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ECONOMICS

Standard 12

PLEDGE

India is my country.

All Indians are my brothers and sisters.

I love my country and I am proud of its rich and varied heritage.

I shall always strive to be worthy of it.

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

I pledge my devotion to my country and its people.

My happiness lies in their well-being and prosperity.

રાજ્ય સરકારની વિનામૂલ્યે યોજના હેઠળનું પુસ્તક

Gujarat State Board of School Textbooks
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PREFACE

The Gujarat Secondary and Higher Secondary Board has prepared new syllabi in accordance with the syllabi at the national level. These syllabi are approved by the Government of Gujarat.

The Gujarat State Board of School Textbooks takes pleasure in presenting this textbook to the students. It is prepared according to the new syllabus of **Economics** for **Standard 12**.

This textbook is written and reviewed by expert teachers and professors. This textbook is published after incorporating the necessary changes suggested by the reviewers.

The Board has taken ample care to make this textbook interesting, useful and free of errors. However, suggestions are welcome to improve the quality of this book from persons taking interest in education.

H. N. Chavda
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Date : 13-02 -2017

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FUNDAMENTAL DUTIES

It shall be the duty of every citizen of India :

(a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;

(b) to cherish and follow the noble ideals which inspired our national struggle for freedom;

(c) to uphold and protect the sovereignty, unity and integrity of India;

(d) to defend the country and render national service when called upon to do so;

(e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;

(f) to value and preserve the rich heritage of our composite culture;

(g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;

(h) to develop scientific temper, humanism and the spirit of inquiry and reform;

(i) to safeguard public property and to abjure violence;

(j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement and

(k) to provide opportunities for education by the parent, the guardian, to his child, or a ward between the age of 6-14 years as the case may be.

[•] Constitution of India : Section 51-A

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1 Graphs in Economics

- **Introduction**

1.1 Meaning of a Diagram and a Graph

1.1.1 Importance of Diagrams and Graphs in Economics

1.1.2 Aspects to be Considered while Drawing a Diagram (Graph)

1.2 Types of Diagrams

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1.4 Use of Technology in the Study of Economics

1.4.1 Computer Technology

1.4.2 Internet Technology

1.4.3 Data CDs (Compact Discs)

Introduction

Economics explains and analyses various economic events occurring in the real world. An analysis of the statistics provided by the state, banks and international organizations is very purposefully done in economics. Lay persons do not get interested in discussions and analysis of events done by experts. But their attention is drawn when important aspects of certain events and matters pertaining to economic changes are presented by way of pictures; and this way certain information which must be conveyed to people, reaches them. Generally two types of pictures are used to depict such information and these are called : (1) Diagrams and (2) Graphs.

1.1 Meaning of a Diagram and a Graph

Statistics classifies diagrams and graphs as different types of pictures which are used for distinct purposes. In economics also, these are used for different purposes.

(1) Diagram : Diagram is a representation of observable data by way of a picture. Scales and measurements are used while drawing a diagram, though, thorough knowledge of statistics is not required to draw. A diagram is drawn for data which are presented in discrete frequency distribution. In other words, a diagram is drawn for self-explanatory data and lay persons do not require detailed knowledge of statistics in order to draw or understand a diagram. A diagram is used by advertising companies to draw attention, by the government to provide information and by social organization to spread awareness.

(2) Graph : A graph is also a representation of observable data by way of a picture. But a graph is drawn for statistical information which is not self-explanatory. A graph is drawn for data with continuous frequency distribution. In order to simplify such data, use of statistical tools is made. A graph is also drawn for other types of complex (unclear) statistical information. Thorough

knowledge of statistics is essential to draw and understand a graph. A graph can extend over one or more of the four quadrants obtained by the intersection of 'X' an 'Y' axes on a plane and it cannot be drawn without taking appropriate measurements.

A graph is generally drawn on a graph paper. Graphs are used more by researchers and educationists. Graphs are not used for conveying information to general public (lay persons).

Example of data with discrete (discontinuous) frequency distribution

Table 1.1

Price (In ₹)	Demand (in units) Frequency
1	100
2	80
5	70
7	20
10	10

Example of data with continuous frequency distribution

Table 1.2

Income Class	Number of People (Frequency)
10,000 - 20,000	500
20,000 - 30,000	300
50,000 - 1,00,000	100

Table 1.3

Classes of Marks	Number of Students (Frequency)
10 - 19	50
20 - 29	30
30 - 39	10

1.1.1 Importance of Diagrams and Graphs in Economics :

The importance of diagrams and graphs in economics can be stated as under :

(1) The study of the subject of economics which is perceived as difficult and complicated is made easier by way of diagrams and less confusing (clearer) by way of graphs.

(2) Trends of certain economic parameters over various years can be observed through a single diagram or graph.

(3) Changes occurring in various sectors of the economy can also be easily understood.

(4) A comparison can be easily drawn for the distribution of some economic parameters between groups/classes, regions, sectors as well as time periods.

(5) When many aspects of economics which are found apparently difficult are presented through a diagram/graph, the time and effort of the presenter in explaining and of the reader in understanding these aspects is saved.

(6) Certain difficult principles of economics are easy to understand with the help of diagrams and graphs. For example, the concepts of expansion and contraction of demand and supply, price elasticity of demand and supply etc. are made easier by way of pictures; and, the trends of macroeconomic parameters can be clarified by way of time - series graphs. For instance, the short-run and long-run irregular fluctuations in agriculture or the regular fluctuations in some industry are calculated by the method of time series and their trends are presented by way of time-series graphs.

1.1.2 Aspects to be Considered while Drawing a Diagram (Graph)

While making diagrams and graphs, the following aspects must be considered as the purpose of drawing pictures is to make an analysis simpler and more effective :

(1) Choice of type of Diagram or Graph and their Presentation : The right type of diagram or graph must be chosen to make a picture more effective. Certain data can be presented in a bar diagram as well as in a pie diagram. The user must make the right choice to make the picture more effective.

(2) Clarity: A picture must look neat and clear. Different colours or shades may be used to denote the various components of a picture.

(3) Scales and Measures : To make a picture look appropriate in size, scales must be taken in accordance with the data.

(4) Representation of axes : Both axes of a diagram or graph must be denoted/represented with appropriate details of what they represent.

(5) Data Table and Source of Data : Diagrams and graphs must be accompanied by the data table from which they are created and by mentioning the source of data, the picture becomes more reliable and authentic.

(6) Method of Calculating the Data : When the picture is not drawn from self explanatory data but is drawn from data simplified with statistical formulae, it is appropriate to state the statistical method briefly.

1.2 Types of Diagrams

There are many types of commonly used diagrams like –

- Pictogram
- Scatter diagram
- Line diagram (based on time periods)
- Circle diagram
- Bar diagram
- Pie diagram

In this section, we shall understand about time-based line diagram, bar diagram and pie diagram.

1.2.1 Time-Based Line Diagram (Curve)

Pictures which show the shape or slope of a relationship in economics between two variables are often drawn. For example, a demand curve, a supply curve etc.

The independent variable is measured on 'X' axis and the dependent variable is measured on 'Y' axis.

Economics often uses line diagram representing time-based self explanatory trends of a variable. For example, size of population in different time periods, rate of inflation in various years, literacy rate in various years etc. Such diagrams can be termed as time-based line (curve) diagrams.

Example :

Table 1.4 Percentage Growth Rate of India's Population Since 1951

Decade	Decadal Growth Rate of Population in %
1951-61	21.64
1961-71	24.80
1971-81	24.66
1981-91	23.87
1991-2001	21.54
2001-2011	17.64

Source : Census of India

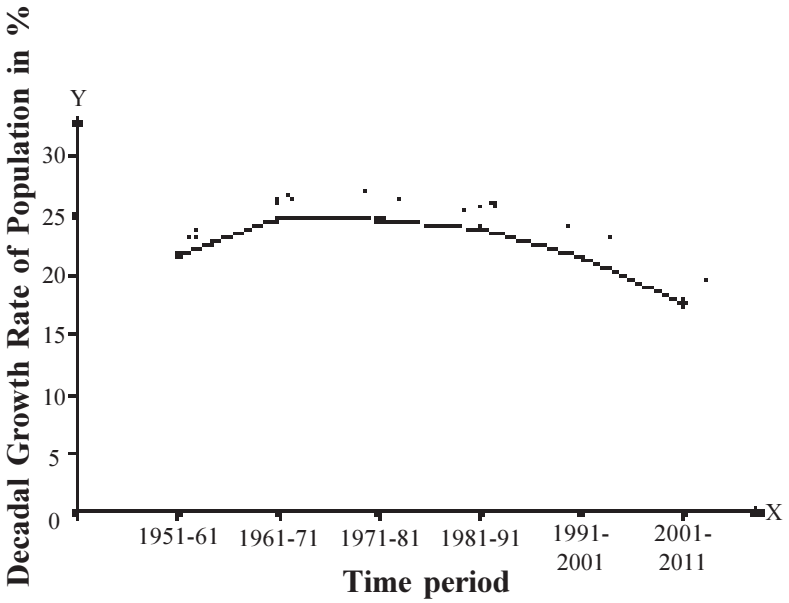

Figure 1.1 : Time-based Line Diagram (Curve)

1.2.2 Bar Diagram and Types of Bar Diagram

A bar diagram shows distribution of the value of a variable in various components. For example, literacy rate in a country in various years or literacy rate among females and males in a particular year.

- A vertical or horizontal bar is drawn for each value of the variable.
- A separate bar is drawn for each section or time-period and the height/length of the bar indicates the value for that section or time-period.

Thus, by comparing the height/length of the bars a comparison can be made of the values of each section.

Bar diagrams are generally of three types : (A) Simple bar diagram (B) Clustered bar diagram (C) Divided bar diagram

1.2.2.1 Meaning and Example of a Simple Bar Diagram : A simple bar diagram represents values of only one variable over a base, say various regions or years etc. It gives a visual effect of the difference in the value of the variable between regions, years and so on.

Example : Bi-Monthly Sale of Chocolate boxes in a Shop

Table 1.5

Months	Sale in units
Jan-Feb	35
March-April	60
May-June	65
July-Aug	40
Sept-Oct	50
Nov-Dec	30

Source : Hypothetical Example

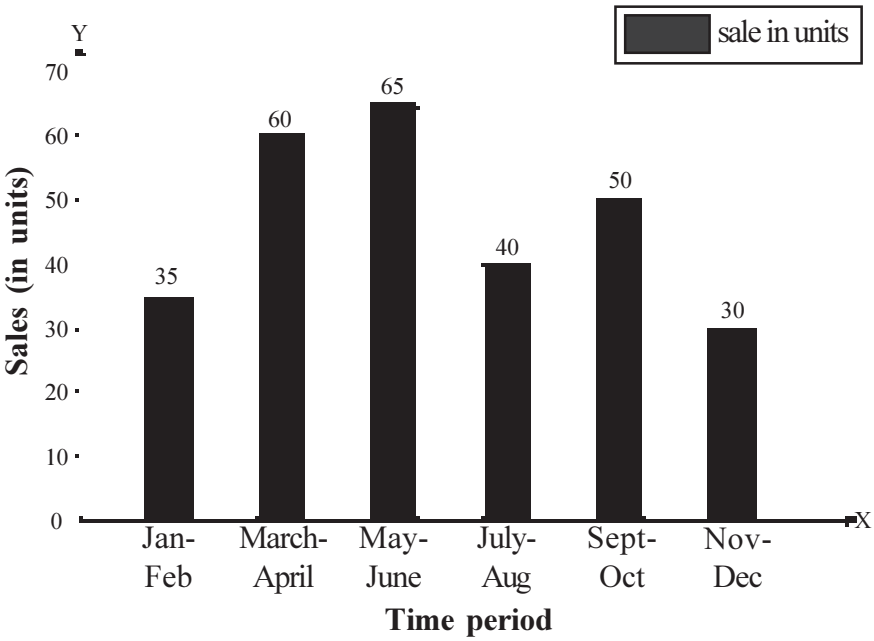

Figure 1.2 : Simple Bar Diagram

1.2.2.2 Clustered Bar Diagram : In this type of a graph, values of a common variable and over a common base are given for more than one section of related parameters. Hence, we get a cluster of bars for the same variable over various base-values.

For example, if the base is time period, the variable is literacy level and its values are expressed for two categories namely, females and males then for one time period, two bars showing literacy level for females and males respectively are drawn in a cluster.

To create proper visual effect and help comparison, each bar is coloured differently and value which it represents are indicated on it.

Example : Bi-Monthly Sale of Chocolate Boxes of Different Sizes in a Shop

Table 1.6 Number of Chocolates Sold

	Sales (in units)		
	Small size	Medium size	Large size
Jan-Feb	30	15	25
March-April	40	25	50
May-June	50	25	35
July-Aug	25	15	10
Sept-Oct	40	20	25
Nov-Dec	60	40	20

Source : Hypothetical Example

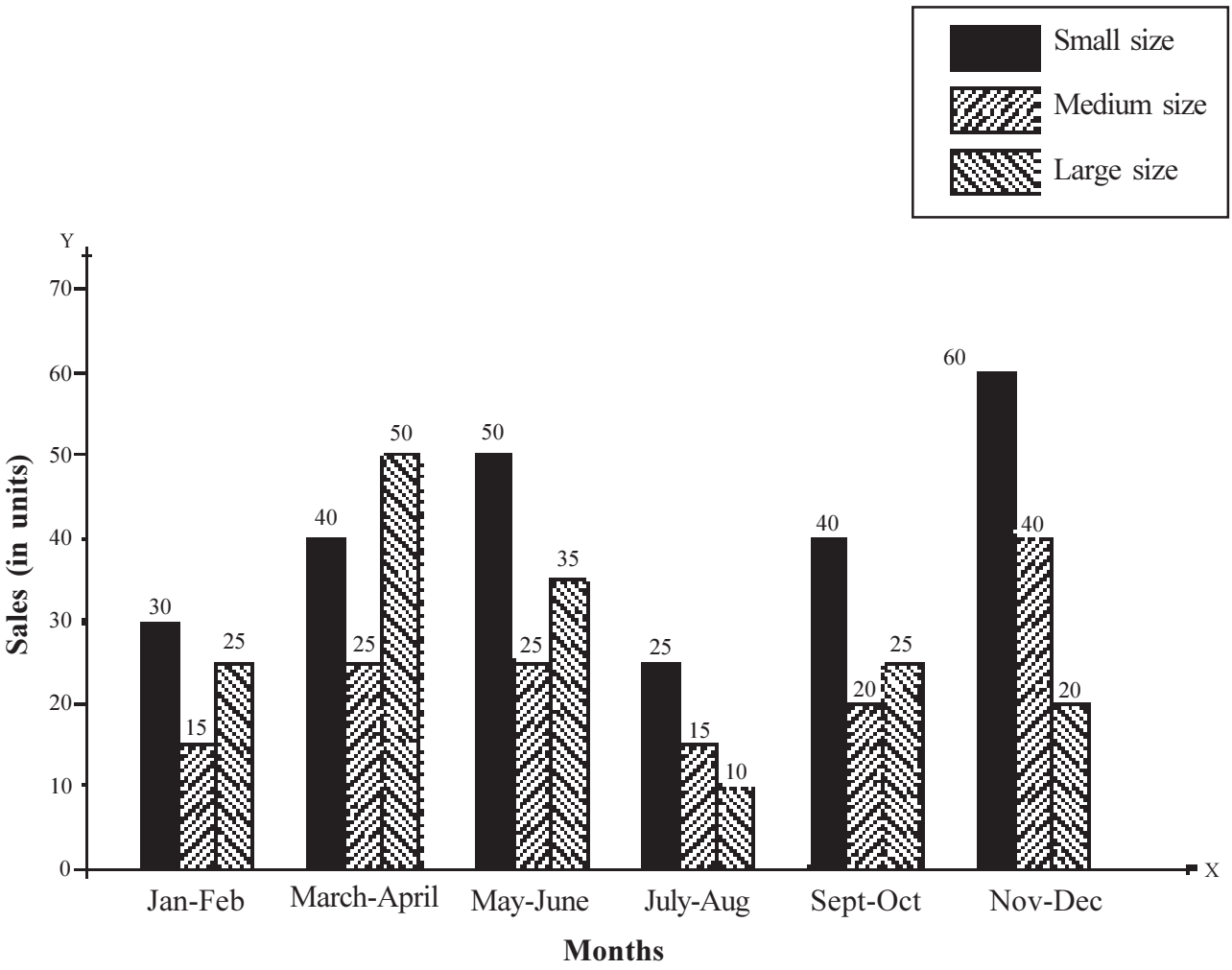

Figure 1.3 : Clustered bar diagram

1.2.2.3 Divided Bar Diagram : In such a diagram, every single value of the variable has sub categories. Hence, we get divisions in all the bars which represent a common variable and common base values.

To create proper visual effect and help comparison, each division of the bar is coloured differently and values which it represents are indicated.

Example : Bi-Monthly Sale of Chocolate Boxes by a Sales Person in Rural and Urban Areas in a Region :

Table 1.7 Number of Chocolates sold in Rural and Urban areas

Sector	Sales (In units)					
	Jan-Feb	**March-April**	**May-June**	**July-Aug**	**Sept-Oct**	**Nov-Dec**
Rural	30	35	40	20	35	40
Urban	40	80	70	30	50	80
All India	70	115	110	50	85	120

Source : Hypothetical Example

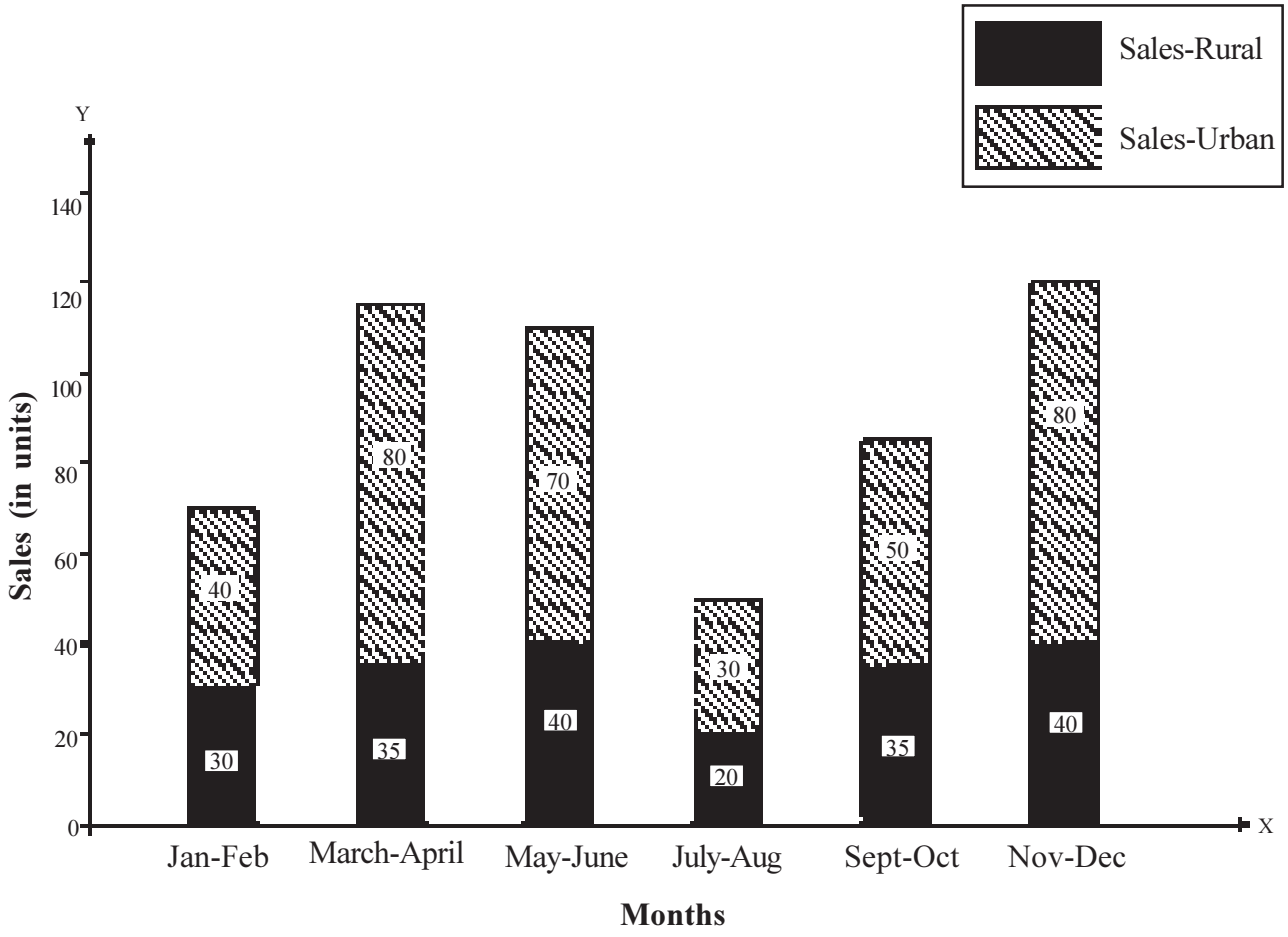

Figure 1.4 : Divided bar diagram

1.2.2.4 Aspects to be Considered while Drawing a Bar Diagram :

(i) The width of the bars does not represent any data and hence all bars should be of equal width.

(ii) The length of the respective bars should be proportional to the value of the variable which they represent.

(iii) The distance between all bars should be equal and that should also be maintained between the first bar and the origin.

(iv) All bars rest on the same line called the base which usually coincides with the 'X' axis.

In today's times with the help of computer technology, horizontal bars are also drawn instead of vertical bars.

(v) All vertical bars should be arranged from left to right in order of the data series. Therefore, the bar representing the first data in the series is drawn first near the point of origin.

1.2.3 Pie Diagram :

Division of a circle in degrees represents a pie diagram. If an entire circle is considered as universal set of an entire data and the different components of this data are represented by dividing the circle in degrees proportional to the data then a pie diagram is obtained.

Pie diagram is drawn for the similar type of data for which a bar diagram can be drawn.

Since an entire circle represents 360°, the entire data represents 360° and sections/divisions of the data are represented by dividing the circle in degrees proportional to each data section.

In other words, a diagram which is drawn by representing sub-divisions of an entire data by proportionate degrees in a circle is called a pie diagram.

Formula for obtaining proportional degree for a component of data :

$$\text{degree} = \frac{\text{component value}}{\text{total value}} \times 360$$

Example : Percentage of Pocket Money Spent by a Student on Various Items

Table 1.8

Item	Percentage of Money Spent	Calculation of Degrees
Books	20	(20 × 360) ÷ 100 = 72°
Stationery	5	(5 × 360) ÷ 100 = 18°
Phone, Computer, other devices etc.	30	(30 × 360) ÷ 100 = 108°
Food	30	(30 × 360) ÷ 100 = 108°
Clothes	15	(15 × 360) ÷ 100 = 54°
Total	**100**	**(100 × 360) ÷ 100 = 360°**

Source : Hypothetical Example

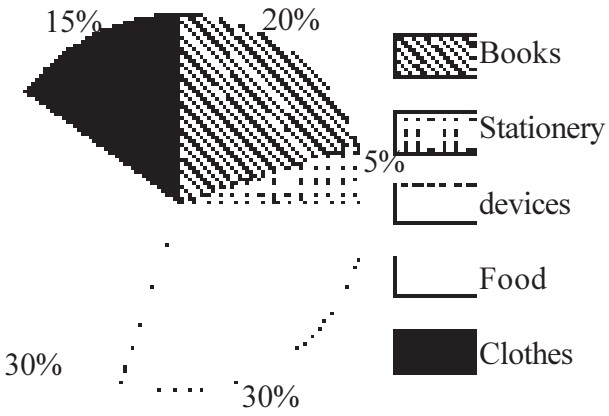

Figure 1.5 : Pie Diagram

1.2.3.1 Aspects to be Considered while Drawing a Pie Diagram :

(i) 360 degrees make a circle.

(ii) Degrees for sub divisions are calculated in proportion to the value of the variable for that division and the sum total of the degrees of all such sub divisions must be 360°.

(iii) If relevant data is to be compared across regions or time periods then two pie graphs can be drawn side by side. For a data set with a smaller total value, a circle with smaller dimensions is drawn and for a data set with larger total value, a circle with bigger dimensions is drawn.

1.3 Types of Graphs

Use of graphs is also frequently made in Economics. Statistics classifies graphs as under :

(1) Time-series graphs

(2) Graphs for continuous frequency distribution

- Histogram
- Frequency polygon
- Frequency curve
- Cumulative frequency polygon

(3) Logarithmic graphs

1.3.1 Time Series Graphs

In a trade cycle or in cycles of economic activities, short term and long term regular or irregular (erratic) changes are observed. The trends of such changes are obtained with the help of statistical tools; and when graphs are drawn taking these changes as variable and time period as base then such graphs are called time series graphs.

Since the syllabus does not include other types of graphs, they are not discussed here.

1.4 Use of Technology in the Study of Economics

We are living in an age of digital technology and we use this technology in our daily lives. We use digital technology to stay connected with friends and relatives, to watch movies, to listen to music, to navigate our way while driving on unknown roads, to order purchase goods, to pay our bills, to buy tickets and for many more purposes.

This technology is also used for education.

Economics is an art and science which evolves every day as the behaviour of human beings, society and state changes with time. Hence people in ordinary business of life as well as experts have to update themselves by the day and technology helps to cope up.

Different types of digital tools frequently used in the study of economics are explained below :

1.4.1 Computer Technology

A student of economics is aware of the word computer. We may have used a computer frequently in our school and some of us might also be having a computer at home. Oh! Today even smart phones perform several functions of a computer. We can use various programmes of a computer technology in our study. Like,

(i) Presentations : Complicated economic information/data and difficult theories of economics can be made easy by expressing in a power point presentation.

For example, the entire topic of budget can be highlighted in 3 slides. One can give the meaning and two accounts in a budget and their meaning. Another can show the example of the contents of a budget and how it is presented. The third slide can give the trends of budget in our country or can give the actual budget of a government for a recent year.

(ii) Excel Work Sheets : Economics deals with lots of data. Researchers sometimes deal with data in thousands of observations. For instance, if we do a survey on number of items produced by small scale industries in India, we may get thousands of observations. Such data must be entered in an excel sheet and this sheet can process the data for any formula at only one click. For example, it can give us sum total, averages, correlations and much more. Excel sheets are almost an important tool for processing data in economics. We can also obtain various figures for the data in an excel sheet.

(iii) Diagrams and Graphs : There are several programmes in a computer which help us to draw diagrams and graphs which we frequently use in economics.

There are simple drawing tools in a word file which can be used to draw simple free hand figures like a simple downward sloping or upward sloping demand or supply curve. Excel sheet plots almost all types of diagrams and graphs for the data which we enter in the work sheet. We must only know the formula for doing so and give the relevant command.

(iv) Storage Tools : We use plenty of study material in economics. Such material becomes useful in higher studies in economics or for research. We need space and carefulness to preserve such material in the form of physical note books or books. There is a fear of losing such material owing to moisture, pests etc. But we can preserve all such material in a computer. Besides, it can be carried anywhere by transferring it in a hard disc or pen drive. By transferring it in e-mail, drop-box, google drive, digi-locker etc. we can access this material and read it in any part of the world. Thus, study materials can be preserved with the help of computer technology.

(v) Other Tools : Statistical programmes like SPSS, SHAZAM, E-views, SAS etc. are developed to do almost all types of data processing for lakhs of observations in minutes by entering the right formulae. Research institutes buy such programmes. These are very expensive. However, certain software like Gretl, PSPP, R etc. can be obtained free of cost through the internet.

Now-a-days all these functions of a computer are also available on smart phones and tablets.

Caution in Using Computer Technology :

Computer is an aid in studying and it is not a study material by itself. It helps to make the process of studying easier and faster but it does not replace the process of studying. If we do not use the right commands in a computer, we may end up losing our material. We may also end up getting incorrect graphs and data processing if we do not know the correct formulae and commands.

1.4.2 Internet Technology :

Internet is another facility created by digital technology, which all of us have used from time to time. The use of internet in economics can be summarized in the following chart.

Purpose	Manner in which Internet Helps
(1) Tutorials	Some educational websites put power point presentations and study material along with work sheets on the open access link. We can view such presentations as tutorials.
(2) Active Learning	Some videos of lectures by experts are put on open access sites by some educational institutions; some institutions create live lectures available to students. We can register on these sites and we can listen to a lecture on the net like we do in our class room. e.g. lectures by experts are available in economics and other subjects
(3) Reading Material	Numerous books are available online free of cost for reading. Some good research articles, copies of journals etc. are also available for reading. Some articles, books and journals can be accessed by paying some annual fees on those websites. These materials are called e-books, e-journals, etc.

Purpose	Manner in which Internet Helps
(4) Information	By merely searching, we can get information on universities offering degrees in economics, or any other information about any subject.
(5) Miscellaneous	We can get quotes by economists, names of reference books etc. also on internet by using the search engine.
(6) Data	Economics uses a lot of secondary data. For instance, we use data on budget of a government, banking, agricultural production, value of exports and imports, poverty, employment, industrial production and many others. These data can be accessed from authentic websites. For example, authentic site for data on banking in India is the official website of Reserve Bank of India, for exports and imports is the website of Ministry of Commerce and Industries of Government of India, Budget related information from Ministry of Finance, Government of India and so on. Some Organizations and agencies functioning at national and international levels also collect publish as well as put data on websites. For example, CSO, NSSO, WHO, UNO, CMIE, ILO, IMF, World Bank and so on. (By authentic data is meant data which is published by recognized research institutes after doing comprehensive research.)

Caution in Using Internet for Education

Like computer, internet is also only a tool. It cannot replace books and teachers or our own thinking and reasoning. A lot of substandard material, irrelevant information, misleading information, plagiarised articles are found on internet. We must avoid using those. Readers must have the wisdom of identifying the authentic material on internet. Only authentic websites must be referred to otherwise we may end up getting misled.

1.4.3 Data CDs (Compact Discs) :

Some authorities and agencies like laboratories, research centres, government agencies, etc. involved in collection and publication of information and data pertaining to macroeconomic indicators put huge data content in compact discs and sell those for researchers and educational institutions. Such CDs are used by educational institutions, research institutes, etc. for their studies. Some such data CDs frequently used in economics are :

- CD of National Income Accounts of India
- CD of Census of India
- CD of Annual Survey of Industries in India
- CD of NSSO (National Sample Survey Organization)
- CD of data pertaining to any Ministry in India which are provided by the statistical department of respective Ministries.
- Some agencies like CMIE (Centre for Monitoring Indian Economy), also create data soft ware which can be purchased only by research institutes and corporations as these are very expensive.

Difficulty in Using Data CDs :

Since the data CDs and software contain a huge size of data, these become complicated to use. There are several sheets in a CD, and one must have the knowledge regarding searching the relevant data sheet and get the relevant data.

Exercise

1. Choose the correct option for the following questions :

(1) For which type of distribution a diagram is drawn ?

(a) Continuous (b) Discrete/Discontinuous

(c) Skewed (d) Ideal

(2) For which type of distribution a graph is drawn ?

(a) Continuous (b) Discrete/Discontinous

(c) Skewed (d) Ideal

(3) Which of the following diagrams are drawn for similar data ?

(a) Simple bar diagram and clustered bar diagram

(b) Bar diagram and pie diagram

(c) Clustered bar diagram and time-series graph

(d) Pie diagram and time-series graph

(4) Which of the following statements is true for internet in the present times ?

(a) It is a tool for studying.

(b) Fulfils the role of a teacher in the process of studying.

(c) Is a close substitute for schools.

(d) Is only a tool for entertainment for youth.

(5) Who/Which type of organization presents data CDs pertaining to economic information ?

(a) Private publishers

(b) Schools

(c) Laboratories, research centres, government etc.

(d) Individuals

2. Answer the following questions in one line :

(1) What is meant by a diagram ?

(2) What is meant by a graph ?

(3) What is meant by a bar diagram ?

(4) What is meant by a pie diagram ?

(5) What is a data CD ?

3. Answer the following questions in brief :

(1) What is meant by a diagram and for what purpose it is drawn ?

(2) What is meant by a graph and for what purpose it is drawn ?

(3) State the importance of diagrams and graphs in economics.

(4) How is computer technology useful in the process of learning ?

(5) Write a note on data CD.

4. Give answers to the point for the following questions :

(1) State the important aspects to be considered while drawing a diagram and a graph.

(2) State the important aspects to be considered while drawing a bar diagram.

(3) Give the difference between diagrams and graphs.

(4) Explain the usefulness of internet technology in the process of learning.

(5) Give the caution areas in using computer and internet technologies for studying.

(6) What is the importance of diagrams and graphs in context of presenting information about economics for lay persons and for experts.

5. Answer the following questions in detail :

(1) Explain the types of diagrams in detail.

(2) Give an understanding of the usefulness of technology in the study of economics.

Glossary

Diagram	**:**	Representation of the relationship between variables in a picture is called a diagram.
Graph	**:**	It is a picture drawn for complex information which is simplified with the help of statistical tools or for information expressed in continuous frequency which is made presentable with the help of statistical tools.
Bar Diagram	**:**	When a data set is distributed among various sections and for each section a bar is drawn on a common base, such that the height of the bar is proportional to the value of the variable for the respective section then such a diagram is called a bar diagram.
Pie Diagram	**:**	A diagram which is drawn by representing sub-divisions of an entire data by proportionate degrees in a circle, is called a pie diagram.

2 Indicators of Growth and Development

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Introduction

The most important objective of the various countries of the world, more so after the IInd world war has been the attainment of economic development. The neucleus of all economic thinking has been the attainment of economic development. The terms "Economic Growth" and "Economic Development" have become popular after the IInd world war of 1939-1944 since the developing countries attempted to solve problems like unemployment, poverty, hunger deaths, inequalities of income and wealth distributions etc. It can be said that the awareness level of developing countries towards attainment of development increased, since developing countries started attemping to reduce the gap in per capita income level with the developed countries and to increase the standard of living through economic development. It should be remembered that the need for improving the level of economic development is not for developing countries alone but also for the developed countries, but for different reasons. Developing countries aim at improving the standard of living of the people by reducing poverty and

unemployment while the developed countries aim at maintaining the prevailing higher standards of living. If we think this way, maintaining economic growth is the aim of developed countries and attaining speedy economic development is the prime requirement of developing countries.

General economic Development and Economic growth are considered to be the same.

In the past, the words 'growth' and 'development' were used interchangeably. But few economists have always considered economic growth and economic development as different. According to Prof. Mrs. Ursula Hicks, the solution for the economic problems of developing countries is economic development and for the developed countries it is economic growth.

2.1 Meaning of Economic Growth

Growth means economic growth. Economic growth relates to the long run, increase in the total output of an economy. In economic growth, there is a continuous increase in the real national income and the real per capita income. Such growth is possible due to the increase in the supply of factors of production like land, capital, labour and entrepreneurial ability and increase in their productivity. In short, it can be said that, the supply of factors of production, their availability, productivity and efficiency tend to increase leading to a continuous increase in real national income and real per capita income. Thus economic growth is a quantitative change. Economic growth shows the increase in output and gross national output through which a country's economic status is depicted. It also helps in a comparative evaluation of economies of two countries.

2.1.1 Definitions :

"Economic Growth refers to growth rate of national income or rise in total quantum of goods and services."

– Prof. Hansen

"A long term increase in capacity of a country to supply diverse economic goods to its people is known as economic growth."

– Simon Kuznets

2.1.2 Limitations of the Concept of Economic Growth:

(1) Economic growth takes into consideration only the quantitative change.

(2) In Economic growth, there is a rise in national income and per capita income but institutional and psychological factors remain as before.

(3) The concept of economic growth is narrow and depicts only the rise in the rate and extent of output.

(4) The concept of economic growth is not of much use in understanding the welfare of the people.

2.2 Meaning of Economic Development

We need to understand, as to what Economic Development actually means, when Economics of Asia, Africa and Latin America have become proactive in achieving economic development. Economic Development is a process which is continuous, to achieve economic well-being. Hence the term economic development has a very wide meaning which includes economic growth, economic welfare and economic progress.

Even in Economic Development there is an increase in the real national income and real per capita income but economic development is not just about quantitative changes but also about qualitative changes. Development is different from growth. It is a multi dimensional process. During

the process of development economic and social structure of the economy changes. Along with economic progress, progress takes place in the society too. Generally, the structure of national income also undergoes a change. The contribution of agriculture as percentage of the total national income decreases. The contribution of industry and service sector increases. The disguised unemployed in agricultural sector get employment in other sectors. Modern technology is being implemented due to which time and money is saved. New seeds are innovated as a result the structure of institutions pertaining to production and distribution changes. Poverty unemployment and inequalities fall due to such systematic changes.

2.2.1 Definitions :

(1) "Economic Development is a multidimensional process." **- Michael Todaro**

(2) "Economic Development is such a process in which there is no increase in the population living below the poverty line, the distribution of income does not further increase the inequalities and there is a continuous rise in the real per capita income of the country for a long period of time."

- G.M. Meier

(3) "Economic Development is a process which increases the factors of production and create change in the technique of production due to which per capita income continuously increases and the standard of living continuously rises irrespective of whether population remains constant or increases."

- Machlup

2.2.2 Characteristics of Economic Development :

(1) Economic Development is a continuous process : Economic Development is a slow but strong process in a predetermined order and direction. In any country, development is a process which is easy to start but difficult to maintain. The process of development is usually fast initially but slows down over a period of time.

(2) Quantitative and qualitative change takes place : In Economic Development, output increases which is quantitative and due to research, the quality of the product improves which is qualitative. But there is more of qualitative improvement.

(3) Change in demand : There is rise in the income of the people due to development which changes their taste. In the initial stages of development, the demand for basic or primary goods rise but subsequently there is a rise in the demand for comforts and luxury goods.

(4) Labour become more dynamic : Development leads to increase in education of labour which makes him more dynamic.

(5) Increases capital formation : Development leads to increase in demand for different commodities. New enterprises come forward due to which the rate of investment and capital formation increase enormously.

(6) Change in technology : There is a shift in dependence from fire and water based technology to coal & iron based technology which results in faster development.

(7) After a particular stage, development becomes self motivating.

