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ECONOMICS

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Foreword

Providing education to children is a fundamental right, and it's essential for the overall development of society. The government of Telangana plays a crucial role in ensuring that education is accessible to all, and they often establish institutions like the Telangana Open School Society (TOSS) to cater to children who may be unable to access formal education due to various reasons.

To provide quality education to learners studying Intermediate Education in Telangana Open School Society starting from the 2023 academic year, the textbooks have been revised to align with the changing social situations and incorporate the fundamental principles of the National Education Policy 2020. The guidelines set forth in the policy aim to enhance the overall learning experience and cater to the diverse needs of the learners. Earlier Textbooks were just guides with questions and answers. TOSS has designed the textbook with a student-centric approach, considering the different learning styles and needs of learners. This approach encourages active engagement and participation in the learning process. The textbooks include supplementary teaching materials and resources to support educators in delivering effective and engaging lessons.

This textbook of economics is broadly divided into four areas: introduction to Economics, Microeconomics, Macroeconomics, the Indian Economy, and the Telangana Economy. Inflation, unemployment, economic growth, Demand Analysis, National Income Analysis, Economic Development in India, and human resources are some of the topics of this textbook. Understanding all these chapters is essential for a comprehensive grasp of the subject.

We are indeed very grateful to the Government of Telangana and the Telangana State Board of Intermediate Education. Special thanks to the editor, co-coordinator, teachers, lecturers, and DTP operators who participated and contributed their services tirelessly to write this text book.

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CHAPTER 1

NATURE AND SCOPE OF ECONOMICS

1.0. Objectives

- Definitions of economics
- Problems of an economy
- Nature and scope of economics
- Differentiate between micro and macroeconomics

1.0. Introduction

Economics is the study of how humans make decisions in the face of scarcity. These can be individual decisions, family decisions, business decisions or societal decisions. If you look around carefully, you will see that scarcity is a fact of life.From the point of view of betterunderstanding of the subject and finding a solution to the problem, it is imperativeto know the nature of the economic issue under study and the area or branch underwhich the issue is dealt with. In this chapter we will discuss on definitions, nature and scope of economics and basic concepts of economics.

1.2. Definitions of Economics: Evolution in the definitions of Economics

- Wealth definition (1776) : Adam Smith
- Welfare definition (1890) : Alfred Marshall
- Scarcity definition (1932) : Lionel Robbins
- Growth definition (1948) : P.A. Samuelson
- Modern definition (2011) : A.C. Dhas

1.2.1: Wealth definition (1776)

- Adam Smith, who is regarded as Father of Economics, published a book titled "An Inquiry into the Nature and Causes of Wealth Nations" in 1776 Adam Smith explains using its natural resources how a country acquires the wealth.

- He defined economics as “a science which inquiries into the nature and causes of wealth of nations.”
- He emphasized the production and growth of wealth as the subject matter of economics.

Features of wealth definition

Characteristics:

- It takes into account only material goods exaggerated the emphasis on wealth.
- It inquires the caused behind creation of wealth.

Criticisms:

- It considered economics as a dismal or selfish science.
- It defined wealth in a very narrow and restricted sense.
- It considered only material and tangible goods.
- It gave emphasis only to wealth and reduced man to secondary place.

1.2.2. Welfare definition (1890)

- In 1890, in his famous book 'The Principles of Economics' Alfred Marshall stated that “economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of material requisites of wellbeing.”
- It is on one side a study of wealth; and on the other side, a study of human welfare based on wealth.

Features of welfare definition

Characteristics:

- It is primarily the study of mankind.
- It is one side a study of wealth; and on other side the study of man.
- It takes into account ordinary business of life. It is not concerned with social, religious and political aspects of man’s life.
- It emphasizes on material welfare i.e. human welfare which is related to wealth.
- It limits the scope to activities amenable to measurement in terms of money.

Criticisms:

- It considered economics as a social science rather than a Human Science.
- It restricts the scope of economics to the study of persons living in organized communities only. Welfare in itself has a wide meaning which is not made clear in definition.

1.2.3. Scarcity definition (1932)

- According to Lionel Robbins, "Economics is the science which studies human behaviour as a relationship between ends and scare means which have alternative uses."
- He emphasized on 'choice under scarcity'. In his own words "Economics is concerned with that aspect of behaviour which arises from the scarcity of means to achieve given ends."

Features of welfare definition

Characteristics:

Economics is a positive science

- New concepts: Unlimited ends, scarce means and alternative uses of means.
- It emphasizes on choice - A study of human behaviour.
- It tried to bring the economic problem which forms the foundation of economics as social science.
- It takes into account all human activities.

Criticisms:

- It does not focus on many important economic issues of cyclonical instability, unemployment, income determination and economic growth and development.
- It did not take into account the possibility of increase in resources over time.
- It has treated economics as science of scarcity only.

1.2.4. Growth definition (1948)

- According to Prof. P.A. Samuelson, "Economics is the study of how men and society choose with or without the use of money to employ the scarce productive resources which have alternative uses, to produce various commodities over time and distribute them for consumption now and in future among various people and groups of society. It analysis the costs and benefits of improving pattern of resource allocation."
- This definition introduced the dimension of growth under scare situation.

Features of growth definition

Characteristics:

- The definition is not merely concerned with the allocation of given resources but also with the expansion of resources, tries to analyse how the expansion and growth of resources to be used to cope with increasing human wants.
- More dynamic approach.
- According to this definition resource allocation is a universal problem whether it is a better economy or an exchange economy.
- Definition is comprehensive in nature as it is both growth as well as future oriented.

1.2.5. Modern definition (2011)

- According to Prof. A.C. Dhas, "Economics is the study of choice making by individuals, institutions, societies, nations and globe under conditions of scarcity and surplus towards maximizing benefits and satisfying their unlimited needs at present and future."
- In short, the subject economics is defined as the "study of choices by all in maximizing production and consumption benefits with the given resources of scarce and surplus for present and future needs."

Features of modern definition

- It takes into account all the earlier definitions- wealth, welfare, scarcity and growth.
- It covers both micro and macro aspects of economics.
- It considers both production and consumption activities.
- It emphasizes choice making dimension as crucial in economics.
- It aims at obtaining maximum benefits with given resources.
- It is suitable in conditions of both scarcity and surplus.
- It takes into account the present and future-time dimensions - Growth dimension and sustainable development.

1.3. Problems of an Economy

Basic economic problems:

- What to produce?
  - What kinds of products to be produced?
  - What quantity of it should be produced?
- How to produce?
  - Which production method to be used?
- For whom to produce?
  - How to distribute the quantity?
  - What criteria should be chosen?

1.3.1. Economic Problem

Economic Problem regarding the allocation of resources to produce alternative goods and services, so the economic problem is the problem of choice. The economic problem lies at the root of all the problems of an economy. The basic economic problem is the problem of relative scarcity and choice.

Resources with alternative uses:

All factors of production can be put to alternative uses. For example, a piece of land can be used to do farming, build a factory, develop a school or build a hospital. A labour can be used to plough a field, make baskets or sell vegetables; hence, we see that resources have alternative uses.

Economic or choice problem:

Wants are unlimited but resources to satisfy those wants are limited. Hence, the basic economic problem that is faced by all economics is that there are unlimited wants but the resources satisfy these wants are limited. We have also discussed that resources have alternative uses. Scarcity of resources also leads to choice.

Limited resources:

Resources to satisfy human wants are limited. People may have high or low income but not unlimited income. Hence, resources available to consumers are scare or limited. Resources are the factors of production that are used to make the goods and services which satisfy human wants. These resources include land, labour, capital and entrepreneurship.

Scarcity of resources:

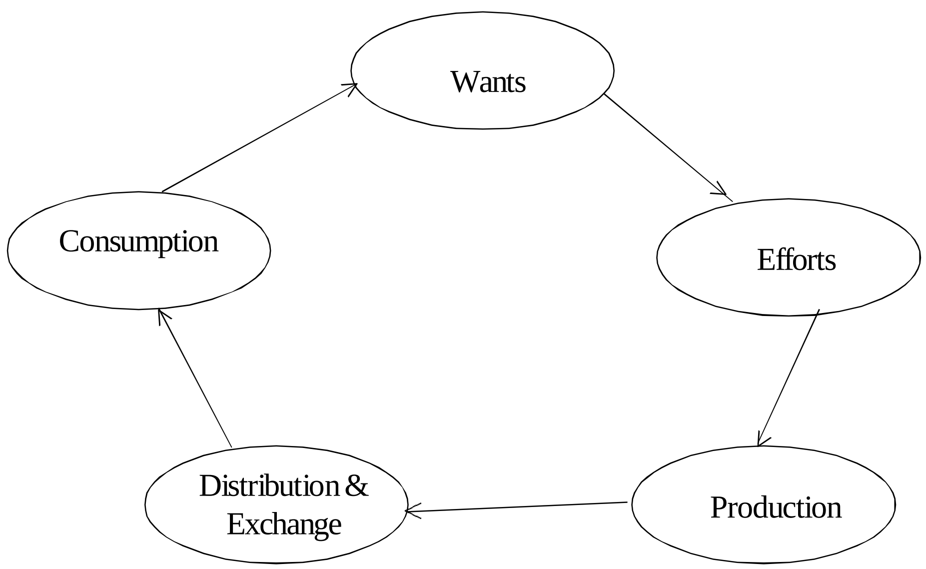
Scarcity means that the demand for the resources is greater than their availability. Resources to satisfy wants are limited. People may have high or low income but not unlimited income. These resources include land, labour, capital and entrepreneurship.

1.4. Nature and scope of economics

- Economics is the science that deals with production exchange and consumption of various commodities in economic systems.
- It shows how scarce resources can be used to increase wealth and human welfare.
- The central focus of economics is on scarcity of resources and choices among their alternative uses.
- The resources or inputs available to produce goods are limited or scarce. This scarcity induces people to make choices among alternatives and the knowledge of economics is used to compare the alternatives for choosing the best among them.

1.4.1 Scope of Economics

The scope of economics is broad and encompasses various aspects of human behavior related to the production, distribution, and consumption of goods and services. Economics is a social science that examines how individuals, businesses, governments, and societies allocate scarce resources to satisfy their unlimited wants and needs.



1.5 Microeconomics and Macroeconomics

Microeconomics and Macroeconomics are two fundamental branches of economics that study different aspects of the economy at different levels of aggregation. Microeconomic analysis and Macroeconomic analysis are now considered two important approaches to economic analysis. The terms 'Micro' and 'Macro' were first used in economics by Norwegian economist Ranger Frisch in 1933. These terms were derived from Greek words 'mikros' and 'makros' which means small and large respectively.

1.5.1 Microeconomics

Microeconomics is a branch of economics that focuses on the study of individual agents and their economic interactions within the market. It examines how individuals, households, and firms make decisions regarding the allocation of resources, the production and consumption of goods and services, and how these decisions impact prices, quantities, and market outcomes.Microeconomics is based on the assumptions "full employment" and "marginal analysis". Scope of 'Micro Economics' includes mainly three theories. 1 Theory of product pricing 2 Theory of factor pricing 3 Theory of Economic Welfare

Importance of microeconomics

- Allocation of resources: Microeconomics helps determine how resources, such as labour, capital, and natural resources, are allocated among different uses and industries.
- Pricing decisions: Microeconomics plays a significant role in analyzing how prices are determined in markets.
- Policy formulation: Microeconomic analysis provides the foundation for designing effective economic policies, such as taxation, subsidies, regulations, and antitrust laws.
- International trade: Microeconomics is also relevant in understanding the behavior of individual firms and consumers in the context of international trade.
- Consumer behavior: Microeconomics deals into the factors influencing consumer choices, preferences, and purchasing patterns.

1.5.2 Macroeconomics

Macroeconomics, on the other hand, deals with the economy as a whole and focuses on broader aggregates, such as the overall level of output, employment, inflation, and economic growth. It looks at the entire economic system and aims to understand the factors that influence its overall performance.Macroeconomics is also known as Income and employment theory or aggregative economics. It also deals with the theory of macro distribution, theory of business cycle, theory of General Price level and Inflation.

Importance of Macroeconomics:

- Stability and Growth: Macroeconomics helps policymakers and governments make informed decisions to achieve stable and sustainable economic growth.
- Inflation and Price Stability: Macroeconomics plays a crucial role in controlling inflation and ensuring price stability.
- Employment and Unemployment: Macroeconomic analysis is instrumental in addressing unemployment issues. Governments can use fiscal and monetary policies to influence employment levels and create an environment conducive to job growth.
- Government Policy Formulation: Governments use macroeconomic data and theories to create effective economic policies. Fiscal policies (government spending and taxation) and monetary policies (control of the money supply and interest rates)
- Trade and Balance of Payments: Macroeconomics considers factors influencing international trade, such as exchange rates, trade deficits, and surpluses.

Difference between Microeconomics and Macroeconomics

Microeconomics	Macroeconomics
It studies the particular segment of the economy, i.e. an individual, household, firm, or industry.	It deals the economy as a whole; it studies aggregate units, such as national income, general price level, total consumption, etc. It deals with broad economic issues.
It deals with various issues like demand, supply, factor pricing, product pricing, economic welfare, production, consumption, and more.	It deals with various issues like national income, distribution, employment, general price level, money, and more.
It is known as 'price theory'	It is known as 'income and employment theory'
Microeconomics determine the price of a particular commodity along with the prices of complementary and the substitute goods.	Macroeconomics is helpful in maintaining the general price level.

1.6 Positive and normative economics

Positive and normative economics are two branches of economics that serve different purposes and focus on distinct aspects of economic analysis.Positive economics establishes the foundation for understanding economic phenomena, while normative economics provides the framework for evaluating policy choices and making value-based decisions.

1.6.1 Positive Economics

Positive economics deals with the objective analysis of economic facts and phenomena. It aims to describe and explain economic behavior and events as they are, without making value judgments or opinions about whether they are good or bad.The focus is on providing a scientific and empirical analysis of economic issues, using data, mathematical models, and other tools of economic analysis.

1.6.2 Normative Economics

Normative economics, on the other hand, deals with the subjective analysis of economic issues and seeks to make value judgments about what ought to be. It involves making recommendations and offering opinions about economic policies or actions based on specific value systems or ethical frameworks.

1.7 Basic Concepts

1.7.1 Goods

Goods play a central role in the functioning of market economies. The production, distribution, and consumption of goods drive economic activities and contribute to the overall well-being of individuals and societies. Understanding the different types of goods and their characteristics is essential for analyzing economic behavior

Types of Goods:

Free Goods: Free goods are items that are abundant and do not have a direct cost associated with them. For example, air and sunlight are typically considered free goods.

Economic Goods: Economic goods are scarce items that have a cost associated with their production, distribution, or acquisition. These are the goods that necessitate economic choices and trade-offs due to their limited availability.

Consumer Goods:

Durable Goods: These are products with a long lifespan and are expected to be used over an extended period, typically lasting more than three years. Examples include cars, furniture, and appliances.

Non-Durable Goods: These goods have a short lifespan and are used up quickly. Examples include food, beverages, and toiletries.

Capital Goods: Capital goods, also known as producer goods, are used by businesses to produce other goods and services. They are not directly consumed by end-users but are essential for the production process. Examples include machinery, equipment, and factories.

Intermediate Goods: Intermediate goods are materials and components used in the production of other goods. They are not the final products sold to consumers but are part of the production process.

