – These are the most widespread forests in India which occur in areas of 70 to 200 cm of annual rainfall. The trees of these forests range from dry deciduous to moist deciduous type. Teak, sal, sandalwood etc. are the most valuable trees of these forests. These forests are found in the foot hills of the Himalaya, eastern slopes of the Western Ghats, Odisha, Jharkhand, Bihar, Chhattisgarh, Uttar Pradesh, Maharashtra, Karnataka, Andhra Pradesh and Tamil Nadu.

**(iii) Thorn forests and scrubs** – These are the stunted forests found in the less rainfall areas of below 50 cm in a year. They include Gujarat, Rajasthan, Madhya Pradesh, areas of Chhattisgarh, Uttar Pradesh, Punjab and Haryana. Babul and kikar are the most valuable trees of these forests. Besides , palms, khair, euphorbias and a variety of acacias are also found in these forests.

**(iv) Montane forests** – These forests are found in the Himalayas in the north and high hills of the south. They show a vertical zonality with height varying from tropical to tundra. Oak and chestnut are predominant in the foothills. The coniferous evergreen trees such as pine, spruce, fir, silver, deodar, walnut etc. are found in the higher reaches. At high altitudes, these forests are gradually replaced by pastures.

**(v) Mangrove forests** – These forests are found in Sundarbans of West Bengal, the deltas of Mahanadi, Godavari, Krishna and in the Andaman and Nicobar islands. They consist of a number of salt-tolerant species of plants. Sundari trees grow abundantly in Sundarban and are used for making boats and boxes.

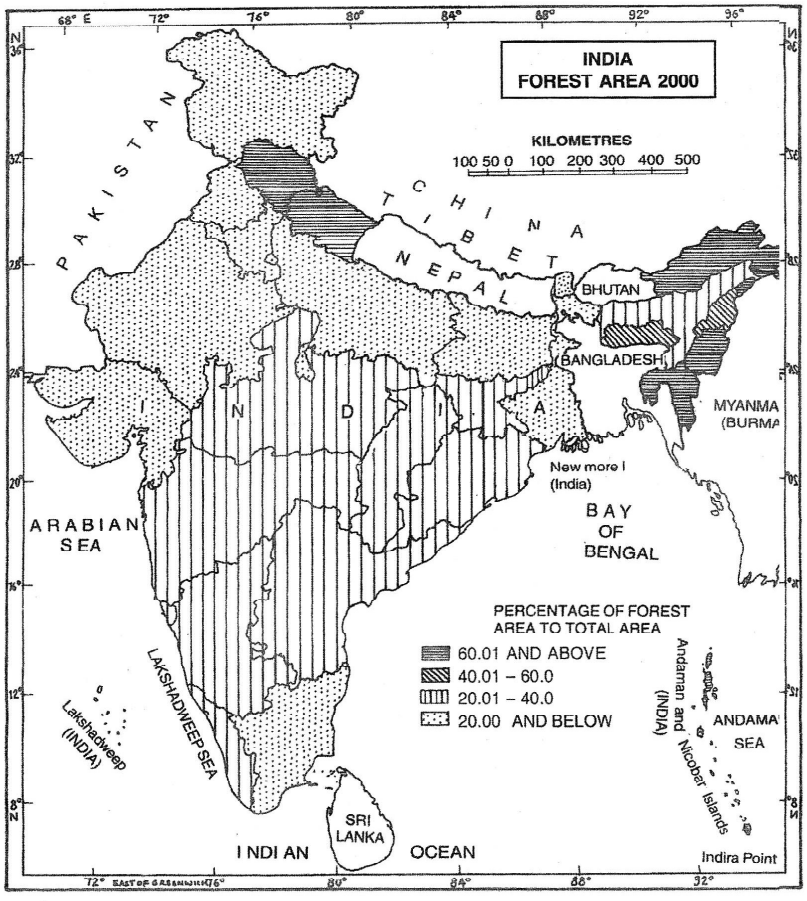


***Fig. 2.1 – India : Forest area***

From administrative point of view, Indian forests are classified as **(i) Reserved Forests (ii) Protected Forests and (iii) Unclassed Forests.**

**(i) Reserved Forests –** These are the permanent forest estates reserved for producing timber and other forest produces like gum, resin, turpentine etc. Grazing of animals and farming are not allowed in these forests. Hence, they are the most valuable as far as conservation of forest and wildlife resources are concerned. They account for more than half, i.e. 53 per cent of the country's total forest lands.

**(ii) Protected Forests –** They are also permanent forest estates but in these forests, grazing of cattle and even cultivation is allowed in specific regions. Almost 29 per cent of the total forest area of the country is of this type.

**(iii) Unclassed Forests –** These are other forests and wastelands that belong to government, private individuals and communities. They are the worst type of forests. They account for 18 per cent of the total forest area.

## DEPLETION OF FORESTS

As numerous materials such as wood, bark, leaves, rubber, medicines, dyes, food, fuel, fodder, manure etc. are obtained directly or indirectly from forests, we transform them into many useful things. So, we are responsible for the depletion of forests. In our country 1.3 million hectares of forests are being destroyed every year. The greatest damage to them occurred during the colonial period due to expansion of agriculture, transport and communication, forestry, and mining. During 1951-1980, over 26,200 sq km of forest area in the country was converted into agricultural lands. Still today, forest lands are being degraded by shifting (Jhum) cultivation especially in the north-eastern and central India. Again, the infrastructural developments such as large river valley projects are responsible for clearing of forests in India. For example, the Narmada Sagar Project in Madhya Pradesh would inundate 40,000 hectares of forests. Dolomite mining in West Bengal affects the Buxa Tiger Reserve. Besides, the greatest degrading factors behind the depletion of forests are over-grazing, collection of fuel wood, over exploitation due to expanding industrial-urban economy, and forest fires .

The destruction of forest cover has been leading to a number of adverse consequences particularly to the people of forest dependent communities who directly depend on forests and wildlife for food, drink, medicine, culture and spirituality. They may get suffered from the severe impacts of drought and deforestation induced floods. Poverty and health problems are the direct outcome of such environmental destructions.

**Do you know ?**

**The Himalayan Yew tree found in Himachal Pradesh and Arunachal Pradesh is in trouble. It is a species from which a chemical compound called 'Taxol' is extracted. It has been used successfully to treat some cancers. This drug is the biggest selling anti-cancer drug in the world. The Yew is under great threat due to over-exploitation.**

## CONSERVATION OF FORESTS

The National Forest Policy, 1988 seeks to achieve environmental stability through forest conservation. Through its objectives, sustainable forest management programmes have been taken up by the government in order to conserve and expand forest reserves on the one hand and to meet the needs of local people on the other. For conservation of forests, efforts should be made to increase the actual forest cover area of the country through social, agro-community forestries as well as other afforestation programmes on degraded lands. This will help in checking soil erosion, flood, drought and other natural calamities. Besides, the active participation of the community is very essential in bringing a good result for the conservation efforts. For this, a massive people movement should be created involving women in planting trees and checking deforestation. Moreover, the pressure on the existing forests could be reduced if alternative fuels at affordable cost are made available to the people who have been living on forest firewoods for a long time. The **Chipko** movement in the Himalayas has not only resisted deforestation in several areas but also shown that the community afforestation with indigenous species can be enormously successful.

## WILDLIFE

India is rich in wildlife resources. About 65,000 species of animals and birds are found in this country. These include large mammals like elephants, Indian bison, rhinoceros, swamp deer, Neelgai, four horned antelope, black-buck, lion, tiger, leopard, snow leopard, marble cats; reptiles like crocodiles, gharials, python and various types of snakes and beautiful birds such as peacock, geese, ducks, mynahs, pigeons, cranes, hornbills etc. The snow leopard and the Pandas are found in the Himalayan forests. Elephants are found in the jungles of Assam, Karnataka and hot-wet equatorial forests of Kerala. In the marshy areas of Assam, one-horned rhinoceros are found. Camels and wild asses are found in the arid regions of Rajasthan and the Rann of Kachchh. Other creatures of wildlife are distributed over various parts of the country. There has been a rapid decline in wildlife population in India mainly due to habitat destruction, hunting, poaching, over-exploitation, environmental pollution etc. As a result, a number of species are now endangered. These include 79 mammals, 44 birds, 15 reptiles, 3 amphibians and a large number of moths, butterflies and beetles. It is, therefore, imperative to adapt to sound forest and wildlife conservation strategies.

## CONSERVATION OF WILDLIFE

Do you realize the need for conservation of forest and wildlife ? Conservation preserves the ecological diversity and our life support system – water, air and soil. You have learnt that forests provide numerous advantages directly and indirectly to our economy and society. Hence, the conservation of forest is of vital importance to the survival and prosperity of mankind. Wildlife is a national property which is to be inherited by our younger generations. It is, therefore, our duty to preserve each and every species of animal and bird for them. In fact, conservation of wildlife not only helps in protecting the threatened and endangered species of animal and birds, but also in maintaining the eco -tourism and natural heritage of the country.

For conservation of wildlife in India, a comprehensive wildlife Act was enacted by the government in 1972, which provides the main legal framework for the purpose. It published an all India list of protected species of wildlife. Its thrust objective was towards the protection of the remaining population of certain endangered species by banning hunting, giving legal protection to their habitats and restricting trade in wildlife. Subsequently, national parks, sanctuaries and zoological gardens have been established in different parts of the country. At present there are 18 Biosphere Reserves 102 National Parks, 515 Wildlife Sanctuaries and 43 Zoological Gardens in India. The Keibul Lamjao National Park in Manipur is one of them which has been established by the government in order to protect the **brow antlered deer** (Sangai) from extinction. This national park provides a natural habitat for this rare species. Besides, the government of India had announced several projects for protecting specific threatened animals, like Indian tigers, the one-horned rhinoceros, the Kashmir stag, the crocodiles, the Asiatic lion and others. Among them **Project Tigers**, 1973 and **Project Elephant**, 1992 are worth mentioning.

**Do you know ?**

**'Project Tiger' is one of the well publicised wildlife campaigns in the world launched in 1973 in order to save Indian tigers from extinction. It is to ensure the maintenance of viable population of tigers in India. For this, there are 27 tiger reserves at present in India covering an area of 37,761 sq. kms.**

**'Project Elephant' was launched in 1992 ensuring long-term survival of identified viable population of elephants in their natural habitats.**

Apart from this, other projects such as **Crocodile Breeding Project**, Project Hangul (Kashmir Stag), and conservation of **Himalayan Musk Deer** have also been launched. The government observes wildlife week throughout the country once in a year so as to increase the awareness of the people about the importance of wildlife in our sustainable living.

## EXERCISES

**1. Choose the correct answer from the given alternatives.**

**(i)** Which one of the following belongs to the region with 40-60 per cent forest area?

(a) Manipur (c) Meghalaya

(b) Mizoram (d) Uttarakhand

**(ii)** The most valuable forest type from the conservation point of view is

(a) Reserved Forest. (c) Unclassed Forest.

(b) Protected Forest. (d) Mangrove Forest.

**(iii)** Project Hangul is connected with the conservation of

(a) Indian tigers. (c) Kashmir stag.

(b) one-horned rhinoceros. (d) elephant.

**2. Answer the following questions briefly.**

**(i)** What is the percentage of total area under forest cover in India as desired by the National Forest Policy 1988 ?

**(ii)** Give one reason why the forest and wildlife resources are being depleted.

**(iii)** 'In India forests are being degraded due to the development of river valley projects'. Cite one example.

**(iv)** "Collection of firewood by the local people increases adverse pressure on the existing forests of India". Suggest one measure to reduce such a pressure.

**(v)** Why did the government set up the Keibul Lamjao National Park ?

**3. Answer the following questions in about 40 words each.**

**(i)** Explain the importance of forests considering the benefits that we obtain directly and indirectly from them.

**(ii)** Explain how human activities lead to the depletion of the flora and fauna of India.

**(iii)** What is the difference between Reserved and Protected forests ?

**(iv)** Suggest two measures which would be helpful in increasing the forest cover area of the country.

**(v)** Write an account of two projects launched by the government of India in order to protect wildlife from extinction.

**Project work/Activity**

**1. List some social and religious practices that help in conserving forest and wildlife in India.**

**2. Collect some photographs or posters showing how rural people of India meet their fuel needs.**

**3. Draw an outline map of India and locate the biosphere reserves/National Parks/ Sanctuaries in the north-eastern states of India.**

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UNIT

# III

# WATER RESOURCES

Water is invaluable for living beings. It is one of the three basics that have made life possible on the earth. About 71 percent of the earth's surface is covered with water. However, it is the fresh water which is more useful to mankind for his well being. About 3 per cent of the total water on the earth is of fresh which is effectively available for human use. We use water for agricultural, industrial and domestic purposes. Besides, it is also used for production of hydro- electricity, navigation, fishery etc.

In India, the demand for fresh water is increasing with the growth of population and advancement in agriculture and industry. But, the availability of fresh water in the country varies over space and time. All parts of the country do not possess the same quantity of water at the same time. This is because the spatial distribution of rainfall is very uneven. Rainfall during the south-west monsoon period is also very uncertain and it is confined to 4 months only. India receives nearly 4 per cent of the global precipitation and ranks 133 in the world in terms of water availability per person per annum.

The total renewable water resources of India is estimated at 1897 cubic km per annum. It is predicted that large parts of the country will be in absolute water scarcity by 2025. The limited supply of fresh water in the country may be depleted or made unusable by excessive utilisation, pollution or careless management.

## SOURCES OF WATER AND DISTRIBUTION

Rainfall and snowfall are considered to be the main sources of water on this planet. Some part of the water obtained from rainfall gets evaporated and others flow off into the sea. While flowing, some water percolates into the soil and forms ground water. Thus, water is obtained from four major sources **(i) Atmospheric water, (ii) Surface water, (iii) Ground water and (iv) Ocean water.**

**(i) Atmospheric water** – The atmospheric water reaches the earth's surface through different forms of precipitation. In India rainfall is the most widespread form while snowfall is confined to limited areas particularly in the Himalayas. Rainfall is mainly concentrated in the monsoon season. The average rainfall in the country is around 117 cm in a year. Over the desert region the annual rainfall could be as low as 20 cm or even less. The eastern parts of India get an average of 200 cm every year. In most parts of the country the annual rainfall ranges between 50 –200 cm.

**(ii) Surface water** – Surface water appears as rivers, lakes, ponds and tanks. In our country there are 10,360 rivers which altogether account for the mean annual flow of 1,869 cubic km. However, only about 690 cubic km of the available surface water can be used due to topographical, hydrological and other constraints.

In northern India, the three major river systems viz. the Indus, the Ganga and the Brahmaputra along with their tributaries have the largest catchment areas. Most of them are snowfed and perennial. However, these catchment areas altogether account for only one-third of the total area in the country and have 60 per cent of the country's total surface water resources. The remaining 40 per cent is shared equally by the westward and eastward flowing rivers of the peninsular India. They include the Narmada and the Tapti among the west flowing rivers and the Mahanadi, the Godavari, the Krishna and the Kaveri among the east flowing rivers. These rivers are non-perennial because they rise in the hills of the peninsular plateau and are rainfed. Besides, there are large and small fresh water lakes in different parts of the country. Many of them are man-made and are generally associated with river valley projects. Among the natural fresh water lakes, the Wular in Kashmir and the Loktak in Manipur are worth mentioning.

**(iii) Ground water** – In India, the total replenishable ground water resources is estimated at about 432 cubic km. Out of this, about 46 per cent is shared by the Ganga and the Brahmaputra basins where the level of ground water is relatively high. But, most part of the peninsular plateau are deprived of the ground water since the region is made of old hard impervious rocks and the water table is very low. However, Maharashtra, Madhya Pradesh and Tamil Nadu have large potential of ground water. Hence, the state-wise percentage of developed ground water resources to total available potential ranges from 1.07 per cent in Jammu and Kashmir to 98.34 per cent in Punjab.

**(iv) Ocean water** – Due to the projection of the Deccan Peninsula into the Indian Ocean, a large part of India has a free access to seas and oceans. She has a vast coastline which is very indented in some states. As a result, a number of lagoons, backwaters and lakes are formed. Such water bodies is generally brackish or saline and have limited use.

## UTILISATION OF WATER RESOURCES

We use water for irrigation, production of hydro electricity, industrial, transportational, recreational and domestic purposes.

Irrigation consumes over 80 per cent of all water resources. As agriculture is being modernized, the demand for irrigational water has also been rising. Again, a greater demand of water is also created by the rapid industrialization of the country. In fact, the irrigated areas and the industrialized regions consume much more water than the national average. The availability of potable water would also get reduced in areas where industrial effluents and urban wastes are being discharged in the nearby freshwater sources like rivers. For

example, water of the Ganga at places is being polluted and is not fit for human and animal consumption.

The main sources of irrigation in the country are **(i) Canals, (ii) Wells and tube-wells and (iii) Tanks.**

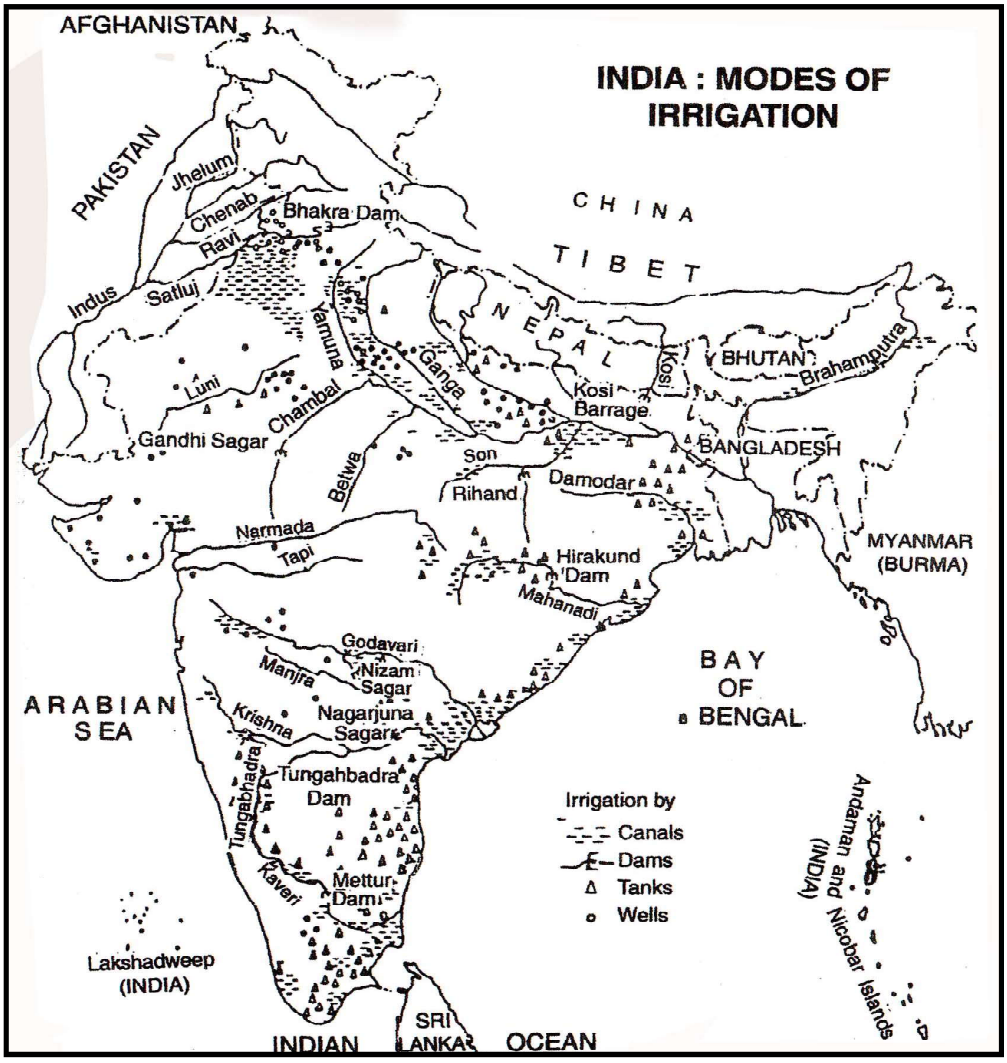



*Fig. 3.1 India : Modes of Irrigation*

**(i) Canals** – Canals are the most popular mode of irrigation in the plains, coastal and deltaic regions of India. They are found in Punjab, Haryana, Uttar Pradesh, Rajasthan and Bihar. They cover over 36.5 per cent of the total inrrigated area. The upper and the lower Ganga canals, the Sharda canal, the Yamuna canal, the Agra and the Betwa canals are worth mentioning in Uttar Pradesh. In Harayana, the Western Yamuna

canal, the Jui and the Gurgaon canals are important. The Upper Bari canal, the Sirhind, the Bhakra and the Beas canals are the main canals in Punjab. The Indira Gandhi canal is the most important in Rajasthan. Bihar also has the Son, the Kosi and the Gandak canals. West Bengal has Mayurakshi and the Midnapur canals.

In Southern India, dams are built on the Godavari, the Mahanadi, the Krishna, the Tungbhadra and the Kaveri and canals have been constructed to divert water from them.

**(ii) Wells and tube-wells** – Well irrigation is popular in areas where the level of sweet ground water is high. These areas include the plains of Punjab, Haryana, Rajasthan, Gujarat, Uttar Pradesh and the coastal plains. In India, 58.8 per cent of the total irrigated area is occupied by the well irrigation.

**(iii) Tank irrigation** – Tank irrigation covers only 4.7 per cent of the total irrigated area of the country. It is practised mainly in peninsular India especially in Andhra Pradesh, Tamil Nadu, Karnataka and Kerala. It is also important in West Bengal and Odisha.

## MULTI-PURPOSE RIVER PROJECTS

In India, the need for assured water supply for the common people was realized even in ancient times. This could be learned from the archaeological and historical records. Those records show that we have been constructing sophisticated hydraulic structures like dam built of stone rubble, lakes or reservoirs, embankments and canals for irrigation. We have continued this tradition even today by constructing dams in most of our river basins.

Traditionally dams were built to impound rivers and rain water that could be used in times of need particularly for irrigating the fields where crops are grown. Nowadays, dams are built not just for irrigation but for the generation of hydro-electricity, water supply, flood control, inland navigation, fish breeding and for conservation of soils. Thus, the dams of river valley projects serve many purposes at the same time and hence are known as '**Multi-purpose projects**'. In our country, a number of multi-purpose projects have been launched with integrated water resource management considering that it would lead the nation to development and progress. Hence, Jawaharlal Nehru proclaimed the dams as the '**Temples of modern India**'.

**Do you know ?**

**A dam is a barrier across flowing water that obstructs, directs or retards the flow often creating a reservoir or a lake. Dam refers to the reservoir rather than the structure. On the basis of the structure and the raw materials used, dams are classified as timber dams, embankment dams or masonary dams with several sub-types. They are also categorised as low dams, medium dams and high dams according to height.**

The following are some of the important multi-purpose projects of India.

**The Bhakra Nangal Project** – It is constructed on the Sutlej as the joint venture of Punjab, Haryana, Rajasthan and Delhi. The Bhakra dam is the highest in the world. A large reservoir is formed by the dam and it is known as the **Govind Sagar**. It irrigates about 1.5 million hectares of land and produces 1204 MW of power.


*Fig. 3.2 India : Major Rivers and Dams*

**The Damodar Valley Project** – This project has four dams built on the river Damodar and its tributaries. It irrigates about 5.15 lakh hectares of land and has a total installed capacity of 118 MW. It also helps in controlling floods in West Bengal. Besides, the main left bank canal is navigable for a distance of 136 kms.

**The Hirakud Project** – The Hirakud dam is built on the river Mahanadi in Odisha and is the longest in the world. This project produces 350 MW of power and irrigates 1 milion hectares of land.

**The Chambal Project** – It is jointly undertaken by Madhya Pradesh and Rajasthan. It irrigates 5.6 lakh hectares of land and produces 386 MW of power. This project has three dams viz. the Gandhi Sagar dam in Madhya Pradesh and the Rana Pratap Sagar and the Jawahar Sagar dams in Rajasthan.

**The Tungabhadra Project** – This project is a joint venture of Andhra Pradesh and Karnataka. A dam is built at Mallapuram on the river Tungabhadra, a tributary of the Krishna. It irrigates 3.9 lakh hectares of land in the two states.

**The Beas Project** – It links the Beas and the Sutlej and has a dam at Pong. It irrigates about 1.7 million hectares of land in the states of Punjab, Haryana and Rajasthan.

**The Rajasthan Canal Project** – It is also known as the Indira Gandhi Canal Project. It is meant for irrigating the thirsty lands of Ganganagar, Bikaner and Jaisalmer districts of Rajasthan by using the water of the Sutlej, the Ravi and the Beas. It will irrigate about 1.25 million hectares of land.

**The Kosi Project** – A barrage is built at Hanumannagar on the Kosi in Nepal. This project irrigates 8.7 lakh hectares of land in Bihar and Nepal. It also protects Nepal and Bihar from floods.

**The Nagarjuna Sagar Project** – It is one of the largest river valley projects in the world because it includes the construction of 29 major, 450 medium and 3,000 minor dams. Though the project has large economic prospects, it is surrounded by controversies.

**The Sardar Sarovar Project** – A high dam will be constructed in the lower Narmada valley in Gujarat. It irrigates 17.92 lakh hectares of land and will produces 1450 MW of power.

Big dams have raised a number of controversies in the country in recent years. Damming and regulating of rivers affect the natural flow of the rivers resulting in sedimentation and in rockier stream beds. It also makes the aquatic fauna difficult to migrate for spawning. Besides, a large number of people have been displaced as the vegetational belts and agricultural fields are submerged by the impounded water of the dams. Authorities have also failed to rehabilitate the communities that have been displaced. Thus, multi-purpose projects and large dams have been the cause of new social movements like the '**Narmada Bachao Andolan**' and the '**Tehri Dam Andolan**' etc. The same was the case in the **Sardar Sarovar and Rihand Dams** too.

## WATER SCARCITY

You must have learnt that the availability of water resources in the country varies over space and time, mainly due to the variations in seasonal and annual precipitation. But, in most cases water scarcity is caused by over-exploitation, excessive use and unequal access to water among different social groups.

There may be the problems of water scarcity even in the areas of ample water resources. In most of our cities, the problem of water scarcity may be an outcome of large and growing population, and consequent greater demands for water and unequal access to it.

As changes take place in agriculture, industry and urban life styles, the problem of water scarcity has further been aggravated. For example, more water is needed for irrigation where High Yielding Variety seeds have been used. The ever increasing number of industries has put more pressure on fresh water resources as some of them are heavy users of water. Moreover, the power required to run them comes from hydro electricity.

Again, the consumption of fresh water has been made increased by urbanisation. For example, a bath by shower or in a tub would need many times more water than a bath using bucket and mug. Besides, the tradition of preserving fresh water in ponds and small tanks has also been neglected in urban centres.

From the above discussion, you must have realized that the need of the hour is to conserve and manage water resources to safeguard from health hazards, to ensure food security, to continue productive activities and to prevent degradation of the natural eco-system.

## CONSERVATION AND MANAGEMENT OF WATER RESOURCES

Since there is shortage of fresh water, conservation and management of this precious resource has become essential for sustainable development. India makes effective policies and laws for utilisation and sharing of surface water resources. Effective measures for the conservation of water should be adopted with the use of water saving technologies and methods. Attempts should also be made to prevent water pollution. There is need to encourage watershed management, rainwater harvesting, water recycling and reuse.

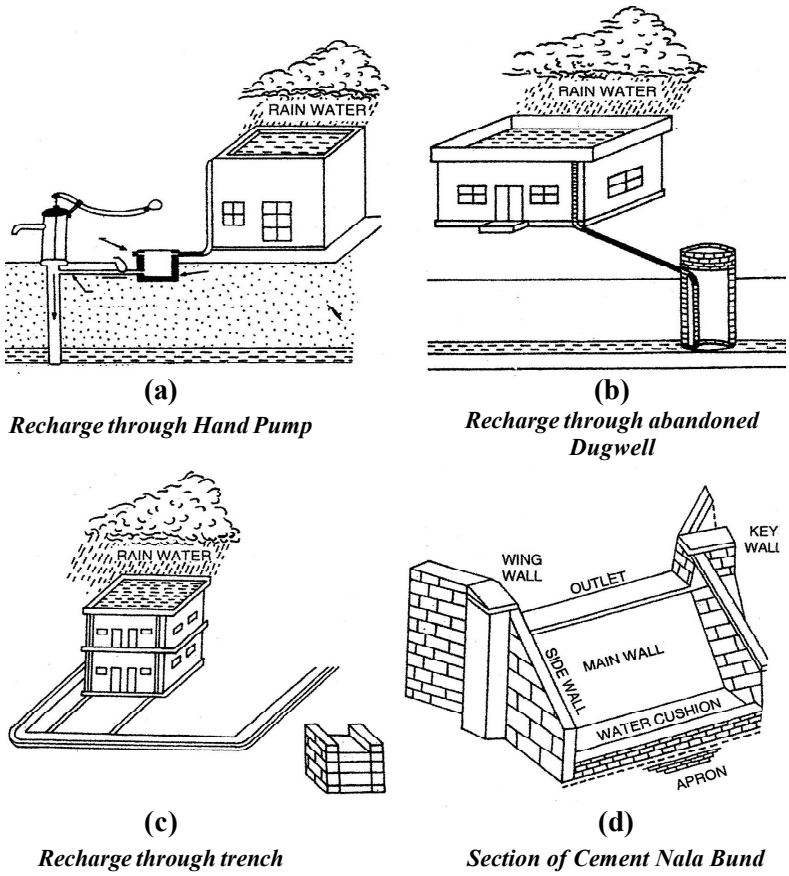
**Do you know ?**

**Watershed or water divide is an area of land that separates two river basins. Watershed management includes conservation, regeneration and judicious use of land, water, plants and animals and human within a watershed.**

## RAINWATER HARVESTING

Rainwater harvesting is a system to capture and store rainwater for various uses. It is used to recharge ground water aquifers to meet the household needs. It is a low cost and eco-friendly technique for preserving every drop of water by guiding the rainwater to wells,

bores and pits. Rainwater harvesting increases water availability and checks the declining of ground water table. It improves the quality of groundwater through dilution of contaminants like fluoride and nitrates. If rainwater harvesting is done to recharge aquifers, floods and soil erosion can also be checked. It helps in arresting salt water intrusion in coastal areas.




**(a)** ***Recharge through Hand Pump***

**(b)** ***Recharge through abandoned Dugwell***

**(c)** ***Recharge through trench***

**(d)** ***Section of Cement Nala Bund***

*Fig. 3.3 Different methods of rainwater harvesting*

## A CASE STUDY

Rainwater harvesting has been practised through various methods by different communities in the country for a long time. In hills and mountainous regions, people built diversion channels like the '**Kuls**' or '**Guls**' of the western Himalayas. In the flood plains of West Bengal, people developed inundation canals to irrigate their fields. In semi arid and arid regions, '**Rooftop rainwater harvesting**' was commonly practised to store drinking water and agricultural fields were converted into rainfed storage structures that allowed the water to stand and moisten the soils like the 'Khadins' and 'Johads' of Rajasthan. In Rajasthan almost all the houses kept underground tanks or '**tankas**' for storing drinking

water. In this system of rainwater harvesting, rain falling on the rooftops is collected through a pipe and stored in the tankas. But, rooftop rainwater harvesting is on the decline in this state as plenty of water is available due to the perennial Rajasthan canal.

Meghalaya has two rainiest stations in the world viz. Cherrapunjee and Mawsynram. They are situated at a distance of 55 km from Shillong. But, the state capital faces acute shortage of water. Hence, rooftop rainwater harvesting is the most common practice in Shillong. Tamil Nadu is the first and the only state in India which has made rooftop rainwater harvesting structure compulsory for all the houses across the state.

## EXERCISES

**1. Answer the following questions by choosing the correct option from the given alternatives.**

**(i)** The percentage of fresh water available on the earth is approximately

(a) 2. (c) 4.

(b) 3. (d) 5.

**(ii)** Which of the following is India's share in the global precipitation ?

(a) 3 per cent. (c) 5 per cent.

(b) 4 per cent. (d) 6 per cent.

**(iii)** The highest utilisation of ground water is found in

(a) Haryana. (c) Uttar Pradesh.

(b) Punjab. (d) Bihar.

**(iv)** The practice of rainwater harvesting in Rajasthan is on the decline because

(a) rainwater is dirty.

(b) rainwater collection is costly.

(c) ample water is obtained from the Rajasthan canal.

(d) amount of rainfall is very low.

**2. Answer the following questions briefly.**

**(i)** Give one reason why the availability of fresh water in India varies over space and time.

**(ii)** What is a dam ?

**(iii)** Why did Jawaharlal Nehru proclaim dams as 'Temples of modern India' ?

**(iv)** Which region accounts for 60 percent of India's total water resources ?

**(v)** What is the another objective of the Kosi project other than irrigation ?

**(vi)** Name the lake formed by the Bhakra Nangal Project.

**(vii)** Suggest one measure which would be helpful in conserving water resources of India.

**3. Answer the following questions in about 30 words.**

**(i)** What are the two principal sources of fresh water on this planet ?

**(ii)** Why does sea water have limited use ?

**(iii)** Give two reasons for the shortage of potable water in India.

**(iv)** Name the two states that jointly undertake the Chambal project.

**(v)** Explain how urbanisation causes water scarcity.

**(vi)** Mention the activities associated with watershed management programme.

**(vii)** Why is it necessary to conserve water resources?

**(viii)** Explain how rainwater is harvested in the arid and semi-arid regions of Rajasthan.

**(ix)** Name two states of India where rooftop rainwater harvesting is successfully practised.

**4. Answer the following questions in about 150 words.**

**(i)** Write an account of the various sources of water in India.

**(ii)** Explain the different sources of irrigation used in India.

**(iii)** Write an account of various utilities served by multi-purpose projects.

**(iv)** Explain the adverse effects of the dams of multi-purpose projects.

**(v)** Write an account of five important multi-purpose projects of India.

**Project work/Activity**

**1. Write a brief report on various irrigational methods practised in your district.**

**2. Make a list of dams that provide irrigation in Manipur.**

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UNIT

# IV

# MINERAL RESOURCES

A mineral is a chemical element or a combination of chemical elements. Geologists define mineral as a homogenous, naturaly occurring substance with a definable internal structure. Minerals are identified and classified by studying their physical and chemical properties such as hardness, crystal forms, density, cleavage, colour, lustre etc.

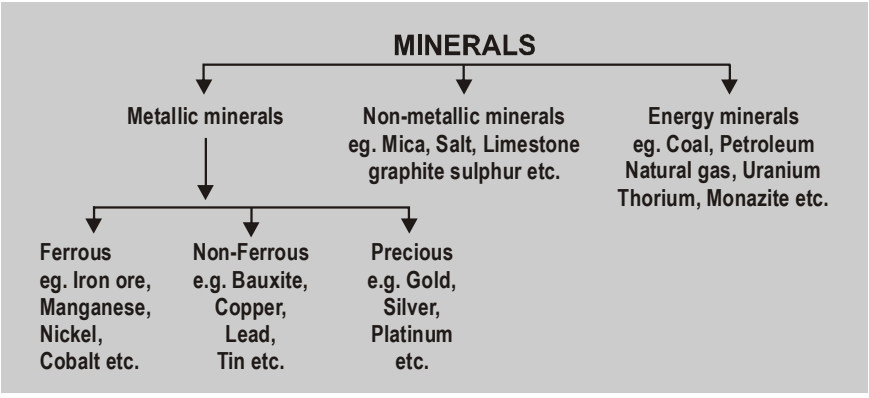
Minerals are found in varied forms in nature ranging from the hardest diamond to the softest talc. They are embedded in varying proportions in rocks. Some rocks consist of a single mineral, but majority of them consist of several minerals. The crust of the earth is formed by a number of minerals. So, they are found on or near the surface or buried inside the earth.

Minerals are unevenly distributed over space. They are exhaustible. There is an inverse relationship in quality and quantity of minerals i.e. good quality minerals are found in smaller quantity and vice versa. Hence, mineral resources are to be conserved in a proper way so that they may last longer.

## TYPES OF MINERALS

On the basis of physical and chemical properties, minerals can be classified into three main categories – Metallic, Non-metallic and Energy minerals which may further be sub-divided as follows :

***Classification of Minerals***



**Do you know ?**

**Metallic minerals can be melted to obtain new products whereas non-metallic mineral does not yield new products on melting. The former is ductile and malleable while the latter is not so.**

## METALLIC MINERALS

Metallic minerals are usually found in **ore** along with other elements or impurities. To extract metals from the ores, impurities are separated through a process of heating called **smelting**.

Metallic minerals are of three types – Ferrous, Non-ferrous and Precious. Minerals which have iron content are ferrous. These include iron ore, manganese, nickel, cobalt, chromite, pyrite, tungsten etc. They are used in the production of iron and steel. On the other hand, minerals which do not have iron content are non-ferrous. They are used in producing manufactured goods of other metals. Bauxite, copper, lead, tin, magnesium etc. are some examples of non-ferrous minerals. Gold, silver, platinum, etc which have high economic value are precious metallic minerals.

## NON-METALLIC MINERALS

Minerals like mica, salt, limestone, graphite, sulphur, phosphorus, clay etc. are non-metallic. They can be used as raw materials in a variety of industries.

## ENERGY MINERALS

Coal, petroleum, natural gas, uranium, thorium, monazite, cheralite, zirconium etc. are energy minerals. They can also be divided into Non-metallic and Metallic. Non-metallic energy minerals are of organic origin. They include coal, petroleum and natural gas which are used as the major sources of power and thus, are known as mineral fuels or fossil fuels. On the other hand, the metallic energy minerals include uranium, thorium, cheralite, zirconium etc. which are used to produce nuclear or atomic power. In India, nuclear power is considered to be the hope of the future since it has a wide scope of use in peaceful purposes such as for producing quality seeds and medicines.

## DISTRIBUTION OF MINERALS

India is endowed with a variety of minerals. This is because the country has a large territorial extent as well as a diverse geological formation. Minerals, however, are distributed unevenly in the country. It is evident that the rich mineralized zone is confined to the old crystalline rock structures of the peninsular India. Thus, the peninsular plateau has large reserves of metallic and non-metallic minerals.

Apart from the main mineral belts of the peninsula, petroleum deposits occur in the tertiary rocks of Assam, Gujarat and Mumbai High. Oil reserves are also found in the Krishna–Godavari and the Kaveri basins.

In the northern plains, the bedrocks are concealed by the thick layer of alluvium. As a result, the region is poor in mineral resources. The Himalayan region does not have large reserves of economically viable minerals because of its complex geological structure. However, this region has some known deposits of copper, lead, zinc, cobalt and tungsten particularly in the eastern and western parts.

## IRON ORE

India is rich in iron ore and has the largest reserve of it in Asia. In 2010 its total reserve is estimated at about 25 billion tonnes which is about 20 per cent of the world's known deposits. The country has different grades of iron ore viz. magnetite, haematite, limonite and siderite. Among these, magnetite and haematite reserves are important because they provide a strong base for the development of iron and steel industry.

Magnetite is the finest iron-ore since it has a very high content of iron up to 70 per cent. Haematite contains 50-60 per cent of iron and is the most important ore in terms of quantity use.

In India, about 95 per cent of its total reserve is located in Karnataka, Odisha, Chhattisgarh, Goa, Jharkhand, Madhya Pradesh, Maharashtra, Andhra Pradesh and Tamil Nadu.

Karnataka produces 25 per cent of the country's total iron ore. Bellary, Chikmagalur, Chitradurga, Shimoga, Tumkur and Dharwar are main iron-ore producing districts. The Kudermukh deposits in Chikmagalur district are known to be one of the largest in the world.

Odisha has large reserves of high grade haematite particularly in the districts of Sundergarh, Mayurbhanj, Kendujhar. It produces 22 per cent of the total iron ore in the country.

In Chhattisgarh the main iron ore producing districts are Raipur, Durg, Bastar, Bilashpur and Raigarh. About 20 per cent of the total iron ore in the country is shared by this state. Iron-ore mined at Bailadila hills in Bastar district is exported to Japan and South Korea.

Goa is an important iron ore producing state which accounts for 18 per cent of India's total. The iron ore is mainly of low grade.

In Jharkhand, iron ore is mined in Singbhum, Palamau and Hazaribagh. It produces about 14 percent of the country's total iron ore. In Singbhum, the mines located at Gua and Noamundi are important.

Besides, there are other iron ore mining regions located in some other states of the country. They are Balaghat, Jabalpur and Mandla in Madhya Pradesh; Chandrapur, Bhandara and Ratnagiri in Maharashtra; Karimnagar, Warangal, Kurnool Cuddapah and Anantapur in Andhra Pradesh ; Salem and Nilgiri districts in Tamil Nadu. They altogether account for the remaining one per cent of the country's iron ore.

## MANGANESE

Manganese is mainly used in manufacturing steel and ferro-manganese alloy. Nearly 10 kg of manganese is required to manufacture one tonne of steel. It is also used in making of bleaching powder, paints and insecticides.

In 2010, India has a large reserve of manganese ore which is estimated at 380 million tonnes. It has the second largest manganese reserve in the world. About 30 percent of the country's manganese is exported.

Odisha leads in the production of manganese ore in the country and produces 39 per cent of India's total. In this state, major mines are located in Bonai, Kendujhar, Kalahandi, Sundergarh, Gangur, Koraput, and Bolangir.

Maharashtra is the second largest producer of manganese which accounts for about 23 per cent of the total production in the country. Ratnagiri, Bhandra, Nagpur, etc. are the important districts.

Balaghat, Chhindwara,Nimar, Mandla and Jhabua are the important manganese producing districts of Madhya Pradesh. It accounts for 20 per cent of the country's total manganese.

Karnataka accounts for 13 per cent of the total manganese in India. Dharwar, Bellary, Belgaum, North Canara, Chikmagalur, Shimoga, Chitradurga and Tumkur are the districts where manganese is mined.

Besides, manganese is also mined in Andhra Pradesh, Goa and Jharkhand. They altogether account for 5 per cent of the total manganese in India.

**Table : 4.1**

***Production of selected minerals in 2003-04***

| Minerals | Production in '000 tonnes | Minerals | Production in '000 tonnes |
|---|---|---|---|
| Iron ore | 1,20,601 | Coal | 3,61,00 |
| Manganese | 1,738 | Petroleum | 33,000 |
| Bauxite | 10,957 | Natural Gas | 30,932 |
| Copper (concentrate) | 143 | | (million cubic metre) |
| Limestone | 1,54,000 | | |

## BAUXITE

Bauxite is the ore from which aluminium is extracted. Aluminium is a versatile metal which has the strength of metals like iron. It is extremely light and a good conductor of electricity. Aluminium has a wide utility in the manufacturing of electric wires and cables, aeroplanes, automobile engines, bus bodies and household utensils.

India has large reserves of bauxite which is estimated at about 3290 million tonnes and become a good exporter of it. Odisha, Gujarat, Jharkhand, Maharashtra, Chhattisgarh, Tamil Nadu and Madhya Pradesh are the main producers of this mineral. Among them, Odisha is the largest producer having important mines located in Kalahandi, Koraput, Bolangir, Sundergarh and Sambalpur districts. In Gujarat, Jamnagar, Kaira, Sabarkantha, Kachchh and Surat are the important bauxite producing districts. Kolaba, Thane, Ratnagiri, Satara, Pune and Kolhapur are the bauxite producing districts in Maharashtra. Huge amount of bauxite comes from the Lohardaga mine in Palamau district in Jharkhand. In Chhattisgarh, bauxite deposits are found in the region of Amarkantak plateau. Besides, Tamil Nadu and Madhya Pradesh are other bauxite producing states.

## COPPER

Being an excellent conductor of electricity, it is used in the manufacturing of a wide variety of electrical and electronic goods. It is also used in making of brass,bronze and jewellery items.

India is poor in copper ore. The estimated reserves are nearly 1390 million tonnes. Out of this, about 90 per cent of copper reserves exists in Madhya Pradesh. Rajasthan, Karnataka, Andhra Pradesh and Jharkhand. The Balaghat mines in Madhya Pradesh produce around 56 per cent of the country's copper ore. Other leading copper mines are located in Khetri in Rajasthan and, Singbhum and Hazaribagh in Jharkhand. Recently some copper deposits are known to be located in Uttar Pradesh, Tamil Nadu, Punjab and Sikkim. In India, copper ore has become a scarce mineral. In order to meet its domestic demands, India imports copper from other countries.

## LEAD AND ZINC

Lead and Zinc are also important non-ferrous metallic minerals. Zinc is used in the manufacture of tyre, dry batteries, dye casting, textile industry etc. Similarly, lead is also used in various industries such as in the manufacture of electrical cables, batteries, glass, ammunition etc.

Lead and Zinc reserves occur in Rajasthan, Gujarat, Maharashtra, West Bengal, Odisha, Uttar Pradesh, Andhra Pradesh, Madhya Pradesh, Tamil Nadu, Sikkim and Meghalaya. The total reserve of lead and zinc in India is estimated at about 525 million tonnes and 1.15 million tonnes respectively.

## GOLD

Gold is a precious metal and highly valued. India produces a meagre amount of gold. The total ore reserve is about 390 million tonnes with a total gold content of 491 tonnes.