2.2.3 Limitations of the Concept of Economic Development :

(1) Economic development indicates the progress of a nation. It show the economic scenario but in real sense, it cannot discuss the human development. It cannot become the index of human progress.

(2) Economic development cannot be measured as economic growth. It is a very difficult to measure economic development. Economic development includes those changes that have happened in the society. It is very difficult to derive a measurement for this.

(3) When economic development takes place, the standard of living of people improves. Though economic development is taking place in India today, there is not much improvement in the standard of living of the people and therefore we cannot say that economic development means improvement in standard of living.

2.3 Difference between Growth and Development

Economic development is different from economic growth. Economic growth is that process in which the income of the economy increases but it does not bring any institutional change in the economy. The psychology of the people does not change, while in economic development along with increase in the income of the economy, there is a change in the structure of the economy and the psychology of the people. Hence, Gerald Meier stated, "Development is growth plus change". We can explain the difference between economic development and economic growth in the following manner :

Economic Development	Economic Growth
(1) Economic Development is a process.	(1) Economic growth is an occurrence.
(2) In Economic development quantitative and qualitative changes take place.	(2) In Economic growth quantitative change occur.
(3) In Economic development the question of utilisation of unutilised resources arises.	(3) In Economic growth, emphasis is on the distribution of available resources.
(4) The concept of Economic development is related to developing countries.	(4) Economic growth is related to developed countries.
(5) Economic development is difficult to measure.	(5) It is easy to measure economic growth.
(6) The concept of development is broad.	(6) The concept of growth is narrow.
(7) Economic development is related to distribution along with per capita income.	(7) Economic growth is only related to increase in per capita income.
(8) Economic development is a slow process.	(8) Economic growth is a rapid process.
(9) Economic development is not possible without economic growth.	(9) Economic growth is possible without economic development.

2.4 Indicators of Development

Has the country achieved economic development or not? If so, how fast it has taken place? How much is the economic development of the country? To know and to measure it, we should consider various factors. Such factors are identified as the indicators of economic development, measuring rods or standards. These indicators which measure the rate of economic development and its extent can be presented in numerical and statistical terms. Through these indicators, a comparison of two countries and two time periods can be done. Just as thermometer measures the changes in the temperature of human body and records it development indicators measure the country's development. Some of the indicators of economic development are as follows :

(1) Rate of growth of national income (2) Rate of growth of per capita income (3) Quality of life Physical quality of life index (PQLI) (4) Human Development Index (HDI)

2.4.1 Growth Rate of National Income :

According to this indicator, a country is said to have attained economic development if there is a continuous increase in the real national income of the country for a long period of time. If the rate of rise in national income is high the development rate is said to be high and if national income increases at a lower rate, the rate of development is low. If the national income does not rise it depicts the state of stagnancy and if national income decreases, there is underdevelopment or negative development. According to this indicator real income and not money income is taken into consideration and hence national income is calculated not at current prices but at constant prices.

2.4.1.1 Tabular Expression : Some countries have a faster rate of growth of national income when compared to the rate of growth of national income and hence, such countries are said to have a higher rate of economic development. It can be seen in table 2.1 that countries like Norway, America, Sri Lanka and Pakistan have a slower annual growth rate of national income as against India. Hence, it can be said that India's growth rate is higher than that of these countries. Today, India is considered to be one of the fastest developing countries of the world. But it should be remembered that countries like Norway and America had impressive growth rate already though they are growing at a rate of 2 to 3 % per annum in the present.

Table 2.1

Country	Annual Growth Rate of National Income in Percent
Norway	2.2
America	2.4
Sri Lanka	4.5
China	7.3
India	7.3
Pakistan	4.7

Source : World Bank and Economic Survey, 2015-16

2.4.1.2 Limitations : There are some limitations in accepting national income as an indicator of economic development. They are as follows :

(1) Difficulty in Calculating the True National Income : Double counting, products for self consumption, difficulties in calculating depreciation, illegal income, tax avoidance, tax evasion, barter transaction, illiteracy, employment of persons in more than one occupation etc. makes it difficult to estimate the true national income of the country and hence national income cannot be considered as a true measuring rod of the rate of economic development of a country.

(2) Population : By just knowing the national income of a country the rate of economic development cannot be understood. Hence the extent of population should also be known. If the rate of growth of national income is lesser than the rate of growth of population, then development is said to be negative. If the rate of growth of national income is higher than the rate of growth of population, then the rate of economic development is positive.

(3) Different Methods of Calculating National Income : There are different methods used to calculate national income across the world. The most important among them are production, income and expenditure methods. When a country's national income is measured through two different methods, the result instead of remaining the same, differs. As different countries adopt different methods to calculate national income, international comparisons become difficult.

2.4.2 Growth Rate of per Capita Income :

According to this indicator, when the per capita income of a country increases for a long period continuously, it can be said that economic development has taken place. Per capita income is average income per head. Per capita income is gross national income of a country divided by the population of that country. This indicator takes into account the population of the country too, and hence per capita income as an indicator is superior to the national income as an indicator. The experts of UNO (United Nations Organisation) have recommended per capita income as an indicator of economic development. Just as national income if per capita income is high and if its rate of growth is high, it can be said that development has taken place.

If the country's per capita income rises at a faster rate, development is said to be fast. If per capita income grows at a slow rate, development is slow. If per capita income is constant there is stagnation and if per capita income falls, development is negative.

The ultimate objective of economic development is to improve the standard of living of the people and to raise the human development for which the best indicator is per capita income. If development does not improve the standard of living of the people, in real sense it cannot be called as development. Hence per capita income increase leading to physical betterment of the people is considered to be a good indicator. Rise in per capita income improves physical welfare of an individual and hence it is the real indicator of economic development.

Table 2.2 World Bank & Economic Survey 2015-16

Country	Per Capita National Income Purchasing Power Parity, 2014 (In US $)	Growth rate (in Percent)
Norway	64,992	1.1
America	52,947	1.6
Sri Lanka	9,779	3.5
China	12,547	6.7
India	5,497	6.0
Pakistan	4,866	2.6

Source : World Bank and Economic Survey, 2015-16

2.4.2.1 Tabular Expression : It can be seen from the table that the per capita income of India in 2014, on the basis of purchasing power parity is 5,497 US $ which is lower than Norway, U.S., China, Sri Lanka. Compared to Norway, India's per capita income is 11 to 12 times lesser and hence Norway's growth is said to be higher than India's by 11 to 12 times. But the rate of growth of per capita income is higher in India and hence the rate of development is faster.

2.4.2.2 Limitations : Per capita income as an indicator has following limitations :

(1) Only Estimates : The national income of the economy is calculated almost every year and hence we get almost a correct data. But the population of the country is not calculated every year. In India population census is taken once in 10 years. Hence, only an approximation is taken for all other years. So per capita income data is not acquired correctly.

(2) Difficulty in the Calculation of National Income and per Capita Income : Already we have seen the difficulty in calculating national income. In the same way whether per capita income should be at current price or constant price and their related difficulties make it difficult to know the real situation.

(3) Per Capita Income Shows only an Average : Per capita income shows only an average income. On the basis of this average, no decision can be taken and the stage of development of countries cannot be decided. With increase in per capita income, if equitable income distribution takes place economic development is said to have taken place. If income distribution is inequitable, it can be said that economic development has not taken place. Due to this too, per capita income as an indicator is considered deficient.

(4) Difficulty in Comparison : The per capita incomes of different countries are expressed in their respective currencies. It will have to be first converted into US $ and then comparison can be done to find out whether economic development of a country is relatively high or low. Different countries of the world impose different controls on the exchange rate and real exchange rate cannot be known and consequently the real comparison is not possible amongst countries.

(5) Per capita income of the country is not actual income that a citizen gets. Per capita income as an indicator hides more than it reveals and hence it is not a correct indicator.

2.4.3 Improvement in Quality of Life and PQLI :

The objective of economic development is to improve the standard of living of the people. For that, if economic development has taken place, and how much more or less is to be measured and for this physical quality of life index as an indicator is accepted.

2.4.3.1 What is Physical Quality of Life? : Quality of life in human beings depends on the different types of goods and services that a person consumes. The standards of consumption refer to the :

(1) Consumption of food, fuel and other non-durable goods. (2) Consumption of durable and semi durable goods. (3) Consumption of services during a period of time by a person or group of people.

This consumption standard or living standard determines the physical quality of life. Hence consumption or living standard is identified as physical quality of life. If the living standard of the people goes up, it can be said that physical quality of life has gone up.

2.4.3.2 Aspects which are Included in the Physical Quality of Life : The composition of goods and services consumed by an individual during a period of one year determines the physical quality of life. The following are determinants included in the list of goods and services :

(1) Food (Calories, proteins - fats) proportion

(2) Health and medical services (of doctor to population)

(3) Housing and clothing (number of houses, average number of people living in each house)

(4) Education and entertainment (percentage of population getting primary secondary education, TV, theatre etc.)

(5) Transport, communication and information services (the extent of road, railway lines, number of telephones per capita)

(6) Energy (per capita energy consumption)

(7) Population having access to pure drinking water

(8) Average life expectancy

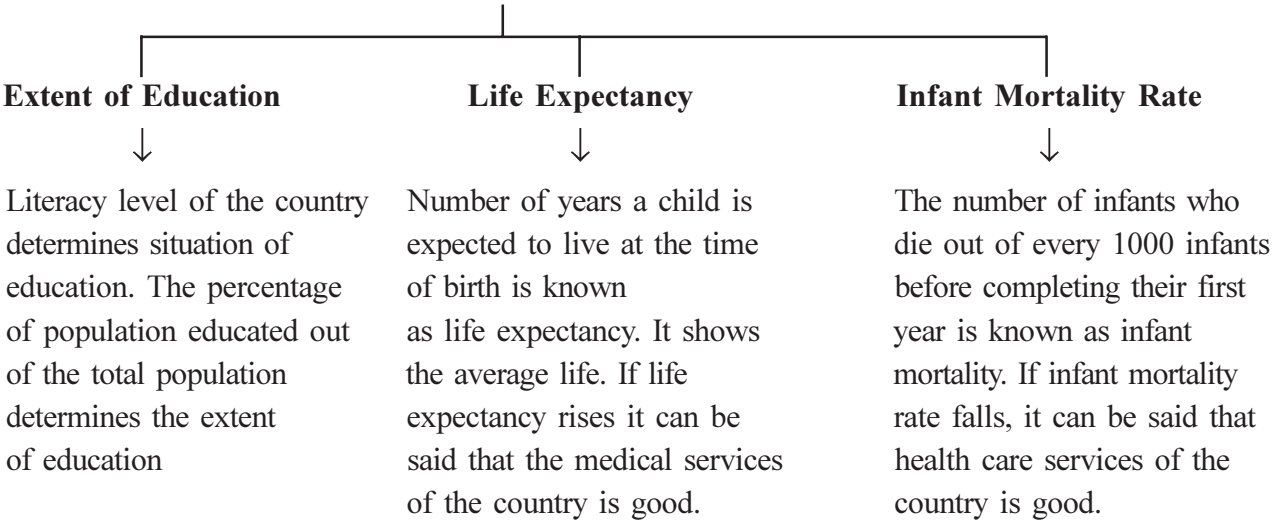
(9) Infant mortality rate

(10) Drainage facility

If there is improvement in the above 10 aspects, then it can be said that there is improvement in the physical quality of human life. If there is no improvement then it can be found out as to where improvement is needed and remedial measure can be adopted to increase the rate of development. Every indicator can be relatively expressed. That indicator which has the highest value is given 100 pts. Now developed countries give greater importance for the improvement the physical quality of life.

2.4.3.3 Physical Quality Life Index = PQLI : Increase in National Income and per capita income are not the real indicators of Economic development as it has number of limitations. Increasing incomes of the country is concentrated in the hands of few people, which is not development. The development of a country should be such that the living standards of the poor rise. The basic requirements of the citizens are fulfilled. Keeping this in mind Morris Davis Morris presented the physical quality of life index which is in short known as PQLI. In this index betterment of physical quality of life of human beings is considered as Economic development. The level of physical quality of life determines the level of economic development. If any country's physical quality of life is higher than that of the other country, then that country is considered as more developed. There are three standards to measure the physical quality which are depicted here.

2.4.3.4 Physical Quality of Life - 3 Factors (Determinants) :



PQLI = Literacy level + Life expectancy index + Infant mortality index

2.4.3.5 Reasons for only Three Determinants

(1) Dependable data for all these factors can be acquired for all the countries.

(2) All these three factors (determinants) depict the results and not efforts.

(3) All these three factors are product based and hence fulfils the justifiable standards for performance comparison.

Literacy : This is a very important measuring rod for physical quality life. Increase in literacy and education shows rise in the welfare of an individual. Human efficiency is a necessary aspect for national development.

Life Expectancy : Increase in life expectancy is a mirror of social environment and well being. It is a reflection and the consequence of nutrition, medical care and environmental situation.

Infant Mortality Rate : It is a reflection of social status and welfare. It is an intricate reflection of availability of pure drinking water, environment of the house, status of women and role of a mother.

2.4.3.6 Formulation of Physical Quality of Life Index :

- Every indicator (literacy, life expectancy, infant mortality rate) is given 100 weights (weightage)
- On the basis of performance of that determinant in that country is graded between 0 to 100.
- A total of these grades of 3 factors are summed up.
- This total is divided by 3 to derive an average.
- This data so derived is identified as PQLI.

2.4.3.7 Important Aspects :

(1) Closer to 100 better is the performance of all the 3 indices of PQLI of the country.

(2) Closer to 0, bad is the performance of all the 3 indices of PQLI of the country.

(3) PQLI is always between 0 to 100.

(4) PQLI can be used to compare two states within the country or two different countries.

(5) Higher the PQLI more is the economic development.

(6) Lower the PQLI, lesser is the economic development.

2.4.3.8 Positive Aspects :

(1) PQLI includes factors like literacy life expectancy (health) etc. which touch the standard of human life.

(2) PQLI is a better index when compared to the per capita income index.

(3) PQLI as an indicator of economic development has lesser drawbacks, as against National income and per capita income indicators.

(4) With PQLI comparisons can be made between different countries, different groups of countries or different states of the same country.

(5) We can create PQLI for urban rural areas, females - males and a comparison can be done.

2.4.3.9 Limitations :

(1) Only 3 aspects are included and on their basis it cannot be categorically stated, whether a country has actually developed or not. To get a correct picture we need to include other factors also to the existing ones.

(2) Only averages are depicted - The values obtained from three indicators are divided by 3 to obtain PQLI which is in the form of average. Average of three aspects of a country does not show the prominence or backwardness of each indicator. Decisions cannot be made on the basis of averages.

(3) If a country's present PQLI is high, it cannot be generalized that the economic development is high as against other countries.

(4) It is not right to give equal weightage (100) to all indicators. All three aspects do not have same importance in human life.

(5) Growth of income has high importance in physical quality of life index and ignoring that is not possible.

(6) The PQLI of rich countries rise at a slower rate because average life cannot increase beyond a particular limit.

2.4.3.10 Present Scenario :

After 2003 instead of 3 aspects, three more aspects were included and Quality of Life Index (QLI) is prepared in the world.

2.4.4 Human Development Index - HDI :

The most recent indicator of development is the Human Development Index. United Nations Development Programme (UNDP) presented the Human Development Report (HDR) in 1990. In that report Human Development Index was presented as a measurement of development. Along with economic aspects of measurement HDI emphasised more on non economic aspects, too. Indian economists too, contributed in evolving the HDI on the basis of the evaluation made regarding the development efforts in different countries. Improvements were introduced in the year 2010 in the minimum and maximum values which were used to measure HDI since 1990.

2.4.4.1 Determinants of Human Development Index :

Three factors alone are considered while preparing HDI to make it simple and easy. Instead of

absolute values, average of all the three values are prepared : (1) Life expectancy. (2) Educational achievements (knowledge) data depicts social achievements. (3) Income data depicts the standard of living which in turn shows the economic achievements.

HDI

Life Expectancy	**Knowledge (Literacy or Education)**	**Good Standard of Living**
What is the expected number of years a person will live at the time of birth of the population of a country determines the value. If it is less than 50 years, that country is said to be deficient in health. Higher the life expectancy better the HDI.	To know the quantum of knowledge adult literacy in percent is calculated. People in the age group 15 years and above are included. Two aspects are included in this (A) Number of years of schooling (B) Expected number of years of schooling. The gap between expected and actual number of years of schooling is taken to derive the values.	Standard of living refers to the availability of pure drinking water, medical services, good sanitation, infant mortality rate percentage of undernourished and malnourished children, per capita calorie availability per day, mortality rate of infants below 5 years of age, protein and fat availability, etc. are considered which depends on income. Income index is that in which per capita gross national income is measured on the basis of PPP. (Purchasing Power Parity)

2.4.4.2 Important Aspects :

- The maximum value of HDI is 1 which is based on three standards.
- The value of HDI ranges from 0 to 1.
- That country whose HDI data is closer to 1 is considered more developed. It gets higher ranking in HDI.
- That country whose HDI value is farther from 1 is considered less developed. It gets lower ranking in HDI.
- According to 2014 data, Norway ranked number 1 with 0.944 while India with 0.609 points ranked 130th out of 188 counties.

2.4.4.3 Human Development Indicators for Some Countries of the World, HDR-2015 : The Human Development Report (HDR) of 2014, which was published in 2015 shows the extent of human development of some countries in the following table :

Table 2.3

Country	In HDI (2014)		Gross National Income (GNI)	Average Life Expectancy at Birth (ALE)	Expected years of schooling	Average no.of years in school
	Value	Rank				
Norway	0.944	1	64,992	81.6	17.5	12.6
America	0.915	8	52,947	79.1	16.5	12.9
China	0.727	90	12,547	75.8	13.1	7.5
India	0.609	130	5,497	68.0	11.7	5.4
Pakistan	0.538	147	4,866	66.2	7.8	4.7
Niger	0.348	188	908	61.4	5.4	1.5

Source : HDR, 2015 and Economic Survey, 2015 -16

(GNI = Gross National Income, LEB = Life Expectancy at Birth)

According to the HDI of 2015, which has included 188 countries, classified countries into 4 on the basis of human development :

(1) Countries having highest (maximum) human development: The average value of human development of 1st to 49th countries is 0.890.

(2) Countries having high human development: Average value of HDI of countries with 50th to 105th ranks is 0.735.

(3) Countries with moderate human development: Average value of HDI of countries with 106th to 143rd ranks is 0.614.

(4) Countries having low human development: Average value of HDI of countries with 144th to 188th in 0.493.

2.4.4.4 Derived Conclusions :

(1) In 2014 Norway is number 1 with 0.944 in human development.

(2) India with 0.609 is 130^{th} in the list of 188 countries.

(3) India comes in moderate human development countries in the classification of human development Index.

(4) Niger in the continent of Africa with 0.348 comes last in the order of HDI of 2015.

2.4.4.5 Importance of Human Development Index :

(1) HDI is complete as it not only takes Economic factors but also includes social welfare by giving importance to education and health.

(2) HDI indicates the policy makers that Economic development is only a tool but the ultimate objective is only human welfare.

(3) True progress = Economic progress + Social progress

(4) HDI is functional. A rise in the HDI ranking indicates that health and education have improved in the country.

(5) Developing countries get an idea as to where there is scope for development and in which direction should the government work by looking into the HDI.

(6) HDI is progressive in its approach.

2.4.4.6 Limitations :

(1) Only three social indicators are included in HDI which is less. Other social indicators should have been included.

(2) All three indicators are given equal weightage. But in reality, in different situations, different indicators become important.

(3) Human Development index is not an absolute expression. It only shows the relative progress, as it compares one country with the other.

Other than HDI, we have

(1) GDI = Gender Development Index (2) TAI = Technological Achievement Index

(3) HPI = Human Poverty Index (4) HCI = Human Consumer Index

And such other indicators are also used.

Exercise

1. Choose the correct option for the following questions :

(1) Development is a multi dimensional process. Who has given this statement?

(a) Todaro (b) Kindleberger (c) Marshall (d) Machlup

(2) Which concept is qualitative?

(a) National Income growth rate (b) Per capita Income growth rate

(c) Economic growth (d) Economic development

(3) What was India's ranking in the world according to the Human Development Index in 2014?

(a) 127 (b) 128 (c) 129 (d) 130

(4) What was the per capita income of India in US dollars according to the Human Development Report of 2014?

(a) 7110 (b) 7068 (c) 480 (d) 5497

(5) When economic development takes place in a country

(a) Contribution of agricultural sector decreases.

(b) Contribution of agricultural sector increases.

(c) Contribution of industrial sector decreases.

(d) Contribution of service sector decreases.

(6) What is the maximum value of Physical Quality of Life Index (PQLI)

(a) less than 100 (b) more than 100 (c) 100 (d) zero

(7) What is the value of Human Development Index?

(a) 0 (b) 1 (c) between 0 & 1 (d) 100

(8) Generally which countries are related with the concept of economic growth?

(a) Developed (b) Developing (c) Backward countries (d) Third world countries

(9) Economic development is the ..... of economic growth.

(a) cause (b) result (c) Means (d) end

(10) ..... was first in Human Development Index according to 2014 report.

(a) Japan (b) Norway (c) America (d) India

2. Answer the following questions in one line :

(1) What is Economic growth?

(2) Give the meaning of Economic development?

(3) What is per capita income?

(4) Why is per capita as an indicator is more effective than national income as an indicator ?

(5) Which economist presented the Physical quality of life index?

(6) How many countries were included in the HDI of 2014?

(7) Which factors are included in the Human Development Index?

(8) What is Infant mortality rate?

(9) State the maximum value in Human Development Index.

(10) What does high per capita income indicate?

3. Answer the following questions in brief :

(1) State the limitations of National Income as an indicator.

(2) State the limitations of per capital income as an indicator.

(3) Where do the quantitative and qualitative changes occur?

(4) What type of change is rise in production?

(5) What are the various indicators of Economic development?

(6) State the limitations of Economic growth.

(7) State the limitations of development.

(8) What is life expectancy at birth?

(9) Between growth and development, which one is difficult to measure ? Why ?

(10) Sanitation facility indicates which aspect of improvement?

4. Give answers to the point for the following questions :

(1) What is Physical Quality of Life? What are the aspects included in it ?

(2) Discuss national income as an indicator of economic development.

(3) Explain per capita income as an indicator of economic development.

(4) Explain in brief, the limitations of Physical Quality of Life Index.

(5) At present, India is growing or developing or both. Give answer by stating reasons.

5. Answer the following questions in detail :

(1) Explain with the help of examples, the difference between economic growth and economic development.

(2) Explain an improvement in the Physical Quality of Life Index as an indicator of economic development.

(3) What are the factors included in the human development index? Explain them.

(4) Compare PQLI and HDI and show which indicator is superior? Why?

(5) Explain in short the indicators of economic development.

Glossary

Economic Progress	:	Increase in per capita income is economic progress.
Economic growth	:	It depicts growth rate of national income or quantum increase in the production of products and services.
Economic development	:	Economic development is a multidimensional process.
Physical Quality of Life Index	:	Consumption standards and standard of living is known as Physical Quality of life Index.
Quantitative changes	:	Increase in total output in the various sectors of the economy is known as quantitative change.
Qualitative changes	:	Innovations take place, new methods of production comes into use, change in the efficiency of labour, change in sectoral composition are all qualitative changes.
Adult education rate	:	Extent of education amongst the age group 15 and above is known as adult education rate.
Life expectancy at birth	:	Expectation of number of years a person will live on an average at the time of his birth is known as life expectancy at birth.
Infant mortality rate	:	For every 1000 live births in one year, how many infants die before completing one year is known as infant mortality rate?
Standard of living	:	Availability of facilities which includes water, electricity, drainage, housing, transportation, communication, health facilities, protein and fats, required calories for citizens comprise standard of living.
Expected number of years of schooling	:	Number of years prescribed in the country to be studied by an individual in the school.
Average number of years in school	:	Average number of years actually spent in school in a given country.
Purchasing power parity	:	Exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries.

3 Money and Inflation

- **Introduction**

3.1 Meaning of a Barter System

3.1.1 Limitations of a Barter System

3.1.1.1 Issue of Mutual Adjustment of Wants

3.1.1.2 Difficulty in Storing of Value

3.1.1.3 Problem of Measurement of Value

3.2 Origin and Development of the Concept of Money

3.3 Meaning of Money and Functions of Money

3.3.1 Money as a Medium of Exchange

3.3.2 Money as a Store of Value

3.3.3 Money as a Measure of Value

3.4 Types of Money

3.5 Meaning of Inflation

3.6 Definition of Inflation

3.7 Characteristics of Inflation

3.8 Causes of Inflation

3.8.1 Increase in Demand

3.8.2 Increase in Cost of Production

3.8.3 Other Reasons

Introduction

Money is at the centre of all economic activities in a modern world. To satisfy her/ his needs an individual requires money to buy goods and services. Money is not only the medium of exchange but it is also used the store value. People save money for their future needs.

Human wants are unlimited and a person cannot satisfy all wants by one's own produce. Thus a person tries to satisfy maximum possible wants by way of mutual exchange of goods and services.

In earlier times, human beings used to satisfy their wants by exchanging goods and services among themselves. Such a system of exchange for satisfying wants was called a barter system.

3.1 Meaning of a Barter System

Barter system is a system of exchange where goods or services are directly exchanged for other goods or services without using a medium of exchange, such as money.

3.1.1 Limitations of a Barter System : In the earlier years, individuals lived a simple village life, had less needs and carried out agricultural exchange, exchange of goods and service which was sufficient for their sustenance. For example a farmer cultivating wheat would store the required stock, and would exchange the remaining wheat to get rice, clothes or shoes. Similarly the shoemaker would get clothes and food, ghee by exchanging the shoes he made. Teachers used to get food in exchange for knowledge and the artists would be patronized for their entertaining art.

Increasing population and socio-economic development resulted in an increase and change in demands, making them more specific. Industrialization, Urbanization, division of labour, and Specialization made the Barter system limited and less applicable. The mutual exchanges decreased and the personal needs increased.

The prominent limitations of barter system are :

3.1.1.1 Issue of Mutual Adjustment of Wants : With socio-economic development, the needs of human beings increased and so the economic structure which was simpler in earlier times

became more complicated. Now those who had rice to exchange for wheat did not need wheat but clothes under barter. While on the other hand one who had clothes did not want rice but wanted ghee in exchange for their clothes. Thus, there was a dificulty in establishing a need for each other's goods or services to make the barter possible, making it a challenge to establish a barter between indivisible and divisible goods.

3.1.1.2 Difficulty in Storing Value : There was an increasing problem in storing value. Here value means exchange value.

A farmer may exchange wheat for pair of shoes or cloth, but when productivity rises and she/ he produces more wheat there arises a problem of strong surplus wheat. If wheat can be stored for a long period then at a future date such stock of wheat can be exchanged for new pair of shoes or cloths or rice. But the question arises, how to store wheat ?

When an individual produced on a large scale through one's own efforts, she/he had to exchange this produce instantaneously for other goods and services. It was otherwise difficult to store the surplus goods or store the exchange value of these goods.

3.1.1.3 Problem of Measurement of Value : With the introduction of division of labour and specialization in an industry driven economy, the issue of measuring the value of goods and services emerged. Exchanging wheat for rice was simpler but now large number of goods became available for exchange against wheat and hence it became difficult to determine and maintain the exchange value of wheat. If 20 kg. of wheat is equal to 40 kg. of rice, 10 meters of textile and 1 kg. ghee; in a modern structure the questions of measurement arise as, how much of textile can exchange for 1 kg. ghee? Or how much of rice can exchange for 1 kg. ghee? It became difficult to determine such measures and hence arose a need for a universally acceptable measuring rod.

This led to the origin of money, which became a standard measure of value and a common denomination of trade.

3.2 Origin and Development of the Concept of Money

Evolution of money : In order to simplify the procedure of exchange and to introduce a universally acceptable medium which satisfies the store of value function, under the barter system, animals were used as a medium of exchange in India.

Agriculture being the major sector of the economy, there was a large production of crops, of which the required stock stored rest of the crops were sold to buy animals. When required, the animals could also be sold to get goods, services or even the crops in return. In this way animals like horse, cow, and buffalo became the means of exchange values for money and trade.

The use of animals as a standard measure and a common medium of trade also became a limitation and caused difficulties. Animals are mortal, they get sick and die, therefore the storage of wealth (in terms of value for money) in form of animals was not advisable. Thus, valuable minerals-stones were used instead of animals. At the onset of imperialism the use of coins started, as a means of trade and exchange of goods and services in the kingdom. The only limitation was that they were used in limited societies and regions.

Democracy and Industrialization inspired the need for the modern money as a means of exchange. By the support of central govermnent the money became widely accepted as a means of exchange of goods and services. Money also succeeded in overcoming the limitation of storage of value for money. The advent of banking system made it easier to transfer and storage of money.

3.3 Meaning of Money and Functions of Money

According to Marshall "Money is that medium which is used as a means of exchange without any doubt or investigation regardless of time or place".

While Robertson defines money as "What is accepted universally in exchange of goods or services".

Thus, that which performs the functions of money is called money. In order to understand money, it is necessary to understand the functions of money.

Functions of Money

3.3.1 Money as a Medium of Exchange :

The most important function of money is to act as a medium of exchange and trade. It removes the limitation of the lack of 'double coincidence of wants' and makes exchanges easier. The farmer can get money in exchange of wheat and then from that money he can buy clothes, rice, ghee, etc. An individual can spend money to satisfy his present demands of goods and services, and also save the money for future to satisfy his future needs for goods and services. Basically money is used as a medium to satisfy the needs of an individual by buying goods or services.

3.3.2 Money as a Store of Value :

Another function of money is "Money is a store of value". If a person produced goods and services in exchange of other goods and services but saving wealth for future needs of goods and services was difficult before the use of money as a means of exchange. Animals were mortal and a long term saving of values was not possible using them. This made money the most successful means of storage of value in terms of time. It is easy to have money as storage of value. It became possible to get money in exchange of crops and save the money for future needs to buy goods or services.

Another advantage of using money was that it could be used as a standard of deferred payment. This characteristic of money became an important basis for the entire systems of credit, hire-purchase and instalment payments.

3.3.3 Money as a Measure of Value :

Money plays an important role as a measure of value. In Barter-exchange system it was difficult to remember the exchange rates and values of each of the goods or services for 20 kg of wheat equals to how much kg of rice? equals to how much meter of cloths ? equals to how much kg of ghee? while on the other hand, money makes this easier allowing the values of different goods or services to be compared and assessed against each other. Money implies the price system, allowing the measure of price of each goods or services which can be compared to each other. It also allows faster decision making and exchanges.

3.4 Types of Money

Since the time of barter system, animals or precious stones were used as the means of exchange and storage of value. Thereafter metal coins came into existence which were followed by government regulated notes and currency coins. This was succeeded by the banking system, credit card and e-banking system. The types of money are: (l) Commodity money (2) Animals money (3) Metal money (4) Paper money (5) Plastic money (6) Banking money (Invisible or e-money)

3.5 Meaning of Inflation

In a simple sense, inflation means a rise in the general price level. Generally people consider inflation to be a rise in the prices of goods and services; but economics gives a clear meaning of inflation.

3.6 Definition of Inflation

According to Dr. A. P. Lerner,

"A situation of excess demand over supply of goods is called inflation."

According to Dr. A. C. Pigou,

"Inflation is said to occur when monetary income rises faster than real income."

The constant and steady increase in price leads to decrease in the purchasing power of money. Dr. J. M. Keynes believes that "The real situation of inflation is created with increase in money income beyond the level of the full employment of factors of production".

According to the above definitions of inflation, various characteristics of Inflation are given below:

3.7 Characteristics of Inflation

(l) Constant rise in price levels

(2) Price rise in all sectors of the economy

(3) Purchasing power decreases (value of money)

(4) The rise in price level after full employment is inflation.

Some other points to be considered for a better understanding of inflation are :

(l) When government has kept control over and suppresses increase in price levels via rules, law and subsidies, it is considered inflation even if there is no price rise. It is called 'Suppressed Inflation'.

(2) If in an economy for shorter period of time if there is an increase in the price of limited goods or services, then it is not inflation.

(3) When some factors of production are unemployed, arise in prices boosts economic activity and gives more employment to factors and thus production rises and prices fall.

If there is unemployment in factors of productions leads an economy the increasing price of goods or services will allow employment to increase production to decrease the price of goods and services.

Therefore the increase in price levels in all sectors of an economy even after full employment is considered inflation and it proves to be harmful for economy.

3.8 Causes of Inflation

Inflation means constant increase in price of goods and services in all sectors of an economy. The two major factors affecting the price of goods and services are : Demand and Supply. So the major factors affecting inflation are : (1) Increase in demand (2) Increase in production cost.

3.8.1 Increase in Demand :

There is an increase in demand of a product which leads to the increase in its price. If the supply is not provided or if they are provided at a slower rate than the increasing demands, then there is an increase in price of the product. If there is inflation due to increase in aggregate demand as compared to the aggregate supply, then it is called 'Demand-pull inflation'. The major reasons for increase in demand are following :

(1) Increase in Supply of Money : Monetarists consider inflation as a purely monetary

phenomenon. According to them if there is an increase in money in a state, the individuals earn more income because of which the demands of necessities increase. Against the increasing demand the supply remains steady, leading to increase in price and inflation. Machlup says that "Too much money chasing too few goods causes inflation"

(2) Increase in Public (Government) Expenditure : The government of developing countries like India is involved in economic development of the country. Government incurs expenditure after installing infrastructures, provision of basic utilities or providing employment; which increases the supply of money in the economy. This increases the incomes and demands of the people which lead to a rise in the general price level. Thus, if the government circulates money in excess of the production of goods and services in the economy by increasing public expenditure then the rise of general price level gains momentum

(3) Over-population : In India there is 2 % annual increase in population, leading to an increase in demands of individuals. The increasing population causes increase in the demands of basic requirements and when the supply is insufficient the price level increases. When the population is constant but their purchasing power increases due to rise of their income there is an increase in price levels.

Thus, supply of money leads to increase in demands followed by increase in price levels of goods or services.

3.8.2 Increase in Cost of Production :

The other major factor affecting the price is the supply of goods and services. Supply-oriented economists believe that when there is an increase in production cost there is an increase in its price.

If there is an increase in cost of raw material, machines, electricity, water rates, worker's wages or transportation there is an increase in price of goods or services. The inflation caused due to increase in production cost is called 'Cost-push inflation' or 'Supply shock inflation'.

3.8.3 Other Reasons :

The major reasons for inflation are (1) increase in demand (2) increase in production cost. But practically there are also other factors which can affect the inflation. Even though the minor factors are for a short term they cause a spike in price levels. eg. In industry based on foreign import, if there is an increase in import expences or if there is a shortage during contigencies, it can lead to price rise.

Basically there is an increase in demand and production cost that leads to inflation, but the other minor factors are as follows :

(1) Taxation Policy : The taxation policy of the govemment causes inflation. The high increase in tax rates increases the production cost of the products which leads to rise in inflation.

(2) Increase in Price of Import : In India 70 % of petroleum products are supplied via import. If there is an increase in price of crude oil in international market then there will be an increase in rates of petrol and diesel which can also increase the price of other products.

(3) Scarcity : When there is a scarcity in terms of raw material, electricity or any requirement for production it leads to increase in price level of the goods or services. If scarcity prevails for a long period during production or is extensive in nature it can cause inflation.

Exercise

1. Choose the correct option for the following questions :

(1) Who gave the definition "What is accepted universally in exchange of goods or services is money" ?

(a) Marshall (b) Keynes (c) Pigou (d) Robertson

(2) What is the type of inflation called when there is an increase in demand ?

(a) Demand-pull (b) Cost induced (c) Salary induced (d) Profit induced

(3) What is the value of money during constant and steady price increase ?

(a) Increases (b) Decreases (c) Constant (d)Doesn't change

(4) What is the type of inflation when the government controls inflation via rules or laws ?

(a) Suppressed (b) Open (c) Galloping (d) Hidden

(5) Which economist believes that the true inflation is caused when there is rise in prices even when there is full employment ?

(a) Marshall (b) Crowhter (c) Keynes (d) Pigou

(6) What is the economic system called that allows exchange of rice instead of clothes ?

(a) Monetary system (b) Banking system (c) Barter system (d) Loan system

(7) Which of the following can be used as the best means for storage of value ?

(a) Crops (b) Animals (c) Stones- minerals (d) Coins

2. Answer the following questions in one line :

(1) Write the meaning of barter system.

(2) Write the definition of money given by Marshall.

(3) Normally what is inflation?

(4) What is cost-push inflation?

3. Answer the following questions in brief :

(1) Discuss the function of money as a medium of exchange.

(2) Discuss the function of money as store of value.

(3) State the causes of inflation.

4. Give answers to the point for the following questions :

(1) Define money and explain its functions in brief.

(2) Write a short note on the origin and evolution of money.

(3) Explain the statement "Too much money chasing too few goods causes inflation".

5. Answer the following questions in detail :

(1) Define barter system and explain limitations of barter system.

(2) Define inflation and explain the causes of inflation.

4 Banking and Monetary Policy

- **Introduction**

4.1 Evolution and Meaning of Banks

4.2 Classification of Banks (Major Types)

4.2.1 Commercial Bank

4.2.1.1 Functions of Commercial Banks

4.2.1.2 Presence of Commercial Banks in India

4.2.2 Central Bank

4.2.2.1 Reserve Bank of India (RBI)

4.2.2.2 Functions of Reserve Bank of India

4.3 Monetary Policy

4.3.1 Instruments of Monetary Policy

Introduction

All of us may be aware of the word bank. We may have deposited our domestic savings in some bank/s in the form of term deposits or savings deposits. Parents of many of us may have opened an account in some bank for business transactions and some parents might be receiving LPG subsidy in their bank accounts.

Besides, we may have paid our school fees by way of a cheque of some bank, and may have withdrawn money from a bank to buy TV, refrigerator etc. Parents of some of us may have borrowed money as a loan from a bank to purchase a house. Thus, in modern times most of our monetary transactions take place through banks, thus in this chapter we get some idea about banks.