Intangible Goods: Also known as services, these are non-physical products that are not tangible but provide value to consumers. Examples include education, healthcare, transportation, banking, and entertainment services.

1.7.2 Wants

Want is the desire to have a commodity. Wants and their satisfaction have major roles in all economic activities.They play a crucial role in shaping human behavior and decision-making.Understanding the characteristics of wants is essential for individuals, businesses, and policymakers in making informed choices, setting goals, and managing resources effectively.

Characteristics of wants:

- Wants are unlimited: Wants are multiple. They are never-ending. They arise again and again. When one want is satisfied another arises. Wants go on increasing.
- Wants are recurring in nature: Some of the humans want to occur again and again. They arise even if it is satisfied once. E.g. We take food after a certain time interval to satisfy hunger.

- Wants are complementary: Many times, a single article out of a group cannot satisfy human wants by itself. It needs other things to complete its use. For example, a motor car needs both petrol and engine oil to keep working.
- A particular want is satiable:Though human wants are unlimited and all cannot be satisfied at a time, but one particular want is satiable. It can be satisfied sooner or later, if one tries for it and he has the resources to satisfy it.
- Wants are competitive:Some wants compete with each other. Wants compete because all of them cannot be satisfied at a time, and therefore, a choice has to be made between them.

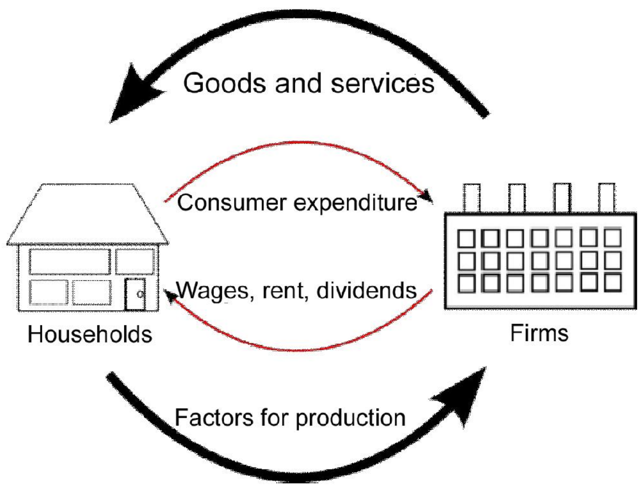
1.8 Circular flow of income

The circular flow of income is an economic concept that illustrates the flow of money and goods between different sectors of an economy. It shows how households, businesses, governments, and the foreign sector interact and engage in economic activities. The circular flow model provides a simplified representation of the complex interactions that occur in an economy.

The circular flow of income operates through two main channels:

Product Market: This is where businesses sell goods and services to households, and households, in turn, purchase these goods and services.

Factor Market: This is where households provide factors of production (labor, land, and capital) to businesses in exchange for wages, rent, interest, and profit.



1.9 Summary

Economics is the study of how people make choices and decisions with scarce resources. Most of the resources in our world are limited, be it time, money or natural resources. Thus, individuals make constant decisions about what to produce, how to produce, whom to produce and what to consume.Microeconomics and Macroeconomics are two fundamental branches of economics that study different aspects of the economy at different levels of aggregation.Positive and normative economics are two branches of economics that serve different purposes and focus on distinct aspects of economic analysis.

1.10 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Choice problem
2. Alternative uses
3. Limited resources
4. Scarcity definition
5. Classify goods.

II. Answer the following questions in about 8-10 lines each.

1. Explain the Problems of economy
2. Differentiate Microeconomics and Macroeconomics.
3. Explain the characteristics of wants.
4. Describe positive and normative economics

III. Answer the following questions in about 16-20 lines.

1. Explain the (4) definitions of economics.
2. Explain nature and scope of economics.
3. Describe the circular flow of economics.
4. Explain micro and macroeconomics and their importance.

1.11. Glossary

- Adam Smith (1723:1790) Regarded as the Father of Modern Economics. Author of Wealth of Nations.
- Microeconomics: The term micro derived from the Greek word 'micros' which means small.
- Economic goods: These goods are manmade goods. These goods have price. The supply of these goods is always less than their demand.
- Price: The value of commodity is expressed in terms of money is known as price.
- Intangible Goods:Services are a broad category of intangible goods that encompass a wide range of activities provided by individuals

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CHAPTER 2

ECONOMIC GROWTH AND ECONOMIC DEVELOPMENT

2.0. Objectives

- Define economic growth.
- Distinguish between economic growth and economic development.
- Identify the developed and developing economics.
- Understand characteristics of the developed and developing economics.
- Analyse characteristics of developing economies with special reference to India.

2.1. Introduction

In this lesson you will study about the meaning of economic development, economic growth, and objectives of economic development and indicators of economic development.

2.2 Concepts of Economic Growth and Economic Development

An increase in the total volume of goods and services produced by a nation is termed as economic growth.

According to Michal P. Todaro, "Economic growth is a steady process by which the productive capacity of the economy is increased over a time to bring about rising levels of national output and income".

Essentials of Economic Growth:

- Economic growth shows a higher rate of increase in real per capita income than the rate of growth of population.
- Economic growth is always linked with a large increase in production ability of the economy.

Economic growth refers to a sustained increase in country's output of goods and services (or) increase in product per capita.

2.2.1 Concept of Economic Development

Economic development is a wider concept than the concept as "Economic Growth" development includes not only economic growth but also certain other positive changes in other spheres of life. In fact, it includes development in all spheres.

According to Michael P.Todaro “Development must be conceived as a multi-dimensional process involving major changes in social structures, popular attitudes and national institutions as well as the acceleration of economic growth, the reduction of inequality and the eradication of poverty”.

2.2.2 Distinction between Economic Growth and Economic Development

Economic Growth	Economic Development
Definition: It refers to the increase in the monetary growth of a nation in a particular period.	It refers to the overall development of the quality of life in a nation which includes economic growth.
Span of concept: It is a narrower concept than that of economic development.	It is a broader concept than that of economic growth.
Scope: It is a uni-dimensional approach that deals with economic growth of a nation.	It is a multi-dimensional approach that looks into the income as well as the quality of life of a nation.
Term: Short-term process	Long term process
Measurement: Quantitative	Both quantitative and qualitative.
Applicable to: Developed economics	Developing economics
Government support: It is an automatic process that may or may not require intervention from the government.	It requires intervention from the government as all the developmental policies are formed by the government.
Ex: GDP, GNP	Ex: HDI, Per Capita Income, industrial developments.

2.2.3 Objectives of Economic Development

The aim of economic development is to improve the material standards of living by raising the absolute level of per capita incomes.

Raising per capita incomes is also a stated objective of policy of the government of all developing countries.

- **High Rate of Growth:** During the first three decades of planning, the rate of economic growth was not so encouraging in our country. But from 6th plan onwards, there has been considerable change in the Indian economy.

  6th Plan - 5.4%

  7th Plan - 5.8%

  8th Plan - 6.8% 9th Plan - 7% (Targeted)

  10th Plan - 7.6% 11th Plan - 8% (Targeted)

- **Economic Self – Reliance:** Self-reliance implies that a country generates sufficient surplus to buy what it needs. It does not depend upon other countries for the resources of funds needed to acquire them.

- **Modernization:** Modernization aims at improving the standard of living of the people by adopting scientific technique of production, by replacing the traditional backward methods and by bringing changes in the rural structure and institutions modernization in sociology, the transformation from a traditional rural agrarian society to a secular urban industrial society.

- **Economic Stability:** Promoting economic stability is a matter of avoiding economic and financial crises. Economic stability is the absence of excessive fluctuations in the macro economy. An economy with fairly constant output growth and low and stable inflation would be considered economically stable.

  Economic stability allows people the ability to access resources essential to life including financial resources, quality housing and food and a job that provides a stable living wage.

- **Sustainable Development:** Meeting the needs of the present generation without compromising the needs of future generations.

Sustainable development is an organizing principle for meeting human developmental goals while also sustaining the ability of natural systems to provide the natural resources and ecosystem services on which the economy and society depend.

- **Inclusive Growth:** Inclusive growth means economic growth that creates employment opportunities and helps in reducing poverty. It means having access to essential services in health and education by the poor. It includes providing equality of opportunity, empowering people through education and skill development.

2.3 Indicators of Economic Development

2.3.1 Real National Income

National income means the value as goods and services produced by a country during a financial year, thus, it is the net result of all economic activities of any country during a period of one year and is valued in terms of money. Real national income is measured at constant prices, adjusted for inflation.

2.3.2 Gross National Product per Capita

Includes the gross domestic product (GDP) and net factor income from abroad which is the income paid to overseas Indians for services. They have contributed to the domestic economy.

2.3.3 Welfare

Is the study of how the allocation of resources and goods affect social welfare. This relates directly to the shady of economic efficiency and income distribution, as well as how these two factors affect the overall well- being of people in the economy.

2.3.4 Social indicators

The main social indicators of development include education, health, employment and unemployment rates and genders equality. Indicators to World Bank and United Nations use these measure how “developed” a country is, and the main indices are economic, demographic and civic, socioeconomic, health security and safety and environment and energy.

2.3.5 Characteristics of Developed Economies

Based on their GNI per Capita, countries are classified as low income middle income and high income countries, according to World Bank Report (2014) entitled "Risk and Opportunity, Managing Risk for Development".

- Significance of services and Industrial sector: At present, the service sector contributes the maximum share in country's net national product at factor cast (national income). According to 2000-01, 48.5% share of national income comes from service sector and moreover, 22.9% of total working population is employed in this sector.
- High rate of capital formation: The higher rate of capital formation in a country means the higher rate of economic growth. Generally the rate of capital formation or accumulation is very low in comparison to advanced countries. Generally, the higher the capital formation of an economy, the faster an economy can grow its aggregate income.
- Use of modern production Techniques and skills: Modern production techniques and skills have become an essential part of economic development process in the developed countries. The new and advanced techniques have been used for the exploitation of the physical human resources.

  The adoption of technology by developing countries has had profound effects on their economies, such as reducing the national costs of production, establishing standards for quality and allowing individuals to communication from a distance.
- Low Growth of population: Slower population growth means that women an average are having fever children, which gives girls and women the opportunity to pursue education and careers and continue a positive cycle of schooling, autonomy and equal status. Slower population growth will also place a higher value on immigration.

2.4 Characteristics of Developing Economies - India

The major characteristics of developing economies in general and the Indian economy in particular are as follows:

2.4.1 Low per Capita Income

Poverty is reflected in low GNP per capita. However, it is not relative poverty but absolute poverty that is more important to do assessment in these developing economies.

India's per capita gross domestic product (GDP) in 2020-21 dropped to 8.7% to Rs.99,155/- in 2020-21 from Rs.1,08,620/- a year before, according to the first advance estimates of National Income.

2.4.2 Predominance of Agriculture

Agriculture is the most important sector of Indian economy as it contributes about 17% to the total GDP and provides employment to over 60% as the population. Indian agriculture has registered impressive growth over last few decades.

Disguised unemployment is found in the agricultural sector of India. Disguised unemployment is also known as hidden unemployment. In this type of unemployment some people seem employed but they are actually not.

2.4.3 Capital Deficiency

Low level of National Income and per capita income are the root cause of capital deficiency in developing countries is low level of real national and per capita income which limits to the motives of savings investments. Due to lack as desired investments, capital formation has no increase.

2.4.4 Technological Backwardness

India is backward in technology because we have very limited funds and insufficient infrastructure for research and development for high-tech products and also less skilled human resources who are working in house. In 2001, India was in 46th place in Inventions Indicator.

2.4.5 Inadequate infrastructure facilities

Lack of infrastructure brings poor standard of living, economic deficit and improves poverty. For example: when a community lacks transport infrastructure like loads, it means that the people from that community are unable to travel to cities or places where job and social networking opportunities, as well as quality health care facilities are inadequate.

2.4.6 Demographic features

Population statistics include indicators that measure the population size, sex ratio, density and dependency ration while vital statistics include indicators such as birth rate, death rate, and natural growth rate, life expectancy at birth morality and fertility rates.

2.4.7 High rate of illiteracy

The illiteracy rate as a group refers to the proportion as members that are part of the illiterate population. According to National statistical office (NSO) data as of the year 2021 India's average literacy rate is 77.70%. The male literacy at the India level is 2021 stands at 84.70% and female literacy stands at 70.30%.

2.4.8 A Dualistic Economy

The Indian economy is considered to have a dualistic feature because it comprises the features of both types of economies – underdeveloped as well as progressive. A very large portion of the economy consists of people who are underdeveloped and belong to the backward class.

2.4.9 Utilisation of natural resources

The natural resources in underdeveloped countries are either unutilized or underutilized or misutilised. A country may be deficient in natural resources, but it cannot be so in the absolute sense.

The management of natural resources is one of the most critical challenges facing developing countries today. The exploitation of non-renewable natural resources, including oil, gas, minerals and timber has often been cited as a key factor is triggering, escalating or sustaining violent conflicts around the globe.

2.4.10 Lack of Entrepreneurship

Another feature of underdeveloped countries is the Lack of entrepreneurial ability. Entrepreneurship is inhibited by the social system which denies opportunities of creative faculties. The small size of the market, lack as capital, lack of infrastructural facilities, technological backwardness, and absence of private property, absence of freedom of contract and law and order hamper enterprise and initiative by all these organisation became very difficult.

2.4.11 Tradition bound attitudes towards work and life

The Indian society is divided into many castes and sub-castes resulting in frictions in the society. The attitude as society towards her work is not conducive. The attitude of men is tradition bound and she is not treated with equality.

2.5 Summary

Economic growth and economic development, although are divergent concepts are inter related and mutually inclusive. The conceptualization of economic development has reflected the relationships between economic and non-economic factors in the economic development. The features of developed and developing countries are not altogether different but same features with countries at different levels of development.

2.6 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Economic growth
2. Economic development
3. Self-reliance

II. Answer the following questions in about 8-10 lines each.

1. Difference between economic growth and economic development.
2. Explain objectives of economic development.

III. Answer the following questions in about 16-20 lines each.

1. Explain the characteristic features of developed economies
2. Examine the characteristic features of developing economies

2.7 Glossary

1. Economic Growth: Increase in the goods and services in a year.
2. Economic Development: Changes in social, technological and overall development along with growth.

3. Structural Changes: These changes indicate the relative contribution by the different sectors – primary, secondary and service sectors to GDP and employment.

4. Self-Reliance: Self-reliance implies that a country generates sufficient surplus to buy what it needs. It does not depend upon other countries for the resources of funds needed to acquire them. Self-reliance allows imports.

5. Sustainable Development: Meeting the needs of the present generation without compromising the needs of future generations.

6. Inclusive Growth: It means the inclusiveness of the hitherto excluded population in the growth process.

2.8 References

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CHAPTER

3

UTILITY ANALYSIS

3.0. Objectives

- Understand the meaning of Utility
- Understand the Marginal utility and Total utility
- Understand the Cardinal Utility and Ordinal utility
- Understand the relationship between total utility and Marginal utility
- Explain the law of diminishing Marginal Utility

3.1. Introduction

Utility analysis is a concept commonly used in economics. Utility analysis is used in demand theory, in rational decision making, in evaluation of alternatives based on their utility and to measure the satisfaction of the consumer.

3.2. Meaning of Utility

The concept of Utility was introduced by William Stanley Jevons in 1871. People demand goods because they satisfy the wants. The utility means want satisfying power of a commodity. The consumer gets satisfaction, through introspection. It can also be defined as property of the commodity which satisfies the wants of the consumer. Utility is a subjective, it varies with different persons. That is different persons derive different amount of utility from a given good.