There are three important gold producing states in India. They are Karnataka, Andhra Pradesh and Jharkhand. The Kolar goldmine in Kolar district and Hutti goldmine in Raichur district are the important gold mines in Karnataka. In Andhra Pradesh, goldmines are located at Ramgiri and Yeppamanna in Anantapur district. Gold is also obtained from some

placer deposits in Jharkhand. Among the goldmines, the Kolar mine is the deepest. It is one of the deepest goldmines of the world. As a result, mining of gold ore in this field becomes more and more expensive.

## Mica

Mica is made up of a series of plates or leaves which can be splitted easily into thin sheets. It has a unique property of being a bad conductor of electricity and is resistant to high temperature. Hence, it is in mainly used for the manufacture of electrical and electronic goods that require a good insulator.

In the production of mica, India is the largest in the world. It produces about two-thirds of the world's total production. Mica is produced mainly in Andhra Pradesh, Rajasthan and

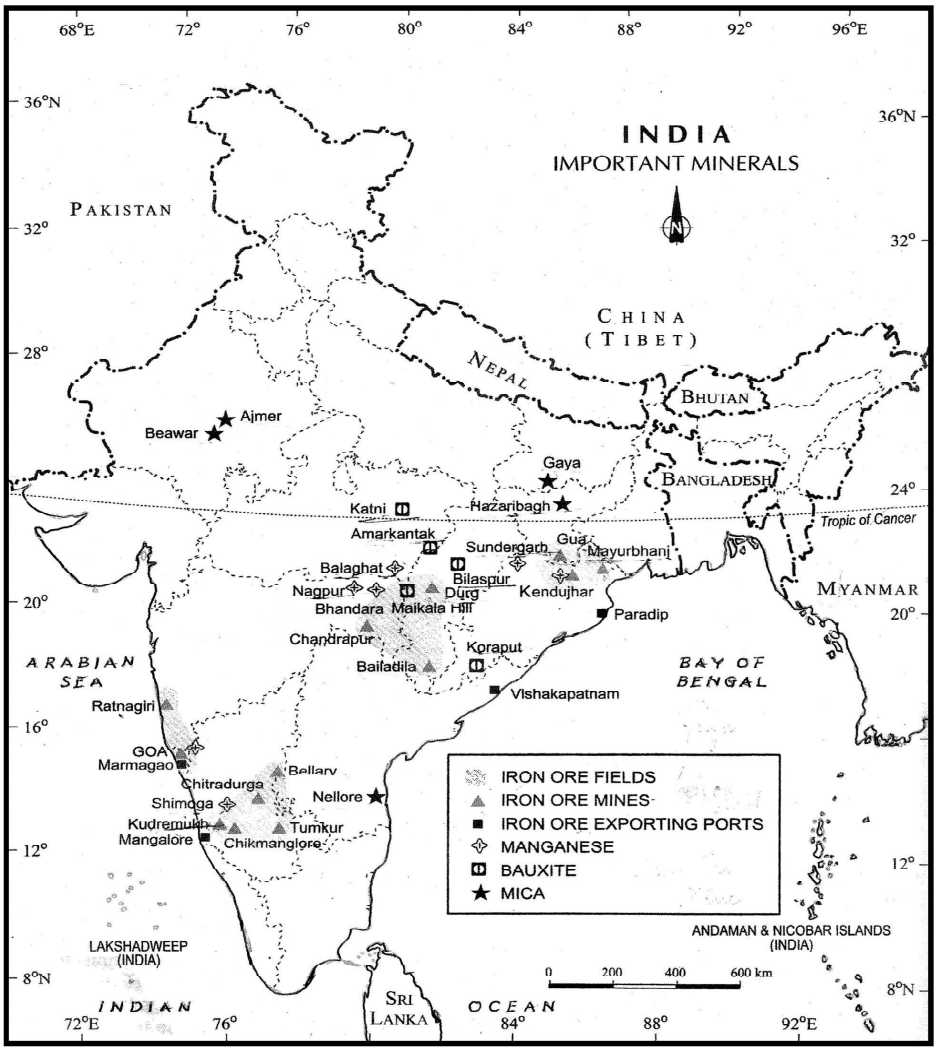



***Fig. 4.1 India : Distribution of Iron ore, Manganese, Bauxite and Mica***

Jharkhand. It is also produced in Tamil Nadu, West Bengal and Madhya Pradesh. Deposits of high quality mica are located in Koderma, Gaya-Hazaribagh belt in Jharkhand, Ajmer ; Shahapura, Tonk, Bhilwara and Jaipur in Rajasthan and Nellore in Andhra Pradesh.

## LIMESTONE

Limestone is the basic raw material for cement industry and essential for smelting iron-ore in the blast furnace. Madhya Pradesh, Chhattisgarh and Himachal Pradesh produce about three-fourth of the country's production.

Besides, a number of other minerals are also found in our country. You will find more details about these minerals in the next chapter.

## ECONOMIC IMPORTANCE OF MINERALS

You must have learned that the crust of the earth is made up of rocks in which minerals are embedded. These minerals are taken out from the crust through mining and various metals are extracted from them.

**Do you know ?**

**Quarrying –** The excavation of minerals from the surface of the earth is called quarrying. Marble, pebble, stone and other construction materials are generally excavated through this process.

**Open pit mining** – It is also known as open cast mining. This type of mining is used for minerals being exposed on the surface when overlying strata have been removed by human action or natural processes.

**Mining –** The deep underground excavation of minerals is generally termed as mining. Most fossil fuels are obtained in this way.

**Rat-hole mining –** The mining of minerals is regulated by the government. However, in tribal belts, local people continue to extract minerals from the earth's surface as their ancestors did in earlier days. They make a long narrow tunnel to enter these mines. This is why such tunnels are called 'Rat-holes'. For example, Rat-hole mining is adopted by certain tribes for coal mining in Jowai hills and Cherrapunjee hills of Meghalaya.

These metals are used in making of different things that we need in our daily life. Almost everything we use, from a tiny pin to a towering building are made from minerals. All the vehicles with which we travel such as cars, jeeps, buses, trains, ships, aeroplanes, etc. the implements and machinery that we use with are made from minerals. We use minerals even for making our food, medicines, decorative and other things.

Besides, minerals provide the base for industrial development of the country as they supply raw materials. These industries provide jobs to millions of people. Thus, minerals, considering their economic significance, are an indispensable part of our lives.

## CONSERVATION OF MINERALS

India possesses large reserves of various minerals. But they are not large enough in view of its huge size and population. Besides, minerals are being exploited at an accelerated rate due to rapid industrialisation, and advanced technology in mining. Moreover, a large quantity of strategic minerals are being exported to earn the much needed foreign exchange.

Minerals, on the other hand, are non-renewable resources. The geological processes of mineral formation take millions of years. Minerals once exhausted are gone forever. That is why mining is called the **robber industry**.

In order to conserve and utilise our mineral resources in a planned and sustainable manner we must use the existing mineral resources wisely and carefully avoiding wasteful consumption at every level. Besides, new reserves are to be explored and improved technologies should be applied for proper use of low grade and by products. Recycling of scrap metals should be encouraged in order to reduce the burden on metallic minerals. Again, scarce minerals like copper can also be substituted by cheaper and abundant minerals like aluminium. Lastly, the export of strategic minerals must be reduced so that the existing reserves may be used for a longer period of time.

# EXERCISES

**1. Answer the following by choosing the correct option from the given alternatives.**

**(i)** Which of the following is a metallic mineral ?

(a) Mica (c) Graphite

(b) Manganese (d) Sulphur

**(ii)** Balaghat mines in Madhya Pradesh produce nearly half of the country's

(a) bauxite. (c) manganese.

(b) copper. (d) mica.

**(iii)** The largest mica producing state in India is

(a) Rajasthan. (c) Bihar.

(b) Madhya Pradesh. (d) Jharkhand.

**(iv)** Which of the following is a scarce mineral in India?

(a) Iron ore (c) Copper

(b) Mica (d) Bauxite

**2. Answer the following questions briefly.**

**(i)** What is a mineral ?

**(ii)** Why are most of the mineral reserves confined to the peninsular plateau ?

**(iii)** Name the process by which metals are extracted from ores.

**(iv)** Suggest one mineral that can be conserved through recycling ?

**3. Answer the following questions in about 40 words each.**

**(i)** Give two points of difference between the metallic and non-metallic minerals.

**(ii)** Classify energy minerals on the basis of their origin.

**(iii)** Why does the Himalayan region not have reserves of economically viable minerals?

**(iv)** What are the two major mica mining regions in Jharkhand ?

**(v)** Mention the two industries in which limestone is used as raw material.

**(vi)** Give two reasons why mineral conservation is needed for us.

**(vii)** Suggest two measures in which minerals can be conserved.

**4. Answer the following questions in about 150 words.**

**(i)** Write an account of the distribution of iron ore in India.

**(ii)** Give an account of manganese producing regions in India.

**(iii)** Explain how minerals are important for us.

**(iv)** Explain the various ways through which we can conserve mineral resources.

**Project work/Activity**

**1. Collect production data of five important metallic minerals of India and show them with the help of a bar diagram.**

**2. Superimpose the map of India showing distribution of iron ore, manganese and coal on the map that shows the location of iron and steel industry in the country. Find out the correlation between them.**

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UNIT

# V

# ENERGY RESOURCES

Energy is the primary input in the production of goods and services. It is required for all activities in our daily life. Energy is needed to cook, provide light and heat, drive vehicles and run machinery in different sectors of economy. In fact, the availability of affordable and reliable energy resources is the primary requirement for industrialisation as well as for raising the standard of living in a country.

Energy is available in different forms and is obtained from various sources. Hence, on the basis of their sources, energy resources can be classified as conventional and non-conventional. The energy resources of conventional sources include firewood, cattle dung cake, coal, petroleum, natural gas, both thermal and hydel electricity and atomic energy. On the other hand, non-conventional sources include, solar, wind, tidal, geothermal and biogas energy.

**Do you know ?**

- **Conventional sources of energy are those which have been used since a long time. Whereas non-conventional sources of energy are those which are to come into common use.**
- **Among the conventional sources of energy, fossil fuels are expensive to prospect, extract and process while non-conventional sources are inexpensive once machinery for harnessing them is installed.**

## CONVENTIONAL SOURCES OF ENERGY

Among the conventional sources of energy, coal, petroleum, electricity and atomic energy are important.

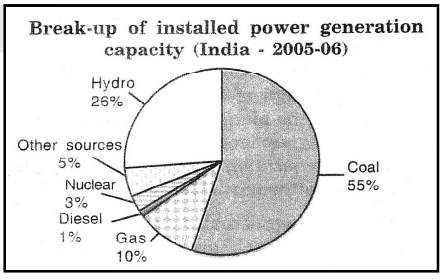


*Fig. 5.1*

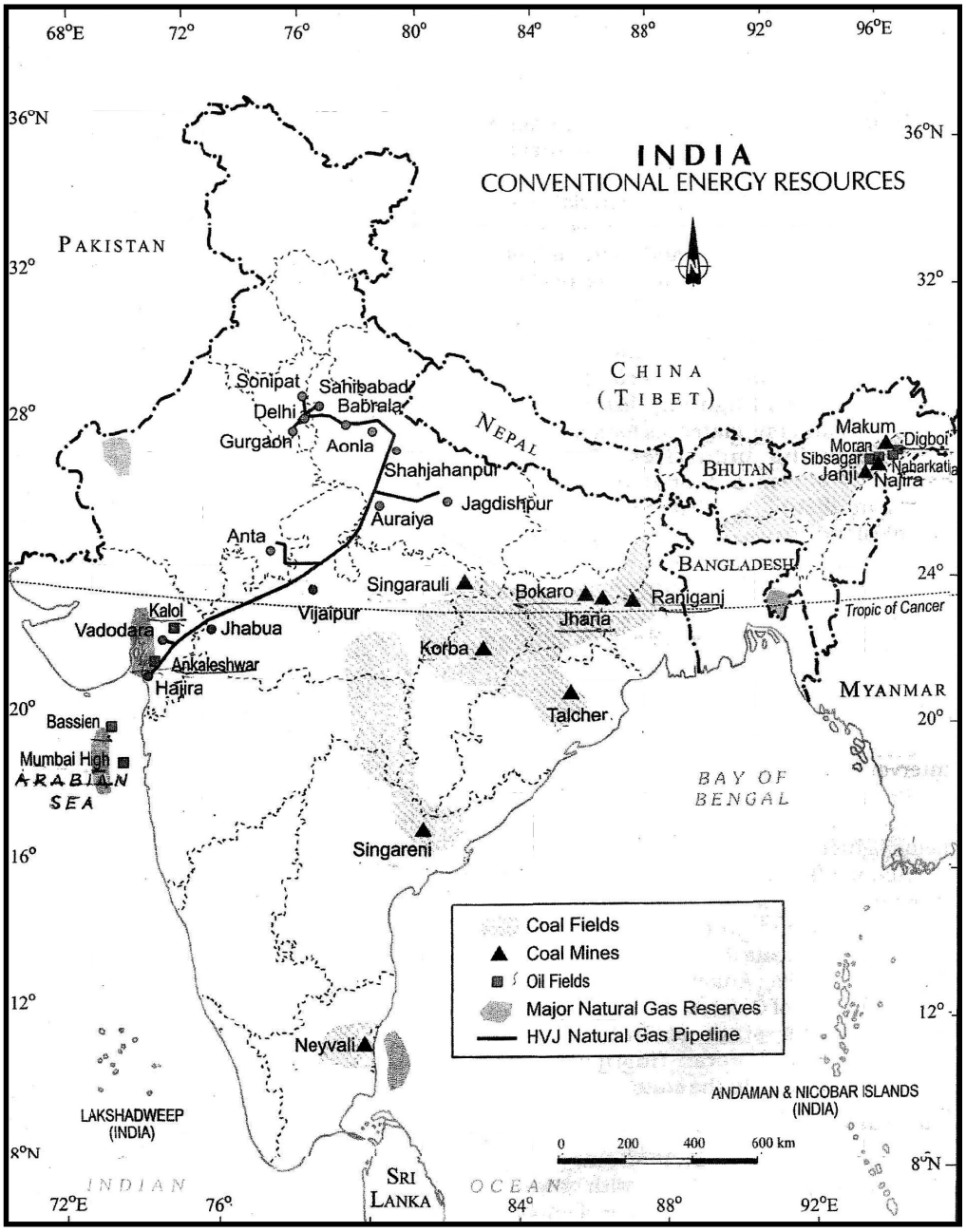


***Fig. 5.2 India : Distribution of Coal, Oil and Natural Gas***

## COAL

Coal provides a substantial part of the nations's energy needs. Not only being the major industrial fuel or the source of power, it is also used as raw material for a large number of industries. Hence, coal is often called **Black Gold**.

You must have learned that coal has originated from plant materials buried and compressed under rocks over millions of years. Hence, the percentage of carbon in coal depends upon duration, the degree of compression and the intensity of heat and pressure on the buried organic matters. Thus, coal is of four types viz. Anthracite, Bituminous, Lignite and Peat. Anthracite is the highest quality hard coal which contains over 80 per cent carbon. The most widely used type of coal in India is bituminous which contains 60 to 80 per cent carbon. Lignite is also known as the brown coal and contains about 60 per cent carbon. The lowest grade is peat. It has only 50 per cent carbon but the moisture content is as high as 80 per cent.

India has large reserves of coal which is estimated at about 360 billion tonnes. Almost all the coal deposits belong to Gondwana and Tertiary periods of geological past. Gondwana deposits are said to be about 200 million years old and the tertiary deposits are about 55 million years old. About 80 per cent of the coal deposits in India is of bituminous type.

Important Gondwana coalfields are located in the Damodar Valley. They include Raniganj, Jharia, Bokaro, Giridih and Karanpura in Jarkhand-West Bengal coal belt. The river valleys of the Godavari, the Mahanadi, the Son and the Wardha are also associated with the Gondwana deposits. The important mining centres are Singrauli (M.P.); Korba (Chhattisgarh); Talcher and Rampur (Odisha); Chanda-Wardha, Kamptee, and Bander (Maharashtra); Singareni and Pandur (Andhra Pradesh).

The coal deposits of Tertiary age occur in Assam, Arunachal Pradesh, Meghalaya, Nagaland and Jammu and Kashmir. They are located at Darangiri, Cherrapunjee, Mewlong and Langrin in Meghalaya, Makum, Jaipur and Nazira in Assam, Namchik-Namphuk in Arunachal Pradesh, Kalakot in Jammu and Kashmir and Neyveli in Tamil Nadu.

## PETROLEUM

Petroleum or mineral oil is the another major source of energy in India after coal. It is used for all internal combustion engines in automobiles, railways and aircraft. It not only provides fuel for heat and lighting but also provides many by-products which are used as the raw materials for a number of petro-chemical and other industries. Thus, petroleum refineries act as a **nodal industry** for fertiliser, synthetic textiles and chemical industries. Because of its diversified use and scarcity, petroleum is referred to as **Liquid Gold**.

In India, occurrence of crude petroleum is associated with anticlines and fault traps in the sedimentary rock formations of the tertiary age. Mineral oil occurs in the porous layer of limestone or sandstone which is trapped in between two non-porous layers.

Oil exploration and production was systematically taken up in our country after the Oil and Natural Gas Commission was set up in 1956. Prior to that, Digboi was the only oil producing region in the country. In recent years new oil deposits have been explored in the extreme western and eastern parts of the country.

In Assam, Digboi, Naharkatia, Moran, Rudrasagar, Galeki and Hugrijan are the important oil producing centres. Mineral oil is also found at Nigru in Tirap district of Arunachal Pradesh and at Borholla in Nagaland. The major oilfields of Gujarat are Ankleshwar, Kalol, Mahesana, Nawagam, Kosamba, Kathana, Barkol, Sanand and Lunej. In the western offshore region, there lie Mumbai High and Bassein which are considered to be the richest oilfields in India. Oil and natural gas fields have also been set up in the Krishna-Godavari and Kaveri basins. Among them, Narimanam and Kovilappal are the important oilfields in Kaveri offshore area. In Mumbai High **Sagar Samrat,** the first mobile offshore drilling platform, has helped in drilling the oilfields lying below the bottom of the sea.

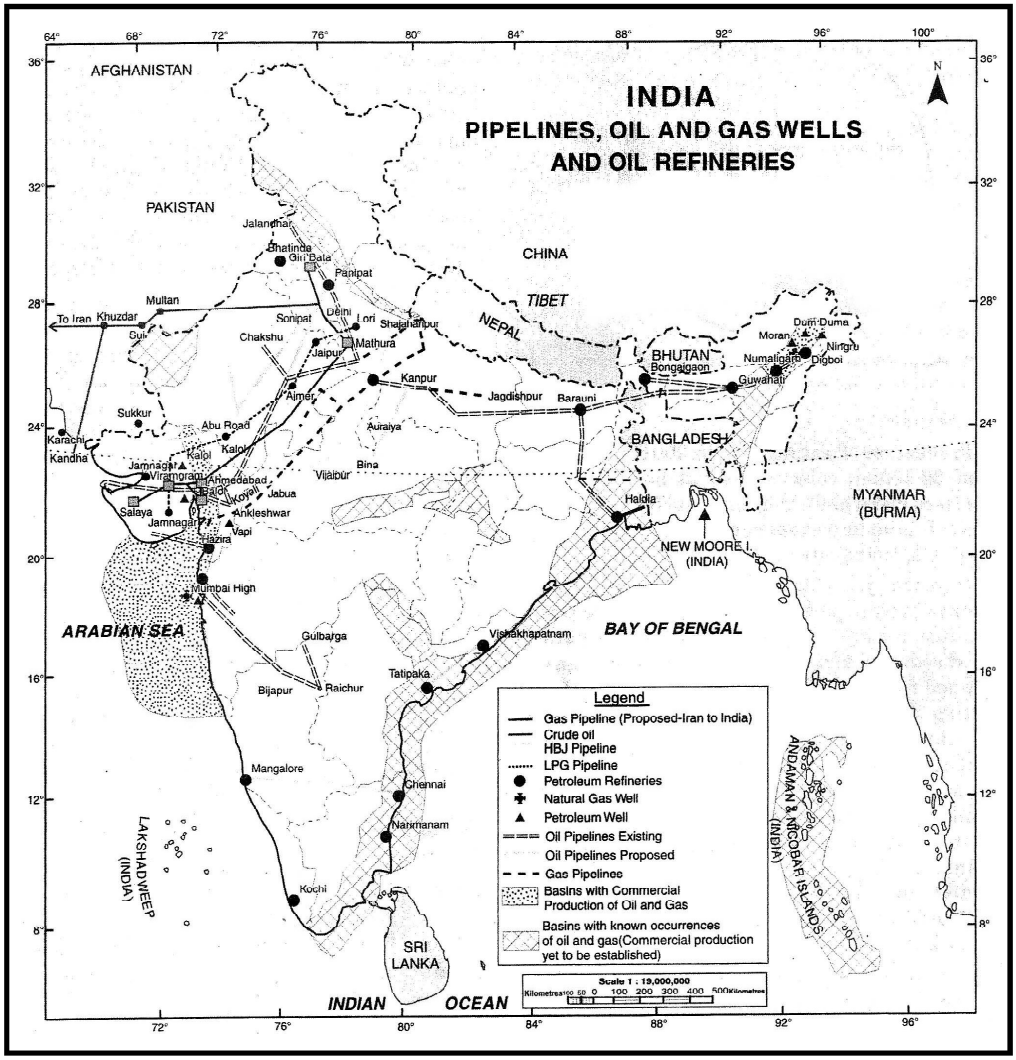


***Fig. 5.3 India : Pipelines, Oil and Gas wells and Oil Refineries***

In India, the total oil reserve is estimated at 40,000 lakh tonnes. The production of crude petroleum reached its peak of 35.2 million tonnes in 1996-97 after which a declining trend has been observed. Though India produced 37.7 million tonnes of crude petroleum in 2004-05, it could not meet the huge domestic requirements. Hence, India imports huge quantities of crude oil from other countries.

## NATURAL GAS

Natural gas is used as a source of energy and as a raw material in the petroleum and fertiliser industry. It is a clean and environment friendly resource. This is because the emission of carbon dioxide into the atmosphere is quite low while using it. Hence, use of Compressed Natural Gas (CNG) for vehicles in place of liquid fuel has been encouraged and is gaining wide popularity in the country.

Natural gas is found along with oil in all the oilfields. Large reserves of natural gas have been located along the eastern coast particularly in the Krishna–Godavari and the Kaveri basins, as well as in Tripura and Rajasthan. Along the western coast, the natural gas reserves are associated with the offshore wells in Maharashtra and Gujarat. Besides, large reserves of natural gas are also found in Andaman and Nicobar islands.

The production of natural gas exceeds 31.9 billion cubic metres. Gas Authority of India Limited (GAIL) is responsible for processing, transporting and marketing of natural gas. GAIL has completed the Hajira-Vijaipur-Jagdishpur cross country gas pipeline to link Mumbai High and Bassein with the fertiliser, power and industrial complexes in the western and northern India.

## ELECTRICITY

Electricity has a wide range of application in today's world and plays an important role in the progress and prosperity. Hence, its per capita consumption is considered as an index of development that shows a nation's economic well being and standard of living. Electricity is generated in three different ways – Hydro-electricity, Thermal electricity and Nuclear electricity.

**Hydro-electricity** is generated by driving turbines using fast-flowing perennial water. It is the cheapest power resource and is considered to be one of the clean and renewable resources. It accounts for about one-fourth of the total installed power of the country. The generation of hydro-electricity is associated with a number of multi-purpose river valley projects There are also other river basins which have large potentiality for hydel-power in India.

**Thermal electricity** is generated by using coal, petroleum and natural gas.Generation of thermal power causes environmental pollutions. Hence it is not eco-friendly. But, thermal electricity has special significance in areas where geographical conditions are not favourable

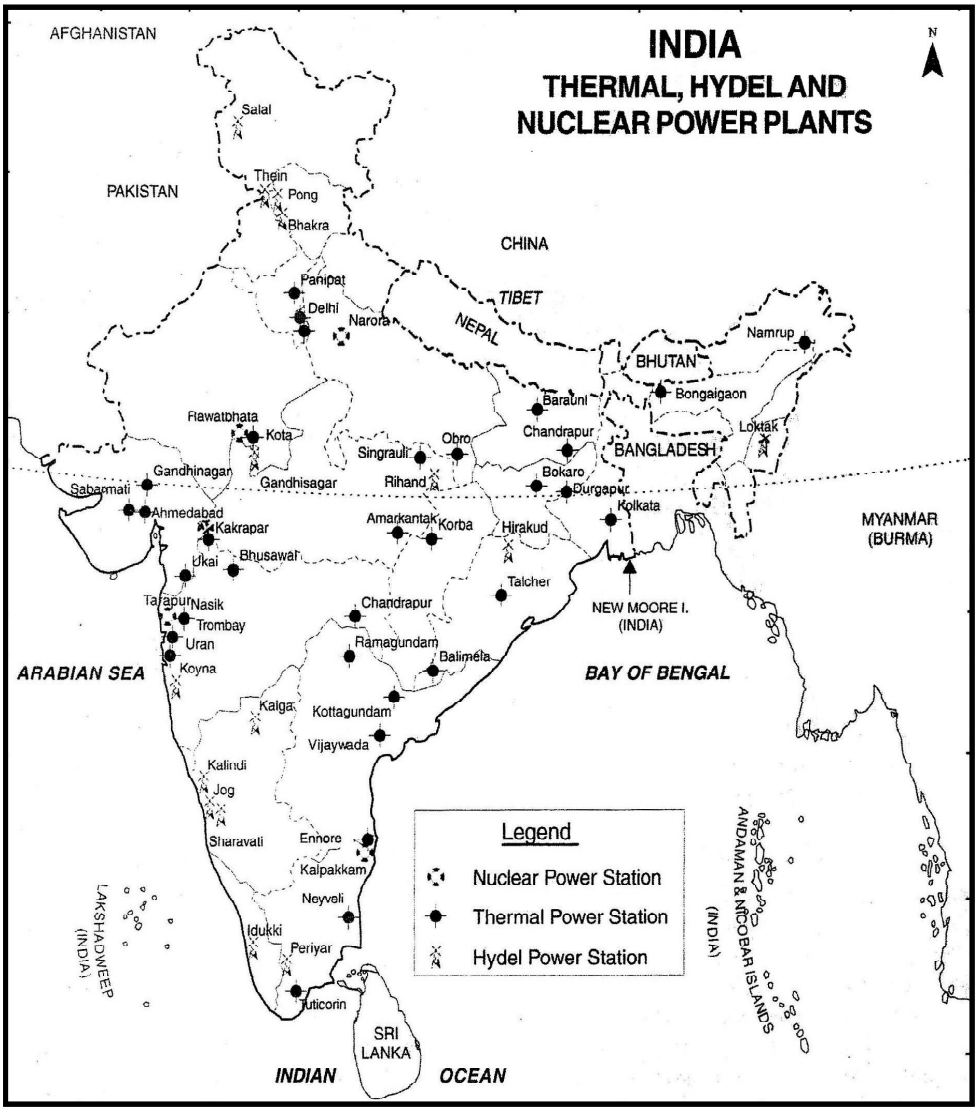


***Fig. 5.4 India : Thermal, Hydel and Nuclear Power Plants.***

for generating hydro-electricity. It accounts for over two-third of the total electricity generated in the country. India cannot depend entirely on hydel-power because of the uneven and seasonal nature of its rainfall. It, thus, needs both thermal and hydel-power plants all over the country At present, there are 310 thermal power plants in India.

## NUCLEAR ELECTRICITY

Nuclear energy is generated by altering the structure of atoms. Much heat energy is released when such an alteration (atomic fission) is made and that heat is used to generate electric power. Uranium and thorium, are mainly used for the generation of nuclear power.

India is rich in uranium and thorium. Uranium is found in Jharkhand. Rajasthan and Tamil Nadu while thorium is obtained mainly from the monazite sand of Kerala beach. Thorium is also found at Gaya (Bihar), Nellore (Andhra Pradesh), Udaipur and Jaipur (Rajasthan).

The first nuclear power station of India was set up at Tarapur in Maharashtra. The other neclear plants are located at Kalpakkam near Chennai, Kota in Rajasthan, Narora in Uttar Pradesh, Kaiga in Karnataka and Kakrapara in Gujarat. At present, there are 17 nuclear power plants across the country.

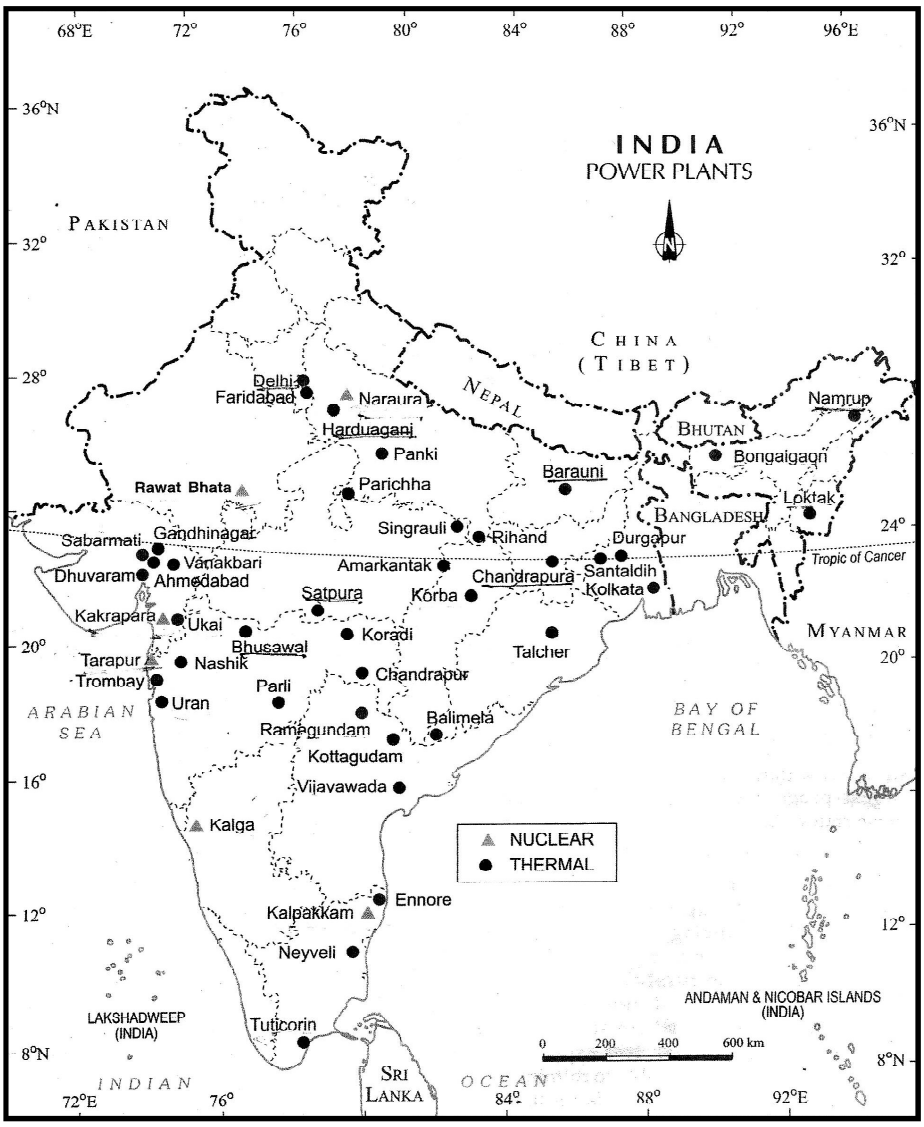


***Fig. 5.5 India : Distribution of power plant***

## NON–CONVENTIONAL SOURCES OF ENERGY

With the increasing demand for energy, a great pressure is being exerted on the use of exhaustible mineral fuels like coal, oil and gas. But, rising prices of oil and gas and their shortage have created uncertainties about the security of energy supply in future. Moreover, increasing use of fossil fuels have caused serious environmental problems. Hence, there is a pressing need for the use of renewable energy sources like solar, wind, tidal, geothermal, biogas, etc.

## SOLAR ENERGY

The two effective processes of tapping solar energy are photovoltaics and solar thermal technology. Photovoltaic technology converts sunlight directly into electricity while solar thermal technology is being employed in heating and cooling applications.

India, being a tropical country, is well endowed with plenty of solar energy. It receives solar energy equivalent to 20 MW/sq. km per year which is more than the total energy consumed in the country. If properly exploited, it could minimise the dependence on the other sources of energy. Solar energy is 7 per cent more effective than thermal plants and 10 per cent more effective than nuclear plants. It is generally used in various appliances like heaters, crop dryers, refrigerators, solar cells, cookers etc. In India, the largest solar plant is located at Madhapur near Bhuj in Gujarat. Here, solar energy is used to sterilise milk cans.

## WIND ENERGY

The kinetic energy of wind through turbines is converted into electrical energy. The permanent wind systems such as Trade winds, Westerlies and periodic winds like Monsoons have been used as sources of energy. Besides, local winds such as land and sea breezes can also be used to produce electricity. The largest wind farm cluster is located in Tamil Nadu from Nagarcoil to Madurai. Apart from these, Gujarat, Rajasthan, Andhra Pradesh, Maharashtra, Karnataka and Lakshadweep have important wind farms.

***Fig. 5.6 A wind farm cluster***

## TIDAL ENERGY

For the generation of tidal energy, floodgate dams are to be built across inlets. During high tide, ocean water flows into the inlet and gets trapped when the gate is closed. After the tide recedes, the trapped water is released through a power-generating turbine to produce electricity.

In India, large tidal waves are known to occur along its west coast. Hence, the National Hydro Power Corporation sets up a tidal energy plant of 900 MW at the Gulf of Kachchh.

## GEOTHERMAL ENERGY

Geothermal energy refers to the heat and electricity produced by using heat from the interior of the earth. You must have learnt that the earth's interior is very hot and is progressively hotter with increasing depth. High temperature occurs even at shallow depth where the geothermal gradient is high. In such areas, ground water absorbs heat from rocks and gushes out in the form of hot spring, geyser etc. The water is so hot that it turns into steam. This steam is used to drive turbines and generate electricity.

In India, two experimental projects have been set up to harness geothermal energy– one at Parvati valley in Himachal Pradesh and the other at Puga valley in Ladakh. Besides there are 115 hot springs and 350 favourable sites for producing geothermal electricity.

## BIOGAS ENERGY

Biogas is derived from biological products such as bagasse, farm waste, rice husk, sewage, vegetable waste, animal and poultry wastes and human excreta. Biogas plants using cattle dung are known as **Gobar gas plants**. The power so produced is used for cooking, lighting homes and streets in villages. So, this energy is a clean and cheap source of power in rural areas. It not only provides energy and improved quality manure but also helps in checking deforestation and pollution.

## CONSERVATION OF ENERGY RESOURCES

Every sector of the national economy, vis, agriculture, industry, transport, commerce, domestic etc. needs energy because it is the basic requirement for economic development. Hence, India has become a large consumer and importer of mineral fuels like coal, petroleum and natural gas. At the current rate of consumption, the known reserves of these minerals will last only for 30-40 years. Hence, energy conservation is an urgent need to develop a sustainable path of energy development in India.

The following are some guidelines laid down for the conservation of energy.

**(i)** To develop alternative energy sources and utilise the present sources of energy judiciously.

**(ii)** To improve the efficiency of power plants.

**(iii)** To make public transport dependable so that use of individual vehicles be discouraged.

**(iv)** To use energy efficient engines in vehicles.

**(v)** To use power saving devices at homes and in industries.

**(vi)** To make greater use of hydel power and non- conventional sources of energy.

**(vii)** To conduct awareness programmes on the slogan– **Energy saved is energy produced**.

## EXERCISES

**1. Answer the following questions by choosing the correct option from the given alternatives.**

**(i)** Which of the following is a conventional source of energy ?

(a) Solar (c) Atomic

(b) Wind (d) Tidal

**(ii)** Which of the following is a metallic mineral ?

(a) Coal (c) Natural gas

(b) Petroleum (d) Thorium

**(iii)** The most widely used type of coal in India is

(a) Peat. (c) Bituminous.

(b) Lignite. (d) Anthracite.

**(iv)** Nagarcoil in Tamil Nadu is associated with the harnessing of

(a) Solar energy. (c) Geothermal energy.

(b) Wind energy. (d) Tidal energy.

**2. Answer the following questions briefly.**

**(i)** Why is coal known as 'Black Gold' ?

**(ii)** Name the only oil producing region of India before 1956.

**(iii)** Why is it necessary to develop both thermal and hydel power plants in India ?

**(iv)** Which conventional source of energy is considered to be an eco-friendly ?

**(v)** Where is the largest solar energy plant located in India ?

**(vi)** What type of energy is produced by using heat from the interior of the earth ?

**(vii)** Why did the National Hydro Power Corporation set up a tidal energy plant at Gulf of Kachchh in Gujarat ?

**(viii)** What is used to produce energy in a Gobar gas plant ?

**(ix)** Where was the first nuclear power plant set up in India ?

**3. Answer the following questions in about 40 words.**

**(i)** Distinguish between thermal power and hydel power.

**(ii)** Give two points of difference between the conventional and the non-conventional sources of energy.

**(iii)** Classify coal reserves of India on the basis of their geological age.

**(iv)** Why are petroleum refineries known as nodal industry ?

**(v)** Explain how tidal energy is generated ?

**(vi)** Where are the two geothermal energy plants located in India ?

**(vii)** Explain the importance of biogas as a source of non-conventional energy.

**(viii)** Why is it necessary for us to conserve energy resources ?

**(ix)** Suggest two measures to be taken up for efficient use of energy.

**(x)** Give two reasons why non-conventional sources of energy have a bright future.

**4. Answer the following questions in about 150 words each.**

**(i)** Write an account of the distribution of coalfields in India.

**(ii)** Describe the distribution of oil producing regions in India.

**(iii)** Explain how we can conserve the energy resources of our country.

**Project work/Activity**

**1. On an outline of map of India, show the following**

**(i)** Petroleum producing areas.

**(ii)** The Hajira-Vijaipur-Jagdishpur cross country gas pipeline.

**2. Make a list of five important river valley projects and locate and label them on an outline map of India.**

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UNIT
# VI
# AGRICULTURE

India is essentially an agricultural country. About 60 percent of its population is engaged in agricultural activities and about 57 per cent of its land is devoted to crop cultivation. With the growing seasons all the year round, fertile soils, wide climatic variations and a large area under cultivation, India is in a unique position to grow almost every crop. Besides food grains, it also produces raw materials for agro-based industries.

During the last 50 years, production and yield of many crops has increased at an impressive rate. India ranks first in the production of tea, jute, pulses and milk. It is the second largest producer of rice, wheat, sugarcane, groundnut and vegetables. Moreover, it also exports some agricultural products like tea, coffee and spices.

## TYPES OF FARMING

In India, land has been cultivated for over 5000 years from now. Over these years, cultivation methods have changed significantly. On the basis of source of moisture for crops, the farming in India may be classified into **irrigated farming** and **rainfed farming**. Depending on adequacy of rainfall during cropping seasons, rainfed farming is further classified into **dry land farming** and **wetland farming**.

Under the influence of physicial and socio-economic factors, the different types of farming practised in India are the following.

### Primitive Subsistence Farming

Primitive subsistence farming is the type in which crops grown are consumed by the grower and his family. It is carried out with the help of primitive implements like hoe, sickle and dao. The farming depends upon monsoon and fertility of soil. This type of farming is still prevalent in certain areas of India and is known as **Shifting Cultivation**.

In shifting cultivation, a piece of forest land is cleared by cutting and burning and crops are grown. When the soil gets exhausted, the farmer moves to a new site for cultivation. It is also known as slash and burn agriculture. In this type of farming the farmer does not use fertilisers or other modern inputs. So productivity is low.

This primitive form of cultivation is called by different names in different parts of India viz. Jhumming in Nagaland, Mizoram, Assam and Meghalaya, Pamlou in Manipur, Kuruwa in Jharkhand, Dipa in Chhattisgarh and Khil in the Himalayan belt. Make a list of five crops grown under Pamlou in Manipur.

recent years, Manipur has also increased its area under tea and rubber plantation. In this specialised agriculture, crops are grown for sale. So, an efficient network of transport and communication is highly necessary for the development of plantation.

## CROPPING PATTERN

Crops grown in a region during specific seasons is known as **Cropping Pattern**. In India, there are three distinct cropping seasons -- **Kharif, Rabi and Zaid**. Kharif crops are grown with the onset of south-west monsoon in June and continue until September. Rice, maize, bajra, jowar, cotton, jute, groundnut, soyabean and pulses are the important crops.

Rabi crops are grown during the period from October to March. The main crops include wheat, barley, peas, gram and mustard. The Western Disturbances (temperate depression) during winter months brings light rainfall which is most beneficial to rabi crops.

**TABLE 6.1**

CROPPING SEASONS IN INDIA

| Cropping Season | Months | Major Crops cultivated |
|---|---|---|
| Kharif | June - September | Rice, Cotton, Bajra, Maize, Jowar,Ragi,Groundnut, Arhar. |
| Rabi | October - March | Wheat, Gram, Barley, Mustard, Rapeseeds, Peas. |
| Zaid | April - May | Fruits, Vegetables, Watermelon, Cucumber, fodder. |

Zaid crops are grown during the short summer months from April to June. Watermelon, muskmelon, cucumber, vegetables and fodder crops are cultivated on irrigated lands. Find out the reason why these three distinct cropping seasons do not exist in southern India.

## MAJOR CROPS

A wide variety of crops are grown in different parts of the country. The crops can be grouped under different heads, viz., cereals, pulses, oil seeds, fibre crops, cash crops and beverage crops.

## CEREALS

India produces about 11 per cent cereals of the world and ranks third in production after China and U.S.A. The cereals are classified as fine grains (rice, wheat) and coarse grains (maize, jowar, bajra, ragi).

## Wheat

Wheat is the second most important cereal crop in India. It is the main food crop in north and north - western parts of the country. It requires a cool wet climate (10°C to 15°C) during the growing season and a warm dry climate (20°C to 25°C) at the time of harvesting.

The two important wheat-growing zones are the Sutlej-Ganga plains in the north-west and the black soil region of the Deccan. Uttar Pradesh, Punjab, Haryana, Rajasthan and Madhya Pradesh are the five leading wheat producing states. The yield of wheat is very high in Punjab and Haryana (above 4,000kg. per hectare).

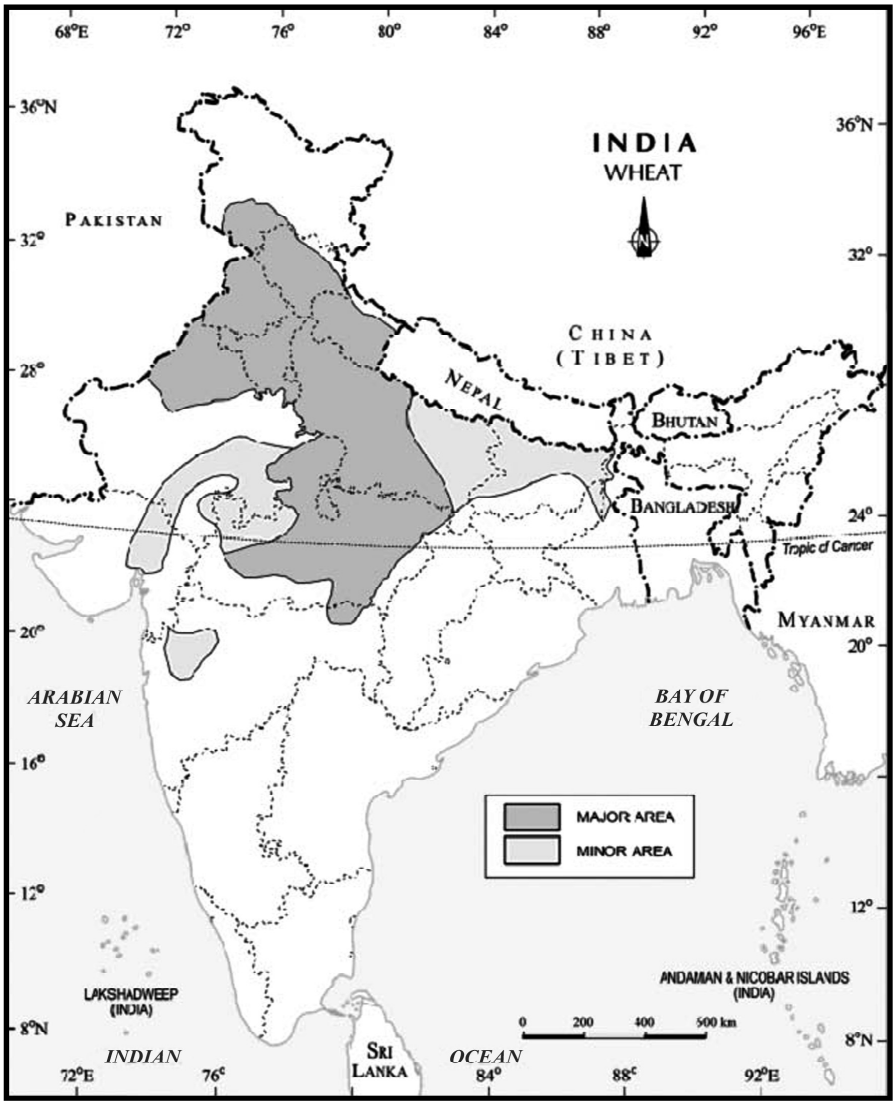


*Fig. 6.2 India : Distribution of Wheat*

### Rapeseed and Mustard

Rapeseed and Mustard are frost sensitive crops. They are used for preparing pickles, curries etc. Rajasthan contributes about one-third of the production while other leading producers are Uttar Pradesh, Haryana, West Bengal and Madhya Pradesh.