4.1 Evolution and Meaning of Banks

In English language, the word bank means 'heap' or 'mass'. In Sanskrit language, the word akin to bank is 'bhanda' which means collection of capital/fund. The word 'bhandod' is derived from 'bhanda'. The English word bank originated from the Italian word 'banca' or from the French word 'banque'. Both these words meant a 'Bench' for money exchange. In olden days, European money lenders or money changers used to display coins of different countries in big heaps on benches or tables for the purpose of lending or exchanging. Thus, they were exchangers of various coins (currencies of various regions). Thus the word 'bank' came into use.

It can be concluded that the word bank is related to collection/fund of money.

The 'Bank of Barcelona' set up in Spain in 1401 is known to be the first real bank established in the world. With the introduction of currency money, people started using money not only as a measuring rod of value, unit of account or medium of exchange; but also as a store of value and standard of deferred payments. With furthering in the functions of money, there arose a need to maintain the value of money. In short, in economic systems dependent on money, there arose the need for an institutional arrangement for safety of money, transfer of money and maintaining the value of money; and the role of such an institution is played by banks.

Meaning of a Bank : (i) A bank is that institution which provides services of banking.

(ii) A bank is an institution authorised to collect peoples' savings/deposits with the purpose of lending those; under the condition of returning the same when the depositor demands.

(iii) A bank is a commercial organization functioning for profit which accepts peoples' savings

in the form of deposits and pays interest in return, it ensures the safety of these deposits, lends money from these deposits to people who need money by charging them with interest; and invests the surplus funds in various sectors for development of the nation.

To state briefly, banks are instrumental in mobilizing money. Value of stock of money which is not mobilized among activities tends to fall at a future date. Value of circulating money tends to increase.

4.2 Classification of Banks (Main Types)

Banks are broadly classified in two categories : (1) Commercial bank (2) Central bank

4.2.1 Commercial Bank

According to the Banking Company Act, (1949)

"Commercial bank is one which transacts the business of banking, that is, accepting deposits from the people for the purpose of lending or investment; repayable on demand or otherwise and withdrawable by cheque, draft, pay-order or otherwise."

A commercial bank is a business unit which provides banking services for profit.

People entrust their savings with the banks which banks handle in the form of deposits. Banks also use some of these deposits for other economic activities and therefore they give interest to the depositors.

Banks may use deposits for investment in the agricultural and industrial sectors for their development or they may buy government securities or they may lend some proportion of the deposits to people who need money. When banks invest some of the deposits, they earn profit and when they lend this money, they earn by charging interest.

The lending rate of interest is higher than the rate of interest which banks give on deposits and the difference between the two is the profit earning. Hence, banks are called commercial institutions.

In other words, banks undertake activity of mobilizing peoples' money in order to make profit and therefore they are commercial institutions.

4.2.1.1 Functions of Commercial Banks

Commercial banks perform several functions which are as under :

(A) Primary Functions :

(1) Accepting Deposits : A bank accepts money from the people (savers) in the form of deposits. It gives safety to the deposits of its customers by acting as a custodian of funds. In a way people lend their savings to banks for which banks give them interest.

Deposits are mainly of three types :

- **Current Account Deposits :** A current account is opened with a bank in the name of a business, firm or an individual. The deposits in this account are more liquid than deposits in any other account. Withdrawal can be made from this account any number of times during a day. The customers of this account are given a cheque book but do not get interest on current account deposits, on the contrary certain times banks may impose some kind of service charges on this

account. A customer may even obtain overdraft facility for business purpose on this account as per rules of the bank.

- **Savings Account Deposits :** People usually deposit savings for a short period in this account for which banks give them interest. Upon requirement, they can withdraw with a cheque or withdrawal slip. In present times they can also withdraw money from this account by using debit card or credit card.

Recurring Deposits : These deposits are also a type of savings deposits. People who do not wish to save or cannot save bigger sums of money, save and deposit small amounts each month for some period of time in this account. Thus, the savings gradually increase and interest is paid on the accumulated money. Thus, these deposits are called recurring depostis. (By rules of some banks, if a person skips to deposit some month's money in this account, she/he may have to pay a penalty along with some interest loss.)

- **Fixed/Long Term Deposits :** These deposits are for a fixed period of time and usually people who want to deposit money for a long period of time choose such deposits. Banks pay highest rate of interest on such deposits among all types of deposits. Customers get overdraft facilities on such deposits.

(2) Providing Credit Facilities : When individuals or investors or farmers or other professionals require money for personal or investment purposes, they borrow from banks and banks provide credit by charging a rate of interest. In terms of time period, borrowing/credit can be for short term, medium term or long term. (These time periods are not strictly fixed and may vary for different activities. However, in a theoretical sense, short term is a period up to 1 year; medium term is a period between 1 and 5 years and long term is a period between 5 and 15 years.)

In the context of purpose, credit can be for personal reasons, for agricultural activity or for business activity.

The rates of interest charged vary with purpose.

(3) Payment and Withdrawal Facilities : A bank provides easy payment and withdrawal facility to its customers in the form of cheques, withdrawal slips and drafts, pay order, ATM facilities, (Automatic Teller Machines), credit and debit cards, internet banking, etc.

(4) Credit Creation : Banks undertake the activity of credit creation to ensure that the supply of money in the economy fulfils the demand for money. Banks create money from the existing stock of money (deposits); thereby add to the supply of money in the economy. When credit creation by banks increases, the supply of money increases and when credit creation decreases, the supply of money reduces.

When a bank lends money from primary deposits, the borrower has to open an account with the same bank or another branch in order to deposit the cheque of the loan (borrowed sum of money). When the cheque is credited in the new account, it becomes a derived deposit for the bank. From this derived deposit, the bank can create still another loan account for a third person. The third person's loan becomes one more deposit for the bank. Thus, a bank can create several deposits from a primary deposit.

Besides, when the borrower withdraws the loan amount from her/his account and spends it, there is greater circulation/supply of money in the economy.

No bank can lend the full amount of a deposit. From every deposit, the bank has to keep aside some proportion of money in the form of cash reserves which is known as cash reserve ratio. Thus they can lend the remaining money only.

If a bank has a primary deposit of ₹ 1,000 and the cash reserve ratio determined by rule is 20% then the bank can create credit up to ₹ 1,000 × $\frac{1}{20\%}$. In other words, primary deposit of ₹ 1,000 can create a money supply of ₹ 5,000 and it can be said that new credit of ₹ 4,000 is created. This can be understood with an example,

Table 4.1

Bank (1)	**Net Deposits (in ₹)** (2)	**Required Reserves (in ₹) Reserve ratio 20 %** (3)	**New Loans (in ₹)** (4)
A	**1,000**	200	800
B	800	160	640
C	640	128	512
.	.	.	.
.	.	.	.
Other banks	2,048	409	1,639
Total	5,000	**1,000**	4,000

This, credit creation = Primary deposit × $\frac{1}{\text{cash reserve ratio}}$

When customers withdraw more money than the deposited amount from their current account it is called over draft facility and this also leads to credit creation.

(5) Inter-Banking Transactions : Banks provide short term and long term credit to one another from time to time. Short term credit is provided by one bank to another through the central bank and is called 'call money'. The interest rate on call money is called the 'call money rate'.

(B) Secondary/Other Functions of Commercial Banks :

Banks also perform certain other functions as,

(1) Agency and Utility Services : A bank provides various utility and agent banking facilities to its customers. For example, a bank can act as a mediating agent by providing a letter of credit to the exporter on behalf of the importer. Banks also provide underwriting services to various businesses.

Banks also provide facilities to its customers to pay tax challans. Banks also provide safe deposit vaults on rent to its customers, wherein they can safely store their precious jewellery, documents etc.

Banks provide micro finance facilities for very small businesses which are important for development of communities. When some payments are to be made with full proof security, banks provide service to the payer by issuing draft or pay order.

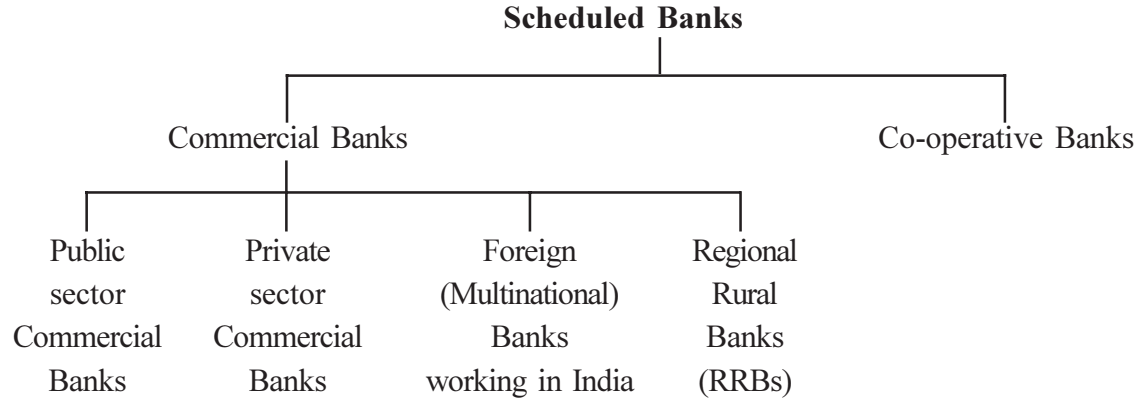
(2) Provide various Facilities with Changing Times : Banking is an evolutionary concept. There is continuous expansion and diversification of the functions, activities and services of the banks. In present times, electronic transfer of money from the account of one customer to that of any other customer of any bank (without using cash or cheque) is done through facilities like NEFT (National Electronic Fund Transfer) and RTGS (Real Time Gross Settlement). Both these are possible because of CORE banking. (Centralized Online Real Time Exchange)

Besides, customers can get various details of their account as well as make payments, buy goods, book tickets etc. on their computer or mobile phone through internet banking and mobile banking app. Banks also provide safe deposit vaults and facilities of DEMAT account. (Dematerialized account). This is an account where shares, debentures, bonds etc. can be held in electronic form which is easier than holding them in physical form.

4.2.1.2 Presence of Commercial Banks in India :

Commercial banks in India operate in the public as well as private sectors. After the economic reforms of 1991, foreign banks have entered the private sector. Besides, there are financial companies which function like banks in the unorganized and organized money markets of India. And, there also is the existence of co-operative banks.

But, by the official definition of banks in India, only those companies which are listed in the 2nd schedule of the RBI Act, 1934 (are established accordingly) are called scheduled banks and are the real banks. All rules and regulations of the Reserve Bank of India, apply to these banks.



The above chart gives a classification of scheduled banks.

4.2.2 Central Bank :

There exists a central bank in all countries of the world, which manages, evaluates and regulates the banking activities in the entire country. Besides, a central bank protects the interests and rights of customers of various banks and of the general public.

R. P. Kent defines a central bank as, "The institution charged with the responsibility of managing the expansion and contraction of the volume of money in the interest of the general public welfare".

Hence, central bank is the Apex bank of the country whose function is to aid, regulate and promote the entire money market and the banking sector; as well as to maintain monetary/financial stability for overall economic good of the nation.

Mobilization of money has several macroeconomic implications which impact economic growth and development of a nation. The responsibility of regulating monetary/financial transactions in a country and maintaining the value of the country's money/currency rests with the central bank. In order to fulfil this responsibility, a central bank formulates a monetary policy. In short, a central bank assumes the responsibility of maintaining economic stability.

A central bank also provides monetary/financial advice and suggestions to the government.

4.2.2.1 Reserve Bank of India (RBI)

The central bank in India is known as Reserve Bank of India.

Under the Reserve Bank of India Act of 1934, the Reserve Bank of India was established on April 1, 1935 with a private paid up capital of ₹ 5 crores. RBI was nationalized on January 1, 1949.

RBI is the Apex bank of India which supervises and regulates the entire banking sector as well as formulates the monetary policy of India.

4.2.2.2 Functions of Reserve Bank of India

As the Apex bank of India, the RBI performs functions as,

(A) Monetary Functions (Monetary Responsibilities) :

(1) Currency Issue : Reserve Bank of India has the sole right to issue notes of denominations starting from ₹ 2 and above. Currency note of ₹ 1 and all currency coins are issued by the finance ministry of Government of India but the distribution of one rupee notes and currency coins is done by the RBI as an agent of the Government of India.

(2) Banker to the Government : The RBI is a banker, advisor and agent of the central government and of all state governments. It manages government bonds, government accounts, currency coins and notes of ₹ 1, and also provides loans to the government.

(3) Bankers' Bank and Lender of Last Resort : The RBI is a banker and regulator of all the scheduled banks in the country. It manages the Cash Reserves of banks, determines the direction of credit as well as directs the credit policy and rate of interest for all banks. It is also the lender of last resort for the scheduled banks in case of emergency.

(4) Credit Control : The RBI controls the process of credit creation and money supply in the economy with the help of various tools of monetary policy.

(5) Custodian of Foreign Exchange Reserves : The RBI has the responsibility of maintaining the value of rupee vis-a-vis other currencies under the fixed exchange rate regime. Under free exchange rate system where exchange rate is determined by the market, RBI maintains the value of Indian currency by buying and selling foreign exchange in the open market as and when required.

The RBI is also the custodian of India's reserves of foreign currencies. It also administers foreign exchange reserves by checking the inflow or outflow of foreign exchange.

(B) Non-Monetary Functions of Reserve Bank of India :

(1) Regulatory and Supervisory Functions : RBI supervises the functioning of the entire financial and money markets which include branch expansion and methods of working of scheduled banks, working of non banking finance companies and of co-operative banks.

(2) Promotional Functions : Even today, there are many people in India who do not hold a bank account. They depend on unorganized money market for their credit needs, make business related payments in cash rather than by cheques owing to which it is difficult to know the exact value of transactions taking place in the country and it becomes difficult to ascertain the exact value of money or arrive at the actual figure of national income. Hence RBI tries to create banking awareness among people, encourages branch expansion in rural areas and promotes setting up of co-operative banks in the interest of the people. It makes efforts to get more and more people under the organized money market.

(3) Financial Inclusion and Development : India is a country with huge degree of economic diversity and rural-urban divide and hence whenever major economic reforms and changes come about it is necessary that people and economic units of all segments receive benefits of such changes. For such inclusion, RBI continuously makes efforts in the banking sphere. It provides special credit facilities to priority sectors like agriculture, small scale industries, self employed people, traditional and cottage industries etc.

It also makes efforts to increase information flow and enhance awareness regarding banking among the masses.

In the present times, RBI manages the Prime Minister's 'Jan Dhan Yojna'.

RBI also works towards protecting the interests and rights of customers.

It publishes all types of banking related information and statistics as well as experts' articles in order to promote research related to banking and monetary improvement in the country. On the RBI website people can get free access to such information.

4.3 Monetary Policy

In economic theory, monetary policy is the policy which regulates the demand for money and supply of money in the economy. It is essential to regulate these as an imbalance between demand for money and supply of money can result in inflation or deflation, can impact the value of Indian currency and destabilize the economy. Hence monetary policy is also known as one of the stabilization policies.

In earlier times, the purpose of monetary policy in India was more to regulate the volume of money, value of money and nature of money. In the present times, the monetary policy is used more for credit creation.

From the viewpoint of economic theory,\

- *Monetary policy constitutes the conscious steps undertaken by the monetary authority which bring about changes in the stock of money, source/generation of money, and cost of money.*

• *The policy which entrusts various tools of regulating supply of money in the hands of the apex bank with the purpose of achieving general economic objectives is called monetary policy.*

• *In simple terms, the policy undertaken by the apex bank for regulating the supply of money in order to maintain economic stability keeping into consideration the process of economic development and interest of the public is called monetary policy.*

4.3.1 Instruments of Monetary Policy :

The important instruments of monetary policy can be explained as,

(A) Quantative Measures (General Measures) : The quantative measures are aimed at impacting the entire economy in a general/common way and hence these are also called general measures.

(1) Bank Rate : When commercial banks have shortage of funds, they borrow from the RBI. The rate at which RBI lends to the commercial banks for long term is called the bank rate. If the bank rate is increased, commercial banks will borrow less as it is expensive to borrow. When they borrow lesser amounts and at higher rate, they give lesser amount of loans and at higher rate to the general public and when people get fewer loans, their demand for certain goods and services falls. On the whole, there is lesser creation of money, lower demand for goods and lower circulation of money in the economy. When the economy is under the grip of inflation, bank rate is increased to control inflation.

When supply of money is higher than demand for money there is inflation and hence reducing money supply helps in reducing inflation and if supply of money is lower than the demand for money, there is depression.

The policy of keeping the bank rate very low is called the cheap money policy and the policy of keeping the bank rate very high is called the dear money policy.

Table 4.2 Trends of Bank Rate in India

Year	Bank rate (in %)
1953	3.5
1981	10
1991	12
2016	7

Source : www.rbi.org

RBI has stopped using bank rate as an instrument to regulate money supply since last few years and is using repo rate, reverse repo rate instead. Bank rate is a rate for long term and hence cannot be changed in the very short period while, repo and reverse repo rates can be altered in very short periods also and thus they help to regulate money supply in the short term.

(2) Repo Rate and Reverse Repo Rate : When commercial banks need funds for very short period (sometimes for 1 day, 7 days, 15 days, etc.) they sell some securities which are held by them to RBI with a repurchase agreement at a particular rate. This rate is called the repo rate. (The word 'repo' is used for the term 'repurchase rate'.) Banks sell government securities to RBI in order to raise money for a very short term with a condition to repurchase them at some discount. Such a discounting rate is repurchase rate/repo rate.

In the event of inflation, central banks increase repo rate as this acts as a disincentive for banks to borrow from the central bank. Subsequently they lend to the general public at higher rate and ultimately people borrow less and thus money supply and inflation are arrested.

Reverse repo rate means the agreed upon rate at which the RBI repurchases its securities from the commercial banks in the event when the RBI has to borrow short term funds from the commercial banks by parking its securities with the commercial banks. (Even the RBI sells government securities held by it to commercial banks under the condition of repurchasing those at a discounted rate upon the end of the short term period.)

An increase in reverse repo rate means that commercial banks will get more incentives to park their funds with the RBI by lending more to RBI, thereby decreasing their lending to general public and ultimately reducing the supply of money in the market and vice-versa.

Table 4.3 Repo and Reverse Repo Rates in past few years

Year	Repo Rate (in %)	Reverse Repo Rate (in %)
January, 2006	6.50	5.50
March, 2010	5.0	3.50
April, 2016	6.5	6

Source : www.rbi.org

(3) Stabilization under Emergency Situation : There is a special window for banks to borrow from RBI against approved government securities in an emergency situation like an acute cash shortage. This rate is higher than Repo rate. In 2016, this rate was 7%. (This is called marginal standing facility.)

(4) Cash Reserve Ratio – CRR : Under the RBI Act, 1934, all commercial banks have to keep certain minimum cash reserves with the RBI. Initially CRR was decided to be 5% of demand deposits and 2% of time deposits. It was variable as per the requirement felt by RBI. Since 1962, CRR is variable between 3% and 15% of the total deposits of individual banks.

CRR fulfills the need of a comfortable amount of cash reserves with the banking system, in case many customers start withdrawing their deposits and banks have to provide cash against their deposits.

Besides, this is also used as an instrument to control inflation. When CRR is higher, commercial banks have lesser deposit money to create credit. Thus, they give fewer loans to people and hence money supply and inflation are curtailed. CRR is reduced in times of deflation and depression.

(5) Statutory Liquidity Ratio – SLR : Apart from and in addition to CRR, under the Banking Regulation Act, 1949, all banks have to maintain equal to and not less than 25% of their total deposits (demand and time deposits) in the form of cash, gold and unencumbered approved securities.

A higher SLR diverts bank funds from loans and advances to approved government securities and helps to meet government expenditures and on the other hand, it reduces the capacity of banks to create loans and raise money supply by credit creation and a lower SLR increases the capacity of banks to create loans and raise money supply by credit creation. If SLR is higher people get lesser credit and vice-versa.

(6) Open Market Operations – OMOs : Open market operations refer to sale of or purchase of government securities/bonds by the RBI in the open market.

When the RBI purchases government bonds from the market, the supply of money in the economy rises. The supply of money in the economy falls when RBI sells such bonds in the open market. Such operations are undertaken to regulate inflation and depression.

This instrument was not used in india prior to 1991.

(7) Sterilization of RBI accounts against shocks arising from excessive increase or decrease in amount of foreign exchange : When there is excessive inflow of foreign exchange in India owing to trade and foreign investment, the RBI indulges in open market sale of government securities equal to the amount of inflow of foreign exchange. This is done to keep its balance sheet unchanged owing to excessive foreign exchange. Thus, it sterilizes its balance sheet against external shocks. It buys government bonds if there is excessive outflow of foreign exchange.

(B) Selective (Qualitative) Measures of Credit Control :

Besides the general measures, the RBI uses certain selective measures to direct credit for development of certain sectors or sections of the economy;

These measures have unique impact on some sectors and are not meant to impact all sectors similarly. Some of these measures are,

(1) Security Requirement : Banks must ensure that public returns the loans given to them. Hence, they lend money against some security deposits from the borrowers. In case the borrower is not able to repay the loan, the bank uses the security to recover its dues. For example, a bank can take jewellery, deposits, car, house, land etc. as security.

Security specifications are different for different segments of the population so that all sections of the population can have the opportunity to obtain bank credit and all sectors including agricultural sector develop well. Hence RBI directs commercial banks regarding the amount of security which they may ask for in case of different types of loans or from different sections of the people. A poor farmer may be granted a loan without much security and a rich business person may be required to keep more as security with the bank for a loan.

(2) Margin Requirement : The RBI also sets margins for granting loans against security. An individual is given only a certain percentage as loan of the total value of assets offered as security. Banks are directed to selectively keep different margins for different purposes.

(3) Ceiling on Credit : The RBI also prescribes ceilings for credits for different purposes.

(4) Discriminatory Interest Rate : RBI suggests differential rates of interest for different types of lendings. This is called the policy of discriminatory interest rate. For example, a relatively lower rate of interest is charged from needy farmers than what is charged from rich business persons to buy a car or a house.

Exercise

1. Choose the correct option for the following questions :

(1) What is the meaning of the word 'bank' ?

(a) Money supply (b) Stock of money (c) Investment (d) Commerce

(2) How many major types of deposits exist in banks in India ?

(a) 2 (b) 6 (c) 10 (d) 3

(3) Short term lending in theoretical sense is for what period?

(a) Up to 1 year (b) 1 to 3 years (c) 1 to 5 years (d) 5 to 15 years

(4) What is a central bank ?

(a) A private bank (b) An apex bank

(c) A cooperative bank (d) A foreign bank

(5) What is the rate at which RBI borrows funds for very short term from the commercial banks is called?

(a) Repo rate (b) Bank rate

(c) Reverse repo rate (d) Open market rate

2. Answer the following questions in one line :

(1) Give the meaning of a bank.

(2) Give the meaning of a commercial bank.

(3) Give the meaning of a central bank.

(4) Give the meaning of monetary policy.

(5) What is meant by quantitative tools of monetary policy ?

(6) What is meant by qualitative tools of monetary policy ?

3. Answer the following questions in brief :

(1) How did the word 'bank' originate?

(2) Give an idea of the accounts of a commercial bank.

(3) Write a note on qualitative tools of monetary policy.

(4) Explain the functions of a central bank in short.

4. Give answers to the point for the following questions :

(1) State the difference between a commercial bank and a central bank.

(2) List down the primary and secondary functions of commercial banks and explain each of those in one sentence.

(3) List down the quantitative and qualitative tools of monetary policy and explain each of those in one sentence.

5. Answer the following questions in detail :

(1) Give the meaning of a commercial bank and explain its functions.

(2) Give the meaning of a central bank and explain its functions.

(3) Explain the quantitative measures of monetary policy in detail.

Glossary

Bank	:	A bank is a commercial organization functioning for profit which accepts peoples' savings in the form of deposits and pays interest in return, it ensures the safety of these deposits, lends money from these deposits to people who need money by charging them with interest and invests the surplus funds for development of the nation.
Credit Creation	:	The policy process of banks for lending money from primary deposits and thereby creating new deposits and increased money supply is called credit creation.
Scheduled Banks	:	Banking companies which are listed in the 2nd schedule of the RBI Act, 1934 (are established accordingly) are called scheduled banks.
Central Bank	:	Central bank is the Apex bank of the country whose function is to aid, regulate and promote the entire money/financial market and the banking sector; as well as to maintain monetary/financial stability for overall economic good of the nation.
Monetary Policy	:	The policy undertaken by the apex bank for regulating the supply of money in order to maintain economic stability keeping into consideration the process of economic development and interest of the public is called monetary policy.
Primary Deposits	:	Deposits in the form of initial public savings with banks are called primary deposits.
Secondary Deposits	:	Additional deposits derived by banks when loans created from primary deposits are accounted in banks are called secondary deposits.
Government Securities	:	Interest bearing bonds floated by government in the market to raise money, which are purchased by people and are repurchased by the government after a fixed period are called government securities in simple terms.
Store of value function of Money	:	Store of value function of money implies that money is stored, exchanged with other currencies or mobilized to enhance its own worth or to enhance wealth.

5 Poverty

- **Introduction**

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Introduction

Poverty is such a situation existing in the economy, under which one class of economy is unable to fulfill the minimum basic needs. In most of the developing economies, where the per capita income is very low and there exists high level of income inequality, a large portion of poor population can not enjoy a healthy life because of unavailability of minimum basic requirements such as nutritive food,

clothes, proper housing. On the other hand, rich and resourceful class enjoys high income and high standard of living. Due to existing economic inequality in the country, the society faces dissatisfaction, restlessness, hatred and class conflict. According to HDR 1997, Economic Development is a resource and Human Development is the goal. So, it is expected that economic development should result in reduction in poverty. Unless there is reduction in income inequality and poverty, economic development cannot be said to be the Development in true sense. Poverty eradication was one of the main goals of some of the five year plans in this context. Especially in the fifth five year plan and following plans, poverty eradication and alleviation special programmes and schemes were started but poverty could not be reduced to the targeted level.

5.1 Meaning of Poverty

A situation where a major portion of population cannot even satisfy their minimum requirements are said to be poor. If a larger population is living below the minimum required standard of living, there exists wide-spread poverty.

Many nations of the world have tried to interpret poverty in their way. But poverty being a relative concept, its meaning changes with change in time, place and society.

In most of the interpretation of poverty, an average standard of living is considered as base and existing inequalities in society are shown. Hence, there exists a difference in the level of poverty.

In this context, poverty can be divided into two parts : (1) Traditional meaning of poverty or income poverty. (2) Modern meaning of poverty or non-income poverty.

According to income definition of poverty "A certain normative minimum level of per capita consumption expenditure required to ascertain minimum basic needs and services is called poverty line."

All people, who have less than required income or spend less than required minimum expenditure are said to be poor. So according to this interpretation, Poverty is a state of scarcity.

In India, poverty line is defined in reference to consuming minimum required calories or minimum consumption expenditure required to get minimum calories. But the limitation of this method is that, it only shows the situation of non-availability of food or starvation. Poverty is not only a situation of starvation.

In the concept of minimum required standard of living, apart from food, other necessities such as clothing, housing, education, health, cleanliness, pure drinking water are also included and then only the non-income poverty has become a popular modern concept of poverty.

According to modern economists, income poverty is one of the important elements of poverty but it only reflects a single aspect of human life. Freedom of choice in occupation which is available to rich is never available to poor. In this context, to get a broader meaning of poverty, income should not be the sole measuring rod of deprivation but other important elements of human development such as knowledge, long and healthy life, good standard of living, individual freedom, availability of opportunities and a life with choices and self respect should also be considered.

UNDP, while preparing a development report through HDI (Human Development Index) and HPI (Human Poverty Index), induded three important parameters namely, Knowledge, Health and Standard of living. Under which knowledge - literacy rate and enrollment ratio, for health-life expectancy and for standard of living - per capita total house production is considered.

5.2 Nature of Poverty

To understand the concept of Poverty more clearly, according to its nature, economists have divided poverty in two parts : (1) Absolute Poverty (2) Relative Poverty

5.2.1 Absolute Poverty

The minimum expenditure or income required to satisfy the minimum basic needs and services is known as Poverty line. The population having income or expenditure below this poverty line are said to be Absolutely poor. Absolute poverty is also known as complete poverty. The concept of Absolute poverty helps us to categorize people living below poverty line and to reduce poverty among these, target-oriented policies can be framed.

5.2.1.1 Poverty Line : To understand the level of absolute poverty, the minimum consumption expenditure required to fulfill the minimum physical amount of cereal, pulses, milk, butter, etc. should be studied.

To ascertain this minimum per capita consumption expenditure, in the intial years of planning, Indian Council of Medical Research has decided that for Rural areas per person per day, 2400 calories and for Urban areas per person per day, 2100 calories are required. This method was accepted by Planning Commission in 1969 and taking 1960-61 prices as base year, ₹ 20 per capita per month was decided as the measuring rod for poverty.

With this working method, Dandekar and Rath for Rural Areas, on the basis of 1960-61 prices, decided ₹ 15 per capita per month as poverty line and for urban areas ₹ 22.50 per capita per month. Later, Planning Commission appointed an expert committee under the chairmanship of Prof. D. T. Lakdawala which estimated poverty for the year 1993, taking 1973-74 prices as base year prices, for rural areas, ₹ 49 per capita per month and urban areas ₹ 57 per capita per month consumption expenditure was estimated to fulfil the requirements for the above poverty line.

In the method of calculating poverty line, one of the major drawbacks is that it only takes into account calorie consumption. But poverty is an economic situation and hunger is a physical situation. So that Poverty line becomes "starvation line".

To make the concept of poverty line more progressive, the minimum standard of quality life should be decided and for that required facilities for quality life such as nutritive and balanced food, health, electricity, kitchen fuel, clothing, educational expenditure, housing etc. should be included. In this context, to redefine the measuring rod of poverty, the committee under the chairmanship of Prof. Suresh Tendulkar submitted its report to the Government in the year 2009. The Committee decided a new method of measuring poverty, in which apart from consumption expenditure for minimum calorie, expenditure on educaiton and health was also included. According

to this new method in the year 2011-12, the per capita monthly consumption expenditure for Rural areas ₹ 816 and for Urban areas ₹ 1000 was decided as the poverty line.

In order to calculate absolute poverty at an international level, the cost of all resources consumed by an average adult are considered. At international level, poverty line based on Purchasing Power Parity decided as 1.25 $ per day for the year 2005 which was 1 $ for the year 1990 and for the year 2015, it is adopted as $ 1.90 per day. With the help of international poverty line, absolute povery for the different nations can be measured using a uniform method.

Measurement of Absolute Poverty in India

In the 68th round of NSSO (National Sample Survey Organisation) (2011-12) using per joint family expenditure data, Tendulkar committee estimated that in India, in the year 2004-05, the measurement of absolute poverty was 37.2% which reduced to 21.9% in the year 2011-12.

Table 5.1 Measurement of Poverty in India (%)

Poverty	2004-05 (%)	2011-12 (%)
Rural	41.8	25.7
Urban	25.7	13.7
Total	37.2	21.9

Source : Economic Survey, 2015-16

In rural India, the measurement of poverty in the year 2004-05 was 41.8 % which reudced to 25.7 % in the year 2011-12. Whereas in urban area the measurement of poverty was 25.7 % in the year 2004-05 which reduced to 13.7 % in the year 2011-12.

State-wise magnitude of Poverty in India

According to the Planning Commission 2011-12, state-wise magnitude of poverty is as follows :

Table 5.2 State-wise Magnitude of Poverty in India (2011-12)

Percentage of population below poverty line	States
Below 10 %	Goa, Kerala, Himachal Pradesh, Sikkim, Punjab, Andhra Pradesh
10 to 20 %	Jammu and Kashmir, Haryana, Tamil Nadu, Gujarat, Rajasthan, Maharashtra, Tripura, Nagaland, Meghalaya
20 to 30 %	West Bengal, Mizoram, Karnatak, Uttar Pradesh
30 to 40 %	Madhya Pradesh, Assam, Odisha, Bihar, Arunachal Pradesh, Manipur, Jharkhand, Chhattisgarh

Source : Economic Survey, 2015-16

According to the above information, states less than 10 % of poverty are Goa, Kerala, Himachal Pradesh, Sikkim, Punjab and Andhra Pradesh. Whereas in Jammu Kashmir, Haryana, Tamil Nadu, Gujarat, Rajasthan, Maharashtra, Tripura 10 % to 20 % measurement of poverty is seen. Madhya Pradesh, Assam, Bihar, Odisha, Jharkhand, Chhattisgarh, Arunachal Pradesh have measured highest poverty that is 30-40 %. According to the Annual Report of 2013, among various states of India, Goa has the lowest poverty 5.09 % and the highest measurement of poverty is for Chhattisgarh which is 39.93 %.

5.2.2 Relative Poverty

In the concept of absolute poverty, the minimum consumption expenditure required for satisfying minimum needs is taken into consideration but in the concept of relative poverty, income inequality existing in different groups of people living in society is considered. Commonly in every economy, income disparity is seen in that case lower income class is considered relatively poor than the higher income class.

To study Relative Poverty, society is divided into different income groups and unequal distribution of income is studied. Relative poverty exhibits the level of income inequality among different class of people.

It is argued in context of India that as a rapid developing economy, instead of studying the concept of poverty and poverty line, relative poverty or unequal distribution of income should be considered.

The concept of Relative poverty can be studied with the help of a hypothetical example. For example, a nation's population is divided on the basis of five income groups.

Table 5.3

Group	Income group (In ₹)
Group 1	0 - 30,000
Group 2	30,000 - 1 lakh
Group 3	1 lakh - 3 lakh
Group 4	3 lakh - 10 lakh
Group 5	10 lakh and above

In the above example the class in group 2 has more income than the class income of people in group 1. It can be said that people in group 1 are relatively poorer than group 2. But the people of group 2 has lower income than income of people in group 3, 4 and 5. Hence people of group 2 are relatively poorer than the groups 3, 4 and 5.

To measure relative poverty or income inequality, generally formation of income group, Lorenz curve and Gini co-efficient are useful.

5.3 Indicators of Poverty

The level of Poverty and their components are called its indicators. In our country various factors showing poverty are known as its indicators. Indicators are useful to know poverty and levels of poverty. With this, we can know the nature and measurement of poverty. The Indicators of Poverty are as follows :

5.3.1 Low Per Capita Household Consumption Expenditure

Per Capita household expenditure is the amount of income a family spends on an average on consumption of goods and services. It is calculated at the market prices of durable goods like cars, washing machines, computers and so on. The nation's total spending on such goods is divided by the total population to calculate this. The per capita consumption expenditure for developing countries is much lower than that of the developed countries and in this sense, developing countries are poor. The following table shows per capita consumption expenditure of many countries.

Table 5.4 Per Capita Consumption Expenditure

Countries	Fixed price of 2005 in US $ Year 2014
US	31,469
UK	25,828
Japan	22,149
Pakistan	603
China	1,420
India	725

Source : w.w.w.worldbank.org

According to the above information, on the basis of base year price of year 2005, in the year 2014, the per capita household consumption expenditure was $ 725 in India, $ 31,469 in US, $ 25,828 in UK, $ 22,149 in Japan, it is $ 603 in Pakistan., The per capita household consumption expenditure is very less in India as compared to US and UK.

5.3.2 Level of Malnutrition

Malnutrition is such a situation in which the food taken by individual lacks calories proteins, carbohydrates, vitamins and minerals. In India, inspite of an increase in agricultural production, people with low income are unable to get nutritive food because of low per capita income and unequal distribution of income. India's information regarding people with malnutrition is as follows :

Table 5.5 Measurement of Malnourished People (in percentage)

Year	Total malnourished people (in percentage)
1990-92	23.7
2000-02	17.5
2005-07	20.5
2010-12	15.6
2014-16	15.2

Source : Economic Survey, 2015-16

According to the above table, in the time period of 1990-92, India had total 23.7% of malnourished people. Likewise in the year 2000-02, 2005-07 and 2010-12, India had 17.5 %, 20.5 %, and 15.6 % of malnourished population respectively. According to FAO, 2015 report, the situation of food security in India ranked 2nd in the world in measurement of malnourishment which indicates poverty in India.

5.3.3 Life Expectancy and Infant Mortality Rate

Life expectancy means that how long new born baby is expected to live on an average. The average life expectancy of people in a country is based on nutritive food, cleanliness, pure drinking water and health services. Poor people are deprived of such facilities so they have low life expectancy.

Infant mortality means number of death taking place per thousand children born before reaching the age of one year. The rate of infant mortality depends on availability of health services, mother's education, vaccination among children and nutrition of food. Infant mortality is also an indicator of poverty in respect to poor health services.

Life expectancy and infant mortality rates of various countries of the world are shown as below :

Table 5.6 Life expectancy and Infant mortatily

Countries	Life expetancy (in years) (Year 2014)	Infant Mortatily (Year 2014)
Norway	81.6	02
USA	79.1	06
Sri Lanka	74.9	09
China	75.8	10
India	68.0	39

Source : Compiled from HDR-2015, Economic Survey (2015-16) and www.dataworldbank.org

According to above information, in Norway, life expectancy is 81.6 years, in America 79.1 years, in Sri Lanka 74.9 years, China 75.8 years whereas in India it is 68.0 years which is even less than China and Sri Lanka.

In case of child mortality rate in Norway, 2 children die per thousand, in America 6, in Sri Lanka 9, in China 10 whereas in India, the rate is 39 which is very high.

5.3.4 Medical Facilities

In health sector, doctors, nurse, compounders etc. are included and their scarcity adversly affects health services. India as compared to other countries, lacks medical services and doctors.

In developing economies, people get less medical services. They often suffer from various diseases as poor people do not get complete nutritive food. As a result, their immunity is too low. The country has less medical facilities. People are deprived of such services. As a result poverty is more.

In developing countries, every six thousand population, one doctor is available whereas among developed economies, every 350 people, service of one doctor is available.

In developing countries every year 1.7 crore people die from diarrhoea, Malaria and T.B. In the whole world, 2.3 crore people are suffering from AIDS. Out of this, 90 % belong to the developing economies.

5.3.5 Drinking Water

Health of population is very much connected to drinking water and facilities of cleanliness. According to the Census Report 2011, in India 63.3 % families get pure drinking water through treated source. 8.67 % families get untreated tap water, 26 % people get water from other sources such as well, handpump, tubewell, spring river, canal, pond. In the absence of pure drinking water, polluted water (contaminated) increases the chances of having water borne diseases and hence make the problem of poverty more severe.