3.2.1 Utility measurement

There are two main approaches to measure the utility.

(A) Cardinal Utility

According to Alfred Marshal utility, we can measures in terms of cardinal numbers. The consumer satisfaction express in a numbers i.e. 1, 2, 3, 4, 5 in quantitatively. This approach is known as cardinal utility.

Example: An apple gives 25 units of satisfaction. Here, 25 is the measurement of cardinal utility.

(B) Ordinal Utility

J.R. Hicks and R.J.D. Allen have followed the ordinal utility. The consumer satisfaction cannot be measured in terms of numbers, but we compare i.e. the satisfaction is a qualitatively measured with other one.

For example: Coffee gives more satisfaction than tea. The preference of I, II, III,IV etc. used for ordinal utility.

3.2.2. Types of Utility

There are four types of utilities are there.

a) Form Utility

Some commodities satisfies human wants by its shapes is known as Form Utility. Ex: Conversion of wooden log into table and chair.

b) Place Utility

Shifting the goods where the people wants called Place Utility. Ex: Raw material to industry, finished goods to consumer market, they gets utility.

c) Time Utility

Some goods will get utility at certain time only. Ex: Cool drinks in summer; tea, coffee, swetters in winter; Umbrella in rainy etc.

d) Service Utility

Some services have the ability to satisfy human wants. Ex: Services of a good doctor, teacher have the utility.

3.3 Law of Diminishing Marginal Utility

Introduction: The Law of Diminishing Marginal utility was originally explained by H. H. Gossen in1854, hence it is called as Gossen's first law. Alfred Marshall, in his famous book "the Principles of Economics 1890" developed scientifically and popularized this theory.

Definition:

"The additional benefit that a person derives from a given increase in his stock of a thing diminishes with every increase in stock that he already has" (Alfred Marshall).

Meaning: It explained that if any consumer goes on to increase his stock of the commodity, the Marginal Utility of that additional stock will diminish.

Assumptions:

The law is based on the following assumptions.

1. Rationality: The consumer is rational. His objective is to get maximum satisfaction.

2. Cardinal Utility: The consumer utility can be measured in numbers. e.g: 1,2,3,4…

3. Independent Utility: The Utility of any commodity is independent.

4. Marginal utility of money is constant: This assumption is necessary. The Marginal Utility of Money is constant. No change in income level.

5. Homogenous goods: The Goods are homogeneous.

6. The size of Goods is same.

7. There is no time gap between consumption of goods.

8. Commodity is divisible

9. The tastes, habits and preferences of the consumer are constant.

10. Consumer has full knowledge of Market.

Illustrations of the Law:

Total Utility (TU)

Total Utility is the total satisfaction obtained from the Consumption of all possible Units of a commodity.

$$TU_n = f(Q_n)$$

Where, Total Utility of 'n' commodity; f = functional relationship; Q_n = Quantity of 'n' commodity

Marginal Utility (MU)

Marginal Utility is the addition to the Utility derived from the consumption of an additional Unit of a Commodity.

$$MU = \Delta TU / \Delta Q \qquad \text{Marginal Utility} = \frac{\text{Change in Total Utility}}{\text{Change in the quantity of goods}}$$

$MUn = TU_n - T_{Un-1}$

Marginal Utility = Current Utility – Previous Utility

The above given assumption based the Law of diminishing marginal utility.

Illustration of the law:

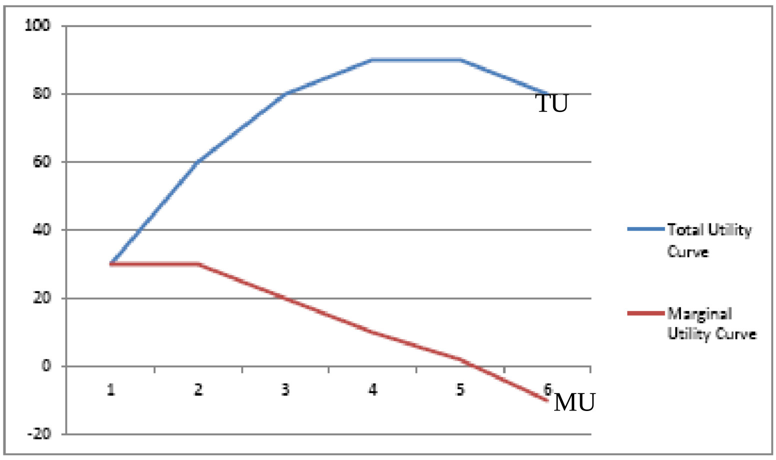
The law of diminishing marginal utility is a general observation of human behaviour. As a consumer uses more and more of a commodity, the marginal utility derived starts declining and eventually becomes zero, and if the use of the commodity is continued beyond this stage, the marginal utility eventually becomes negative.

Table-1

Units of the Commodity (Apple) Q	Total Utility (Uitls) TU	Marginal Utility (Uitls) MU
1	30	-
2	80	50
3	110	30
4	120	10
5	120	0
6	110	-10

The Table-1 explains that the functional relationship between Total Utility and Marginal utility. The consumer is consuming good i.e. apple. As consumer is consuming more and more of X goodderived Marginal Utility from that additional good is diminishing.

TU/ MU



No. of apples

The consumer consuming X- good apples 1st to 4th apple the TU is increasing but MU is decreasing. When 5^{th}Apple consumed TU constant MU is becomeszero.The consumer consumes 6th apple the TU is decreasing and MU becomesnegative (-10).

A) When TU is increasing at diminishing rate, MU is diminishing.

B) When TU is maximum, MU is zero.

C) When TU starts decreasing MU becomes negative.

Limitations of law:

The Law of diminishing marginal Utility has certain limitations. They are

1. The law is based on unrealistic assumptions.
2. The consumer behavior may not be rational at all the time.
3. If the goods are not homogeneous (same) this law will not be applicable.
4. If the consumer income, tastes, habits are changed this law will not be applicable.
5. The Law cannot be applied to indivisible goods and durable goods.
6. Consumer hobbies like stamps and coin collection are an exception, to this law.
7. The law will not applicable to miser.

Importance of Law:

1. This law is helpful to the producers, change in designs, patterns, and packing of goods.
2. This Law explains value theory of Price of goods.
3. Based on this law, the Government can formulate taxes.
4. The difference between value in use and value in exchange based on this law. Ex: Diamond – Water paradox.

3.4 Law of Equi - Marginal Utility

Introduction: Law of - Equi-Marginal utility is an important law of consumption.

This law is also called H.H. Gossen's Second Law and Law of Maximum satisfaction and Law of substitution.

Definition of the law:

According Marshall, “If a person has a thing which can be put to several uses, he will distribute it among there uses, he will distribute it among these uses in such a way that it has the same marginal utility in all.

Statement of the Law:

The consumer has a fixed income. If he spends money on goods, he will get maximum satisfaction. The consumer spending money should all the way follow the Principles of substitution to get the same marginal utility from different commodities.

The fundamental condition for consumers maximum satisfaction and equilibrium of the

Consumer can be following as:

MUX/Px = MUY / Py = MUz/Pz = MUn/ Pn

there, MU_X, MU_Y, MU_Z and MU_N are marginal utilities of commodities x, y, z and many, and Px, Py and Pz are prices of x, y, z goods.

Assumptions of the Law:

1. Utility can be measured.
2. Consumer behaviour is rational so as to get maximum satisfaction.
3. The Marginal Utility of money remains constant.
4. The goods prices are constant.

Table-2

Units of money (in rupees)	Marginal Utility of Expenditure on A	Marginal Utility of Expenditure on B
1	20 (1st)	18 (3rd)
2	18 (2nd)	16 (5th)
3	16 (4th)	14
4	14	12
5	12	10
Total Utility	80	70

It is clear from the above table that the consumer spends three rupees on commodity A and two rupees on B, so that he can maximize his total utility. By spending Rs. 3 on A, he is getting a total utility of 54, and the total utility from B is 34. Therefore by spending Rs 5 on both A and B he is able to get the total utility of 88. (54+34). Thus the consumer gets maximum satisfaction by equating the marginal utilities of A and B by spending Rs. 3 on A and Rs 2 on B.

Limitations of the law:

There are some limitations for this law

1. It is not applicable in case of indivisible goods.
2. This law is based on certain unrealistic assumption.
3. The law of equi-marginal utility is not applicable in case of ignorant consumer.
4. In reality marginal utility of money does not remain constant.
5. It is assumed that the consumer has a perfect knowledge. But this is not correct.

Important of the law:

1. The consumer expenditure depends on this law.
1. This law is useful in the theory of production.
2. This law is useful in the theory of distribution.
3. This law helpful to the government for making budget.

3.5 Summary

The utility analysis is explained utility concept, types of utility and measurement of utility approaches. Utility analyzed based on the law of diminishing marginal utility and the law of equi- marginal utility.

3.6 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What is utility?
2. What is Cardinal Utility?
3. What do you mean by Ordinal Utility?
4. Explain Total Utility.

5. Write about Marginal Utility.
6. Define the law of diminishing Marginal Utility.
7. Explain the law of Equi-marginal Utility.
8. Write the differences between Utility and Marginal Utility.

II. Answer the following questions in about 8-10 lines each.

1. Explain the concept of utility analysis.
2. Explain the difference between total utility and marginal utility.
3. Explain the concept of cardinal utility, ordinal utility.
4. Write the definition and assumptions of law of diminishing marginal utility.
5. Discuss the limitations and importance of law of diminishing marginal utility.
6. Explain the concept and assumptions of law of Equi-marginal utility.

III. Answer the following questions in about 16-20 lines.

1. Explain the law of diminishing marginal utility, its limitations and importance.
2. Describe the law of equi-marginal utility.

3.8 Glossary

- **Utility:** The want satisfying power or capacity of a commodity of services is called as a utility.
- **Cardinal utility:** The consumer satisfaction express in a numbers i.e. 1, 2, 3, 4, 5 in quantitatively. This is called cardinal Utility.
- **Ordinal utility:** The consumer satisfaction cannot be measured in terms of numbers, but we can measure the satisfaction is a qualitatively like compared to other one.

- **Total utility:** The total amount of Psychological (feeling) satisfaction that a person, derives from consumption of goods or services is called total utility.
- **Marginal utility:** Marginal Utility is the addition to the Utility derived from the consumption of an additional Unit of a Commodity

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1. Text book of intermediate fist year Economics from Telugu Academy.
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4. Micro Economic theory – M.L. Jhingan.

CHAPTER 4

DEMAND ANALYSIS

4.0. Objectives

- Explain the meaning of Demand
- Classify types of Demand
- Analyse Market Demand Schedule
- Describe Income effect on Demand
- Explain Cross Demand

4.1. Introduction

Demand is the primary concept in economics. Hence, it is necessary to learn the concept of demand. In this chapter, you learn the meaning of demand. Demand function, determinants of demand, types of Demand, etc.

Meaning of demand: In general, demand and desire, or use in the same sense, are used to purchase goods and services. But in economics, demand means being willing and able to purchase the goods or services that a consumer desires.

For example, a poor person's desire to purchase a car is not a demand. Even if a rich person wants to buy a car, if he is not interested in paying the price of the car, it cannot be considered a demand. This means that if the rich person is willing to pay the price of a car, then only that is considered a Demand. That is, when one has a desire to buy a car, has the financial means, and is willing to pay its price, it can be considered as demand.

Demand should have the following characteristics.

- Desire to buy the product.
- Should have the financial ability to fulfill those desires.
- Consumer must be willing to pay the price of a commodity.

A consumer can create the demand in the market only when he has the above three characteristic features.

Definition:

Demand is the quantity that consumers are willing to buy a good at a given time and at a given price.

4.2. Demand function

It is a mathematical expression, showing the relationship between the quantities demanded of a commodity and the factor that determine it. It can be expressed as follows:

$D_x = f(P_x, P_1, \ldots, P_n, Y, T)$

Px = The price of the commodity

P1, …., Pn = The prices of other commodities

Y = The income of the household;

f = functional relationship

T = The tastes and preferences of the household.

Demand is a dependent variable, where as P1, P2, ... Pn, Y, T are independent variables.

4.2.1. Determinants of Demand:

There are a number of factors that determine the demand for a good. The demand function shows the relationship between the demand and the factors that determine the demand for a good.

The following are the determinants of demand.

Price of a commodity: The demand for a commodity depends on its price. The change in demand takes place if the price of a commodity increases, then its demand decreases and vice versa. When other factors that determine demand are constant and there is a change in the price of the good only. Demand for a commodity is inversely related to its price.

$$P_x \uparrow \dashrightarrow D_x \downarrow$$

Price of substitutes and complementaries: Demand for a commodity is also influenced by the change in the prices of substitution and complementary commodities. Coffee, tea and scooter, motorcycle are the example for Substitute commodities.

In this, an increase in any one will lead to Increase in the demand of the other substitute commodity. Hence, in the case of substitute there exists, a positive relation between the price and the quantity demanded.

In the case of complementary goods, there exists a negative relationship between the price of the commodity and the quantity demanded. Patrol, car and Tea, sugar are the examples for complementary commodities. Joint demand exists for complementary goods.

Income of the consumer:

Income of the consumer influences the purchasing power. Being other things, remain constant, whenever the income of a consumer increases, the demand for the normal goods increases, but the demand for the inferior Goods decreases. Ex: When consumer income increases, he will shift to superior commodities from normal cars to premium cars.

Tastes and preferences of consumer:

In the society tastes and preferences or not same, and it may vary from person to person. Tastes do not remain same forever. For example, changes in the fashion influences, the different types of Items.

Population:

Size of the population of a country influences demand of certain goods. For instance, larger the population more will be the demand for the goods like food grains clothes, etc.

Technological changes:

Due to technical progress, new discoveries enter the market. As a result old goods are substituted by new Goods. Hence demand decreases for old goods. For instance, landline phones are replaced by the mobile phones, due to the change in the technology.

Change in weather:

Demand for a commodity may change due to a change in the climate equal conditions. For example, woolen clothes in winter and cotton clothes in summer gain more demand.

4.3. Law of demand

Law demand, denotes the relation between price and quantity, demanded. Generally consumer purchases goods in high or more quantity when the price is low, and if price is high, Low quantity is demanded.

According to Marshall, when the other things remain the same, the amount demanded increases with the fall in price and diminishes with a rise in price.

4.3.1. Characteristics of law of demand

The following are the main characteristics of law of demand.

Inverse relationship:

When the price of good increases, then the demand decreases and vice, a versa. Prices independent, as It is due to change in the price quantity, demanded changes. Not due to any other factors.

Time period: Consumer's demand is attached to a particular time period. Prices are not constant they change with the time. For example, daily monthly weekly etc.

Other things being same:

This is an assumption as the law that apart from the price other things like income, price of substitute goods and complementary Goods, etc. remains same.

4.3.2. Assumptions of the Law of demand

The following are the some of the main assumptions of law of demand:

i) No change in the income of the consumer.

ii) No change in the tastes and preferences of the consumer.

iii) No change in the price of substitutes and complementaries.

iv) No new substitutes are discovered.

v) No expectation of future price changes.

The following are the exceptions for the law of demand:

According to the law of demand, demand for a commodity and price are inversely related. But, under certain circumstances price and demand have direct proportionate relationship. This means that when the price of a good rises, consumers buy more and when the price falls, they buy less.