### Other oilseeds

Soyabean, sunflower, sesamum, castor seed and linseed are other important oilseeds. Madhya Pradesh and Maharashtra together produce about 90 per cent of total output of soyabean in India. Sunflower is grown mainly in Karnataka and Andhra Pradesh. It is a minor crop in north India. Sesamum is mostly used as cooking oil. It is a Kharif crop in north and rabi crop in south India. Castor seed is both a kharif and rabi crop, and its oil is used for medicines, lubricating and industrial purposes. Linseed is derived from flax plant and grows in rabi season. It is used in paint and varnish. U.P., Madhya Pradesh and Maharashtra are the leading linseed producers.

## FIBRE CROPS

These crops give us fibre for preparing cloths, bags, sacks and other items. Cotton, jute, hemp and natural silk are the four major fibre crops of India. Silk is obtained from cocoons of the silkworms.

### Cotton

Cotton is the most important of all the fibres. It requires high temperature, light rainfall, 210 frost-free days and clear sky during flowering stage. It grows in kharif season and requires 6 to 8 months to mature. It grows best in drier parts of the black cotton soil of the Deccan plateau. India grows both short staple cotton (fibre length less than 18 mm ) and long staple cotton (fibre length 25 mm and above).

India is the fourth largest producer of cotton in the world after China, U.S.A. and Pakistan. Leading producers are Maharashtra, Gujarat, Madhya Pradesh, Andhra Pradesh, Karnataka, Tamil Nadu, Punjab and Haryana. Punjab has the highest yield due to warm climate, fertile soils and facilities of irrigation.

### Jute

Jute is known as the **golden fibre**. It is used for making gunny bags, coarse cloth, sacks, mats, ropes, carpets and decorative items. So it is also called "Brown Paper of Wholesale Trade". It requires uniformly high temperature (27°C) throughout the year and grows well on well- drained fertile soils in the flood plains where new soils are deposited every year.

India is the largest producer of jute in the world. West Bengal accounts for about three-fourth of the production in the country. Bihar, Assam, Odisha and Meghalaya are other jute growing states.

## TECHNOLOGICAL AND INSTITUTIONAL REFORMS

The Indian farmers have been using traditional methods of farming using wooden plough and bullock cart for the last so many centuries. They still depend upon monsoon and natural fertility for agriculture. So they could not increase in productivity and production of agricultural crops. For a growing population, the increase in production is highly necessary. Agriculture also provides livelihood for more than 60 per cent of India's population. But agricultural development is seriously hampered on account of certain institutional barriers. Without institutional reforms, science and technology can do little to achieve increase production. Therefore, Indian agriculture needs technological and institutional reforms. Some steps were taken in this direction after independence.

### Technological Reforms

(i) **Improved Tools and Mechanisation :** The animal drawn wooden plough is now gradully being replaced by tractor and other machinery even by farmers with small holdings.

(ii) **New Techniques of Irrigation :** Electricity or diesel operated water pumps have replaced Persian wheel. Sprinkler and drip irrigation has also been promoted.

(iii) **Transport and Communication :** Mobile phone facilities and all-weather roads in villages have enabled farmers to take their surplus farm produce to far away markets.

(iv) **Quality Seeds :** Distribution of quality and certified seeds to farmers increases agricultural production.

(v) **Agricultural Inputs :** For increasing farm productivity, chemical fertilisers, manures, insecticides and pesticides are being used. In 2010-11, per hectare consumption of chemical fertilisers in India was 140 kg. and became the second largest consumer in the world.

(vi) **Green and White Revolution :** The Green Revolution (for increasing productivity and production of crops) in the 1960s and 1970s in India was followed by White Revolution (Operation Flood) for increasing milk production.

**Do you know ?**

**White Revolution and Silver Revolution**

**Dr. V. Kurien, the founder chairman of the National Dairy Development Board, designed and implemented the world's largest dairy development programme, Operation Flood which results in the White Revolution in India. He is known as the father of the White Revolution.**

**Silver Revolution refers to the tremendous increase in egg production.**

TABLE 6.2

INDIA : GROWTH OF MAJOR SECTORS AND G.D.P. (IN PER CENT)

| Sector | 1980-81 | 1992-2001 | 2002-2007 |
|---|---|---|---|
| Agriculture | 3.6 | 3.3 | 4.0 |
| Industries | 7.1 | 6.5 | 9.5 |
| Services | 6.7 | 8.2 | 9.1 |
| G.D.P. | 5.6 | 6.4 | 8.0 |

In 2001 the share of agriculture in providing employment and livelihood was about 63 per cent. The above Table shows that the growth rate in agriculture is decelerating while the GDP growth rate is increasing over the years. Even the increasing growth rate of GDP has not been able to generate sufficient employment opportunities. The growing population needs employment.

Today, Indian farmers are facing many problems. One major problem is international competition. Foreign farmers sell their products at cheaper rates. As the government has reduced investments on irrigation, power, rural roads, market and mechanisation as well as subsidy on fertilisers, the cost of agricultural production has been increased. Moreover, reduction in import duties on agricultural products has adversely affected farmers. Farmers are withdrawing their investment from agriculture. This causes decrease in employment in agriculture.

There is steady increase in agricultural output to meet the growing population in India. The total foodgrains production (rice, wheat, coarse grains, pulses) has risen from 168 million tonnes in 1991-92 to about 242 million tonnes in 2010-11.

## FOOD SECURITY

Food security means freedom from hunger and malnutrition. Citizen of India at all times should have access to adequate supply of food which provides minimum nutritional level. This is called food security. It includes not only creating reserve stocks of foodgrains but also remove calorie and protein deficiency in food. There are two major components of food security in our country, (a) Buffer Stock and (b) Public Distribution System (PDS).

Food Corporation of India (FCI) procures and maintains the stock of foodgrains. FCI procures foodgrains at the minimum support price (MSP) announced by the government from time to time. High MSP, subsidies in input and ensured FCI purchases have distorted the cropping pattern in the country.

PDS is a programme which provides foodgrains and some other items such as kerosene to the people at subsidised prices. There are two categories of consumers, (i) below poverty line (BPL) and (ii) above poverty line (APL). The issue price is different for each category.

Organic farming has been taken up widely in India today. Its product is in great demand in international market. It is practised without factory made chemicals such as fertilisers and insecticides. Hence, it does not spoil physical environment.

Diversification of Indian agriculture is the need of today. Indian farmers have to grow high-value crops like fruits, vegetables, flowers, bio-diesel crops (jatropha and jojoba) and medicinal herbs. These crops increase the income of the farmers and are eco-friendly as well. The crops also need much less irrigation than other crops. India's diverse climate will be helpful in growing a wide variety of high -value crops. Israel, Italy and Chile have succeeded in their effort of diversification in agriculture.

The most important impact of globalisation on agriculture was liberalisation. According to the policy of liberalisation there is no ban on the export of farm products except cotton and onion.

## EXERCISES

**1. Choose the correct answer out of the given four options :**

**(i)** Which one of the following is a kharif crop?

(a) Wheat (b) Gram

(c) Cotton (d) Watermelon

**(ii)** Which crop is known as the golden fibre?

(a) Cotton (b) Jute

(c) Hemp (d) Silk

**(iii)** Which of the following belongs to institutional reforms in agriculture?

(a) Quality seeds (b) Crop Insurance

(c) White revolution (d) Chemical fertilisers

**(iv)** Why is organic farming practised widely in India?

(a) Little use of fertilisers

(b) Highly profitable.

(c) Easy farming method

(d) Environment-friendly.

**2. Give answer to each of the following questions in about 40 words :**

**(i)** What is plantation agriculture?

**(ii)** Where is shifting cultivation practised in India?

**(iii)** Which crops enjoy predominant position in Indian agriculture?

UNIT

# VII MANUFACTURING INDUSTRIES

We need food, clothes, medicines, fans, cars, etc. These are manufactured in various industries. Production of goods after processing from raw materials to more valuable products is called manufacturing. Sugar is manufactured from sugarcane and aluminium from bauxite. Manufacturing industries help in modernising agriculture, the backbone of our economy, and provide many people employment in secondary and tertiary sectors. Agriculture and industry move hand in hand. Export of manufactured goods encourages trade and brings in foreign exchange. In modern times industries have become a very important part of our national economy. Industry can take us to a better quality of life. India's prosperity lies in increasing and diversifying its manufacturing industries. After Independence, the Government of India laid emphasis on industrial development under Five Year Plans.

For rapid industrial development, the government introduced some reforms in industrial sector. The New Industrial Policy (1991) is one of them. Since this policy has abolished the system of industrial licensing, some industries need not take any prior sanction from the government. This opened the industries to private sector which had been reserved for public sector. Private sector participation is sought in construction of roads, setting of up power plants and manufacture of defence equipment. Private companies can increase their capacity to produce the goods. Another reform is the invitation of Foreign Direct Investment (FDI) in specified industries. It would result in technological upgradation as well as establishing large scale industries to bring down prices.

In the present day world of globalisation, our industry needs to be more efficient and competitive. Our manufactured goods must be at par in quality and price with those in the international market. Only then, we will fetch foreign exchange and be able to compete in the international market. You may ask your teacher to understand the new terms like Liberalisation, Privatisation and Globalisation (LPG).

## CLASSIFICATION OF INDUSTRIES

Industries are classified in different ways.

### (i) Based on source of raw materials :

(a) **Agro–based Industries** – These are based on agricultural products, e.g. cotton textiles, sugar, tea, coffee, food processing, edible oil industries, etc.

## SPATIAL DISTRIBUTION OF INDUSTRIES

Spatial distribution of industries refers to distribution of industries over land area of the country. It is observed that industries are not evenly distributed in India. Industries get concentrated in certain regions offering locational advantages. Factors affecting location of industries are availability of raw material, capital, labour, power and market. It is rarely possible to find all these factors available at one place. Consequently, manufacturing industries tend to locate at the place where cost of production and transportation are the least. Early establishment of industries and government policies also influence the location of industry.

**Do you know ?**

**There are some industries termed as footloose. They do not depend on any factor affecting location of industries.**

Industrialisation and urbanisation go hand in hand. Cities provide services such as banking facilities, transport, insurance, labour, consultants, etc., to the industry. So many industries tend to come together to make use of these advantages known as **agglomeration economies**. Thus, there develops a large industrial agglomeration.

## AGRO–BASED INDUSTRIES

### Textile Industry

The textile industry includes cotton, jute, woollen, silk and synthetic textiles. It occupies a unique position in the Indian economy because it contributes to industrial production, foreign exchange earnings and provides employment to 35 million persons directly.

### Cotton Textiles

Cotton textile industry is one of the oldest industries in India. In modern period, the first successful textile mill was established in Mumbai in 1854. After independence this industry flourished. In 1998, India had 1782 mills, of which 80 per cent was in the private sector and the rest in the public and co-operative sectors. The industry has a close link with agriculture and provides a living to farmers. It also provides livelihood to workers engaged in ginning, spinning, weaving, dyeing, designing, packaging and tailoring. It supports many other industries, such as chemicals, dyes and other village industries. It is one of the biggest foreign exchange earners with high value added products.

India exports cotton yarn to Japan, East European countries, U.S.A., U.K., Nepal, Singapore and Sri Lanka. It accounts for one-fourth of the total cotton yarn trade in the world. However, in garments India's share is only 4 per cent of the world's total. Our spinning mills are competitive at the global level and capable of using all the fibres we produce. The weaving and processing units do not use much of the high quality yarn produced in the country. As a result, many spinners export cotton yarn while garment manufacturers

Maharashtra and Gujarat lead the country in cotton fabrics. Mumbai is the oldest centre of cotton textile industry in India. Mumbai is known as **Cottonopolis** of India. Early start, long staple cotton from Gujarat and Maharashtra, facilities of port, easy import of machinery, humid climate, financial centre, cheap labour and large market are the factors that have led to the localisation of this industry in Mumbai. Other centres in Maharashtra are Sholapur, Pune, Nagpur and Amravati. Ahmedabad is the largest producer of cotton textiles in India. It is known as the **Manchester of India**. Surat, Vadodara, Bhavanagar and Jamnagar are other main centres in Gujarat. Other cotton textile centres are Bhopal, Indore, Gwalior (M.P.), Chennai, Coimbatore, Madurai, Salem and Tirunelvelli (Tamil Nadu), Kolkata and Hugli basin (West Bangal) and Kanpur, Moradabad, Agra and Modinagar (Uttar Pradesh).

### Jute Textiles

After partition in 1947, most of the mills remained in India but three-fourth of the jute growing area went to Bangladesh. Today, India ranks number one in raw jute and jute goods production. There are about 79 jute mills in India. Most of these are located in West Bengal, mainly along the banks of the Hugli, in a belt of 98 km long and 3km wide. The reasons for the concentration of jute mills in the Hugli basin are – nearness to the jute growing area, inexpensive water transport with a good network of roadways and railways, ample water for retting the jute, cheap labour and facilities of port, banking and insurance provided by Kolkata. Over 80 per cent of jute goods is produced in West Bengal. Andhra Pradesh contributes about 10 per cent of production. India exports jute goods to U.S.A., Canada, Russia, United Arab Republic, U.K. and Australia.

Challenges faced by the industry include declining demand for jute bags, high cost of manufactured goods, stiff competition in the export market from Bangladesh, Philippines, Brazil, Egypt and Thailand. The industry also faces competition from synthetic substitutes which are stronger and cheaper. Some steps have been taken to solve problems of jute industry. The government made it mandatory for various types of mills particularly that of foodgrains and sugar to use jute products in packing. In 2005, National Jute Policy was formulated with the objectives of improving quality, making a variety of new products, ensuring good prices to farmers and increasing the yield per hectare.

### Woollen Textiles

Woollen textile industry is located at Amritsar, Dhariwal and Ludhiana in Punjab; Agra, Mirzapur and Kanpur in U.P.; Gwalior in M.P. and Jamnagar in Gujarat. These centres account for 50 per cent of India's total production. Panipat and Gurgaon in Haryana, Bikaner and Jaipur in Rajasthan, Srinagar in Jammu and Kashmir are other centres of woollen industry. This industry is not well developed in India. Tropical climate and low quality of indigenous wool hinder the progress of this industry. We import good quality wool from Australia to produce fine woollen items.

bamboo, sabai grass, cotton, jute, bagasse etc. for paper making. Waste paper and rags are also recycled to produce paper. There are 700 paper mills in the country producing about 7 million tonnes of paper annually.

West Bengal is the largest producer of paper in India. The main centres are Titagarh, Raniganj, Naihati and Kolkata. Bamboo from Assam and Sundarban Delta, grass from Bihar, coal from Jharia and Raniganj, clean water from Hugli river, large market, and cheap transport are the favourable conditions for the localisation of this industry in West Bengal. In Uttar Pradesh paper mills are located at Saharanpur, Meerut, Lucknow and Kanpur. Other paper mills are scattered in Maharashtra, Odisha, Bihar, Karnataka, Madhya Pradesh and Haryana.

Newsprint is the paper on which newspapers are printed. There is a newsprint mill at Nepanagar in Madhya Pradesh. New plants have also come up in other parts of the country. The total newsprint production is about 1 million tonnes. However, India imports large amount of newsprint to meet the heavy demands at home.

## MINERAL BASED INDUSTRIES

### Iron and Steel Industry

The iron and steel industry is called the basic or key industry because several industries depend on it for their machinery. Steel is used to manufacture tools, implements, engineering goods, industrial machines etc. The production and consumption of steel is the index of the economic development of a country.

Iron and steel is a heavy industry because all the raw materials as well as finished goods are heavy and bulky. The raw materials required for the industry are iron ore, coking coal and limestone in the ratio of 4:2:1 and some quantities of manganese and dolomite. All these raw materials are weight losing. Therefore, the best location for the iron and steel plants is near the source of raw materials. The Chotanagpur region has the maximum concentration of iron and steel industries. It is because the region has certain advantages such as good quality raw materials in proximity, cheap labour, nearness to Kolkata port and growth in the home market.

In India, there are 10 integrated steel plants. An integrated steel plant handles everything in one complex – from putting raw materials to steel making and shaping. Out of these, the Tata Iron and Steel Company is in private sector and the remaining nine are in public sector. In 1973, Steel Authority of India Limited (SAIL) had been established for the better management of steel plants. All public sector undertakings market their steel through SAIL, while TISCO markets its produce through Tata Steel. Some of the public sector plants were set up in collaboration with foreign countries.

**Bhilai Steel Plant, Chhattisgarh :** It was established with the help of Russia. This plant gets iron ore from Dhalli Rajhara hills, coal from Korba and Jharia, manganese from Balaghat and limestone from Nandini deposits.

**Rourkela Steel Plant, Odisha :** It was set up with the help of Germany. It gets iron ore from Bonaigarh, coal from Jharia and Raniganj and limestone from Birmitrapur.

**Durgapur Steel Plant, West Bengal :** It was built with the help of Great Britain. It gets iron ore from Singbhum, coal from Raniganj, limestone from Gangpur and water from river Damodar.

**Bokaro Steel Plant, Jharkhand :** It is the largest steel plant in India. This plant was established with the help of Russia. It obtains iron ore from Noamundi, coal from Jharia and water from river Damodar.

**Vishakhapatnam Steel Plant, Andhra Pradesh :** This is the first port based plant in India. Its coastal location is an advantage.

The other public sector steel plants are Salem Steel Plant, Tamil Nadu ; Indian Iron and Steel Company (IISCO), Kulti, Hirpur and Burnpur, West Bengal ; Vishvasarya Iron and Steel Limited, Bhadravati, Karnataka and Vijay Nagar Steel Plant, Karnataka.

Apart from these plants, there are more than 225 mini steel plants in India. Most of these use scrap and sponge iron as their main raw material, and processing is done in electric furnaces.

India is the ninth largest steel producing country in the world. It produces three varieties of iron and steel : pig iron, sponge iron and finished steel. In 2013 it produced 86.53 million tonnes of finished steel. Though the country produces large quantity of steel, per capita consumption is very low. Today, China is the largest producer as well as consumer of steel in the world. In 2004, India was the largest exporter of steel and accounted for 2.25 per cent of world trade. India also imports high quality steel from other countries. The policy of liberalisation and Foreign Direct Investment has given an incentive to the iron and steel industry with enthusiasm from private entrepreneurs.

## Aluminium Industry

Aluminium smelting is the second most important metallurgical industry in India. Six tonnes of bauxite and 18,600 Kwh of electricity are needed to produce just one tonne of aluminium . Availability of bauxite and regular supply of electricity at cheaper cost are the two main factors for the location of aluminium industry.

There are 8 aluminium smelting plants in the country located in Orissa (Nalco and Indalco), West Bengal, Chhattisgarh, Uttar Pradesh, Maharashtra, Tamil Nadu and Kerala. The annual production from these plants is about 60 million tonnes.


*Fig. 7.3 – India : Software Technology Parks and Centres of Electronic Goods*

The government has established 18 **Software Technology Parks** in the country. The industry has made significant contributions in terms of employment generation. In 2008 the IT industry employed over 4 million persons. It is encouraging to know that 30 per cent of the workforce are women. Indian software industry is a major foreign exchange earner because of its fast growing **Business Process Outsourcing (BPO)** sector. In 2004-05, value of exports of Indian software and services sector was Rs. 78,230 crore. The software industry has surpassed electronic hardware production. A large number of Indian software companies have acquired international quality certification. The continuing growth in the software and hardware is the key to the success of IT industry in India.

## A CASE STUDY

Industrailisation leads to environmental degradation. Kanpur is one of the major industrial towns in India. It houses a large number of tanning industrial units in residential areas. More than 150 tannaries are located in the Jaiman area. The process of tanning has been changed from using bark or vegetable to chrome or chemical. This has greatly increased the pollution load in the area. Untreated effluents from tannaries have polluted the ground water as well as the Ganga river. The effluents discharged from the tannaries were ten times more poisonous than domestic sewage.

Households close to tannaries use the contaminated ground water for drinking and cooking. This affects the health of people and causes paralysis, cholera, dysentry and other infections in the area. The government has asked leather tannaries to have treatment plant to deal with hazardous effluents or to shift out the city.

## CONTROL OF ENVIRONMENTAL DEGRADATION

Environmental degradation caused by industrial activity can be reduced by adopting the following measures.

- ⇨ To treat hotwater effluents before releasing them in rivers and lakes.
- ⇨ To minimise use of water by reusing and recycling it.
- ⇨ To harvest rainwater to meet water requirements.
- ⇨ To prohibit over drawing of groundwater by industry.
- ⇨ To fit smoke stacks with electronic precipitators, fabric filters, wet scrubbers, inertial separators etc. for reducing release of particulate matter.
- ⇨ To fit silencers in machinery and equipments in order to reduce noise pollution.
- ⇨ To plant trees such as Ashok, Neem, Tamarind etc. around industrial sites for absorbing and dissipating sound.
- ⇨ To take legal measures e.g. environmental clearance for setting up new industries, enforcing Ozone Depleting Substances Rules, 2000.

# EXERCISES

**1. Choose the correct answer from the four options.**

**(i)** Which one of the following is the largest of cotton textile centre in India ?

(a) Mumbai (b) Ahmedabad

(c) Pune (d) Kanpur

**(ii)** Which one of the following industries uses bauxite as a raw material ?

(a) Iron and steel (b) Fertiliser

(c) Aluminium (d) Electronics

(iii) Give reasons why cotton textile industries are concentrated in Mumbai and Ahmedabad.

(iv) What factors are responsible for shifting of sugar industry towards South India?

(v) What are the reforms that have led to the rapid industrialisation of India ?

(vi) Suggest three measures to be taken to minimise industrial pollution of fresh water.

## Project work/Activity

1. **Find out the agro-based industries located in your area. Write about the raw materials they use, the goods they produce and the environmental norms followed by these factories.**

2. **Hold a group discussion with the help of your teacher on any one of the following:**

   (a) Industrialisation can eradicate poverty.

   (b) Importance of handloom industry in the economy of Manipur.

   (c) Harmful effects of environmental pollution.

3. **Solve the puzzle by following your search horizontally and vertically to find the hidden answers.**

| B | U | R | M | A | H | T | A | N | O | L | K | I |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E | N | T | G | A | L | U | M | I | N | I | U | M |
| N | G | P | M | G | O | S | P | M | C | U | B | A |
| S | U | G | A | R | S | I | M | L | A | T | A | U |
| O | K | A | P | O | L | L | U | T | I | O | N | P |
| C | H | N | G | B | O | K | A | R | O | L | G | E |
| T | A | G | M | A | K | A | N | P | U | R | A | T |
| U | N | O | I | S | E | R | I | T | I | N | L | R |
| G | D | A | F | E | R | A | W | W | M | E | O | O |
| L | S | C | I | D | U | R | G | A | P | U | R | L |
| O | A | O | B | I | H | A | R | T | H | O | E | E |
| C | R | A | R | A | N | C | H | E | A | R | N | U |
| K | I | L | E | C | O | A | L | R | L | E | C | M |

1. A product obtained from bauxite.
2. The main product obtained from sugarcane.
3. Degradation of environment with harmful effects on living organisms.
4. Site of steel plant in public sector in Jharkhand.

UNIT

# VIII

# DISASTER MANAGEMENT

## DISASTER

A disaster is a terrible event that occurs unexpectedly and causes great loss of life, property and environment. It is a sudden accident that may cause displacement of a great number of people living or working in an area. It leaves a trail of death and destruction. It may be cyclone, drought, flood, earthquake, fire, war, tsunami, traffic accident, nuclear accident and communal riot.

Disaster can broadly be divided into two groups, viz., natural disaster and man-made disaster. While natural disasters are caused by the force of nature, man-made disasters are the result of human error and negligence.

## HAZARD

Hazard is a dangerous natural or man-made condition that could cause injury, loss of life, damage to property or environment. It is a risk or something that can cause harm. For example, garbage and refuse piled up in some streets of Imphal are health hazards.

Natural hazards include earthquakes, volcanic eruptions, tsunamis whereas socio-natural hazards include floods, droughts, fires and landslides as they are caused by both natural and man-made factors. Man-made hazards are mostly connected with industries and factories. Many hazards are now predictable.

There are several types of hazards which are of widespread concern to us. Hazards are also classified as follows :

**(i) Sudden onset hazards –**
earthquake, volcanic eruption, tropical cyclones, floods, tsunamis, avalanche, landslides.

**(ii) Slow onset hazards –**
drought, famine, environment degradation, desertification, pest infection.

**(iii) Epidemics –**
water or food borne diseases, vector-borne diseases, contagious diseases.

**(iv) Industrial or technological accidents –**
fire, explosion, system failures, chemical leakage or spillage.

Disasters and hazards are very closely related. In fact, hazard is a threat while disaster is a consequence of a hazard.

**Do you know?**

**The Richter scale (0-9) indicates the magnitude or strength of an earthquake. It was invented by Charles F. Richter in 1935. No quake higher than 8.9 has been recorded.**

In India, the foothills of the Himalayas, the north-eastern states including Manipur and the Ganga-Brahmaputra basin are included in very high risk zone and hence prone to earthquake. A major earthquake hit the Bhuj area of Gujarat on 26 Jan., 2001. Several towns were turned into mounds or rubble and about 1,00,000 persons lost their lives. The earthquake that hit Kashmir in 2005 left three million people homeless.

**(iii) Floods** – Floods occur when a river overflows its banks and the water submerges the surrounding areas. They are caused by excessive rainfall, silting of the river beds, changes in the river courses, tsunami, dam bursts and deforestation.

India is facing floods almost every year. The northern plain is mostly affected by floods. Of the total damage caused by floods, almost three-fourth is to crops and the rest is to properties such as houses, roads, railways and communication lines. For example, the devastating flood in Odisha in 2001 affected more than 15,000 villages and damaged more than two lakh houses.

**(iv) Droughts** – Drought refers to a long period of time when there is little or no rain. Deficient rainfall causes drought which results crop damage and fodder scarcity. Droughts cause deaths by starvation and thirst. Rajasthan, Gujarat, Karnataka, Chhattisgarh, Maharashtra and Odisha face the problem of water scarcity. In 2001, Rajasthan was hit by drought which affected about four crore people.

**(v) Tsunami** – Tsunami refers to a large ocean wave generated by an undersea earthquake. It may travel hundreds of kms across the deep ocean, reaching speeds of about 800 km per hour. On entering shallow coastal waters, the wave begins to grow rapidly. When the wave approaches the shore, it becomes a towering wall of water of about 15 metre high and destroys entire coastal settlements. On 26 December, 2004 a tsunami caused catastrophic floods in Indonesia, India, Sri Lanka, Myanmar, Maldives, Malaysia and parts of Africa. More than 283,100 people died.

**(vi) Landslides** – Landslide is a sudden fall of a mass of earth and rock down a slope or a mountain side under the influence of gravity. Human activities increase both the frequency and damage done by landslides. The effects of landslides are great. They block and bury roads, lines of communication, settlements and agricultural lands. Sometimes, they cause floods by damming water bodies. In 1993, forty people died and over 600 families were shifted to safer places in the landslides of the Nilgiri hills (Tamil Nadu).

## DISASTER MANAGEMENT AND MITIGATION

Disaster may occur but we don't know when, where and in which form it may occur. We can not prevent a disaster but can mitigate the impact of disaster by being prepared for it. Disaster management is a process which consists of steps to be taken before, during and after a disaster so as to reduce the suffering and damage caused by it. These steps include forecasting of disaster, management activities, monitoring of disaster causing agents, medical care, help of food, clothing, shelter to the affected people, etc.

India is among the most disaster prone countries. It has set up the National Disaster Management Authority (NDMA) in December 2005. The Authority takes responsibility for the formulation and execution of effective policies, plans and guidelines of disaster management. The National Institute of Disaster Management and the National Disaster Response Force have been established recently. The government has also issued a list of Do's and Don'ts for the people in the disaster prone areas. The Manipur State Disaster Management Authority set up under the Disaster Management Act, 2005 is taking up certain measures in the state.

When disaster occurs, affected people have to take the necessary steps to cope with the same. So, people should be trained for such events and prepared to act promptly in an organised manner. The preparation should be at (i) the Government level, (ii) the community level, and (iii) the individual level.

**(i) Preparedness at the Government level :** The Government should –

- **(a)** provide shelter, food, clothing and medicines during disaster.
- **(b)** set up forecasting and warning centres of cyclones, tsunamis, floods, etc.
- **(c)** train officials to respond quickly during disasters.
- **(d)** build levees, embankments and dams for flood control, and plant trees in coastal areas for mitigating storm.
- **(e)** enforce laws, regulations and ordinances in disaster prone areas such as compulsory construction of earthquake-resistance houses, checking of building plans by the Municipality, provision of fire extinguishers at public places, and control over terrorists with laws.
- **(f)** prepare long term plans. e.g. prepartion of the 3-phase programme for flood control by the government during the period 2008-2025.

**(ii) Preparedness at the Community level :** During and after a disaster, it is the people of the community who respond first. The community as a whole should be prepared for disaster management in the following ways–

- **(a)** The community should act together as a team to reduce the vulnerabilities.
- **(b)** People should aware of the local hazards that cause disaster and find out coping mechanism to deal with the same.
- **(c)** A local committee should be formed by the community for relief operations and others.

**(v)** The disaster in Bhopal in 1984 was caused by

(a) a nuclear accident.

(b) a terrorist attack.

(c) an industrial accident.

(d) a traffic accident.

**2. Answer the following questions briefly.**

**(i)** What are natural disasters ?

**(ii)** What is disaster management ?

**(iii)** Why is terrorism considered as a disaster ?

**(iv)** How much area of India is prone to floods ?

**(v)** Name two human activities that induce earthquake.

**3. Distinguish between**

**(i)** Disaster and hazard

**(ii)** Nuclear Winter and Dirty Bomb.

**4. Classify the following into natural and man-made disasters.**

Train accident, forest fires, avalanche, global warming, air crash, tsunami, landslides, cold wave, earthquakes, cyclones.

**5. Answer the questions in about 150 words each.**

**(i)** What man-made hazards can you identify in your city or area ? Which of them may result in a disaster?

**(ii)** What steps should a community take up to mitigate a disaster ?

**(iii)** Mention some effects of landslides on humans.

**(iv)** Describe how families and individuals should prepare for disasters.

**(v)** Write an account of the extent of vulnerability to various types of natural disasters in India.

## Project work/Activity

**1.** Prepare a school disaster management plan for various hazards like fire, earthquake and floods. The class teacher may divide the students in groups and help them in preparing the plan.

**2.** Prepare a list of questions that you want to ask to the expert of the Manipur State Disaster Management Authority who is delivering a lecture on disaster management in your school.

**3.** Make a list of at least 10 safety measures for fire prevention in home.

********

**(i) Super Highways (Expressways) :** The major objective of the Super Highways is to reduce the time and distance between the mega cities of India. Some Expressways are built under the scheme called BOT (Build, Operate and Transfer). These highways are taken up by the National Highways Authority of India. The chief roads under this scheme are :

**Do you know ?**

**Under the BOT scheme, the government has opened road building to the Private Sector. The private companies will bear the cost of construction, operate roads and collect toll taxes. They will realize costs, earn profit and after a certain number of years transfer the roads back to the government.**

**(a) Golden Quadrilateral** – This six-lane Super Highway will connect the four megapolis of Delhi, Mumbai, Chennai and Kolkata and will have a length of 5,846 km.

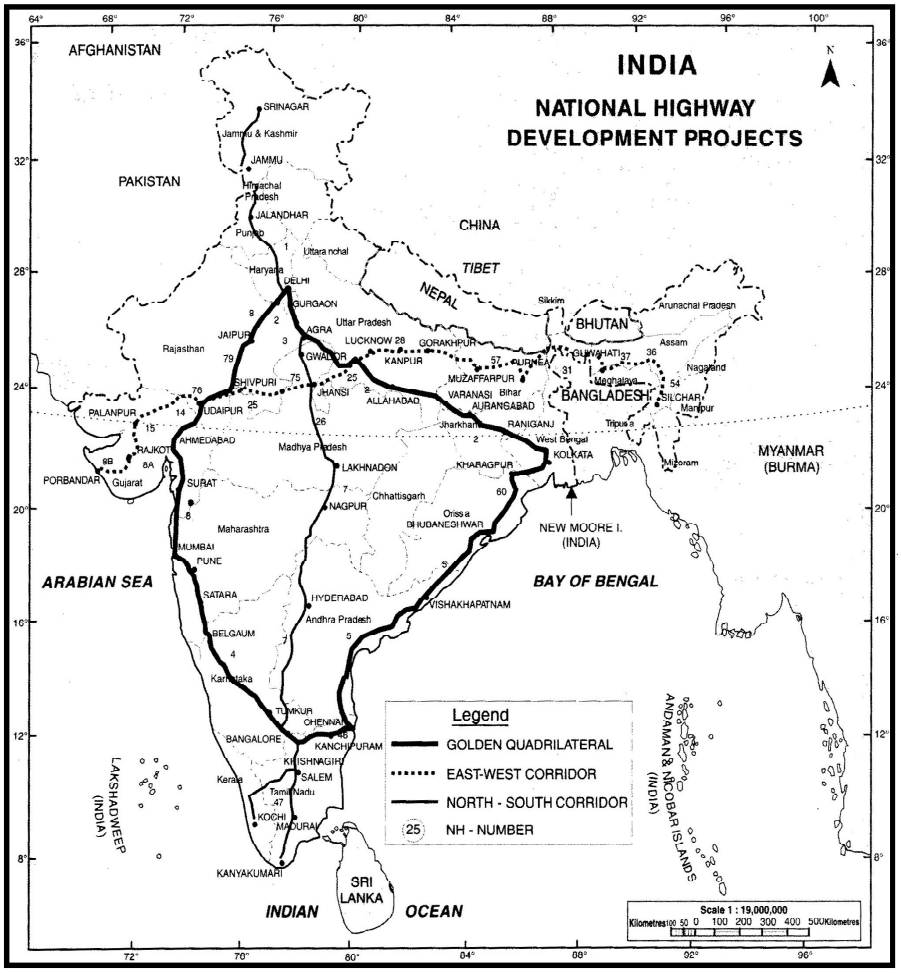


*Fig. 9.1 India – National Highway Development Projects*

## RAILWAYS

The first railway line was constructed between Mumbai and Thane in 1853, covering a distance of 34 km. The Indian Railways have a route length of nearly 64,000 km. with a fleet of 8,593 locomotives, 51,030 passenger service vehicles, 6,505 other coaches and 2,19,931 wagons as on March 2010. The railways have three gauges, viz, **Broad gauge** (1.676 m), **Metre gauge** (1 m) and **Narrow gauge** (0.762 m and 0.610m). The different gauges create many hindrances. Therefore, efforts are being made to convert the Metre and Narrow gauges to Broad gauge. Moreover, steam engines have been replaced by diesel and electric engines. This step has increased the speed and the haulage capacity.

The network of Indian Railways is divided into 16 zones. They are Central (Headquarters, Mumbai CST), Eastern (Headquarters, Kolkata), East Central (Headquarters, Hajipur) , East Coast (Headquarters, Bhubaneshwar), Northern (Headquarters, New Delhi), North Central (Headquarters, Allahabad), North Eastern (Headquarters, Gorakhpur), North East Frontier (Headquarters, Maligaon), North Western (Headquarters, Jaipur), Southern (Headquarters, Chennai), South Central (Headquarters, Secunderabad), South Eastern (Headquarters, Kolkata), South East Central (Headquarters, Bilaspur), South Western (Headquarters, Hubli), Western (Headquarters, Mumbai Church Gate) and West Central (Headquarters, Jabalpur) Railways. Such a division facilitates travelling throughout the country. Moreover, **metro rail** in Kolkata and Delhi has revolutionised the urban transport system.

Indian Railways is the largest government undertaking in the country. They employ about 18 lakh workers and carry more than 888 million tonnes freight. About 95 per cent of freight traffic and 70 per cent of passenger traffic in India is carried by railways. For the railways, goods traffic is far more important than passenger traffic. Each day 18,000 trains carry 13 million passengers.

The distribution pattern of the railway network in India has been influenced by physiographic, economic and administrative factors. The northern plains with their vast level land, high density of population, advanced agriculture and developed industries favour the growth of railways. In the hilly terrain of the peninsular plateau, railway tracks are constructed through low hills and tunnels. The Himalayan regions are unfavourable for the construction of railway lines due to deep gorges, sparse population and undeveloped economy. Likewise, it is difficult to construct railway lines in desert regions of Rajasthan, the swampy regions of Gujarat and densely forested parts of Madhya Pradesh, Chhattisgarh, Jharkhand and Odisha. The Sahyadri could be crossed only through gaps or passes. The Konkan Railway is an engineering marvel that has been developed between Mumbai and Mangalore along the west coast.

Railways remain the main means of transport for the masses. They bind the economic life of the country and accelerate the development of industry and agriculture. Today, the railways have become more important in our national economy than all other means of

Kandla is a tidal port. It caters to the needs of export and import of a vast hinterland. Mumbai is the largest sea port of the country and has a well-sheltered and large natural harbour. Jawaharlal Nehru port was developed on the island of Nhava Sheva with a view to decongest the Mumbai port. Marmagao (Goa) is the premier iron ore exporting port of the country. New Mangalore port caters mostly to the needs of foreign trade of Karnataka. Kochi port lies at the opening of a lagoon and has a natural harbour with deep waters.

Tuticorin in Tamil Nadu is a modern port and has a natural harbour. Its hinterland includes Tamil Nadu and even our neighbouring countries like Sri Lanka, Maldives, etc. Chennai is an old artificial port. To relieve congestion at Chennai, a new satellite port has been developed at Ennore. Vishakhapatnam is the deepest and the safest port in India. Paradip port located in Odisha mainly handles the export of iron ore. Kolkata is a riverine port situated on the Hugli river, 148 km from the sea. It has a vast and rich hinterland spreading over Ganga-Brahmaputra basin.

**Do you know ?**

**Hinterland is the region served by a port from where items of export are collected and to which items of import are distributed.**

## AIR TRANSPORT

Air transport is the fastest mode of transport. Difficult terrain like mountains, forests and deserts can be easily connected by air services. Air travel is the most important means of transport in the north-eastern states of India where difficult terrain, frequent floods and landslides restrict the use of different means of surface transport. India has at present 14 international airports and 436 domestic airports.

The air transport in India is managed by two corporations, **Air India** , **Indian Airlines** and other private companies. Now Indian Airlines is known as **Indian** with effect from December 8, 2005.

### Air India

Air India provides both international and domestic air services. It operates 173 flights per week serving 59 (both international and domestic) stations. More than half of the total air traffic is handled only at Delhi and Mumbai.

### Indian

Indian provides mainly domestic flights. It operates to 55 domestic and internaltional stations. Its service has been extended to Kathmandu, Kuala Lampur, Singapore, Colombo, Dhaka, Male, Kuwait, Dubai, Sharjah and Karachi. In 2011, domestic movement involved 33.6 million passengers.

### Private Air service providers

There are many private companies that are operating on domestic as well as international air routes in the country. Among them, Jet Airways, Jet Konnect, Spice-Jet, Indigo, Kingfisher, Air Sahara etc are worth mentioning. Out of these Jet Airways and Air Sahara are operating both domestic and international flights.

communication can broadly be divided into two categories, viz, personal communication and mass communication. Personal communication includes postal network, telecommunication and internet communication. Mass communication consists of print media and electronic media.

### Personal communication

The Indian postal network is the largest in the world. It handles postcard, inland letter, envelope, parcel, etc. Now most of the **First Class Mail** consisting of cards and envelopes are airlifted. The **Second Class Mail** consisting of books, periodicals and registered letters are sent by road or rail transport. In large towns and cities, six types of collection points have been introduced. They are called Rajdhani Channel, Metro Channel, Green Channel, Business Channel, Bulk Mail Channel and Periodical Channel.

India has one of the largest telecom networks in Asia. More than two-third of the villages in India have been covered with Subscriber Trunk Dialling (STD) telephone facility. Besides the landline telephone, there is the mobile phone service called Global System for Mobile (GSM). In 2006, there are more than 100 million mobile phone customers in India.

The internet is a network of computer, linking world-wide. The network through internet and e-mail provides an access to information at a low cost. There are millions of internet subscribers in India. You might have noticed a number of cyber cafes in urban areas.

### Mass communication

India publishes a large number of newspapers and periodicals and the total number is about 82,237 in 2011. The newspapers are published in about 100 languages and dialects. Largest number of newspapers are being published in Hindi followed by English and Urdu.

The electronic media include films, radio, television and satellite. India is the largest producer of feature films in the world. All India Radio (Akashwani) broadcasts a variety of programmes related to information, education and entertainment in national, regional and local languages. Doordarshan, the national television channel of India, serves about 87 per cent of the total TV owning households and is one of the largest terrestrial networks in the world. It telecasts various programmes of entertainment, education, sports etc. for people of different age groups.

## INTERNATIONAL TRADE

The exchange of goods among people, states and countries is called trade. The place where such exchange takes place is called market. Local trade is carried on in cities, towns and villages. State level trade takes place between two or more states. Trade between two countries is called **international trade**. Trade routes may pass through land, sea and air. Advancement of international trade of a county is an index to its economic development. Therefore, international trade of a country is known as its Economic Barometer.

No country has all the required resources and can produce everything. Hence, international trade is necessary. The components of trade are export and import. The **balance**

(c) Pipeline transport (d) Water transport

**2. Answer the following questions in about 40 words.**

**(i)** Name the major ports of India located on the west coast.

**(ii)** What are National Highways ?

**(iii)** What industrial raw materials do pipelines carry?

**(iv)** Mention the three languages in which the largest number of newspapers are published in India.

**(v)** Explain the meaning of hinterland.

**(vi)** What are the two major public sector undertakings that manage the air transport in India ?

**(vii)** Why is a good network of transport necessary in India?

**(viii)** Name four means of communication.

**(ix)** Name the cities where metro rail is being operated.

**(x)** What is the purpose of developing the Ennore port?

3. What is meant by BOT scheme of roads construction?

4. Why is air travel preferred to in the north-eastern states of India ?

5. Who constructs the border roads and what is the significance of these roads ?

**6. Answer the following questions in about 150 words.**

**(i)** Discuss the importance of the railways in the economy of India.

**(ii)** How do physiographic and economic factors influence the distribution pattern of Indian railway network ? Explain with examples.

**(iii)** Explain how road transport has an edge over railway transport.

**(iv)** Write an account of any five major seaports located in the eastern coast of India.

**(v)** Give a brief account of the international trade of India.

**(vi)** Explain the importance of mass communication in India.

## Project work/Activity

1. **Make a list of the fourteen international airports of India along with the cities where they are located. Show the location of these airports on the map of India.**
2. **List the names of five important places each along the National Highway No. 2 and No. 37.**
3. **Enumerate the facilities that Indian Railways provide to the passengers.**
4. **Name the nearest domestic and international airports from your place. What activities are going on in the domestic airport for its upgradation ?**

********

The role of the forests is threefold, i.e., protective, productive and aesthetic, each being equally important. The state has a vast area of forest covering as much as 16,990 sq.km. which forms about 76 per cent of the total. Based on the legal status, the forests are categorised as reserved, protected and unclassed forests. Reserved forest is meant either for the production of timber or other forest produce. In this forest type, grazing and cultivation are not allowed. In the case of protected forest, grazing and cultivation are allowed subject to a few restrictions. Unclassed forest consists largely of inaccessible forest or unoccupied waste land. In 2012-13, the distribution of reserved forests, protected forests and unclassed forests was 8 per cent, 24 per cent and 68 per cent respectively. The area under crops and grazing lands within the forests are generally included under the forest area.

With a view to maintaining ecological balance, the Government has restricted the felling of trees in the forest areas. The important major forest products are teak and other timbers, fire-wood and charcoal. The estimated production of teak in 2005-06 is 287 cubic metre valued at about Rs. 7 lakhs. Other timber species available in Manipur are Uningthou, Pine, Khangra, Leihao, Tolhao, Tairen, etc. They are suitable for furniture and construction purposes. The important minor forest products are cane, thatching grass, bamboo, cardamom, agar, cinnamon and broom. Table 10.1 shows the production of major and minor forest products in the state.

Table 10.1 – ***Forest production of Manipur***

| Products | Unit | 2004-05 | 2005-06 | 2013-14 |
|---|---|---|---|---|
| Teak | Cubic metre | 149.16 | 286.65 | – |
| Timber other than teak | Cubic metre | 3,174.22 | 8,784.84 | 5,216.80 |
| Firewood | Tonne | 16,624.51 | 23,960.85 | 20,662.82 |
| Charcoal | Quintal | 1,550.00 | 777.00 | 400.00 |
| Cane | Metre | 6,29,000.00 | 1,57,000.00 | 1,04,900.00 |
| Thatching grass | Bundle | 5,356.00 | 5,625.00 | – |
| Bamboo | No. | 7,16,320.00 | 8,87,470.00 | 21,11,420.00 |
| Broom | Kg. | 3,86,600.00 | 3,83,800.00 | 3,12,360.00 |
| Cinnamon | Quintal | 17,600.00 | – | – |

***Source : Economic Survey, Manipur, 2014-15***

## Biodiversity

Manipur is physically adorned with micro climate and monsoon type of climate. It has a large number of flora and fauna. Regarding biodiversity, the north-eastern Himalayan region including Manipur is one of the **'hotspots'** in India. The state has a number of proposed biosphere reserves, like Yangoupokpi, Shiroi, Kailam, Khonghotenepu–Dzuko, Jial lake and Keibul Lamjao National Park where a number of wild plants and animals exist. The varieties of flora and fauna can be seen from the following table.