5.3.6 Provision of Toilets :

According to the census report 2011 in India, 70 % of total population lives in villages. They are more prone to water borne and contagious diseases. To save them from diseases, cleanliness is very important and for that, toilet facilities are a must.

Table 5.7 Calssification of Slum Families with Toilet Facilities

Total Families	Toilet facility within house	Houses without toilet facility
100 %	66 %	34 %

In India, 66 % houses have toilet facility within house whereas remaining 34 % families use common toilets. Lack of cleanliness, pollution and physical weakness, keeps the production and productivity at low level, which is one of the factors of rise in poverty.

5.3.7 Housing :

One of the indicator of poverty is also housing facilities and its nature. Developing countries lack housing facilities. People live in dirty hutments and slums. This is called measurement of existing poverty. Housing is a primary need for human being. Types of housing facilities decidesed the level of poverty. Construction of a house, varandah, members in the house, tap in the house, drainage, electricity facilities, etc. and percentage of houses with these facilities decides the level of poverty. India lacks houses with full facilities. In India, 60 crores people have dwellings which are dangerous for their health and risky for their lives. Most of the houses in India comprise of one room facility which is one of the major measuring rods of poverty.

5.3.8 Electricity Consumption :

One of the major factors in the development of any country is electric facility. To increase the production of country and quality of life of people, electricity is imperative. India is a main producer and consumer of electricity. Then also, because of high population and low per capita, income, per person electricity consumption is very less.

5.3.9 Education :

According to the World Bank, people in the age group of 15 years and above who can read and write are literate, and the rest are illiterate and they are mostly poor.

Lack of education and training gives rise to incapable and less productive labourers in the country. As a result, labourers get limited work opportunities and choices. Hence less wages and low income increases poverty. In 2011, Brazil had 91% literacy rate where as in India it was 74.04 %, in Nepal 60 % and 55 % in Pakistan, which shows that in developing countries, the literacy rate is comparitively very less. Low education among poor makes them conservative and less acceptable to changes. High rate of ignorance is a strong indicator of poverty.

Only level of per capita income cannot give the right estimate of poverty in the world. A country with high per capita income can have high number of people below the poverty line.

5.3.10 Unequal Distribution of Income and Property

After 1991 economic reforms, economic growth and per capita income have increased sharply in India but due to unequal distribution of income, larger reduction in poverty is not noticed. With increase in income inequality, on one hand, we see rich class of people with high standard of living and enjoying good facilities and on the other hand, we find low income people living in slums and deprived of basic necessities like food, education and health. The table below shows the actual income of the top 1% rich class in USA, UK and India.

Table 5.8 Share of actual national income to top 1% rich class

Country	Year 1998	Year 2012
US	15.2	18.9
UK	12.5	12.7
India	9.0	12.6

Source : Economic survey, 2015-16

According to the above information, in comparison to 1998, in the year 2012, the top 1 % rich class's share in actual real income has increased. In comparison to 1998, in the year 2012, actual national income of top 1% rich class's in US has increased from 15.2 % to 18.9 %, UK 12.5 % to 12.7 % and in India 9.0 % to 12.6 %. For India, it can be said that the advantage from economic reforms were more in favour of the rich. So, the disparity of income inequality is also one of the indicators of existing poverty.

5.3.11 High Rate of Unemployment

When people with working capacity and willingness to work at existing wage rate, do not find work, they are said to be unemployed. Low economic development and jobless growth after 1991 resulted in less development of employment opportunities in comparison to increase in supply of labour is the main reason of increase in unemployment. In situation of unemployment, due to lack of income, a person cannot fulfill basic needs of his family. As a result, level of poverty remains high. In India, till 2011, the rate of unemployment remained around 9 %. According to the Labour Commission in the year 2013-14, the rate of unemployment among people 15 years and above is 4.9 % . In rural areas, this rate was 4.7 % and in urban areas it was 5.5 %.

5.4 Causes of Poverty

To solve any problem, it is better to know its causes and then find the solutions. To eradicate the problem of poverty, it is necessary to understand its reasons. In India, the causes of poverty are as follows :

5.4.1 Historical Reasons

Historians says that in the 17th century, India was comparitively more urbanised and most commercialized nation. In business, India had major share in exports of cotton textile and with that silk, spices, paddy was also exported. But after the entry of English, French and Dutch people and due to their policy of colonial exploitation, India's agriculture and industrial situation deteriorated.

During the British rule, the Agricultural sector suffered in India due to many reasons. On one hand, Indian agriculture was based on monsoon. Britishers did not show any interest in investing money in irrigation projects. On the other hand, due to repeated draught, zamindari system, and tenancy system, the farmers economic conditions deteriorated and they were under the pressure of debt and interest of loan given to them by zamindars, money lenders and big businessmen. Cultivators started losing land. The farmers and agriculture suffered and so poverty increased.

In case of business and trade, Britishers followed that kind of trade policy, tax policy and Industrial policy which would benefit them by trading in India. Indian exports were prohibited in Europe whereas goods produced in England were given a lot of tax concession and freedom to sell in the Indian markets. Moreover to supply these goods to each and every corner of India, Indian railway was extensively used.

Because of this kind of policy, Britishers gained surplus from production and sale in India which they invested in Britain to speed up industrialisation and used Indian market to sell final goods produced in Britain. In this system, Indian trade and business started losing their competitive power and production power. Small and cottage industries of India were ruined. As a result, unemployment and poverty started increasing.

5.4.2 Causes of Rural Poverty

5.4.2.1 Natural Causes : India has been an agricultural country from the beginning and today also a major portion of population lives in villages and is dependent on agricuture. In India, production in agriculture sector is based on natural factors like rain, weather conditions etc. Repeated draught, uncertainity of monsoon and floods results in low production and less and uncertain income of the agriculturist. Hence, poverty is more.

5.4.2.2 Demographic Factors : After independence and during planning period in India, due to economic development and rapid improvement in health services, on the one hand, death rate declined fast but at the same time birth rate did not reduce. As a result, high population growth rate was noticed. High increase in population did not allow per capita income to increase. Low per capita income and big size of families resulted in poor quality of life. There was rapid increase in labour supply because of high population but low pace of development of employment opportunities resulted in reduction in wage rate, so unemployment increased and so was poverty.

5.4.3 Economic Factors

5.4.3.1 Low Agricultural Productivity Per Labour : One of important reasons of high poverty in rural India is low agricutural productivity per labourer. Because of poor irrigation facilities, insufficient technology, lack of education and training, low rate of investment, heavy load of population, result in low agricultural productivity. So income of farmers remains low and poverty increases.

5.4.3.2 Unequal Distribution of Land and Property : Land is very important for cultivation. From British period in India, because of system like Zamindari, land ownership was with the handful of zamindars. This class was not directly associated with land cultivation and had no interest to invest in agricultural sector. On the other hand, the tenants were working on other's land and were not the owners, so they also had no interest in investments. Due to low agriculture production and productivity, poverty increased day by day.

5.4.3.3 Minimal Development of Small and Cottage Industry : In India the second five year plan onwards, as a strategy for economic development, heavy and basic industries were given

importance. But in rural areas, small and cottage industries which have great contribution in employment, production and income were neglected. Moreover agricultural and allied activities like Animal Husbandry, Dairy farming, Fisheries etc. were growing slowly and this increased seasonal unemployment. As a result, poverty remained high.

5.4.3.4 Rapid Increase in Prices : Price-rise seriously affects Poverty. Because of war, draught, low national production, rapid increase in demand, increase in production cost, price of goods and services as well as edible goods rise rapidly. This reduces purchasing power of low income group. It reduces standard of living. It increases poverty. On the other hand, increasing prices benefit businessman, traders and big farmers. This increases unequal distribution of income in the society.

5.4.3.5 High Rate of Unemployment

In India, major part of rural India is dependent on agriculture. But agriculture is dependent on monsoon, hence only one crop in a year is cultivated, so there exists seasonal unemployment. High increase in population and joint family system also increases the burden on agriculture and results in disguised unemployment. In rural India, lack of development of allied industries are responsible for high illiteracy, low mobility of labour, high rate of unemployment and poverty.

5.4.4 Social Reasons

5.4.4.1 Low level of Education : One of the major reasons of poverty in India is scarcity of education, training and skills. Low level of education, specially in rural areas, prevents them from gaining from the use of new technologies in agriculture, new agriculture system, research and benefit of market for sale of the product. As a result, both per hectare productivity and per labour productivity in agriculture remains low. This is the reason of low income of farmers. Apart from this, because of low level of education, they get less opportunities in alternative employment. Wage level remains low and poverty increases.

5.4.4.2 Gender Inequality : India has gender inequality from the beginning. Society cares less about health of females. As a result, women face higher level of malnourishment, low weight and weakness. This causes high maternal mortality during childbirth and health problems among new born children. Work allocation is such that it is believed as compulsory for women to work at home, resulting in low level of education and less economic opportunities to work. Apart from this, at workplace, females are paid less than males. Out of the total population, less than half are women. Amongst them, low health level and less opportunities to work in economic field keeps family income low and this increases the level of poverty.

5.4.5 Other Reasons

5.4.5.1 War : After independence, India fought two wars with neighbouring countries, Pakistan and China. During the war, the limited resources of country are spent on production and import of required arms and ammunition. This reduces production of basic goods and services. During the war, to avoid scarcity of certain goods in future, people store foodgrains, clothes, fuel, etc. As a

result, prices increase rapidly. Because of war, the process of economic development slows down. Due to several wars in India, developmental expenditure is reduced. Economic development remains low and problem of price rise takes place. Hence poverty increases.

5.4.5.2 Increase in Defence Expenditure : Several wars made the issue of security very serious. To make the security system stronger, expenses on modern missiles, fighter planes, tanks and submarines have increased rapidly. In the present era, to fight against terrorism, a lot of special facilities have increased expenditure on defence. The expenditure on security is non-developmental in nature and any increase in such expenditure reduces expenditure on economic development. Economic development slows down and level of poverty increases.

5.4.5.3 Defective Policies : For rapid economic development in India, the 2nd five year plan onwards, basic and heavy industries were given priority and through rapid industrialisation, high economic growth was to be achieved and thus policy of removal of poverty and unemployment was adopted. But this policy neglected the vast population dependent on agriculture. Agriculture and small and cottage industries which give the employment and income to majority of population, developed slowly and so was the income of poor people. Apart from this, various schemes were introduced during planning period to reduce poverty and unemployment but due to frequent changes in the ruling government many times, they lacked continuity and co-ordination. As a result, the targeted poverty reduction could not be achieved through these schemes.

5.5 Measures to Reduce Poverty

India has taken the following steps to reduce poverty during planning period.

5.5.1 To Increase Agricultural Productivity

In India, one of the basic reasons of poverty is low productivity in agriculture. With increase in agricultural productivity and income of agriculture labourer, poverty can be reduced. Regarding this, through public programmes, farmer are informed about upgraded technology, available resources at reasonable rates, improved infrastructural facilities, maximum price and regulated market for their produce. Development of agriculture will increase productivity per labour. Also employment opportunities and prices of foodgrains will decrease. This will be more advantageous to the poor and poverty can be reduced.

5.5.2 Development of Small Scale Industries

In India, small and cottage industries have made immense contribution in the Gross National Income and employment. So, if small and cottage industries can be developed and encouraged, then poverty can be reduced on a larger scale.

5.5.3 Development of Unorganised Sector

Unoganised sector includes vegetable vendors, masons in construction sector, agricultural labourers, vendors etc. To improve the conditions of these workers. National Commission has recommended to decide the working conditions, Life Insurance, health, old age pension and other social security measures. Moreover, for small and marginal farmers, it is recommended to provide them with irrigation facilities and loan facility.

5.5.4 Use of Appropriate Tax Policy

Government uses tax policy to reduce inequality of income and poverty by redistributing income. To fulfill this objective, the government makes such a policy wherein more tax is imposed on rich class which can afford that tax and less tax is imposed on poor class and given tax concession. This way the government collects a fund by imposing taxes on rich people and makes expenses on welfare oriented programmes for the poor people. As a result, socio-economic conditions of the poor improve and reduction is income inequality and poverty is seen.

5.5.5 Rise in Human Capital Investment

Developed nations, where large scale investment is made on education, skill development have very low level of unemployment. As a result, poverty is less. High level of education satisfies the requirement of various employment opportunities and choices among workers. Skill development increases the productivity of workers and that reflects in high wages. For that, at workplace, continuous investment is required for training and research.

5.5.6 Goods and Services at Reasonable Rates

To provide nutritive food and food security to poor people it should be made available at reasonable rates which will also directly reduce poverty. Under public distribution system in India, we have ration shops where rural and urban poor are given basic utility goods at reasonable prices. During draught and scarcity, the responsibility of public distribution system is more to satisfy the basic needs of the poor.

5.5.7 Employment Programmes

Employment generation and poverty eradication are inter-related. Some important employment programmes for poverty eradication are as under :

5.5.7.1 IRDP / SGSY : Integrated Rural Development Programme / Suvarna Jayanti Gram Svarojgar Yojana

During the 6th five year plan, various agencies started different programmes for rural poor. All these programmes were merged in IRDP on 2nd October, 1980. The main objective of IRDP is to encourage poor families for self employment so that they can get more income to rise above the poverty line.

This programme focused on few special groups which includes small and marginal farmers, agricultural labourers and rural artisans.

This way IRDP programme is known as anti-poverty programme.

Following programmes were included in self employment programme :

(1) IRDP (Integrated Rural Development Programme)

(2) TRYSEM (Training of Rural Youth and for Self employment)

(3) DWCRA (Development of Women and Child in Rural Areas)

(4) MWS (Million Wells Scheme)

(5) SITRA (Supplying Improved Tool Kit to Rural Artisans)

(6) Ganga Welfare Scheme

On 1st April, 1999 IRDP and other programmes integrated with it were merged and named as Suvarna Jayanti Gram Swarojgar Yojana. Under this scheme, in rural areas, apart from development of small trade, self help groups were also provided infrastructural facilities, technology, loan, facility, market for final goods to rural poors.

5.5.7.2 Wage Employment Schemes : These programmes are part of strategy of poverty eradication and has multiple objectives. In wage employment scheme, focus was on those poor who do not have any other source of income than physical labour. These schemes do not only provide self employment in the slack season but also provide employment during floods, draught, scarcity and other natural calamities. Under these schemes, infrastructural services developed in rural areas. It is tried that labourers should get proper salaries. Wage employment scheme included (1) Jawahar Rojgar Yojana (JRY) (2) Employment Assistance Scheme (EAS).

5.5.7.3 Prime Minister Rojgar Yojana (PMRY) : In the decade of 90's employment generation in organised sector was stagnant and in public sector, negative growth was noticed. On the other hand, unemployment rate was rising fast. On this situation, Prime Minister Rojgar Yojana was started for self employment with the objective of starting ventures to provide employment to educated unemployed.

5.5.7.4 National Rural Employment Guarantee Act, 2005 (NREGA) : In the year 2005, National Employment Gaurantee Act was accepted with the objective of creating assets through public construction activities and to provide employment to one person per family of minimum 100 days to rural and urban poor as well as lower middle class families. In 2009, NREGA was reformed as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

5.5.8 Housing Schemes : In India, still a majority of poor people dwell in semi-stable or temporary houses. With an objective to provide proper dwelling to poor in the year 1985-86, Indira Awas Yojana (IAY) was started for families below poverty line and schedule caste, schedule tribes. Moreover, in 2013-14, Rajiv Gandhi Yojana was implemented to improve the housing of those who reside in huts. In urban areas also, poor people reside in slums where they are deprived of basic facilities of drinking water, toilets and electricity. Due to fast increasing problem of dwelling in urban areas, from 25 June, 2015 for urban poor, Prime Minister Awas Yojana (PMAY) was started. Housing schemes are important for dwelling purpose but simultaneously they also create employment.

5.5.9 Social Security Schemes : As a strategy to reduce poverty in India, various social security schemes were started. For workers of unorganised sector, from 9th May, 2015, Atal Pension Scheme was started in which monthly pension is paid to people above 60 years. Under the Prime Minister Security Scheme, for people in the age of 18 to 70 years, accident insurance of ₹ 2 lac was opened with minimum premium of ₹ 12 and Jivan Jyoti scheme was started with ₹ 2 lakhs life insurance policy at ₹ 330 yearly premium. To safegaurd farmers from crop failure, Prime Minister Fasal Bima Yojana was started (PMFBY).

5.5.10 Jan Dhan Yojana : Through financial inclusion, to hit the root of poverty, an ambitious scheme Pradhanmantri Jan Dhan Yojana was introduced. This scheme began on 28th August, 2014 and on the very first day of this scheme, 1.5 crore accounts were opened. Till 8th January, the number increased to 12.58 crores where investment of ₹ 10,590 crore was generated.

Features and Importance of Jan Dhan Yojana : With the objective of increasing banking facilities per capita and reduction in regional inequalities, this yojana was started and the main purpose was that the subsidy given to poor families by government should directly go to their bank accounts.

The main feature of this scheme is that the bank account is opened with zero balance and after 5 months of opening account, an overdraft of ₹ 5000 is available. Under this scheme, those who opened account before 26 January, have also benefitted with a life insurance policy.

Prime Minister Jan Dhan Yojana is prominantly a scheme for overall financial inclusion. On the other hand, it hits directly on poverty by providing micro finance and banking facilities.

Exercise

1. Choose the correct option for the following questions :

(1) How many minimum daily calories per person per day is decided by Indian Council of Medical Research ?

(a) 2400 (b) 2300 (c) 2200 (d) 2100

(2) What amount of rupees are decided by Tendulkar committee in the year 2011-12 for deciding poverty line in urban areas ?

(a) 816 (b) 916 (c) 1000 (d) 2000

(3) Which state has the lowest poverty in the year 2013 in India ?

(a) Gujarat (b) Rajasthan (c) Goa (d) Bihar

(4) According to all estimate for the year 2011-12, which of the following state falls in the catogory of 30-40% poverty ?

(a) Punjab (b) Jammu & Kashmir (c) Karnataka (d) Odisha

(5) What is the percentage of malnourished people in India in 2014-16 ?

(a) 23.7 (b) 15.2 (c) 11.2 (d) 20.5

(6) Which state has the maximum toilet facility in India ?

(a) Gujarat (b) Punjab (c) Bihar (d) Kerala

2. Answer the following questions in one line :

(1) What is Poverty line ?

(2) Explain the concept of Relative Proverty.

(3) Which kind of expenditure is included by Tendulkar Committee for poverty line ?

(4) Which method is used to measure relative poverty ?

3. Answer the following questions in brief :

(1) Explain income concept of poverty.

(2) Explain the modern approach of poverty.

(3) Explain the limitations of poverty line.

(4) What is the measure of absolute poverty in India ?

(5) Explain the importance of safe drinking water and housing facility.

4. Give to the point answers for the following questions :

(1) Explain the economic causes of poverty.

(2) Explain employment oriented programme for poverty eradication.

(3) Discuss health related indicators of poverty.

(4) Explain the nature of poverty.

(5) Explain in short the social security schemes for poverty eradication.

5. Answer the following questions in detail :

(1) What is Poverty? Explain its indicators.

(2) Discuss the nature and causes of poverty.

(3) Discuss the measures to reduce poverty in India.

Glossary

Lorenz Curve	:	In economics Lorenz curve is graphical presentation of distribution of Income and property. In 1905 Max. O. Lorenz explained the inequality of property through Lorenz Curve.
Gini (Co-efficient)	:	Gini (Co-efficient) is numerical measurement of distribution of income and property based on Lorenz curve. It lies between 0 to 1. If the value of Gini (co-efficient) is 0 then it shows equal distribution of income. If value Gini (co-efficient) is 1 then it shows that whole property belong to one person. More the value of Gini (co-efficient) more unequal is the distribution of property.
Per Capita Consumption Expenditure	:	Total market value of all the goods and services bought by families during a year divided by the total population of the same year.
Per labour Productivity	:	During a particular period of time the amount of goods and services produced by one labour is per labour productivity.
Literacy Rate	:	According to 1991 census the percentage of total population who are above seven years and able to read and write any one language. The total percentage is literacy rate.
FAO	:	Food and Agricultural organisation is a special agency which tries to reduce starvation at international level.

6 Unemployment

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Introduction

In recent years most of the nation of the world are facing economic and social problems like poverty, unemployment, inflation and depression. World is worried about these problems. It is a fact that each nation has tried to solve these problems in their own manners but still now, these problems cannot be solved. Developed and developing countries have economically developed but could not attain full employment. As a result, unemployment has become a global problem today. In India also, problem of unemployment is a long term issue. That is why in plans the objective of removal of unemployment is prioritised. But even after economic development the problem of unemployment has increased instead of declining. This is a limitation of our planning system. In developing India, on one hand high population growth rate and on the other hand insufficient economic development made problem of unemployment more serious.

6.1 Meaning of Unemployment

In common parlance, unemployment is a situation were a person is willing to work but doesn't get work. Unemployment is not only a problem of labour but other factors of production can also be unemployed. But commonly unemployment is seen in relation to labour only. So here, we will define unemployment keeping in mind labour.

According to Prof. Pigou, "A person can be called unemployed only when he is willing to work but is not able to find work."

In short unemployment is 'a situation where a person is ready and capable of working at current wage rate but does not get work.'

According to above definition at current wage rate, a person is eager and ready to work but is deprived of work then he is said to be "unwilling unemployment" or "compulsory nature of unemployment." Similarly, if a person is not willing and ready to work and not getting work then he is not said to be unemployed. This type of person is said to be voluntary unemployed. According to this definition, children, elderly people, weak people and people who do not want to work, are not part of the active work force but cannot be said unemployed. This voluntary unemployment is not a problem.

The term unemployment is understood in terms of supply of active work force. Active work force supply includes people in the age group of 15 to 64 years. From the meaning of unemployment it can be said that unwilling unemployment or compulsory unemployment is only a problem. In India also unemployment has become a serious economic problem.

An unemployed person is economically dependent and cannot live in society with dignity. That is why problem of unemployment is not only an economic problem but can create social, ethical and political problems.

6.2 Types of Unemployment

While discussing the nature or types of unemployment, it is necessary to know the nature of economy. Because the nature of unemployment is different in developed and developing economy. Generally in developed countries, lack of effective demand resulted from trade cycle creates unemployment. This is mainly for short term. In developed countries, generally, we find cyclical and frictional unemployment, which can be solved by increasing effective demand. Whereas in country like India because of high population growth rate, labour supply constantly increases but on the other hand because of structural limitations employment rate rises at a lower pace which gives rise to the problem of unemployment. That means unemployment in India is structural in nature and for long term. This can be solved by introducing economic, social and political changes or through developing infra-structural facilities.

To know the nature and types of unemployment, Shri Raj Krishna committee Report in 2011-12 has given four measures.

(1) Time : If any person has willingness and capacity to work but does not get work for more than 28 hours a week, he is said to be intensively unemployed. But those who are employed for more than 28 hours and less than 42 hours in a week then they are considered as less intense unemployed.

(2) Income : When a person gets very less income which cannot solve the problem of his poverty then from income point of view, he is poor. In rural India, specially this type of poverty is seen.

For example a person required ₹ 30,000/- per month for satisfying the needs of his family, but earning only ₹ 15,000/- or less than that, from his present job.

(3) Willingness : When a person is eligible of getting good job but she/he does not get job

as per her/his eligibility, and accepts lower cader job, and gets very less income from this job then he is underemployed. e.g., if C.A. has to work as clerk.

(4) Productivity : When a labourer is working with less than his actual productivity then production is less than his productive capacity.

e.g., a person can make 20 meter clothes in a day but gets a job where he can make only 10 m clothes.

According to above measuring rods, unemployment can be divided in following types :

6.2.1 Open Unemployment :

Meaning : Those individuals who are ready to work at current wage rate and posses qualifications too, but do not get any job are said to be 'fully unemployed or openly unemployed'.

Commonly, the country in which labour supply increases fast and the process of urbanisation is also fast, over there, high rate of full unemployment can be seen. This type of unemployment is seen more in cities than in villages. Open unemployed people are those who migrate from villages to cities in search of job. People suffering from open unemployment are educated or less trained / skilled persons.

People with open unemployment cannot work and cannot get work, but such people consume goods and spend. Hence, they become a burden and reason for low productivity. Open unemployment can be seen more among the age group of 15 to 25 years.

To get proper number of open unemployed people is very difficult, still there are three methods :

(1) Through Registration in Employment Exchange Centres (2) Throgh Sample Survey for Labour Supply (3) Through Census

6.2.2 Underemployment :

Meaning : When labourers cannot utilize their capabilities fully and for certain period accept less capable job is said to be underemployed.

When a labourer is willing and ready to work for certain years or days but gets job for less than those hours or days then he is said to be underemployed. For example, a labourer working in industry or agricultural land gets work only for 5 hours instead of 8 hours, then he is said to be underemployed. According to this meaning, in rural India the seasonal unemployment in agricultural sector is a type of underemployment. Because the labourer in agriculture sector gets work only during sowing and harvesting season, is unemployed rest of the time. Indian agriculture is based on monsoon and due to limited irrigational facilities, agricultural sector faces seasonal nature of unemployment.

Similarly many individuals do not get jobs according to their degrees, they accept degraded job that is also called underemployment. e.g. a person with the degree of computer engineer works in a garage.

6.2.3 Disguised Unemployment :

Disguised unemployment means hidden unemployment. This type of unemployment is very common in developing economies like India.

Meaning : In any activity if too many persons are employed at the given level of technology, and when a few persons are removed from work, the total production does not change, then there exists disguised unemployment.

It could also be defined as, Given, the resources and technique of production, in over-populated developing economies, agriculture sector has zero marginal productivity, then such countries are said to have disguised unemployment.

In relation to above definition, it can be said that disguised unemployment has zero marginal productivity.

In India, population is constantly increasing. Hence, people demanding employment is also increasing at a higher rate. But in India, poor development of sectors other than agriculture puts heavy burden on agriculture sector for employment, if the surplus labourers are removed from agriculture sector then also agriculture production will not decrease. As the marginal productivity of these labourers are zero, they are said to be disguisedly unemployed. In cities also, in industries and business this kind of disguised unemployment is seen. Commonly, the business where labour is borne by the families themselves and wages are not paid in monetary terms, in such a case, disguised unemployment takes place.

e.g. If 10 hectare land is to be optimally used then maximum 5 labourers can be employed. But due to unavailability of work, anywhere else, the other 3 members of family also join the same work. But even after they join, the total production does not increase at all, then the other three labourers are called disguisedly unemployed. These labourers visibly do not seem to be unemployed but because the marginal productivity is zero there is a disguised unemployment.

6.2.4 Cyclical Unemployment :

In a capitalist type of economy, investors and saving class are distinct classes and so that, it creates disequilibrium. As a result, sometimes economy faces prosperity and sometimes depression. During prosperity there is a high investment, production, income, employment in the economy. When economy faces depression then there is a reduction in the demand of goods and services. Due to reduction in effective demand, industries have to reduce production or shut down the production and many labourers are retrenched from work. So here, depression becomes the reason for unemployment.

So this type of unemployment is called cyclical or depressive unemployment or trade cycle unemployment.

America experienced severe depression during 1929-30 and its effect was faced by many countries of the world. That is why this depression was known as a Great Depression. Presently also, sometimes developed countries like America, England faces this type of unemployment. In

India, due to capitalist market mechanism, every now and then cyclical unemployment is seen. Indian diamond industry faces this type of unemployment.

To solve the problem of cyclical unemployment the state should invest in productive and developmental activities and provide employment to maximum people and try to increase their income levels. With increase in income, effective demand will increase and production will increase. With increase in production, employment will increase. As a result the problem of cyclical unemployment will reduce.

6.2.5 Frictional Unemployment :

Meaning : When in production process, because of changes in demand or production or due to change in taste and preferences or new technology, new goods enter in the market and unemployment arises, then this unemployment is called frictional unemployment.

In a developed nation when old production system is replaced by a new production system then the units with old production system face economic loss and shut down. As a result, the labourers working in those units remain unemployed till they don't learn the work according to the new technology. This unemployment is for a short term.

e.g. When smart phone replaced old mobile phones then the labourers engaged in production, sales and service of old mobile phones became unemployed. This is frictional unemployment.

6.3 Causes of Unemployment

In India the information regarding unemployment is published by Planning Commission, Central Statistical Organisation, National Sample Survey and journal published by Employment Exchange Reports. Bhagwati Committee was established to study the problem of unemployment and it clearly talks about magnitude and causes of unemployment.

To improve the rate of economic development of a country and to solve the problem of unemployment, in 1951 planned steps were taken but problem of unemployment became more severe.

At the end of Planning, the level of employment can be known from the following information. At the end of the first five year plan, 53 lac people were unemployed which increased to 304 lacs at the end of the fifth five year plan and 348.5 lacs at the end of the ninth five year plan.

From the above information, it can be seen that India faces extensive unemployment and it is increasing day by day which is a serious problem. The reasons for high unemployment are high rate of increase in labour supply, slow rise in employment opportunities, low savings and investment and limitations of education system. Let us examine the reasons of unemployment in India.

6.3.1 High Rate of Population Growth

In India, size of population and high rate of population growth is noticed.

Because of high growth rate of population, there is a tremendous increase in the size of population. With this, labour supply also increases rapidly and there is a continuous increase in

new labourers, in search of employment in labour market. But simultaneously, there is a slow rise in employment opportunities which increases the problem of unemployment and underemployment.

According to one estimate, in India each year there is an increase in population by 1.70 crores which is more than total population of Australia. So, with this much increase in population and lack of employment opportunities, its obvious that unemployment will rise. The rate of growth of employment is much lesser than the population growth rate in India, which gives rise to the problem of unemployment and it keeps on increasing.

6.3.2 Slow Rise in Employment Opportunities

Increase in employment and economic growth rate has strong relationship. But during planning periods, there was continuous increase in economic growth but we failed in creating employment opportunities which shows that "Economic growth has remained jobless growth."

In first three decades of planning, India attained 3.5 percent of economic growth. This growth rate increased to 7.6 % in 10th five year plan and 7.8 % in 11th five year plan but still number of unemployed kept increasing. Even after planned economic growth, opportunities cannot be created for old and new entrants. Green revolution in agriculture sector remained limited to certain areas and sector other than agriculture observed slow growth. Employment cannot be created as per labour supply, which increased unemployment.

6.3.3 Low rate of Savings and Investments

Indian planning has increased national income but simultaneously population growth rate also increased. As a result, per capita income increased at a lower rate than national income. Due to low per capita income and expenses in satisfying basic needs of burdensome population kept saving and investments at a lower rate. Because of low rate of investment in industry, agriculture or other sector, they could not create much employment opportunities which increased the problem of unemployment.

6.3.4 Capital Intensive Production Technique

There is a scarcity of capital and abundance of labour in India. In these circumstances, to solve the problem of unemployment, labour intensive techniques of production should have been adopted but from the second five year plan, India has adopted development of heavy and basic industries. In planning schemes also in place of capital intensive technique, labour intensive technique was given less importance. In agriculture and industries, mechanisation was adopted which increased employment at slow rate. In industrial sector also to increase productivity and to get security against organised labour unions, such a policy is adopted which saves labour. Other than that railway, irrigation, roads, construction and public sector of state also uses capital intensive technique. As a result, unemployment problem has become acute. That is why Bhagwati Committee and Venkatraman Committee which was formed to study unemployment also recommended to use less of mechanisation.

6.3.5 Lack of Vocational Education

In India, one reason for a high educational unemployment is ineffective educational system. Those who can work according to the changing working atmosphere in every sector, such type of workers are not created. With the objective of increasing economic growth rate, technology and mechanisation has been adopted by industries and agriculture. So such labourers are required who have knowledge of these techniques, but the present education system is opposite to that. Hence, skilled labourers are few because of lack of vocational education. Present education failed in mental and physical formation of human being even after acquiring education, a person is incapable of self employment and suffers from problem of unemployment.

6.3.6 Lack of Manpower Planning

In India during planning period manpower is not planned rightly. The type of labour which is in demand presently in India, availability of similar type of labour supply is not possible, as that kind of human resource planning is not found in the education system. Education has been made a widespread activity without estimation of kind and number of labour requirement. As a result, every year lakhs of educated youth obtain degrees. As they lack knowledge and training required in present economic development, they are unemployed even after being educated.

This is direct result of lack of planning of human resource. In many cases, due to lack of employment opportunities the doctors and engineers with high degree, go to foreign countries because of not getting suitable work in our country.

During British rule, gold used to move from India to Britain. This one sided movement is called "Drain of Gold." Similarly presently Indian intelligence is moving from India to abroad. This one sided movement is called "Drain of Brain".

6.3.7 Inefficiency of Public Sector

After independence, public sector was given more importance than private sector. There is an immense increase seen in number of public sectors and investments there of.

The quantity of employment generation estimated from public sectors, was not able to generate more employment because of its low productivity. Employment oriented private sectors were controlled, for the development of public sector. Moreover, private sector development was neglected and so there was less employment generation and unemployment increased.

6.3.8 Negligence Towards Agriculture Sector

India is an agricultural country and most of its population resides in villages. This population is dependent on agriculture for employment. So, agriculture planning should be such that could generate more employment, but in India's economic development policy, more emphasis is given to other sector than agriculture. As agriculture was given less importance, it could not develop

effectively and the planning related to agriculture sector failed to generate more employment. Advantage of Green Revolution is enjoyed by few states like Punjab, Haryana. So, overall employment could not be created in agriculture sector. Burden of population, lack of irrigation facilities, lack of agricultural finance, uncertainity of monsoon and few other uncertainties are responsible for poor development of agriculture.

In rural area, non-agricultural sectors are not developed properly. That is why rural labourers who are dependent on agriculture, face high rate of seasonal and disguised unemployment.

6.3.9 Low Mobility of Workers :

In many circumstances lack of mobilisation among labourers, is also a reason for unemployment. In India, due to social reasons, family relations, language, religion, casteism, culture, lack of information, lack of transportation facilities and problem of housing are few reasons which restrain mobilisation and increase problem of unemployment.

People with higher education are not interested in going to rural areas, backward areas even if they get employment. These people expect to get employment in urban area which, if not satisfied they would prefer to remain unemployed. Attraction towards urban life and urban facilities do not show readiness among people to go to rural areas for employment.

6.3.10 Lack of Infrastructural Facilities

In rural areas because of lack of infrastructural facilities, unemployment has become a major problem. In rural area lack of transportation facilities, lack of proper roads, lack of education, health and electricity facilities are the reasons of low generation of employment. As such, in rural areas for industries there are availability of labourers at low wages and easy availability of raw materials for agro-based industries but due to lack of continuous and required electricity, industrialists do not wish to establish industries in rural areas, as a result new employment cannot arise and unemployment exist.

Apart from the above reasons, in India, lack of national employment policy, lack of conducive environment for development of industries and trade, under utilisation of natural resources are also responsible for increase in unemployment.

6.4 Measures to Reduce Unemployment

After understanding the extent and reasons of unemployment in India, it is clear that the problem of unemployment is becoming serious day by day. From its reasons, it will be easier to find out its solution. The problem of unemployment is not only economic, it also gives rise to social, moral and psychological issues. From political point of view also this problem is serious. That is why in India right from the first five year plan, one major objective is, to reduce unemployment. Specially from the fifth and the sixth five year plan the prime objective is the reduction of unemployment. In the eighth five year plan, it was thought to make Right to

employment as fundamental right and changes could be made in constitution but it could not be materialised. But it is clear that to provide appropriate employment opportunities is the prime responsibility of our country.

To solve the problem of unemployment following steps can be taken :

6.4.1 Population Control

The high population growth rate of India has increased the problem of unemployment and made it more serious. Because of the fast population growth in country on one hand the number of labourers demanding job is increasing and on the other hand due to slow economic growth appropriate number of employment opportunities cannot be created. As a result, unemployment is increasing. If in India, problem of unemployment is to be solved then effective steps for population control must be taken. With that, the rate of population growth will come down and the high rate labour supply will reduce. So, the number of job seekers will reduce and on the other hand because of population control, resources will become surplus. As a result, rate of capital investment and employment oppurtunities will increase. With the population control, in long term, the productive age group (15 to 64 year) can be placed appropriately.

6.4.2 Increase in the rate of Economic Development :

One of the constructive solutions of reducing unemployment is by increasing the rate of economic development. In the initial years of planning, the rate of economic development use to be as low as 3 to 3.5 %. If economic developement is continuously increased at a higher rate, then employment opportunities can also develop at higher rate and problems of unemployment can be solved. For that coordinating various sectors of economy, efforts should be made to increase capital investment between public, private and cooperative sector. In agricultural sector, irrigational facilities and other required facilities should increase and agricultural growth rate should be kept high. Efforts should be made so that advantage of green revolution shall be reaped by every state and that way by achieving high economic development, employment opportunities should increase and problem of unemployed could be solved.

6.4.3 Employment Oriented Planning

It is seen that during planning, special emphasis is given to economic development. Like, from the 2nd five year plan special importance was given to the development of public sector and as a key to basic industries, capital intensive industries were developed. For strong foundation of industrilisation it was necessary. But in present situation, employment oriented planning is very important. For that state has encouraged consumer goods and labour intensive industries, small and medium scale industries and business and trade, animal husbandry, dairy development. Because of all these, industries require less of capital and generate more employment. With the establishment and development of these employment oriented industries, the production of consumer goods will increase, employment will increase and economic stability will also be achieved. In construction sector through employment oriented planning more employment can be increased. States also can coordinate between capital

intensive and labour intensive production techniques and more emphasis should be given to labour intensive production technique, so that unemployment problem can be solved.

6.4.4 Employment Oriented Education

Present education system is responsible for unemployment. Present education system only provides bookish knowledge and produce clerks. So, even after being graduated in commerce and management field, individual does not become capable enough for self employment. So for a longer period of time, they have to remain unemployed. In order to change this situation, it is necessary to give vocational education in the field of trade, commerce, business, agriculture and other fields. For this, a major change is needed in present education system. Though some changes have been introduced in education system but they are not enough. This is a fact. It is necessary to start and increase the curriculum that comprises of providing training and business oriented education in the field of trade, commerce, agriculture and industry. So that after getting such education, it is easy to get employment.