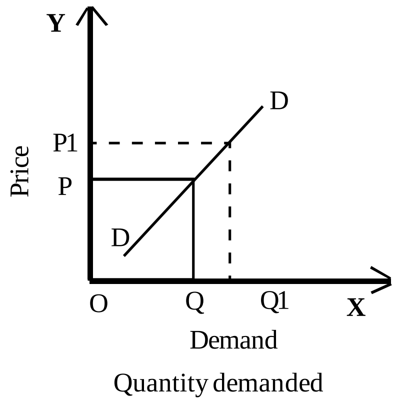


Fig.1: Exceptional Demand Curve

Quantities demanded are shown on OX axis and prices are shown on OY axis in the fig. DD is the exceptional demand curve which slopes from left to right upwards. When price increases from OP to OP,, quantity demanded also increases from OQ to OQ,. This is ?? contrary to the law of demand.

1) Speculation:

If the prices of the commodities are expected to increase still further in future, the consumers will buy more of it now. Therefore, an increase in price may not reduce the demand which is contrary to the law of demand.

2) Giffen's Paradox:

In 19th century Sir Robert Giffen observed that when the price of bread increased, workers in England purchased more of the bread by reducing the consumption of meat because bread is the staple food to satisfy their hunger. This type of situation is known as 'Giffen's Paradox. Demand for low quality goods and inferior goods decrease even if there prices falls. In this case, demand curve slopes upward from left to right, showing exception to the law of demand.

3) Veblen Effect:

According to Veblen, consumers want to buy a product based on its value rather than its utility. Veblen pointed that there are some goods like diamonds, precious stones, costly furniture etc. which are demanded by very rich people for their social prestige. If the prices of these goods fall, poor people also can buy and hence rich people stop buying these goods as these goods do not have any special status.

4) Illusion:

Sometimes, consumers develop a false idea that high priced goods will have a better quality. If the price of goods decreases they feel that their quality also low and at the same time middle class people may prefer these goods.

5) Necessary Goods:

The Demand for essential goods like TV's, washing machine, cooking gas, petroleum products etc. stays intact even if there's a price rise. People can't stop purchasing the products of regular necessities.

6) Fear of Shortage:

When there is an anticipation of a shortage of the commodity in near future due to the possibility of war or natural calamity like famine or economic depression, consumer start buying the commodity at the available price, even at higher price.

4.4. Types of Demand

In economics Demand is classified into three types:

1) Price Demand

2) Income Demand

3) Cross Demand

4.4.1. Price demand

Price demand relates to the amount a consumer is willing to spend on a product at a given price. Demand and price have an inverse relationship. This means that when the prices go up, the demand goes down.

Price of oranges (Rs.)	Quantity demanded (units)
50	5
40	10
30	15
20	20
10	25

Market demand schedule

Market demand schedule is a tabulation of the quantity of a good that all consumers in a market will purchase at a given price. At any given price, the corresponding value on the demand schedule is the sum of all consumers' quantities demanded at that price. It is a summation of the individual demand schedules and depicts the demand of different customers for a commodity in relation to its price.

Market Demand Schedule

Price of Oranges Rs..	Quantity Demanded			Market Demand for Oranges (A+B+C)
	Consumer A	Consumer B	Consumer C	
25	4	5	6	15
24	6	8	10	24
23	8	11	14	33
22	10	14	18	42
21	12	17	22	51

Individual Demand Curve and Market Demand Curve

Individual Demand Curve

Market Demand Curve

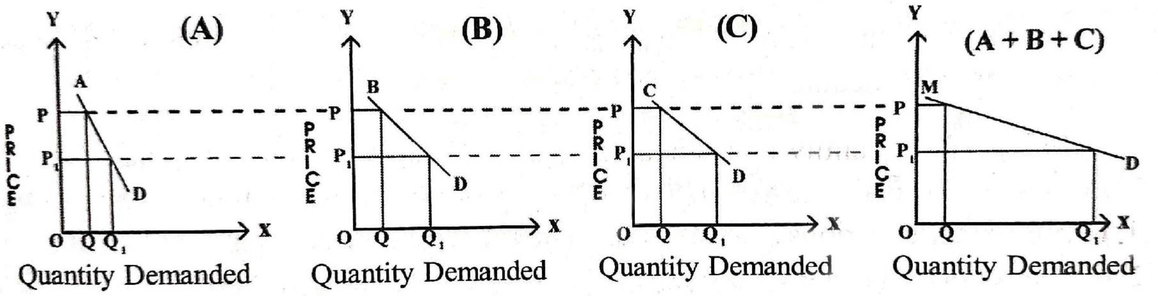


Fig-2: Individual Demand Curve and Market Demand Curve

4.4.2. Income demand

Income demand indicates the relationship between income and the quantity of commodity demanded. It relates to the various quantities of a commodity or service that will be bought by the consumer at various levels of income in a given period of time, other things being equal.

As income increases, the demand for superior goods or normal goods increases. In the case of these goods, there will be a direct proportional relationship between income and demand. That means if income increases, the demand for good will also increase. As income decreases, the demand for inferior goods is inversely related to income. It means, when consumer income falls, the demand for inferior goods increases. As consumer income increases, the demand for inferior goods decreases and the demand for normal / superior goods increases.

Functional relationship between income and demand is as follows

$Dx = f(Y)$

Where Dx = demand for good X, Y= income of a consumer and f = function

Table-1: Income Demand Schedule

Income (Rs.)	Demand (Kgs)	
	Superior good	Inferior good
2000	4	12
4000	6	10
6000	8	8
8000	10	6
10000	12	4

Above table explains whenever income increases, the quantity demanded of superior goods increases and quantity demanded of inferior goods decreases.

Income Demand for Normal / Superior goods

When the consumer's income increases, the demand for normal goods or superior type of goods increases i.e. in case of demand for normal / superior good there is a positive relationship between demand and income. The demand curve has a positive slope upward from left to right.

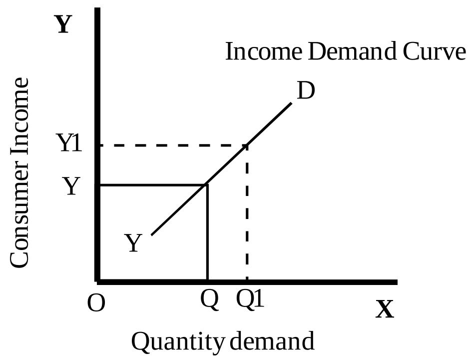


Fig-3 : Income Demand for Superior Goods

In figure, OX-axis represents quantity demanded for superior goods and OY-axis represents the income of the consumer. YD represents the income demand curve showing a positive slope. Whenever income increases from OY to OY, the quantity demanded of superior or normal goods increases from OQ to OQ,. In case of Veblen goods income demand curve slopes upward direction

Income Demand for inferior goods:

In the case of inferior goods, when the consumer's income increases, the demand decreases. In the case of these goods, income is inversely related to demand.

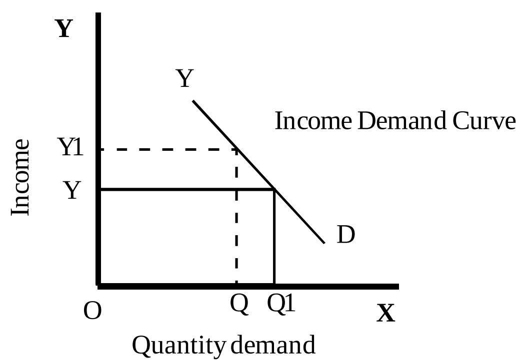


Fig-4: Income Demand for inferior goods

Figure, OX-axis represents the quantity demanded and OY-axis represents the income of the consumer. When the consumer's income increases from OY to OY, then the quantity demanded of the commodity decreases from OQ to OQ,. YD is the income demand curve for inferior goods. In case of inferior goods income demand curve slopes down ward from left to right. The curve has a negative slope.

4.4.3. Cross Demand

Cross Demand: Cross demand indicates changes in the demand for those goods when there is a change in the prices of substitute and complementary goods. Cross-demand analysis assumes that other factors, i.e., product price, consumer income, and preferences, are constant.

Cross-demand refers to the reciprocal relationship between changes in the prices of substitutes and complementary goods and changes in their demand. This can be shown by the following equation:

Dx= f(Py)

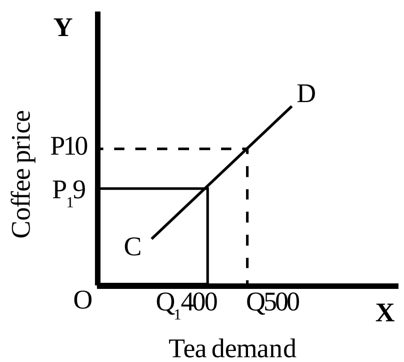
Where Dx = demand for good X, Py= Price of good Y, f= functional relationship

Substitute Goods: Different goods that satisfy the same need are called substitute goods. For example: tea and coffee, Colgate and Close-Up, Pepsi and Tumsup.

Table-2

Coffee		Tea	
Price (Rs.)	Demand (cups)	Price (Rs.)	Demand (cups)
10	500	10	500
9	600	10	400

Fig-5 :



In the figure, OY-axis represents price of coffee and OX-axis represents the quantity demanded of tea. Being price of tea remaining constant, an decrease in the price of coffee from OP to OP, leads to an decrease in the quantity demanded of tea from OQ to OQ. Hence, the demand curve for substitute goods slopes from left to right upward.

Complementary goods:

Some goods are collectively useful to satisfy a single desire. Such goods are called complementary goods. For example: car and fuel, tea powder and sugar.

Car		Fuel	
Price (Rs. in lakhs)	Demand (L)	Price (Rs.)	Demand (L)
5	1000	75	500
5	2000	50	1000

According to the table, there is a negative relationship between the price of cars and the demand for fuel. If the price of fuel goes down, the demand for cars increases. If the price of fuel increases, the demand for cars decreases.

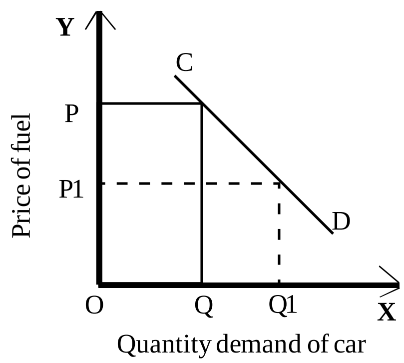


Fig-6 :

In figure 9, demand for cars is taken on OX-axis and price of fuel is taken on the OY-axis. If the price of fuel decreases from OP to OP1, the quantity demanded of cars may increase from OQ to OQ for complementary goods cross demand has negative slope.

4.5. Summary

According to economic analysis, demand is formed when there is desire along with purchasing power. The demand curve is the relationship between the demand for a commodity and the factors that influence that demand. Price and demand have an inverse relationship when demand is determined and there is no change in other factors. But there is an inverse relationship in some cases. In the case of the same inferior goods, there is a negative relationship between income and demand. Cross-demand describes the demand for alternative pickled goods.

4.6. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Define demand
2. Explain law of demand.
3. Explain price demand.
4. What are substitute goods? Give examples.
5. What is income demand?
6. Explain complementary goods with suitable examples.
7. Explain Giffen's paradox.

II. Answer the following questions in about 8-10 lines each.

1. Explain the characteristics of law of demand.
2. Explain the assumptions to the law of demand.
3. Explain the concept of cross demand.
4. Describe income demand with suitable table and graph.

III. Answer the following questions in about 16-20 lines each.

1. State the factors that determine demand and explain any two.
2. Explain the exemptions to the law of demand.
3. Mention the types of demand and explain any one with the help of a graph.

4.7. Glossary

- Demand: The desire backed up by willingness and ability to pay a sum of money for some quantity of a good or service.

- Demand function: It is the functional relationship between the quantity demanded for a good and all the quantitative factors which determine the demand.
- Substitute goods: substitutes are those goods which satisfy the same want
- Complementary goods: complimentary are those goods which satisfy the same want jointly.
- Price demand: it refers to the functional relationship between the price of good and the quantity demanded.
- Income Demand: it refers to the functional relationship between the Income of consumer and the quantity demanded.
- Cross Demand: it refers to the functional relationship between change in the demand due to changes in the price of substitutes and complementary goods.

4.8. References

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CHAPTER
5

PRODUCTION ANALYSIS

5.0. Objectives

- Understand the concept and meaning of the production
- Explain the concept of production function and identify types of production functions
- Explain the factors of production and understand their characteristics
- Analyze the Law of Variable Proportions. Know the reasons for diminishing returns. Recognize the importance of the law.
- Identify returns to scale and classify their types
- Understand and analyze internal and external economies

5.1. Introduction

Human wants are unlimited. Means of satisfying wants are limited and have alternative uses. Consumers use goods and services to fulfill their wants and get satisfaction. Production helps in getting these goods and services. In this chapter we will study various aspects of production.

5.1.1 Concept of Production

Production of goods and services is the most fundamental economic activity and all other economic activities flow from here. Production is an act of making output that is goods or services by using different inputs such as land, labour, capital and entrepreneurship. Hence, production is process of converting inputs into output. Changes in production can be made by combining the factors of production in different combinations or by increasing or decreasing their proportion.

Production is a result of co-operation of four factors of production viz. land, labour, capital and organization. This is evident from the fact that no single commodity can be produced without the help of any one of these four factors of production. Therefore, the producer combines all the four factors of production in a technical proportion.

5.2. Factors of Production

The factors (inputs) which are used to produce goods and services are called factors of production. These factors may be available in nature or man-made.

Definition:- 'All goods and services which help in the process of production are called factors of production'. - Prof. Benham

Types of Factors of Production

In general economics, factors of production are described in four types and they are: land, labour, capital and organisation. In recent times technology has also been considered as a factor of production by some economists. The modern economists have described factors of production as 1. Organisation(including labour) and 2. Capital (including land and technology). Total production in an economy depends on availability of factors of production and their quality. Let us know more about these factors of production

1. Land: The term 'Land' refers to the surface part or soil that we see as earth. But in economics land has a wider meaning, it includes not merely land in the ordinary sense of the term but the whole of the material and the forces which nature gives for human's requirement like land, water, air, minerals, rains, light and heat etc. Thus, land includes any natural resource used to produce goods and services. Land resources are the raw materials in the production process. These resources can be renewable, such as forests, or non-renewable such as oil or natural gas.

2. Labour: Labour is the effort that people contribute to the production of goods and services. In ordinary language labour is very often used to represent the mass of labour. But in economics it is used in a wider sense. Labour means any work whether mental or manual undertaken for monetary reward. It includes the work from the lower level to the highest professional work undertaken for monetary reward and excludes the work for the sake of pleasure or love. Labour is the most significant factor of production.

3. Capital: In economics, capital typically refers to money. However, money is not a factor of production because it is not directly involved in producing a good or service. Instead, it facilitates the processes used in production by enabling entrepreneurs and firms owners to purchase factories, machinery, tools, equipment, raw materials, wealth etc. Thus, capital means all manmade resources used in the production process.

Capital is created by individuals or firms through savings from a portion of their current income to contribute to the creation of future wealth. Capital is also known as *produced factor of production*. There are variations and changes in the availability of capital. Capital has mobility.