**Do you know ?**

**(i) A biosphere reserve is a multipurpose protected area. Wildlife as well as traditional life styles of tribals, varied plant and animal resources are protected in it.**

**(ii) A national park is dedicated to conserve the environment and wildlife therein. Forestry, grazing and cultivation activities are prohibited inside the park.**

**(iii) A wildlife sanctuary is dedicated to protect the wildlife. Killing, hunting or capturing of any animal is prohibited inside it.**

Manipur has vast potential of fisheries comprising lakes, swampy and marshy areas, ponds, tanks, rivers, low-lying paddy fields, etc. The largest source of fish is the Loktak lake. The swampy and marshy areas can be utilised for fish culture of various indigenous fishes such as Pengba, Ngaton, Khabak, Ngatin etc. The total area available for fishery in the state is around 56,461 hectares in 2009-10.

The estimated per capita requirement of fish is 11.44 kg per annum in Manipur. However, the production of fish is low. Table 10.4 shows that the total requirement of fish far exceeds the production. Large quantity of fish are being imported from other states every year to meet the heavy domestic demand. Such a demand can be eliminated by harnessing the vast fisheries of the state using advanced techniques of fish culture. This will enable us to export the surplus production.

Table 10.4 : ***Production and Requirement of Fish in Manipur***

| Year | Production (in '000 tonnes) | Estimated Requirement (in '000 tonnes) |
|---|---|---|
| 2007-08 | 18.60 | 27.50 |
| 2008-09 | 18.80 | 28.03 |
| 2009-10 | 19.20 | 28.57 |
| 2010-11 | 20.20 | 29.11 |
| 2011-12 | 22.20 | 28.86 |

***Source : Fisheries Department, Manipur 2011-12***

## MINERALS

Minerals provide a base for the rapid industrialisation. The Geological Survey of India (GSI) has undertaken survey for exploration of minerals in Manipur. So far 58 per cent of the total area has been covered by geological mapping and the remaining 42 per cent was supposed to be initiated during the Eleventh Five-Year Plan, 2007-12. The GSI has discovered valuable mineral deposits like limestone, serpentinite, copper, nickel, chromite, lignite, salt, asbestos, etc.

The state has made a good progress in rural electrification covering 2,258 villages during 2011-12 which is about 89 per cent of the total number of villages. The Manipur Renewable Energy Development Agency (MANIREDA) has electrified 93 villages in Henglep of Churachandpur district and one in Bishnupur district with Solar Home Lighting system. The state government has also started taking up micro hydel projects. They are Gelnel Stage II MHP, Tuipokpi MHP and Maklang MHP. Survey works for Small Hydro Electric Projects at Irang, Barak and Maklang-Tuyungbi have also been started.

## AGRICULTURE

Agriculture is the main occupation of the people of Manipur and plays a very crucial role in the economy of the state. It provides employment to about 52 per cent of the total workers in Manipur. The average size of agricultural land holding by a farmer is 1.15 hectares. Permanent cultivation is generally practised in the valley districts, while terrace cultivation as well as shifting cultivation is adopted in most of the hill districts. During 2012-13, the foodgrain production was 437.60 thousand tonnes and the requirement was 582.65 thousand tonnes thereby showing a shortfall of 127.28 thousand tonnes. The irregular and erratic behaviour of monsoon and inadequate irrigation facilities have resulted in fluctuations in agricultural production.

Rice is the staple food of Manipur and is grown in both the hill and the plain areas. It accounts for 98 per cent of foodgrains production and about 65 per cent of the total cropped area. Imphal East district is the highest producer of rice followed by Thoubal district. In 2012-13, the total production of rice was about 4.27 lakh tonnes.

Maize is the next important crop of Manipur. Ukhrul and Senapati districts are the two main producers of maize. It is sown in May and harvested in August and September. In 2012-13 the estimated area, the average yield and production of maize was 5.27 thousand hectares, 2454 kg per hectare and 11.10 thousand tonnes respectively.

Sugarcane is mainly cultivated in Thoubal district. It is planted in March and harvested in January and February. Area under sugarcane in the state has been gradually decreasing for the last eight years.

Pulses, oilseeds and cotton are the other crops of Manipur. In 2012-13 Pulses occupy about 5.70 per cent of the total crapped area and about 8 per cent is occupied by oilseeds. Production of oilseeds in 2008-09 was about 26 thousand tonnes. Cotton is of short staple type and its cultivated area is small as compared to other crops.

In recent years, cultivation of horticultural crops like pineapple, lemon, potato and vegetables are being developed on commercial scale in many places. In 2013-14, the average annual production of fruits, vegetables and spices were 5.16, 2.64 and 1.33 lakh tonnes respectively.

Plan period. Basically, this industry is a labour intensive family occupation.

In weaving there are many artistic designs such as Ningthou Phee, Lamthang Khulak, Khamen-chatpa, Moirangphee, Lashingphee, Hijamayek, Leirong, Akoibi, etc. The state is famous throughout India for its handloom products.

## SERICULTURE INDUSTRY

Sericulture is the next important cottage industry of Manipur. It has been practised from time immemorial. Mulberry silk worm rearing and reeling was confined to four villages, viz. Khurkhul, Leimaram, Pheiyeng and Thongjao. Later on, four varieties of silk worm, i.e., Eri ( feeds on castor leaves), Muga (feeds on Som and Soalu leaves), Oak Tasar (feeds on oak leaves) and Mulberry silk (feeds on Mulberry leaves) were developed. During 2013-14, the cocoon production in mulberry, eri, tasar and muga was 1056 tonnes, 441 tonnes, 120 lakhs and 32 lakhs respectively.

The State Government had taken up the Manipur Sericulture Project with assistance from JBIC, Japan in order to increase the production of silk yarn. The project has been implemented with an outlay of Rs. 490.59 crores since July, 1998. Plantation work up to 95 per cent has been achieved.

## HANDICRAFT INDUSTRIES

Handicrafts play an important role in the society because of their aesthetic values and importance in the customary functions. Among the handicrafts, making of doll and toys, kouna phak, dance costumes, cane and bamboo works, brass and bell metal works, pottery, stone works, wood works and jewellery are important. Making of gold ornaments is done by male workers.

## OTHER INDUSTRIES

Other industries of the state are food processing industry, which is a sunrise industry in Manipur, bamboo processing industry producing bamboo charcoal, Bamboo Blinds etc. and Electronics industry.

## TRANSPORT

After independence, there were rapid developments in the transport systems of Manipur. However, many parts of the state particularly in the hills still remain inaccessible.

**Roads** – In Manipur, roads have a special importance for its economic development. The total length of roads in Manipur by March 2005 was 8,648 kms of which 4,573 kms and 4,075 kms. were surfaced roads and unsurfaced roads respectively. These include National Highways, State Highways, Major District Roads, other District Roads and Inter Village Roads. The National Highway No. 2 connects Imphal with Dimapur (Nagaland) via Mao. Another National Highway No. 37, known as New Cachar Road, connecting Imphal with

**Airways** – Manipur has air links with Guwahati, New Delhi, Silchar, Aizawl and Kolkata. The service is operated by the public sector undertaking Air India, Indian and other private airlines. The importance of air transport is increasing day by day in the state as air transport is the only means at the time of landslides and other disturbances.

**Waterways** – The state has no navigable waterways. However, the Barak river is navigable on a very limited scale. The Loktak lake is also used as a waterway for movement of people and local products particularly between islands.

## COMMUNICATION

The system of communication in Manipur comprises both personal and mass communication services. In this state, postat service is mainly provided by India Post and private couriers. The Bharat Sanchar Nigam Limited (BSNL) and many private companies are operating to provide telephone and internet networks in the state. A number of news papers, journals, magazines, periodicals are being published in Manipuri, English, Hindi and several dialects. In electronic mass media the services of AIR and DDK, Imphal are reliable and trustworthy. The state also has a tremendous developement in indigenous films in recent years. It helps in providing good messages to the people.

## TRADE

The government has set up two Trade Centres, one at Moreh and another at Porompat. The **Indo–Myanmar Border Trade** was operationalised from April 1995. Under the Trade Agreement signed between India and Myanmar, exchange of 22 items (now subsequently increased to 60 items) have been allowed by the residents across the border. During the year 2004-05, the value of export and import was Rs. 615 lakhs and Rs. 527 lakhs respectively. The main items of export were wheat flour, soyabari, cumin seed, milk powder, dry buffallo offal, detonating fuse, bullet proof jacket and single rifle with telescope sight, while the import items were dry ginger,betel nut, turmeric powder, kuth roots, round hog and surpentina roots.

The border trade needs to be revised and increased due to the importance of the trade related issues of India's **Look East Policy** now renamed as Act East Policy with the countries of South East Asia. The policy aims at improving India-ASEAN relations.

# EXERCISES

**1. Choose the right answer from the four options.**

**(i)** The type of soil found in the Barak basin is

(a) Red sandy loam.

(b) Red clayey loam.

(c) Old alluvium.

(d) New alluvium.

**4. Give answer to each of the following questions in about 150 words.**

**(i)** Give an account of the forest types classified on the basis of legal status.

**(ii)** Write an account of the mineral resources of Manipur.

**(iii)** Describe the present position of power supply in Manipur.

**(iv)** Write an account of the two important cottage industries of Manipur.

**(v)** Manipur remains as an industrially backward state. Explain.

**(vi)** Describe the two important modes of transport in Manipur.

## Project work/Activity

**1. You know that Manipur has started production of food items like fruit juice, snacks, etc. in different factories in the last few years. Make a list of at least six factories engaged in production of foods along with their location and food quality.**

**2. Find out the reasons why wheat is not a staple food as well as a widely cultivated crop in Manipur.**

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UNIT XI

# EXERCISE ON DRAWING THE OUTLINE MAP OF INDIA AND FILLING DETAILS THEREIN

## MAP SKILLS

Each of the following questions pertains to a particular chapter or unit of the textbook. The teacher should ask students to draw the outline map of India and insert the details therein.

Stencils and templates of the outline map of India may be used by the students in their map drawing exercises. Labelling with appropriate signs on the map for the features asked is a must.

**1. Draw a full page outline map of India and insert therein the following.**

**(a)** Areas of black soil.

**(b)** Chambal river.

**(c)** One state in the north east where red soil occurs.

**(d)** Thar desert.

**2. Draw an outline map of India and mark on it the following.**

**(a)** Kaziranga National Park.

**(b)** Nilgiri Bio-reserve.

**(c)** States with 60 per cent and above forest areas.

**(d)** Areas of mangrove forest.

**3. Draw an outline map of India and indicate on it the location of the following.**

**(a)** Hirakud Dam.

**(b)** Areas of heavy rainfall.

**(c)** Krishna river.

**(d)** Indira Gandhi Canal.

**4. On the outline map of India, locate and label the features given below.**

**(a)** One iron ore producing region.

**(b)** Mumbai High.

**(c)** Hajira-Vijaipur-Jagdishpur Gas Pipeline.

**(d)** Kolar Gold Field.

**5. On the outline map of India, mark therein the location of the following.**

**(a)** Narora Nuclear Power Plant.

**(b)** Nagercoil.

**(c)** Bhakra Dam.

**(d)** Raniganj.

**6. On the outline map of India, locate and label the following features.**

(a) Coffee growing regions.

(b) Wheat growing areas.

(c) Jute producing areas.

(d) Areas of Green Revolution.

**7. Draw a full page outline map of India and mark therein the location of the following.**

**(a)** One silk textile industrial centre.

**(b)** Bhilai steel plant.

**(c)** Jaipur Software Technology Park.

**(d)** Hyderabad.

**8. Draw an outline map of India and show therein the location of the following.**

**(a)** Region affected by Tropical cyclones.

**(b)** Very high risk seismic zone.

**(c)** Flood prone areas in North India.

**(d)** Drought prone areas in the South.

**9. Draw an outline map of India, and locate and label the following features.**

**(a)** East-West Corridor.

**(b)** Inland Waterway between Allahabad and Haldia.

**(c)** Headquarters of South Central Railways.

**(d)** International airports of Punjab.

**10. Draw a full page outline map of India and mark therein the location of the following.**

**(a)** Jawaharlal Nehru Port.

**(b)** Barak river.

**(c)** Tipaimukh.

**(d)** Air route from Imphal to Kolkata via Silchar.

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## The French Revolution and the Growth of Nationalism

The greatest result of the French revolution was the destruction of the French monarchy and the feudal system, and the capture of the sovereignty of the state by a body of French citizens. The revolutionaries proclaimed that it was the French people who would henceforth constitute the French nation and determine their destiny. The French revolution introduced far reaching reforms which created a sense of collective identity of the French people. Their ideas of "La Patrie" (father land) and "Le Citozen" (citizen) were based on the nation of a united people enjoying equal rights under a constitution. They adopted many symbols of national unity. A new French flag, the Tricolour (Blue, White and Red) was adopted. The traditional Estates General was renamed the National Assembly, new anthems, oaths taken, martyrs commemorated all in the name of the nation. A centralized government, uniform laws for all citizens, internal custom laws were abolished. Uniform system of weights and measures was adopted ;regional dialects were discouraged ; the French as spoken and written in Paris became the common language of the French nation.

The Revolution also proclaimed that it was the mission and destiny of the French nation to liberate the peoples of Europe from despotism – to help other people to become nations.

## Liberal Nationalism

The ideology of liberalism was closely linked with nationalism. The term "liberalism" was derived from the Latin root "Liber", meaning free. Liberalism stood for freedom of the individual and equality of all before the laws. It was based on the concept of government by consent. Since the French Revolution, liberalism had stood for the end of autocracy, clerical privileges, a constitutional and representative form of government through parliament. In economic sphere, liberalism stood for the freedom of the markets and the abolition of the state imposed restrictions on the movement of goods and services. The economic liberalism was greatly demanded by the emerging middle class which was created by the industrial revolution and expanding colonial trade.

In 1815, Emperor Napoleon was defeated. The victorious European powers met at Vienna and concluded a settlement for Europe which was aimed at the destruction of what French Revolution and Napoleon stood for. The conservative forces were returned to power everywhere. The Bourbon dynasty was restored to France. New states based on the absolutist political system were created to surround France in 1815. The new conservative regime was against freedom and equality. Liberalism was suppressed. The liberal nationalists continued to fight against the absolutist rule which introduced strong censorship laws. The great issue taken up by the liberal-nationalists was the freedom of the press. Fear of the repression drove the liberal nationalists underground. Secret societies were formed to train revolutionaries and spread their ideas. They were to fight for liberty and freedom. They visualized that the creation of new nation-states was part of their struggle for freedom.

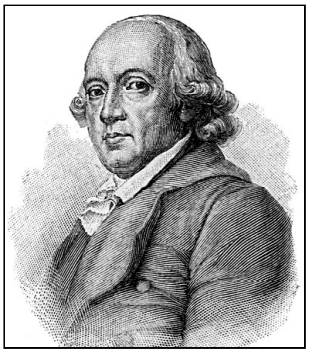
## 1.2 ROMANTICISM AND NATIONALISM

The gradual development of nationalism came out only through wars and territorial expansion. The age of revolution following the July revolution towards nationalism was not the mere handiworks of the statesmen and political leaders. But it was the community of poets, thinkers, musicians, men of science and letters who shaped the idea of freedom, unity of man and nations. Culture played a great part in creating the idea of nation, art, poetry, folk stories and music which expressed and shaped the nationalist feelings.

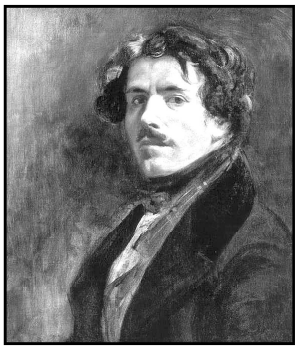
If nationalism was regarded as a child of the French Revolution, it was linked up with an intellectual movement called Romanticism. Romanticism is so broad and varried that, it defies a definition. Historically, romanticism was a reaction against the rationalism of the Enlightenment of the 18th century. The artists and poets were against the glorification of reason and science, and focussed on emotion, intuition and mystical feelings. According to the romantics, knowledge was the product of both innate feelings and external perceptions. In concrete terms, romanticism became a school of thought, attitude and behaviour relating to art, music, poetry and literature marked by feeling and intuitions rather than intellect or reason.

Romanticism stressed on individualism and the individual creativity that resulted from the interaction of the unique personality with external experience. It stressed on the inheritance of attitudes ; it also celebrated the past and that celebration was its link with the nationalists. Romanticism and nationalism were connected by their common belief that the past should be made to function as a means of understanding the present and planning for the future.

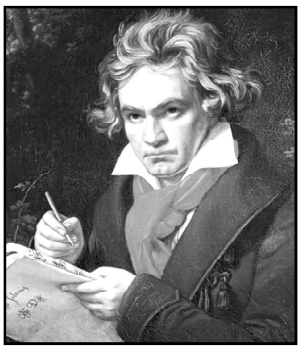
However, in the strict sense, the romanticists were not nationalists; romanticism was universal reflected in the celebration of nature and of individual creativity. Nature was best perceived not by reason but by the senses. They also believed that the human experience was not linked to one national tradition but rather to transcendental nature. Romanticists were internationalists because they enjoyed freedom from the confinement of any boundary, political or international boundaries which tended to restrict a person's ability to realize his or her potential.



*Johann Von Herder*



*Eugene Delacroix*



*Van Beethoveen*

*Fig. 1.2*

## Germany

A nationalist ferment was already growing in the 39 German states. An idea of Pan-Germanism was created by the writers, thinkers and artists. The German nationalists had visualized a nation state for the Germans with the French state as a model. When the revolution broke out in France, a large number of political associations whose membership was drawn from the middle class profession, businessmen and prosperous artisans gathered at Frankfurt and held an all German National Assembly in May, 1848. The parliament met at the Church of St. Paul. This was known as the Frankfurt Parliament (Fig. 1.3). The Parliament drafted a constitution for the German nation which provided for a constitutional monarchy. They offered the crown of all Germany to William IV, king of Prussia. The offer was rejected. The Prussian king hesitated and ultimately joined other European monarchs to suppress the elected representatives.

The aristocracy and the military opposed the Frankfurt Parliament. The Parliament was dominated by the middle class who were opposed to the demands of the workers and artists. The Parliament lost the support of the working class. Ultimately the army was called out and the Parliament was disbanded. The revolution of 1848 failed in Germany.

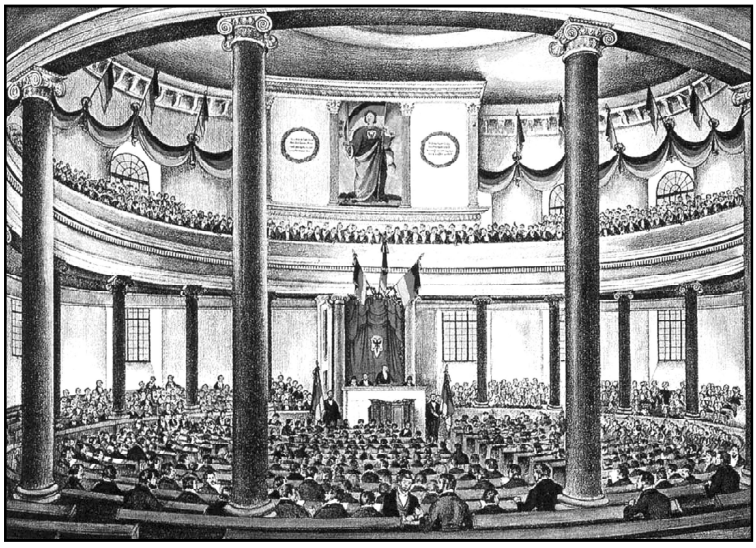


***Fig. 1.3 The Frankfurt Parliament***

## Austria – Hungary

There were five centres of revolution in the empire of Austria–Hungary.

In March, 1848, the first revolution broke out in Vienna. It was a popular and partly democratic. It demanded a constitution and freedom of press. The revolution compelled Metternich, the Chancellor of Austria and the architect of the Vienna settlement of 1815 to flee to England. His system had collapsed. The emperor of Austria–Hungary also had retired.

and decided to start a new patriotic movement to replace the Carbonari. Released in 1831, he went into exile to Marseilles in France.

### Young Italy

Mazzini spent two years at Marseilles and established a movement for the young people ; he called it " Young Italy" (Geovine Italia). And the name of Mazzini was eternally associated with the Young Italy. It was a national organization for the liberation of the Italian states from the foreign rule, and fusing them into a free, independent, and unitary republic. The Young Italy tried to achieve their goal through education of the Italian people and insurrection. A strong moral basis was derived from Mazzini's philosophy ; belief in God, the permanent law of progress, duty and sacrifices. It was the first Italian democratic movement. He declared, " Neither Pope or King. Only God and the people will open the way of the future to us". The Young Italy captured the imagination of the Italian youth. It became a popular organization and encouraged the Italian people to believe in the unity and freedom of Italy. However, the attempted insurrections were failed. 12 persons were executed. Even Mazzini was condemned to death in absentia. Mazzini encouraged his colleagues. "Ideas ripen quickly when nourished by the blood of martyrs". He moved to Switzerland and planned to invade Savoy. These failures destroyed the Young Italy as an organization but its spirit lived on.

Mazzini tried to widen his revolutionary plan, based on his belief in the brotherhood of man and his dream of a world republican federation. He founded organizations like, Young Europe, Young Germany, Young Switzerland and Young Poland. But his stay in Switzerland was a great disappointment. In 1837, he went to London. And England became his real home. He continued to work for the Italian unification in the subsequent decades. In 1840, he revived the Young Italy to arouse national consciousness among the Italians wherever they were.

### Revolution of 1848

In 1848, Mazzini returned to Italy. There was a revolution in Milan where the revolutionaries drove away the Austrians. Milan welcomed him. He was against the merger of Milan with Sardinia –Piedmont which withdrew from Milan. And the Austrians recaptured Milan. He served with an Italian revolutionary, Garibaldi. But his idea of republicanism was not acceptable to the revolution. And he returned to England.

In 1849, he led the revolution in Rome. And he was elected "Triumvir of republican Rome". He showed a great ability in the administration of Rome. But he offended the Catholics when Pope was to be dethroned. France under Louis Napoleon intervened and Pope returned to Rome. Mazzini once again fled to England. The Revolution of 1849 in Rome was regarded as the greatest achievement of Mazzini in his revolutionary career.

Back in England, in 1851, he founded a new society named " Friends of Italy". He continued to be involved in revolutionary movements in Milan, Carrara (1856), and Genoa (1857). For these involvements Mazzini was condemned in Piedmont where a new moderate

Russian rule but it was crushed by the Russian government. After the rebellion, the Church in Poland began to use the Polish language as a weapon of national resistance. Polish was used in the Churches; and it was a medium of religious instruction. A large number of priests and bishops were imprisoned or exiled to Siberia as a punishment for their refusal to preach in Russian language. The use of Polish became a symbol of the struggle against the Russian domination.

There were further repercussions in 1837 and 1846 before the Revolution of 1848. Imperial Russia tried to win over the Poles to the Russian rule. But the Poles who were inspired to recapture the ancient glory of the undivided Poland were never reconciled to the Russian rule. The most serious rebellion of Polish people occurred in 1863. They succeeded in the revival of Polish language and literature. But their dream to regain ancient Poland was not acceptable to the Russians. The rebellion of 1863 was the last of the Polish insurrections in the 19th century.

### Hungary

The kingdom of Hungary had a long history. From a small province of the ancient Roman empire Hungary became a kingdom which maintained her independence till 1526. The Ottoman Empire conquered Hungary. In the 17th century, the Habsburg rulers of Austria conquered Hungary in 1699. And the combined empire of Austria and Hungary continued to exist till 1918.

The majority of the inhabitants of Hungary were the Magyars. They were a very jealous nationality. They imposed their language, way of life and education on the non-Magyar people of Hungary. This was known as Magyarization. Politically, Hungary was a part of the Habsburg empire of Austria and Hungary. But the rulers of Austria discriminated against the Hungarians though Hungary had a provincial assembly known as the Diet. The Hungarian nationalist feeling was quite strong. They preserved their provincial internal independence.

The Revolution of 1848 was spread to the Habsburg empire of Austria-Hungary. The main centre of the Hungarian revolution was at Budapest, the capital of Hungary. In November,1847, the Hungarian Diet met at Pressburg. The leader of the Hungarians was Kossuth who was compared to Mazzini of Italy. He converted the Diet into a revolutionary council. In March, 1848, a revolution occurred in Vienna leading to the flight of Metternich. And another revolution broke out in Budapest. The Diet adopted a constitution and a parliamentary form of government was established under the leadership of Kossuth. In April, 1848, the Austrian empire was forced to ratify the Hungarian constitution. But soon the Austrian empire carried out a reprisal against Hungary in November,1848. The revolutionaries were driven out of Budapest. Kossuth fled to Turkey. The Hungarian Assembly was dissolved. But the Hungarian resistance continued for some time ; ultimately they were suppressed in 1849.

In January, 1871, the Prussian king William I was proclaimed as the German emperor in a ceremony at Versailles in France. On 18 January, the princes of the German states, the representatives of the army and ministers including chief minister, Bismarck gathered at the Hall of Mirrors in the Palace of Versailles to proclaim the new German empire headed by Kaiser William I of Prussia. The nation building process in Germany demonstrated the dominance by the Prussian state. The Prussian state became the model for the rest of Germany.

## Italy Unified

Italy had a glorious history. The Roman empire was the cradle of European civilization. With the acceptance of Christianity by Rome, the Pope of Rome became the centre of Christian world. However in the 19th century, Italy was scattered over seven dynastic states. Sardinia-Piedmont was ruled by an Italian princely house. The north was under Austrian Habsburgs. The centre was ruled by the Pope and the southern region was under the Bourbon dynasty of Spain. The idea of a united Italy, of course existed.

As we have learnt the story of Mazzini in the earlier paragraphs, he propounded the idea of a united republic. His "Young Italy" had spread the message of the Italian unification to all the Italians. However, after the failure of the revolutions of 1830 and 1848, people turned away from the democrats and revolutionaries and looked to the kingdom of Sardinia-Piedmont under king Victor Emmanuel II for the unification of Italy through state sponsored wars. Count Cavour, the Prime Minister of Sardinia-Piedmont was the mastermind of the leadership of this kingdom in this movement.

*Fig. 1.6 Count Cavour*

*Fig. 1.7 Garibaldi*

However, Cavour was neither a democrat nor a revolutionary. He was a member of the wealthy and educated Italian elite. He engineered a tactful diplomatic alliance with France under the flamboyant Louis Napoleon. He succeeded in defeating the Austrian forces in 1859 with the help of the joint French and Italian forces.

We have to mention the role of Garibaldi who organized armed volunteers and succeeded in driving away the Spanish from the two kingdoms of Sicily in 1860. He was a great patriot and he was popularly known as the " Knight -errant" of the Italian unification. He handed over the conquered kingdom to Victor Emmanuel II.

3. Explain why Mazzini was called the philosopher of the Italian unification.
4. Why was the Revolution of 1848 in Europe called the Revolution of the Liberals?
5. What were the major events of Revolution of 1848 in Germany?
6. Describe the role of Bismarck in the unification of Germany.
7. Explain how the Polish nationalist spirit was preserved in Poland.
8. What were the main centres of revolution in Austria-Hungary in 1848?

## B. Short Answer Type Questions :

1. Against whom the Greek war of Independence was fought? When was the independence of Greece achieved?
2. What were the achievements of the Young Italy?
3. Explain the ideology of Count Cavour in the unification of Italy.
4. What was the Frankfurt Parliament?
5. What was the contribution of Garibaldi to the unification of Italy?
6. What was the status of the Pope of Rome after the United Kingdom of Italy was proclaimed?
7. What was Magyarization policy in Hungary?
8. What was the role of language in national movements in Europe?

## C. Very Short Answer Type Questions :

1. Where and when the unified German empire was proclaimed?
2. Who was Metternich?
3. What was Carbonari?
4. Who were the Magyars?
5. Who was Louis Phillippe?
6. When was Louis Napoleon dethroned in France?
7. What was the Prussian Zollverein?
8. Name the King of Germany at the time of German unification?
9. Who was Beethoveen?
10. Who was the Knight-errant of the Italian unification?

## D. Activity :

**Prepare a chart giving the sequences of the February Revolution of 1848 in France.**

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minded intellectuals and middle class for discussion and debates on social, economic and administrative issues. Several brilliant Indian leaders joined the organization which became an all-India organization of the patriotic Indian leaders. The Congress influenced the educated class and aroused the national consciousness. But the Indian National Congress hesitated to take up political demands. The British administration understood the potential of the Congress to emerge as a national political party. The Congress was not only a political party but a movement.

***Fig. 2.1 Indian National Congress, First Session at Bombay, 1885***

A real test of the patriotism of the Congress was on the question of the Partition of Bengal in 1905. This plan was an anti-Congress political move engineered by Lord Curzon, the Viceroy of India. It aroused a strong anti-British sentiment in many parts of India. There was a strong protest movement. The protest movement took the form of boycott of foreign goods and adoption of Indian goods. This was known as the Swadeshi movement. The Indian National Congress was divided into two factions : the Moderates and Extremists. The Moderates were believers in constitutional means under the law. The Extremists were for an adoption of militant action. A section of revolutionary youth took to revolutionary terrorism. The terrorist movements were suppressed. The Indian National Congress had become quite ineffective till its leadership was taken over by Mahatma Gandhi.

## 2.1 CHARACTERISTICS OF INDIAN NATIONALISM

The Indian nationalism was the product of the Indian National movement which was one of the biggest mass movements of modern times. The salient features of this movement were reflected in the Indian nationalism. The movements involved millions of people of all classes and ideologies into the political action which pulled down a mighty colonial empire.

⇨ The movement was based on the principles of democracy, civil liberties and secularism.

the communists, the socialists and the capitalists who formed part of the national movement. Toleration of the views of the individuals and groups was unique feature of India's national movement.

## 2.2 WORLD WAR I, KHILAFAT AND NON-COOPERATION

The First World War (1914-1919) greatly affected the people of India. The leaders of the national movement, including Gandhiji co-operated with the war efforts of the British hoping that the British after the war would concede the various demands of the Indian National Congress. After the war, the national movement was spread to new areas, covering new social groups and developing new modes of struggle.

The war created a new economic and political situation. There was a huge increase in the defence expenditure which was met by war loans and increasing taxes : custom duties were raised ; and the income tax was introduced. The prices increased; there was extreme hardship on the common people. There was forced recruitment to the army. There was anger in the rural area. In the last years of the war and after, there were failure of crops in many parts of India. There were famines and epidemics. Millions of people died. People hoped that their hardship would end after the war. Their hopes were belied. At this stage, a new leader appeared in the Indian scene. He was Mohandas Karamchand Gandhi.

### Mahatma Gandhi and his Satyagraha

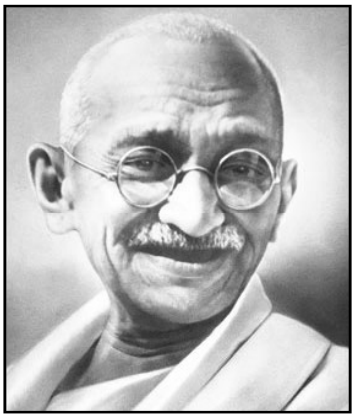

*Fig. 2.2 Mahatma Gandhi*

Gandhiji returned to India from South Africa in January, 1915. While in South Africa where he spent nearly 25 years, he fought against the racist regime with a new method of mass agitation which he called Satyagraha. The idea of Satyagraha was based on the power of truth and the need to search for truth. If the cause was true, if the struggle was against injustice, then physical force was not necessary to fight the oppressor. A Satyagrahi could win the battle through non-violence. People including the oppressor had to be persuaded to see the truth instead of being forced to accept the truth through the use of violence. Mahatma Gandhi believed that this dharma of non-violence (Ahimsa) could unite all the Indians. Gandhiji successfully organized the Satyagraha movements in different parts of the country. His sensational success was the Satyagraha movement of the indigo plantation workers of Champaran in Bihar (1916), Peasant movement of Kheda district of Gujarat (1917) and Allahabad cotton mill workers' strike (1918).

Mahatma Gandhi explained the concept of Satyagraha : "Satyagraha is pure soul force. Truth is the very substance of the soul. That is why this force is called Satyagraha. The soul is informed with knowledge, in it burns the flame of love **.....** Non-violence is the

There was a strong public reaction against this incident. There were strikes, clashes with police and attacks on government buildings. The British government responded with brutal repression. Gandhiji called off the movement.

### Khilafat Movement

The Rowlatt Act Satyagraha was confined to towns and cities. Mahatma Gandhi planned a more broad based movement in India by bringing the Hindus and Muslims together. The Khilafat issue provided such an opportunity. The First World War ended with the defeat of Ottoman Turkey. There were rumours that a harsh peace treaty was going to be imposed on the Ottoman Emperor who was the spiritual head of the Islamic World (Khilafat). To defend the Khilafat 's temporal powers a Khilafat Committee was formed in Bombay in March, 1919. A young generation of Muslim leaders, led by the two brothers, Muhammad Ali and Soukat Ali consulted Gandhiji on the prospect of launching a mass movement on this issue. This issue provided an opportunity to bring the Muslims under the umbrella of the national movement. At the Calcutta Session of September, 1920, on the persuasion of Gandhiji, the Congress decided to launch a non-coperation movement in support of the Khilafat and Swaraj for India.

### Non Co-operation Movement

Mahatma Gandhi used to argue that the British rule was established in India with the cooperation of the Indians. And their rule survived due to this cooperation. If the Indians refused to cooperate, the British rule would collapse within a year and the swaraj would come.

Gandhiji's plan for non-coperation was something like the following : surrender of the titles awarded by the government, boycott of civil services, army, police, courts, legislative councils, schools and foreign goods. If the government used repression, a full civil disobedience movement would be launched. In the summer of 1920, Mahatma Gandhi and Soukat Ali toured the country extensively in support of the movement. There was a difference of opinion among the Congress leaders on the issue of the boycott of the elections to the legislative council to be held in November, 1920. However, in the Nagpur Session of the Congress, a compromise was worked out and the Non Co-operation programme was adopted.

The Non Co-operation Khilafat Movement began in January, 1921. Various social groups participated in the movement. All of them responded to the call of the Swaraj.

Middle class people participated in the towns and cities. Thousands of students left the government controlled schools and colleges. The teachers resigned, lawyers gave up the legal practice. The resignation of C.R.Das from the legal profession was sensational. Elections to the councils were boycotted. The boycott of foreign goods was very dramatic. Liquor shops were picketed. Foreign clothes were burnt. As the boycott of foreign textiles continued, people discarded foreign textiles and started wearing indigenous textiles known as the Khadi. Non Co-operation could not sustain for long in the towns and cities.

## 2.3 CIVIL DISOBEDIENCE MOVEMENT

### Salt Satyagraha

After the failure of the Non Co-operation Movement, the mainstream of the Indian national movement had stagnanted. Different political parties participated in the Legislative Councils. The peasants, workers and tribal movements flittered away. After the release of Mahatma Gandhi in 1928, the Indian National Congress was again geared up for action. A significant landmark was the Lahore Session of Congress in which Jawaharlal Nehru was elected as the President. And the historic resolution on the "Purna Swaraj" was adopted on 31st December, 1929. "Purna Swaraj" was defined as "complete independence". This session authorized the Congress working committee to launch a Civil Disobedience movement including non-payment of taxes. In February, 1930, the working committee invested Gandhiji with full powers to start the movement at a time and place of his choice.

It was a brilliant idea of Mahatma Gandhi that the civil disobedience movement was to start with disobeying the Salt Act. Salt was a common item of food used by everybody. Gandhiji condemned the tax on salt as the most inhuman poll tax. He said, "there is no article like salt, outside water by taxing which the state can reach even the starving millions, the sick, the maimed and the utterly helpless". In his historic letter to the Viceroy, Lord Irwin, Gandhiji described the British rule "as a curse".

*Fig. 2.4 Dandi March, 1930*

The Salt Satyagraha was brilliantly conceived. Gandhiji along with a band of seventy-eighty members of the Sabramati Ashram among whom were men belonging to almost every region and religions of India would march across the villages of Gujarat, 240 miles, to Dandi in the west coast and would break the salt law by collecting salt from the sea beach.

In such a situation, Mahatma Gandhi once again decided to suspend the movement. He entered into a pact with Viceroy Lord Irwin. This was known as the Gandhi-Irwin Pact. According to this pact Gandhiji consented to participate in a Round Table Conference in London. The government agreed to release the political prisoners. The government conceded the right to make salt for consumption. Apart from the terms of the pact, the agreement was made between Lord Irwin on behalf of the government and Mahatma Gandhi on behalf of the Congress. It was an agreement between two equals. For this, the pact was condemned by anti-Indian political leaders of Britain particularly, Winston Churchill.

The Second Round Table Conference was held in September, 1931. Ghandhiji was the sole representative of the Congress. Sarojini Naidu attended as a woman representative of India. But Gandhiji was not satisfied with the outcome of the conference which was deadlocked on minority issues, separate electorate for the Muslims, depsressed classes and Indian Christians.Ghandhiji returned empty handed to India on December 28.

*Fig. 2.6 Second Round Table Conference*

### Civil Disobedience Resumed ( 1932-34)

The government suppressed the civil disobedience movement. After the truce for few months, the-Congress Working Committee decided to resume the Civil Disobedience Movement. Outmanoeuvered and facing an unprecedented repressive measure the Congress fought valiantly for about a year and half before admitting defeat. The movement was formally withdrawn in April, 1934.

## 2.4 PEASANTS, WORKERS AND TRIBAL MOVEMENTS

The Peasants, workers and tribals participated in the national movement. But they faced problems peculiar to themselves.

## Tribal Movements

*Fig. 2.7 Birsa Munda*

The British policies disturbed the traditional tribal system. The tribal land system was marked by the community ownership of land and the absence of the land lords. But the British changed the land system of the tribes. They created the class of Zamindars in tribal areas. The British rule also introduced market economy among the tribes. A class of traders, money lenders, Thekedar and government officials who were not natives of the tribal areas exploited the tribals. The forest policy of the British deprived the tribals of their customary rights in the forests. Famines also occurred frequently in tribal areas.

The tribals reacted to the exploitation and oppression in the form of revolts and movements. Their agitations against the British and outsiders could be called anti colonial. Their movements had social and religious overtones. Their movements were merged with national movement, particularly the no tax campaign. The tribals fought against their enemies with their traditional weapons, bows, arrows, lathis and axes. But in most cases, their rebellions and movements were suppressed by the British authorities.

Some major tribal movements in India were the Santhal Revolt of 1855, Bhokta Rising of 1854-95 and Birsa Revolt (1895-1901). The movement of Birsa Munda was the most famous tribal movement in Eastern India. The Dev Movement in Gujarat and the tribal movement in NE India (Assam, Meghalaya, Manipur and Mizoram) were also worth mentioning.

The tribals of NE India, during the colonial period resisted the British encroachments on their lands. The Khasi rebellion under U. Tirot Singh is a well known event in the British conquest of NE India. The Jaintias revolted. The Nagas fought against the British who conquered their land.

In Manipur and some parts of Nagaland and Mizoram ( Lushai hills), there were tribal uprisings against the British. The Mizos fought seriously against the British.

*Fig. 2.8 Rani Gaidinliu*

The Kukis rose into Rebellion (1917-1919) for their independence. The Kuki Rebellion was suppressed after a serious punitive expedition. Tingtong was the most valiant of the Kuki tenders.

The Zeliangrong people of Manipur revolted against the British under the leadership of Jadonang. He raised an uprising which was described by the British as the Naga Raj Movement. After the execution of Jadonang in 1931, his disciple, Rani Gaidinliu took up the leadership of the revolt. In 1932, she was

## GLOSSARY

| | | |
|---|---|---|
| ***Satyagraha*** | – | *Soul Force : A non-violent way of resisting evil.* |
| ***Boycott*** | – | *The refusal to deal and associate with people or participate in activities, or buy and use things : a form of protest.* |
| ***Non Co-operation*** | – | *Refusal to cooperate with the government.* |
| ***Civil-Disobedience*** | – | *Refusal to obey the law and dictates of the state and government.* |
| ***Khilafat*** | – | *Caliphate : The spiritual head of the Islamic world who was also the head of the Ottoman empire (Turkey).* |
| ***Picket or Picketing*** | – | *A form of d\emonstration and protest by which people block the entrance to shop, factory or office.* |
| ***Gadhar Party*** | – | *Name of an Indian revolutionary party based in North America. Gadhar in Urdu means "revolt".* |
| ***Forced recruitment*** | – | *A process by which the colonial authorities forced the people to be recruited in the army.* |
| ***Dandi March*** | – | *March of Gandhiji from Sabramati to Dandi in the west coast for breaking the salt law.* |
| ***The Gandhi-Irwin Pact, 1931*** | – | *An agreement between Viceroy Lord Irwin and Mahatma Ghandhi which ended the First Civil Disobedience Movement.* |

## EXERCISES

**A. Long Answer Type Questions :**

1. What were the factors that favoured the rise of Indian nationalism?
2. What were the major characteristics of the Indian National Movement?
3. What were the landmarks of the Indian national movement (1885-1934)?
4. When was the Indian National Congress founded? What were its objectives?
5. What were the British motives in the Partition of Bengal in 1905?
6. Explain the concept of Satyagraha of Mahatma Gandhi.

UNIT

# III

# ECONOMIES AND LIVELIHOODS

## INDUSTRIALIZATION : 1850s – 1950s

### (a) Contrast between the forms of Industrialization in Britain and India

**Introduction**

The Industrial Revolution that began in Britain in the middle of the 18th century was not a planned historical event. The transformation of an agrarian British society into an industrial society obviously was not an event that came about in a natural way. It was only an unusual development that occurred in the history of mankind. Many circumstances led to the industrialization in Britain or any other country of the world. It was from the Industrial Britain that the designs of industrialization spread to other countries of Europe and the United States of America. The wave came to Asia and Africa much later.

Last year we have learnt about the Agricultural Revolution in Britain and America. It resulted into the creation of a large number of displaced farm – workers, particularly in Britain. They began to run from place to place in search of work. Some of such people hired themselves out to rich farmers while some of them switched over to spinning and weaving. They began to work wherever they could get better wages.

With the dawn of the 19th century, steam power and machinery completely revolutionized the manufacture and transport systems of Britain. A large number of workers thronged into the factories for their livelihood

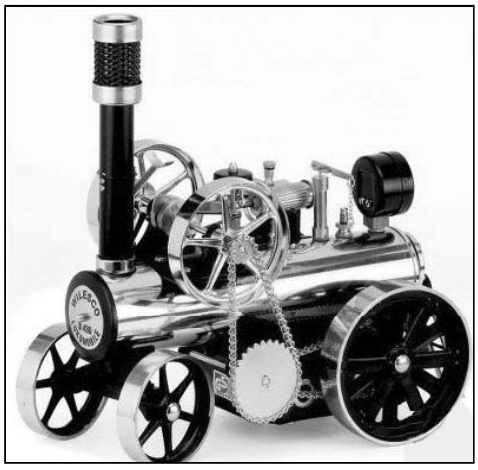

*Fig. 3.1 Steam Engine*

This Section will look at the different forms of industrialization, relationship with handicrafts and industrial production, formal and informal sectors and the livelihood of workers in Britain and India.

produced thread (yarn) of greater fineness and strength than the thread spinned by the Spinning Jenny or the Water Frame.

In 1785, Edmund Cartwright patented his 'Power Loom'. However, many weavers strongly opposed to its use as it threw many of them out of employment. The Power Loom was not widely used until 1813. It was from this year that the said machine came into use extensively in the cotton textile industry of Britain. No doubt, it did not completely replace the use of hand looms in weaving cotton cloth until the middle of the 19th century and hand looms were still in use to weave woollen cloth until 1880.

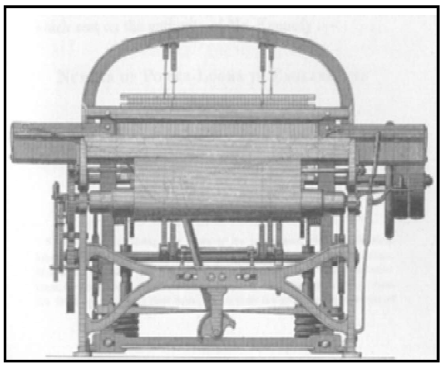

***Fig. 3.3 Power Loom***

Over and above, some other machines also played an important part to the growth of textile industry. In 1785 Thomas Bell invented Cylinder Printing of cotton goods. It helped a lot on the improvement of block printing on cotton cloth. In 1793 the available supply of cotton yarn was increased by Eli Whitney's 'Cotton Gin'. In 1804 J.M. Jacquard, a Frenchman developed a loom on which patterns could be woven in fabrics by mechanical means.

The process of industrialization in England was not confined to textile industry alone. In 1763 a Scottish mechanic called James Watt perfected the Newcomen Steam Engine and made it a practical device for use in operating machines. The coal, iron and steel industries of Britain began to use this newly improved steam engine. We may term these industries as the first industries which were benefited by the new age of machinery. In the coal mines, the steam engines were widely used to pump out water from the flooded deep shafts, The iron and steel industry also benefited a lot from steam power.