In India, to solve the problem of unemployment and to increase the capabilities to gain employment, a revolutionary change in the educational field is necessary which can implement an educational system with perfect human resource planning.

In the new education policy of 2015, for employment generation, collaboration with industries were developed as the objective to have vocational education. Similarly, in future years which sector has employment opportunities has to be studied and accordingly curriculum needs to be prepared which should also include private sector association.

6.4.5 Development of Cottage and Small Scale Industries

Cottage and small scale sector have capacity to create employment with low a investment. To provide employment to one person, low capital investment is required as compared to big industries. So with the development of these type of industries, problem of unemployment can be solved. With similar capital investment small industries can create 7.5 times more employment than big industries. India is a capital scarce and labour intense country. So, development of cottage and small scale industries should be accepted as the best alternative and special initiative should be taken for its development. In the industrial policy also, these industries are given importance and various measures have been taken for their development. Like production of certain goods are reserved for small scale industries. For the development of these industries, state provide monetary, technical and managerial help.

6.4.6 Extension of Infrastructural Facilities :

Indian rural areas have less employment opportunities than urban areas and one reason responsible for this, is poor infrastructural facilities in rural area. So if Government extend the services like education, health, housing, electricity, roads, business training center and other infrastructural facilities, then with the help of local resources, employment can be made availaible to individuals, nearer to their residences. With the development of infrastructural facilities, new

employment opportunities will increase. Employment will also generate in agriculture and allied sector. So, problem of unemployment will reduce.

6.4.7 Speed and Expansion of Green Revolution in Agricultural sector :

High population growth in India, high dependence of population on agriculture, creates disguised unemployment and at the same time uncertain monsoon and insufficient irrigational facilities creates seasonal unemployment. Solutions of high dependence of population on agriculture and the capability of shifting of these surplus people to another sector has not become feasible.

Hence, to solve the problem of unemployment in rural areas, green revolution should be speed up and effort should be made to extend it to more areas which can increase the opportunities of employment.

If planned properly than agriculture has more space to provide employment than any other sector. This has been supported by Economist P. C. Mahalnobis with regard to calculation of employment opportunities. According to him, in India by investing ₹ 1 crore in agriculture sector 40,000 people can be employed and production can be increased by 5.7 %. Whereas in big industries by investing ₹ 1 crore only 500 people can be employed and production can be increased by 1.4 %.

From the estimate it is clear, agriculture sector can create more employment than industry. So for the green revolution in agriculture, the important complimentary activities such as minor and major irrigation, soil conservation, mix farming, forest development, planning for more harvest should be adopted. By enhancing the planning for more than one harvest in a year, modernisation of land, stressing on agro based rural industries, employment opportunities can be increased.

According to Dr. M. S. Swaminathan, if development is encouraged towards agriculture sector than many times more employment can be created.

6.5 State Program to Solve Unemployment Problem :

In 1951, five year plans started in India. It was thought at that time that with the steps of planning and economic development, the problem of unemployment can be solved but in the first four five year plans, this thought proved to be wrong. As a result, from the fifth five year plan, various employment oriented schemes like Integrated Rural Development Programme, Food against Work, Jawahar Rojgar Yojana, Nehru Rojgar Yojana, Suvarna Jayanti Gram Swarojgar Yojana, Suvarna Jayanti Sheher. Rojgar Yojana, Training to Rural Youth for Self Employment were started to solve the problem of unemployment. National Rural Employment Guarantee Programme, MGNREGA, Skill Development Programme, Skill India, Make in India and Mudra, many employment oriented schemes were implemented. Some of them are as below :

(1) Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) : On February 2006, National Rural Employment Guarantee Act was started with the objective of providing employment to rural people residing in backward districts of country. The name NREGA

was changed to MGNREGA on 2nd October, 2009. To make this programme successful, government declared 2nd February as "Employment Day". In this programme, at least one person from each family is given guarantee of getting employment for 100 days in a year.

1/3rd employment is reserved for females under this scheme. It was recommended to provide minimum wages for physical labour. Moreover, labourers should be provided wages within seven days. Labourer should be given employment within 5 km from their residence. If labourers are given employment beyond that distance then 10 % extra wages are given to them. Laboures working under this scheme are provided job cards which is valid for five years. After receiving job card if the labourer does not get employment then he is paid employment allowance.

(2) Pandit Deendayal Upadhyay Shramev Jayate Yojana (PDUSJY) : This scheme was started on 16th October, 2014. Some of the objectives of this scheme were to provide health and security along with good management, skill development and welfare to the labourers of unorganised sector and to develop conducive environment for industrial development.

(3) Deendayal Upadhyay Gramjyoti Yojana (DUGJY) : Instead of the earlier Rural Electrification programme, this programme is started with an objective of providing constant 24 × 7 electricity services in rural areas.

(4) Deendayal Upadhyay Gramin Kaushalya Yojana (DUGKY) : This scheme was started on 25th September, 2014. The main objective of this programme was to provide employment to youth between age group of 18 to 35.

(5) Prime Minister Agricultural Irrigation Programme : This programme was started on 1st July, 2015 with an objective of "Water to every filed" to increase field productivity, optimum use of available resources and planning of irrigational facilities to agricultural areas.

Exercise

1. Choose the correct option for the following questions :

(1) A person is capable, willing and ready to work at current wage rate but not getting work is said to be

(a) unemployed (b) poor (c) surplus (d) worker

(2) Compulsory nature of unemployment is seen in which context of labour supply ?

(a) Active (b) Passive (c) Children (d) Elders

(3) Who presented four measuring rods of measuring types of unemployment ?

(a) Raj Krishna (b) Mahalnobis (c) Keynes (d) Rodan

(4) Which type of unemployment arise due to lack of effective demand ?

(a) Frictional (b) Seasonal (c) Cyclical (d) Disguised

(5) Which type of production technique increase unemployment ?

(a) Labour intensive (b) Capital intensive

(c) Agriculture oriented (d) Education oriented

2. Answer the following questions in one line :

(1) Explain meaning of unemployment.

(2) Which type of unemployment is seen in developed nations ?

(3) Define disguised unemployment.

(4) Which depression is called world's great depression ?

(5) From where is information regarding extent of unemployment in India is obtained ?

(6) Which age group is called productive age group ?

(7) Which industries should develop to solve the problem of unemployment ?

(8) Which slogan is given by Prime Minister Agricultural Irrigation scheme ?

(9) When was "Pandit Deendayal Upadhyay Shramev Jayate Yojana" started ?

3. Answer the following questions in brief :

(1) Explain meaning of full unemployment.

(2) Explain frictional unemployment with example.

(3) "The problem of unemployment is because of low savings and investment in India." Explain in brief.

(4) "Labour intensive technique is more applicable for India." Explain.

(5) Which scheme was started to provide continuous electricity service in rural area ? Explain it.

(6) When and with what objective Prime Minister Irrigation scheme was started ?

4. Give to the point answers for the following questions :

(1) Explain the measures given by Raj Krishna to understand the nature of unemployment.

(2) Explain the concept of under employment in detail.

(3) Explain the concept of disguised unemployment with example.

(4) Explain the concept of cyclical unemployment.

(5) "Defective education system is responsible for unemployment." Explain.

(6) "Negligence towards agriculture has increased the problem of unemployment in India." Explain.

(7) "Speed and expansion of green revolution can solve the problem of unemployment." Explain.

(8) Give the information about Mahatma Gandhi National Rural Employment Guarantee Programme.

5. Answer the following questions in detail :

(1) What are the reasons of unemployment ? Describe any five in detail.

(2) What are the measures to solve the problem of unemployment ? Explain any five in detail.

(3) Explain any three schemes introduced to solve the problem of unemployment.

Glossary

Prosperity	:	That stage of trade cycle in which business is at higher position and because of high demand economy is profit oriented. There also exist high rate of capital investment and employment.
Depression	:	Lack of effective demand creates surplus of supply. This reduces the market price further, is a stage of low capital investment and employment.
Supply of active laboureres	:	Supply of labour who are capable willing and ready to work at current wage rate.
Developed Nation	:	Nations which are economically developed. e.g. America, Britain.
Developing Nation	:	Nations where the process of economic development is going on for ex. India.
Labour Supply	:	Total number of employed and unemployed people able and willing to work.
Capital Intensive Technique of Production	:	A technique of producing goods where units of capital are more than units of labour.
Labour Intensive Technique of Production	:	A technique producing goods where units of capital are less than units of labour.
Capitalist Economy	:	An economy where all factors of production are owned by private sector and decision regarding production are taken by market mechanism keeping in mind the objective of profit.
Public Sector	:	Units whose ownership, capital investment, administration is with government.
Mobility of labour	:	Movement of labour from one place to other place or one business to another business for employment.

7 Population

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Introduction

It becomes inevitable to discuss about the increasing population when the world population has crossed 7 billion mark and India's population has reached 1.25 billion. The basic responsibility of every Government is to fulfil the basic requirements of its growing population. For this, the country's natural resources assume utmost importance because only with the help of natural resources, economic development becomes possible. Here between population and natural resources, there are two aspects.

(1) As population increases, the limited natural resources depletes fast and in the long run it becomes dangerous for the future generations.

(2) When unskilled population rises, the natural resources will not be utilised in the best possible manner which proves to be a barrier for the economic development of a country.

So, a study of population for an economy becomes very essential. Rise in population is the root cause of most of the problems in an economy.

7.1 Meaning of Population Explosion

India's death-rate has fallen rapidly and as against it, birth-rate has not fallen to that extent, which has resulted in rise in net population which is known as population explosion.

Population rise is the most important and biggest reason for the various problems faced by the world. The world has never ever witnessed such a fast rate of growth of population as in the present period and India is not an exception.

Between 1931 and 2011, there has been a continuous rise in population. In the year 1951, population of India was 36.1 crores which has increased to 121.02 crores in the year 2011. i.e. in the span of 60 years population has increased by 85.7 crores and average rate of growth of population was around 2.5 percent. More population and high rate of growth of population along with very high rise in population after 1970 is identified as population explosion.

7.2 Population Trends in India

Trends of population in India includes, size of population, population growth rate, birth-rate, death-rate, rural-urban population, proportion of female to male population etc. and their related statistical information alongwith their interpretation and analysis.

The very first population census was conducted in 1871 owing to the initiative of Jamshedji Tata. After that, a systematic census was conducted in 1891 and there after it has been conducted every 10 years. The first census of independent India was conducted in 1951.

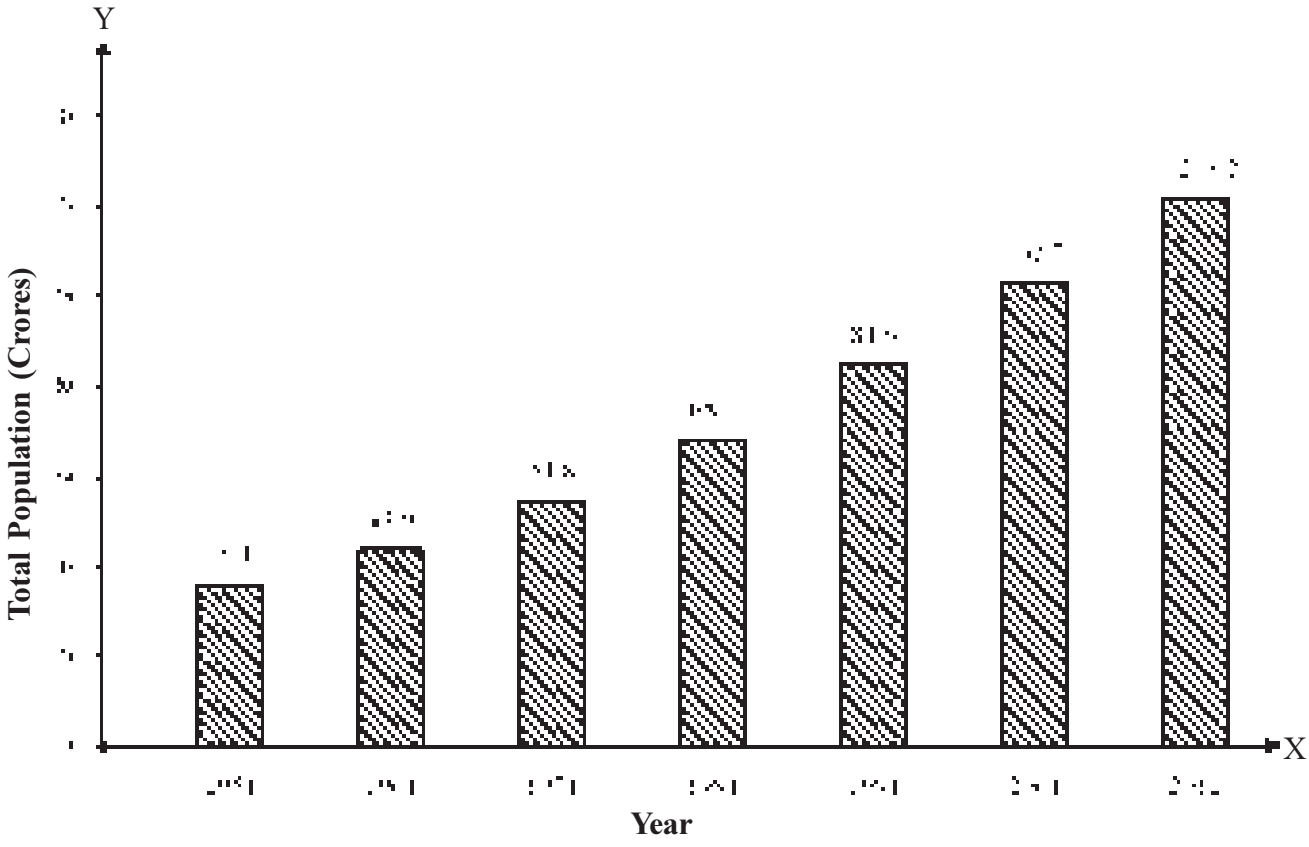
7.2.1 Size and Growth Rate of India's Population

Size of population refers to the total population in India during different periods or the numbers and percentage increase in population is known as population growth. The following table represents size of India's population and its population growth rate.

Table 7.1 Size of India's population and population growth rate (1901 to 2011)

Year	Population (In crores)	Average yearly growth rate of population (percent)
1901	23.8	+0.08
1911	25.2	+0.57
1921	25.1	–0.03
1931	27.9	+1.04
1941	31.9	+1.33
1951	36.1	+1.25
1961	43.9	+1.96
1971	54.8	+2.20
1981	68.3	+2.22
1991	84.6	+2.16
2001	102.9	+1.97
2011	121.02	+1.64

Source : Census of India, 2011



Graph 7.1

Analysis or Conclusions :

(1) Between 1901 and 1921, the rate of growth in population was slow. In the decade 1901 to 1911, there was 5.7% increase in population while in the decade 1911 to 1921, there was a decrease in the rate of population to the extent of – 0.3%. The main reason for this decrease is a high death-rate. Frequent occurrence of famines led to various diseases like Cholera, Plague, Tuberculosis, Malaria and Influenza leading to high death-rate.

(2) Except for 1921, the rate of population growth was high, in all the years. Hence the year 1921 was considered as the 'year of great divide'. After 1921, in every decade the population growth-rate has been high.

(3) In 1951, planning started in India : When planning started in 1951, population of India was 36.1 crores which rose to 102.9 crores after 5 decades i.e. in 2001. Thus the registered growth in population was 66.6 crores.

(4) In present times, population of India increases by 170 lakhs every year. Every year, an Australia is added to India's population.

(5) China is the most populated country (134.10 crores) of the world while India ranks second. In 1911, India's population was 25.2 crores and within one century, in 2011 it rose to 121.02 crores.

Demographers forecasted that by the year 2000, India's population will cross 100 crores mark and it has been proved right. According to World Development Report (1997) India's population

was 93 crores. According to the census of 2011, between 2011 and 2025, the estimated population growth in India will be 139.98 crores.

7.2.2 Male and Female Population in India (Gender Distribution of Population in India)

The number of males and females of the total population in different years in India depicts the male-female ratio.

Table 7.2 Male-Female Ratio in India's Total Population

Year	Male Population (in crores)	Female Population (in crores)	Total Population (in crores)
1951	18.55 (51.37 %)	17.56 (48.63 %)	36.11 (100 %)
1991	43.92 (51.90 %)	40.71 (48.10 %)	84.63 (100 %)
2011	62.37 (51.54 %)	58.65 (48.46 %)	121.02 (100 %)

Source : Census of India 2011

Note : Numericals given in the bracket depicts percentage.

Analysis and Conclusions :

(1) The consistent increase in the male-female population during the period 1951 to 2011 is a result of a high population growth rate.

(2) If it is presented in percentage, the male population in the total population was 51.37 % in 1951, which rose to 51.54 % in 2011. Thus it shows 0.2 % point rise in male population.

(3) In 1951, female population was 48.63 % which decreased to 48.46 % which depicts – 0.17 %. In comparision to males, decreasing ratio of female population is a matter of concern. This fall in female population is a challenge for the future of our society.

7.2.3 Gender Ratio in India (Extent of Female per 1000 Males) :

The number of females in the country per 1000 males is identified as Sex ratio or Gender ratio or female-male ratio.

Gender ratio occupies an important place in the study of population. Falling number of females per 1000 males creates various implications in the country. If there is skewed gender ratio, number of problems arise in the economy regarding marriage, family, reproduction, etc. By getting a clear picture of the gender ratio, it is possible to understand the causes of adversity in gender ratio and efforts can be made to solve the same.

There are various developed countries, where the gender ratio is more i.e. females are more than 1000 for every 1000 males. In India, with the exception of Kerala, all other states have low

female-male ratio. According to 2011 data for every thousand males, there were 1084 females in Kerala. The lowest female population per 1000 males was 879 in Haryana.

It has been found that there are social, cultural, economic factors responsible for the adverse female-male ratio. In Indian Society, the status of women has been low since ancient times. Due attention was not given to nutrition, health, education and overall up bringing of daughters. The Dowry system also contributed towards the neglect of girls. Apart from this, early marriage, frequent child births had adverse effect on the health, leading to high death-rate among minor and adult females. All this leads to low female population as compared to males.

Table 7.3 Gender Ratio in India

Year	Number of females per 1000 males (India)	Number of females per 1000 males (Gujarat)
1901	972	954
1931	950	945
1961	941	940
1991	927	936
2001	933	921
2011	940	918

Source : Census of India 2011

Analysis or Conclusions :

(1) Between 1901 to 1991 for every 1000 males, number of female population has been decreasing. But 2001 to 2011 was a period in which female population per 1000 males increased negligibly, thanks to "Beti Bachao" programme and encouragement given to the birth of girl child.

(2) If we talk about Gujarat, the period between 1901 to 2011 saw a consistent fall in female population per 1000 males, which creates social and cultural implecations. If we discuss the reasons behind this, it can be found out that the craze for or preference for male child and improvement in medical science has encouraged female foeticide. To stop this, the Government has imposed ban on sex detection legally. But its implementation largely has been only on papers. In states, which are economically prosperous like Punjab, Haryana and Gujarat, this disparity or imbalance between females and males is more.

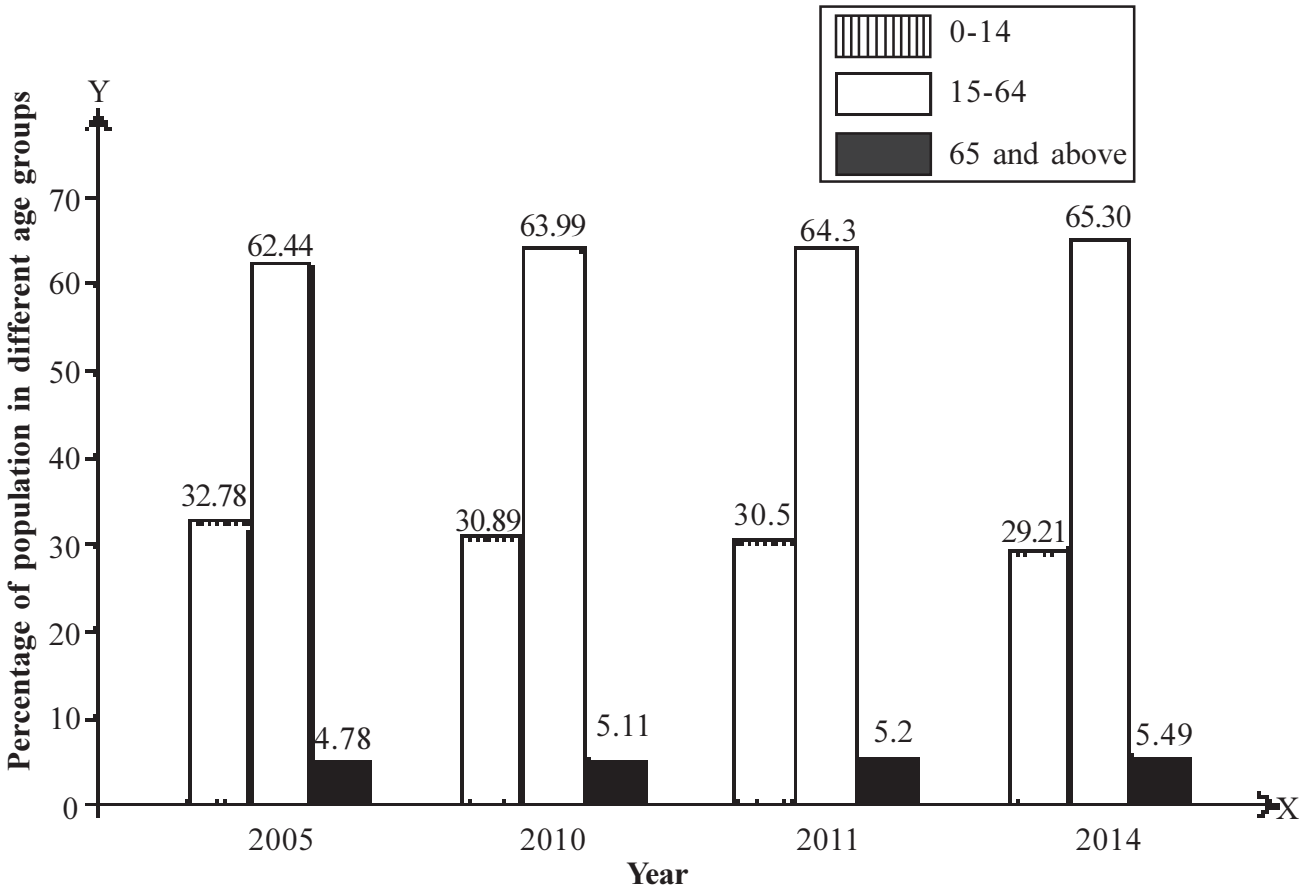
7.2.4 Age-Wise Population in India

Age-wise population in India refers to the classification of population in different age groups. e.g. the percentage of population in the age group of 0-14. A study of age-wise population helps in understanding aspects like working and nonworking age groups.

Table 7.4 Age-Wise Population of India

Age groups (years)	2005	2010	2011	* 2014 estimated
0 - 14	32.78	30.89	305	29.21
15 - 64	62.44	63.99	64.3	65.30
65 and above	04.78	05.12	05.2	5.49

Source : Census of India, 2011 *estimated



Graph 7.2

Analysis and Conclusion :

It is a known fact that changes in death-rate and fertility rate influences the age-wise classification of population which in the long rum will affect the family size and the labour market in the future.

(1) In 2005, people in the age group 0-14 was 32.78 percent which reduced to 29.21 % in 2014 which shows a decrease in birth-rate.

(2) In 2005 there were 62.44 % population in the age group to 15 - 64 years which increased to 65.30 %. In this age group, majority of the population are working population. Increase in the working population leads to economic development of the country which is considered to be significant.

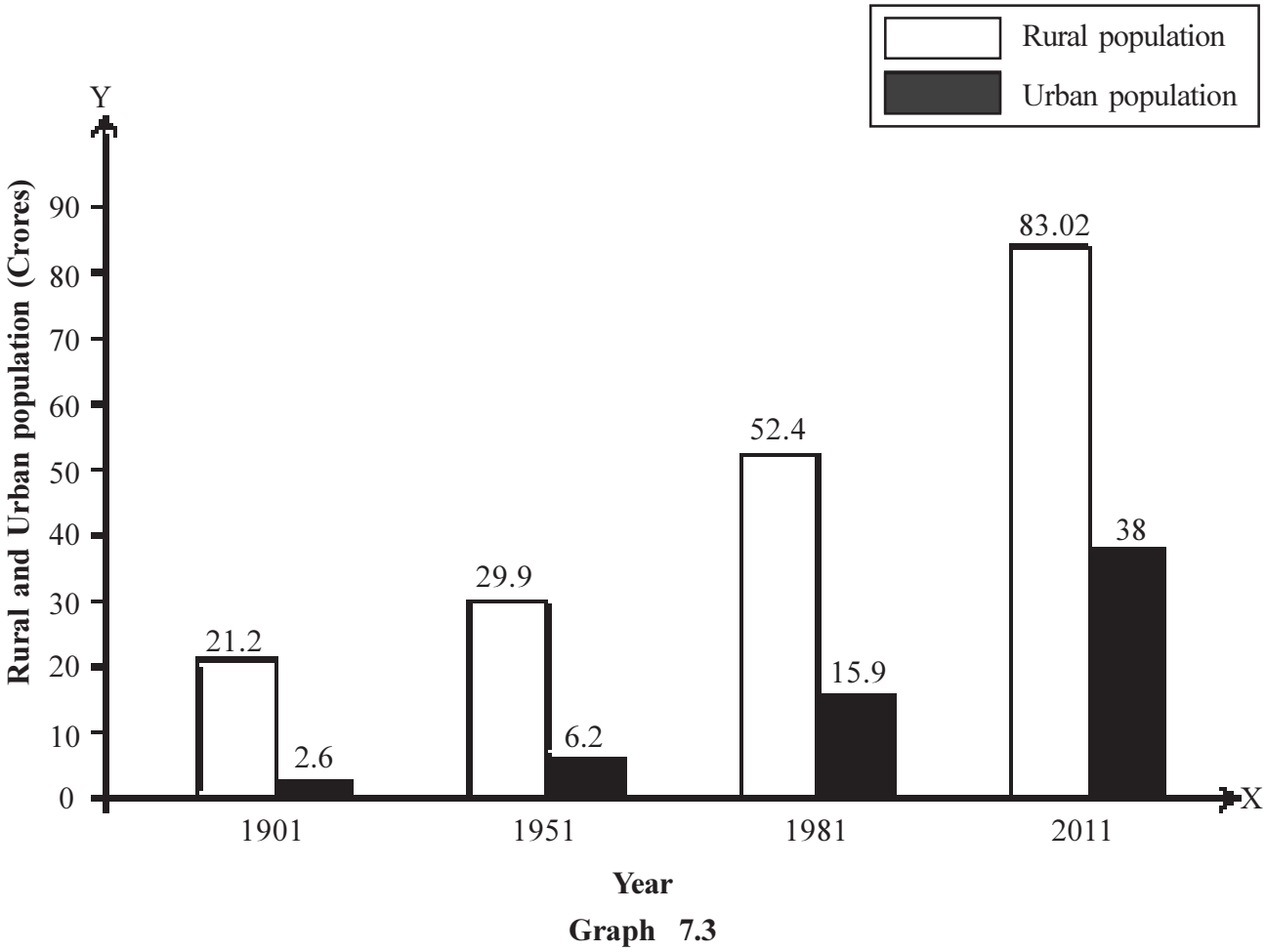
7.2.5 Rural and Urban Population in India

Number of people living in rural areas and the number of people living in urban areas constitutes the proportion of rural and urban population. The rural-urban population is influenced by various factors like extent of employment, education, health, social life, quality of life, economic returns, occupation, etc.

Table 7.5 Rural and Urban Population in India

Year	Rural population (crores)	Urban population (crores)	Total population (crores)
1901	21.2 (89.1 %)	2.6 (10.9 %)	23.8 (100 %)
1951	29.9 (82.8 %)	6.2 (17.2 %)	36.1 (100 %)
1981	52.4 (76.72 %)	15.9 (23.28 %)	68.3 (100 %)
2011	83.02 (68.0 %)	38.0 (32.0 %)	121.02 (100 %)

Source : Census of India, 2011



Graph 7.3

Analysis and Conclusions :

(1) In recent years, the urban population out of the total population is consistently rising. The problems of dirt and squalor arise due to increase in hutments. Administration will prove to be a failure in providing basic services like electricity, transportation, water etc. due to lack of infrastructural facilities. Due to improper waste management, pollution arises. Social evils will occur in the form of crimes, theft, loot, etc.

(2) In 1901, the rural population was 21.2 crores (89.1 %) which was 83.02 crores (68 %) in 2011. But there has been a registered fall in the percentage of rural population. This is because of lack of employment opportunities and the existence of widespread disguised unemployment and under employment in the rural sectors. There are large scale employment opportunities in urban areas leading to migration of people from rural to urban areas.

(3) Urban population was 2.6 crores (10.9 %) in 1901 which rose to 38 crores (32.0 %) in 2011 i.e. in every decade, percentage wise increase has been registered. This is because of availability of various physical facilities in urban areas, like electricity, schools, colleges, theatres, housing, good roads, transportation, communication facilities, cultural and entertainment activities, facilities for good medical treatment, etc. Many people have migrated from rural to urban areas because of abolition of Zamindari system and control of money lenders on business.

7.3 Causes of Rapid Increase in Population

There are two factors affecting increase in population : **Birth-rate** and **Death-rate**. The difference between the birth-rate and death-rate is the cause of increase in population. In other words, it can be said that high birth-rate and low death-rate has led to population increase.

7.3.1 Meaning of Birth-rate : The birth-rate depicts the number of children born for every 1000 people during the given year.

$$\text{Birth-rate} = \frac{\text{The number of live-births during a given year}}{\text{Total population}} \times 1000$$

Birth-rate is not depicted as percentage, but for every 1000 people how much is the addition taking place is shown. On the basis of birth-rate the increase in the population is known and the data on birth-rate helps in deciding the population policy.

Table 7.6 Extent of birth-rate in India

Year	Birth-rate (per 1000 persons)
1951	39.9
2011	21.8

Source : Census of India, 2011

Analysis and Conclusions :

(1) In 1951, the extent of birth-rate in India was 39.9 which decreased to 21.8 (39.9 – 21.8 = 18.1 difference) in 2011, which shows a slow reduction in the birth-rate. The main reasons for this, are low level of education, preference for male child, low income levels, etc.

7.3.2 Meaning of Death-rate : The death rate depicts the number of people who die per every 1000 people during a given year.

$$\text{Death-rate} = \frac{\text{No. of people who die in a given year}}{\text{Total population}} \times 1000$$

The decrease in population can be understood from the death-rate. The reduction in the total population in a particular manner can be understood by measuring the total number of deaths in a year.

Table 7.7 : The extent of death-rate in India

Year	Death-rate (per 1000 persons)
1951	27.4
2011	07.1

Source : Census of India, 2011

Analysis and Conclusions :

(1) The death-rate in India in 1951 was 27.4 which fell to 7.1 in 2011 (27.4 – 7.1 = difference 20.3). The fall in death-rate is much higher than the fall in birth-rate. The main causes are control of famines, improvement in quality of life, nutritious food, increase and improvement in medical services, spread of education, improvement in medical science and research in the field of surgery, control of infectious diseases, etc.

7.3.3 Causes of High Birth-rate : Causes of high birth-rate in India can be classified under three heads : Social factors, Economic factors and other factors.

7.3.3.1 Social Factors :

(1) Universality of Marriage : In India marriage is a religious ritual. The society doubts an unmarried person. To escape from this, a man and a woman enter, into an institution of marriage. Even disabled people are not exceptions. Compared to advanced countries, in India most women marry. This universality of marriage leads to high birth-rate.

(2) Early Marriage and Widow Remarriage : Child marriage is prevalent in many parts of the country despite, laws banning child marriage. As they get married at an early age, their fertility span is very long. This results in the birth of more children.

The widow remarriage act in India which has been supported by many and thus widow remarriage has become common. Therefore it has resulted in high birth-rate.

(3) Preference for a Male Child : Indian society is male dominated and more importance is given to sons rather than daughters for the following three reasons :

(1) It is believed that there is a hell named 'poo' and a son's birth can stop them from reaching this hell. (2) For procreation. (3) To support them financially during old age.

Due to these three reasons, families give birth to more children expecting a son and in the process their family size becomes large.

(4) Joint Family System : There is the prevalence of joint family system in the rural areas of India. As a result the financial responsibility of the upbringing of a child is distributed among all the family members, hence, a child does not become a burden leading to high birth-rate.

7.3.3.2 Economic Factors :

(1) Low Level of Education : Education and population growth has a complex relationship. This is more so, regarding female education. Inadequate education makes it difficult to understand the need for small families and as a result the family size tends to become large. Education and the number of children in a family have inverse relationship all over the world. It has been found that as compared to illiterate women, the women who have had primary education gives birth to less number of children. This proves true for middle school educated and secondary school educated as against primary school educated women. From this experience, it can be said that the birth-rate is high because of illiteracy and low education.

(2) Low Level Income : When the income level of a family is low, the birth of a child is considered to be an asset rather than a burden. It is commonly said, "more the merrier". It is expected that child also contributes to the income of the family in future. Even today we see children working in small eateries or in tea stalls.

(3) High Infant Mortality Rate : "Out of every 1000 children born in a given year, the number of child deaths before one year of age is known as infant mortality rate".

Table 7.8 Extent of Infant Mortality Rate in India

Year	Infant Mortality Rate (for every 1000 live births)
1951	146
2011	41.40

Source : www.data.worldbank.org

The extent of infant mortality rate is quite high in India in comparison to various other developed counties. In India, infant mortality rate in 1951 was 146 which fell to 41.40 in 2011 but still, this rate is considered to be quite high. The main reasons for this high infant mortality rate are poverty, less care given to girl child, lack of nutritious food, frequent abortions among women, age-old practices in the upbringing of a child, inadequate medical facilities, less gap between two children etc. are some of the reasons which leads to a high tendency of birth-rate.

7.3.3.3 Other Factors :

(1) High Fertility Rate : In a given year, out of every 1000 females in the age group of 15-49 years, how many live children are given birth, is what is known as fertility rate. In the Indian population structure, high fertility is a speciality. Let us analyse this speciality with reference to the women in the age group of 15-49 years.

In 1961, the average of women in this age group gave birth to 6 children, fell to 3 in 2011. Still this is considered to be high and 2 reasons can be attributed to this high rate. (1) Early

marriage leads to longer fertility period for women. (2) The proportion of unmarried women in the total number of women in the fertile age group is very low.

(2) Lack of Family Planning Information : Family planning refers to decisions on the size of family and maintaining gap between two children based on proper understanding i.e. a planned parenthood. In India, poverty, social customs and religious beliefs combined with low level of education has acted as obstacles to family planning. Moreover, lack of knowledge regarding the instruments of contraception and sometimes scarcity of those leads to high birth-rate.

7.3.4 Causes of Low Death-rate :

7.3.4.1 Improvement in Standard of Living : Standard of living of the people has improved because of the rise in income of the people, due to economic development. People of our country, have now started getting better quality food grains, better housing, health care and education which has led to decrease in death-rate.

7.3.4.2 Control Over Epidemics : In the beginning of 20th century, there were life threatening diseases like, Plague, Measles, Tuberculosis, Malaria, etc. which raised the death-rate, but at the end of 20th century, development resulted in extra ordinary progress and innovation of varied immunization vaccines. This resulted in successful control over the aforesaid diseases and death-rate.

7.3.4.3 Control on Drought : Science and technology led to control over drought. As a result, the deaths caused by hunger could be stopped. Considerable increase in the supply of food grains was registered after 1966, when green revolution was introduced in India. Food grains can be easily transported from abundant areas to scarce areas and thus we could prevent starvation related deaths.

7.3.4.4 Protection against Natural Calamities and Transportation Facilities : Earlier natural calamities like earth quake, Tsunami, landslides, floods, famines, etc. led to high death-rate. If such calamities occur now in any part of the country then immediate relief can be made available by enabling the availability of basic requirements like food grains, medicines, etc. thereby reducing the death-rate.

7.4 Measures to Control Population

7.4.1 Mass Education and Awareness :

It is necessary to make people realise the importance of small families, to reduce birth-rate. For this it is necessary to propagate and spread education, specially by making society aware through various programmes. Telecast through visual media. In schools and colleges, expert lectures need to be arranged, and awareness can be created through plays, mimes, songs etc. In the year 2000 population policy, emphasis was placed on women upliftment. Demographers believed that education is the best method for population control.

7.4.2 Effectiveness of Family Planning Programme :

To make family planning programme more effective, alongwith public awareness, family planning services and incentives were also increased. It is essential to create simple, easy and affordable availability of contraceptives. In the population policy of 2000, changes were made in the programmes related to family planning by reducing the importance of sterilisation and emphasis was placed on preventing unwanted pregnancy through preventive methods.

7.4.3 Increasing the Age of Marriage and Raising the Status of Women :

By raising the legal age of marriage particularly for women, reduction in birth-rate can be achieved. As per the population policy of 2000, encouragement was given to raising the age of marriage for women from 18 to 20 years if possible.

If women's status is raised in the society in comparision to men and if equal opportunities are given to in the matters of education and employment, such women will control the family size.

7.4.4 Incentives and Disincentives :

The incentives and disincentives that are offered by the Government, play a very important role in family planning. For instance, those couples who undergo sterilisation are given financial compensation by the Government.

China has adopted disincentives or discouragement to control rising population, in which number of facilities are withdrawn from those couples who have two or more children. But recently some relaxations have been given. In India, in the elections of local self government, couple with more than two children cannot contest in elections.

7.4.5 Expansion in Medical Services and its Growing Effectiveness :

In India death-rate has come down but it is still higher than some of the developed countries. With the help of science, there has been an increase in the services and facilities for child birth and health of the new born. Universalisation and effectivness of vaccination and to make it effective, awareness regarding communicable diseases like "AIDS", is to be increased; reduction in various infectious diseases and sex related diseases, etc. can bring about a reduction in death-rate and infant mortality rate.

India was the first country in the world to introduce population policy to control population. A committee was set up to frame New Population Policy of 2000 under the Chairmanship of Dr. M. S. Swaminathan.

The various measures in the population policy will result in increase in social welfare which in turn will improve awareness against population growth.