4. Organisation or Entrepreneur: By organisation, we mean services rendered by the entrepreneur, entrepreneur co-ordinates the activities of other agents of production like land, labour and capital. An entrepreneur is a person who brings other factors of production in one place. He uses them for the production process. Entrepreneurship is involved with establishing innovative ideas and putting that into action by planning and organizing production. Entrepreneurs are important because they are the ones taking the risk of the business and identifying potential opportunities. The income that entrepreneurs earn is called profit.

5.3. Production Function

In simple words, production function refers to the functional relationship between the inputs and outputs. Production function specifies the maximum quantity of a good that can be produced in a given time with given quantities of inputs and technology. The production function is purely a technical relation which connects factor inputs and output.

Mathematically, such a basic relationship between inputs and outputs may be expressed as:

$Q = f(N, K, L, O)$

Where Q = Quantity of product produced in a given period; K = Capital; L = Labour; N = Land and O=Organization or Entrepreneur.

A change in production requires a change in the proportion of factors of production.

Production function can be classified into two parts:

1. Short-run Production Function: In the short run, it is possible to increase or decrease any one of the inputs while keeping the other inputs constant. This is called as the law of variable proportions or diminishing returns. When a producer brings a change in production by changing factors of production, as a result there will be a change in the proportion of combination of factors of production. This kind of proportional relationship is known as *law of returns to a factor*.

2. Long-run Production Function: In the long run, it is possible for a firm to change all inputs according to its scale. This is called as *returns to scale*. In this case a producer changes all the factors of production in the same proportion. Thus, the proportional leadership between production and factors of production is known as law of returns to scale.

5.4. The Law of Variable Proportions

Law of variable proportions occupies an important place in economic theory. It is a short run phenomenon which takes place when production is increased by using one of the variable factors while keeping all other factors fixed. In the short run, factors of productions are classified into two categories. They are: fixed factors and variable factors. It is not possible to increase or decrease fixed factors to realize a change in production in the short run.

The law of variable proportions was initially called the law of diminishing returns by Marshall. Law of diminishing returns states that an increase in the capital and labour applied in the cultivation of land, in general, results in a change in total product at an increasing rate initially, then after an increase at a diminishing rate and after some point of time eventually starts declining.

Definitions: "As the proportion of the factor in a combination of factors is increased after a point, first the marginal and then the average product of that factor will diminish" - Benham.

"An increase in some inputs relative to other fixed inputs will in a given state of technology cause output to increase, but after a point the extra output resulting from the same additions of extra inputs will become less and less." - Samuelson.

Assumptions: The law of variable proportions or the law of diminishing returns is based on following assumptions:

1. Constant technology: The state of technology is assumed to be given and constant. Production methods and technology remains unchanged during this period.

2. Homogeneous factor units: The units of variable factor are homogeneous and each unit is identical in quality and amount with every other unit.

3. Short-run: The law operates in the short run where it is not possible to vary all factor inputs.

4. Factor proportions are variable. The law assumes that factor proportions are variable. If factors of production are to be combined in a fixed proportion, the law has no validity.

5. Product can be measured in physical units.

Before we discuss the detailed analysis of the law, let us first understand the different terms that are used in the explanation of law of variable proportions.

Total Product (TP): It is the total of output, resulting from efforts of all factors of production.

Average Product (AP): Average product equals the total product (TP) divided by the total number of variable inputs. In other words, it is the total product per unit of the variable factor and thus:

$$\mathbf{AP=TP/N}$$

Marginal Product (MP): It is the addition made to the total product as a result of an increase of one more unit of input. Marginal Product or output is derived when the producer employs additional units of inputs in variable factors.

$$MP = \triangle TP/\triangle N \qquad \text{or} \qquad MP = TP_n - TP_{n-1}$$

Explanation of the Law:

In order to understand the law of variable proportions let us take the example of agriculture. Suppose land and labour are the only two factors of production. Let's assume there is 10 acres of land and 1 unit of labour for production. Therefore, the land-labour ratio is 10:1. Now, by keeping the land constant if number of units of labour is increased to 2, the land-labour ratio becomes 5:1.

Therefore, as you can see, the law analyses the effects of a change in the factor ratio on the amount of out and hence called the law of variable proportions. By keeping land as a fixed factor, the production of variable factor i.e., labour can be shown with the help of the following table:

Table 1.

Units of Land	Units of Labour	Total Production	Average Production	Marginal Production
10 Acres	0	–	–	–
”	1	20	20	20 } 1st stage MP > AP
”	2	50	25	30
”	3	90	30	40
”	4	120	30	30 } AP = MP
”	5	140	28	20 } 2nd stage MP=0 and TP Maximum
”	6	150	25	10
”	7	150	21.3	0
”	8	140	17.5	–10 } 3rd stage MP < 0

From the table 1 it is clear that there are three stages of the law of variable proportions.

Stage I: In the first stage average production increases as there are more and more doses of labour employed with fixed factor (land). In this stage total, average and marginal products are increasing however it can be seen that average and marginal products are increasing up to 4 units only. Later on, both start decreasing because proportion of workers to land was sufficient and land is not properly used. This is the end of the first stage.

Stage II: The second stage starts from where the first stage ends or where AP=MP. In this stage, average product and marginal product start falling. We should note that marginal product falls at a faster rate than the average product. Here, total product increases at a diminishing rate. At 7 units of labour it is at maximum where marginal product becomes zero while average product is never zero or negative.

Stage III: The third stage begins where second stage ends. This starts from 8th unit. Here, marginal product is negative and total product falls but average product is still positive. At this stage, any additional increase in the labour units leads to negative marginal product.

Graphical Presentation:

In figure 1, on OX axis, we have measured number of labourers while quantity of product is shown on OY axis. TP is total product curve. Up to point ‘E’, total product is increasing at increasing rate. Between points E and F it is increasing at the decreasing rate. Here marginal product has started falling. At point ‘M’ i.e., when 7 units of labourers are employed, total product is maximum while, marginal product is zero. Thereafter, it begins to diminish corresponding to negative marginal product. In the lower part of the figure MP is marginal product curve.

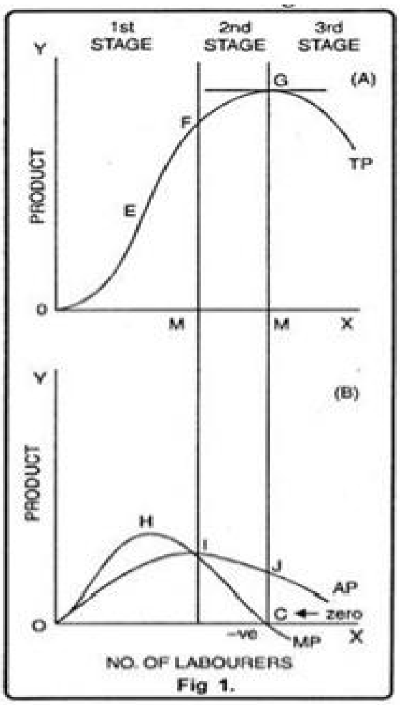

Fig 1.

Figure-1

Up to point ‘H’ marginal product increases. At point ‘H’, i.e., when 3 units of labourers are employed, it is at maximum. After that, marginal product begins to decrease. Marginal product becomes zero at point C and it turns negative. AP curve represents average product. Before point ‘I’, average product is less than marginal product. At point ‘I’ average product is at maximum. Up to point ‘I’, average product increases but after that it starts to diminish.

Importance and Applicability of the Law of Variable Proportions:

The law of variable proportions has universal applicability in any branch of production. It forms the basis of a number of doctrines in economics. The Malthusian theory of population stems from the fact that food supply does not increase faster than the growth in population because of the operation of the law of diminishing returns in agriculture.

Ricardo also based his theory of rent on this principle. According to him rent arises because the operation of the law of diminishing return forces the application of additional doses of labour and capital on a piece of land. Similarly the law of diminishing marginal utility and that of diminishing marginal physical productivity in the theory of distribution are also based on this theory.

The law is of fundamental importance for understanding the problems of underdeveloped countries. In such agricultural economies the pressure of population on land increases with the increase in population. This leads to declining or even zero or negative marginal productivity of workers. This explains the operation of the law of diminishing returns in LDCs in its intensive form. Ragnar Nurkse has suggested ways to make use of these disguised unemployed labour by withdrawing them and putting them in those occupations where the marginal productivity is positive.

5.5. The Law of Returns to Scale

This is a long-term analysis. The law of returns to scale explains the relationship amidst outputs and the scale of inputs in the long run when all the inputs are increased in the same proportion. To meet a long run change in demand, the firm enhances its scale of production by using more space, more machines and labourers in the factory.

Assumptions

1. All the factors of production are variable factors. They are labour and land. Here factors of production such as organisation is included as part of labour, capital and technology is included as part of land.
2. Technology is constant
3. There is a perfectly competitive market
4. Product can be measured in physical form
5. All factors of production are homogeneous.

Definitions: As per Roger Miller the law of returns to scale refers "to the relationship between changes in output and proportionate changes in all factors of production."

As per Leibhafsky the law of returns to scale refers "to the behaviour of total output as all inputs are varied and is a long run concept"

Types of the law of returns to scale: Returns to scale are classified into three categories. They are**: I) Increasing returns to scale, II) Constant returns to scale and III) Decreasing returns to scale.**

Let us take a numerical example to explain the behavior of the law of returns to scale.

Table-2: Returns to Scale

Unit	Scale of Production (No. of labor+Land increases)	Total Returns	Marginal Returns	Returns to Scale
1	1 + 2	4	4	Stage I (Increasing Returns)
2	2 + 4	10	6	
3	3 + 6	18	8	
4	4 + 8	28	10	Stage II (Constant Returns)
5	5 + 10	38	10	
6	6 + 12	48	10	
7	7 + 14	56	8	Stage III (Decreasing Returns)
8	8 + 16	62	6	

The data of table 1 can be represented in the form of figure-2

In figure-2, OX axis represents scale of production (increase in labour and capital) while OY axis shows increase in marginal returns (Marginal output). When labour and land increase, output also increases from R to P which is higher than the factors of production i.e. labour and land.

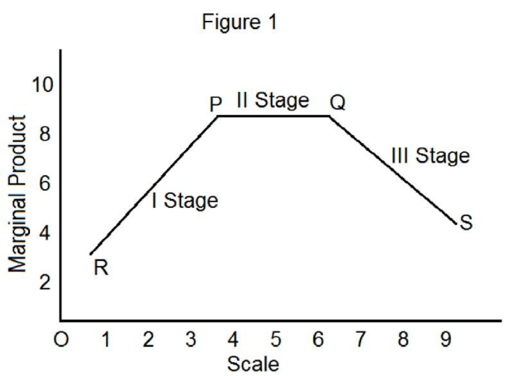

Figure-2

RS = Returns to scale curve

RP = Segment; increasing returns to scale

PQ = segment; constant returns to scale

QS = segment; decreasing returns to scale

I. Increasing Returns to Scale: In figure-2, stage I represents increasing returns to scale. During this stage, the firm enjoys various internal and external economies such as dimensional economies, economies flowing from indivisibility, economies of specialization, technical economies, managerial economies, and marketing economies. Economies simply mean advantages for the firm. Due to these economies, the firm realizes increasing returns to scale. Marshall explains increasing returns in terms of "increased efficiency" of labor and capital in the improved organization with the expanding scale of output and employment factor unit. It is referred to as the economy of an organization in the earlier stages of production. The reasons for increasing returns are:

1. There may be indivisibilities in machines, management, labour, finance etc. A little item of equipment or some activities have a minimum size and cannot be divided into smaller units.
2. Increasing returns to scale also result from specialisation and division of labour, when the scale of firm enlarges, there is a broader exposure for specialisation and division of labour.
3. As the firm enlarges, it enjoys internal economies of production. It may be able to install better machines, sell its products more easily, borrow money cheaply, procure the services of more efficient manager and workers etc.

II. Constant Returns to Scale: In figure-2, stage II represents constant returns to scale. During this stage, the economies accrued during the first stage start vanishing and diseconomies arise. The term diseconomies refers to the limiting factors for the firm's expansion. The emergence of diseconomies is a natural process when a firm expands beyond a certain stage. In stage II, the economies and diseconomies of scale are exactly in balance over a particular range of output. When a firm is at constant returns to scale, an increase in all inputs leads to a proportionate increase in output but to an extent.

The reasons for constant returns are:

1. The returns to scale are invariable when internal economies enjoyed by a firm are neutralized by internal diseconomies so that productivity amplifies in the same ration.
2. One more reason is the balancing of external economies and external diseconomies.
3. Invariable returns to scale also result when factors of production are perfectly divisible, substitutable, standardised and their supplies are perfectly elastic at given prices.

That's why in the case of invariable returns to scale, the production function is 'homogeneous of degree one'.

III. Decreasing Returns to Scale: In figure-2, stage III represents diminishing returns or decreasing returns. This situation arises when a firm expands its operation even after the point of constant returns. Decreasing returns mean that increase in the total output is not proportionate according to the increase in the input. Because of this, the marginal output starts decreasing (see table-2). Important factors that determine diminishing returns are managerial inefficiency and technical constraints. The reasons for **decreasing** returns are:

1. Indivisible factors may become incompetent and less productive.
2. The firm experiences internal diseconomies. Business may become unwieldy and produce problems of supervision and coordination. Large management creates complexities of control and rigidities.
3. To these internal diseconomies are additional external diseconomies of scale. These occur from higher factor price or from diminishing productivity of the factors.

5.6. Economies of Scale

Economies of scale refer to cost advantages experienced by firms as they grow and become more efficient. An economy of scale is realized as a firm increases in size and is able to spread out the cost of production over a larger number of units of a good. Economies of large scale production have been classified by Marshall into internal economies and external economies.

(A) Internal Economies – Their Causes and Types

Internal economies are internal to a firm when its costs of production are reduced and output increases. They are "open to a single factory or a single firm independently of the action of the other firms. They result from an increase in scale of output of the firm and cannot be achieved unless output increases. They are not the result of inventories of any kind but are due to the use of known methods of production which a small firm does not find worthwhile."

Causes – Internal economies will occur to a firm when it enlarges and are caused by two factors which are discussed as follows. They are (1) Indivisibilities, and (2) Speculation.

1. **Indivisibilities –** Many fixed factors of production are indivisible in the sense that they should be used in a fixed minimum size. Such "factors of production can be most efficiently employed at a fairly large output, but work less efficiently at small outputs because they cannot be divided into smaller units." Thus as output increases, the indivisible factors which were being used below capacity can be utilised to their whole capacity thereby reducing costs. Such indivisibilities arise in the case of labour, machines, marketing finance and research.

2. **Specialisation –** Division of labour which leads to specialisation is another cause of internal economies. When a firm expands in size, not only its production increases, but the amount of input and the number of labourers also amplify. The requirement of division of labour whereby each labourer is assigned one specific job and the splitting up of processes into sub-processes for greater efficiency.

Types of Internal Economies

1. **Technical Economies –** These occur to a concern when a firm employs of good equipments and techniques of production. As a consequence production amplifies and the per unit cost of manufacture drops. It is further divided into five classes such as economies of superior techniques, economies of increased dimension, economies of linked processes, economies of use of by-products and economies of increased specialisation.

2. **Marketing Economies** – A huge concern also reaps the economies of trading. It purchases it requirements of various raw materials in lump sum and is hence capable to safe them at constructive terms in the form of better quality inputs, prompt delivery, transport concessions etc.

3. **Managerial Economies** – A huge concern can afford to employ experts to oversee and control a variety of departments. There may be a separate head for manufacturing, assembling, packing, marketing and general administration etc. This directs to functional specialisation which increases the productive efficiency of the concern.