Darby Abraham (c. 1678 – 1717) founded the Bristol Iron Company in 1708 and he is generally acknowledged as the first man to use coke successfully in the smelting of iron ore. His grandson, Arbaham (1750 –91) made the first cast-iron bridge of 100 feet span over the river Severn in 1779. In 1780s the processes for puddling and rolling in iron industry were developed by Henry Cort (1740 –1800). Henry Cort was born in Lancaster, Lancashire. He became a navy agent in London ; then in 1775 he bought an iron works near Plymouth and invented the 'Puddling' process for converting 'pig iron' into 'wrought iron' as well as a system of grooved rollers for the production of iron bars. Thus with the adoption of the new inventions and improved machines the iron and steel industry led to the rapid development of the factory system of manufacture in Britain. Henry Bessemer, an English iron maker invented his 'Vertical Converter' for making steel from iron. He patented a tilting converter in 1860. And in the next year William and Fredrick Siemens introduced 'Open Hearth Furnace'. As a result of such developments, the iron and steel industry in England became more and more productive.

The Great Economic Depression was originated from the United States of America. However, it affected the whole world. The British industries also struggled to adjust to the slump in the international trade. Thousands of British soldiers came home after the World War I and searched for employment. Trade Unions launched strikes against the cut in wages.

Consequent on the coming of the Great Depression, England could not continue to lead the industrial production. The British monopoly in industry and trade came to a deteriorating situation. Moreover, the underdeveloped countries of Asia, Africa and South America which in the pre-World War I period took loans from Britain for their development activities, were now starting to rely on their own economic resources. The slump in the British industry began to revive on the eve of the World War II.

## BRITISH INDUSTRIES IN THE POST WORLD WARS

The fruits of scientific development were used by the British industries with an aim to recapture their dying world market. Britain in the 1950s was greatly influenced by the scientific research and findings. No doubt, the process of mass production in England began immediately before the end of the World War I.

In fact, the process of mass production in England was taken up at a great speed. She began to produce many things which were not produced before the First World War. Motor car industry became a prosperous industry. The mode of pre-World War I British industries were now strongly replaced by more advanced machinery. Electrical power and improved transport and communication systems greatly helped in the further growth of industries in Britain.

The two great wars witnessed the use of various weapons and means of transport. From machine gun to atom bomb were the products of the Industrial West. England also manufactured various war related goods. Furthermore, many heavy industries were established in Britain during the 1950s.

## COMING UP OF LABOUR UNIONS

With the progress of industrialization in England, the industrial workforce began to demand improved working conditions and wages through labour unions. They began to subscribe small amount of money and extended aid to the workers during illness or unemployment. Subsequently, the workers formed organizations for winning improvements by collective bargaining and strikes. The industrial workers also sought to benefit themselves by political action. For example, they fought against the English Laws of 1799 and 1800 forbidding labour unions. The workers struggled to win the right to vote and to extend their political power was one of the principal factors in the spread of democracy during the 19th century England.

The book examined in detail the consequences of economic freedom, such as division of labour, the function of markets, and the international implications of a *Laissez-faire* economy.

Children could tend most of the machines as well as other persons could, and they could be hired for less wage. They were made to work for 12 to 14 hours a day under terrible conditions.

A series of laws were passed by the British Parliament pertaining to industrial labour. Beginning in 1833, the worst conditions in British industry had been alleviated. Employers were forbidden to hire children under nine years of age, and the labour of those under eighteen years of age was restricted to nine hours a day. Women and children were excluded from mine labour, and better hours and safety devices were required in the mines. Government inspectors were provided to ensure that the regulations were followed. After wage-earners were given the right to vote in 1867, additional measures were effected for their protection and welfare.

## INDUSTRIALIZATION IN INDIA

India's industry is an age old tradition. Textiles, pottery and bronze articles were manufactured from ancient times.

India was one of the leading ship building nations of the world till the 18th century. Gold flowed into India from many parts of the world in exchange of the country's textiles, ,metalware, spices, etc.

Under the colonial rule, Indian industries had no sound base. India's handicraft production declined to a level that never happened before. It is opined by many economic historians that the basic intention of the colonial British Government was not industrialization but de-industrialization of India. They intended to reduce India to the status of a mere exporter of important raw materials for feeding the British industries. Further, the colonial government thought of turning India into an extensive market for the British manufactured goods. It was aimed to continue the further expansion in the field of industrialization of Britain.

The decline of indigenous handicraft industries of India created large scale unemployment in the country. At the same time it created a new demand in the Indian consumer market, which was now deprived of the supply of local produces. This gap was profitably bridged by the imports of cheap industrial products from Britain.

During the second half of the nineteenth century, modern industrialization began in India. However, the progress was very slow. At first, industrialization in India was confined to the establishment of cotton and jute mills.

The cotton textile mills were located in Maharashtra and Gujarat. And on the other hand the jute industry, dominated by the Europeans, were concentrated in Bengal. And in the beginning of the 20th century, iron and steel industry began to take roots. Subsequently, other smaller industries like, sugar, cement, paper, etc. came up after the World War II.

**Jamshedji Tata** (1839 – 1904), who learnt the textile industry at Manchester founded the Empress Cotton Mill in 1887 at Nagpur. This strengthened the progress of modern cotton textile industry in India. By the last decade of the 19th century nearly 70% of India's total estimated 137 number of cotton mills was located in Maharashtra.

*Fig. 3.7 Jamsheji Tata*

During the World War I India was ranked 4th among the cotton producing countries of the world. After the war , however, Indian cotton industry had to face stiff competition from the Japanese cotton textile sector. It is estimated that there were nearly 423 cotton mills during the World War I and the number increased during the years that followed the great war. India now holds the third place among the cotton textile producing countries of the world.

### *Jute Industry*

Most of the jute mills were established by the Europeans, particularly by the Britishers. It is estimated that Rs. 6.00 crore had been invested by them in jute industry in Bengal during the last decade of the 19th century.

Hundreds of power looms came into operation in the jute mills of Bengal and this led the industry to become a huge profit earning industry. There had been a difference in the characteristics of the cotton textile industry and the jute industry. The difference was that the former was quickly developed as an indigenously financed and managed industry while the latter was financed and supervised by the Europeans, particularly by the British.

The demand of jute products by the world market increased after the World War II. No doubt, Indian jute industry got a shock with the partition of India in 1947 as nearly 75% of the jute producing areas of India became part of the erstwhile East Pakistan (now Bangladesh).

## IRON AND STEEL INDUSTRY

India knew the science of smelting iron ore since the ancient times. Modern iron industry was first started at a place called Kuiti in Bengal in 1874. However, the real beginning of the modern iron and steel industry coincides with the establishment of an iron and steel plant at Jamshedpur in the modern day Jharkhand by the sons of Jamshedji Tata in 1907. It is called the Tata Iron and Steel Company (TISCO).

In 1919 another iron and steel plant was set up at Burnpur in West Bengal called the Indian Iron and Steel Company (IISCO). In1923 another iron and steel plant came into operation at Bhadravathi in Karnataka called the Mysore Iron and Steel Company (MISCO). Now it has been renamed the Vishweswaraiah Iron and Steel Company (VISCO). During the second Five-year plan period, three big iron and steel plants were commissioned at Bhillai in modern day Chhattisgarh, Rourkela in Orissa and Durgapur in West Bengal.

The "Free Trade" policy adopted by the colonial Government in India resulted into the further ruination of India's handicraft industries. The decline of these industries was inevitable part of the industrialization in England and the West. The process of the decline of Indian handicrafts that began in the 19th century continued in the following century too. It may be remembered that unlike the European countries India was not favoured by sufficient growth of modern industries.

With the introduction of modern industries in India, new methods of production by using machines replaced the use of manual labourers and hand-operated tools. Consequently, Indian industries migrated from homes to mills and factories. The Indian family was no more a workable unit as before. The caste based handicraft industries could no longer maintain their earlier entity and monopoly. Industrialization in India displaced highly individualistic nature of production on which the craftsmen were the producers. In fact, the industrialization on modern lines led to a large scale unemployment problem in India. However, in the long run production by machines gave rise to a number of other supporting industries giving job opportunities to a number of displaced craftsmen. No doubt, despite various odds the Indian handicraft industries could not be completely swept out.

## FORMAL AND INFORMAL SECTORS

Only a small portion of Indian workers was getting regular income. They are protected in many ways by Labour Laws. This section of labourers formed trade unions, bargaining for better wages and other social security measures. In short, the Indian workers may be classified into two sectors – (i) Formal Sector (Organized) and (ii) Informal Sector (Unorganized). Enterprises which employ ten hired workers or more are called formal sector workers. The Informal Sector workers are the farmers, agricultural labourers, owners of small establishments and self-employed persons.

The workers in the formal sector enjoy a number of social security measures and benefits. Usually they get more than the informal sector workers. The informal sector workers do not earn regular income. They were not protected by the government or its regulations. In the recent times, the Indian Government has started paying attention towards the extension of social security benefits to the informal sector workers.

## LIVELIHOOD OF INDIAN WORKERS AND COMING UP OF TRADE UNIONS

India has been an agrarian nation since the olden times. A vast majority of the Indian population lives in the villages and is dependent on agriculture as their main livelihood. In the process of industrialization, the British merchants always tried to earn more profits by export trade of Indian goods. Factory life in India was not happy. The death rate and infantile mortality rate were high in the industrial towns and cities. Ignorance about the factory conditions always led to the giving up the work.

Quite contrary to the progress achieved by the workers' unions in England, legislation to ensure security benefits to Indian workers was very slow. In 1877, the workers of a

neutrality. No doubt, in the process the socialist elements dominated. However, those who were inclined towards the Congress Party now separately established the Indian National Trade Union Congress when India became independent.

Such developments gave an impetus to the demand for reforms for the welfare of the workforce. In 1947, the Industrial Disputes Act was passed to settle disputes through workers, Committees and officers. Employees' State Insurance Corporation Act was also passed to improve the conditions of the workers. No doubt, a lot is still to be done for the welfare of the Indian workforce.

## GLOSSARY

**Patent** – An exclusive right officially granted by a government to an inventor to make or sell an invention.

**Shaft** – A vertical passage that gives access to a mine.

**Hearth furnace** – Lowest part of a foundry furnace where molten metal collects or ore is smelted.

**Puddling** – The method of processing pig iron to convert to wrought iron by heating in a furnace.

**Pig iron** – Crude form of iron made in a blast furnace and shaped into rough blocks for storage and transportation. It is further processed to make steel, wrought iron and other alloys.

**Wrought iron** – A highly refined form of iron that is easy to shape but is strong and fairly resistant to rust.

**Trade Union** – An organized association of people who work in a particular trade or profession, formed to represent their interests and help them improve their working conditions.

**Laissez-faire** – The economic theory that governments should not interfere with market forces. The concept originating in France, was advocated by Adam Smith and Widely accepted untill the beginning of 19th Century.

## EXERCISES

**A. Long Answer Type Questions :**

1. Trace the history of industrialization in Britain.
2. How did the British industrial workers live during the 19th century?
3. How did the process of industrialization begin in India?
4. How far did the industrialization in India affect her handicraft industries?

UNIT

# IV

# TRADE AND GLOBALIZATION

## A. EXPANSION AND INTEGRATION : THE WORLD MARKET IN THE 19TH AND EARLY 20TH CENTURIES

What we call "World Market" originated centuries ago. As you know different people had something which were wanted by some other people, whether finished products, food or natural resources. The Industrial Revolution which began in the mid-eighteenth century in Britain enabled some economies to develop and compete in similar goods with each other. The globalized economies in the modern times are spreading the manufacturing processes themselves across the globe.

A market is the place where the seller meets the buyer to exchange goods for money. Most of the agricultural enterprises and manufacturing industries are remote from the consumer. The commodities or products pass through many stages or hands before reaching the final consumers like, the trucks, trains, aeroplanes, ships, warehouses, wholesalers, retailers, etc.

The British economist, Adam Smith published his famous book, "The Wealth of Nations" in 1776. He advocated the principles of "*Laissez-faire*" (French for 'Let do'). His ideas were not immediately accepted. His ideas provided an argument against mercantilism and influenced the long-term development of economies. No doubt, mercantilism underwent a powerful revival in the twentieth century, through the influence of John Maynard Keynes and his disciples.

Mercantilism is a European Economic theory and system that actively supported the establishment of colonies that would supply materials and markets and relieve home countries of dependence on other countries.

### John Maynard Keynes (1883 – 1946)

John Maynard Keynes was born in Cambridge and studied at the Cambridge University. His economic theories influenced in most of the European countries and the USA. In between the two world wars, John Maynard Keynes was an adviser to the British Government ; and his views on a planned economy influenced the New Deal administration of the American President, Theodore Roosevelt. A Treatise on Money (1930) and General Theory of

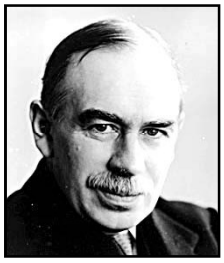

*Fig. 4.1 J.M. Keynes*

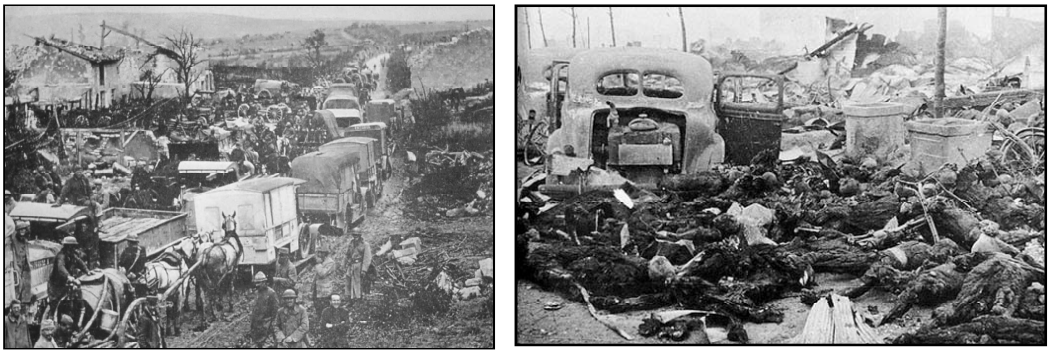

*Fig. 4.2 Damages caused by World War I and II*

During the World War I and in its aftermath, the United States became the most powerful creditor and advanced millions of dollar as war loan to France, Italy, Britain and other allied nations.

In the previous chapter you have learnt a little about the Great Economic Depression. The loan payments collected by the USA from the debtor nations during the two World Wars increased the gold reserve of the country to an unexpected level. Consequently, the purchasing power of other countries had been greatly reduced.

The economic boom in the United States resulted in the withdrawal of her capital from the debtor countries. The Americans became more interested now to invest in their own country. In short, there had been the flight of American capital from Europe. Its consequences were the rise of bank rates, restrictive credit policy and high tariffs. Unemployment problem became the order of Europe. The rise of interest rates automatically resulted in high cost of commodities and manufactured items. The Great Depression of the 1930s affected trade very badly as the exports and imports of the Eastern European countries like, Romania, Bulgaria, Poland, Yugoslavia, etc. fell to a great extent. These ill fated countries restricted imports and as a result the industrialized European countries lost their profitable trade in these countries.

Among the countries which fought in the First World War, Germany was the most affected country. She had to pay fifty million pounds to the Allies as preliminary reparation amount by May, 1921. She had to manage for doing so by taking loan from the USA. The German economy was almost collapsed in managing to pay the reparation amount. Consequently, the German government took up drastic measures by restricting import of foreign goods and export of funds further.

The United States and the Allied Powers tried to revive the German economy through various Commissions and Plans. However, Germany could not pay any reparation payments. The German President, Hindenburg appealed to the American President, Herbert Clarke Hoover (1874 – 1964) for a moratorium which was granted for one year beginning from 1st July, 1931. It saved Germany from the complete collapse of her economy for the time being.

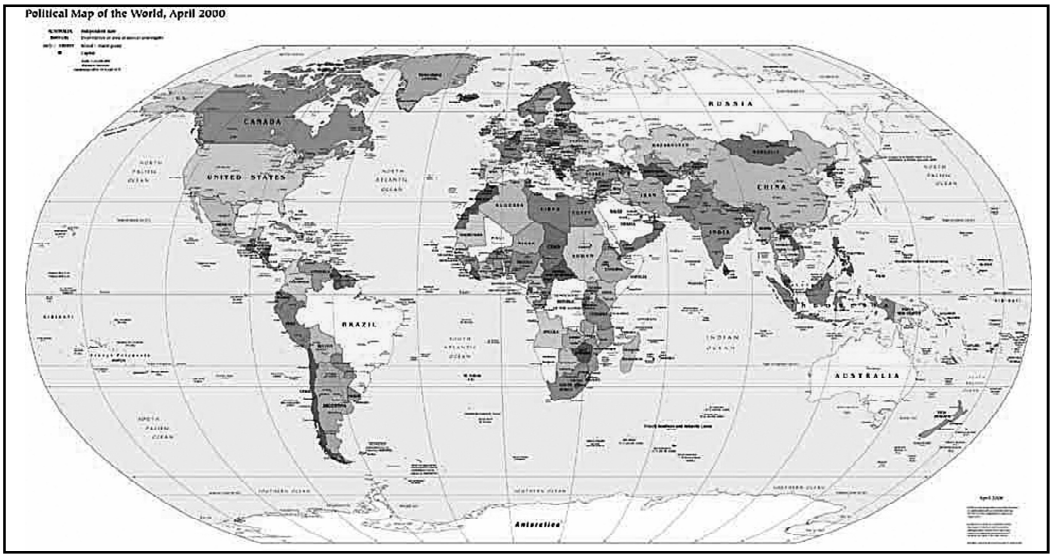


***Fig. 4.4 World Political Map***

After the World War II Europe got huge economic aid from the United States through the "Marshal Plan (1947)".

Marshall plan was a programme of loans and other economic assistance provided by the USA between 1947 and 1952 to help western European nations rebuild after the Second World War.

A number of international organizations came into being. In 1948, the Organization for European Economic Co-operation (OEEC) was established. Important members of this organization were Britain, France, Austria, Ireland, Turkey, Belgium, Switzerland, the Netherlands, Luxembourg, Norway, Sweden, Denmark, Finland and the Faroe Islands,. By 1963, the rebuilding process adopted by the OEEC led to the growth of industrial and agricultural production to the pre-war level.

On the 18th April, 1951, West Germany, France, Italy, Belgium, the Netherlands and Luxembourg signed a treaty for setting up of the European Coal and Steel Community (ECSC). It came to be known as the "Schuman Plan" as it was proposed by Robert Schuman, the French Foreign minister. The Treaty which was to have a life span of five decades provided for the creation of a common market by abolishing duties on export and import, subsidies and other restrictive practices on the movement of coal and steel among the member countries. The proposal for establishment of the European Coal and Steel Community was ratified by the parliaments of the six member countries on 25th July, 1952.

The USA soon established close ties with the ECSC. And Britain also with an intention to establish a close relation with the community, signed an agreement on 21st December, 1954, The establishment of the OEEC and ECSC proved fruitful in achieving the European Movement for Economic Union.

France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States of America. Its headquarters is in Paris, the capital of France.

By the early 1990s the world trade was reshaping itself into three major economic blocs. The blocs are Northern America, the European Union (E.U.) and the Far East, led by Japan, China, South Korea, Hong-Kong, Taiwan and Singapore. In 1992 the North American Free Trade Agreement (NAFTA) came into effect by the USA, Canada and Mexico. It created an effective free trade bloc among themselves. In the same year a free trade zone also came up in Southeast Asia in the name of Association of Southeast Asian Nations (ASEAN).

With the establishment of various trade related organizations and signing of various trade argeements across the world, the war-torn economies of Europe and Japan were restored after the World War II. The world trade increased in a massive way leading to a strong globalized economy.

## D. IMPLICATION OF GLOBALIZATION FOR LIVELIHOOD PATTERNS

By the late 19th and early 20th centuries, the European countries and North America reached a fairly advanced stage of industrialization. With sound economies, they began to compete for customers in each other's home markets. Cars manufactured in Germany began to sell in the USA and vice versa. The number of companies competing in the international market has been increasing dramatically since 1980s. German and Japanese automobiles began to compete for customers throughout Europe and in Latin America. Hotel enterprises based in Britain, the USA, France and Japan all operate hotels in each other's countries as well as in other countries. This competitive advantage has been attained by seeking market share on an international basis. In the late 20th century Japanese companies practised this type of seeking markets with a great success. It tries to establish relations in such a way that the happenings in a country can be influenced by events happening miles away in another country or countries. The process of globalization has turned the world into a borderless world.

*Fig. 4.5 Car Manufacturing Industries*

Globalization has produced good and bad results. Some economic historians opined that globalization should be seen as an opportunity in terms of greater access to international markets, high technology and increased possibilities of large induction of developing countries to play important roles in the world markets.

*Fig. 4.6 Bretton Woods Conference*

Medicine and surgery made massive advancements. Penicillin was produced. DDT (Dicloro - diphenyl - trichloro-ethane) began a new age in controlling dangerous pests and disease carriers. No doubt, the use of DDT has now been banned by almost all countries of the world after knowing its bad effects. Nuclear energy had also been developed for peaceful purposes.

In order to reconstruct the devastated economy, a group of financial experts representing 44 countries held a Conference at Bretton Woods, New Hampshire, the USA during July, 1944. The Conference is known in history as the UN Monetary and Financial Conference. The experts agreed on a system for establishing an international lending agency. Countries in need of funds to finance international trade could borrow an amount equal to their contribution. The Conference also decided for creation of an "International Bank for Reconstruction and Development" to lend money for rehabilitation projects in member countries. This bank is better known as the "World Bank". The World Bank began its operation in 1946 with its headquarters at Washington D.C. Its first loans were for post-World War II economic reconstruction. Within a short span of three years its purpose had been shifted to extend loans for economic development.

In addition to loans, the World Bank extends technical assistance through the Economic Development Institute, which was established in 1955. The International Finance Corporation was set up in 1956 to promote capital for private enterprise to encourage development of local capital markets and to promote private investment in developing countries. In 1962 the International Development Association was established as a separate institution to make loans easier to obtain by nations heavily in debt. The International Centre for Settlement of Investment Disputes came into being in 1966 to deal with the issue of nationalization of

**Gold Standard** – A system of defining monetary units in terms of their value in gold, usually accompanied by the free circulation of gold and free exchange of currency into it.

**Inflation** – An increase in the supply of currency or credit relative to the availability of goods and services resulting in higher prices.

**Free market** – An economic system in which businesses operate without government control on matters such as pricing and wage levels.

**Globalization** – The process by which social institutions become adopted on a global scale or the process by which a business or company becomes international or starts operating at the international level.

**Balance of payments** – It refers to the amount of money that is paid out versus the amount that is taken in through international transactions or the difference between the amount paid by a national Government to other countries and the amount it receives from them.

**Float or Floating** – Fluctuation in monetary value or free to fluctuate in exchange rate value in relation to other currencies.

## EXERCISES

### A. Long Answer Type Questions :

1. Explain the trends of international trade and economy during the two World Wars.
2. Trace the history of economic growth after the first half of the 20th century.
3. Estimate the international trade and economy after the World War II.
4. Explain the contributions of Bretton Woods Conference in the growth of Globalized Economy.

### B. Short Answer Type questions :

1. Define "Market".
2. What is meant by "mercantilism"?
3. Write a note on the contribution of Adam Smith in the growth of 'free trade'.
4. What was the "Hoover Moratorium"?
5. How was England affected by the Great Economic Depression of the 1930s?
6. What was the Marshall Plan?
7. Why was the Organization for Economic Co-operation and Development (OECD) established?

UNIT

V

# CULTURE, IDENTITY AND SOCIETY

## PRINT CULTURE AND NATIONALISM

### (A) HISTORY OF PRINT IN EUROPE

Can you imagine what might have happened today if print culture was not there ? Modern day education systems might not have been there as are today. Moreover, we might not have the pleasure of reading a newspaper, a magazine, a book or any sort of printed material. In this section we will study about the history of print in Europe and growth of press in India and the relation between print culture and circulation of ideas, etc.

China was the first country to print with paper, ink and carved wooden blocks. The process is known as "Xylographpy". Xylography is the art of engraving process on and printing from wooden blocks. The invention of paper in China in the 8th century A.D. provided a smooth, flexible surface on which to reproduce an image. In this process, a single carved wooden block of text was used to print impression on pages. By the eleventh century, the Chinese had cut the blocks into individual characters, creating the world's first movable type.


*Fig. 5.1 Xylography*

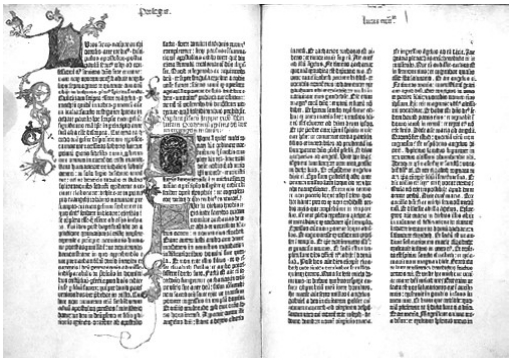

*Fig. 5.2 Gutenberg's Bible*

Xylography was also the first printing method used in Europe in the early 15th century. By 1450, Gutenberg's combination of movable metal type and the printing press had produced Europe's first type-set book – "Gutenberg's Bible". Gutenberg's process spread very quickly to other European countries.

knowledge and answers. Both fact and fiction books tell and teach us about the things that we have never came across.

Today we have millions and millions of printed books. No doubt, ancient books were in manuscript forms. The world received the Bible from Israel. However, Herodotus, Plato, Aristotle, etc. of ancient Greece gave us great works on different subjects. Rome was also a centre of great works, like that of Cicero, Livy, Plutarch, Tacitus, etc. The great works of great Christian theologians like, St. Augustine of Hippo, St. Anselm of Canterbury, Dante, Chaucer, Giovanni Boccaccio, Nicolo Machiavelli, Copernicus, Leonardo da Vinci, etc. emerged during the Middle Ages of European history.

The writings of the modern period are on various subjects and ideas. They include the writings of religious reforms of the 16th century, the philosophers and scientists, novels beginning with Miguel de Cervantes's "DON QUIXOTE", William Shakespeare and many other great playwrights and thousands of books on numerous subject matters.

*Fig. 5.4 Don Quixote*

The Eastern World has several cultures. We find different works in the East also. Most of the writings on Islam, Hinduism, Confucianism, Taoism, Buddhism, etc. may be included in the list of eastern works. In India, the Vedas of Hinduism are the oldest religious scriptures in existence. They form the basis of a long tradition of sacred writing that extends to the modern times. Since the early 19th century a significant number of non-religious books has emerged in the East.

*Fig. 5.5 Fate of Genji*

Chinese and Japanese writings are on all types of literature. The earliest and most revered books in China are the Confucian Classics and sacred book on Shintoism is so in Japan. The first remarkable Chinese novels came in the 15th and 16th centuries. Books of the 20th century are varied. The revolutionary writings of Dr. Sun Yat-sen and Mao Zedong, etc. are important contributions to the world of Chinese history of printed books. The earliest surviving writings of Japan are histories and poetry. The first significant novel in any language was Shikibu Murasaki's "The Fate of Genji", an eleventh century Japanese work.

colonies only after 1704, that too were published by authority of the British government.

By the time of the American War of Independence, there were daily newspapers in most cities and weeklies in smaller towns. Each of these newspapers was not afraid to engage in intelligent and forceful debate on public issues. After the enforcement of the American constitution in 1787, the American newspapers became extremely partisan. They followed the principles and ideas of either John Adam's Federalists or the Jeffersonian Republicans. The American Government was using the print media as a propaganda tool.

### John Adams (1735 – 1826) :

John Adams was the second president of the USA (1797 – 1801). He was born in Braintree (now Quincy). He distinguished himself at Harvard University and became an advocate in 1758. He led the protest against the Stamp Act (1765) and he was a delegate to the "First Continental Congress (1774)". He proposed the election of George Washington as Commander-in-chief to fight against the British colonial rule. John Adams retired from the Congress in 1777 as he was sent to France and Holland as American Commissioner. In 1789 he became the Vice President under George Washington. They were re-elected in 1792; and in 1796 John Adams was chosen president by the Federalists. He was defeated on seeking re-election in 1800.

*Fig. 5.7 John Adams*

### Thomas Jefferson (1743 – 1826)

He was a powerful statesman and the third president of the United States (1801 – 1809). He studied at the College of William and Mary and became a lawyer in 1767. He joined the Revolutionary Party and played a prominent role in the First Continental Congress (1774) which drafted the Declaration of Independence. He was the Governor of Virginia (1779 – 81). He became the American minister in France in 1785 and Secretary of State in 1789. Thomas Jefferson became the vice president under John Adams and became the president of the United States in 1801 defeating John Adams.

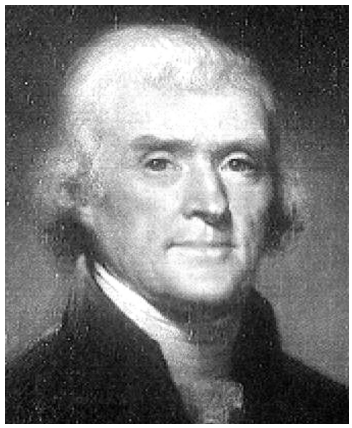

*Fig. 5.8 Thomas Jefferson*

In France a move towards the press free from partisan sentiment emerged with the founding of "La Presse" in 1836 by Emile de Girardin. He introduced news features, like serial stories, to raise circulation and bring down the purchasing price of newsprint. In the United

The first vernacular newspaper in Bengali, "Samachar Darpan" appeared in 1818. The promoters of this paper were the famous Serampore missionaries, William Ward, William Carey and Joshua Marshman. The Gujarati newspaper, "Bombay Samachar" came out in 1830. From 1835 to 1857 the Indian press was sprouted in Agra, Delhi, Gwalior and Lahore. However, the Governor-General, Lord Canning (1856 – 1862) gagged the Indian press in 1857 by restoring the system of licences. His aim was to control the vernacular journalism. It is said that out of 33 popular publications in existence on the eve of the Revolt of 1857, only six of them survived the Great Revolt.

Lord Canning established an "Editors' Room" in 1858. Journalists could visit the Room for examining official papers of public interest. The Press Act of 1835 was repealed in 1867. Consequently, the Indian print media was apparently regulated.

In 1878, Lord Lytton (1876 – 1880) promulgated the Vernacular Press Act. It gagged the vernacular newspapers. The Act was a great blow to the freedom of press, especially the newspapers published in vernacular languages. The Act was vehemently criticized even by some members of the Viceroy's Council. Lord Lytton established the office of Press Counsellor of India. Sir Robert Lethbridge became the first Press Counsellor of India. The function of this new office was to supply correct, early and accurate information pertaining to public measures, to act as a liaison office between the colonial government and the Indian vernacular press.

Immediately after the commencement the Act as law, the Amrita Bazar Patrika which was a bilingual daily published in Bengali and English became a full-fledged English daily. The reason was to evade the blow of Vernacular Press Act. In 1876, the Hindu began its publication at Madras (Chennai) and it became a tri-weekly paper from a weekly one.

In 1878, the Illustrated Weekly was born in Bombay (Mumbai) and the Capital came into being in Calcutta (Kolkata) in 1888. And many other dailies, weeklies and monthlies appeared in India during the last quarter of the 19th century.

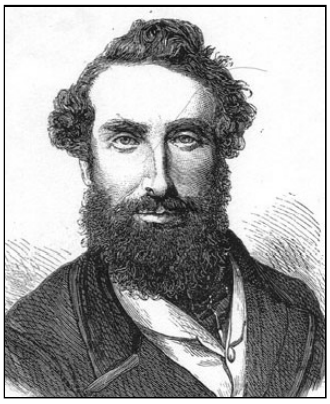

*Fig. 5.10 Lord Lytton*

## (C) RELATIONSHIP BETWEEN PRINT CULTURE, PUBLIC DEBATE AND POLITICS

During the second half of the nineteenth and the early part of the twentieth centuries, a good number of newspapers came out with nationalist ideas. They were published in vernacular languages and in English. These newspapers played an important part in spreading democratic and nationalist ideas among the Indian people. They helped in arousing the Indian masses politically conscious. The newspapers became the medium of communication

The early twentieth century India withnessed a new era in the growth of print culture. G.A. Natesan (1873 – 1949) of Madras (Chennai)began the "Indian Review", a monthly in 1900. Natesan was specialized in editing and publishing a number of biographies of reputed Indian personalities. The "Leader" published from Allahabad became essentially the mouthpiece of the Liberals.

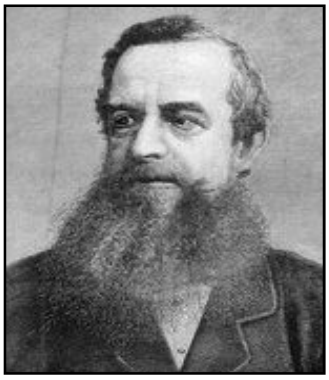

*Fig. 5.12 Lord Ripon*

Annie Besant bought the "Madras Standard" and renamed it "New India". She was widely accepted as an enthusiastic, devoted idealist and powerful journalist for her cause of "Home rule Movement". Annie Besant (1847 – 1933) was a Theosophist born in London. After separation in 1873 from her husband, Annie Besant became Vice President of the National Security Society. In 1889, after meeting Madame Blavatsky, she developed an interest in theosophy and came to India. In India, she became involved in the independence movement of India.

*Fig. 5.13 Annie Besant*

Mohandas Karamchand Gandhi took to journalism in his fight for the Indians in South Africa. He founded the "Indian Opinion". After returning to India, he founded the "Young India", an English Weekly with its Gujarati counterpart, "Navajivan".

The Hindi daily, "Aj" began its publication in 1920 and it supported the Congress programmes. It set the standard for Hindi journalism while consciousness of Hindi gave a new impetus to the Hindi journalists. The "Hindustan Times" began its publication with K.M. Panikkar (1895 – 1913) as its first editor. The paper supported the cause and objective of the Swarajya Party.

The Indian Press Ordinance was promulgated in 1930 and curbed the freedom of press. The Indian editors strongly protested against the ordinance. Some of them were heavily fined and the securities of some of the newspapers deposited into the government treasury had been forfeited. In 1931, the Indian Press (Emergency Powers) Act was promulgated. This Act prohibited the newspapers to publish of matter inciting to or encouraging murder or violence. Further, the Act also curbed the publication of any kind of Congress propaganda, including messages from persons arrested or jailed. The Congress-minded papers – the "Ananda Bazar Patrika", the "Amrita Bazar Patrika", the "Bombay Chronicle", and the "Free Press Journal" were the victims of the Act.

It is worth mentioning that during the Civil Disobedience Movement of 1930, unauthorised, unregistered and undeclared cyclostyled news - sheets became very popular. These cyclostyled news-sheets contained news about the Satyagraha and details of all

on the headlines and space given to news on disturbances ; (v) compulsory press advice; and (vi) arbitrary censorship. In protest, the "Harijan", "National Herald' and "Indian Express" stopped publication. An all India Newspapers strike was launched on the 6th January, 1943.

Then the Indian press decided not to give publicity to : (i) all circulars issued by government ;(ii) New Year Honours list; (iii) speeches of members of the British government, the Indian government and the provincial governments. Consequently, the colonial administration withdrew prohibitory orders and the press began to publish government news.

## GLOSSARY

**Photogravure** – The process of using photography to make a printing plate with an image engraved into it.

**Offset** – A method of printing in which inked impressions onto paper from another surface.

**Billboard** – A very large board erected by the roadside or attached to a building, used for displaying advertisements.

**Wallpaper** – Paper, usually printed with pattern(s), which is pasted on walls and sometimes ceilings.

**Confucianism** – It relates to the teachings of Confucius (c.551 - 479 BC), the Chinese philosopher, administrator and moralist. His teachings include personal control, adherence to social hierarchy and social and political order, etc.

**Shintoism** – The Japanese religion in which devotees worship and make offerings to numerous gods and spirits associated with the natural world.

**Veda** – Any or all of the collections of Aryan hymns , originally transmitted orally but written down in sacred books from the 6th century B.C.

**Jesuits** – Members of the Roman Catholic Religious order known as the Society of Jesuits engaged in missionary and educational work. The order was founded by St. Ignatius Loyola in 1534 with an aim of defending Catholicism against the Reformation.

**Coranto** – Alteration of French word "Courante' influenced by the Italian word "Corranta".

**Trivialities** – The condition or quality of having little importance or seriousness.

**Crossword puzzle** – A puzzle in which numbered clues are solved and words that form the answers entered horizontally or vertically into a correspondingly numbered grid of squares.

8. Name the first book in Bengali.
9. When was the "Samachar Darpan"started?
10. Name the first Press Counsellor of India.
11. In which year did the "Illustrated Weekly" begin its publication?
12. In which year was the Vernacular Press Act promulgated?
13. Who was the first editor of the Hindustan Times?
14. When was the Indian and Eastern Newspapers Society established?

## D. Activity :

**Reproduce a picture of Gutenberg's Bible in a chart.**

********

Japan was an aggressive imperial power in Asia. She had visualised a dream for the conquest of east Asia, including China and south east Asia. She exerted her sphere of influence over the Pacific. These imperial dreams of Japan made her to come into clash with Great Britain and the United States. When the War broke out in Europe, Japan made alliance with the Axis powers, namely, Germany and Italy. She attacked Pearl Harbour, the American naval base in Hawaii which made her a belligerent country. She invaded the British colonies in the south east Asia and drove away the British forces from there. The great Indian nationalist leader, Netaji Subhas Chandra Bose, who was lobbying with Germany and later on Japan could convince the Japanese forces to help the Indians in their struggle against the British imperialism. Subhas Chandra Bose was permitted to raise the INA consisting of the Indian prisoners of war. It was agreed that the imperial forces of Japan and the INA would invade India in the north eastern frontier, in Manipur and Kohima and liberate the Indians. Ultimately, Burma was easily conquered and the Indian immigrants and the British traders were driven out of Burma. These refugees flocked to Manipur on the journey to their destinations in India.

*Fig. 6.1 Netaji Subash Chandra Bose*

Manipur's immediate problem was the influx of the Indian refugees from Burma. Refugee camps were set up at Imphal. Refugees went to Silchar through the old Cachar road, and to Dimapur, the nearest rail head in Assam. The British strategists were greatly concerned at this Japanese threat to the eastern frontier. Manipur was aware of this impending Japanese invasion. British army started deploying their units in Manipur.

## JAPANESE BOMBING OF IMPHAL, 1942

The War came to Manipur with the bombing of Imphal, the capital of Manipur by the Japanese air force planes. The first bombing was on 10th May, 1942 which caused a lot of civilian casualty. The civil administration of the state ceased to function. The town was deserted, the traders and other inhabitants fled to the hills and rural areas. Another air raid occurred on 16th May. The offices of the state government began to function at Kwakeithel, a suburb of the capital in the house of the Inspector of Police, Khomdram Dhanachandra Singh. The Johnstone High School started running at Khagempalli at the house of the headmaster, Konjengbam Goura Singh. After the first bombing, there was a lull for about a year. On 20th and 21st April, 1943, there were bombings at Imphal. It did not cause any panic. People were made familiar with air raid precaution. Incidentally it coincided with the Matriculation examination of Calcutta University. The examination was held at the residence of the Jail member of the Darbar at Moirangkhom. After almost a year after, in March, 1944 there were air raids on Imphal heralding the actual invasion of Manipur.

The 17 Indian Division posted at Tiddim faced a great logistic difficulty. At the impending march of 33 Division under Major General Yanagudi, General Scoones decided and ordered Major General Cowan to withdraw 17 Division from Tiddim and return to Imphal valley. It was found that the three divisions were not enough to defend Imphal. Another division, 5 Indian Division stationed in Arakan was airlifted to Imphal. By March, 1944, IV Corps had four divisions to defend Imphal. The invasion began with the crossing of the Chindwin by 31 Division and 15 Division of the Japanese Army on 16th March, 1944 and march of 33 Division for Tiddim to Manipur chasing General Cowan's 17 Division.

## THE MAIN BATTLES

The withdrawal of 17 Division from Tiddim to Imphal was regarded a successful operation. The 33 Division of Japanese Army marched from Tiddim into Manipur. On the way, they occupied Churachandpur, Moirang, Ningthoukhong, Potshangbam and Bishnupur. The British forces resisted them in the battle of Bishnupur and Silchar track. The Japanese marched to Nunggang and occupied the Maibam Lokpaching, known as the Red Hill. The Japanese were beaten back from the Red Hill.

The 33 Division under Lt. General Sato marched to Kohima which was sieged for several months. 15 Division invaded Ukhrul hills, crossed it and marched to Kanglatongbi and blocked the Imphal Dimapur Road on March 29 and the siege of Imphal began.

In Ukhrul hills, 15 Division and a group of 33 Division had a number of battles before their occupation of Ukhrul. A bloody battle was fought at Shangshak with heavy casualty on both the sides. The British forces withdrew from Shangshak. The battle of Shangshak is important in the Manipur Front. The Japanese pushed down to Imphal plains and occupied a vintage position at a hill known as Nungshigum overlooking Imphal-Ukhrul Road, about 7 miles from Imphal. The Japanese forces were repulsed from the Nungshigum hill. The battles in Bishnupur and Pallel went in favour of the British. By May, Japanese were losing ground due to the lack of reinforcement and supply of food.

The Japanese siege of Kohima was over in early June. The 2nd Indian Division moved down to relieve Imphal. 5 Indian Division moved from Imphal towards Kohima. The 2nd Division cleared the Japanese from the villages inhabited by the Angami, Mao and Maram Nagas. The two forces met on 22nd June, 1944. The siege of Imphal was over. And the Japanese were pushed out of Manipur and they retreated into Burma.

## THE INA IN MANIPUR

The INA forces fought against the British force. They were employed in gathering intelligence and propaganda among the Indian soldiers in British Army. The INA force attacked the airstrip near Kakching. The INA occupied Moirang and hoisted the Indian flag at Moirang Kangla on 14 Arpil, 1944. Col. A. Malik of the INA established their office at Moirang.

## POST WAR POLITICAL DEVELOPMENT

The Second World War brought changes in the life of the people of Manipur. The first was the development of a network of roads and communication between Imphal, the capital of Manipur with the neighbouring province and country. The roads in the state were also developed. These roads favoured the growth of trade and commerce. A large number of persons were engaged in the government reconstruction works. The vision of the people was greatly widened due to the contact with the foreign soldiers and exposure to western technology. Consequently, the state government established many educational institutions. The students residing outside Manipur in places like Calcutta, Guwahati, Daaca were greatly increased. In the hills, the number of Christian missionary schools greatly increased.

A great impact of the War and the awareness of the impending British departure from India was the growth of political consciousness of the people both of the valley and hill. This political consciousness was reflected in the establishment of political parties in Manipur. Hijam Irawat Singh who was also imprisoned in jail for his involvement in the Nupilan returned to Manipur after the war. He started political activities. The attempt to revive Akhil Manipuri Mahasabha failed. And the Manipur State Congress Party was founded by the pro-India Congress inspired political leaders. Manipur Praja Sangh was established by Irawat Singh which was greatly influenced by the Marxist ideology. Yet, he was greatly concerned with the problems of peasantry. He founded the Manipur Krishak Sabha. There was intense political debate on the future of Manipur state after the British departure.

The tribes of Manipur were also organized into tribal solidarity organizations like the Kuki National Assembly (KNA), Kabui Naga Association, The Tangkhul Long, Paite National Council, Gangte Tribal Union, etc.

Maharajah Bodh Chandra Singh was aware of the political development and was preparing for a constitutional monarchy, after the British departure. The Maharaja became a member of the Chamber of Indian Princes when the interim Government of India led by Pandit Jawaharlal Nehru was established. The Maharaja took two steps. The first was the preparation for the coming of the constitutional monarchy. He established a Constitution drafting committee whose members were nominated from amongst the leaders of different political parties and some tribal leaders. The Manipur State Darbar was converted into Manipur State Council; and the President of the Darbar was redesignated as the Chief Minister of Manipur. One F.F.Pearson, IPS was the first Chief Minister of Manipur. A Constitution was drafted and it was promulgated as the Manipur State Constitution Act, 1947. The Constitution provided a

***Fig 6.5 Maharaja Kumar Priya Brata Singh***

**Lt. General G.A.D Soones** – Commander of the IV Corps of the British Indian Army to defend Manipur against the Japanese invasion.

**Col. A. Malik** – An officer of the Indian National Army who hoisted the Indian Tricolour flag at Moirang on 14th April, 1944.

**Battle of Red Hill** – Red hill was the name of the hillock of Maibam Lokpaching in Bishnupur district. The Japanese forces under Col. Saku occupied the Red Hill. And there was a fierce battle. The Japanese forces were beaten back from the Red Hill.

**The battle of Sangshak** – It was a bloody battle between the Japanese forces and the British Indian army. It is a Tangkhul village in Ukhrul district. The British forces withdrew from Sangshak.

**Maharaja Bodh Chandra Singh** – Maharaja of Manipur during 1941-1955. He gave great help to the British in their war against Japan.

**Stand Still Agreement** – It was an agreement between India and Manipur that the relation between Native State of Manipur and British Indian government would remain even after India became independent.