Exercise

1. Choose the correct option for the following questions :

(1) Who was responsible for the introduction of population census for the first time in India ?

(a) Jamshedji Tata (b) Swaminathan

(c) Deendayal Upadhyay (d) Dadabhai Naoroji

(2) What is the estimated population of India between 2011-2025 ?

(a) 155 crores (b) 130 crores (c) 139.98 crores (d) 180 crores.

(3) In which year the first population census was under taken in India ?

(a) 1901 (b) 1951 (c) 1871 (d) 1921

(4) How much was India's population in 1901 ?

(a) 22.2 crores (b) 25.2 crores (c) 102.7 crores (d) 23.8 crores

(5) How much was India's population in the year 2011?

(a) 36.1 crores (b) 54.8 crores (c) 121.02 crores (d) 23.8 crores

(6) In which year was planning started in India?

(a) 1901 (b) 1951 (c) 1950 (d) 2000

(7) Which country in the world, has the largest population?

(a) China (b) India (c) Australia (d) America

(8) Which state in India has the highest female population per 1000 males?

(a) Gujarat (b) Maharashtra (c) Kerala (d) Uttar Pradesh

(9) How much was the female population per 1000 male population in India in 2011?

(a) 930 (b) 950 (c) 940 (d) 970

(10) What was India's birth-rate in 2011?

(a) 21.8 (b) 36.8 (c) 72.0 (d) 23.8

2. Answer the following questions in one line :

(1) What has been the basic cause for all the problems?

(2) What is meant by working and non working population?

(3) What was the population growth rate in 2011?

(4) Where does India stand in the world population order?

(5) What was the female population per 1000 males in Gujarat in 2011?

(6) What is meant by classification of population according to age group?

(7) Which age group has the highest population in India?

(8) State the percentage of rural urban population in India in the year 2011?

(9) What is meant by infant mortality rate?

3. Answer the following questions in brief :

(1) Why is the year 1921 identified as the year of 'great divide'?

(2) What is meant by productive and unproductive population?

(3) Give the meaning of birth-rate and state the formula to calculate birth-rate.

(4) Give the meaning of death-rate and state the formula to calculate death-rate.

(5) Give the meaning of population policy.

4. Give pin pointed answers for the following questions :

(1) Explain population explosion.

(2) State the causes of low death-rate.

5. Answer the following questions in detail :

(1) Discuss in detail the gender ratio (number of females per 1000 males)

(2) Discuss in detail the causes for high birth-rate.

(3) Explain in detail the methods to control population.

Glossary

Population Explosion	:	In India, as the death-rate falls steeply but the birth-rate falls at a slower rate resulting in a steep rise in population is known as population explosion.
Population Trends	:	Population trends refer to acquiring data and interpreting important aspects of population like, size, rate of growth of population, birth-rate, death-rate, rural and urban population, female-male ratio etc.
Size of Population	:	Population size refers to total population in a country during different years.
Male-Female Ratio	:	Female-male ratio refers to number of females and males in the total population of a country in different years.
Gender Ratio	:	Gender ratio refers to number of females per 1000 males in a country.
Age-Wise Composition of Population	:	Distribution of total population of the country in different age group. e.g. 0-14 years, 15-64 years etc. is known as age composition of population.
Rural and Urban Population	:	Out of the total population of a country, how many people live in rural and urban areas, is known as a rural urban population.
Birth-Rate	:	In a given year, for every 1000 people, how many children are born refers to birth-rate.
Death-Rate	:	In a given year, the number of people who die for every 1000 population is known as death-rate.
Infant Mortality Rate	:	Infant mortality rate refers to number of children who die in a given year for every 1000 live births before completing their first year.
Population Policy	:	The steps taken by the Government to bring the growth rate of population to the required level is known as population policy.
Working Population	:	Out of the total population, the number of people, working is known as working population. In other words, the population which contributes to the economic production. e.g. people in the age group 15-64 are included in working population.
Non-Working Population	:	Those people who do not contribute anything to the productive activities of the country is known as non working population. e.g. women, children and old people.

8 Agriculture Sector

- **Introduction**

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Introduction

Agriculture sector is the primary and important sector of all economies of world. This sector is not only providing foodgrains, vegetables, fruits, flowers, but it also provides raw material to the industrial sector. The agricultural productivity of every country of the world is different. That gives production, employment and income generation in various proportions.

8.1 Importance of Agriculture Sector

Since ancient times, India has been an agricultural nation, due to a high dependency on this sector for agriculture production, for employment and for exports. It is like the life-line of India. So, it has the status of being the backbone of the economy. Indian economy is dependant on agriculture for various aspects. Then main reason being, if Indian agriculture sector fails to produce foodgrains, vegetables, fruits and flowers (are) not only affect but raw material, which are cash crops and used in industries that also fails in that situation agricultural goods are not be available in enough quantity. Therefore they become costlier, which influences the life of people. In addition to that big proportion of India's population (68.8 % population as per 2011 census) live in rural

areas. And if agricultural production fails then the income of a big mass gets negatively affected. Due to this, they have to reduce demand of industrial products. Thus, on a one side industries are not getting enough raw material and on the other side industrial products are not adequately demanded. Thus, it can be said that agricultural failure, provide failure to industrial sector. And where both are badly affected, it is very obvious to say that the third sector, which is the service sector also faces fall in its demand and income. Agriculture sector fails then entire economy fails. In short once the agriculture succeeds then whole nation progresses. Hence, agriculture sector is known as the back bone of nation.

India utilises industrialisation since 1956 (Second five year plan). The Government of India has made efforts to industrialised the nation but even today India is known as an agriculture oriented economy. It should be noticed that due to planning efforts dependency on agricultural production, income, employment, export revenue etc. have been reduced. Inspite of this, even today the development rate of economy is dependent on the growth of agricultural sector.

8.2 Present Situation of Agricultural Sector in India

India has been an agriculture oriented economy before the british rule, during the british rule and even after the british rule. During planning period, industrialisation is mainly focused upon and due to that as compared to past, the present scenario of agriculture shows abnormal changes. Presently, agriculture sector provides much more employment, production and export income as compared to the past, but changes have been prevalent in these areas. Though agriculture sector provides maximum employment to the economy, its contribution to the share in total revenue (National income) as compared to the other sectors of economy is the least. To understand these changes about their type and direction, let us examine several factors of present scenario of agriculture.

8.2.1 Contribution in National Income

Table 8.1

Year	Share of Agricultural Sector in National Income (in percentage)
1950-51	53.1
1960-61	48.7
1970-71	42.3
1980-81	36.1
1990-91	29.6
2000-01	22.3
2011-12	13.9

Source : Economic Survey, 2011-12

Usually, the income of agricultural sector is also known as the income of primary sector. It includes agriculture crops, poultry farming, fisheries and cattle rearing. As per economic survey of 2011-12, contribution of agriculture sector in national income (GDP) was 53.1 % in 1950-51 and had reduced upto 13.9 % (at constant prices) in the year 2011-12 due to greater emphasis on industrialisation since 1956. This fall in contribution in national income of agriculture sector is due to the speedy progress of non-agricultural sector. The development of agricultural sector in India has become a complex issue.

8.2.2 Employment :

It is the agricultural sector which provides maximum employment in India. At the time of independence, 72 % population was engaged in agriculture and allied agricultural activities (cattle rearing, fisheries, forest products, poultry farming, etc.). After independence of India the development process has become speedier, specially development of industries and service sector achieved much faster growth than agriculture sector, therefore, employment dependency on agriculture has been reduced. In the year 2001-02 it was 58 % which came to 49 % in the year 2014-15 as an employment providing sector.

8.2.3 Export Income :

Indian agriculture helps our coutry to earn foreign exchange by exporting necessory exports and it helps to import necessary goods which are not produced or produced less in the country. During the independence period, the total contribution of India's total export earnings of 70% has been obtained from agriculture. But, due to the development process, industries and service sector are at the top most and thus the contribution of agriculture sector in export earnings has reduced. It can be noted that in the year 2013-14, the contribution of agriculture in the total export earnings was 14.2%.

8.2.4 Living Standard

Agriculture is the basic support of the world's population. Agriculture has continuously improved life of people in India also. Agriculture sector produces two types of crops : Food grains and Cash crops. All the cereals are included in food grains. Due to production of these food grains, India became self sufficient. Cash crops are cotton, jute, ground nut, oil seeds, sugarcane, etc. are used as raw material. Food items are mainly included in food grain crops / and these have shown rise in production. Present farmers are also engaged in production of vegetables, fruits, flowers etc. Therefore, it can be said that agriculture sector is satisfying requirement of agricultural goods of people. Average food grain availability was 395 grams per head per day in the year 1951 which increased to 511 grams in the year 2013 even there was rise in population. Therefore it can be said that agriculture sector is satisfying requirement of people in enough quantity and due to that average life span of people is also increased.

8.2.5 Growth of Agriculture Production :

Table 8.2

Sr No.	Crop	1950-51	2013-14
1.	Food grains (in metric ton)	51.0	264.4
2.	Pulses (in metric ton)	8.4	19.6
3.	Sugarcane (in metric ton)	69.0	348.0
4.	Oilseeds (in metric ton)	5.1	32.4
5.	Cotton (in metric bale)	2.1	36.5

Source : Ministry of Agriculture, Government of India 2015

Total production of agriculture in India has increased. As shown in the schedule production of food grains was 51 metric tons in 1951 which increased to 264.4 metric tons in 2013-14. That shows about 2.5 times rise of it. Where as production of sugarcane was 69 metric tons in 1951 which increased to 348 metric tons in 2013-14. That also shows rise about five times. Here, oilseeds and cotton show tremendous rise. In which oilseeds was 5.1 metric ton in 1951 which rose to 32.4 metric tons in 2013-14. That means a rise of 6.35 times and cotton was 2.1 metric bales in 1950-51. It rose to 36.5 metric bales in 2013-14. That mean rise of 17 times. That becomes possible only due to rise of cultivated land and rise of hectre wise productivity.

8.2.6 Base for Industrial Development

Agriculture is a base for industrial sector of India. Agriculture sector provides required raw material to industrial sector, to do production as per capacity of industrial sector to attain possible development. In addition to that rural areas are becoming big market for the industrial products because about 69 % population of India live in rural areas. Here, it is noticeable, that 69% population of rural population has main source of income from agriculture. Due to that only rural areas are demanding industrial products like television, freeze, bike, mobile, etc.

8.3 Causes of Low Productivity of Agriculture

India is agriculture oriented nation then also it has many agriculture related problems. One of the major problems is a low agricultural productivity. In reality agriculture productivity, it can be in terms of productivity per hectare or income per hector are being measured. Agriculture productivity is very low as compared that of the world. Responsible factors for that are as follows :

8.3.1 Institutional Factors

8.3.2 Technological Factors

8.3.3 Other Factors

8.3.1 Institutional Factors :

The influence of those farmers who work in the institution and are felt in the physical, social, economic and legal factors are institutional factors such factors are negative in India due to that

agriculture development is very low or of a very least level. Therefore, low productivity of agriculture being seen.

Zamindari system, Mahalwari system, Ryotwari system are land revenue collection systems implemented by Britishers, facility of agriculture finance, agriculture marketing system, land ownership system etc. are included in institutional factors. These insitutional factors remain resistant or negative. Due to this agriculture productivity has also remained low.

8.3.1.1 Land Revenue Collection Systems : Three revenue collection systems - Zamindari system, Mahalwari system and Ryotwari system were prevalent during India's independence. Tenants of land or landless labourers were cultivating the land under these systems. A large share of crop or just by leaving substistance level of farmer the entire crop was compulsorily taken by the landlords as rent of land. This was the reason why farmers were not interested in increasing productivity as they did not make efforts to increase production or they were not ready to implement any innovations, so agricultural production remained about stagnant. As a result, agriculture production did not increase as per nation's requirement and not according to the requirement of the cultivators.

After independence to protect tillers and to control rent of land, "Tillers land" act was passed. But this act was not completely implemented and due to that farmers are not exploitation free. Finally, productivity of agriculture sector become series issue.

8.3.1.2 Agriculture Finance : Majority of the farmers are facing poverty in India and they are in need of agriculture finance. To buy fertilisers, seeds, pesticides, etc. they require finance to do cultivation. But, since independence a great role is played by private money lenders. 71.6 % agriculture finance business was managed by money lenders in 1951. They were providing finance at a very high rate of interest, not even that, they were doing manipulation of account to exploit poor farmers.

After independence government had nationalised banks which has reduced the importance of money lenders. Government has expanded insitutional agriculture finance by constructing regional rural banks in 1975 and National Bank for Agriculture and Rural Development (NABARD) in 1982. Due to all these efforts, the role of money lenders fell down to 27 % where remaining entire agriculture credit is managed by institutes. These factors prove that farmers are paying higher cost to avail credit and due to that their revenue (profitability) remain very low. As profits are remaining very low farmers are not much interested to improve productivity on to do agriculture oriented work and agricultural productivity has also remained low.

8.3.1.3 Agriculture Marketing : Due to weak infrastructural facility Indian remote villages are not having adequate road or transportation facility to connect agriculture markets. Even agriculture markets have different rates of produce at the time of season and at the end of season. Majority cases high price benefits go to traders and hoarders. Farmers, who are under the debt are forced to sell their crop before crop get ready to local lenders and brokers. Farmers are least informative so they do not have knowledge of market, knowledge of market rates, selling procedure. Therefore, they are not able to get good returns of their crop and due to this they become pessimist.

8.3.1.4 Rural Social Stucture : Indian farmers are fatalist and having least information. Rural society is bound with old traditions and structure. As they are fatalist, they accept problems given by nature and accept situation of scarcity. So, they do cultivation for their substistance only. They are not having motivations to attain, economic development, development of cultivation, increase in income. This is the reason, why agriculture, which is centre point of rural areas is having low productivity.

8.3.2 Technological Factors :

Indian agriculture sector utilises old traditional technology, old equipments, ideologies, techniques, etc. which make agriculture weak. Even in the present, farmers use plough and bullock instead of tractors. They use traditional seeds instead of hybrid seeds which give low productivity. They use cow dung as manure instead of chemical based fertiliser which give low productivity. Indian farmers use very less proportion of pesticides and newer technology to protect crops. Therefore, Indian agriculture sector moves ahead very slowly.

8.3.3 Other Factors :

8.3.3.1 Pressure of Population : One of the big reason for low productivity of agriculture sector is population pressure on it. Population pressure on agriculture sector can be understood by dependancy on agriculture about employment. At the time of independence 72 % population was engaged in agriculture that reduced to 58 % in 2001-02, which was giving 49 % employment in agriculture in 2013-14. Thus, burden on agriculture reduced, but, still it is higher than other sectors and even high compared abroad economies. Here, total produce of agriculture being distributed on the grounds of production or income among big mass of population, it shows low productivity of labour.

8.3.3.2 Lack of Economic Planning : Government of India has used first five year plan exclusively for agriculture sector. But, from the second five year plan (1956) India's economic planning centred to industries. The government has not taken that much efforts, not allocated time and money for the agricultural sector as compared to industrial sector. Finally, it can be said that, as agriculture sector has irregular and slow rate of development, government has not given help to it and due to that only Indian agriculture sector is in a worrisome condition.

8.4 Measures to Increase Agriculture Productivity

Low productivity of agriculture sector shows backwardness of agriculture sector. Agriculture sector needs improvement as it is a main occupation and very important pillar of Indian economy. In addition that, if agricultural productivity increases than income of rural economy will increase which will force to development of industry and service sector. It will also give solution of employment, urbanisation, migration and inequality of income. To improve productivity of agriculture following steps to be taken :

8.4.1 Institutional Measures

8.4.2 Technological Measures

8.4.3 Other Measures

8.4.1 Institutional Measures

To increase agricultural productivity economic planning has undertaken institutional reforms, which would be favourable for economic progress of agriculture.

8.4.1.1 Land Related Reforms : Law to abolish zamindari system, to protect tillers and to control rent are implemented in India so that it provides ownership of land to farmers and land labourers may have protection to till land. To stop exploitation of farmers and this way farmers may have big share of their crop. This may become cause to do more efforts to increase agricultural production. Overall it may increase agriculture productivity.

8.4.1.2 Availability of Institutional Credit : To provide (reach) credit and other monetary facilities, nationalisation of banks undertaken by India. Even National Bank for Agriculture and Rural Development (NABARD) which is body of RBI set up in 1982 to do special focus on agriculture sector and Regional Rural Banks (RRBs) and Land Development Banks (LDBs) developed under it to provide cheap and enough credit to Indian farmers. So that, they would have cheap and enough credit in order to increase agriculture productivity.

8.4.1.3 Improvement in Structure of Agriculture Marketing : To overcome the shortcomings of the system of agriculture marketing many important steps have been taken :

(1) Regulated markets have been set up.

(2) To classify the agriculture produce as per their quality "AGMARK" (Agriculture Marketing) has been introduced.

(3) National warehouse corporation and state warehouse corporation started to increase agricultural produce of farmers.

(4) Systems have been developed to provide information about prices of agriculture produce.

(5) To protect farmers from market price changes, bottom price being announced by government.

8.4.1.4 Agriculture Reaserch : Indian farmers are not able to do research as they are less educated therefore that duty is allotted to NABARD. It does many researches and it gives knowledge and training to farmers about it. So, farmer should not cultivate only with traditional technique but they produce as per rising demand and by that earn more income and start doing market oriented production. To include them in agricultural reform programs, collective rural development programs, Panchayati Raj, Integrated rural developemt programs, Jan-Dhan Yojana, etc. started to modernize the agriculture sector to direct them for increase in agricultural productivity.

8.4.2 Technological Measures

Compared to institutional measures, technological measures are more easy and fast to give benefits. Therefore, these changes have more importance in agriculture developmental strategies. They are as follows :

8.4.2.1 Improved Seeds : Improved seeds (Hybrid seeds) are developed by scientific inventions. These scientifically developed seeds give more production helps in producing crops

speedily and protect crop against diseases. India has achieved a notable rise in food grain production with the help of these type of seeds. Therefore, extra ordinary rise in food grains production is known at the place of agriculture revolution, 'as seed revolution'. National agriculture research committee, National seed corporation and agriculture universities give priority to seed development to increase agriculture productivity in reality.

8.4.2.2 Use of Chemical Based Fertilizers : Use of chemical fertilizer increased with the use of improved seeds in India. Chemical based fertilisers give enough nutrition to plant and helps it to grow rapidly. Therefore, these fertilisers are very beneficial to increase agriculture productivity. Nitrogen, phosphate, potash and other chemicals used as per crop. Chemical based fertilisers produced by public sector enterprises are also used India. Even fertilisers are imported and distributed at lower rates (subsidy rates)

8.4.2.3 Increase in Irrigation Facility : Indian agriculture sector depend on sky (for rain purpose) in majority cases but rain is quite uncertain. So it directly affects agricultural production and productivity. India has one of the big issues of agriculture which is inadequate facility of irrigation. If agriculture has to come out from uncertainly of rain and to provide certainty in irrigation facility, then different motive of small scale and of medium scale irrigation projects should be developed and this task should be prioritised. To expand the service of irrigation 'Development program of irrigation sector' and 'Infrastructural development fund' set up by India. In addition to that incomplete irrigation projects and to develop other facilities NABARD being assigned.

8.4.2.4 Use of Machines : One of the reasons for low productivity of agriculture is traditional equipment or machines. In reality, with the development of engineering and automobile sectors Tractor, Trailer, Thresher, Electric pump set, Oil engine, Pesticide sprinkler pump, etc. modern machineries are invented. These machines are very helpful to have more than one crop a year which increases productivity.

8.4.2.5 Pesticides : Ready crop has danger of various diseases and insects. To prevent crop from various diseases and to protect plants from insects scientifically develop pesticides are very useful. By using them, the loss of crop can be restricted which also will give high productivity.

8.4.2.6 Soil Testing : Soil testing is much popular in cultivation with the help of scientific techniques. That tests give information about land, it means, it is land favourable to crop or not can be known by tests. Even it gives information of deficiency of elements of soil. That helps to remove deficiency of land.

This way land can be made favourable to crop and it become capable to give high productivity. This test answers about favorability of land for crop or not so.

8.4.3 Other Measures :

To improve agriculture productivity farmers are needed to educate or they may be well inform about new techology to bring changes in their working pattern. Even they should awakened for bad customs of rural areas and can be explained about, not to believe in fatalism. New measures like agriculture fair can be used to increase agriculture productivity.

In addition to that, agriculture allied activities like cattle rearing, poultry farming, food processing, jungle and others can be used to reduce dependency of agriculture. That can increase agriculture productivity. If small scale industries can be expanded to rural areas, that kind of industries can become supporting to agriculture and that can make improvement of agriculture productivity easier and possible in reality.

8.5 Modern Agriculture

Indian traditional agriculture use organic manure, seeds, simple plough, bullocks and primary instruments. These instruments give very less productivity and the use of them was unable to satisfy agricultural requirements of entire nation. Therefore, since 1966 modern agriculture emerge in India. Modern agriculture uses modern inputs like hybrid seeds, chemical fertilisers, pesticides, new machines of agriculture, irrigation. Due to use of these modern inputs agricultural production increase entensively. This was counted as revolution. This revolution was of agriculture, therefore it was called Green Revolution.

8.5.1 Green Revolution :

Use of new technology of agriculture started from the year 1960-61 at seven districts of India as 'pilot project'. This known initially as IADP (Intense Agricutural District Program) that means Intensive agricultural programme for districts. Due to wonderful success with passing of time, it was applied to whole nation. When it was implemented to nation this was known as HYVP (High Yielding Varieties Program) that means program of high yeild products which is also known as "Green Revolution". It is also known as "Modern agricultural technology progarmme" or "Programme of seeds, fertiliser and water technology."

8.5.2 Multiple Cropping :

Multiple cropping can be obtained by different crops on a cultivated land area. Multiple cropping show nature of agricultural work. Normally two types of crops are seen : (1) Food grains (2) Non food grains which is also known as cash crops. Wheat, Rice, Coarse grains (Millet/bajra, Sorhum/juvar, Maize etc.) and pulses are included in food grain crops whereas different oilseeds (Groundnut, Sesame , Castor, Soyabean, Linseed, Sunflower, etc.) and sugarcane, rubber, cotton, jute, etc. are included in cash crops.

Reasons for multiple cropping are two : (1) Technological factors (2) Economic factors.

Technological factors : Multiple cropping in a area depends on its soil, environment, rain, etc. elements. For example, in Madhyapradesh after taking crop of millet/bajri, they take crop of Sugarcane, Tobacco, etc. on the ground of irrigation facilities. This way multiple cropping is possible due to capital, new seeds, fertilisers and credit facilities.

Economic factors : Economic factors are also important for multiple cropping. These economic factors are as follows :

(1) To maximise price and income (2) Availability of agricultural instruments (3) Size of farm (4) Protection of insurance (5) Tenure (Tenure avail from landlord) etc.

Availability or scarcity of these factors are responsible for selection of crop.

In 1950-51, approximately 75 % crop of food grains and 25 % crop of cash crops was taken up. After 1966, multiple crop have been seen due to use of inputs of 'Green Revolution'. In the year 1970-71, about 74 % of food grains, where about 26 % of cash crops were taken. It became as 64 % of food grains and 36 % of cash crops in the year 2006-07. But then again due to change in multiple crops in the year 2010-11 about 66 % of food grains and about 34 % of cash crop were taken. That can be said on the ground of details of Agricultural Statistics at a glance of 2010-11.

8.5.3 Crop Protection :

Agriculture productivity should increase with the use of pesticides but India has very less use of pesticides per hectare. Economic survey 2015-16 shows that India has only 0.5 kg per hectare use of pesticides where America has 7.0 kg, Europe has 2.5 kg, Japan has 12 kg and Koria has 6.6 kg use of pesticides. This is the reason why 15 to 25% Indian crop get spoiled by insects, diseases, weed, cattles and birds, which may be saved.

Improper information of pesticides, poor quality pesticides and lack of information of proper use of pesticides are big issues of India. Improper use of pesticides in India create big danger to mankind and environment.

CIBRC (Central Insecticide Board and Registration Committee) is appointed to inform Indian farmers abour various types of pesticides and its level of poison. That publish different booklets to guide farmers which explain about quantity of pesticides, time of usage and level of poison. This information should be spread among farmers, to make pesticides environment friendly. Pesticides should be effective but non poisonous and cheaper to encourage small and marginal farmers for increasing agricultural productivity.

8.5.4 Agriculture Research

ICAR (Indian Council of Agricultural Research) is only institute which manages agricultural researches. It provides arrangements for research and also gives adequate help. It is also spreading awareness of Horticulture, Fishering and Cattle rearing science. ICAR has done pioneer work for expansion of green revolution. It has made appropriate efforts to have national food availability and nutrition.

Exercise

1. Choose the correct option for the following questions :

(1) How much percent population live in rural area as per 2011 census ?

(a) 68.8 % (b) 72 % (c) 60 % (d) 74 %

(2) How much was the contribution of agriculture in national income of 2011-12 ?

(a) 53.1 % (b) 42.3 % (c) 13.9 % (d) 59.9 %

(3) How much employment was provided by agriculture in the year 2014-15 ?

(a) 72 % (b) 49 % (c) 26 % (d) 24 %

(4) When was NABARD constructed ?

(a) 1947 (b) 1969 (c) 1975 (d) 1982

(5) When was the utilization of green revolution applied on overall India ?

(a) 1961 (b) 1966 (c) 1969 (d) 1991

(6) How much is the use of pesticides per hectare in India ?

(a) 0.5 kg (b) 2.5 kg (c) 6.6 kg (d) 7 kg

(7) Which is the institute of agriculture research ?

(a) ICAR (b) CIBRC (c) Regional rural banks (d) RBI

2. Answer the following questions in one line :

(1) When was the second five year plan started ?

(2) How much is the export income of agriculture ?

(3) Give names of methods to collect land revenue under British rule.

(4) Give examples of cash crops.

(5) Which corporation was made to store agriculture product ?

3. Answer the following questions in brief :

(1) Explain about factor of population pressure on low productivity of agriculture.

(2) Explain about agriculture credit to improve agriculture productivity.

(3) Why is India known as agriculture oriented economy ?

(4) Explain role of agriculture to improve life standard of people.

(5) State different names of Green Revolution.

4. Give answers to the point for the following questions :

(1) Explain crop rotation.

(2) What is Green Revolution ?

(3) Discuss about agricultural research.

(4) Discuss any three factors/matters/points to prove importance of agriculture.

(5) Explain any three reasons for low productivity of agriculture in India.

5. Answer the following questions in detail :

(1) Explain about agriculture pattern.

(2) Discuss the reasons for low productivity in Indian agriculture.

(3) State measures to improve productivity in agriculture.

Glossary

National Income	:	Value of goods and services produced in a year with the help of factors of production.
Export	:	Sale to foreign economy is known as export.
NABARD	:	It is institute of Reserve Bank of India. It is focusing only on monetary functions of agriculture sector, due to that it is known as central bank of agriculture (NABARD – National Bank for Agricultural and Rural Development)
Population Pressure	:	When big mass of population live in a small area or big mass of employment depends on a area then it can be called that there is population pressure in that area.
Green Revolution	:	Fast technological growth attained by agriculture with the help of irrigation, fertilizer, seeds, pesticides and machines known as Green Revolution. In other words, Green Revolution is, in short period what speedy growth achieved by agriculture with the help of technological advancement.
Cash Crop	:	Mainly crops used as raw material in industries known as cash crops. Normally, these crops are non food grains crops.
Thresher	:	A machine which separates seeds from husks or straws.

9 Foreign Trade

- **Introduction**

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Introduction

The geographical boundaries of our country like all countries is determined. There are legal restrictions and sometimes prohibitions on crossing geographical boundaries of a country. Then, have we ever thought that how do we have a Korean refrigerator, Japanese TV in our homes, German cars on our roads, American tractors in our farms, UK made shoes and garments in our malls ? Do we know that bulk of the petrol and diesel with which our vehicles run comes from Gulf countries ?

Hence, we will understand in this chapter that the activity of exchanging goods, services, technology etc. by a country across the geographical boundary is called international trade. Besides, we will also understand some important aspects of international trade.

9.1 Meaning of Domestic and International (Foreign) Trade

Trade means a commercial (business) activity which involves exchange of goods, services, resources, capital, technology, know - how, intellectual property etc. In other words, trade is an activity in which such goods are exchanged for earning profit.

Activity of trade which takes place within the geographical boundary of a nation is called internal (domestic) trade and trade activity taking place outside the geographical boundary of a country is called International Trade (Foreign Trade).

9.2 Reasons for International Trade

The main reasons for occurrence of trade stated in economics are as below :

(1) Difference in Factor Endowments in Various Countries : Different countries are endowed with different factors of production in different proportions. Besides, all countries may not

have all the factors necessary for production of all types of goods. Hence countries trade in resources, factors of production and technology to fulfil their requirements.

(2) Cost of Production : Owing to differences in availability of factors of production and resources, the cost of production of goods and services is also different in different countries. Scarcity of factors leads to higher price of those factors in a country and hence to a higher cost of production of goods and services. When domestic cost of production is higher, it becomes cheaper and easier to import such goods and services from countries where they are produced cheaply.

(3) Technological Progress : All countries do not achieve the same level of technological progress. Besides, some countries have expertise in some type of technology while others possess greater ability in another type of technology. Hence, every country does not possess equal efficiency in production of all types of goods and hence trade in goods and services takes place between countries.

(4) Division of Labour and Specialization : Labour productivity and dexterity in each country is different. Besides, entrepreneurial efficiency is also different. Hence, differences in division of labour and specialization are found to exist between countries. This means, since labour in some countries is more efficient in production of some types of goods and services, such countries specialize in the production of such goods, while they imports those goods and services which they are not able to produce more efficiently.

If any country attempts to produce goods and services which she is not specializing in then she imports expertise and know-how from other countries for helping such production.

9.3 Nature of International Trade

Nature of international trade means such special features and aspects of trade which gives it a unique identity from other activities. The nature of international trade is determined by the circumstances affecting trade, policies and laws governing trade. These are :

(1) The Geographical and Occupational Mobility of Factors of Production is lesser in International Trade : Labour is less mobile in international trade owing to policy and social reasons. Certain type of huge capital is less mobile, while there are policy restrictions on mobility of some other types of capital. Entrepreneurs are less mobile for the same reasons as labourers. But in present times entrepreneurship has become more mobile. Land has no geographical mobility.

Hence, owing to lower mobility of factors of production, the size of international trade is restricted to some extent.

(2) Trade in Many Varieties of Goods : Large varieties of goods and services are made available through international trade so as to satisfy the needs of populations with different standards of living and different lifestyles.

The very success and prosperity of international trade depends upon '*variety*'. For example, in countries where there is scarcity of electricity, there will be greater demand for manually operated machines while in countries with abundant supply of electricity there will be greater demand for automatic machines.

(3) More Challenging in Nature : International trade is more challenging for traders as the environment, language, culture, customs, preferences, habits, tastes etc. of people in different countries is different. Traders have to overcome these barriers in order to trade.

(4) Requirement of Diplomatic Efforts : For the setting up and development of international trade the efforts of traders solely are not enough. The government of every nation has to make diplomatic efforts, hold informal meetings and at the same time nations have to organize trade fairs etc. For example, in order to promote international trade in Gujarat, the state government organizes the 'Vibrant Gujarat Summit' in which representatives of governments and businesses of various countries participate to exchange business information as well as to get an idea of the policies of the state, culture of people and other such relevant information.

Since the political and business establishments and economic policies of all nations are different, diplomatic efforts are essential along with the efforts of businesses towards production, sales and promotion.

(5) Knowledge and Forecasts Regarding the Value of Different Currencies : Payments in international trade are to be made in internationally acceptable currencies and every trading country has to convert her national currency into international currency. For this proper information regarding value of various currencies and the changes in their values is essential. If foreign currency is purchased at an expensive rate then the trader may incur a loss. It is for this that traders have to hire experts who can guide in matters of exchange rates.

(6) Joint Effort of Nations and International Organizations : International trade can develop only with the joint efforts of governments of various countries of the world and of international organizations like World Trade Organization. The political systems of all countries must work towards making their policies more conducive for trade, the social and cultural groups must be open to trade, the industry associations must co-operate to enter in trade and enhance trade and so on.

(7) Impact of Political and Social ideologies : The size and direction of international trade is greatly influenced by the political and social events taking place in the world. For example, trade relations between nations get disturbed owing to events like world war, on the other hand if leaders of the world engage in promoting trade then nations are diverted away from war and world trade increases.

The size and direction of a particular nation's trade is determined much by the ideology of that nation, social structure, historical events and its relation with other countries of the world.

(8) Vast Scale : The scale of international trade is vast as it involves several countries, several varieties of goods, several rules, international organizations etc.

(9) Involves more Permissions and Taxes : In order to carry out international trading activity, traders need several permissions and licenses from their respective countries. They have to clear procedures regarding tradable goods and quality of goods; clear the custom procedures; fulfil the requirements of international freight and transport procedures, the quality tests for different countries (food and drug quality tests for different countries are different) etc. Owing to different quality standards, traders need to have information regarding methods of production in different countries. Production for exports must be made accordingly.

(10) Involves Higher Degree of Competition : Several countries of the world make attempts to produce and sell a variety of goods and services. Hence the degree of competition among sellers is very high. Similarly, the product or service may be demanded by consumers of several countries and so the degree of competition among buyers is also very high.

The risk of creating a market and generating demand for a product is very high in the international market. High quality standards have to be maintained, huge promotional expenses as well as sales costs have to be incurred and greater efforts have to be made to satisfy customers of a foreign country. After adhering to all these requirements if the trader is not able to capture enough share of the market demand then she/he may incur a loss.

9.4 Difference between Domestic Trade and International Trade

The nature of international trade is different from that of domestic trade and it involves hurdles and challenges different from those of domestic trade. Hence, It is important to understand the difference between domestic trade and international trade. The basic difference between the two can be summarised as under :

(1) Based on Scale : The scale of international trade is much larger than that of domestic trade as it involves more countries, more variety of goods, more procedures and greater rules etc.

(2) Based on Currencies and Modes of Payment : Transactions in domestic trade are made only in domestic currency and payment is transferred from one bank to another of the same country. International trade involves several currencies and exchange rates; it involves conversion of the trading countries' currencies at a determined exchange rate into an internationally acceptable currency. payment is to be made in internationally acceptable currency. Besides, in international trade, the procedures are more rigorous involving several permissions, clearances and duties. Buyers have to obtain letter of credit from their respective banks for assurance of payment to sellers.

(3) Based on Language, Culture and Society : Transactions in domestic trade take place within a common social, cultural and language set up. In international trade these are very different and hence traders have to be more careful to avoid controversies or hurt sentiments or even to avoid legal offence.

Goods which suit the life styles of each country's people can only be sold.

(4) Based on Transport Cost : The transport cost in international trade is much higher than in domestic trade as goods have to be transported outside the country. The transport duties for international trade may entail higher expenses than the domestic taxes.

(5) Based on Degree of Competition : Degree of competition is relatively lesser in domestic trade even if there are many producers of the same product as the nature of factors of production and technology in one country is common. The degree of product differentiation is smaller and therefore limited variety of goods are produced. But under international trade, producers/traders compete on the basis of variety and differentiation of same product. Besides, there is competition among domestic and international sellers in a country to obtain market share for selling a product.

For example, when the production and sale of foreign cars was not allowed in India, the competition among Indian car manufacturers was not very high as compared to the competition of today's times where we witness introduction of new models, attractions/incentives for buyers, new advertisements etc. very frequently. Foreign car makers make continuous efforts to increase their share in the Indian car market.

(6) Based on Consumer Satisfaction : It is not very difficult to satisfy consumers in domestic trade as the society, level of awareness and education, information, preferences, values, tolerance level etc. in one country are almost similar. In other words, consumers expectations are known and traders undertake production and adopt sales and promotion methods accordingly.

These aspects are different in different countries of the world and hence it is more difficult to satisfy buyers in international trade.

In other words, consumer behaviour is predictable in domestic trade while it is not easily predictable in international trade.

(7) Based on Administrative and Legal Systems : Administrative and legal systems and procedures in domestic trade are known to the traders so they face relatively lesser difficulty in undertaking trading activity. Such systems are highly different in different countries and hence it is almost impossible for a trader to trade without understanding the tax system, the system of obtaining licenses, permissions as well as the legal systems of various countries of the world. The process of obtaining such information about foreign countries is expensive.

9.5 Magnitude of World Trade in Present Times

The World Trade Report, 2013 has stated some trends of world trade from the work of historian Agnus Maddison.

Since the mid-1800s, the world's population has grown roughly six-fold, world output has grown 60-fold, and world trade has grown over 140-fold.

According to this report, dramatic decreases in transport and communication costs have been the driving forces behind today's global trading system. Geopolitics has also played a decisive role in advancing and reinforcing these structural trends.

In the last 30 years, world merchandise and commercial services trade have increased by about 7 per cent per year on average.

Between 1980 and 2011, the share of developing economies in world trade increased from 34 % to 47 % and their share in world imports increased from 29 % to 42 %. The Asian countries are playing an increasing role in world trade.

For a number of decades, world trade has grown on average nearly twice as fast as world production (World GDP growth). This reflects the increasing prominence of international supply chains and hence the importance of measuring trade in value-added terms.

Table 9.1

Average Annual Growth of World Trade During Different Time Periods

Time Period	World Trade Growth
1950-1973	7.88 %
1973-1985	3.65 %
1985-1996	6.55 %
1996-2000	6.89 %
2000-2011	5.00 %
2015-2016	2.8 %

Source : Compiled from various sources

9.6 India's Share in Global Trade

India's share in the world trade has remained low considering the size and growth of world trade. However, as a developing nation India plays an important role in determining direction of world trade. India's own exports have grown significantly and exports are rising significantly as a percentage of GDP.

Though India's exports are also rising significantly, the growth rate of imports has been higher than the growth rate of exports. Imports also constitute a greater percentage of GDP than exports.

India is able to import more because the rising pace of growth and development have increased the demand for imports and the ability to import. India is able to export more because it is now able to produce better and desirable quality of goods at a competitive price and is able to generate more exportable surplus.

Share of India's total trade in world trade in 2014-15 was about 2.07 %.