4. **Financial Economies** – A huge firm can acquire cheap and timely finance both from banks and the market since it possesses huge assets and goodwill. It can also bring in additional capital by issuing shares and debentures in the capital market.

5. **Risk Bearing Economies** – A huge firm is in a better position that a small firm is spreading its jeopardy. It can make various articles and sell them in diverse regions. By the diversification, of its articles, the huge concern is proficient in plummeting risks by counter balancing the loss of one product by the gain of the other.

6. **Economies of Research** – A huge concern holds larger resources than a small concern and can institute its own research laboratory and employ trained research workers. When they invent new production techniques or progression the latter become the property of the firm which utilises them for increasing its output and reducing costs.

(B) External Economies

External economies are external to a firm which are available to it when the output of the whole industry amplifies with the expansion of the industry itself. They are "shared by a number of firms or industries when the scale of production in any industry or group or industries increases. They are not monopolised by a single firm when it grows in size but are conferred on it when some other firms grow larger."

External economies gives profit to all firms within the industry as the size of the industry expands. Such economies accrue to concerns when the industry is localised in a particular region makes innovations and evolves specialisation.

1. **Economies of Concentration –** When an industry is focused in a specified region all the member concern harvest some widespread economies. Skilled workers are available to all firms. Modes of transport and communications are considerably improved. The industry may ask the railway authorities for additional facilities for more wagons, loading and unloading etc.

2. **Economies of Information –** An industry is in good status to establish research labs than a huge concern since it is capable to pool larger resources. It can employ highly paid and more experienced research personnel. The fruits of their in the form of novel innovations are passed on the concerns through a scientific journal.

3. **Economies of Welfare –** Relating to a huge concern an industry is in a more advantageous status to give welfare facilities to the labourers. It may get land at concession rates and acquire facilities from the municipal corporation of the region for setting up housing colonies for the labourers, public health and amusement facilities.

4. **Economies of Specialisation –** The concern is an industry may also harvest the economies of specialisation. When an industry enlarges in size, concerns begin specialising various processes and industry benefits as a whole.

5. **Economies of Infrastructure:** when all the firms in an industry are concentrated in one place, Government provides infrastructure facilities like transportation, banking, insurance, information, electricity etc,. In some cases private organizations can also provide these infrastructure facilities. Having everything in one place reduces the costs associated with these facilities to the firms of the concerned Industries in this location.

5.7. Summary

The process of converting inputs into final goods is called production. The relationship between factors of production and production is called production function. In short run, it is possible to increase of one input while keeping the other inputs constant. This is called as the law of variable proportions or diminishing returns. The law of returns to scale explains the relationship amidst outputs and the scale of inputs in the long run when all the inputs are increased in the same proportion. **Economies of scale** refer to cost advantages experienced by firms as they grow and become more efficient is termed as economies of scale. Economies of large scale production have been classified by Marshall into internal and economies and external economies.

5.8. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What are the factors of production?
2. What do you mean by constant returns to scale?
3. What do you mean by production function?

II. Answer the following questions in about 8-10 lines each.

1. What are internal economies?
2. Write about the characteristics of land.
3. What do you mean by long run production function?

III. Answer the following questions in about 16-20 lines each.

1. Write about law of variable productions function with suitable diagram.
2. Discuss Economies of scale.
3. Explain in detail about the law of returns to scale.

5.9. Glossary

1. ProductIion: The process of converting raw materials into final consumer goods is called production.

2. Factors of production: The factors (inputs) which are used to produce goods and services are called factors of production. These factors may be available in nature or man-made.

3. Production Function: The functional relationship between the quantity of a good produced (output) and factors of production (Inputs) is called as production function.

4. The Law of Variable Proportions: It is a short run phenomenon which takes place when production is increased by using one of the variable factors while keeping all other factors fixed. The law states that when the quantity of one factor of production is increased, while keeping all other factors constant, it will result in the decline of the marginal product of that factor.

5. Total production: The total output produced by all the factors of production in a given period is called total output.

6. Average Product (AP): Average Product equals the total product (TP) divided by the total number of variable inputs. In other words, it is the total product per unit of the variable factor.

7. Marginal Product (MP): It is the addition made to the total product as a result of an increase of one more unit of input. Marginal product or output is derived when the producer employs additional units of inputs in variable factors.

8. The Law of Returns to Scale: This is a long-term analysis. The law of returns to scale explains the relationship amidst outputs and the scale of inputs in the long run when all the inputs are increased in the same proportion.

9. Internal Economies: The internal economies occur to individual firms only. As a firm increases its scale of production, the firm enjoys several economies named as internal economies. Basically, internal economies are those which are special to each firm.

10. External Economies: External economies are external to a firm which are available to it when the output of the whole industry amplifies with the expansion of the industry itself. They are "shared by a number of firms or industries when the scale of production in any industry or group or industries increases. They are not monopolised by a single firm when it grows in size but are conferred on it when some other firms grow larger."

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CHAPTER 6

SUPPLY, COST AND REVENUE ANALYSIS

6.0. Objectives

- Explain about supply.
- Factors determining supply are classified.
- Explain the increase and decrease in supply.
- Classify types of expenses.
- Explain the nature of short-run cost-drainage.
- Classify the types of income.

6.1 Introduction

The term supply is used to refer to the amount of goods available for sale in the market due to changes in production costs. The quantity of goods that are ready to be sold in the market at different prices reflects the behaviour of rational suppliers. Supply of a commodity refers to the quantity of a commodity available in the market. Firms use factors of production to produce goods. Cost of production is the remuneration paid to the factors of production used in the production process such as wages, salaries etc.

The income earned by a company selling a certain quantity of goods at different prices is considered as revenue. So it is necessary to know about the costs of production as well as the returns of the firms. In this unit we will learn about supply, cost and revenue analysis.

6.2 Meaning of Supply

The quantity of a commodity that is ready for sale by a producer at a given price at a given time is called the supply of that commodity. We should remember the difference between supply and stock. Stock means storing the goods produced by the company in warehouses. How much part of the stock the company keeps for sale in the market at a fixed price is called supply.

6.3 Supply Function

Supply function describes the relationship between the factors that determine the supply of a good and the supply of that good. The supply of a good is determined by factors such as the price of that good, prices of substitutes and complements, prices of factors of production, state of technology, Goals of producers, government policies, etc. Supply function can be expressed by the following equation.

Sx = f (PX, Pt, Pf, T, Gf, Gp), where

S_x=Supply of x commodity; P_x= Price of X commodity; P_t=Prices of other commodities related to x commodity; P_f=Prices of factors of production; T=Technology level; G_f=Firm objectives and G_p=Government policies

In the supply chain shown above, supply of a commodity is variable. It depends on many factors. P_x, P_t, P_f, T, G_f, G_p are independent variables. A change in any one of these factors will lead to changes in supply. Price is the most important factor in determining supply. Hence, all other factors being constant, the supply function will be Sx=f(P_X).

6.3.1 Determinants of Supply

Let us learn about the factors that determine the supply of goods.

1. Price of the Commodity: If the price of a commodity increases as long as other factors remain unchanged, its supply will increase. If the price of a commodity decreases, the supply will decrease. That is, there is a direct relation between price and supply.

2. The Prices of other goods (prices of substitutes and complements): The supply of a good depends not only on the price of the good but also on the prices of other goods (prices of substitutes and complements). Producers prefer to produce other goods if their prices are high. So even if the price of a commodity remains constant, if the price of other commodities changes, its supply will also change.

3. The Prices of Factors of Production: The cost of factors of production also changes the supply of goods. If the prices of the factors of production increase, the cost of production increases. Hence production decreases and supply decreases. If the prices of the factors of production fall then the supply increases.

4. Goals of Producers: When the producer wants to earn maximum profit, he produces the goods on a smaller scale and earns profit. Otherwise, when he wants to increase sales rather than profits he increases supply.

5. State of Technology: Increase in technology leads to changes in production methods due to creation of new machines. As a result the cost of production will decrease and supply will increase. That is why changes in the supply of goods come about due to changes in technology.

6. Government policies: If the government imposes high taxes on goods it is the production of goods discouraging. As a result the supply of goods decreases. The supply of goods will increase if the government imposes lower taxes and gives subsidies.

6.3.2 The Law of Supply

The law of supply states the functional relationship between the price and quantity offered for sale. The law of supply can be stated as follows- 'other things remaining the same, an increase in the price of a commodity will increase its supply and *vice versa*. That is direct relation between price and supply.

The law of supply can be explained with the help of supply schedule and curve.

6.3.3 Supply Schedule

The supply is a statement of the various quantities of a given commodity offered for sale at various prices per unit of time.

Table-1: Supply of commodity at various prices

Price of Good (in Rs.) P	Quantity Supply (in units) Q
10	500
20	600
30	700
40	800
50	900

The above table shows the direct relation between the price of the commodity and the supply of the commodity. The supply was 500 units when the price of the commodity was Rs 10. While the price of the commodity has gone up by Rs 20, the quantity of supply has gone up to 600 units. If we observe the information in the table, we understand that as the price increases, the supply of goods increases. A decrease in price will decrease the quantity supplied.

6.3.4 Supply Curve

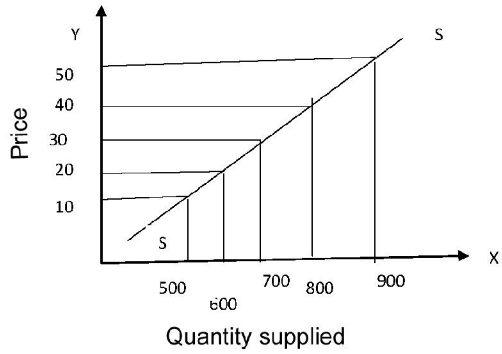

Fig 6.1 Supply curve

In the above graph we measure the supply of the commodity on the X-axis and the price of the commodity on the Y-axis. There is a positive relationship between price and supply. So the supply curve is upward sloping from left to right. That is, if the price increases, they buy more quantity of the product, if the price decreases, they buy less quantity of the product. If the price increases, the supply curve will shift from left to right. The quantity of supply increases. It can be seen in Figure 6.1 that if initially the price is 10 rupees the quantity supplied is 500 units and when the price increases by 50 rupees the quantity supplied increases to 900 units.

6.3.5 Increase and decrease in supply

Changes in the supply of a commodity due to changes in other conditions without a change in the price of the commodity is called increase and decrease in supply.

Supply is shown on the OX-axis and price on the OY-axis. SS is the supply curve at that point price is OP. So the firm supplies OQ quantity of good at OP price. When other conditions are change (for example when the cost of factors of production falls) increasing supply will shift the supply curve to the right as S1S1. Then the firm will sells higher supply

OQ1 quantity at the previous price OP. or sells OQ supply at a lower price to OP1. If changes in other conditions then the supply decreases, the supply curve will shift to the left as S2S2,.Then supply will decrease to OQ2. In such a situation the firm either sells the initial quantity OQ at the higher price OP2 or the lower quantity OQ2 at the initial price OP.

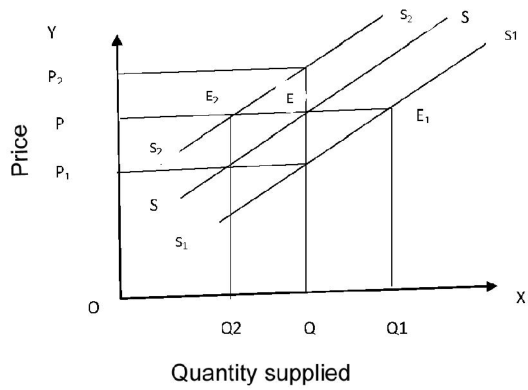

Fig.6.2 Increase and decrease in supply

6.4 Cost Analysis

Firms produce goods. Firms use factors of production to produce goods. Cost of production is the remuneration paid to the factors of production used in the production process such as wages, rent of buildings, interest payments etc. The production of goods in a firm depends on its cost. The demand for a commodity and its supply together determine its price. Cost analysis is useful only when various cost concepts are known.

6.4.1 Types of Costs: Costs can be broadly classified into three types. They are money costs, Real Costs, Opportunity Costs.

1. Money Costs: The money costs incurred by a firm to produce a good are known as money costs. For example, wages paid to the labourer, expenses on raw materials used in production, machinery, fuel, depreciation, etc. electricity, advertising, insurance premium, taxes, payments made for transportation, etc. are monetary expenses.

Money costs are again known as explicit costs and implicit costs. Explicit costs are those paid by the firm to the factors of production purchased from outside for the production of goods **.**If the entrepreneur uses his own resources or services in the production process, their value is called implicit costs.

2. Real costs: Alfred Marshall explained that real costs are the efforts and sacrifices undergone by the various members of the society to produce a commodity. For example, the crop lost by the landlord when he gives away the land, the labourer's loss of leisure by working, the capitalist sacrifice his consumption due to the investment of capital. Real costs and monetary costs are different from each other.

3. Opportunity Costs: Opportunity cost is called alternative cost or transfer cost. Opportunity cost is the reward received if a factor of production engages in a better alternative to the work currently engaged in. For example, if a farmer grows wheat instead of rice on his land, the opportunity cost of growing wheat is the value of the rice he could have grown on that land.

6.4.2 Short-term and long-term costs

Costs can be classified into short-term and long-term costs on the basis of time element. In the short run some inputs are constant while others are variable. In the long run all inputs are variable. So in the long run, all costs are variable costs.

1. Fixed costs: Fixed costs are those expenses which do not change in accordance with changes in production in the short term .They have to be incurred even the firm stops the production temporarily. Producers have to bear fixed costs. For example, fixed cost include rent on buildings, capital invest on machinery, wages paid to permanent staff, interest on capital, depreciation etc. These are also called overhead costs or supplementary costs.

2. Variable Costs: The costs vary with the level of output. If production increases, expenses will increase. If output is reduced, expenses will be reduced. If the company stops production, there will be no variable costs. For example daily wages paid to staff, payments for raw materials, fuel and electricity.

6.4.3 Nature of Short-Run Cost curves

Nature of various types of short-run costs of a firm and their nature in the production process from the details given in Table 6.2.

Table-2: Short-Term Costs

Year	Total Fixed Cost (TFC)	Total Variable Cost (TVC)	Total Cost (TC)	Average Cost (AC)	Marginal Cost (MC)
0	100	-	100	100	-
1	100	20	120	120	0
2	100	38	138	69	18
3	100	52.5	152.5	50.8	14.5
4	100	66	166	41.5	13.5
5	100	80	180	36	14
6	100	99	199	33.2	19
7	100	140	240	34.3	41
8	100	184	284	35.5	44

As shown in Table 6.2, a producer can change the output in the short run by changing variable costs without changing fixed costs. Hence in the short run there are both fixed costs and variable costs. If a firm increases its output, total variable costs will increase. Reducing production reduces total variable costs. This means that total variable costs change with the volume of production. The total fixed cost in the table remains unchanged. This means that even if the production increases or decreases, the total fixed cost remains at Rs 100. But as production increases, the variable cost increases. However, it grew rapidly in the beginning and then increased at a declining rate due to the law of increasing returns. After that the rate at which the total variable cost increases due to the law of diminishing returns.

TC=TFC+TVC. In the above equation TC= Total Cost, TFC= Total Fixed Cost, TVC= Total Variable Cost.