**Instrument of Accession** – By this agreement, Manipur would retain all the powers of governance except defence, external affairs, finance and currency which were given to India.

## EXERCISES

### A. Long Answer Type Questions :

1. What was the imperial design of Japan during the Second World War?
2. Why did Netaji Subash Chandra Bose make alliance with Japan to liberate India?
3. Why did the Japanese forces and the Indian National Army invade Manipur?
4. Give an account of the war between the Japanese and Allied forces in Manipur in 1944.
5. Who were the Japanese generals who invaded Manipur and who were the British generals who defended Manipur?

UNIT

I

# WORKING OF DEMOCRACY

Democracy is regarded as the best form of government in modern times. Most of the countries of the world are adopting the democratic form of government. The 20th century is a century of democracy. Even those countries where there is non-democratic government, they are struggling to attain democracry.

India and the United States of America claim themselves to be great democratic countries in the world. However, the nature of democracy in India is different from that of other democracies of the world. In India many challenges vastly inlfuence the working of the democratic institutions. The supporters of British Imperialism argued that the inhabitants of this vast sub-continent with multiplicity of races, languages and religions with barriers and divisions of innumerable castes and sub-castes, with sharp differences of social and cultural standards could not be considered as a nation. Nor could they become a nation. Linguistic, cultural and religious pluralism of India is an accepted fact. This fact has to be taken into consideration at the time of adoption of any public policy in our government. Keeping this fact in view Jawaharlal Nehru pronounced his thesis of 'Unity in diversity'.

## CHALLENGES POSED BY COMMUNALISM

There was considerable harmony among the members of the various sections of communities in India during the pre-independence period. However, there were some occasional confrontations between the Hindus and Muslims. The members of other communities like, Christians, Budhists, Jains, Sikhs, Zorastrians etc. lived peacefully. They accepted the leadership of the Congress in their fight against British colonialism. The Hindus constituted the majority in India and the Muslims constituted the largest minority groups. Members of all other religions also constituted minority groups. Thus India has a large number of social groups.

Not only there were social differences in Indian polity, there were keen political competitions and contestations also among them. The animosity between the Hindus and Muslims were largely the creation of the British rulers. They could foresee a great threat to their authority in the unity among of these two communities. They thus deliberately adopted the policy of 'divide and rule'. They promoted hostility and confrontation among the Hindus and Muslims for achieving their own selfish end. The British sowed the seeds of social divisions and political competition among Indians by providing for special electorate for the Muslims.

With definite patronage and support, the Muslim League started an agitation. The agitaition demanded the division of the country on the basis of the malicious 'two nation' theory. On the eve of partition of the country into India and Pakistan, there was wanton destruction of life and property on both sides of the dividing line. A number of parties which were formed on religious basis, were responsible for spreading religious fanaticism and fundamentalism.

### What is Communalism ?

In quite simple terms, communalism may be defined as a person's attachment with the good of his community. A person guided by communalism subordinates his loyalty to the nation or the society to the promotion of narrow and selfish interest of his community. In the realm of politics it has very sinister implications. It is generally associated with a narrow, selfish, divisive and aggressive attitude on the part of the religious group. India has the worst type of communilism-Sikhism in Punjab, Dravidianism in Tamil Nadu and acute caste conflict in Bihar and some other Northern states. The rise of tribalism can be taken as a manifestation of communalism. Different forces of communalism are getting more and more consolidated and they pose a grave danger to the unity and integrity of the nation. HIndu-Mulsim communal riots become a common affair. Communalism thus results (i) when beliefs of one religion are presented as superior to those of other religions (ii) when the demands of one religious group are formed in opposition to another (iii) and when state power is used to establish domination of one religious group over the rest. This method of using religion in politics is communal politics. Communalism prevails not only in India but it exists in many European states as well.

Communalism was and continues to be one of the major challenges to Indian democracy. The makers of our constitution, therefore, made India a secular state.

- ⇨ There is no official religion for the Indian state.
- ⇨ The Indian Constitution provides to all individuals and communities freedom to profess, practise and propagate any religion or not to follow any religion.
- ⇨ The constitution prohibits discrimination on the ground of religion.
- ⇨ The constitution allows the state to intervene in the matters of religion in order to ensure equality among religious communities.

These are the constitutional devices to combat communalism in India. Communal prejudices and propaganda needs to be countered. Religion should not be politicised in any case. Our secular constitution is necessary to combat communalism but it is not sufficient.

## CASTE AND POLITICS

The term 'Caste' has been derived from the Portugese word 'casta' meaning breed, race, kind. The Indian terms used to define their system are 'Varna' and 'Jati' i.e. complexion and lineage. The former refers to racial differences and the latter means birth or descent.

During the Rig Vedic period the Aryan society had four caste – the Brahmin, the Kshatriyas, the Vaisyas and the Sudras. The first three caste enjoyed privileges which were denied to the Sudras.

Caste division is special to India. The influence of caste permeates every area, level of political and administrative life of the nation. It begins with the electoral politics. All parties including the so-called secular parties select their candidates for elections with an eye on the caste composition of the constituencies concerned. Every party tries to select candidates from the numerically dominant caste in the electoral arena. In electoral campaigns party leaders make open or disguised appeal to caste sentiments. Among some castes casting of one's vote is thought to be like giving away one's daughter in marriage. There is an electoral maxim in Haryana "Jat ki beti jat ko, jat ki vote jatko" ( A jat gives his daughter in marriage to a jat, so he gives his vote to a jat).

Political expression of social differences is possible and somtimes quite desirable in a democratic system. All societies have some kind of social inequality and some form of division of labour. Occupations are passed on from one generation to another. Caste system was based on exclusion of and discrimination against the outcaste groups. The Constitution of India prohibits any caste-based discrimination. It has laid the foundations of policies to reverse injustices of the caste system.

Caste system has not disappeared from India. Even now most people marry within their own caste or tribe. Untouchability, despite constitutional prohibition still persists. Those groups that could not get educational facilities lag behind. That is why there is disproportionately large presence of 'upper caste' among the urban middle classes.

## CASTE IN POLITICS

**Caste can take various forms in politics :**

- It is not in the electoral politics alone that the influence of caste is visible. When a ministry is formed either in the state or at the centre caste considerations are always kept in mind. Every Chief Minister tries to ensure that all dominant castes in the state are adequately represented in his council of ministers. In Manipur also tribes and castes are represented in the formation of govennments.
- Political parties and candidates in elections make appeals to caste sentiment to get support.
- The focus on caste in politics can sometimes give an impression that elections are all about caste and nothing else. But that is not true :-
- No parliamentary constituency in the country has a clear majority of one single caste. Every candidate needs to win the confidence of more than one caste and community to win elections.
- No party wins the votes of all the voters of a caste or community.
- Some voters have more than one candidate from their caste while many voters have no candidate from their own caste. Many political parties may put up candidates from the same.

⇨ The ruling party and the sitting MP or MLA frequently lose elections in our country. That could not have happened if all castes and communities were frozen in their political preferences.

It is clear that the voters have strong attachment to political parties. People within the same caste or community have different interests depending on their economic condition. Rich and poor or men and women from the same caste often vote very differently. People's asessment of the performance of the government and the popularity rating of the leaders are often decisive in election results.

It is not a one way relation between caste and politics. Politics too influences the caste system and caste identities by bringing them into the political arena. Thus, it is not politics that gets caste ridden, it is the caste that gets politicised. It takes several forms : (i) Each caste group tries to become bigger by incorporating its neighbouring castes or sub-castes which were excluded earlier from it. (ii) Various caste groups are required to enter into a coalition with other castes or communities for dialogue and negotiation. (iii) New kinds of caste groups have come up in the political arena like 'backward' and 'forward' caste groups. Thus, caste plays different kinds of roles in politics.

The primary function of caste politics has been to transfer authority from the higher to the lower and middle caste. Caste is playing a progressive role in modernizing Indian society. Casteism has become a means of levelling the old order of inequality and uplifting the down trodden sections of society. This process is known as Sanskritisation. That means the lower castes have ever tried to emulate the ways of the higher one which should not be appreciated. Because caste division may lead to tensions, conflict and even violence.

## GENDER PERSPECTIVE IN POLITICS

Gender division is a form of hierarchical social division seen everywhere. The gender division is understood as natural and unchangeable. This division is not based on biology but on social expectations and fixed in form.

In most families women do all house hold works, such as cooking, cleaning, washing clothes, looking after children etc. men do all the works outside the home. Men think that to do house work is for women. But when these jobs are paid for, men are ready to take up these works e.g. cooking in hotels. Similarly it is not that women do not work outside their house. Women work both in rural and urban areas. In fact the majority of women do some sort of paid work in addition to domestic work. But their work is not valued and does not get much recognition.

The role of women in public life especially is minimal. Earlier only men participated in public affairs, voted and contested for public offices. Gradually the gender issue was raised in politics. Women in different parts of the world organised and agitated for equal rights. Women agitation in different countries demanded for women empowerment in political and legal status of women and improvement of their educational and career opportunities. These

movements of women aimed at equality in personal and family is called feminist movement. Now, we find women working as scientists, doctors, engineers, lawyers, police officers, pilots and what not. In Scandinavian countries like Sweden, Norway and Finland, the participation of women in public life is very high. In India women still lag much behind men. Ours is still a male dominated patriarchal society. Women face disadvantages, discrimination and oppression in various ways. Women are not paid equal wages. In many parts of India parents prefer to have sons and find ways to have the girl child aborted before she is born.

There are many reports of harassment, exploitation and violence against women. They are not safe particularly in urban areas. They are not safe even within their own home.

## WOMEN'S POLITICAL PARTICIPATION

In India the proportion of women in legislature has been very low. The percentage of elected women members in Lok Sabha has never reached even 10 percent of its total strength. Their share in the state assemblies is less than 5 percent. India is among the bottom group of nations in the world in this respect.

One way to solve this problem is to make it legally binding to have a fair proportion of women in the elected bodies. This is what Panchayati Raj has done in India. One third of seats in local government bodies in panchayats and municipalities are now reserved for women. Now the Parliament has agreed reservation of half of the total number of seats. Now there are more than 10 lakh elected women representatives in panchayats and municipalities. Women organisations and activists have been demanding for similar reservation of seats for women in the Lok Sabha and state assemblies. A bill with the proposal has been pending before the Parliament for more than a decade. There is no consensus over the bill among the political parties and, therefore, the bill has not been passed. It is expected that the bill will be discussed in Parliament very soon.

Thus, gender division is an example that some form of social division needs to be expressed in politics. However, women could hold two highest posts in the country namely those of Prime Minister and the President of India. That is a grand success of women empowerment in India. The 15th and 16th Lok Sabha witnessed the prestigious seat of the speaker occupied by Meira Kumari of UPA and Sumitra Mahajan of NDA respectively.

***Indira Gandhi***
***Former Prime Minister of India***

***Pratibha Devi Singh Patil***
***The President of India***

## ROLE OF MEIRA PAIBIS IN THE WORKING OF DEMOCRACY IN MANIPUR

The state of Manipur has a unique pressure group of women only namely, the Meira Paibis. 'Meira Paibis' is a local name which means women torch bearers. They are called so because they use *meira* (torch) in the night in lieu of lights or lamps. The institution of Meira Paibi was established in 1980.

Manipur has been under conflict situations. The condition of law and order had been very bad as a result of separatist movement. The role of the Meira Paibis is very important for such law and order problem. The objective of the group is restoration of peace. They hope for a completely changed society where there should be social equality and social justice. They like to have a good and effective popular government that would maintain law and order and territorial integration.

***Fig. Meira Paibis***

The Meira Paibis have spread far and wide. Every locality in Manipur has its own Meira Paibis' Association. They are very much against the impostion of the Armed Forces Special Powers Act, 1958 and state atrocities in Manipur. Sometimes there had been cases of inhuman torture by the security forces in the pretext of counter insurgency operation. If some innocent youths are arrested by the security forces in the name of counter insurgency without issuing arrest memo, the Meira Paibis challenges the security forces courageously. Since Manipur is a dry state where sale of liquor is prohibited, they help the authority in the

implementation of the policy. They are very much against social evil activities like adultery, forcible divorce, abduction, kidnapping etc. Their movement is spontaneous. Any moment they can have a huge gathering within a short time by giving signals on electric or telephone posts. They are very active and brave.

Really the Meira Paibis are very powerful. They can exercise influence and participate in the political decisions at the grass root level. It is an agency of democracy. Their mode of movements are organising big rallies and holding sit in protest and agitations. They played an active role against kidnapping of children by some outlawed groups in mid 2008. Again they played a great role in the movement of 2015 demanding introduction of Inner Line Permit system in Manipur under the guidance of JSILPS.

## THE MANIPUR STATE COMMISSION FOR WOMEN

The need for a commission exclusively for women only has been felt long back to look after the exploitation of women in Manipuri Society, Women in Manipur have been looked down upon by the male dominated society. We hear several cases of domestic violence, physical assault, harassment, forcible kidnapping and divorce. In fact, they are suffering a lot in the hands of their husbands, in-laws, brothers etc. Therefore, there had been the demand for the establishment of a women's commission.

As a result of the demand and social pressure from different groups, the Government of Manipur established the Manipur State Commission for Women on 12th December, 2006. The observance of Nupi Lal also falls on 12th December every year. The Commission is just like Human Rights Commission for women only.

All the members are eminent personalities and we can hope a bright future of the Commission. Now the Commission has started hearing cases from agrieved women relating to the above stated incidents. Women should be given social justice. They must live in peace and harmony in the society. They should not be victims of male section. They are not dolls to be played with.

To run a Commission smoothly is not an easy thing without adequate fund. It is learnt that the Commission has requested the Development of North Eastern Region (DONER) to extend possible financial assistance. In the year, 2008 the Commission started a slogan 'Awake Women' in local language'Nupisha Mikap Thoklo'; Therefore, we hope a bright future for women of Manipur with the assistance of the Commission. In 2015 the newly constituted Commission has started to visit the family of the victims for effective results. Moreover, the Supreme Court of India has given special directives to the State Governments to take up serious actions for the protection of women and children against crime. This is an interesting step for the exercise of power of the commission.

## GLOSSARY

**Social Division of Labour**
– A system in which women do all the domestic works either by themselves or witht the assistance of domestic helpers. Men are generally excluded from domestic works.

**Patriarchy** – The literal meaning is the rule by father. It is a system where men are given more powers and values than women. It is male dominated society.

**Family Laws**
– Laws relating to marriages, divorce, adoption, inheritance etc. In India there are different family laws with the difference of religions.

**Urbanisation**
– Shifting of population from rural areas to urban areas, when there is industrialisation people rush to towns and cities for employment or some other causes.

**Caste hierarchy**
– It is a ladder like arrangement of caste groups, ranging from the highest to the lowest one.

## EXERCISE

**A. Give Very Short Answers :**

1. What is caste system in India?
2. Give the meaning of Communalism.
3. What is the meaning of Gender division?

**B. Give Long Answers (Essay type) :**

1. Examine the role of caste in Indian Politics.
2. Discuss the challenges posed by communalism to the Indian democracy.
3. Explain the role of Meira Paibis in Manipur.

**C. Give Short Answers :**

1. Why is there the Manipur State Commission for Women?
2. Why are the Meira Paibis called so?
3. What happened to the Women Empowerment bill in Parliament?

4. What is the meaning ? "A jat gives his daughter in marriage to a jat, so he gives his vote to a jat"

5. What is the meaning of 'Unity in diversity'?

## D. Fill up the blanks :

1. Social divisions based on ..... are peculiar to India.

2. Political parties and candidates in elections make appeals to ..... sentiments to get support.

3. All societies have some kind of social ..... and some form of division of labour.

4. In India seats are rerserved for women in ..... .

   (a) Lok Sabha

   (b) State legislative assemblies

   (c) Cabinets

   (d) Panchayati Raj bodies

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## How is power shared in democracies ?

In modern democracies, power sharing arrangements can take many forms. Some of the most common arrangement are given below :

- Power is shared among the three organs of the government – the legislature, executive and judiciary. This may be called horizontal distribution of power. Because it allows different organs of government placed at the same level to exercise different powers. Such a separation ensures that none of the organs can exercise unlimited power. Each organ checks the others. This arrangement is also called a system of checks and balances. In a democracy, even though ministers and government officials exercise power, they are responsible to the Parliament or State Assemblies. Although judges are appointed by the executive, the judiciary can check the functioning of the executive or laws made by the legislature.
- Power can be shared among governments at different levels. Power is distributed between the National or Union government and the provincial or state governments. The Union government is popularly known as federal government. In India we call it Central or Union government. However, there are many countries where there are no state governments. The Indian constitution clearly lays down the powers of different levels of government. This is called federal division of power. The same principle can be extended to the levels of government lower that the state government, such as the municipality and panchayat. This is known as vertical division of power.
- Power may also be shared among different social groups such as religious and linguistic groups. The best example is 'community government' in Belgium. This type of arrangement is meant to give space in the government and administration to diverse social groups. This gives minority communities a fair share in power.
- Power is also shared among political parties, pressure groups and social movements while influencing those in power. In a democrary the citizents must have freedom to choose among various contenders for power. In comtemporary democracies this takes the form of competition among different parties. Such competition ensures that power does not remain in one hand. Sharing of power among the political parties may be direct when two or more parties form a coalition government. In a democracy, there are interest groups such as those of traders, businessmen, industrialists, farmers and factory workers that take share in government either through participation in government committees or exerting influence on decision making process.

We can take two countries where there are different forms of power sharing. In Belgium the political leaders have realised that the unity of the country is possible only by representing the feelings and interests of different communities and regions. Such a realisation ensured mutually acceptable arrangement for power sharing. Sri Lanka shows us a contrasting picture where the majority community wants to force its dominance over others and refuses to share power. It can undermine the unity of the country.

- A federal government has dual objectives– to safeguard and promote unity of the country, while at the same time accomodate regional diversity. For the institutions and practice of federalism two aspects are very important. The governments at different levels should agree to some rules of power sharing. They also trust that each would abide by its part of agreement. Mutual trust and agreement to live together are ideal for a federal system.

The exact balance of power between the central and the state governments varies from one federation to another. This balance depends on the historical context in which the federations have been formed. There are two routes to the formation of a federation. The first involves independent states coming together on their own to form a bigger unit. By pooling sovereignty and retaining identity they can increase their security. The USA, Switzerland and Australia are of this type of federation. In this category, all the constituent states usually have equal power.

The second process is where a large country decides to divide its powers between the constituent states and the national government. India, Spain and Belgium formed their federations by 'holding together'. In this second groups the central government tend to be more powerful. Very often the different constituent units of the federation have unequal powers. Some units are granted special powers.

### How has federal division of power in India helped national unity ?

India is a vast country having many languages, religions and regions. India had emerged as an independent nation after a painful, long struggle. Soon after independence several princely states became parts of the country. The constitution declared India as a Union of states. The word 'federation' was deliberately avoided by the framers of the constitution because of the diversity of India in many respects. They did not like the power of secession of the consituent states from the Union. However, the Indian Union is based on the principles of federalism.

The constitution originally provided for a two-tier system of government, the Central or the Union government and the State governments. Later, a third tier of federalism was added in the form of panchayats in rural areas and municipalities in urban areas. These levels of government enjoy separate jurisdictions. The constitution clearly provided a three-fold distribution of legislative powers between the Union government and the State governments.

- Union List includes subjects of national importance such as defence, foreign affairs, banking, communications and currency. They are included in the Union list because we need a uniform policy in these matters throughout the country. The Union goverment alone can make laws relating to subjects in this list, having 97 items.
- State List contains subjects of state and local importance such as police, trade, commerce, agriculture and irrigation. The state governments alone can make laws relating to the subjects mentioned in the state list. The list contains 66 items.

## POLITICAL DECENTRALISATION IN INDIA

A vast country like India cannot be run only through the two tier system. Many of the big states of India are internally very diverse. There is a need for power sharing with these states. There is another tier of government below that of state governments. This refers to the decentralisation of political power at the grass root level.

When some power is taken away from Central and state governments and given it to local governments, it is called decentralisation. People have better knowledge of problems in their localities. There are a large number of problems and issues which are best settled at the local level. The local people know the needs of their locality and can manage things more efficiently. It is also possible for the people to directly participate in decision making. This also inculcates the habit of democratic participation. Local self government is the best way for realisation of one important priciple of democracy.

There have been several attempts to decentralise power since long back. As a result panchayats in villages and municipalities in urban areas were set up in all the states. But these were under the direct control of the state governments. Elections to these local governments were not held regularly and there was no adequate fund to run them. There was no effective decentralisation.

In 1992, a major step towards decentralisation was taken. The constitution was amended to make the third tier of democracy more powerful and effective.

- ⇨ Now it is constitutionally mandatory to hold regular elections to local government bodies.
- ⇨ There are reserved seats in the elected bodies and the executive heads of these institutions for the ST, SC and OBC.
- ⇨ At least one-third of all seats are reserved for women.
- ⇨ An independent institution called the State Election Commission has been created in each state to conduct panchayat and municipal elections.
- ⇨ The State governments are required to share some powers and revenue with local government bodies. The nature of power sharing is different from state to state.

Panchayati Raj is the popular name of rural local government. It works at three levels – village level, block level and district level. Each village or a group of villages in some states, has a Gram Panchayat. This is a council consisting of several ward members, often called panch and a president or sarpanch. They are directly elected by all the adult population living in that village. It is the decision making body for the entire village. The Panchayat works under the overall supervision of the Gram Sabha. All the voters in the village are the members of the Gram Sabha. The Sabha has to meet at least twice or thrice in a year to approve the annual budget of the Panchayat. It has to review the performance of the Gram Panchayat. The Gram Sabha is the general body while the village Panchayat is a small committee. The Gram Sabha elects its head. He/she is called the Pradhan, the Sarpanch or

experience as leaders at the grass root level. It inculcated the habit of democratic participation to the local people. In Manipur there are village Panchayats and Zilla Parishads taking part in the administration of our villages. In the hill districts of Manipur, they have village authorities as local bodies. Now there are Autonomous District Councils (ADCs) in the hill districts of Manipur to act as local bodies and their elections are held regularly.

## GLOSSARY

**Jurisdiction** – The area over which someone has legal authority. The area may be geographical boundaries or certain kinds of subjects.

**Prudential** – Based on careful calculation of gains and losses. Moral consideraion are usually contrasted with prudential considerations.

**Coalition Government**
– A government formed by two or more parties coming together. Political parties in a coalition form an alliance with some common programme. Usually a coalition government lacks stability.

## EXERCISE

**A. Give Very Short Answers :**

1. What is meant by horizontal distribution of powers?
2. Why is power sharing needed in democracy?
3. What is the meaning of power sharing?
4. When was the new Panchayati Raj Act passed?

**B. Give Short Answers :**

1. What is Concurrent list?
2. What is Union List? How many items of subjects are there?
3. What is prudential reason of power sharing?

**C. Give Long Answers (Essay type) :**

1. Give a critical appreciation of the Panchayati Raj working at the gras root level of democracy .
2. What are the federal provisions and institutions working in Indian federalism?
3. What are the key features of federalism?

UNIT

# III

# COMPETITION AND CONTESTATIONS IN DEMOCRACY

We have discussed in previous chapter how different tiers of government and various social groups share power. Now we are to discuss how power are constrained by the influence and pressure exerted to them. Democracy will have conflict of interests and view points. These differences are often expressed in organised ways. These groups have competitions and contestation among themselves to capture political power in a democracry. There are different ways and organisations through which ordinary citizen can play a role in democracy. We have to discuss the roles played by ordinary citizens through organisations while sharing power in democracy. Through pressure groups and movements, politics is influenced indirectly by citizens.

We may refer to the popular movement that took place in April, 2006. The movement brought far reaching effect in the Himalayan Kingdom of Nepal. There a King ruled it. The movement aimed at the establishment of democracy and popular control over the government from the king. All the major political parties formed a Seven Party Alliance (SPA) and called for a 4 day strike in Kathmandu, Maoist insurgents and various other organisations joined the general strike. Protestors numbering 4-5 lakhs served an ultimatum to the King on April 21.

On the last day of the ultimatum on April 24, 2006 the King was forced to concede all the demands. The King was Gyanendra who came to power after a mysterious assassination of King Birendra's family. The SPA chose Giraja Prasad Koirala as the new Prime Minister of the interim government. The restored Parliament met and passed laws taking away most of the powers of the King. This struggle came to be known as Nepal's second movement for democracy. Now the movement asked king Gyanendra to vacate the royal palace. The popular movement has become a source of inspiration to the world. In July, 2008 King Gyanendra left the King's palace for the establishment of a democratic republic and constituted an assembly for drafting a constitution. Now, Nepal has a popular democratic government. A democratic constitution was drafted in 2015.

This is a good example of political conflict that led to popular uprising. The struggle involved mass mobilisation. Public demonstration with mass support told the story of success. It had the critical role of political organisations. Similarly the Indians had struggled against the British authoritarian regime for a long time. They had a bitter experience of subjugation and poverty. So it was but natural for the makers of the Indian constitution to have opted for a democratic polity. Now we can draw a few conclusions from these examples.

## SECTIONAL INTEREST GROUPS AND PUBLIC INTEREST GROUPS

Usually interest groups seek to promote the interest of a particular section or group of society. Trade Unions, business associations and professional bodies (lawyers, doctors teachers) etc. are examples of this type. Their main concern is the betterment and well being of their members only.

There is another type of group known as promotional or public interest group. They promote collective rather than sectional good. They aim to help groups other than their own members. Its principal concern is with social justice and social equality for the whole society. e.g., a group of people fighting against bonded labour.

## MOVEMENT GROUPS

### Why have Social Movements come to occupy larger role in politics ?

The groups involved with movements include a very wide variety. Most of them are issue specific movements that seek to achieve a single objective within a limited time. In India, Narmada Bachao Andolan is an example. There are movements that involve more than one issue and run for a long term. The women movement for empowerment and environmental movement are examples.

### How do they influence politics ?

Pressure groups and Social movements exert influence on politics in various ways :

- ⇨ They try to draw public attention and support for their goals by carrying out information campaigning, organising meetings etc. They try to influence the media into giving more attention to their cause.
- ⇨ They often organise protest activity like strikes and disruption of government programmes.
- ⇨ Business groups often employ professional lobbyists or sponsor expensive advertisement. Some of their members may participate in official bodies and committees that advise the government. They also seek to exert influence political parties.
- ⇨ Sometimes presssure groups are either led or formed by leaders of political parties. Most of the leaders of such pressure groups are usually activists and leaders of party.
- ⇨ Sometimes political parties grow out of movements. After foreigner's issue Asom Gana Parishad formed a government of AGP.
- ⇨ In most cases the relationship between parties and interest or movement groups is not so direct. They often take positions as if they are opposed to each other. But most of the new leaders of political parties are from interest or movement groups.

- Political parties contest elections. In most democratic countries elections are held regularly. The political parties fight these elections. Contestations are mainly among the candidates put up by the political parties. Parties select their candidates in different ways. In India top party leaders generally choose candidates for contesting elections. In the USA, members and supporters of a party choose its candidates.
- Every political party prepares its programmes and policies which is published in the election manifesto and distribute it to the people. A party reduces a multitude of opinions into a basic position which it supports. A government is supposed to follow the policies of the ruling party.
- Parties mould public opinion. The parties organise, educate and discipline the electorate. The common people do not have knowledge about the political problems. Political parties present clearly such problems to the people and create awakening among the people. They try to mould public opinion in their favour in different ways.
- Parties form and run the governments. Parties recruit leaders, train them and then make them ministers to run the government in the way they like. In parliamentary democracies the formation of a cabinet depends upon the parties in the House.
- In making laws parties play a decisive role. But laws are debated and passed in the legislature. Most of the members belonging to a party are moved by the direction of the party leader.
- Those parties that cannot win majority in the legislature will act as opposition. The opposition parties exercise adequate checks on the government for its failure or wrong policies.
- Parties provide people access to government machinery and welfare schemes. For an ordinary citizen it is easier to contact a party leader than a government officer. Parties have to be responsive to the needs of the people. If not, people can reject those parties in the next election.

### Why are political parties needed ?

From the list of functions given above we know that political parties are very much needed in modern democracies. Because democracies cannot exist without political parties. Without parties government may be formed but its utility will remain ever uncertain. There will be no accountability of the government and will not be responsible to the people. Without political parties villagers will not be united and it would be difficult for candidates to contest elections.

That is why we find political parties in almost all countries of the world whether they are big or small, old or new, developed or developing. The rise of political parties is directly related to the emergence of representative governments. These societies need some agency to gather different views on various issues and to present these to the government. Political parties fulfil these needs.

and Nationalist Congress Party (NCP). National parties are those which influence all over the country. The strength of national parties vary from state to state.

There are also some parties in India which cannot have national influence. Their influence and activities are restricted to particular states or regions. These parties are regional parties. Some of their names are AIDMK (All India Anna Dravida Munnetra Kazhagam), the DMK both in Tamil Nadu; the Telegu Desam in Andhra Pradesh; the Shiromani Akali Dal in Punjab, the Shiv Sena in Maharastra, the Jharkhand Party, the National Conference in Jammu and Kashmir, Asom Gana Parashad in Asam, Manipur People's Party, Uttarakhand Kranti Dal, Sikkim Democratic Front, Forward Block and Trinamool Congress in West Bengal, Rastria Lok Dal and Samajwadi Party in Uttar Pradesh etc.

## INDIAN NATIONAL CONGRESS (Symbol– Palm)

It is popularly known as Congress Party. It is one of the oldest parties in the world founded in 1885 and has experienced many splits. After India's independence it played a dominant role both at the national and state levels for several decades. The party sought to build a modern secular democratic republic in India under the leadership of Jawaharlal Nehru. The Congress Party won the general elections held in 1952, 1957, 1962, 1967 and 1971. The Congress Party has gone through several splits. After several changes of its symbol, at present it has palm as its symbol. It was defeated for the first time in 1977 general election after the proclamiation of national emergency by Indira Gandhi. The party regained Power in 1980 and continued upto 1989. In the general election of 2004 it emerged as the largest party and currently leads the ruling United Progressive Alliance (UPA) Coalition government at the Centre. It supports secularism and welfare of weaker sections and minorities. It also supports new economic reforms. In the election of 2014 the Indian Congress got defeat winning only 44 seats and became opposition party.

## BHARATIYA JANATA PARTY (Symbol– Lotus)

The party was formed in 1980 by reviving the erstwhile Bharatiya Jana Sangh. In 1980 the Jana Sangh group walked out of the Janata Party. The BJP wants to build a strong modern India drawing inspiration from India's ancient culture and values. Cultural nationalism 'Hindutva' is an important element of the party. It wants full territorial and political integration of Jammu and Kashmir with India. The BJP emerged as the second largest party in the parliamentary elections held in 1991. The first BJP government at the Centre was formed after the election of 1996 but it lasted for 13 days only. A more stable BJP government came to power in 1998 as the leader of National Democratic Alliance. It lost election in 2004 and it is the main opposition party in the Lok Sabha. In the elections of 2014 the NDA won overwhelming majority. The BJP alone won 282 seats under the able leadership of Narendra Modi.

to blame parties for all that is wrong with our democracy and our political life. Parties have become identified with social and political divisions. However, we can come to the conclusion that political parties, pressure groups and movements are the necessities of democracy. They induce the ordinary citizens and encourage them maximum participation in political activities.

## GLOSSARY

**Partisan** – A person who has strong commitment to a party, group or faction. A partisan cannot take firm side and unable to take a balanced view on an issue.

**Ruling Party**
– The party in the majority form the government and rule the country or the state. The party that runs the government.

**Regional Parties**
– The parties that exist in some states only. They have no influence at the national level. They may operate in two and three states only. MPP in Manipur is a regional party.

## EXERCISE

**A. Give Very Short Answers :**

1. What is a political party?
2. What is a pressure group?
3. Give one example of pressure group in Manipur?
4. What is a national party?
5. What is a regional party?

**B. Give Short Answers :**

1. Distinguish between a political party and a pressure group.
2. Why have movements become very important in modern democracies?
3. Write four characteristics of a political party.
4. State four functions of a political party.

**C. Give Long Answers (Essay type) :**

1. Why do we need political parties ?
2. Examine the policies and programme of Indian National Congress.

UNIT

# IV

# OUTCOME OF DEMOCRACY

What does democracy do ? What outcomes can we reasonably expect of democracy? Does democracy fulfil these expectations in real life ?

In this last chapter we are to discuss these questions otherwise discussion will not be complete. We have to look at the expected outcome as well as actual outcomes of democracy in various respects viz, quality of government, economic development, inequality, social differences and conflict, freedom and dignity etc.

How do we assess democracy's outcomes ? It is not an easy thing to assess its outcomes. But to know the real outcome we have to compare assets of democracy with those of other non-democratic governments. Democracy is a better form of government when compared with dictatorship or any other alternative. We can say democracy is better because it

- ⇨ promotes equality among citizens ;
- ⇨ enhances the dignity of individuals
- ⇨ improves the quality of decision making
- ⇨ provides a method to resolve conflicts
- ⇨ allows room to correct mistakes

Majority of the people support democracy against other alternatives that are ruled by a monarch, a military junta, a single party or religious leaders. There is one dilemma– is democracy good in principle but not in its practice ? We have to produce some prudential reasons to support democracy.

When we see around we find over a hundred countries of the world today claim and practise some kind of democratic politics.

**(a)** they have formal constitutions
**(b)** they hold elections regularly
**(c)** they have political parties
**(d)** they guarantee rights of citizens.

While these features are common to them, they have different social situations, economic achievements and cultures. They have lots of differences in their achievements. Democracy can address all socio-economic and political problems. If some of our

Is a democratic government attentive to the needs and demands of the people and largely free of corruption ? In these respects the record of democracies is not satisfactory. Democracy often frustrates the needs of the people and often ignores the demands of a majority of its populaton. But there is nothing to show that other alternative governments are less corrupt or more sensitive to the people.

Democracy is certainly better than its alternatives in having a legitimate government. The government may be slow, less efficient, not always much responsive or clean. But a democratic government is people's own government, that is why there is an overwhelming support for the idea of democracy all over the world. It is a fact that people wish to be ruled by representatives elected by them. Democracy's ability to generate its own support is itself an outcome.

## ECONOMIC GROWTH AND DEVELOPMENT

If we assess the economic growth of all democracies and all dcitatorships for the last fifty years, dictatorships have slightly higher rates. Economic development of a country depends on social factors : i) country's population size ii) global situation iii) co-operation from other countries and iv) economic priorities adopted by the country etc. The differences in the rates of economic development is negligible, we cannot say that democracy is a guarantee of economic development. But we can expect democracy not to lag behind dictatorship in this respect. It is better to prefer democracy as it has several other positive outcomes.

## REDUCTION OF INEQUALITY AND POVERTY

Perhaps more than development, it is reasonable to expect democracies to reduce economic disparities. Democracies are based on political equality. All individuals have equal weight in electing representatives. We see economic inequality with political equality in many democracies. A few rich enjoy a highly disproportionate share of wealth and incomes while those at the bottom of the society their income have been declining. They find it difficult to meet their basic needs of life. In actual life democracies do not appear to be very successful in reducing economic inequalities. The poor constitute a large proportion of our voters. But no elected governments do not appear to address the question of poverty of the voters. The situation is much worse in some other countries like Bangladesh where more than half of the population live in poverty.

## ACCOMODATION OF SOCIAL DIVERSITY

Do citizens in democracies live a peaceful and harmonious life ?

Democracy should produce a harmonious social life is a fair expectation. No society can fully and permanently resolve conflict among different groups. But we must evolve mechanisms to negotiate the differences. Democracy is best suited to produce this outcome.

rounds of Political talks between Government of India and NSCN(IM). We can say that there are dignity and freedom of the citizens under the democratic consititution of India. There has been sharing of power horizontally and vertically There is complete decentralisation of power although not satisfactorily. In respect of economic development also India is going ahead of other neighbouring countries Sri Lanka, Bangladesh, even Pakistan cannot compete with India in respect of economic development. There are so many fundamental rights guaranteed by the constitution of India by which the citizens can enjoy a better status and personality. Elections in India are regularly held and all elections are free and fair to a large extent. There has been no imposition or outside threat to the citizens while they exercise their secret voting. Many expectations have been fulfilled although there are yet a few exceptions. For example, India cannot settle with the separatist movement permanently which are existing in many parts of India. We have already hinted that any democratic country cannot satisfy all the expectations of the people fully. More expectations from the government means a success of democracy. Because we cannot have such expectations from a dictatorship.

## CHALLENGES TO DEMOCRACY

In the last hundred years there had been expansion of democracy all over the world. We can confirm our belief that democracy is the dominant form of government in the contemporary world. It does not face a serious challenge or rival. But when we examine closely we have noted the serious challenges that democracy faces all over the world.

A challenge is not any problem. We usually call only those difficulties a challenge which are significant and which can be overcome. A challenge is a difficulty that carries within it an opportunity for progress. Once a challenge is overcome then the government goes up to a higher level than before.

Different countries of the world face different kinds of challenges. At least one fourth of the globe is still not under democratic government. This is a challenge for democracy in these parts of the world. These countries face the foundational challenge of making the transition to democracy and then instituting democratic governments. This involves bringing down non-democratic regimes.

Most of the established democracies face the challenge of expansion. This means applying democratic principles across all the regimes, different social groups and various institutions. Ensuring greater power to local governments, extension of federal principle to all the units of the federation, inclusion of women and minority groups etc. fall under this challenge.

Thus, every democratic country faces a challenge in one form or another. Deepening of democracy by strengthening its institutions and practices is also a challenge faced by every democratic country. Most countries including India and the USA face their challenges. Communalism, casteism, regionalism, poverty, illiteracy, unemployment, movement for women empowerment etc. are great challenges faced by Indian democracy. However, India could overcome all these challenges slowly with great care. Most of the challenges have been

# EXERCISE

## Give Very Short Answers :

1. How are elections conducted in democracy?
2. Why can't China have free and fair elections?
3. What is tranparency in the government?
4. What is right to information?
5. In what ways does democracy transform a subject to the status of a citizen?

## Give Short Answers :

1. What are the four practices followed by the so called democratic countries of the world?
2. How does democracy improve the quality of decision making?
3. How do democratic governments have the room to correct mistakes?
4. Why is it said that some delay is bound to take place in decision making in democracy?
5. Why are majority and minority opinions not permanent in a true democracy?

## Give Long Answers (Essay type) :

1. How is democratic government accountable, responsible and legitamate?
2. How do we confirm that democratic government is dominent over its rivals?
3. Discuss how democracy is superior to any other forms of government in promoting dignity and freedom of the individual.
4. How can you say that complaints of the people is itself a testimony to the success of democracy?
5. Analyse the ways in which India accomodates social differences.

## Fill up the blanks : Objective questions

1. In Bangladesh more than ..... of its population live in poverty
   **(a)** one third **(b)** half
   **(c)** two third **(d)** three fourth
2. It may be reasonable to expect from democracy a government that is ..... to the needs and demands of the people.
   **(a)** attentive **(b)** negligible
   **(c)** disinterested **(d)** discredited

UNIT

I

# THE STORY OF DEVELOPMENT

Just like human beings, a country can be poor. A poor person cannot afford to meet all the requirements of his family members. There is discontent in the family. Similarly a poor country also cannot meet the requirements of its citizens. The country passes through crisis after crisis.. You can recognize a poor person from his appearance and conditions of his belongings. Similarly there are certain characteristics common to all poor or developing countries such as large population size, preponderance of agriculture , large unemployment rate, low per capita income and extensive poverty. Lack of development is the main reason behind the sense of deprivation which is plaguing most of the developing countries.. Everyone wants development and the perception of development may differ from person to person. In common parlance development is the embodiment of our dreams and aspirations. Each of us has his own dream about his future.

The establishment of railway connectivity in Manipur is an example of contradictory perspectives of development. Policy makers look at it as a watershed in transport & communication in the state. It will make transportation of goods substantially cheaper. It will create enormous opportunities when it is extended and linked up with the TransAsian railway network. In short the change in economics due to the improvement in connectivity will give space to our entrepreneurs who would have access to the fast growing southeast Asian markets. At the same time some people are apprehensive of the influx of outsiders with the coming of railways. They feel that everyone in the state including the entrepreneurs will be overwhelmed by the influx. More established companies will crowd out the fledgling entrepreneurs. The advent of railways should be preceded by serious preparation for infrastructure and capacity building of stakeholders.

**Activity :** ***Ask the following persons about their aspiration***

- ⇨ **Your friend**
- ⇨ **Your neighborhood shopkeeper**
- ⇨ **Your school chowkidar**
- ⇨ **Your bus/van driver**

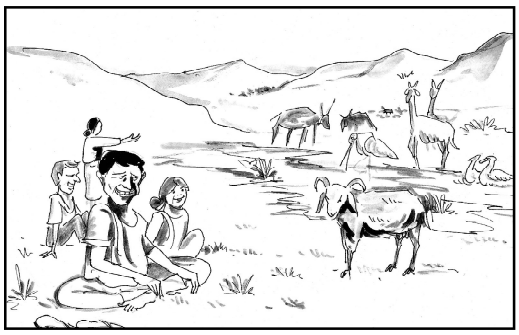
**List the common aspirations and unique aspirations.**

The concept of development as reflected in our aspirations may be myriad for us but for a country those aspirations have to be translated into more general objectives. Many countries like India take active role in development planning. It is impossible to plan directly for every aspiration of the people .It is not possible to ensure that everyone eats an egg a day. But it is possible to plan for enabling them to realize their aspirations. If everyone has work ,he is in a position to buy an egg a day with his income. Farmers can realize their dreams of a bumper harvest by creating adequate irrigation infrastructure. Quality education may be provided with proper infrastructure and well trained teachers. A sick person will get adequate health care if the hospitals are properly developed. More employment opportunities will make our youth happier. Better opportunities may be available if we have money. The voters will be happy with their M.L.A. if he can spend lots of money for their welfare. In short money is one such thing that can take care of most of these diverse aspirations. This led us to believe in the supremacy of money. If we have high level of income we can get what we want . This is the reason behind the use of income as an indicator of development.

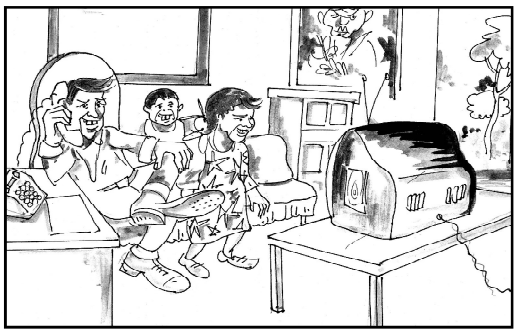
The traditional view of development is enhancement of the capacity of a national economy to sustain and generate an annual increase in its gross national product at rates between 5 percent and 7 percent. An alternative measure is growth in per capita income. The growth should be over a period of time and should not be sporadic. Per capita income is the income everyone of us will get if the national income is distributed equally among the citizens. It is obtained by dividing the national income by population. National income is the value of final goods and services produced by the normal residents of a country within one year. It can also be interpreted as the income of all the citizens of a country. The national income of India consists of income accruing to Indians engaged anywhere in legal economic activities. It does not include income earned from illegal activities such as selling heroin and smuggling arms across the border. However equal distribution of national income has always been a dream. In the real world income distribution is highly unequal with a large proportion of income accruing to a small proportion of people. Growth of Per capita income takes into account the ability of a nation to expand its output at a rate faster than the growth rate of population. High per capita income can provide the citizens a decent standard of living when the country has an inbuilt mechanism to distribute the national income equally. Per capita income is a poor indicator of development when there is no institutional mechanism to distribute income equally among the citizens. Prior to the 1970s development used to be seen as an economic phenomena characterized by rapid growth in per capita income . It was taken for granted that its benefits would trickle down to lower strata of society.

During the 1970s economic development was redefined in terms of reduction in poverty, inequality and unemployment . This rethinking came about as in many developing countries high rate of growth of per capita income failed to reduce unemployment rate,

inequality and poverty during the 60s and 70s. Our experience led to a broader perspective of development with improvement in quality of life as the most prominent objective of development. Human beings came to the centrestage both as a means and an end of development.A better quality of life needs, besides higher income , better educational facilities, higher standards of health and nutrition ,less poverty, cleaner environment, greater individual freedom and a richer cultural life and more opportunity.



*A happy rural family*



*A happy urban family*

Our children need good schools to enable them to meet the emerging challenges. Private schools in Manipur are more expensive than government schools yet vacant government schools have become a common sight in Manipur . Mission and private schools are teeming with students. Why is it so ? In Manipur one of the reasons behind the fall in the number of students is the increasing number of our students going to other states for study. This phenomenon is no longer restricted to the rich class. Every section of our society is trying to send their children outside the state. Why does a rich person want to send his only son to a far off school in another state? Why does a poor person want to send his children outside the state even though he will be in great difficulty ? If we are always afraid and feel insecure,our wealth makes little sense. Why does a highly paid government official seek voluntary retirement? Why do rich and highly qualified foreigners renounce their professions by joining the ISKCON ? Are not they highly paid ?

*An Iskcon devotee*

*Midas' despair with his golden touch*

Have you heard the story of king Midas who was blessed with the golden touch ? Any object he touched would change into gold. Was he the happiest man with so much gold ? We should have the freedom of choice. If I have to eat only my favourite dish, I will become bored after some days. Thus development is not income only .It is increasingly viewed as a multi dimensional process. What it means is that in addition to income one should look at other indicators also to have a proper perspective of development.