Table 9.2

Share of India's exports in the world exports

Financial Year	Share in global merchandise exports	Rank
2005	0.9	29th
2010	1.5	19th
2012	1.6	19th
2013	1.7	19th
2014	1.7	19th

Source : EXIM Bank

9.7 Size, Composition (Nature) and Direction of India's Foreign Trade

In order to understand the trends of trade, the development of trade, the efforts of a country to promote her trade in international market, and to know the relations of a country with other countries; as well as in order to check the quality of domestic production according to international standards and the competitiveness of domestic products in international market, it becomes important to know the size, composition and direction of the country's foreign trade.

9.7.1 Size of India's Foreign Trade :

In simple terms, size of foreign trade means, the total value and volume of merchandise imports and exports of a country. Every successive year if the payments made towards imports and revenues generated from exports rise, the percentage share of trade value rises in national income and the share of a country's trade in world trade rises then it is concluded that the size of the country's foreign trade has increased.

Between the period from 1951 and 2016 the size of India's imports and exports, their percentage share in national income as well as their share in world trade have increased. However, the size and growth rate of imports has been higher than that of exports in most years.

Note : If the value of imports or exports rises in successive years because of a price rise then such a rise in value does not signify an increase in size of trade. Size of trade is said to increase when value increases owing to increase in volume of imports and exports over previous years. Hence the value of a country's imports and exports is measured at constant prices or in US $. (When value of imports and exports is measured in US $, the changes in prices of import goods and export goods in successive years are adjusted in the exchange rate mechanism and thus we can obtain size of trade in real terms.)

Table 9.3

Size of India's Foreign Trade after 1991 (in mn. US $)

	1991-92	1998-99	2014-15
Merchandise Exports	17.9	33.2	310.5
Merchandise Imports	19.4	42.4	448.0
Balance of Trade	–1.5	–9.2	–137.5

Source : Economic Survey of India, 2015-16

In the initial years after independence the size of developmental imports remained large but owing to lower capacity to export, India's exports remained lower.

As India started developing more, after 1980, the imports for sustaining, maintaining and expanding the large industries started rising. During this period, incomes of people in the country started rising in good proportion and so domestic demand for goods increased owing to which lesser amount of exportable surplus was generated. Hence, exports remained lower.

After 1991, India's exports increased significantly. To sustain international competition, the demand for technology, petrol etc. by industries remained very high but along with this, exports also increased.

(Developmental imports constitute raw materials, know-how, machines etc. Maintenance imports constitute electricity, infrastructural facilities, imports related to skill formation etc.)

Table 9.4

Percentage Share of Trade in India's GDP (Gross Domestic Product)

Year	Percentage Share of Trade in India's GDP Measured in US $
1981	12
1991	13.9
2001	19
2011	41.8
2014	38.3

Source : World Trade Report, 2015

Figure 9.1

9.7.2 Composition (Nature) of India's Merchandise Imports and Exports :

In this section composition of trade signifies the nature of trade. Composition of trade means the items of merchandise imports and exports.

It is noted while checking the nature of India's foreign trade that in 1951 India was a less developed economy, it progressed to become a developing economy by 1980 and progressed still further to gain identity as a fast developing and emerging economy after 2000.

In a less developed economy, imports are very high in all the sectors. In the decade between 1950 and 1960, owing to poor state of agriculture, food grain imports were frequent; besides, developmental imports like machines, capital, technology, know-how, spare parts were also high.

While, in less developed economies, exports of primary goods constitute a high proportion of exports. The exports of tea, coffee, jute, ores and minerals, etc. were much higher from India and the exports of industrial goods were much lower.

When a country starts developing more, the proportion of imports of food grains tends to fall. The share of primary sector goods in total exports tends to fall and that of industrial goods tends to rise. Such trends were found in the decades of seventies and eighties in India's trade.

As a country develops still further, maintenance imports, imports for export oriented industries

and imports for diversification and expansion of industrial activity increase; for instance, imports of intermediate goods, raw materials, spare parts, petrol, new technology etc. rose in India with the process of furthering development.

After 1991, the nature of exports and imports changed significantly in India. The proportion of food grains, other agricultural goods and capital goods declined in total imports.

The share of traditional exports like tea, coffee, jute, etc. in total exports declined while that of industrial goods and non-traditional items increased. For example, exports of software.

In 1961, the share of food imports in India's total merchandise imports was 19.1 % which declined to just 3.9 % in 2014-15. This shows, India attained self-reliance in grains and other food items. With increase in the speed of development, India could produce capital and capital intensive goods also more efficiently and thus the imports of these items also fell significantly. In 1960-61, the share of capital intensive goods in India's merchandise imports was as high as 31.7 % which declined to 9.8 % in 2014-15.

The imports of new items in 1960-61 were only 2.2 % of the total merchandise imports which increased to 46.5 % in 2014-15. With diversification in the development process, imports of new goods increased.

In a similar way, the nature of exports has also changed. The share of entire primary sector in India's merchandise exports in 1960-61 was 44.2 % which reduced to as low as 12.3 % in 2014-15 (wherein, the share of tea, coffee exports declined from 19.3 % to 0.2 % and that of jute export declined from 21 % to 0.2 %). Likewise, the share of leather products in merchandise exports declined from 4.4% in 1960-61 to 1.3 % in 2014-15 and that of textile declined from 10 % to 2 % during the same period.

Against that the export of readymade garments increased from 0.1 % in 1960-61 to 5.4 % in 2014-15.

The share of all manufactured goods in total merchandise exports was 45.3 % which increased to 66.7 % in 2014-15.

Exports of petroleum products constituted only 1.1 % of total merchandise exports in 1960-61, which increased to 18.5 % in 1914-15.

9.7.3 Direction of India's Foreign Trade :

Direction of foreign trade means the trade relations of a nation with various countries of the world. The requirements for a country in order to develop trade relations with countries in different directions of the world are,

- Capability to undertake production of large variety of goods.
- Good political and diplomatic relations with many countries.
- Readiness to undertake several diplomatic engagements with other nations.

- Ability and technology for setting up proper sales facilities and trade mechanisms.
- Greater proportion of exportable surplus.

After independence, large proportion of our trade was with England as our trade with England was already established before independence.

In 1960-61, 19 % of our total merchandise imports were from England which fell to less than 2 % after 2007.

After independence we were dependent on USA for many items of imports. In 1960-61 our imports from USA constituted 29 % of our total merchandise imports which fell to less than 8% after 2007.

Over the years our merchandise imports from OPEC increased as our imports of petroleum (crude oil) increased with increasing pace of industrialization and development. (OPEC-Organization of Petroleum Exporting Countries)

India had friendly relations with Russia and our imports from Russia were high after independence which declined since 1980s after the economic crisis in Russia.

Hence, our trade with traditional partners started declining gradually but out trade with other developing countries started increasing, especially with developing countries of East Asia, Central Asia and Africa. Our imports from other developing countries were about 11.8 % of our total merchandise imports in 1960-61 which increased to 32 % in 2007-08 and further to 59 % in 2014-15.

In the same pattern in 1960-61, India's exports to England constituted 26.8 % of the total merchandise exports which reduced to as low as 4 % after 2007-08.

During the same period, India's exports to USA declined from 16 % of the total merchandise exports to 12.7 % and that to Russia from 4.5 % to 0.6 %.

Contrary to this, our merchandise exports to OPEC constituted 4.1 % of our total merchandise exports in 1960-61 which gradually increased over years and after 2007-08 increased over 16 % and during the same period merchandise exports to developing countries increased from 14.8 % to 42.6 % of the total merchandise exports.

From our total merchandise exports, those to Asian countries were almost 50 % in 2014-15. This way, India has made successful attempts to diversify her trade with different countries and in different directions.

Note : The classification of regions made by India for the purpose of indicating the direction of trade had changed after 2007-08.

Table 9.5 Share of Various Regions of the World in India's Merchandise Imports (Financial Year : 2014-15)

Region	% share in India's Merchandise Imports
Asia	59
Europe	16
Africa	08
Latin American Countries	07
North America	06
CIS and Baltic Regions	02
Others	02
Total	**100**

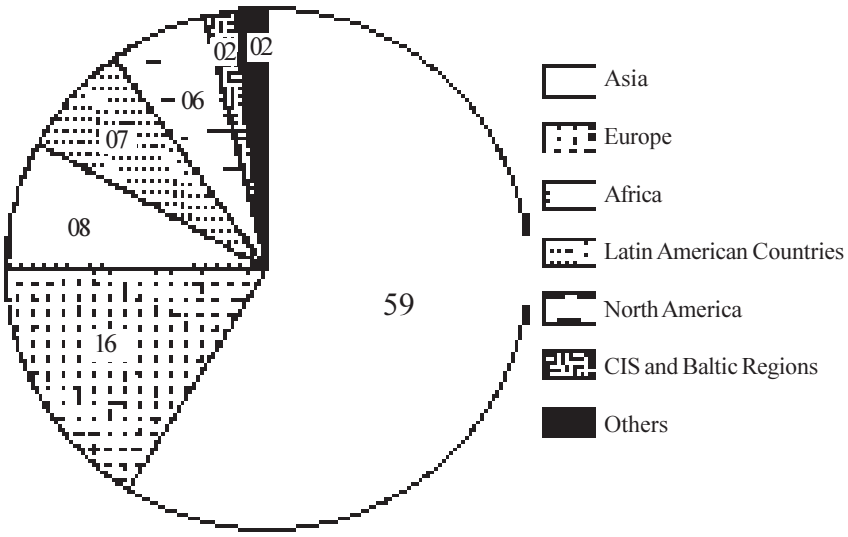

Figure 9.2

Source : EXIM Bank and Economic Survey of India, 2015-16

Table 9.6 Share of Various Regions of the World in India's Merchandise Exports (Financial Year: 2014-15)

Region	% share in India's Merchandise Exports
Asia	50
Europe	18
North America	14
Africa	11
Latin American Countries	05
CIS and Baltic Regions	01
Others	01
Total	**100**

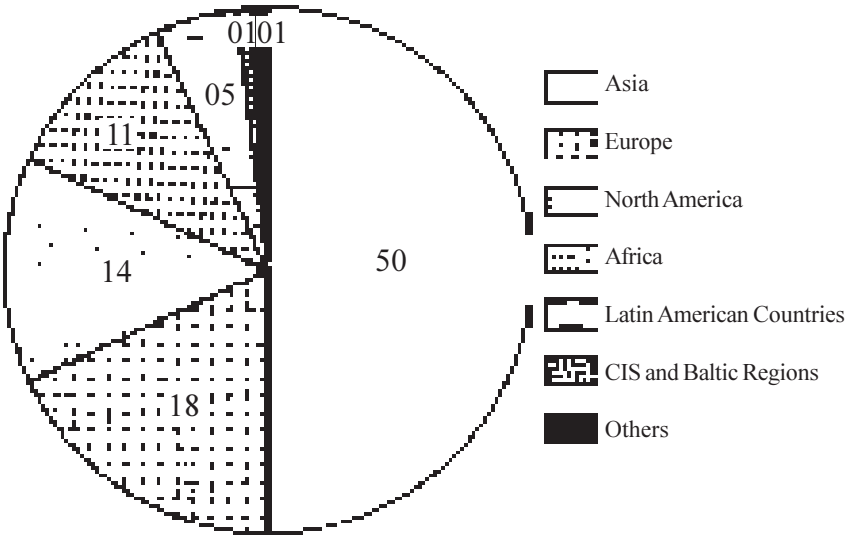

Figure 9.3

Source : EXIM Bank and Economic Survey of India, 2015-16

9.8 Concept of Balance of Payments

Balance of Payments is a systematic account of the value of transactions of a country with the rest of the world in goods and services, transfer payments and capital (assets).

Meaning : An accounting statement showing the value of imports and exports of tangible (visible) and intangible (invisible) goods during a year.

(Tangible or visible goods means goods which have a physical existence. Intangible or invisible goods means services.)

Balance of Payments has a credit entry and a debit entry. All receipts by the home country from foreigners are recorded in the credit entry and all payments by the home country to foreigners are recorded in the debit entry.

9.8.1 Types of balance of Payments :

Balance of Payments can be (1) Balanced (2) Unbalanced.

Balance of Payments is said to be in balance when the value of entries on credit side equals that on the debit side. Balance of payments is unbalanced when the value of entries on the credit side is not equal to entries on the debit side.

If payments are more than the receipts or the value of credit side entries is lesser than the value of debit side entries, there is a deficit in the Balance of Payments.

If receipts are more than payments or the value of credit side entries is greater than the value of debit side entries, there is a surplus in the Balance of Payments.

Note : According to the double entry book keeping system, a balance of payments always balances. However, in reality there can be a deficit or a surplus in the balance of payments.

9.8.2 Accounts of Balance of Payments :

Balance of Payments (BoP) has two accounts : (1) Current account and (2) Capital account

(1) Current Account : This account records the credit and debit entries for the following :

(i) Trade in merchandise goods (tangible goods) : Receipts from exports are recorded as credit entry and payments for imports are recorded as debit entry.

The sum total on this section of current account is called the balance of trade. If the payments for merchandise imports are greater than the receipts from merchandise exports then there is a deficit in the balance of trade. The vice versa situation is called surplus on the balance of trade.

(ii) Trade in invisibles or services : The incomes from invisibles are recorded on credit side and payments on debit side.

Combined balance of (i) and (ii) is called the current account balance.

(2) Capital Account : This account records receipts and payments from transactions on assets such as money assets like bonds, shares, gold, capital loans, etc. and other forms of fixed capital.

The total of current account and capital account is called the balance of payments.

9.8.3 Factors Influencing Balance of Payments :

Factors influencing balance of payments means those factors which affect the imports, exports, movement of capital, movement of factors of production, investment, lending etc. in a nation. Deficit or surplus in the balance of payments can arise owing to such factors.

The impact of such factors usually depends upon the level of economic development of a country. Some of these factors can be stated as under :

- Exchange rate.
- Prices of tradable goods in home country and in foreign countries.
- Variety and quality of tradable goods.
- Inevitable imports.
- Level of economic development of the country.
- Legal restrictions on trade.
- Trade supporting facilities and infrastructures like transport, communication etc.

Table 9.7

Hypothetical Example of Balance of Payments

Credit Items (Receipts)		**Debit Items (Payments)**		**Balance**
Current Account (₹ in crores)				
Merchandise Exports	200	Merchandise Imports	300	
Trade Balance				–100
Services exported	100	Services imported	200	
Investment income earned	100	Investment money paid	200	
Unilateral receipts	200	Unilateral payments	100	
Sub Total (Current A/c.)	**600**		**800**	
Current Account Balance = (Sub total on credit side – Sub total on debit side)				–200
Credit Items (Receipts)		**Debit Items (Payments)**		**Balance**
Capital Account (₹ in crores)				
Long term borrowing	200	Long term lending	80	
Short term borrowing	100	Short term lending	60	
Sale of Gold	100	Purchase of Gold	50	
			190	
Sub Total (Capital A/c.)	**400**	Errors and Ommissions	+ 10 = **200**	
Balance on Capital account = (Sub total on credit side – Sub total on debit side)				+200
Total Receipts	**1,000**	**Total Payments**	**1,000**	
Balance of Payments				0

In reality there can be a deficit or surplus in the balance of payments.

9.9 Concept of Exchange Rate

When an Indian tourist visits a foreign country she/he may not be able to purchase goods there in Indian Rupees. They need currency of that country. Likewise when an Indian importer

imports goods from a foreign country she/he will have to make payment in that particular country's currency or in an internationally acceptable currency. These are examples of India's demand for foreign currency.

Similarly, foreigners may demand India's currency.

Therefore, such tourists or traders approach banks or officially registered currency traders to convert their domestic currency into a foreign or internationally acceptable currency. Such conversion of currency is done at a specific rate at a specific time which is known as the exchange rate. Exchange rate is the price of a foreign currency in terms of domestic currency. In other words, it is the units of home currency required to buy one unit of a foreign currency.

- *The rate at which the currency of one country can be converted into currency of another country is called exchange rate.*
- *Exchange rate is the price of a foreign currency in terms of domestic currency.*

For a particular country, exchange rate is the price of one unit of a foreign currency in units of home currency; in other words, it is the units of home currency required to buy one unit of a foreign currency.

For example, exchange rate of US $ 1 = ₹ 60 implies that in order to buy $ 1, a price of ₹ 60 must be paid.

A rise in the exchange rate for India means that the value of Indian currency has declined in the international market. For now, more Indian ₹ will have to be paid to buy one unit of a foreign currency. It implies that the foreign currency becomes expensive and hence value of Indian ₹ falls.

Initially, if US $ 1 = ₹ 60 and

exchange rate rises for India, then US $ 1 = ₹ 65

On the other hand, when exchange rate falls for India, the value of Indian ₹ rises.

(However, in the actual analysis of rise or fall in the value of a currency, the time gap between the rise or fall in value of the currency, prices of goods in the various countries etc. are taken into consideration.)

Sometimes exchange rates change owing to open market forces and sometimes government of a country may alter the exchange rate to impact imports and exports.

If the exchange rate rises for India and value of ₹ falls, the demand for imports by India tends to decline and India's exports tend to rise.

When the price of one US $ rises from ₹ 60 to ₹ 65, an Indian importer has to pay ₹ 65 now instead of the earlier ₹ 60 to import a commodity worth US $ 1. Hence, imports tend to fall.

While earlier by spending US $ 1, a foreign trader could purchase goods worth ₹ 60 earlier while now she/he can buy goods worth ₹ 65. Hence, exports from India tend to rise.

The reverse happens when exchange rate for India falls.

Exercise

1. Choose the correct option for the following questions :

(1) What happens owing to trade ?

(a) The mobility of factors of production declines.

(b) The number of industries declines.

(c) Production process slows down.

(d) Diversification in production occurs.

(2) Which factor of production is least mobile in international trade ?

(a) Capital (b) Labour (c) Entrepreneurship (d) Land

(3) Which significant change has occurred in India's foreign trade after 2005 ?

(a) The size of trade has increased and India's rank in world trade has risen.

(b) The size of trade has increased but India's rank in world trade has fallen.

(c) India's balance of payments has continuously recorded a deficit.

(d) The share of traditional exports in trade has increased.

(4) Which countries can be included in the list of India's traditional trade partners ?

(a) England and Russia (b) Japan and China

(c) Countries of Central Asia (d) Australia

(5) What is balance of trade ?

(a) Balance of current account (b) Balance of capital account

(c) Balance of merchandise (visible) trade (d) Balance of service (invisible) trade

(6) A balance of payments has how many accounts ?

(a) 1 (b) 2 (c) 3 (d) 4

2. Answer the following questions in one line :

(1) What is meant by international trade ?

(2) What is meant by size of international trade ?

(3) What is meant by nature of international trade ?

(4) What is meant by direction of international trade ?

(5) What is meant by exchange rate ?

3. Answer the following questions in brief :

(1) Give an understanding of balance of trade.

(2) Explain the term 'size of international trade'.

(3) Give an understanding of balance of payments.

4. Give answers to the point for the following questions :

(1) State the present condition of world trade.

(2) Elucidate the differences between balance of trade and balance of payments.

(3) Write a note on exchange rate.

(4) Explain reasons for trade in short.

(5) Specify the difference between current account and capital account of balance of payments.

5. Answer the following questions in detail :

(1) State in detail the changes that have occurred in the nature of India's foreign trade over years.

(2) Explain the difference between domestic (internal) trade and international trade.

(3) State in detail the changes that have occurred in the size of India's foreign trade over years.

(4) State in detail the changes that have occurred in the direction India's foreign trade over years.

(5) Give the meaning, types, accounts and factors influencing balance of payments.

GLOSSARY

Trade	:	Trade means a commercial (business) activity which involves exchange of goods, services, resources, capital, technology, know - how, intellectual property etc. In other words, trade is an activity in which such goods are exchanged for earning profit.
Nature of Trade	:	Nature of international trade means such special features and aspects of trade of which gives it a unique identity from other activities. The nature of international trade is determined by the circumstances affecting trade, policies and laws governing trade.
Nature of Imports-Exports	:	Nature of imports and exports means composition of trade, that is, the items of merchandise imports and exports.
Size of Trade	:	In simple terms, size of foreign trade means, the total value and volume of merchandise imports and exports of a country.
Direction of Trade	:	Direction of foreign trade means the trade relations of a nation with various countries in different regions of the world.
Balance of Trade	:	Sum total of value of merchandise imports and merchandise exports in the statement of trade accounts of a country during a year.
Balance of Payments	:	An accounting statement showing the value of imports and exports of tangible (visible) and intangible (invisible) goods during a year.
Exchange Rate	:	The rate at which the currency of one country can be converted into currency of another country is called exchange rate or exchange rate is the price of a foreign currency in terms of domestic currency.
Traditional Exports	:	The items of exports which dominated the total exports of a country for a long period of time and export items produced by the traditional industries of a country are called traditional exports.
Developmental Imports	:	Imports of goods like capital, technology etc. by a developing country to give a boost to her development process are called developmental imports.
Maintenance Imports	:	Imports of spare parts, know-how, intermediate goods, petrol, energy goods which are made in order to maintain and sustain the process of industrialization and development undertaken by developing countries are called maintenance imports.

10 Industrial Sector

- **Introduction**

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10.4 Special Economic Zones

10.5 Importance of Small Scale Industries

Introduction

Nations of world are having combination of three producing sectors like agriculture, industry and service sector. In which industry is one of the important producing sector therefore it has special importance in each economy. Except petroleum exporting country Saudi Arabia, all developed nations are industrial economies for example, USA, Britain, Japan. Economies with agriculture as main occupation can also be developed for e.g. Australia, Newzealand. But, developed agricultural economies are very less in number, where as there are number of examples of developed industrial nations. Therefore majority of world economies have started believing that to attain faster economic development, industrial sector has to develop.

10.1 Importance of Industrial Sector

Industrialisation is necessary to have speedy growth of the economy, to develop agriculture sector, to generate more employment opportunities, to do optimum utilization of internal resources of economy, for quick increase in income and for improving living standard of people. Therefore, it can be said that to overcome serious issues like unemployment and poverty in developing economies like India, industrialisation is must. Industrialisation is not only necessary for economic development, but also for social and political stability. That can be proven from factors mentioned on next page.

10.1.1 Contribution in National Income :

At the time of independence, agriculture sector was having dominance over economy which reduced gradually with the development of industries. Due to planning efforts, share of industries has increased in national income, but still it is not enough. In the year 1951, industrial sector contributed 16.6% in national income which rose to 27% (at constant prices) in the year 2013-14. Based on this, it can be said that contribution of industrial sector has increased in national income. It is also noticeable that, in the growth of service sector, industrial sector has played extra ordinary role.

10.1.2 Employment :

India is highly populated nation, where entire labour supply is not being utilized in productive activities. It also indicates that serious issue of unemployment is being created due to lack of enough employment opportunities. Planned efforts have increased employment opportunities in industrial sector. In the year 1951, 10.6% labourers were employed in industries which rose to 24.3% in 2011-12. Small scale industries in industrial sector, generally used labour intensive production technique therefore increase in small scale industries could substantially increase employment.

10.1.3 Export Income :

Similar to agriculture sector, industrial sector can also increase its production volume and generate surplus in economy. These surplus items can be exported to earn foreign exchange. This foreign exchange is very useful to import scarce items in the economy. In the year 2013-14 industries earned about 2/3 share of export income. Thus, industrial sector of economy does not only satisfy requirement of citizens but it also earns foreign exchange from exports of surplus production. Thus it indirectly helps in satisfying the requirements of other items in economy.

10.1.4 Balanced Economic Development :

Industrial sector is very useful in attaining rapid and balanced economic development. Along with development of economy, there is a rise in demand of primary commodities. In addition to this, excess income remains as savings. This increases demand of luxurious and entertainment products. This also can be satisfied by industries. In addition to this, government can also establish several public sector enterprises in less develop or backward areas to increase employment and income in order to make speedy and balanced development of economy.

10.1.5 Modernization of Agriculture :

Modernization of agriculture is needed to increase development of agriculture sector and to increase land and labour productivity. Industries can provide technology to help agriculture sector. Tractor, Thresher, Submersible pumps, equipments to spray pesticides, etc. and such other modern instruments can be provided by the industry. Even chemical based fertilizer, pesticides etc. are also produced by industries. Finally, it can be said that by using the modern technology of manufacturing industries, development of agriculture could be made possible.

10.1.6 Strengthens Economic Structure :

Industrial sector is essential to create strong solid structure of economy. Industrial sector produces products like steel (Iron), cement which are useful to build irrigation projects, roads, bridges, etc. In addition to that, it provides vehicles of transportation such as buses, trucks, railways, plane, car, two wheelers, etc. strengthen the economy. Even instruments of safety - protection (Rifles, bullets, tanks, etc.) are also produced by industrial sector which reduce dependence on other nations and make India much stronger economically.

10.1.7 Change in Social Structure :

Due to industrialisation, new industrial culture emerged. Due to which new values like discipline, hard work, competition, team work, self dependency, co-operation, under standing, innovation skills, institutional capability gets developed and stands against superstitions, fatalism, narrow psychology, orthodox behaviour gets reduced. These types of social changes inspire economic development.

10.2 Industrial Structure :

Industrial structure of India has remained progressive during planning period. It is important to understand industrial structure to know various aspects of industrial sector. Industrial structure varies depending upon the size of investment, ownership and produced products. This can be explained by following factors :

10.2.1 Types of Industries on the Bases of Investment Size :

10.2.1.1 Cottage Industries : Industries mainly run by family members and with simple equipments and with negligible use of electricity, machines and investment is known as cottage industry. E.g., Khadi, Papad, Khakhra, incense stick industries, etc.

10.2.1.2 Tiny Industries : Industries run on labour intensive production technique along with the investment limit upto 25 lakhs are known as tiny industries. E.g., Industries of Artistic products made from metal, leather, clay, etc.

10.2.1.3 Small Scale Industries : Industries which have investment of more than ₹ 25 lakhs and less than 5 crores and utilises labour intensive production techniques and ancillary industries to big industries are known as small scale industries. E.g., units producing tools and simple consumer goods, auto repaire units, etc.

10.2.1.4 Medium Scale Industries : Industries which have investment limit of more than ₹ 5 crores and less than ₹ 10 crores, utilise labour intensive or capital intensive production techniques are known as medium scale industries. E.g., Industries of machinery, chemicals, electronic equipments, etc.

10.2.1.5 Large Scale Industries : Industries which have investment of more than ₹ 10 crores and utilise capital intensive production technique known as large scale industries. E.g., Industries related to equipments of railway, big vehicles, iron, etc.

10.2.2 Types of Industries on the Basis of Ownership

10.2.2.1 Public Sector Units : Industries which have ownership and administration under

government control are known as public sector units. For example, Railways, Telephone, Post, etc. Public sector units are classified in three categories :

Departmental Industries : When government runs industrial units under its direct observation as its department and includes its income and expenditure provisions in budget is known as departmental industries. E.g., Railways, Post, etc.

Public Corporations : Units which are owned by central or state government but administration is under independent control of corporation where in administration and decision process is under strong influence of government is known as public corportations. E.g., Life Insurance Corporation, State Transport Corporation, Air India and fertilizer producing and selling units are known as public corporations.

Joint Stock Companies : Units which are managed by government like private companies within framework of prevailing company laws, for which government raises capital by issuing and selling shares to the people or institutes are known as joint stock companies. These units are not working under direct controls of government. These types of units are different from departmental industries and public corporations. E.g., Bharat Heavy Electricals Limited (BHEL), Oil and Natural Gas Corporation Limited (ONGC), Indian Oil Corporation (IOC), etc.

10.2.2.2 Private Sector Industries : Industrial units which are owned and managed by private sector are known as private sector industries. Here, it is notable that, management of such units are under personal ownership or partnership. E.g., Car, TV, Shoe making units.

10.2.2.3 Joint Sector Industries : There is difference between joint stock companies and joint sector industries. Units in which government has given up ownership rights of industry to people and institutes 51% or more are joint sector industries. Thus though industry is joint sector industry still it remains in the control of government. E.g., GSPC.

10.2.2.4 Co-operative Sector Industries : Industries run on co-operative activities to stop exploitation of small (marginal) owners, to stop exploitation of labourers or to stop exploitation of consumers and to provide benefit to all are known as industries of co-operative sector. Shops of daily used (essential) commodities, dairies, several banks have administration on co-operative bases. E.g., IFFCO, KRIBHCO.

10.2.3 Types of Industries on the Bases of Products

10.2.3.1 Consumers Goods Industries : Goods which directly satisfy the requirements of people are known as consumer goods. Industries producing these type of commodities are known as consumer goods industries. E.g., ghee, oil, soap, shampoo, powder making industries, etc.

10.2.3.2 Intermediate Goods Industries : Units which have semi finished production. It means, the types of goods which are semi processed in nature and still one stage of production is remaining are known as intermediate goods industries. E.g., yarn, steel sheets, machines etc.

10.3 Measures taken by Government for Industrial Development

To have overall development of economy industrial sector is as needed as other sectors. So government takes supportive steps for it, which are as follows :

10.3.1 State Owned Enterprises : Government set up basic and key industries. These

sectors require heavy investment and which are risky. Therefore private sector is not ready to make investment. Produce of these industries are very useful to other industries. Therefore government runs, such industries which contains high risk at the same time very important for development of industries.

10.3.2 Encouragement to (Promotion of) Private Sector Industries : To start and to run private sector industries, government provides various types of help like land at concessional rates, electricity, water and even tax breaks. In addition to that cheap and enough finance is provided by government. This way by giving different types of help, government tries to make them competitive. Government also gives private sector entry into the reserved sectors to have enough opportunities to grow.

10.3.3 Import Tariff : Import tariff means tax on imports. To protect local industries in international competitions government relies on import tariff, due to that foreign products (because of taxes) become expensive and become as costlier as cost of production and cost of sales of our domestic products. This way domestic products may become competitive to foreign products and they get protection.

10.3.4 Technical Skills and Training : Government provides technical and professional training to domestic industries to sustain in competition specially in the period of liberalisation and globalisation. They are trained about new technologies prevailing in the world, new types of goods, selling techniques, administration, etc. It tries to cultivate qualities of management and as much values as possible through training. The purpose is to make them as strong as possible.

10.3.5 Economic Support : Government also provides various economic help to industries to reduce their production cost. So, domestic industries may have lower production cost which enable them to sell their products in international market and by having price benefits that maximise its demand. Government may provide economic help by giving land on concessional rate. Water, electricity, telephone and even transportation, finance to make them efficient.

10.3.6 Infrastructural Facilities/Services : To develop industries basic facilities like road, water, electricity, banks, insurance, sewage and many more provided by government. Due to that industries may keep their costs under control. Here, it is noticeable that, by availing infrastructural facilities industries can save their money, time and efforts to attain least cost levels and become competent. So, they may get encouragement to run industries.

10.3.7 Setting up Various Institutes and Policies : Government makes various industrial policies and make necessary changes in them as per the requirement so as to help industries. It creates system so that its import policy, export policy, monetary policy, fiscal policy, tax policy, etc. remains favourable to industry. Even it tries to prevent unfair competition by it drafting different laws like industrial act, company act, competition act. etc. It has also created institutes like IDBI, SIDBI, ICICI, IFCI, LIC, GIC etc. to provide financial help to industries. It also tries to attract foreign investment. Thus, government provides help and protection from all aspects to create suitable environment for development.

10.4 Special Economic Zones

Special Economic Zones known as SEZ where introduced from 1st April 2000. Its main purpose is to attract foreign investment and to develop control free environment for exports. To make Indian producing sectors as equivalent to those of the world.

Tax incentives granted by law for special economic zones to attract foreign investors. These special economic zones are developed from the model of special economic zones of China which are very helpful to develop export oriented producing sector with foreign direct investment.

Tax free zones are being created by special economic zones. In other words, it can be said that within the nation SEZ are that types geographical area, where economic laws remain different. China, India, Jorden, Poland, Philipinesm Russia and North Korea have utilized special economic zones.

India has set up Eight Special Economic Zones : Santacruz (Maharashtra), Kochin (Kerala), Kandala and Surat (Gujarat), Chennai (TamilNadu), Visakhapattanam (Andhra Pradesh), Falta (West Bengal) and Noida (UttarPradesh). In addition to, new eighteen special economic zones are proposed.

Any private person, government, joint sector, state government or their representative bodies may start special economic zone. Even foreign institute can also start special economic zone. All these types of special economic zones may be controlled by government.

10.5 Importance of Small Scale Industries

Small scale industries have remained much important and progressive during the last five decades. They are very useful for employment generation, production with small capital, industrialisation in rural areas, development of backward areas, reduce regional imbalance and to have adequate distribution of national income and wealth. Small scale industries are complementing to large scale industries for social and economic development in India.

Industries which have investment more than ₹ 25 lakhs and less than ₹ 5 crores are known as small scale industries. Normally, these industries use labour intensive techniques and they use very less capital in comparision to large scale industries. Even then they are very helpful to large scale industries.

Importance of Small Scale Industries :

(1) Employment Generation : Small scale industries have very high potential of employment generation, main reason for that is they use labour intensive production technique. In the year 1994-95 small scale industries have generated 191.40 lakhs employment opportunities. It rose to 249.33 lakhs in 2001-02 and it sharply increased to 1,012.59 lakhs in the year 2011-12. Thus small scale industries have continuously increased their employment generation capacity which is blessings for the nation having over population.

(2) Increase in Production : Normally large scale industries produce machinery and small scale industries produce necessary goods in nation. Small scale industries can increase production very sharply. They produced goods worth of ₹ 4,22,154 crores in 1994-95. It rose to ₹ 2,82,270

crores in the year 2001-02 and in the year 2011-12 it rose to ₹ 18,34,332 crores. This way small scale industries have shown sharp increase in volume of production. The remarkable feature of this industry is tht the production carried out by using less capital.

(3) Increase in Production Units : Small scale industries give different types of benefits and due to that government and people (citizens) are keenly interested in it. Rise in production is only possible with rise of production units. India had 79.60 lakh small industrial units in 1994-95. It increased to 105.21 lakhs in 2001-02. That rose to the number of 447.73 lakhs units in 2011-12. That shows that development of small scale industries lead India towards industrialisation.

(4) Exports : Small scale industries have noticeable role in exports of India. Small scale industries of India exported worth ₹ 29,068 crores in 1994-95. It reached to ₹ 71,244 crores in the year 2001-02 and it rose to ₹ 1,77,600 in the year 2006-07. This way exports of small scale industries show rising demand in abroad economies. In addition to that, if generates income of foreign exchange which is very useful to manage imports of required items.

(5) Labour Intensive Production Technique : Production techniques are of two types : Capital intensive production technique and labour intensive production technique. Capital intensive production technique has main emphasis on production with the help of capital. It utilises more capital and less labour units in production process and keeps proportion of land and entrepreneur unchanged. In contrast to this, the labour intensive production technique produces goods with the help of labourers. It utilises more labour and less capital and it also keeps proportion of land and entrepreneur as unchanged.

Labour intensive production techniques are blessings for the nation like India where availability of labour is in excess. As labour intensive production technique has more scope of employment that is way it is more suitable to our nation.

(6) Saving of Foreign Exchange : Small scale industries are very useful to India. On one hand, they generate export incomes and on the other hand reduce India's import expenditure by producing many necessary goods locally. Ultimately, they help to improve balance of payment.

(7) Short Period of Time : Small scale industries can be started within very short period of time. These industries are very useful due to very short period of time between investment and production. As it can start production in a very short period, it is useful to over come scarcity of goods and because of this, only required volume of production can be achieved by it to help nation.

(8) Balanced Regional Development : As against large scale industries, small scale industries can be started with capital, material and resources in any part of the nation. Due to that, benefits of it are not restricted to a fewer developed areas and it makes a possible balanced regional development. In this way, it is useful to reduce imbalance between rich and poor, developed and developing regions.

(9) Decentralisation : As large scale industries, need a large amount of capital, it can be started by a very limited part of the society of rich people and due to that it can be said that it

does centralisation of capital and wealth where small scale industries need very less amount of capital, it can be started by even small sized producers and have benefit of it. Small scale industries utilises different resources, dormant and passive equipments and resources too which increases volume of total production. Even these resources which are not used to generate employment and get income to distribute benefits of production equally is called decentralization in true sense.

(10) High Rate of Development : Large scale industries need large profits as large amount of capital are invested in it. They develop economy with irregular rate by doing large investments because they can not get change as per the changes of market where, small scale industries can be set up with small amount of capital. Therefore on one side a large numbers of producer increase the volume of production and income. On the other side it brings changes in production as market changes as it requires shorter gestation period. Thus, small scale industries are give very high rate of development which is highly required to develop nation.

Exercise

1. Choose the correct option for the following questions :

(1) How much was the contribution of industries in 2013-14 in national income of India ?

(a) 16.6 % (b) 27 % (c) 40 % (d) 60 %

(2) What was the proportion of employment in industries in 2011-12 ?

(a) 10 % (b) 24.3 % (c) 27 % (d) 49 %

(3) How much investment is needed in large scale industries ?

(a) 2 crores (b) 5 crores

(c) More than 10 crores (d) 100 crores

(4) What is public sector ?

(a) Sector run by people (b) Sector run by government

(c) Sector run on co-operation (d) International sector

(5) When was the implementation of special economic zones ?

(a) 1947 (b) 1991 (c) 2000 (d) 2011

2. Answer the following questions in one line :

(1) Which type of production techniques are being utilized by small scale industries ?

(2) What is medium scale industries ?

(3) Define public corporation.

(4) Australia is known as which type of nation in the world ?

(5) How many special economic zones are in India ?

3. Answer the following questions in brief :

(1) What is small scale industry ?

(2) Give examples of joint stock companies.

(3) How does social sector being changed by industrialisation ?

(4) How does industries are helpful to modernize agriculture ?

(5) What is special economic zone ?

4. Give answers to the point of the following questions :

(1) Explain any three matters (points) about importance of industry.

(2) Explain industrial structure on ground of investment.

(3) Explain industrial structure on ground of ownership.

(4) Explain any things/matters/points to prove importance of small scale industries.

(5) Explain in brief special economic zone.

5. Answer the following questions in detail :

(1) Discuss importance of industries.

(2) Explain structure of industry.

(3) Discuss importance of small scale industries.

(4) Discuss steps of government 70 develop industries.