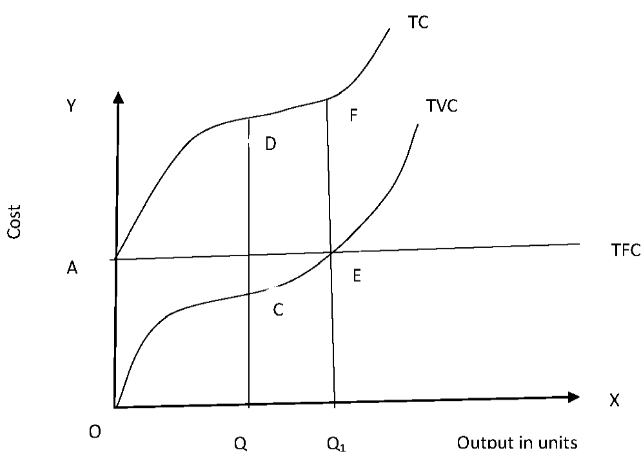

Fig.6.3 Total Cost, Total Fixed Cost, Total Variable Cost

In the above chart, we measure production on the OX-axis and cost on the OY-axis. TFC line shows total fixed cost TVC line shows total variable cost and TC line shows total cost. The TFC line is parallel to the X axis since total fixed cost is constant in the short run. The TVC curve starts from the origin point O. Because when output is zero then TVC is also zero. They increase as output increases. However, it grew rapidly in the beginning and then increased at a declining rate due to the law of increasing returns. After that the rate at which the total variable cost increases due to the law of diminishing returns Total cost also increases initially at a decreasing rate and then again after a certain level of production it also increases at a gradually increasing rate.

6.4.4 Relationship between Average and Marginal Costs

In the short run Average costs is more important than total cost. The firm must know the per unit cost or average cost .If we know the price of the product, we need to know the short-term average cost to know whether the firm will make a profit or loss at a given level of production. Short Run Average Cost (SAC) is the cost per unit of output. So SAC=TC/Q and average fixed cost is equal to AFC=TFC/Q and AVC =TFC/Q. Therefore the average cost equation can be expressed as follows. SAC=TC/Q =TVC+ TFC/Q=AFC+AVC. According to the above equation short run SAC affected by Average fixed and variable costs. Marginal Cost is the addition to total cost by production of one more unit of output. Marginal cost MC=TC/Q.

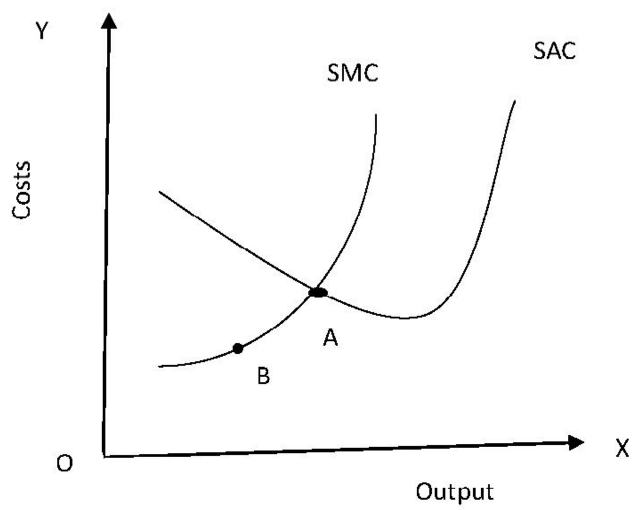

Fig.6.4 Relation between Average Cost and Marginal Cost

The short-run marginal cost curve SMC and the short-run average cost curve SAC are initially U-shaped as shown in Figure 6.4. Initially the SMC and SAC curves slope downwards from left to right. At this point the SAC curve is below the SMC curve. The SMC curve reaches a minimum point before the SAC curve. After that both SMC and SAC are increasing. The rising SMC curve intersects the SAC curve at its lowest point and goes up. Then the SMC curve lies above to the SAC curve. SAC To the left of the minimum point A SMC < SAC and to the right SMC > SAC.

6.5. Revenue Analysis

The supply of goods and services depends on their production costs. Demand and supply of goods together determine the price of goods. Revenue is the receipts obtained by a firm by selling certain quantity of goods at different prices. The firm desires to earn maximum profits by keeping the cost of production to a minimum. So it is necessary to know about the costs of production as well as the revenues of the firms.

6.5.1 Different Concepts of Revenue

Revenue is the receipts obtained by a firm by selling of commodities at various prices. There are three concepts of Revenue.

They are (1) Total Revenue, (2) Average Revenue and (3) Marginal Revenue

1. Total Revenue: Total revenue is the total income of the firm by selling different units of a commodity at a given price. For example if a firm sells 50 books at Rs 20 each the total revenue is Rs 1000.

Total Revenue (TR) = Price of Product (P) X Quantity (Q)

2. Average Revenue: Average Revenue is the Price of one unit of output. Average revenue is obtained by dividing the total revenue by the number of goods sold. Suppose a company sells 50 books and the total revenue is Rs 1000. Then average Revenue = Rs.20

$$\text{Average Revenue} = \frac{\text{Total Revenue}}{\text{Quantity}} \quad \text{(or)} \quad AR = \frac{TR}{Q} \quad \text{(or)} \quad P = \frac{P \times Q}{Q}$$

3. Marginal Revenue: Marginal Revenue is The additional revenue earned by selling an additional unit of a commodity. In other words change in total revenue due to the sale of an additional unit of one good is called marginal revenue.

Marginal revenue = $\frac{\text{Change in total revenue}}{\text{Change in quantity}}$ $\quad MR = \frac{\triangle TR}{\triangle Q}$

6.5.2 Average and Marginal Revenue Curves in Perfect Competition

Under perfect competition market, large number of buyers and sellers, all commodities are homogeneous. The price of a commodity is determined by its supply and demand. All firms in the industry have the same price throughout the industry. Under perfect competitive market the price remains unchanged. Hence average revenue and marginal revenue are equal.

Table-5: Total Revenue, Average Revenue and Marginal Revenue in Perfect Competition

Quantity (Q)	Price (P)	Total Revenue (TR)	Average Revenue (AR)	Marginal Revenue (MR)
1	15	15	15	15
2	15	30	15	15
3	15	45	15	15
4	15	60	15	15
5	15	75	15	15
6	15	90	15	15
7	15	105	15	15
8	15	120	15	15
9	15	135	15	15
10	15	150	15	15

Under the Perfect Competition the price of the commodity is fixed at Rs.15. Any quantity can be sold at this price. The average revenue marginal returns are equal because the price has not changed.

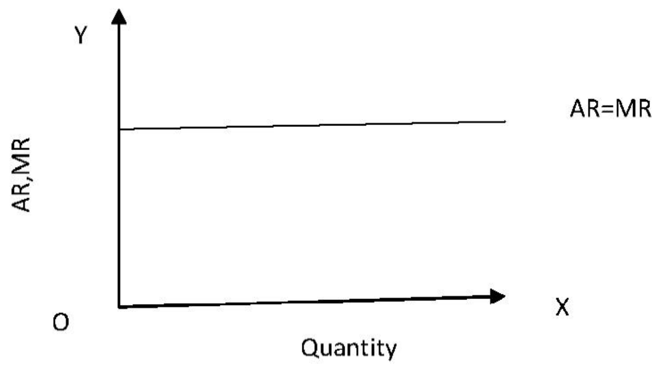

Fig 6.5 AR, MR in perfect Competition

6.6 Summary

The term supply is used to denote the quantity of goods available for sale in the market at a given price at a given time. If the price increases, the supply will increase. The principle of supply explains that a decrease in price will decrease supply. If there are changes in the determinants of supply without a change in price, there will also be changes in the supply curve. Cost of production is the total remuneration paid to various factors in the production process of a good. Costs can be mainly classified into three types. They are monetary costs, real costs and opportunity costs. Revenue is the income earned by a firm by selling goods at various prices. There are three types of Revenue concepts. They are 1. Total Revenue 2. Average Revenue 3. Marginal Revenue. In perfect competition AR and MR lines parallel to X axis.

6.7 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Explain the supply function.
2. Define the law of supply.
3. Explain about supply schedule.
4. What are fixed costs?
5. What are variable costs?
6. What is Total Revenue?

II. Answer the following questions in about 8-10 lines each.

1. Write about the determinants of supply.
2. Explain the changes in supply.
3. Classify the types of costs.
4. Explain the relationship between average cost and marginal cost.
5. Explain different types of revenue concepts.

III. Answer the following questions in about 16-20 lines each.

1. Explain the nature of short run cost curve with the help of a graph
2. Explain the Nature of average revenue and marginal revenue curves in perfect competition.

6.8 Glossary

- **Supply:** The quantity of a commodity that is ready for sale by a producer at a given price at a given time is called the supply of that commodity.
- **Law of supply:** The law of supply states the functional relationship between the price and quantity offered for sale
- **Money Costs:** The money costs incurred by a firm to produce a good is known as money costs.
- **Fixed costs:** Fixed costs are those expenses which do not changing in accordance with changes in production in the short term.
- **Total Revenue:** Total revenue is the total income of the firm by selling different units of a commodity at a given price.

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CHAPTER

7

MARKET ANALYSIS

7.0. Objectives

- Understand the concept of market;
- Know the meaning of perfect competition and its characteristic features;
- Understand the price determination under the perfect competition market
- Explain the meaning of monopoly and its characteristic features;
- Understand the meaning of monopolistic competition and its characteristics;
- Understand the meaning of oligopoly and its characteristics; and
- Understand the meaning of oligopoly and duopoly and its characteristics features.

7.1 Introduction

As we know the market everyday transaction is done in the market. In this place goods and services are exchanged with each other. In this unit, we are going to discuss Markets: meaning and classification, perfect competition: meaning, characteristics and price determination and imperfect competition: monopoly, comparison between perfect competition and monopoly, monopolistic competition, oligopoly and duopoly.

7.2 Markets: Meaning and Classification

7.2.1 Meaning of Market

Edwards defined market as a mechanism by which buyers and sellers are brought together. Market is the place where buyers and sellers meet at a place. Generally the word 'market' is used to denote places like vegetable market, fruit market, bullion market, share market etc. In recent times, buyers and sellers are exchanging goods on online platforms due to modern technology. We may observe that people are doing the transactions of sale and purchase of goods and services through online, mobile phones/mobile app and internet facilities.

7.2.2 Classification of Market

We may observe that market is a place where buyers and sellers meet to engage economic transactions.

The classification of markets is based on three factors. They are:

i) Time based markets,

ii) Area based markets and

iii) Competition based markets.

7.2.2 (A) Time based markets

In this market time period is important. Adjustments are made in goods and supply based on time period. Markets are classified into three types on the basis of time period i.e., long run market, short run market and very short run market.

i. Long run market: In long period market, the supply can be met the increased demand. Producer can make changes in all inputs depending upon the demand in the long period. It is possible to make required adjustments in supply in the long period.

ii. Short run market: In short period market, supply can be changed to a little extent. It is possible by changing certain variable inputs like labour.

iii. Market Period or very short run market: In very short run market, producer cannot make any changes in the production of goods due to less period of time. Hence, the supply is fixed. Perishable goods will have this kind of market.

7.2.2 (B) Area based markets

Area based, markets are classified into local, national and international markets. These markets tell us the size or extent of the market for commodity sales. The size of these markets depends upon demand for the good, transportation facilities and durability of the good etc.

i. Local Market: Local market is the place where the goods are sold at its produced area. These goods have less durability. Perishable goods like vegetables, flowers, fruits etc. may be produced and marketed in the same area.

ii. National Market: If the goods are demanded and supplied throughout the country it is called national market. Ex: Wheat, rice, cotton etc.

iii. International Market: If buying and selling of commodities take place all over the world, it is called international market. Ex: Gold, silver, petrol etc.

7.2.2 (C) Competition Based Markets

Based on the nature of the competition, markets are classified in perfect competition and imperfect competition.

i. Perfect Competition: A Perfect Competition is a market where there are large number of buyers and sellers are engaged in a homogeneous product at a price fixed by the market.

ii. Imperfect Competition: In this, imperfect competition market, competition is not perfect either among the buyers and sellers. There are different prices for the same product. Imperfect Competition market is classified into monopoly, monopolistic competition, oligopoly and duopoly.

7.3 Perfect Competition: Meaning, Characteristics and Price Determination

7.3.1 Meaning of Perfect Competition

A perfect competition characterized by large number of firms producing homogeneous goods. Free entry and exist of firms in the industry, complete mobility of producers and absence of transportation costs.

7.3.2 Characteristics of Perfect Competition

The following are characteristic features of Perfect Competition:

1. Very Large number of buyers and sellers: There are very large number of buyers and sellers in the market any one of the sellers and buyers cannot influence the market. In perfect competition, buyers and sellers accept the price but not decide the price of the goods. Market can fix the price of the good.

2. Homogeneous Product: All the firms in the industry produce homogeneous goods. The goods are identical in terms of quality, size, packing, and other terms of deal etc. This feature ensures the uniformity of the price throughout the market.

3. Firm is a Price Taker: The firm has to sell the goods at a price determined by the industry as the firm has no control over the price. The market or industry determines this price on the basis of market demand and market supply. So industry is the price maker and firm is the price taker.

4. Free Entry and Exit: The firms are free entry into the market and free exit from the market at any point of time in the perfect competition market. This means that there is no restriction on entry and exit from a new firm.

5. Perfect Knowledge: Both sellers and buyers have perfect knowledge of the market about the goods and their prices. It is not possible for a firm to charge a different price. This feature enables the uniform price in the market.

6. Perfect Mobility: The factors of production (land, labour, capital and organization) have perfect mobility (free to move one firm to another firm) so that there is no restriction-legal or monetary (involving expenditure in movement of goods). This feature ensures that the price throughout the market tends to be uniform.

7. No Selling Costs: There are no selling costs in the perfect competition market, because of assumption of perfect knowledge and homogeneous goods. The Producer does not have advertisement cost.

7.3.3 Price determination under Perfect Competition

Under the perfect competition, the industry determines the price with the help of market forces i.e. demand and supply and firms should follow that price. The sellers and buyers are price takers not price makers. The following table and fig help to understand the demand and supply changes in market equilibrium price determination.

Table-1: Demand and Supply schedule

Price (in Rupees)	Quantity Demand (in KGs)	Quantity Supply (in KGs)
10	70	30
20	60	40
30	50	50
40	40	60
50	30	70

The above table shows that demand and supply of the good. Changes in price automatically changes in quantity of demand and quantity of supply. The relationship of the price and demand is inverse relation. If the price increases the demand is decreased. If the price increases the quantity of supply is also increased. So here price and supply have positive relation.

The price of the good is Rs. 10/- quantity of demand is 70 kgs and quantity of supply is 30 kgs. When price is increased Rs. 10/- to Rs. 20/- quantity of demand is 60 kgs and quantity of supply is 40 kgs. When price increased from Rs. 20/- to Rs. 30/- quantity of demand and supply are equal at 50 kgs. This price (Rs. 30/-) is called ***equilibrium price***, equilibrium supply and demand is 50kgs. When price increased from Rs. 30/- to Rs. 40/- quantity of demand is decreased to 40 kgs and quantity of supply increased to 60 kgs. When price increased from Rs. 40/- to Rs. 50/- quantity of demand is decreased of 30 kgs and quantity of supply increased to 70 kgs. If shows that price of the commodity and quantity of demand have inverse or negative relation (If price is increased to Rs. 50 demand is decreased to 30kgs) and price of the commodity and quantity of supply have positive relation (If price is increased Rs. 50 supply also increased to 70kgs).