Other indicators of development are infant mortality rate, sex ratio, expectation of life at birth and human development index (HDI). IMR or infant mortality rate is the chance of dying between birth and exactly one year of age expressed in terms of death of infants per 1000 live births in that year. It is considered to be a sensitive indicator of the health status of the people and the level of human development in the context of education, economic conditions, nutrition etc. Poverty, malnutrition, a decline in breast-feeding and inadequacy of sanitation are associated with high infant mortality. It is found to be invariably low in developed countries and high in developing countries. In adequate health care facility due to poverty of the country is the main reason behind high infant mortality.

**TABLE : 1**

***Mortality rates 2012 (per 1000 live births)***

| Country | Infant | Under 5 | GNI per capita (PPP US$ ) 2013 |
|---|---|---|---|
| Norway | 2 | 3 | 63909 |
| Australia | 4 | 5 | 41524 |
| USA | 6 | 7 | 52308 |
| Japan | 2 | 3 | 36747 |
| India | 44 | 56 | 5150 |
| Pakistan | 69 | 86 | 4652 |
| Nepal | 34 | 42 | 2194 |
| Niger | 63 | 114 | 873 |

Sex ratio is the number of females per 1000 males. If it is less than 1000, sex ratio is said to be adverse for females. Two of the many reasons behind such adverse sex ratio are neglect of female child and inadequacy of maternal health care. In a few regions, mainly in Asia a deficit of women stems from various forms of lifelong discrimination against girls and women – particularly inferior nutrition and health care early in life and during the

child bearing years. In a few countries the sex ratio at birth deviates markedly in favour of boys, because a strong traditional preference for sons places girls at risk of sex- selective abortion or infanticide. Female infants survive in greater numbers than male infants almost everywhere, but in a few countries gender discrimination and neglect outweigh girl's biological advantage. Such differential treatment of males and females is an indicator of underdevelopment.

**Activity**

***Sex Ratio in India and Manipur***

**(Females per 1000 males)**

| Census Year | India | Manipur |
|---|---|---|
| 1901 | 972 | 1037 |
| 1911 | 964 | 1029 |
| 1921 | 955 | 1041 |
| 1931 | 950 | 1065 |
| 1941 | 945 | 1055 |
| 1951 | 946 | 1036 |
| 1961 | 941 | 1015 |
| 1971 | 930 | 980 |
| 1981 | 934 | 971 |
| 1991 | 927 | 958 |
| 2001 | 933 | 974 |
| 2011 | 940 | 987 |

**(i)** Draw a line graph of the sex ratios.
**(ii)** Point out some differences in the two series.

Expectation of life at birth is a comprehensive measure of the health of the people. It is the number of years a newborn infant would live if prevailing patterns of age specific mortality rates at the time of birth were to stay the same throughout the child's life. Chance of dying differs over the life time of a person. Chance of dying in old age is much higher than that in youth. Every age thus can be said to be associated with a specific chance of dying. This is what is meant by age-specific mortality rate. High values of expectation of life at birth indicate better health conditions.

**Activity :**

Expectation of Life at Birth in Manipur 1991

| District/State | Rural | | Urban | | Combined | |
|---|---|---|---|---|---|---|
| | Male | Female | Male | Female | Male | Female |
| Senapati | 67.1 | 70.68 | - | - | 67.1 | 70.68 |
| Tamenglong | 66.91 | 70.69 | - | - | 66.91 | 70.59 |
| Churachandpur | 67.09 | 71.12 | 68.59 | 72.32 | 67.77 | 71.62 |
| Chandel | 67.2 | 71.22 | 68.54 | 72.5 | 67.66 | 71.89 |
| Ukhrul | 66.47 | 71.11 | - | - | 66.47 | 71.11 |
| Imphal(IW/IE) | 67.29 | 70.34 | 77.29 | 80.39 | 71.2 | 74.06 |
| Bishnupur | 66.36 | 69.41 | 73.46 | 80.14 | 69.3 | 73.6 |
| Thoubal | 67.45 | 70.51 | 70.76 | 74.06 | 68.9 | 72.14 |
| Manipur | 66.93 | 70.81 | 70.28 | 73.9 | 68.64 | 72.42 |
| India (2001-05) | | | | | 62.3 | 63.9 |

**Note:** Tamenglong, Ukhrul and Senapati had no urban area in 1991.

⇨ Which district has the highest expectation of life?

⇨ Which district has the lowest rural expectation of life?

⇨ How does Manipur compare with India ?

⇨ Ask your class teacher to explain the concept of urban and rural used in Census in India .

## TABLE : 2

*Development indicators of some select countries.*

| Country | GNI (PPP US $) in 2012 | GNI per capita in (PPP US $) 2012 | Live expectancy at birth 2011 | | Adult literacy rate %15 Years & above |
|---|---|---|---|---|---|
| | | | Male | Female | |
| Norway | 336.1 | 66960 | 79 | 84 | ne |
| Australia | 982.2 | 43300 | 80 | 84 | ne |
| U.S.A. | 15887.6 | 50610 | 76 | 81 | ne |
| Japan | 4629.7 | 36290 | 79 | 86 | ne |
| India | 4749.2 | 3840 | 71 | 79 | 85 |
| Pakistan | 543.6 | 3030 | 65 | 66 | 55 |
| Nepal | 41.1 | 1500 | 68 | 70 | 60 |
| Niger | 11.2 | 650 | 54 | 55 | 29 |

***Source : World Development Report 2014***

GNI (Gross National Income) includes gross domestic product , remittances and foreign assistance income providing a more accurate economic picture of many developing countries.Though India's GNI is 14 times as large as that of Norway, the former's GNI per capita is 6% of the latter's GNI per capita. In the case of Japan and Australia also the situation is similar. Despite having substantially higher GNI , GNI per capita is substantially lower. A citizen of Norway is seventeen times as well off as an Indian.

Table 2 shows how different Per capita income can be across the world. The dollars used are purchasing power parity dollars. This eliminates differences in national price levels.Though India's gross national income is larger than that of Norway, our per capita income is low because of our huge population. Our population is more than one billion. A citizen of Norway can buy as much as 17 times what an Indian can buy and his standard of living can be as high. What can you say about a citizen of Nepal ?

In the capabilities approach to development propounded by nobel laureate Amartya Sen, development enhances capabilities. The process of development expands human capabilities by expanding the choices that people have to live full and creative lives. Capabilities are the freedom that a person has in terms of the choice of functions given his personal features and his command over commodities. There are three core values of development : the ability to meet basic needs, self esteem and the freedom to choose. Development should have the following three objectives : to increase the availability of

basic life sustaining goods such as food, shelter and health , to enhance levels of living through higher incomes, the provision of more jobs, better education and greater attention to cultural and human values and to expand the range of economic and social choices available to individuals and nations. Employment, better education and greater attention to cultural and human values impart greater individual and national self-esteem.

This approach led to the introduction of a more comprehensive summary measure of development in the form of human development index. Human Development Index, ( HDI) is a composite index that measures progress in the three basic dimensions—health, knowledge and income. **Health** is measured by life expectancy at birth. Achievement in **knowledge is measured** by combining the expected years of schooling for a school-age child in a country today with the mean years of prior schooling for adults aged 25 and older. **Income** is measured by purchasing-power-adjusted per capita Gross National Income (GNI); The United Nations Development programme (UNDP) has been publishing it since it started publishing Human Development Report in 1990.

**TABLE : 3** *Human development index for some countries*

| Country | 1980 | 1990 | 2000 | 2010 | 2013 |
|---|---|---|---|---|---|
| Norway | 0.793 | 0.841 | 0.910 | 0.939 | 0.944 |
| Australia | 0.841 | 0.866 | 0.898 | 0.926 | 0.933 |
| Japan | 0.825 | 0.858 | 0.883 | 0.908 | 0.914 |
| U.S.A. | 0.772 | 0.817 | 0.858 | 0.884 | 0.890 |
| India | 0.369 | 0.431 | 0.483 | 0.570 | 0.586 |
| Pakistan | 0.356 | 0.402 | 0.454 | 0.526 | 0.537 |
| Nepal | 0.286 | 0.388 | 0.449 | 0.527 | 0.540 |
| Niger | 0.191 | 0.218 | 0.262 | 0.323 | 0.337 |

We need to be healthy to enjoy the benefits of development. Health is rightly equated with wealth. The good things in life can be enjoyed by healthy people. Healthy workers can do more work than sick workers . A sick person is compelled to spend a large proportion of his wealth and income on medical treatment. Most of the time he will be on sick leave. One of the reasons why AIDS is a dreaded disease is its high cost of treatment. Premature deaths of workers can lower the productive potential of a nation. On the other hand a healthy person can save and invest more in productive activities. We also need to be literate because the benefits of development are not going to be delivered at our doorstep. Illiteracy imposes a heavy transaction cost. There are many formalities to be completed before one benefits from government programmes.We have to know the details of

programmes meant for our development , otherwise unscrupulous persons will corner the benefits meant for us. Only a small fraction of the intended benefits accrue to the actual beneficiaries.This has been the story of most developmental programmes undertaken in this country. The illiterate villagers do not know that large amount of money are earmarked for their development every year. They have been exploited also by unscrupulous village money lenders by getting thumbprints on highly exploitative agreements and deeds.

Countries are grouped in terms of HDI. HDI classifications are based on HDI fixed cut-off points,. The cut-off points are HDI of less than 0.550for low human development, 0.550–0.699 for medium human development, 0.700–0.799 for high human development and 0.800 or greater for very high human development. India belongs to the medium category. The top three countries in terms of HDI in 2013 are Norway,Australia and Switzerland. Niger has the lowest HDI .

**TABLE : 4**

Components of Human development index for some countries

| Country | Life expectancy at birth (years) 2013 | Mean years of schooling 2012 | Expected Years of schooling 2012 | Gross National Income per capita (ppp US$) 2013 | Human Development Index 2005 | Ranking out of 187 countries |
|---|---|---|---|---|---|---|
| Norway | 81.5 | 12.6 | 17.6 | 63909 | 0.944 | 1 |
| Australia | 82.5 | 12.8 | 19.9 | 41524 | 0.933 | 2 |
| U.S.A | 78.9 | 12.9 | 16.5 | 52308 | 0.914 | 5 |
| Japan | 83.6 | 11.5 | 15.3 | 36747 | 0.890 | 17 |
| India | 66.4 | 4.4 | 11.7 | 5150 | 0.586 | 135 |
| Pakistan | 66.6 | 4.7 | 7.7 | 4652 | 0.537 | 146 |
| Nepal | 68.4 | 3.2 | 12.4 | 2194 | 0.540 | 145 |
| Niger | 58.4 | 1.4 | 5.4 | 873 | 0.337 | 187 |

Source : Human Development Report 2007-2008

Though USA has higher per capita GNI than Australia (table 4) it has lower HDI because of lower expectation of life at birth and expected years of schooling . Nepal's per capita GNI is not even half that of Pakistan yet her HDI is higher. What it shows is that it is not per capita GNI only that matters . Other dimensions should not be ignored.

Human development is however a broader concept not amenable to being represented by any summary measure. For example HDI fails to incorporate important aspects of

human development such as the ability to participate in the decisions that affect one's life and to enjoy the respect of others in the community. Democracy is important for human development. One should be free to follow different cultural practices and traditions without facing discrimination or disadvantage in participating politically,economically or socially. It also fails to reflect the difference in the development experience of women and men. These considerations led to other related measures such as gender related development index (GDI) and human poverty index (HPI).

### Development in Manipur and some other states:

Manipur's per capita income is way behind some of the states. It shows better performance in infant mortality and literacy. It has the lowest infant mortality rate among Indian states. It is indicative of an in-built social health care facility because our modern health care facilities are far from being adequate. The column of sex ratio shows that in Kerala there are 1084 females for every 1000 males. The migration of male Keralites in Gulf countries plays an important role in this sex ratio favourable to females. In Punjab there are 893 females for every 1000 males. Despite economic prosperity female infanticide and selective abortion of female foetus have led to this situation. Achievements further spur expectations and the gap between achievements and expectation always leads to discontent. This is expected because the summary measures of development can never capture the myriad human aspirations.

**TABLE : 5**

*Development indicators of some select states in India*

| State | Per capita income at 2004-5 price in 2013-4 | Net state domestic product at billions 2013-4 | Life expectancy at birth (2009 -13) in years | Infant mortality rate (per 1000 births) 2013 | Literacy rate in %2011 | Sex Ratio 2011 |
|---|---|---|---|---|---|---|
| Punjab | 49411 | 1499.48 | 71.1 | 26 | 75.8 | 893 |
| Tamilnadu | 62361 | 4271.82 | 70.2 | 21 | 80.1 | 995 |
| Maharastra | 69584 | 8112.68 | 71.3 | 24 | 69.3 | 925 |
| Karnataka | 45024 | 2745.31 | 68.5 | 31 | 75.4 | 968 |
| Assam | 24533 | 773.76 | 63.3 | 54 | 72.2 | 954 |
| Gujarat | 61220* | 3689.07* | 68.2 | 36 | 78.0 | 918 |
| Kerala | 56115* | 1960.77* | 74.8 | 12 | 94.0 | 1084 |
| Manipur | 22395* | 66.2* | NA | 10** | 79.2 | 987 |
| All India | | | 67.5 | 40 | 73.0 | 940 |

Source : Economic Survey 2014-15

*Note: * refers to 2012-13** refers to 2012*

**Activity :**

Human Development Index of North Eastern states 1981-2001

| State | 1981 | 1991 | 2001 | Increase during 1981-1991 in percentage |
|---|---|---|---|---|
| Mizoram | 0.411(8) | 0.548(7) | n.e. | 33.33 |
| Manipur | 0.481(4) | 0.536(9) | n.e. | ? |
| Nagaland | 0.328(20) | 0.486(11) | 0.62 | ? |
| Sikkim | 0.342(18) | 0.425(18) | 0.532 | ? |
| Tripura | 0.287(24) | 0. 389(22) | 0.59 | ? |
| Meghalaya | 0.317(21) | 0.365(24) | n.e. | ? |
| Arunachalpradesh | 0.242(31) | 0.328(29) | 0.515 | ? |
| Assam | 0.272(26) | 0.348(26) | 0.386(14)* | ? |
| All India | 0.302 | 0.381 | 0.472 | 26.16 |

***Note:*** **Rank among 16 major states*

*n.e. not estimated*

*Figures in parenthesis are all India rank*

On the basis of this table

- ⇨ Calculate the growth rates of HDI during 1981 – 1991.
- ⇨ Which state in North eastern India had the largest HDI in 1981 ? Which state in north-easter India had the lowest HDI in 1981 ?
- ⇨ Which state had the highest growth rate of HDI during 1981-1991? Which state had the lowest growth rate ?

## EXERCISE

### A. Very short answer type questions :

1. What is per capita income ?
2. How is sex ratio defined ?
3. Which organisation is responsible for the publication of HDI ?

4. How many dimensions of development does the HDI consider ?

5. Name the countries with the highest and lowest HDI.

## B. Short answer type questions :

6. Does high per capita income indicate high level of development ? Explain.

7. Why are we worried about a sex ratio adverse to females ?

8. Why does Australia have higher HDI than the USA when its per capita income is lower ?

9. Has Manipur's sex ratio always been adverse to females ?

## C. Long answer type questions :

10. Why is HDI considered an improvement over per capita income as a measure of development ?

11. How does the recent view of development differ from the traditional view of development ?

12. Discuss the various indicators of development.

13. How does literacy facilitate development ?

14. Has HDI been able to represent human development comprehensively ?

## Activity :

**Invite an economist in your locality to deliver a lecture on development.**

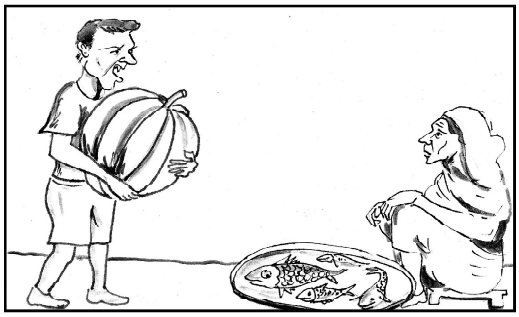
********

UNIT

# II

# MONEY AND FINANCIAL SYSTEM

We use money to buy goods and services It is something which is taken for granted. The fact is that money is one of the biggest inventions in human history just like the invention of fire. Can you imagine how inconvenient it would have been without money ? The economy where goods are exchanged for goods is known as barter economy. Without money as the medium of exchange, transactions can materialize only when my desire to sell rice and buy clothes is matched by the other party's desire to buy rice and sell clothes.

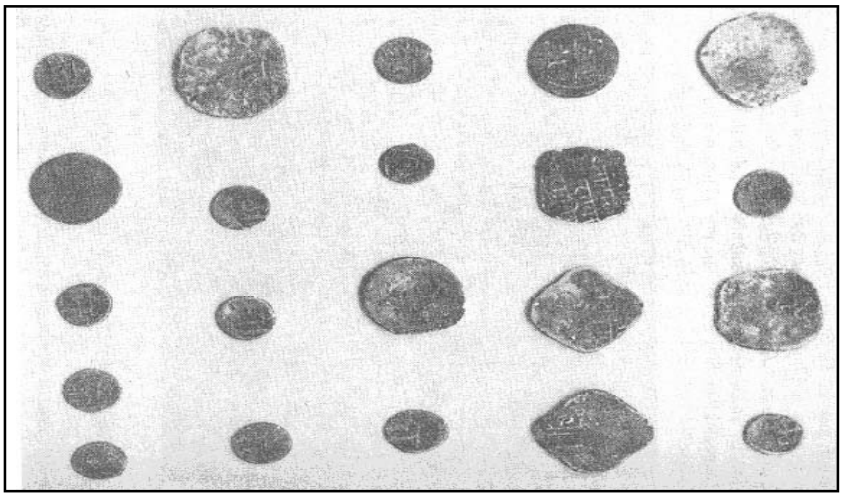


Not only the desire for the commodity should match, the quantity also should match. The double coincidence of wants is an essential feature of barter economy. The inconvenience of double coincidence of wants led to the development of money. Money is a medium of exchange. Having eggs and butter will not be sufficient to get rice if the supplier of rice does not want eggs and butter. However I can sell eggs and butter to get some money. The money can be used to pay for rice and any other thing I want. It is a means of deferred payment. It is a store of value When I use money for exchange I need not have to go through the inconvenience of having to wait for someone coming to exchange rice for eggs. Without money a market economy will be very cumbersome and inefficient. Money does away with the requirement of double coincidence of wants in the barter economy.

Many commodities have been used as money in different places and in different times. Candy bars, cigarettes ( in World War II prisoner of war camps), huge wheels of carved stones (on the island of Yap in the South Pacific), cowrie shells (in west Africa) beads (among North American Indians), cattle (in southern Africa), metallic coins and pieces of paper (in modern world) are some of the examples of commodities being used as money. Metals have been used as money throughout history. The use of metals for money can be traced back to Babylon more than 2000 years B.C. The earliest coins were made of electrum, a mixture of gold and silver . The coins were crude, bean shaped ingots. The picture above is that of a coin issued in 2nd century B.C. bearing the portrait of the king.

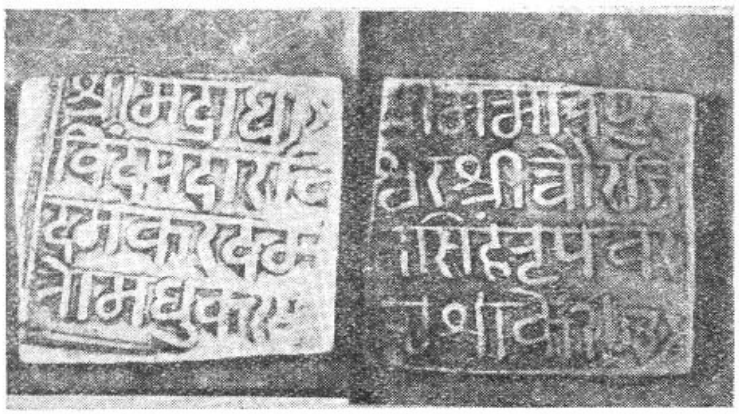
***Demetrius' coin, 2nd century BC***

Many kings of Manipur also issued coins made of bell metal, silver and gold.



***Bell metal coins in Manipur***

Commodity monies are used as money and have some intrinsic value in some other use. A cigarette can be smoked . Gold can be converted into jewelleries. Most of the money we use now are token money which are intrinsically worth less. Paper money was introduced to lessen the inconvenience of carrying large quantities of coins of gold, silver or other metals. The first use of paper money occurred in China more than 1000 years ago. By the late 18th and early 19th century paper money and banknotes had spread to other parts of the world.



***Silver coins of Maharaj Chourajit Singh***
***(1803-1813 A.D.)***

Money is anything that is accepted as a medium of exchange. We are so used to buying goods and services with money that we hardly bother to ask: why should a shopkeeper part with a one litre bottle of Fanta for Rs 45 comprising of 9 five rupee coins? The coins need not be as valuable as the good one gets in exchange. That is melting 9 five rupee coins will not yield metal worth Rs 45. How does a hundred rupee note differ from a piece of paper torn from a newspaper ? The hundred rupee note gives command of the holder over a certain quantity of goods and services while the piece of paper is fit only for lighting a fire. The note has value because everyone knows that it can be used for making payments and everyone will accept it. If other people donot accept the notes the notes are useless. Torn notes are as good as pieces of newspaper. No one accepts a badly torn note which then becomes a worthless piece of paper. Roadside money changers charge 50% of the torn note. Very few people go to banks for the exchange of such notes.

Money is accepted by sellers and buyers pay with money for their purchase of goods and services. Money is also a store of value. It is used as an asset to transfer purchasing power from one period to another. If I sell my products I will get some money. If I donot want to spend the entire money immediately I can keep some of my earnings in the form of money until I decide to spend it. If I decide to keep some eggs over a long period of time under normal conditions they will simply rote. That does not happen with money. It is inflation that can reduce the value of money.

***Inflation is sustained rise in the aggregate price level in an economy. At any point of time the prices of some commodities may be falling while that of some others may be rising. What is measured in inflation is the rate of change in average price level. When inflation rate rises the purchasing power or the value of money declines.***

Thus money acts as a store of value. Of course money is not the only store of value. Gold, land , diamond and antique paintings are all stores of value. However these items donot come in units as convenient as money . You will understand the inconvenience if you have to sell gold everytime you decide to buy sugar and fish. Antique paintings and land are difficult to transport. Money comes in different denominations and can be transferred from one place to another easily. This advantage of money is known as liquidity property of money. By the liquidity of an asset we refer to the ease with which the asset can be converted into money.

Money serves as a unit of account. i.e. as a consistent way of quoting prices. All prices are quoted in monetary units. A book costs RS 50 , not 25 eggs or a bottle of Fanta. How inconvenient it will be if the prices of commodities are expressed in terms of commodities? A standard unit of account is very useful and money serves as a standard unit of account.

The public accepts paper money as a means of payment and a store of value because the government has taken steps to ensure that the money is accepted. The government declares the paper money as legal tender. In India the note is guaranteed by the central bank i.e. the Reserve bank of India. In five, ten ,twenty, fifty, hundred, five hundred and one thousand rupees notes there is a guarantee by the central Government and on a hundred Rupee note it is written

" I promise to pay the bearer the sum of one hundred rupees"

(Signature of the Governor, Reserve Bank of India)

Such notes have to be accepted in the settlements of debt. You cannot insist on paying for rice with chicken if the other party does not like it. However he cannot refuse if he is paid in rupee.

Modern forms of money include currency – paper notes and coins and deposits with banks. Most of the countries have distinct currencies just like the Rupee of India. The currency of the U.S.A is known as the dollar. The currency of U.K. is known as pound sterling. Even a country as small as Bhutan has a distinct currency known as Ngultrum. The cost of one foreign currency in terms of a domestic currency is known as the exchange rate. Their values differ widely. For example a U.S. dollar is worth approximately Rs 65 in September 2015.

*Currencies of some countries*

| Country | Currency |
|---|---|
| Canada | Dollar |
| U.K. | Pound sterling |
| Japan | Yen |
| China | Yuan |
| Russia | Rouble |
| France | Franc/euro |
| Bangladesh | Taka |
| Saudi Arabia | Riyal |
| Germany | Mark/ euro |

Every country has a central bank. Central banks are institutions like the Reserve Bank of India, Bank of England, Bank of France, the U.S. Federal Reserve System and Bank of Japan which have the responsibility of regulating the volume of money supply, the cost and availability of credit and the foreign exchange rate. The Reserve Bank of India issues currency notes on behalf of the government of India. No other institution or individual is allowed to issue currency.


*Chinese 100 -Yuan banknote (front side)*

*Fifty-riyal banknote from Saudi Arabia (front side)*


***One hundred-rupee banknote from India, (front side)***

A financial system is a set of institutional arrangements through which financial surpluses in the economy are mobilized from surplus units and transferred to units in need. Financial assets, financial markets and financial institutions are the main pillars of a financial system. In the Indian context the important financial assets are currency, bank deposits, post office savings deposits, life insurance policies, provident fund contributions, bonds etc. Financial markets deal with currency, deposits, cheques, bond etc. It is very much like the market for goods and services. A bank is an important financial institution.

Banks are institutions which accept deposits of money from the public withdrawable by cheque and used for lending. Commercial banking began in India with the setting up of the Bank of Bengal in 1806. The Reserve bank of India was established in 1935 and became the central bank of India. The main functions of the RBI are as follows

- ⇨ It is the sole authority for the issue of currency in India other than one rupee notes and coins
- ⇨ It acts as banker to the government - both central and state.
- ⇨ It is bankers' bank and their superviser.
- ⇨ It promotes commercial banking

As on 31 st March 2013 there were 115 offices of scheduled commercial banks in Manipur . In 1981 there were only 37 bank offices in Manipur. The volume of deposit in these banks in 2012 was Rs 4235 crore. In addition to State Bank of India (SBI) , other nationalised banks such as Bank of Baroda, Allahabad Bank, Punjab National Bank, Vijaya Bank etc there are local banks such as the Imphal Urban Cooperative Bank and Manipur State Cooperative bank in Manipur. As the government is pursuing the objective of financial inclusion, the interface between banks and the public has increased significantly. The objective of financial inclusion is to ensure the weaker sections of society and low income groups, access to various financial services such as a basic savings bank account, need-based credit, remittance facility, insurance and pension. The Pradhan Mantri Jan-DhanYojana (PMJDY) was launched on 28 August 2014. It envisages universal access to banking facilities with at least one basic banking account for every household, financial literacy, access to credit and insurance.

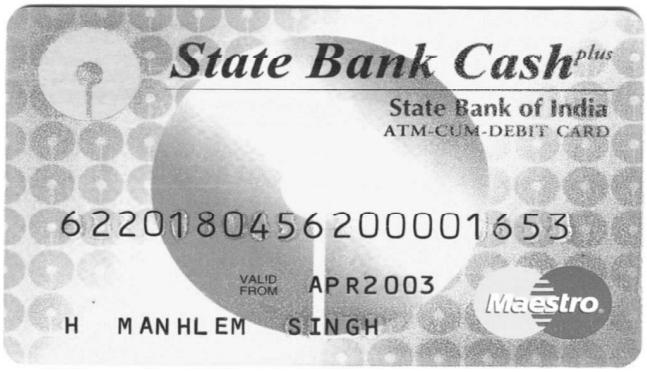

***SBI Imphal Branch***

Most of the time salaried people have more money than they need immediately particularly when they get their salary. Farmers generally have surplus immediately after harvest which would be used later.They can deposit the surplus money in the bank after opening an account in the bank where not only their money is safe, it also earns interest. In the absence of a bank there is not only the risk of losing the money, it will not earn any interest. Deposits can be of two types demand deposits and time deposits. Demand deposits are those deposits which can be withdrawn on demand with the help of cheques.

A cheque instructs the bank to pay on presentation of the cheque, a specific sum of money to the person in whose name the cheque has been drawn. A Cheque can also be a self cheque where the account holder himself withdraws the money. Payments can be settled without cash by using cheques. If a person issues a cheque when there is inadequate balance in his account the cheque will not be honoured. Therefore cheques are widely used as money. On the other hand time deposits are not readily withdrawable. If the time deposits are withdrawn before the maturity of the period for which the money has been deposited the depositor will lose the interest.

In addition to information on the issuing bank, a cheque should have certain features. It should have the name of the person to whom the money is to be paid. It should have the signature of the account holder who issues the cheque. However you cannot encash a cheque without going through some checks. Your signature will be verified by comparing with the specimen signature you had submitted at the time of opening the account. It will be checked whether you have sufficient balance in your account. Earlier all cheques had to be sent to the Accountant who would verify the authenticity of the signatures from the original documents and adequacy of your balance. Such cross checks can now be done immediately by the bank official at the counter through computers. If the account holder is illiterate he or she will be using thumb impressions .

Nowadays many banking operations have been automated. Automated teller machine, known as ATM, is one of the many innovations in how people conduct transactions. ATMs make money more readily available and are more convenient to use by accepting transactions even when banks are closed on weekends and holidays or at any time of the day. ATMs allow travelers to conduct transactions in many parts of the world. However one can withdraw from an ATM a maximum equal to the balance in the customer's account less the minimum balance required. You cannot withdraw Rs 10,000 by an ATM card when you have only Rs 8000 in your account.




***ATM Card***

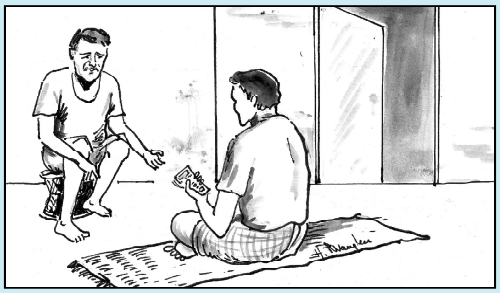
Banks invest the deposits of the public as loan for various purposes . They have to do it to pay interest to their depositors and finance the establishment of the bank. Bank loans carry an interest rate normally higher than what they would pay their depositors. Normally a bank gives away a large portion of the deposits as loan. It thus acts as a mediator between people who have surplus fund and those people who need fund to carry out their activities. It is not necessary for the bank to keep the entire amount of deposits intact because rarely does everyone come to the bank for withdrawal simultaneously. On any day some persons come for withdrawal and some for depositing. It is known as fractional reserve banking In India it is mandatory for scheduled commercial banks to keep around 8.5% of net total liabilities with the RBI. It is known as cash reserve ratio and it is meant to meet emergent situations of liquidity. However if depositors come to withdraw their entire deposits on the same day the bank will simply collapse. It happens when the public loses faith in a bank's ability to repay the deposits on demand as promised.

**Activity**

***Ask your class teacher about the definition of a scheduled commercial bank. A study tour may be undertaken to a nearby bank to acquaint the students of the various opportunities and activities in a bank. Care must be taken not to disturb the activities in the bank.***

We need credit or loan for many purposes such as improvement of land, purchase of new equipments, social functions . Loans or credit involve an agreement between the the creditor who provides the money, goods and services and the borrower .Sometimes these needs are so pressing that we are compelled to get credit from any source. The traditional source of credit is the village money lender who lends money to the villagers at high rates of interest. Village money lenders, traders and relatives are known as non formal sources of credit. On the other hand banks constitute the formal sources. According to the 59th round of National sample Survey 48.6 per cent of farming households of India are indebted in 2003. 58% of the outstanding amount was obtained from formal sources and the balance 42 % from constituents of the informal sector such as moneylenders, traders, relatives and friends. It was estimated that Rs 48,000 crores of farmers debt were from non formal channels where the interest rate was exorbitantly high. A large portion of the debt is carrying interest rate of more than 30 percent per annum.

***Credit for productive purposes from different sources***



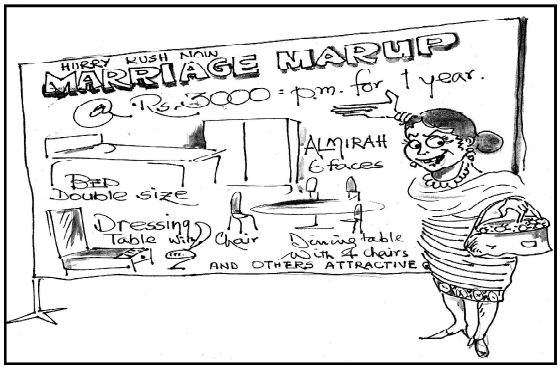

Tomba and Chaoba are hard working farmers. They need credit to buy fertilisers, pesticides for the plants and to improve the farm land. Tomba approaches Mani the village money lender who knows Tomba's family very well for a loan. Because Tomba is not providing any collateral for the loan Mani charges 8% per month and the money is given immediately. Chaoba on the other hand decides to approach the bank in the village. He completes the necessary paper work and after due inspection of this work by the officials in the bank the loan is given . The bank charges only 9 % per annum. After harvest Tomba repays an amount much higher than what Chaoba repays. Had Tomba also borrowed from the bank he would have saved more.

In general informal source of credit has higher interst rate than formal sources of credit. It is possible that relatives may give you loan at zero rate of interest. The relation with relatives is more stable than that with village money lenders. Strictly speaking there is nothing like interest free loan. There are always some implicit costs.

**Loans for unproductive purpose**

Inaoton needs money for the marriage of his daughter. Banks in general donot give loans for such activities. He has to borrow from the village money lender. He is borrowing for an activity from which no return is expected. If he has borrowed it without an assured source of income he will sink into debt. Such debts lead to life long bondage.

Who has not heard of 'marups' in Manipur ? It is an age old informal savings institution. A group of people who know each other come together and pool in a fixed amount at regular interval. It is an ubiquitous institution. You will find it in every section of society. Businessmen organize even daily marups. However usually it is monthly. The savings so accumulated are given to a member of the marup .He should continue paying his share till every member of the marup gets his share alongwith the interest on what he has already received. The savings so accumulated have been used to purchase a wide range of durable goods Marups work on mutual faith sometimes we find organizers of such marups outrightly cheating the other members through irregular payment and willful default. But it is unusual and is a sign of hard times.




***Advertisement of a marriage marup***

An alternative is to save in commercial banks in our accounts. Its disadvantage is that you have to wait for a long time before your savings accumulate to the desirable level. Many find the procedure for opening accounts in banks very cumbersome. The personal details to be declared and the minimum balance one has to keep in an account make banks a less attractive option for saving. Besides it is not as personal as the marups. Sometimes there is a long queue for withdrawal from the bank. Many of you must have seen the long queues for pensioners in front of banks. The practice of handing over pension books to professional pension collectors for a price emerged out of this inconvenience. This inconvenience has been removed by making it mandatory for every pensioner to open accounts in some banks. Pension money is transferred to these bank accounts every month. Now the pensioners can comfortably withdraw their pensions from their bank accounts at their convenience once the Finance department announces the payment of pension. Now banks have become more customer friendly by enabling us to open account more easily. The aim is to open a bank account for everyone. However banking habit cannot be developed overnight.

The banks are also extending many types of consumer loans. Many commercial vehicles have the legend written on their bodies – Hypothecated to SBI. It means the vehicle has been bought with a loan from the State bank of India. Loans for buying cars, loans for building houses, loans for buying computers, loans for education, loans for house repair, personal loans – you name it, there is a loan for anything.

***How does one get a housing loan ?***

It needs some documents. A diagram of the house along with the cost estimate, ownership documents of land, salary statement etc. are needed. The loanee has to deposit some collateral documents like insurance policies and other financial assets . It is also common to take mortgage of the house which is being constructed. Thus the loan amount can be recovered when the loanee defaults. The loan amount is to be repaid in equal monthly instalments spread over a long period of time depending on the interest rate and loan amount. For example a housing loan of Rs 8 lakhs can be repaid in ten years in a monhly instalment of Rs 12,000. The loan (generally) is sanctioned in instalments. Just as officials of the bank inspect the proposal of the loanee minutely at the time when the loan is sanctioned, they inspect the progress of the work before the next instalment is released. There are instances where the bank decides to ask for refund of the loan on realizing that the loan has not been used properly.

The fear of default has been the major reason behind the slow growth of rural credit even though rural people's credit need is as large as that of the urban population. This has led to banks asking people to provide collaterals which can be used to cover the loan in the event of default. This is highly disadvantageous to the rural people who are poor and hence unable to provide the requisite collateral.

Now a big effort is being made to develop banking habit among women through self help groups. Self help groups (SHG) are channels for providing micro credit from banks to women in particular. Women are given small amount of credit at highly concessional rates through these associations.

***Self Help Group meeting in progress***

**Activity : Identify an SHG operating in your locality. List its objectives. Who are its members?**

There are many financial institutions looking after specific needs of credit for different sectors. NABARD looks after the credit requirements of agriculture. EXIM or Export-Import bank caters to the needs of enterprises involved in international trade .IDBI looks after the credit needs of industries.

Bank loans need to be repaid. However non repayment of bank loans is a real problem with banks. When the proportion of loans from which there is no repayment grows large the bank cannot continue its normal operations It is not only the poor that are defaulting, even rich people also default. This problem of default can be largely attributed to inefficient screening of the credit worthiness of the loanee . In the U.S.A. also there is a crisis known as sub prime crisis . Its origin lies in the sanction of loan to people with poor repayment history. The growth of the economy was sustained by keeping demand at high levels with these loans . When the assets of the defaulting loanees are acquired by the banks their prices decline. Frequent announcements of loan waivers as in the Union Budget of 2008-9 amounting to Rs 60,000 crores of farmers loans hinder the development of banking habits. This strengthens the general unfortunate belief that bank loans are not to be repaid.

## EXERCISE

### A. Very short answer type questions :

1. What is a barter economy ?
2. What is money ?
3. How long have metals been used for money ?
4. Which country used paper money first ?
5. When does the value of money decline ?

### B. Short answer type questions :

6. What are the functions of money ?
7. How has money solved the problem of double coincidence of wants ?
8. Why do we accept paper notes ?
9. What are the responsibilities of the RBI ?
10. In what ways is the SBI different from the RBI?

## C. Long answer type questions :

**11.** Why is a bank so important in a financial system?

**12.** What are the new forms of money ?

**13.** What are the requirements of a cheque ?

**14.** Why should farmers be helped to take loans from banks ?

**15.** How has the institution of marup helped us ? Is it a safe institution ?

**16.** You have deposited Rs 5000 in bank. How much money will you receive after two years if the annual interest rate is 7%? How much you will get if the rate is monthly.

**Activity: Contact a neighbourhood SHG to see how it functions.**

**Visit the local museum to find out how old coins looked like.**

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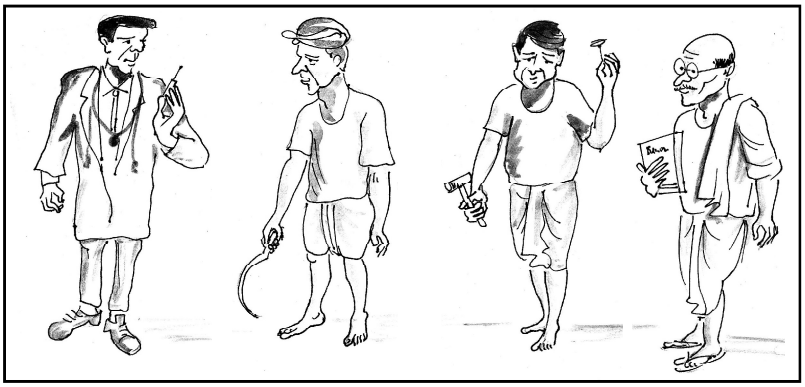
UNIT

# III

# SECTORAL COMPOSITION OF THE ECONOMY

The level of national income is a major indicator of the strength of the economy. It is the value of final goods and services produced by the normal residents of a country in one year. However not only the level but its breakup in terms of the various activities generating it is also important. Everyone works for a living. Income is generated when we work. Unemployment occurs when we donot have work even when we seek work.That is why unemployment is considered a serious problem anywhere .There are many types of work through which one can earn a living. Some work involve physical labour and some involve more of mental labour where we have to think and apply our mind.A farmer ploughing the field, a doctor attending to a patient, a teacher teaching in a class room, a carpenter making a table, a mason building a house have one thing in common, all of them are workers. Yet these activities are different. The carpenter transforms wood. The mason uses cement, iron and sand to construct a house. A farmer works with nature to get his crops. A doctor treats his patient. A teacher teaches his students. Unlike the case of the farmer both the doctor and the teacher do not produce anything tangible , they produce service . Such diverse activities are classified into more homogenous activities by using what we call sectors of an economy.



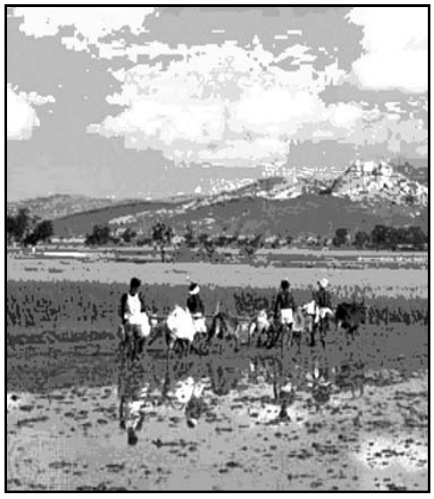
An economy can be divided into three sectors on the basis of the nature of activities. This categorization is based on their distance from the natural environment

It starts from the primary sector which is concerned with the utilization of raw materials from nature such as agriculture and mining. It includes agriculture ( both subsistence and commercial),mining, forestry, grazing, hunting and food gathering. In some

of them, the production of raw materials may be increased by human intervention in the production process; and in some others the production of exhaustible raw materials cannot be augmented through cultivation.The former includes agriculture, forestry, and livestock management and fishing—all of which are subject to scientific and technological improvement of renewable resources. The second category includes the mining of mineral ores, the quarrying of stone, and the extraction of mineral fuels which are non-renewable.

Primary sector tends to dominate the economies of developing nations. As secondary and tertiary sectors develope, its share in the national output tends to decrease.

The secondary sector of the economy manufactures finished goods. All the manufacturing,processing and construction activities are within the secondary sector. This sector uses the output of the primary sector and manufactures finished goods. Activities associated with the secondary sector include metal work and smelting, automobile production, textile production, chemical and engineering industries, aerospace manufacturing, energy utilities, engineering, breweries and bottling, construction and ship building.



***Farmers ploughing the field***

This sector, also called manufacturing sector, takes the raw materials supplied by primary sector and processes them into consumer goods, or further processes goods that other secondary sector units transform into products, or builds capital goods used to manufacture consumer and nonconsumer goods. In India electricity, gas and water supply come in secondary sector.

***Automobile production***

Secondary industry may be divided into heavy or large-scale and light or small-scale industry. Large-scale industry generally requires heavy capital investment in plants and machinery. It serves a large and diverse market including other manufacturing industries. It has a complex industrial organization and frequently a skilled and specialized labour force, and generates a large volume of output. Examples are petroleum refining, steel and iron manufacturing, motor vehicle and heavy machinery manufacture, cement production, nonferrous metal refining, and hydroelectric power generation.

Light or small-scale industry may be characterized by the nondurability of manufactured products and a smaller capital investment in plants and equipment, and it may involve nonstandard products, such as customized or craft work.

***In India the investment limit for enterprises are as follows: micro enterprises have investment upto Rs 25 lakhs. Small enterprises invest between Rs 25 lakhs and Rs 5 crores. For medium enterprises it is between Rs 5 crores and Rs 10 crores. Enterprises with investment beyond Rs 10 crores are classified as large. These limits are routinely revised to adjust for price rise.***

The labour force is heterogenous ranging from low skilled category, as in textile work and clothing manufacture, food processing, and plastics manufacture to highly skilled categories as in electronics and computer hardware manufacture, precision instrument manufacture, gemstone cutting and craft work

The tertiary sector of the economy is the service sector. It provides services to the general population and business. The activities included in this sector are banking, finance, insurance, investment, and real estate services; wholesale, retail, and resale trade; transportation, information, and communications services; professionals, consulting, legal, and personal services; tourism, hotels, restaurants, and entertainment; repair and maintenance services, education and teaching, health, waste disposal, administration, police, security, and defense services.. Services are defined in conventional economic literature as "intangible goods" This sector, also called service industry, includes industries that, while producing no tangible goods, provide services or intangible gains or generate wealth. In mixed economies this sector generally has a mix of private and government enterprise. Activities in this sector are increasing day by day.

***One of the best examples of service rendered by doctors is the service rendered by an organization called "Doctors without Borders". It is an international humanitarian group dedicated to providing medical care to victims of political violence or natural disasters, as well as to those who lack access to such treatment. The group was awarded the 1999 Nobel Prize for Peace.***

You must have seen the legendary cricketer Sachin Tendulkar mesmerizing the spectators in the field. He also earns lots of money by endorsing healthy drinks. He is advised by his manager as to which brand he should endorse. Another highly paid profession of modeling also is managed by such people. These people are known as celebrity managers . Marriages, receptions, functions and parties are increasingly handled by event managers.