Glossary

Balanced Economic Development	:	When all the sectors of economy develop equally, it is known as balanced economic development.
Import Duty (tariff) Tax	:	Tax on import (purchase from abroad) is known as import duty (tariff) which is mainly used to restrict imports.
Special Economic Zone	:	The area which attracts foreign investors and generates a control free environment to develop exports.
Foreign Direct Investment	:	It is the investment made by individuals or companies of foreign origin in a certain home country for the purpose of direct production.
Public Sector	:	A production unit which has ownership, administration and control with government is known as public sector unit.
Public Corporation	:	When production unit is owned by government but administration made by independently that type of producing sector is known as public corporation.

11 Emerging Issues in Indian Economy

- **Introduction**

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Introduction

Major economic changes were brought about in 1991 which are identified as economic reforms. Liberalisation, privatisation and globalisation have changed Indian Economy completely and as a result Indian Economy is being considered as one of the fastest growing economies in the world. Migration and urbanisation are considered as gifts of development process in the country and it is not at all an exaggerated statement.

In the same way, infrastructural facilities are said to be prerequisites for economic development and hence it is directly related to migration and urbanisation. Infrastructural facilities are a combination of facilities which are essential for economic development and economic prosperity of a country.

Thus, in this chapter, we will understand economic development and prosperity and its related aspects like (1) Migration (2) Urbanisation (3) Infrastructural services in detail.

11.1 Migration

The phenomenon of migration became faster with rapid increase in economic growth in which a person has started moving away from his native place and settling in distant places in search of employment, to give stability to his family and to attain a higher standard of living.

11.1.1 Meaning of Migration :

In ordinary language, migration means change in place or moving from one place and settling in another place. But a classical definition of migration is given below.

Definition : Migration refers to movement of a person from one place to another place, away from native place either within or outside the country for job, occupation, business or in search of better standard of living, on a permanent basis.

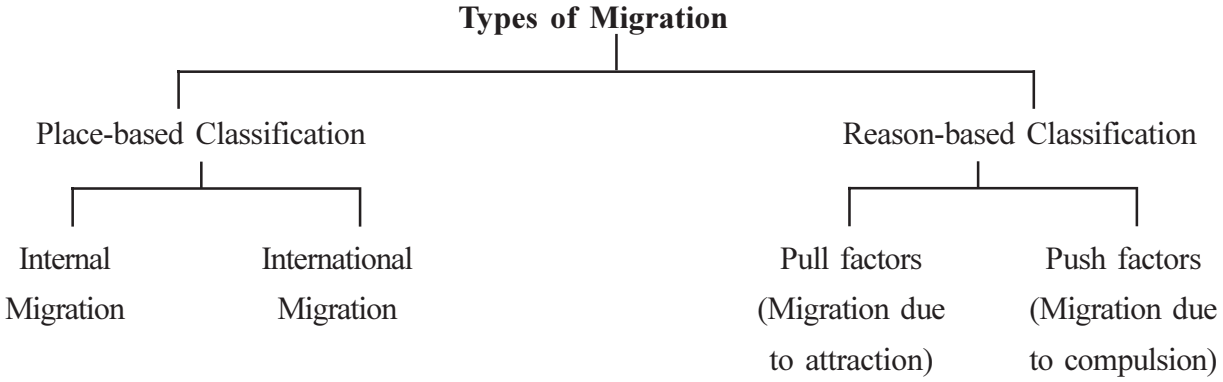
On the basis of the above definition it can be said about migration that

(1) it is a long term movement within or outside the country.

(2) it is done for job, occupation, business or for the betterment of living standard.

11.1.2 Types of Migration :

To understand the meaning of migration in detail, let us study the types of migration. On the basis of following information, let us understand the types of migration.



Migration based on place is divided into two : (1) Internal migration (2) International migration

11.1.2.1 Place-based Classification

Any migration which is based on geographical boundaries of a country is divided into (1) Internal migration (2) International migration

(1) Internal Migration : The movement of a person from one place to another within the geographical boundary of a country is known as internal migration. When a person from Gujarat settles in another state or a city or when a person from any other state or city settles in Gujarat then it is known as internal migration.

(2) International Migration : Movement of a person from one country to another is known as international migration. e.g. From Gujarat or from any other part of India, if a person moves to some other country in search of job, occupation, business or for better standard of living for permanent settlement or when people from other countries come to India for settlement on a permanent basis it is known as international migration.

11.1.2.2 Reason-based Classification

There are two types of reasons for migration : (1) Migration due to Pull factors (2) Migration due to Push factors

(1) Migration due to pull factors : When a person gets attracted to the life style and modern infrastructural facilities of urban areas and migrates there, it is known as migration due to pull factors. e.g. the migration from village to a city can be considered as migration due to pull factors because compared to villages, better life style, transportation, communication system, education, health services etc. are avilable in cities along with wide ranging job opportunities and business prospects.

In the same way, for the same type of attraction in other countries, when people migrate to other countries to settle there permanently, it is also known as migration due to pull factors.

(2) Migration due to Push Factors : When people living in villages are forced to leave their villages due to lack of business or occupational opportunities or when there are limited educational facilities and when they are forcibly pushed to cities, it is known as forcible migration or migration due to push factors.

Thus, after its study reason based migration can be,

(a) In attraction based migration, economically well off villagers move to cities for better life style and the decision is voluntary.

(b) If the migration is based on lack of facilities to improve economic standards or employment opportunities for economically vulnerable groups, it can be called forcefull or compulsory migration.

11.1.3 Causes of Migration :

After studying the types of migration, to understand migration in a better way, it becomes necessary to study its causes. We can explain migration under four heads:

11.1.3.1 Economic Causes : The main reason for migration is economic. Economic reasons are :

(I) For Employment, Occupation and Business : When a person moves for employment, occupation and business to another place.

(II) Transfer : When a person is transferred from one place to another distant place, he is forced to move to that place.

(III) Extent of Natural Resources : When a particular place has abundance of natural resources, but relatively the population is low in that area, people migrate to that place. e.g. gold, diamond, metallic mines, petroleum products, mining and refining requires technicians in large numbers. So people migrate to such places leaving their village or native place for this purpose. e.g. Migration to coutries like UAE, Australia, NewZealand, Canada etc.

(IV) To Attain Better Quality Education : When educational opportunities are limited in any particular place and a person has hunger for better education, he migrates to distant place which, in due course becomes permanent in nature.

(V) To get Modern Health Services : When a person cannot acquire required health services in his own native, he is forced to migrate to a better place for acquiring those services.

(VI) Planned Migration : When a family plans to send one or more persons away from the native place for performing economic activity to a distant place, it can be called as planned or organised migration.

11.1.3.2 Social Causes : Along with economic factors, social factors also play an important role in migration which are :

(1) Marriage : After marriage when a woman leaves her native and migrates to live in a distant place with her husband it is known as social migration.

(2) To get respite from Social Rituals : A society in a village is traditional and orthodox to a great extent, while urban society has liberal thinking and modern life style. The youth of the villages get attracted to such a lifestyle and like to settle in urban areas to escape from the rigidity and rituals of rural areas.

11.1.3.3 Political Causes : There are two political factors which can be considered for migration :

(I) War and Unrest : In whichever area when war takes place time and again, there will be unrest in that area and people of that place will prefer to migrate to another area where they need not have to live in constant fear and insecurity and can live a peaceful and secured life. So they migrate from disturbed to the peacefull place.

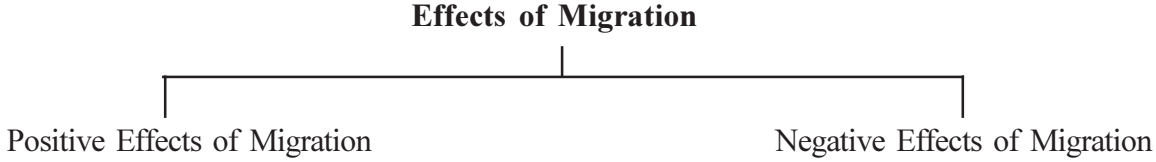
(II) Avoid Friction : Wherever rioting and friction occur people will prefer not to stay there and they will migrate to a peaceful place.

11.1.3.4 Natural Calamities or Environmental Factors : The places which are affected frequently by natural calamities like famine, earth quake, volcanoes, etc. see large scale migration of the people in search of safety.

Due to developmental activity, the migration that takes place, also is included in migration due to environmental reasons. e.g. the migration that happened because of Sardar Sarovar Yojana in Gujarat can be called as developmental migration. Likewise if a National Park or afforestation is adopted, people are made to move to different areas which is also known as developmental migration.

11.1.4 Effects of Migration :

By studying the effects of migration Government can get guidelines for framing migration related policies. From the economic angle when effects of migration is to be studied, we can do this in two ways.



11.1.4.1 Positive Effects of Migration : The positive effects of migration on different sectors of an economy, individual, family, society and the nation is beneficial and developmental. Such effects are the following :

(1) Growth of Income : The main objective of migration is income generation and rise in income. Those who move to cities from villages for livelihood send a major portion of their income to their families which improves the standard of living of those in villages.

Moreover, a share from that income is also invested in agriculture which remarkably improves the production and productivity in agricultural sector.

It has been seen in the recent past that the money earned by them is being invested in business and as a result, agriculture related business and agro industries are also developing.

(2) Contribution towards a Faster Economic Development : When the people of our country migrate to other countries they send a part of their earnings to their families. Also they invest in business, trading and industries which increase the foreign exchange of our country enabling a faster economic growth and economic development of the country. Since the new economic reforms of 1991, migration has rapidly increased resulting into greater inflow of foreign exchange and economic development has been taking place at a faster pace.

Other than that, Indians go abroad for higher education and the expertise that they gain from there is used for the development of our country.

11.1.4.2 Negative Effects of Migration : Alongwith positive effects, there are also negative effects seen from migration. People from villages who migrate to cities are less educated, inefficient and lack expertise and are poor. For such less educated, inefficient people wage levels are low and opportunities in labour intensive areas are limited in cities.

Following are the negetive effect of migration :

(1) Unregulated Urbanisation : When less educated inefficient and untrained, village people who are poor migrate to cities, they are forced to live in the periphery of cities due to low incomes and it results in uncontrolled urbanisation.

Moreover, hutments and slums expand as there is no alternative in the cities. So, slums expand uncontrollably.

(2) Shortage of Infrastructural Facilities : An unorganised urbanisation, hutments and dirty slum dwellings make the local administration ineffective as they are unable to provide enough water, drainage, road, transportation, communication, toilets, education, schools, health services, etc. This results in serious health issues as the poor class are affected by serious life threatening diseases.

(3) Problem of Environmental Pollution : As hutments and dirty slum dwellings increase due to which there arises shortage of toilets and drainage facilities alongwtih shortage of waste removal system, increasing environmental pollution. These problem become serious issues as a result of migration. The best examples are cities like Ahmedabad, Ankleshwar, Surat, Mumbai, Kolkata, Delhi, etc.

In these above mentioned cities, there are insufficient public transportation which force people to seek alternative transportation resulting in serious problem of air pollution, especially in Ahmedabad.

In the same way noise pollution and water pollution are serious problems.

(4) Social Evils : People who migrate from villages to cities in search of a higher and regular incomes, when not able to get expected job or life style sometimes resort to anti social activities like theft, loot, etc. leading to disturbances in the social life of cities. Social frictions arise among people because of differences in the language, culture, life style etc.

11.2 Urbanisation

Urbanisation is a result of economic development, because, due to economic development, industries and infrastructural facilities improve and expand. This leads to a shift of labour from agricultural sector to industrial and service sectors which makes urbanisation faster.

11.2.1 Meaning of Urbanisation :

Generally, the migration of people from rural areas to urban areas is known as urbanisation.

Urbanisation is that socio-economic process due to which the population in one area increases and gets concentrated which converts into a town or a city. This idea can be said as concentration of population in cities also.

Definition : In 1951 the definition of a town or a city was very broad. But by 1961 the definition became narrow. The following are the criteria that were adopted during the census of 1971, 1981, 1991 and 2001.

(i) All those areas which are planned / managed by Municipality, Corporation, Cantonment Board or Notified Town Area committee.

(ii) All those areas which fulfill the following three criteria :

(a) 5000 or more population live in that area

(b) 75 % or more population are employed in non agricultural sectors.

(c) If the density of population is 400 or more per square kilometer.

Due to industrialisation, urbanisation in the entire world is on the rise, and if this continues, by 2050, 2/3rds of the world population will be in urban areas.

As industrialisation was very slow during the British rule in India, the process of urbanisation was also very slow. But after Independence, the Indian Government has adopted a policy to encourage industrialisation, hence urbanisation has started taking place but at a slower pace. But after the economic reforms of 1991, due to liberalised industrial policy, Government has announced various incentives to industries. The policy to encourage service sector also has resulted in faster economic development and urbanisation.

Generally 3 types of urbanisation takes place :

(1) In towns and cities, birth rate tends to be higher than the death rate and hence the urban population increases at a higher rate which is known as natural population growth.

(2) Due to the change in the definition of village and town areas, many rural areas have been upgraded and merged into cities which result in an increase in urban population. e.g. Ahmedabad, Vadodara, Surat, Rajkot etc.

(3) There is large scale migration of people from rural to urban areas which increases the urban population.

Thus, from the above study, we can conclude that after independence, the process of urbanisation started and since economic reforms 1991, there has been a continuous rise in that process and a clear picture of urbanisation can be got from the statistical representation that follows.

Table 11.1

Trends of urbanisation in India

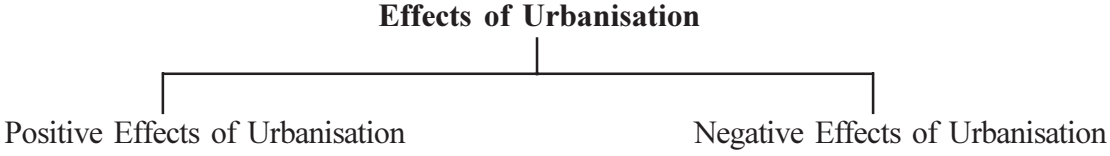
Year	Percentage of Urban Population
1961	17.97 %
1971	19.91 %
1981	23.34 %
1991	25.32 %
2001	27.86 %
2011	31.16 %

Source : Census of India

On the basis of the study of above statistics it can be said that according to 2011 census 37.7 crores live in urban areas which means 31.16 % (approximately 32 %) people live in urban areas in 2011.

11.2.2 Effects of Urbanisation :

India is only second to China in the process of urbanisation. At present it can be said that urbanisation is taking place at a faster rate which indicates a fast rate of economic development. This has resulted in various effects. These effects can be studied in two parts.



11.2.2.1 Positive Effects of Urbanisation : Urbanisation that took place in India has created various welcome effects which can be studied as positive effects.

(1) Increase in Infrastructural Facilities : There is a continuous increase in infrastructural facilities like education, health, banking, transportation, communication, insurance electricity etc creating more employment opportunities which in turn raises the purchasing power of the people to buy goods and services and that necessitates the setting up of more industries, creating more employment opportunities. ⟶ Increase in employment leads to income rise and rise in purchasing power⟶ rise in purchasing power necessitates the setting up of new industries ⟶ employment increases and this cycle keeps moving on.

(2) Reduction in Poverty : Poverty and unemployment are mutually interdependent. Due to urbanisation, industry and service sector creates large scale employment in cities which reduces poverty. Moreover, rural poor and unemployed who come to urban areas get employment according to their capabilities which also leads to reduction in poverty.

(3) Cultural Development : In cities advanced educational facilities are available and through that, an individual can attain allround development which improves personality of an individual and makes him a cultured individual of the society.

Apart from this, libraries with modern amenities, book stalls and various cultural programmes enrich people culturally.

(4) Ultra Modern Health Services : Due to the process of urbanisation, population in urban areas rise which cater to the various requirements for better health along with education. Today, we can see number of multispeciality hospitals, flourishing in cities like Ahmedabad where, ultra modern treatment is available for every disease in one place.

Moreover, Government and local self Government also start hospitals which directly benefits the poor and the middle class in the society and that influences positively the health and the productivity of the people.

(5) Social Effects - Modern Thinking : The thinking of the people of urban areas is modern because compared to villages, cities have better education, cultural development and modern means of communication. This makes them quickly adapt themselves to the modern world by way of decency and dignity in words, actions, thoughts, life style etc.

(6) High Standard of Living : Urbanisation results in rise in income and the presence of modern infrastructural facilities make the standard of living higher in urban areas as compared to rural areas.

11.2.2.2 Negative Effects of Urbanisation :

Due to uncontrolled urbanisation various negative effects have been seen in India which are as follows :

(1) Income Inequalities : The first negative effect of urbanisation is income inequalities. On the one hand, in urban areas there are intellectuals who are very highly educated, entrepreneurs, business magnates, whose income levels are very high.

While on the other hand, there are poor labourers who are illiterates who do not have any skill or expertise and who do not know anything except physical labour and hence their incomes are very low. Thus income inequalities are very obvious in urban areas.

(2) Social Inequalities : Social inequalities are seen along with economic inequalities. The rich and the educated class have modern thinking while the uneducated poor class have blunt and age-old thinking who get exploited in urban areas.

(3) Problem of Slum-Dwelling : People coming to cities from villages are forced to live in hutments and dirty slums as they are not able to afford pucca house due to their low incomes. They constitute the labour class and their affordability is very low.

(4) Law and Order Problem : Uncontrolled urbanisation has led to population explosion in urban areas which results in serious problems. for e.g. The per capita vehicle in cities is high and is seen to be rising continuously which creates traffic problems.

Moreover, in the absance of employment opportunities and ability to earn enough income, people resort to theft, loot, etc. When such anti social activities take place on such a large scale, the day to day law and order situation proves insufficient and the situation deteriotates.

(5) Question of Infrastructural Facilities : There is shortage of transportation, health, roads, shortage of pure drinking water and such other infrastructural facilities which results in problems of water borne diseases, question of sanitation, shortage of electricity which is because of the failure of the local administrative system.

(6) Problem of Environmental Pollution : As urbanisation is the result of industrialisation, pollution level reaches beyond limits due to different industries. The dirt and squalor also creates further problems. e.g. more than 50 % of poor population suffer from skin and respiratory diseases.

11.2.3 Measures to Reduce the Problems of Urbanisation :

Due to uncontrolled urbanisation, negative effects exceed the positive effects and before it attains dangerous proportions, it needs to be controlled so that the negative effects reduce and the fruits of urbanisation can be made to reach the poorest of the poor class.

We can describe the measures to reduce the problems of urbanisation in the following ways :

(1) Policy Related Steps : Let us analyze the measures taken by the Government of India to reduce the problems of urbanisation.

(a) Control has been imposed on setting up industries in those cities where the population is greater than 10 lakh so that a limit can be imposed on the uncontrolled urbanisation.

(b) Encouragement should be given to development of small sized towns, so that big cities can be restricted from further urbanisation.

(c) The Indian Government has adopted such a policy so that big cities do not become bigger and small and medium sized towns in all the states can develop.

(d) Indian Government has adopted a policy of developing satellite towns near big cities.

(2) Increasing Employment Opportunities : Government has implemented employment oriented prgorammes to enhance self employment opportunities in cities to ease the negative effects of urbanisation. The aim is to increase the spread of these progammes so that the urban poor can benefit through these programmes and their incomes can rise and there can be improvement in their standard of living.

(3) Strengthen the Infrastructural Facilities : To ensure that the infrastructural facilities like water, road, transportation, communication system, drainage, sanitation etc. reach people at the grass root level, the system should be made strong. The Central Government has implemented the plan to develop smart city, too.

Besides, attempts must be made to construct houses for slum dewellers. Government of India has already started making attempts in this direction by creating proper housing facilities for the poor.

(4) Education and Health Facilities : The rich and the well-to-do class in the cities are able to attain advanced education and health facilities quite easily but the poor class are unable to get enough and qualitative access to such services which creats problem in reducing the negative effects of urbanisation.

If these facilities are made accessible to poorest of the poor, the negative effects of urbanisation can be minimized and the fruits of positive effects can be enabled to reach the poor.

(5) Development of Cottage and Small Scale Industries : Along with the large scale industries, the subsidiary industries, cottage and small scale industries should be increasingly developed so that economic inequalities can be reduced and socio-economic inequalities due to urbanisation can be reduced.

(6) Development of basic Infrastructural Facilities in Rural Areas : The facilities like education, transportation, communication, roads, electricity, irrigation, etc. should be improved so that people will not be forced to migrate to urban areas and this reduces the burden on cities and the negative effects of urbanisation can be kept under control.

(7) Strengthen the Administrative System : Earlier, we have seen the negative effects of urbanisation and how that has created law and order problem. If law and order situation has to be improved, the administrative system should be strengthened and what ever deficiency in administrative co-ordination is seen, should be eliminated and good governance should be brought about to ease the problems. To improve the law and order situation, more and more awareness should be brought about, amongst the citizens.

11.3 Infrastructural Services

The foundation of a nation's prosperity is agricultural and industrial development which is not possible without infrastructural services. Thus, it can be said that infrastructural development is a prerequisite for agricultural and industrial development as it acts as an engine of economic development. Let's study the various types of infrastructural services.

11.3.1 Education :

(1) Education : meaning and its importance : Education refers to the process of teaching and learning.

Human capital formation refers to that capital investment through which physical and mental capabilities of human beings are developed. Thus, investment made for education; training, grooming, research, etc. are known as human capital investment.

Prof. Marshall writes with reference to capital investment on humans as follows. "Every generation inherits values from their ancestors which is the true inheritance. If the physical wealth of the world, gets destroyed but if the ideas to create physical wealth is not destroyed, we can retrieve the resources quickly but if the ideas themselves are destroyed the physical wealth will remain unutilised and with time such resources will be lost and the world will be at the doorstep of poverty."

In this situation education, training, research, technology, knowledge, standard of expertise etc. influence level of development. Thus, education can be considered as the most important factor affecting economic development.

Through education,

(1) an individual acquires more knowledge due to which she/he becomes eligible for high class opportunities and as a result his/her standard of living improves.

(2) Education improves a person's ability to exchange ideas and uplifts her/his self confidence.

(3) An individual can take profitable decisions for himself and due to which he can build a congenial atmosphere for leading a good life.

(4) Education makes a person efficient enough, to utilize the opportunities that are generated in the society through development.

(5) Productivity of factory labourers can be increased.

(6) Technological knowledge can be given through information regarding financial facilities which are available, different methods of production can be made to be used and agricultural productivity can be increased.

(7) Through effective education, a person's active participation in social issues can be increased.

(8) It is essential to increase and expand education to make a person understand the environmental hazards and to enable a society to create environmental balance and maintain the fertility of soil.

(9) Through education awareness can be brought regarding cleanliness and health.

Thus, after observing the development of advanced countries, it can be said that, through education, efficient labour can be created who can contribute substantially to economic development of the country.

(2) Present Scenario of Education : Education facility is provided by the Government as well as private sector in our country. In India, education is classified into stages, based on the age of the child :

(1) Primary education - 1 to 5 standards

(2) Upper Primary education - 6 to 8 standards

(3) Secondary education - 9 & 10 standards

(4) Higher Secondary education - 11 & 12 standards

(5) College or higher education - 12 +

(6) After 8 + standard ITI study can be taken up and technical expertise can be achieved.

The constitution of India has made primary education for children between 6 - 14 yrs age group, free and compulsory and its responsibility is assigned to the State Governments.

During the era of planning right from the Kindergarten level to the various higher education institutes, development and expansion has taken place.

In 2013-14, there were 1.4 million primary schools where 7.7 million teachers were there in India.

Gujarat state has taken initiatives in the form of 'Gunotsav' and 'Praveshotsav' and enrolled more students in the schools. In 2013-14, the registered number of children in primary education were 93 %. Education to all programme (Sarva Shiksha Abhiyan) and RTE (Right to Education), are means to spread education to all.

Due to poverty and illiteracy, the education sector has not developed to the desired extent. Even today, the situation of primary education in small villages is a matter of great concern. 29 % of the children drop out of school before completing their 5th standard.

Moreover, even today, there is a shortage of trained teachers. In 2013-14, the student teacher ratio was 46 : 1 and in upper primary education it was 34 : 1.

In 2013-14, 69 % pupils were enrolled in secondary standards while in higher education it was 25 %.

Table 11.2

Extent of literacy

Year	Extent of literacy in India (percent)	Extent of literacy in Gujarat (percent)
1981	43.57	44.92
1991	52.21	61.29
2001	64.83	69.14
2011	74.04	79.31

Source : Census of India

11.3.2 Health :

(1) Meaning and Importance of Health : The WHO – World Health Organisation has given the definition of health in this way.

Definition : Health is just not absence of diseases or physical strength but it is an individual's physical, mental and social well being.

The productivity of a labour is dependent on his health. Sound mind can be in a sound body. Education nurtures the mind while health of nurtures the body.

National Income is directly dependent on the public health of the country.

If the health of the labour is not good and if he falls ill again and again it adversely affects production and productivity. If the health of the labour improves, automatically there will be growth in production. Improvement in health leads to increase in economic growth in three ways.

(1) Rise in productivity leads to rise in output.

(2) Natural resources can be better utilized and wastage of resources can be stopped.

(3) Rise in incomes of labour, leads to higher standards of living.

There are two aspects necessary for good health : (1) balanced diet (2) good medical treatment.

The average life expectancy of the people in a country is an important indicator of people's health. In 1951, the life expectancy of an average Indian was 32 years which rose to 63.5 years in 2011 is due to development of balanced diet, nutritional food and good treatment. Similarly, the infant mortality rate was 146 in 1951 which fell to 44 in 2012.

(2) Health Situation : Even today 70 % of India's total population live in villages but out of the total number of hospitals, only 1/5th are situated in rural areas and thus required medical services are not available in rural areas. There is a vast difference between the medical services in rural and urban areas.

There is a shortage of specialised treatments in rural areas as specialists are not available like Child specialist (Peadiatrist), specialist for women (Gynaecologists) anaesthetist, eye specialist (Ophthalmologist) like M.D., M.S and such highly qualified doctors. Good treatment and timely treatment is not available for them.

A healthy child cannot be born to an unhealthy mother. In India due to lack of nutritional food, 50% of females between the age of 15 and 49 suffer from iron deficiency creates anaemia, out of whom 19 % die.

This problem can be eliminated by the spread of education, expansion and spread of health services. The World Bank Report shows that, India spends 4.4 % on health, out of the gross domestic product, while America spends 20.3 % and China 12.5 %.

Government is consistently increasing the expenditure on health. There is a direct relationship between health and country's economic development and thus government can build a healthy nation by expanding and extending health services to rural areas.

11.3.3 Electricity :

Electricity can be considered as an important growth engine for economic development. Infact it can act as a growth engine for the development of rural and urban areas.

Thanks to electricity, the growth of Agriculture, Irrigation, Cottage and small scale industries has taken place in rural areas.

In the same way in cities also, electricity is very important in industrial development and service sector development. In India in 1950-51, the production capacity of electricity was 2300 mega watts which increased to 1,54,574 MW in July 2009.

Thus within the span of 61 years from 1950-51 to 2011-12, electricity production has increased multiple times. The fruits of this increase is directly seen in the development of agriculture, industry and service sector.

India leads the world in electricity production and consumption. India is in the 7th position in electricity production and 5th in electricity consumption in the world.

There are 4 ways of generation of electricity in India :

(1) Thermal power - through coal

(2) Hydro electric power - through water

(3) Nuclear power - through nuclear energy

(4) Others - windmill, biogas, solar energy etc.

Apart from this the Government is consistently making efforts to make solar power more useful and people-friendly, by giving subsidies for the purchase of solar cooker, solar geyser. It also encourages the use of solar panel.

Out of the total energy produced in 2012-2013, 70 % was hydro electric power, 16 % from wind power, 2 % from nuclear power and 12 % from other sources.

The Indian Government has been giving more and more encouragement for hydro electric power and wind power (windmill) because there is no spread of pollution from both these sources. There is a faster progress in production due to above mentioned two sources.

The use of electricity is predominantly seen in (1) Agriculture (2) Industries (3) Household (4) Transportation (5) others, which is explained through following table.

Table 11.3

Use of Electricity by different sectors (in percentage)

Sectors	Year : 2012-13
(1) Household	22 %
(2) Agriculture	18 %
(3) Industries	45 %
(4) Transportation	02 %
(5) Other pilferage during transmission	12 %
Total	**100 %**

The production of electricity in India is done by (1) Central Government (2) State Government (3) Private sector

Challenges Faced by Electricity Sector :

(1) The biggest and the most important challenge is that it is not able to use the fullest production capacity.

(2) The second challenge is that the availability of electricity is not enough to meet the requirement of the economy which aims to grow at the rate of 7 - 8 %.

(3) The production of electricity is less than the production capacity.

(4) Apart from these, improper electricity distribution, wastage of electricity, theft of electricity also are important challenges.

(5) Electricity production is also affected by factors like high cost, frequent power cuts, scarcity of coal etc.

11.3.4 Railways :

World over railways is considered to be a revolutionary development in the field of transportation. The British Government developed railway in India for their own benefits. Indian Railway was started during British Rule on 16th April 1853 between Bombay and Thane, a distance of 22 miles (approximately 34 kilometers).

After Independence the administration of railways came into the hands of Indian Government and adminstered through a separate department.

Today, the spread of railway network stands to be number one in Asia, and number 4 in the entire world. Railway is India's biggest public enterprise and today more than 14 lakh people have got employment in it.

In 2012, 8200 million passengers travelled and 970 million tonnes were transported by railways.

The development of railway has played an important role in India's economic development because:

(1) Industrialisation and business has become faster because of occupational dynamism which is due to faster movement of heavy machines.

(2) Regional dynamisim of labour has improved due to increase in speed, safty and comfort level of travel. This has resulted in increase in labour supply to industries.

(3) Development of railway has resulted in commercialisation of agriculture and it also enables the transportation of fertilizers, tools and other inputs from distant places to agriculture and the agricultural produce is transported to the market.

(4) India's foreign trade has developed through the development of railway.

(5) A new sector has developed which is tourism which is entirely due to the development of railway.

(6) Railway has acted as a link for national unity and integrity.

Thus it can be said that Indian Railway as an infrastructural facility has contributed to the development of agriculture, industry and service sector due to which the entire economy has attained development. Hence in every five year plan encouragement is being given to development of railway and its modernisation and the following aspects were taken care :

(1) More modernisation is undertaken in every plan to speed up the gauge conversion.

(2) More facilities are being created to make rail travel safer.

(3) Modernisation of railway station is also being taken up for providing various facilities.

(4) Railway compartments are also being modernised to make passengers feel more comfor during their travel.

(5) More and more electrification of railway is taking place, so that the travel can become faster.

(6) Through modernisation, the work of increasing the speed of the train has already started so that the time taken to reach the destination for passengers and goods can be reduced.

(7) Talgo and bullet trains are forms of modernisation of trains.

Inspite of all these efforts, railway faces number of challenges like :

(1) The modern technology is still insufficient.

(2) Facility of railways is still insufficient in relation to its demand.

(3) Shortage of finance and problems of administration.

(4) Problems of shortage of facilities for travellors.

(5) Regional imbalance in the development of railways etc.

11.3.5 Petroleum :

Petroleum can be considered as an important source of energy. Moreover, it is a driving force for movement of all vehicles. Any modern technology has depends on the petroleum produced for its production. However we are dependent on imports because the production of petroleum is relatively limited in our coutry

The demand for petroleum is rising greatly because of the speedy industrialisation. Along with that transportation is increasing rapidly and it has resulted in the number of private and public vehicles which increases the demand for petroleum continuously.

In India, oil reserves were found for the first time in Assam. Realising the importance of petroleum for economic development, ONGC (Oil and Natural Gas Commission Limited) was set up in 1959 and later the Government converted it into corporation by intensivefied exploration of crude oil.

Through ONGC, it has been found that petroleum resources are present in Kadi, Kalol, Ankleshwar etc. in Gujarat and in Bombay High for off shore drilling platform has been erected. Inspite of all these efforts, India's contribution to petroleum production is just 0.4 % of the total. The extent of world production at present and a continuous rise in demand, shows that the petroleum reserves are only enough to meet the demand for limited number of years. Hence, the countries of the world have started thinking seriously in terms of alternative energy sources. In this direction, research programmes are being undertaken. India has also started encouraging research in this direction.

Natural Gas also is considered to be of petroleum origin, which is predominantly used in thermal power stations, cooking gas and as fuel for running vehicles. The total gas production in India is only 0.5 % of the total gas of the world. By using more natural gas it is believed that the environmental pollution can be reduced to remarkable extent. Hence, it should be used increasingly in the production of electricity and for vehicle operation. Use of gas is considered Environment friendly.

Exercise

1. Choose the correct option for the following questions :

(1) In which year was economic reforms introduced in India ?
(a) 1990 (b) 1991 (c) 1999 (d) 2008

(2) Identify the type of effect that is caused by migration due to pull factors.
(a) Negative (b) Positive (c) Zero (d) Relative

(3) By 2050, how much of the world population will be in cities ?
(a) $\frac{1}{2}$ (b) $\frac{1}{4}$ (c) $\frac{2}{3}$ (d) $\frac{3}{4}$

(4) In which year, the definition of an urban area was liberally given ?
(a) in 1991 (b) in 1981 (c) in 1971 (d) in 1951

(5) Approximately, what was the percentage of population living in cities in 2011 ?
(a) 20 % (b) 32 % (c) 35 % (d) 25 %

(6) Which age group of children are eligible for compulsory and free education according to the Indian Constitution.
(a) 4-14 yrs (b) 5-15 yrs (c) 6-14 yrs (d) 7-15 years.

(7) What was the extent of literacy in India in 2011 ?
(a) 50 % (b) 60 % (c) 70 % (d) 74 %

(8) When was railway started for the first time in India ?
(a) in 1953 (b) in 1853 (c) in 1975 (d) in 1901

(9) In which year was ONGC set up ?
(a) in 1947 (b) in 1951 (c) in 1955 (d) in 1959

2. Answer the following questions in one line :

(1) What is meant be internal migration ?
(2) What is meant by development based migration.
(3) What is meant by urbanisation ?
(4) What are the ways through which electricity can be produced.
(5) Give the full form of ONGC.

3. Answer the following questions in brief :

(1) Give the meaning of migration.
(2) What are the pull factros for migration ?
(3) Give meaning of urbanisation.
(4) State the different ways in which urbanisation takes place.
(5) State point wise, the negative effects of urbanisation.

4. Give answers to the point for the following questions :

(1) Explain the types of migration.

(2) Explain in brief, the measures to reduce the problems of urbanisation.

(3) Write short note : Petroleum

(4) State the importance of education.

(5) Write short note on the development of Indian railway.

5. Answer the following questions in detail :

(1) Explain the causes of migration.

(2) Discuss the positive effects of migration.

(3) Discuss the negative effects of migration.

(4) Explain the effects of urbanisation.

(5) Explain in detail, about India's educational scenario.

Glossary

Migration	:	Migration refers to a movement of a person from one place to the other, away from native place, within the country or outside, for job, business, livelihood or for better standard of living on a permanent basis.
Pull factors of Migration	:	When a person gets attracted towards the urban life style and various other facilities and migrates to some place from his native, it is known as migration due to attraction.
Forcible migration Due to Push factors	:	When people living in village do not get opportunities of job, occupation and business, or if it is not enough, if enough educational opportunities are not available, he is forced to move from his native to cities it is known a migration due to push factors.
Urbanisation	:	The gradual increase in the proportion of people living in urban areas from rural and the ways in which each society adapts to the change.
Education	:	The activity of teaching or learning is education.
Investment in Human Capital	:	Investment in Human capital refers to the money invested or spent on education, health and training to develop a person's physical and mental abilities.
Health	:	Just absence of diseases and physical strength is not the real health. But overall well being by way of complete physical, psychological and social health is known as health.

Abbreviations used in the Book

ALE	:	Average Life Expectancy
BHEL	:	Bharat Heavy Electricals Limited
CD	:	Compact Disc
CIS	:	Commonwealth of Independent States
CMIE	:	Centre for Monitoring Indian Economy
CSO	:	Central Statistical Organization
DEMAT	:	Dematerialized Account
DUGJY	:	Deendayal Upadhyaya Gram Jyoti Yojna
DUGKY	:	Deendayal Upadhyaya Gram Kaushalya Yojna
DWCRA	:	Development of Women and Children in Rural Areas
EAS	:	Employment Assurance Scheme
GDP	:	Gross Domestic Product
GIC	:	General Insurance Company
GNI	:	Gross National Income
GSPC	:	Gujarat State Petroleum Corporation
HDI	:	Human Development Index
IAY	:	Indira Awaas Yojna
ICICI	:	Industrial Credit and Investment Corporation of India
IDBI	:	Industrial Development Bank of India
IFCI	:	Industrial Finance Corporation of India
IFFCO	:	Indian Farmers Fertiliser Co-operative Limited
ILO	:	International Labour Organization
IMF	:	International Monetary Fund
IOC	:	Indian Oil Corporation
IRDP	:	Integrated Rural Development Programme
JRY	:	Jawahar Rozgar Yojna
KRIBHCO	:	Krishak Bharati Co-operative Limited
LIC	:	Life Insurance Corporation
MGNREGA	:	Mahatma Gandhi National Rural Employment Guarantee Act.
MWS	:	Million well scheme
NREGA	:	National Rural Employment Guarantee Act
NSSO	:	National Sample Survey Organization
ONGC	:	Oil and Natural Gas Corporation Limited
OPEC	:	Organization of Petroleum Exporting Countries
PDUSJY	:	Pandit Deendayal Upadhyaya Shramev Jayate Yojna
PMAY	:	Pradhan Mantri Awaas Yojna
PMFBY	:	Pradhan Mantri Fasal Bima Yojana
PPP	:	Purchasing Power Parity
PQLI	:	Physical Quality of Life Index
RBI	:	Reserve Bank of India
REGP	:	Rural Employment Guarantee Programme
SGSY	:	Suvarnajayanti Gram Swarojgar Yojna
SIDBI	:	Small Industries Development Bank of India
SITRA	:	Supply of Improved Tool-Kits to Rural Artisans
TYYSEM	:	Training of Rural Youth for Self Employment
UK	:	United Kindgdom
UNO	:	United Nations Organization
USA	:	United States of America
WHO	:	World Health Organization