In Manipur feasts, shradha ceremonies, preparation of halls for any function are increasingly handled by professionals. Khura Washang in Thangmeiband handles all types of mandap preparation for a fee. Let us examine how such services have evolved. Feasts

used to be organized at the homes of the hosts. The preparation needed many people and it was the neighbourhood that supplied the workers on reciprocal basis. It means you have to help others to get help when you need. However changes in lifestyle hindered this reciprocity and hosts increasingly found it difficult to organize feasts at home. Temples started organizing such feasts. Sri sri Govindaji's temple, Sri Narasingh temple, Sri Ramji prabhu temple became popular for such feasts. The hosts would pay the organizers in the temple thereby transferring the organizational burden.However it was increasingly felt that the personal touch was missing. On any day many feasts are organized at the same time. It would have been better if the preparation is done by somebody and the feast held at the residence of the hosts. Several enter-prises specializing in ready made meals emerged to capita-lize on this oppor-tunity. Ready made meals are delivered at the doorstep by Eigyagi Chaksang which literally means a Brahmin's kitchen. They are simply a phonecall away. What do we expect in the future? As space for organizing such functions has become scarce in urban areas the service of renting halls for such functions along with the entire arrangement will become profitable. Some of the hotels are already doing it. Another example of emerging service is the money transfer agencies. They deliver money orders immediately through their contacts in metropolitan cities. What is to be stressed is that the growth of the service sector is highly responsive to demand.

*A teacher teaching deaf students*

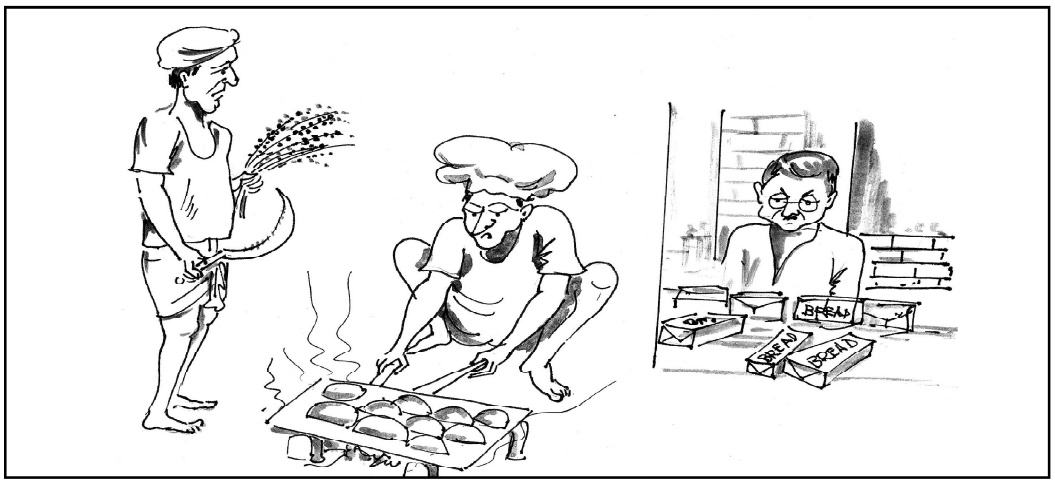
Public utilities such as electricity generation are considered part of the tertiary sector as they provide services to the people while creating the infrastructure of the utility is often considered part of the secondary sector. Goods may be transformed in the process of providing a service . It happens in the restaurant industry or in equipment repair. However the focus is on people interacting with people and serving the customers rather than transforming the physical goods. In most developed countries a large proportion of workers is engaged in the tertiary sector In the U.S.A. more than 80% of the workers are in the tertiary sector.

***In addition to these three sector classification there are two more sectors which are not widely used. The Quaternary sector consists of intellectual activities including government, culture, libraries, scientific research, education and information technology. The Quinary sector includes the highest levels of decision making in a society. It includes the top executives in such fields as government, science, universities, nonprofit, health care, culture and the media. It is also considered as a branch of the quaternary sector. However generally both are included in the tertiary sector.***

Let us have a closer look at the nature of work or activity pursued in these three sectors. Take the case of the farmer who works on the farmland . He prepares the field for cultivation of wheat. He is producing something from nature. For this he uses many other inputs like irrigation, high yielding variety seeds, fertilizer etc. but his interaction is mainly with nature in the form of farmland. This is a primary activity.

The wheat grown by the farmer is transformed into bread by the baker. He is one step farther from nature. He is no longer interacting with nature as the farmer does. The farmer essentially extracts something from nature directly and the baker is transforming what the farmer has extracted from nature into something. This activity belongs to the secondary sector.

The bread so produced is sold in the retail market. Retail market is where most of us would be buying in small quantities. On the other hand wholesale market involves transaction in bulk. It is the businessman who mostly buys in bulk for selling it further. You cannot buy one kg of potato from the wholesale market of potatoes. The contribution of the retail market is in the form of a service which makes the bread available to the public. This activity is an example of service sector.




**Activity:** ***develop one such example where all types of activities are involved***

The study of the history of economic development shows that economic development has invariably been accompanied by changing relative importance of the sectors. By relative importance we mean the share of the sector in the national income. In developed countries the industrial and service sectors contribute a major share in national income with the share of agriculture declining gradually. Development strategies of any country are closely associated with the current nature, structure and degree of interdependence among its primary, secondary and tertiary sectors. Table 1 shows the importance of services in developed countries.

**TABLE : 1**

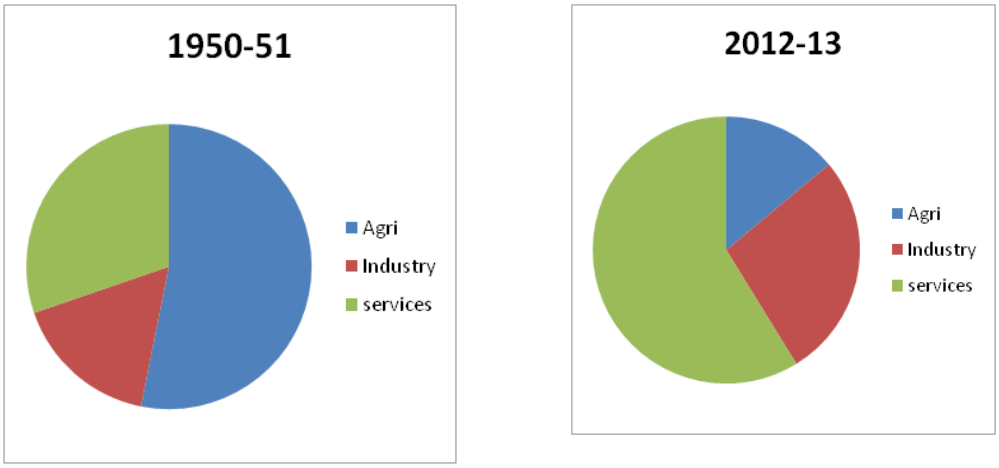
***Value added as percent of GDP 2005***

| Country | Agriculture | Industry | Services |
|---|---|---|---|
| India | 18 | 27 | 55 |
| Pakistan | 22 | 24 | 54 |
| Central African Republic | 56 | 15 | 29 |
| Singapore | 0 | 26 | 74 |
| Norway | 1 | 40 | 58 |
| Japan | 1 | 28 | 71 |
| Germany | 1 | 26 | 73 |
| U.S.A. | 1 | 21 | 77 |
| U.K. | 1 | 21 | 78 |

The Indian economy also has experienced an improvement in the shares of industry and services sector in overall GDP. In the beginning it was the primary sector which contributed the most to GDP. Since the 1980s the service sector has occupied a dominant position in the composition of GDP. However service sector is highly amorphous. It includes public administration and defence which are largely independent of the level of economic activity.

The share of agriculture & allied services in GDP in 2004-5 prices declined from 52% in 1950-51 to 14% in 2012-13 while that of services and industry rose from 29.5% to 58.8% and 16.2% to 27.3% respectively during the same period. in absolute terms the income generated in these sectors have risen substantially. The income generated in agriculture & allied services increased from Rs 145052 crore toRs 764510. During the same period the levels of income from Industry and Services rose from Rs 45277 crore and Rs 82591 crore to Rs 1494921 crore and Rs 3222680 crore , all calculated at 2004-5 prices.

The monetary values are given at 2004-05 prices to free them from the effect of price rise. Rising prices may give an impression of growing income even when there is no change in the physical output. Prices are used in national income calculation to aggregate the physical quantities given in different units of measurement. Can you add barrels of crude oil with tones of steel ? When the physical quantities are multiplied by price we get values in monetary terms. If a farmer produces 1000 eggs from his poultry farm and each egg sells for Rs2 the value of his produce is Rs 2000.




***Percentage share of the three sectors in India's real GDP over time***

The sectoral composition varies across states. Table 2 shows the sectoral composition of the economy of some states in India. Orissa and Bihar have high poverty ratios. Punjab and Goa have high per capita income. Arunachal Pradesh,Assam and Manipur belong to the north eastern region of India which is considered highly backward. Service sector dominates in all states. States differ on the relative importance between agriculture & allied activities and industry. In the case of Manipur only 6.83% of state income originate in industry as against Goa's 31.64%. In Punjab, another high per capita state, both agriculture and industry are equally important.

**TABLE : 2**

***Structure of economy of some select states in India (2011-12) at 2004-5 prices in percentage***

| State | Agriculture & Allied activities | Industry | Service |
|---|---|---|---|
| Bihar | 17.62 | 5.03 | 77.35 |
| Punjab | 24.15 | 22.32 | 52.53 |
| Arunachal Pradesh | 23.53 | 8.2 | 68.26 |
| Goa | 4.22 | 31.64 | 64.14 |
| Assam | 23.74 | 10.39 | 65.87 |
| Orissa | 18.44 | 17.3 | 64.26 |
| Manipur | 25.52 | 6.83 | 67.65 |

**Activity: Prepare pie charts of sectoral distribution of income of Manipur and Goa**

Even though the share of primary sector in GDP has fallen it is not necessary that its share in employment also would decline proportionately. In developed and developing countries a decreasing proportion of workers are involved in the primary sector. About 3% of the U.S. labour force is engaged in primary sector activity today while more than 2/3 of the labour force were primary sector workers in the mid nineteenth century.Agriculture is still the mainstay of Indian economy. The share of agriculture in the GDP has declined gradually, yet it continues to support more than half a billion people providing employment to 52 % of the work force. What worries us is the low productivity per worker in Indian agriculture where a large proportion of the workers is found. When labour productivity in agriculture rises workers can be released for work in other sectors. The following table shows how low is our agricultural productivity in relation to developed countries like the U.S.A. and U.K. As the productivity is high in the U.S.A., only a small proportion of workers is needed to produce foodgrains both for domestic consumption and export.

**TABLE : 3**

***Comparative picture of importance and productivity of agriculture in some countries***

| Country | Value added in agriculture as % of GDP, 2009 | Agricultural value added per worker in 2000 $ in 2005-07 |
|---|---|---|
| India | 18 | 459 |
| Pakistan | 22 | 890 |
| Cental African Republic | 56 | 404 |
| Singapore | 0 | 50828 |
| Norway | 1 | 37855 |
| Japan | 1 | 41492 |
| Germany | 1 | 27598 |
| U.S.A. | 1 | 44041 |
| U.K. | 1 | 27715 |

Source: World Development Report 2012

Sectoral employment elasticity is a measure of employment content of growth in the sector. It shows the percentage increase in employment in a sector for a one per cent increase in output. Table 4 shows that the employment elasticities of the subsectors in the tertiary sector are much higher than those of the primary subsectors. Employment elasticity in agriculture is very low.

**TABLE : 4**

***Sectoral employment elasticity in India***

| Sector | Employment elasticity 1993-4 to 1999-2000 |
|---|---|
| Agriculture | 0.01 |
| Mining & quarrying | - ((-)0.41 |
| Manufacturing | 0.33 |
| Electricity,gas and water ,supply | (-)0.52 |
| Construction | 0.82 |
| Trade, hotels & restaurants | 0.62 |
| Transport, storage & communication | 0.63 |
| Financing, insurance, real estate and business service | 0.64 |
| Community, social and personal services | (-)0.25 |

The importance of the service sector arises due to its role in providing the enabling environment of all economic activities. As an economy grows, the need for several services such as educational institutions, healthcare facilities, telecommunication facilities, enforcement of law and order, transport, banks, insurance companies etc become obvious. A bumper harvest will lead to sharp decline in the price of the foodgrain if the surplus is not transported to deficit areas. All riches become meaningless when one does not have access to adequate health care. Large transactions are facilitated by financial institutions like banks. Imagine how inconvenient it will be if transactions involving crores of rupees have to be undertaken in cash . We may be robbed of the money. This is one reason why law and order enforcement system needs to be strengthoned. Now banks enable us to organize such transactions by the use of bank cheques. The ATMs and core banking enable us to transact huge amounts of money over a wide area. The insurance sector takes care of the people's will to invest when uncertainties exist. Thus though the activities in the tertiary sector donot lead to any commodity production they facilitate it.

As income levels rise the demand for services increases. A poor couple may be compelled to eat at home. On the other hand a rich couple may like to relax by eating out in hotels. They may be doing some liasoning work for future activities by inviting their clients at hotels for partying. They would like to spend vacations at remote tourist spots raising the demand for tourist service. As we become richer we start looking around for better opportunities and realize the need for further training . This brings out the demand for better training facilities.

During 2009-10 in rural India among all usually employed persons , about 63% of male usually employed were engaged in agriculture. It has been gradually declining since 1977-8 when it was 80.6% . in the case of females also there is an overwhelming importance of agriculture where it has declined from 88.1% to 79.3% during the same period. in urban India only 6% of males and 13.9% of females who are usually employed are found to be working in agriculture. The rates have declined much more than in rural India.

**TABLE : 5**

***Number of workers in agriculture per 1000 usually employed persons in India***

| Year | Rural | | Urban | |
|---|---|---|---|---|
| | Male | Female | Male | Female |
| 1977-8 | 806 | 881 | 106 | 319 |
| 1983 | 775 | 875 | 103 | 310 |
| 1987-8 | 745 | 847 | 91 | 294 |
| 1993-4 | 741 | 862 | 90 | 247 |
| 1999-00 | 714 | 854 | 66 | 177 |
| 2004-5 | 665 | 833 | 61 | 181 |
| 2009-10 | 628 | 793 | 60 | 139 |

**Activity**

- ⇨ Draw a bar chart for rural males and rural females.
- ⇨ Which segment registered the highest fall ?
- ⇨ Ask your class teacher about the definition of an urban area in India.

## The Manipur experience :

The following table shows the contributions of different sub sectors in net state domestic product at 2004-05 prices in 2011-12.

**TABLE : 6**

***Structure of Manipur's Economy: 2006-07 (at 1999-2000 prices)***

| Sl.No. | Industry of origin | Contribution to NSDP in Rs. lakhs |
|---|---|---|
| 1. | Agriculture | 104748 |
| 2. | Forestry and logging | 18812 |
| 3. | Fishing | 9314 |
| 4. | Mining and quarrying | 0.00 |
| | Primary (1-4) | 131873 |
| 5. | Manufacturing | 30677 |

| | | |
|---|---|---|
| 5.1 | Registered | 3876 |
| 5.2 | Un- registered | 26801 |
| 6. | Construction | 118397 |
| 7. | Electricity, gas & water supply | 27322 |
| | Sub total: Secondary | 176396 |
| 8. | Transport, storage & communication. | 28132 |
| 9. | Trade, hotels & restaurants | 49425 |
| 10. | Banking and Insurance | 25210 |
| 11. | Real estate, Ownership of dwelling, Business services & legal services | 17778 |
| 12. | Public administration, defence & quasi | 113574 |
| 13. | Other services, | 98837 |
| | Tertiary (8-13) | 332956 |
| | Net State Domestic Product | 641225 |
| | Population ('00) | 28925 |
| | per capita income (Rs.) | 22169 |

***Source : Economic Survey Manipur 2014-15***

Table 7 shows how workers in Manipur have been distributed across sub-sectors of the economy. It shows the evolving pattern of livelihoods of the people. It shows how the activity matrix of the people has been changing. The structural change in the economy is expected to reduce the importance of agriculture and increase that of the secondary and tertiary sector. As we see the structural change has not been accompanied with a similar change in the occupational distribution of the workers away from primary sector to the tertiary sector.

## TABLE : 7

Per 1000 distribution of usually working persons by by broad industry division ;rural

| Year | Agriculture | | Mining & quarrying | | Manufacturing | | Construction | | Trade | | Transport | | Services | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 1977 | 871 | 666 | | | 2 | 0 | 239 | 3 | 14 | 84 | 2 | 90 | 10 | -8 |
| 1983 | 850 | 767 | | | 24 | 167 | 5 | | 31 | 49 | 3 | | 88 | 17 |
| 1987-88 | 692 | 799 | | | 31 | 101 | 14 | | 29 | 35 | 16 | 1 | 217 | 64 |
| 1993-94 | 660 | 603 | 1 | | 37 | 262 | 41 | 6 | 38 | 56 | 24 | | 196 | 70 |
| 1999-00 | 780 | 696 | 1 | 18 | 22 | 186 | 13 | | 27 | 58 | 20 | | 137 | 42 |
| 2004-05 | 694 | 691 | 5 | 6 | 31 | 172 | 50 | 1 | 53 | 87 | 34 | | 132 | 44 |
| 2009-10 | 606 | 350 | 4 | 0 | 49 | 184 | 95 | 243 | 73 | 164 | 27 | 0 | 137 | 38 |

***Source : National Sample Survey Organisation***

The proportion of rural male workers in agriculture declined gradually while that of females remained fairly stable. Manufacturing has remained predominantly a female industry. While the proportion of female workers in manufacturing has declined that in the services has increased. Construction is another sub-sector which has seen a rapid rise in the proportion of male workers. We can visualize what has happened in urban Manipur from table 8.

## TABLE : 8

***Per 1000 distribution of usually working persons by broad industry division; urban***

| Year | Agriculture | | Mining & quarrying | | Manufacturing | | Construction | | Trade | | Transport | | Services | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 1977-78 | 256 | 272 | | 4 | 64 | 394 | 21 | | 236 | 224 | 12 | | 411 | 106 |
| 1983 | 513 | 609 | 9 | | 71 | 228 | 30 | | 51 | 79 | 40 | | 272 | 85 |
| 1987-88 | 323 | 289 | 1 | 11 | 77 | 196 | 29 | | 151 | 203 | 21 | | 398 | 301 |
| 1993-94 | 309 | 261 | | | 44 | 342 | 38 | 3 | 108 | 195 | 46 | 2 | 437 | 196 |
| 1999-00 | 293 | 263 | 13 | | 55 | 215 | 60 | 3 | 164 | 274 | 44 | 19 | 371 | 225 |
| 2004-05 | 313 | 215 | | | 78 | 290 | 65 | | 170 | 261 | 60 | | 310 | 234 |
| 2009-10 | 243 | 71 | | | 58 | 328 | 92 | 3 | 255 | 337 | 44 | 0 | 197 | 238 |

***Source : National Sample Survey Organisation***

Another related aspect is the growth of productivity per worker economy wide and

also at the sectoral level.As we have already mentioned employment and productivity are equally important. High level of employment with declining productivity negate the benefits of development. Table 9 shows the change in the pattern of labour productivity in Manipur.

**TABLE : 9**

***Productivity per worker in Rs.***

| Sector | 1987-8 | 1993-94 | 1999-2000 | 2004-05 |
|---|---|---|---|---|
| Agriculture | 12481<br>(73.5) | 12375<br>(68.6) | 11116<br>(50) | 11054<br>(52.8) |
| Manufacturing | 6797<br>(40) | 14648<br>(81) | 29473<br>(133) | 25386<br>(121) |
| Construction | 81261<br>(479) | 41849<br>(232) | 137766<br>(621) | 93869<br>(448) |
| Transport | 31062<br>(183) | 28939<br>(160) | 36798<br>(166) | 39505<br>(189) |
| Trade | 34894<br>(206) | 29305<br>(162) | 31764<br>(143) | 27192<br>(130) |
| Services | 23330<br>(137.5) | 25059<br>(139) | 42719<br>(193) | 57011<br>(272) |
| All sectors | **16966** | **18044** | **22176** | **20935** |

***Note: Labour productivity in a sector is derived by dividing the real income generated in the sector at 1993-94 prices by number of workers in it. The figures, in parentheses are indices of productivity taking aggregate labour productivity as 100.***

Thus in Manipur also the share of agriculture in Net state domestic product has declined rapidly. Yet a large proportion of rural workers still depend on agriculture for their livelihood. Unfortunately the productivity per worker has been declining in this sector.

## EXERCISE

### A. Very short answer type questions :

1. In how many sectors can the activities in an economy be divided ?
2. What are the characteristics of an activity in the primary sector ?
3. Which sector contributes the most in India's national income ?
4. Why are monetary values given in 2004-05 prices rather than current prices ?

5. Has the importance of the primary sector declined in employment generation as much as its contribution to national income ?

## B. Short answer type questions :

6. Why is the tertiary sector needed ?
7. Why is the dominance of agriculture in occupational distribution a cause for concern in India ?
8. How has the sectoral distribution evolved in the course of development ?
9. Why has the secondary sector become dominant in Manipur ?
10. Looking at the sectoral employment elasticity in India, which sector has the highest elasticity ? What is its implication ?

## C. Long answer type questions :

11. How has an institution like Khura Washang proliferated in urban Manipur ?
12. Compare Manipur's sectoral distribution of state income with sectoral distribution of income in some select states in India.
13. Why is the proportion of rural workers in agriculture still so high in India ?
14. Has the changing pattern of livelihood in Manipur made the people better off ?
15. In which sector would you like to get a job? Explain.

## Activity :

**Make a list of activities easily observable in your neighbourhood. Identify the sectors they belong to.**

********

UNIT

# IV

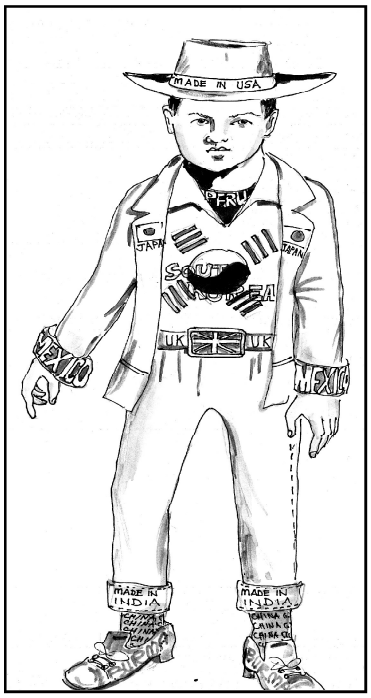
# GLOBALISATION

Apart from the Ima market , the Paona International market at Keishampat is an important part of our market. Ima market specializes in the transaction of locally produced vegetables and fishes. In the Paona International market few shops sell goods produced locally. The electronic items, shoes, ready made garments, batteries, blankets, sports goods and other innumerable items on sale in this market have one thing in common- they are all foreign. Goods made in China, Japan, Hongkong are available . Most of them are coming from Myanmar. Namphalong market in Tamu, adjoining Moreh town in Manipur's Chandel district, is flooded with electronic goods from China, plastic products from Korea, hardware and instruments from Japan and textiles and consumer products from Thailand.Some of the items are highly competitive with similar items produced by domestic producers. Some of them are cheaper and better than the products of leading Indian companies. The purchase of these items was considered a dream because not only their prices used to be high, these items were simply not available in the local market.. Now their prices have declined and thus have come within our reach.


***Paona International Market***

Our consumption used to be restricted by what we ourselves produced. It was only natural that we managed with what we had and our production was also geared to the local market only. Transport cost was prohibitively high. As roads improved goods produced outside the state started appearing. Our own products could be sent to far flung areas

where demand existed.Gradually these goods replaced the local products. Today a large number of goods we consume are not produced locally. These goods are produced in some foreign countries. Your jacket is imported from China. The cheese you are eating comes from Holland. The shoes you are wearing are from Italy. These are examples of the innumerable goods we consume that are not produced locally. This has changed the character of our markets.




***A boy bragging about the various sources of his products***

This is our experience of globalization. Globalization is a process by which the people across the world are unified in to a single society and work together. It is a combination of socio-cultural , economic, political and technological forces.

In the past American products used to be only on news paper or magazines. These products used to be costly due to high customs duty imposed on them. A government imposes customs duty on foreign goods to raise revenue and to protect similar products produced locally. Now not only such artificial barriers have come down substantially the cost of production has also declined due to improvement in technology and decline in transport cost. Look at the airfare. When Indian Airlines now known as Air India was the only airlines operating inside India the airfare was rising and a flight from Imphal to Delhi used to cost around Rs 15,000. Now due to introduction of other airlines such as Indigo,Deccan, Jetlite and Jet airways the airfare has declined and sometimes one can buy a Imphal- Delhi airticket for less than Rs 4000. Competition has reduced airfare. Globalization increases the intensity of competition.

Globalization is viewed as a centuries long process tracing the expansion of human population and the growth of civilization that has dramatically accelerated in the last few decades. Early forms of globalization existed during the Roman empire and Han dynasty in China. Muslim traders and explorers established an early global economy across the world resulting in globalization of crops,trade,knowledge and technology. During the Mongol empire there was greater integration along the silk road. Such integration continued through the expansion of European trade in the 16$^{th}$ and 17$^{th}$ centuries when the Portuguese and the Spanish empires expanded to the then recently discovered Americas. Globalization had tremendous impact on indigenous cultures around the world.

***Silk Route or silk road is an ancient trade route linking China with the West. It carried goods and ideas between the two great civilizations of Rome and China. Silk came westward, while wools, gold, and silver went east. China also received Christianity and Buddhism (from India) via the road..With the gradual loss of Roman territory in Asia and the rise of Arabian power, the Silk Road became increasingly unsafe and untravelled. In the 13th and 14th centuries the route was revived under the Mongols, and at that time Marco Polo used the road to travel to Cathay (China).The road now partially exists in the form of a paved highway connecting Pakistan and Sinkiang Uighur Autonomous Region, China. The old road has inspired a United Nations plan for a trans-Asian highway.***

In the 17th century globalization became a business phenomenon when the Dutch East India company was established. It was considered the first multinational corporation (MNC). The era of globalization in the 19th century broke down with the first world war. Globalization since world war II was based on the recognition of the cost associated with protectionism and declining international economic integration. Their initiatives led to the Bretton wood conference culminating in the establishment of the World Bank and the International Monetary Fund. There was a renewed process of globalization promoting growth and managing adverse consequences.

***The World Bank is an international organization affiliated with the United Nations (UN) and designed to finance projects that enhance the economic development of member states. Headquartered in Washington, D.C., the bank is the largest source of financial assistance to developing countries. It also provides technical assistance and policy advice and supervises—on behalf of international creditors—the implementation of free-market reforms. Together with the International Monetary Fund (IMF) and the World Trade Organization, it plays a central role in overseeing economic policy and reforming public institutions in developing countries. Founded in 1944 at the Bretton Woods Conference, the World Bank officially began operations in June 1946. Its first loans were geared toward the postwar reconstruction of western Europe. Beginning in the mid-1950s, it played a major role in financing investments in infrastructural projects in developing countries, including roads, hydroelectric dams, water and sewage facilities, maritime ports, and airports.***

In popular discourse globalization is synonymous with any of the following : the pursuit of free market policies in the world economy, the growing dominance of western forms of political, economic and cultural life, the proliferation of the internet revolution. The most important dimensions of 'globalization' are three aspects of economic openness. Such as openness to international trade, international investment and international finance in a world integrated through improvements in communication technology.

MNCs are increasingly organizing production on a global scale. The production process is divided across countries. Different components are being produced by different affiliates of the same MNC operating in diffent countries.

***An MNC also called transnational corporation is any corporation that is registered and operates in more than one country at a time. Generally the corporation has its headquarters in one country and operates wholly or partially owned subsidiaries in one or more other countries. In economic terms, a firm's advantages in establishing a multinational corporation include both vertical and horizontal economies of scale (i.e., reductions in cost that are a result of an expanded level of output) and the resulting power of monopoly. Technical expertise, experienced personnel, and tested strategies usually can be transferred readily from country to country. Critics of the multinational corporation usually view it as a means of foreign domination. Developing countries, with a narrow range of exports (often of primary goods) as their economic base, are particularly vulnerable to the manipulations of MNCs.***

An MNC can trade products among its branches located in different countries to its advantage. They can choose their global investment and employment pattern freely because the branches are located in different countries.

***The coca–cola company is an American corporation founded in 1892 and today engaged primarily in the manufacture and sale of syrup and concentrate for Coca-Cola, a sweetened, carbonated beverage that is a cultural institution in the United States and a symbol around the world of American tastes. The company also produces and sells other soft drinks and citrus beverages. Its corporate headquarter is in Atlanta, Ga.The drink Coca-Cola was introduced in 1886 by an Atlanta pharmacist, John S. Pemberton, at his Pemberton Chemical Company. In 1946 the company purchased rights to the Fanta soft drink, previously developed in Germany. It introduced the lemon-lime drink Sprite in 1961 and the sugar-free cola Tab in 1963. By purchase of Minute Maid Corporation in 1960, it entered the citrus beverage market. In 1982 the company acquired a controlling interest in Columbia Pictures, a motion-picture and entertainment company, but sold its interest to Sony Corporation in 1989. This drink was banned in India in 1977 when the Janta party came to power. It is now available throughout the country.***

The bright side of globalization is that we are able to reap the benefits of advances in technology anywhere in the world. Consumers now get goods cheaper and have a choice. However the problem is with those producers whose products have been substituted by foreign goods. The livelihood is adversely affected and it is no wonder that globalization has also led to impoverishment of these people. The gains from trade need not be distributed equally among all sections of the society.

## GLOBALISATION AND INDIA

India followed a mixed economy model where elements of both capitalism and socialism coexisted. Through the five year plan documents a policy framework was sought to be created that provided incentives to the private sector to conform to the Five year plan targets. The framework was based on direct, discretionary, non market, and quantitative controls.

Indian economic development strategy has been driven by perceived foreign exchange scarcities and the desire to ensure that foreign exchange is used for purposes considered essential. Control and regulation of exports and imports and in the case of certain commodities, state trading are necessary not only from the angle of optimum utilization of limited foreign exchange resources available but also for securing an allocation of the productive resources of the country in line with the objectives of Five Year plans. India adopted an inward looking or import substituting strategy of industrialization. The strategy encouraged domestic production for the domestic market under high tariffs and high degree of effective protection to the domestic industries. Tariffs are imposed on imports making them costlier. This effectively reduces the demand for imported goods. This resulted in an uncompetitive domestic industrial structure. Indian planners in the beginning did not consider foreign trade as an engine of growth. Import was to be minimized and export was a necessary evil to generate foreign exchange required for the import of essential items. An elaborate administrative regulatory mechanism was created to control investment and resource allocation in the economy and to ensure their consistency with the Five Year Plan targets. Control over export and import was also an integral part of the strategy. Many controls and regulations accompanying the strategy also led to rampant corruption.

Contrary to expectations the import substituting industrialisation strategy led to many undesirable outcomes such as failure to produce rapid growth, self reliance, eradication of poverty and a perennially precarious balance of payments. The country simply had to borrow more and more to finance the increasing excess of imports over exports.

The heavy industry oriented Second Five Year plan initiated in 1956 led to severe balance of payments crisis in 1957. The term balance of payment refers to the record of the transactions between the country and the rest of the world. A crisis develops when a country cannot earn enough foreign exchange for financing its imports. The government imposed Quantitative Restrictions on imports. An export subsidy scheme was introduced in 1962 to encourage export. The Indo Pakistan war of 1965 and the suspension of foreign aid and the major drought in 1965-6 increased the need for food import. However donors of external aid such as the World bank and the International Monetary Fund made resumption of large scale aid and access to credit conditional on the liberalization of the economy. The first step in liberalization was the devaluation of the rupees by 57.5 percent ( from Rs 4.76 per dollar to Rs 7.50 per dollar) in June 1966. It means that the price of dollars in rupees had increased by 57.5 percent. It does not mean that a hundred rupee note is worth Rs

42.5. Inside India a hundred rupee note is still worth Rs 100. But a good priced at Rs 100 before the date of devaluation would bring $ 21. Now it would be bringing only $13.3.

Economic liberalization in India began with fundamental changes in the strategy of development . The change was dictated by the immediate economic compulsions of crisis management. The main elements of the reforms of 1991-92 were devaluation of the rupee, abolition of import licensing ,replacement of cash subsidies for export, abolition of industrial licensing ,easing of entry requirements for direct foreign investment. At one time foreign direct investment (FDI) was not encouraged. Now many sectors have been opened to foreign direct investment.

India's greater integration with the world economy is reflected by the trade openness indicator, the trade to GDP ratio which increased from 22.5% of GDP in 2000-01 to 34.8% of GDP in 2006-7.The Indian economy has been globalizing rapidly since the initiation of the reforms. Trade has steadily risen as a proportion of GDP. Capital flows as a proportion of GDP reached 5.1% of GDP in 2006-7. Even as FDI into India grew substantially, outward investment picked up . Outward investment by India rose from less than US$ 2.4 billion in 2003-4 to US$ 14.4 billion in 2006-7. Net foreign direct investment has increased and in 2006-7 it was worth US $ 23 billion. Indian multinationals have emerged.

The following table shows India's share in world export of some items. It shows how the shares of some items have risen and fallen. However the overall share has increased very slowly.

**TABLE :1**

***India's share in world export (in percentage)***

| Year | Rice | Tea & mate | Textile yarn, fabrics, made up articles | Iron & steel | Total world exports |
|---|---|---|---|---|---|
| 1970 | 0.1 | 33.4 | 4.1 | 0.9 | 0.6 |
| 1975 | 0.1 | 31.3 | 2.5 | 0.3 | 0.5 |
| 1980 | 3.7 | 27.7 | 2.3 | 0.1 | 0.4 |
| 1985 | 5.6 | 26.2 | 2.1 | 0.1 | 0.5 |
| 1990 | 6.4 | 22.1 | 2.1 | 0.3 | 0.5 |
| 2000 | 10.2 | 14 | 3.6 | 1.0 | 0.7 |
| 2004 | 16.4 | 10.4 | 3.4 | 14.1 | 0.9 |
| 2005 | 15.8 | 9.6 | 3.4 | 13.2 | 1.1 |
| 2013 | 33.5 | 10.5 | 6.5 | 2.7 | 1.7 |

**Source: Economic Survey 2014-15**

**Activity:**

- ⇨ By how much has India's share in world export increased ?
- ⇨ What has been the growth rate in India 's share in rice export?
- ⇨ Draw bar charts for the share of textiles and tea & mate .
- ⇨ Can you find out the period during which India 's share in rice export registered the highest growth?
- ⇨ What are the implications of the rising share in rice export ?

**TABLE : 2**

***India's Imports in Rs. crores***

| Year | Cereals & cereal preparations | Fertilizers & fertilizer mfg | Petroleum, oil and lubricants | Capital goods | Total import* |
|---|---|---|---|---|---|
| 1960-61 | 181 | 13 | 69 | 356 | 1122 |
| 1970-71 | 213 | 86 | 136 | 404 | 1634 |
| 1980-81 | 100 | 818 | 5264 | 1910 | 12549 |
| 1990-91 | 182 | 1766 | 10816 | 10466 | 43198 |
| 2000-01 | 90 | 3034 | 71497 | 25281 | 230873 |
| 2010-11 | 545 | 31533 | 482282 | 231712 | 1683467 |
| 2013-14 | 553 | 38157 | 997885 | 328866 | 2715434 |

*Note : * Total imports have many more items in addition to these four.*
*Source : Economic Survey 2014-15*

**Activity:**

- ⇨ Calculate the share of petroleum, oil and lubricants import in Indian's total import.
- ⇨ Prepare a pie chart of the import figures of 2010-11.
- ⇨ Discuss with your class teacher the possible reasons behind the rise in import of POL and its effect on the economy.
- ⇨ What is the implication of the rising value of fertilizer import ?
- ⇨ What does a decline in import of cereals mean ?

China is the major source of India's imports, accounting for 11.3 per cent of India's total imports, followed by Saudi Arabia (8.1 percent share), the UAE (6.5 per cent share), and the USA (5.0 per cent share) in 2013-14. Petroleum, oil & lubricants constitutes

36.6% of India's imports in 2013-14. That explains the importance of movement of oil prices in the international market.

Asia accounts for nearly 50% of India's exports. Manufactured goods constitute 63% of export. The top export items were petroleum products, readymade garments, Gems & Jewellery and drugs & medicines. The major destinations of India's exports in 2013-14 were the USA (12.5%), the UAE (9.7%). China's share was 4.7%. what is important to understand is that the direction and composition of India's trade have undergone substantial changes.

Globalization cannot be discussed without the World Trade organization because no institution has given as large a push to globalization than the WTO. The WTO is the successor to the General Agreement on Tariffs and Trade (GATT), established in 1947. An agreement to phase out the use of import quotas and to reduce tariffs on merchandise trade, negotiated by 23 countries in Geneva in 1947, came into force as the GATT on January 1, 1948 .GATT proved remarkably successful in liberalizing world trade over the next five decades. By the late 1980s there were calls for a stronger multilateral organization to monitor trade and resolve trade disputes. Following the completion of the Uruguay Round (1986–94) of multilateral trade negotiations, the WTO began operation on January 1, 1995.

The key objectives of the WTO are : (1) to set and enforce rules for international trade, (2) to provide a forum for negotiating and monitoring further trade liberalization, (3) to resolve trade disputes, (4) to increase the transparency of decision-making processes, (5) to cooperate with other major international economic institutions involved in global economic management, and (6) to help developing countries benefit fully from the global trading system.The combined share of international trade of WTO members now exceeds 90 percent of the global total. Open access to markets has increased substantially.

The rules embodied in the WTO serve at least three purposes. First, they attempt to protect the interests of small and weak countries against discriminatory trade practices of large and powerful countries. The WTO's most-favoured-nation and national-treatment articles stipulate that each WTO member must grant equal market access to all other members and that both domestic and foreign suppliers must be treated equally. Second, the rules require members to limit trade only through tariffs. Third, the rules are designed to help governments resist lobbying efforts by domestic interest groups seeking special favours. By thus bringing greater certainty and predictability to international markets, the WTO would enhance economic welfare and reduce political tensions.

The WTO came under fierce criticism. Opponents of globalization, and in particular those opposed to the growing power of multinational corporations, argued that the WTO infringes upon national sovereignty and promotes the interests of MNCs at the expense of smaller local firms struggling to cope with import competition. Environmental and labour groups have claimed that trade liberalization leads to environmental damage and harms the interests of low-skilled unionized workers. In response to such criticism, supporters of the

WTO claim that regulating trade is not an efficient way to protect the environment and labour rights. Meanwhile, some WTO members, especially developing countries, resisted attempts to adopt rules that would allow for sanctions against countries that failed to meet strict environmental and labour standards, arguing that these measures would amount to protectionism.

## TEXTILE INDUSTRY IN INDIA

The Indian textile industry has a market size of US$52 billion and accounts for 26% of the manufacturing sector. It contributes 15% to gross export earning and 4% to GDP .It is estimated to grow to US$ 115 billion by 2012. The textile industry is estimated to create 12 million job opportunities during the eleventh five year plan (2007-12).

The first steam powered cotton mill was established in Kolkata in 1818. The cotton industry was Indian in origin, largely controlled by Indian investors and administered by native managers and technicians. The cotton mill industry flourished despite the internationally aggressive and politically powerful textile industry in Britain. Its rapid expansion began after 1870 and by 1910 it was one of the world's largest. Its expansion depended on the domestic market. Between 1896-7 and 1913-14 no more than 10% of all indigenous cloth production was sold abroad.

When exports of textiles and clothing items from some developing countries started gaining ground in the 60s out competing the domestic textile industries in major developed countries, the latter pressurized their governments into seeking special dispensations from the developing exporting countries. The developing exporting countries were pressurized to agree to an orderly marketing arrangement wherein the normal rules of free export and import were temporarily suspended. The developing countries agreed to restrain their exports to those levels bilaterally agreed on under the framework of multi fibre arrangement(MFA). Initially it covered only cotton fibre products. Woolen and synthetic fibres were included later on. That gave time for adjustment of the textile industries in developed countries which grew under the protective system. The Multi Fibre arrangement came in force in 1972.It provided the framework of setting up quotas thereby restricting imports of textile products to countries faced with problems of increasing imports. The objective of the MFA was to achieve the expansion of trade, the reduction of barriers to such trade and the progressive liberalization of the world trade in textile products while at the same time ensuring the orderly and equitable development of this trade and avoidance of disruptive effects in individual markets and on individual lines of production in both importing and exporting countries. When large imports caused market disruption in importing countries import quotas can be imposed. However this was considered biased against textile exporting developing countries.

The Agreement on textiles and clothing seeks to phase out the restrictions by 1st January 2005. The new agreement on textiles and clothing provides a balanced programme

for progressive integration of textile products over a 10 year period . It covered many items for removal from the MFA quota based system. The items are silk, wool, fine/ coarse animal hair,horse hair, yarn and fabrics, cotton, other vegetable textile fibres, paper yarn and woven fabrics, man-made filaments, man made staple fibres etc. India has given commitment under the GATT Agreement to reduce the average import tariff levels on 17 textile products from the current 85% to about 40%, phased out over a period of 10 years. As a result Indian exports of cotton garments will rise substantially.

India is considered a major beneficiary of the dismantling of the quota system in 2005.

**TABLE : 3**

***Export of textiles (in Rs crores)***

| Year | Cotton yarn, fabrics, made-ups etc | Readymade garments of all textile materials | Textile fabrics & manufactures (excluding carpets handmade) | Total exports * |
|---|---|---|---|---|
| 1960-61 | 65 | 1 | 73 | 642 |
| 1970-71 | 142 | 29 | 145 | 1535 |
| 1980-81 | 408 | 550 | 933 | 6711 |
| 1990-91 | 2100 | 4012 | 6832 | 32553 |
| 2000-1 | 16030 | 25478 | – | 203571 |
| 2006-7 | 19089 | 40238 | – | 571779 |
| 2013-4 | 58663 | 90718 | 41581 | 1905011 |

*Note :* **** Total exports consist of many more items.***

**Activity:**

- ⇨ How has the export in ready made garments grown?
- ⇨ Examine the relative importance of cotton yarn, fabrics and ready made garments
- ⇨ Calculate their shares in total exports.

Globalisation has not left Manipur untouched. Shopping complexes and malls are coming up in Imphal. Imphal will be developed into a 'smart city' Indo Myanmar trade at Moreh became formal border trade after the Indo Myanmar Border Trade Agreement signed in January 1994 became operational in April,1995. The list of permissible items has expanded to 62. An Integrated Checkpost is being constructed at Moreh. However informal trade at Moreh has grown at the cost of formal trade. On the basis of the number of daily visitors to Moreh and Namphalong market across the border the volume of daily trade is estimated at several crores . The entire 107 km long route from Imphal to Moreh has numerous checkpoints . yet the transactions are never properly documented. The occasional

seizures have failed to divert trade from informal to formal trade. Despite such difficulties India's Look East policy has been upgraded to Act east policy where Moreh, as the gateway to ASEAN, has an important role. Look East policy has cultural, security and economic dimensions. It underscores the need to promote trade of northeastern region with southeast Asian countries. The access to bigger markets and improved connectivity may turn out to be the missing driver of growth in this region.

Globalisation provides an opportunity for Manipur's handloom and handicraft products by opening up new and vibrant foreign markets in South East Asia. The opportunity for producing for a bigger market will give a big boost to our handloom and handicraft industry. However international trade is highly competitive and standardisation of the products is essential. The need for competitiveness will break many inefficient enterprises.One of the requirements for this is to develop proper roads. Safe, speedy and unrestrictive flow of goods and services is necessary. Appropriate industries should be established. If we do not prepare ourselves for globalisation, instead of industrialisation we may face deindustrialisation.

### Protection of the consumers in the era of globalisation:

Globalisation enables consumers to have access to a much bigger basket of commodities. However except for goods with ISI or Agmark, the quality of the goods, both foreign and domestically produced, is uncertain. Many unscrupulous businessmen exploit the ignorance of the consumers by passing off sub-standard goods for high quality products through advertisement. Hence the need for protecting the consumers has become even more. In India the Consumer protection Act 1986 has been in operation to safeguard the interest of the consumers. It ensures right of the consumer to seek redressal against unfair trade practices and exploitation. The Act sets up a three tier quasi-judicial machinery at the district, state and national levels for redressal of disputes. Cases involving claims upto Rs. 20 lakhs are taken up at the district level court. The state level court deals with claims between Rs. 20 lakhs and Rs. 1 crore and the national level court with claims exceeding Rs. 1 crore. Consumer Forums guide consumers on how to file cases in consumer courts to redress their grievances. December 24 is observed as the National Consumers' Day in India. The consumer movement in Manipur is yet to take off.

## EXERCISE

### A. Very short answer type questions :

1. Is globalisation a purely 20th century phenomenon?
2. Name an MNC in India.
3. What is the Paona International Market famous for ?
4. Name the first MNC.

5. What are the goods that China imports from India?

## B. Short answer type questions :

6. How does transport cost affect globalisation ?
7. What is globalisation ?
8. What are the most important dimensions of globalisation ?
9. What were the main elements of the reforms of 1991-92 ?
10. How can you say that the Indian economy has been globalising ?

## C. Long answer type questions :

11. How has the process of globalisation evolved over time ?
12. Which are the opportunities provided by globalisation ?
13. Why are we so concerned about the rise in the price of petrol & diesel ?
14. How important is textiles in the Indian economy?
15. Was India always receptive to the idea of globalisation ?
16. How does MFA affect Indian interest ?

## Activity

**Visit your neighbourhood market. Make a list of readily available goods which are not produced in your locality. Try to trace their origin.**

**Organise with the help of your class teacher a mock consumer awareness work shop monitoring either your school canteen or shops in your locality.**

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