This process explains in the following figure.

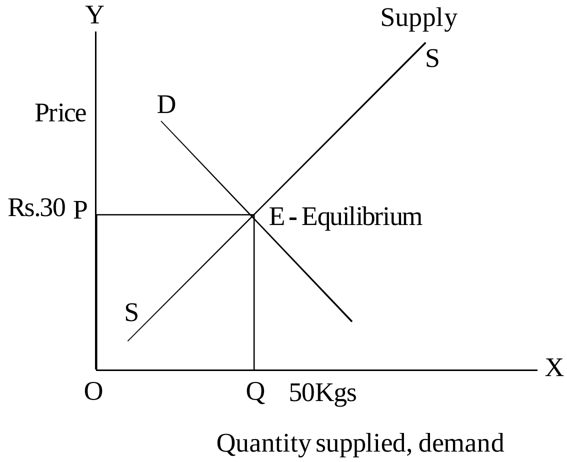

Fig: 7.1 Price determination

In the figure-7.1, the supply and demand of a commodity are shown on 'X' axis and the price of the commodity is on 'Y' axis. In the figure, SS is supply curve and DD is demand curve. 'E' is an equilibrium point where both supply and demand curve intersect each other. OP price is the equilibrium price (Rs. 30/-) and OQ quantity is the equilibrium supply and demand (50 kgs).

7.4 Imperfect Competition

Perfect competition market is not available in the real world. It has ideal conditions only. Let us discus another market i.e. imperfect market. Imperfect market features are opposite to perfect competition market. Based on the sellers size it is classified into 4 types. They are (i) monopoly, (ii) monopolistic competition, (iii) oligopoly and (iv) duopoly.

7.4.1 Monopoly: Meaning and Characteristics

7.4.1 (A) Meaning of Monopoly

Monopoly characteristics are different to the perfect competition market. The word '*mono*' means single and '*poly*' means seller. Monopoly is a market structure in which there is a single seller, there are no close substitutes for the commodity produced by the firm and there are barriers to entry.

Example: Indian Railways which is operated under government of India. Monopoly also implies absence of competition.

7.4.1 (B) Characteristics of Monopoly

Features of Monopoly: Monopoly is characterized by:

1. Single Seller: In monopoly, there is only one firm producing the product. The whole industry consists of this single firm.

2. No Close Substitute: it is assumed that there are no close substitutes of the product.

3. Monopoly has a **strong barriers** can only exist and before a new firm to enter the market.

4. Under Monopoly, firm and industry are one and same.

5. Monopolist can control any one at a time. i.e. price of the product or the quantity of the product. He cannot control both at a time.

6. Monopolist aims minimum cost and maximum profits.

7.4.2 Comparison between Perfect Competition and Monopoly,

Comparison between Perfect Competition and Monopoly

Perfect Competition	Monopoly
1. Large number of sellers and large number of buyers	1. Single Seller and many buyers
2. Perfect substitute goods	2. No Close Substitute
3. Free entry and free exit of firms	3. Monopoly has strong barriers. No scope for entry and exit.
4. Difference between industry and firm	4. Firm and industry is one and same
5. Both sellers and buyers are price takers, price is determined by the industry	5. Producer can determine either price or quantity of output, but not both.
6. Uniform price of the market	6. Price varies depending on demand.
7. Homogeneous goods	7. The goods may or may not homogeneous.
8. Price, AR and MR are the same. Price line is parallel to the OX axis. P=AR=MR	8. AR, MR curves are different, these curves will have downward slope. P=AR>MR.

7.4.3 Monopolistic Competition

7.4.3.1 (A) Meaning of Monopolistic Competition

Monopolistic competition is a market structure in which there is a large number of sellers in the market of a commodity, but the product of each seller differs in some respect from the product of the other sellers. Monopolistic competition has product differentiation. According to J.S. Bains, "Monopolistic Competition is a market structure where there is a large number of sellers, selling differentiated but close substitute products."

Example: Restaurants, Market for Toothpaste etc.

7.4.3.2 (B) Characteristics of Monopolistic Competition

According to Chambarlin, the characteristics of Monopolistic Competition

1. Large number of firms: Under monopolistic competition, there are a large number of firms selling closely related products, but less than that of perfect competition market. Because of the large competition in the market, any single producer cannot influence the total production.

2. Product Differentiation: Product differentiation is an important feature of monopolistic competition. This differentiation could be on the basis of quality, packaging, colour etc. or this differentiation could also be just a matter of perception.

For example, you must have seen different brands of soaps. Even if they look different having different colour, the product it has same use.

3. Selling Costs: Under monopolistic competition firms spend a lot on advertisement of their product in order to attract the customers and sell their product. Every firm tries to promote its product through advertisement for which it bears some extra cost. This is called selling cost.

4. Non-Price Competition: Under monopolistic competition, sometimes, firms compete with each other without changing price. They may start various promotion schemes, gift schemes or compete in terms of advertisement etc.

Thus, firms compete under in every possible way to attract consumers and gain maximum possible market share.

5. Freedom to Entry and Exit of firms: in long run new firms can enter the industry and also can exit from the industry.

6. Nature of Demand Curve: Like monopoly, monopolistic competition also has a downward sloping demand curve from left to right downwards. However due to the existence of competitors in the market, the degree of steepness of the curve is little less, reflecting **greater price elasticity of demand.**

7.4.4 Oligopoly

7.4.4.1 Meaning of Oligopoly

The term "oligopoly" is derived from Greek words – 'oligos' means a few and 'pollein' means to sell. Oligopoly is an important form of imperfect competition. Oligopoly exists when there are few firms selling the product. W.H. Fellner wrote a book on oligopoly with the title, "Competition among the Few". E.H. Chamberlin, hall and Hitch and Paul M.Sweezy developed the theories of oligopoly. Oligopoly can simply be defined as the competition among the few oligopoly firms. The products of these firms may either be close substitutes or homogeneous.

Example: Mobile service providers, car industry, airlines etc.

7.4.4.2 Characteristics of Oligopoly

Oligopoly is characterized by following features:

1. Oligopoly market is limited (few) seller of the product.

2. Interdependence: The firms are interdependence among them.

3. Selling Costs: Oligopoly firms spend expenses on advertisement. These firms have selling cost.

4. Group Behaviour: all the producers come together and form a group for avoiding competition.

5. Price Rigidity: In oligopoly market, the price is fixed by the firms. It is not changed.

7.4.5 Duopoly

7.4.5.1 Meaning of Duopoly

Duopoly (from Greek duo (two) + poly (to sell)) is a specific type of oligopoly where only two producers exist in the market. Duopoly is a market where only two producers exist in the market. It is a limited form of oligopoly. The duopoly model was developed by French economist Augustin Cournot.

7.4.5.2 Characteristics of Duopoly

1. Two producers exist in the market
2. Goods are homogeneous
3. Production cost is Zero
4. Producers do not know their interdependence

7.5 Summary

In this lesson we discussed the meaning of market, classification of the markets, competition based markets, perfect competition market and imperfect markets i.e. monopoly, monopolistic market, oligopoly and duopoly.

7.6 Model Examination Questions

I. Answer the Following questions in about 4-5 lines each

1. Define market
2. Write a note on area based markets.
3. Write a note on time based markets.
4. Write a note on competition based markets.
5. What is perfect competition?
6. Define Monopoly.
7. What is monopolistic competition market?
8. Define Oligopoly.
9. What is Duopoly?
10. Explain the equilibrium price.
11. What are the selling costs?

II. Answer the Following questions in about 8-10 lines each

1. Explain the classification of markets based on time and area.
2. Explain the price determination under perfect competition market.
3. What is monopoly? What are its characteristics?
4. What is Oligopoly? What are its characteristics?
5. Explain the concept of duopoly and its characteristics.
6. Compare perfect competition and monopoly.

III. Answer the Following questions in about 16-20 lines

1. Explain the classification of markets.
2. What are the characteristic features of the perfect competition?
3. What is equilibrium price? How it is determined with a graph? Explain.

7.7 Glossary

- **Market:** Market is a mechanism where the activities of selling and purchasing of goods and services take place.
- **Perfect Competition:** Perfect competition is a market where large number of buyers and sellers exist. All goods are homogeneous and sold at the same price.
- **Monopoly:** Monopoly is a market with a single producer and the product will not have any close substitutes.
- **Product differentiation:** Small differences exist between the products of different firms. Their cross elasticity of demand is more.
- **Selling Costs:** Firms will spend on advertisements to increase their sales. These expenses are called selling costs.
- **Oligopoly:** Oligopoly is a market where a few firms produce the goods. Price of a good is decided independently or collectively by the firms.

- **Duopoly:** Duopoly is a market where only two producers exist in the market. It is a limited form of oligopoly.
- **Equilibrium Price:** Equilibrium price is that price where demand and supply are equal in the market.

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CHAPTER

8

THEORIES OF DISTRIBUTION

8.0. Objectives

- Classify the types of income distribution.
- Explains Marginal Productivity Theory.
- Explains Ricardo Rent Theory
- Explains the determinants of real wages.
- Explains the concepts of interests.
- Explains the concepts of profit.

8.1. Introduction

Factors of production are needed to produce goods. Land labour, capital, organisation. These are called factors of production. They need to be rewarded for their services in the production process. The remuneration paid to the land, which is the factor of production, is called rent, the remuneration given to labour is called wages, the value given to capital for services is called interest, and that of the entrepreneur the reward given for services is called profit.

National income is the sum of all the returns received by the factors of production. So this unit shows how income is distributed among the factors of production.

8.2 Income Distribution

There are two types of income distribution.

1. Functional Distribution.

2. Personal Distribution.

8.2.1 Functional Distribution

The distribution of rewards for the services of the factors of production is called functional distribution. Those are land as rent, labour as wages, capital as interest, entrepreneur as profit. The marginal productivity theory of distribution describes the distribution according to functions. Distribution based on functions can be classified into two types. 1. Micro distribution 2. Macro distribution.

1. Micro-Distribution: Micro-distribution describes how the rates of rewards for various factors of production are determined. It determines the relative prices of productive factors. Rates it refers to rent for land, wages for labour, interest for capital, and profit for the entrepreneur.

2. Macro Distribution: The macro distribution means the relative shares of various factors in national income. That is, it shows how the share of rent and wages in the national income.

8.2.2 Personal Distribution

The distribution of national income among individuals is called personal distribution. It analyzes the causes of income inequality among individuals.

8.3 Determination of factor pricing

Though, like product pricing, factor pricing is based on the forces of demand and supply, yet there are fundamental differences between the two which make factor pricing as a distinct theory:

(i) There are differences in the nature of demand for a product and a factor. The demand for a product is direct demand based on its marginal utility, while the demand for a factor is derived demand. Derived from the demand for the product it helps to produce.

(ii) The supply of a product depends on its money cost of production, while the supply of a factor depends on its opportunity cost.

(iii) The pricing of some of the factors like labour and entrepreneur is influenced by social and human factors, whereas product pricing is influenced little by these factors.

8.4 Theory of Distribution of Marginal Productivity

8.4.1 Theory

According to marginal productivity theory the price of a factor of production is determined by its marginal productivity. The increment made to the total output by employing an additional unit of a factor, keeping all other factors of production constant it is called marginal productivity. According to this theory, the price of a factor of production is equal to its marginal productivity. This theory was developed by J.B.Clark. Marginal productivity is the additional output from using a factor of production.

In other words, marginal product is the increase in total output from using an additional factor. Since factors of production are homogeneous, one factor can be substituted for another, so the producer keeps substituting one factor for another until the marginal productivity of all factors of production is equal. This principle can be illustrated by the following example. Suppose 10 labourers produce 100 books. By employing one additional labourer i.e. 11th labourer if the total production increases by 110 books, the additional increase in total production (110-100=10 books) by 10 books in total output is called as Marginal Physical Product (MPP), by multiplying the marginal physical product or surplus product with the cost of the product, we get the Marginal product value (MVP) or marginal product revenue (MRP).

When an additional unit of production factor is used, the change in the total revenue is called marginal product revenue. Marginal revenue in perfect competition is equal to its price. Every firm compares the marginal factor cost (MFC) with the marginal revenue product (MRP) when using the factors of production in the production process. Factors of production are employed in the production process to the extent that marginal revenue product (MRP) is greater than marginal factor cost (MFC). In the long run, firms discontinue the recruitment of factors of production when the marginal factor cost (MFC) is equal to the marginal revenue product (MRP)and the average revenue product(ARP). That is, firms reach equilibrium when (AFC=MFC=MRP=ARP) is equal in the long run.

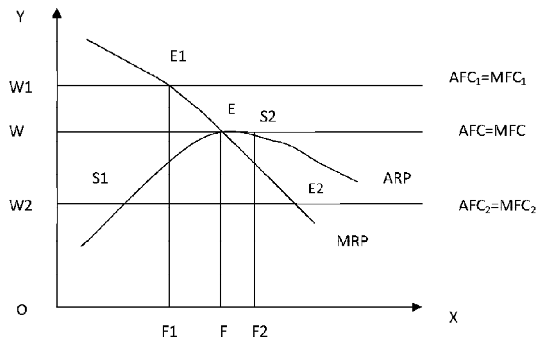

Fig 8.1 Firm's equilibrium in the factors market

When the firm is in equilibrium at point E, AFC=MFC, ARP and MRP are equal. Here the firm pays OW price for of units of the factor. If the cost of production increases to OW-OW1, the firm incurs losses in the amount of E1S1. The price paid to the factors of production is F1E1. It is higher than F1S1. That means average cost of production is greater than average revenue. Under these conditions some firms will leave the industry. Hence the cost of production at OW falls back to AFC and the firm reaches equilibrium. If the cost of production falls to OW2 then the firm will earn S2 E2 profits. At this point new firms enter the industry and AFC increases to OW level and the firm is in equilibrium at point E. ARP=MRP=AFC=MFC at this OW price.

8.4.2 Assumptions of the theory

1. There is perfect competition in the product market and the factor market
2. There is full employment of factors of production.
3. All units of a factor are homogeneous.
4. There is perfect mobility of factors
5. Factors of production can be substituted for each other
6. Factors of production can be divisible according to the process of production.
7. No change in technology.
8. The theory is applicable in the long run.

8.4.3 Criticism

1. Factors of production units are not homogeneous.
2. Factors of production are not perfectly mobile.
3. There is no perfect competition in the market of factors of production.
4. Factors of production are not fully employed.
5. Factors of production are not always substitutable.
6. Ignores changes in technology.
7. This theory does not apply in the short term.
8. Factors of production are not divisible.
9. The major drawback in this theory is that it ignores supply.

8.5 Rent Meaning: Concepts and the Ricardian Theory of Rent

8.5.1 Rent Meaning: In common language the word rent means the amount paid to the owners for the use of land, house, shop etc. According to Prof. Marshall, ‘’the income derived from the ownership of land and free gifts of nature is commonly called rent’’.

8.5.2 Concepts of Rent

There are two concepts in rent. 1. Contract Rent 2.Economic Rent.

1. Contract Rent: Amount paid to the owner under a pre-arranged contract for the use of services such as land, buildings and machinery for a fixed period.

It is called a contract rent. The contract rent is also known as gross rent. It includes a) Interest for the capital used in making improvement of assets b) wages of Management C) Depreciation and maintenance charges d) Profits as the reward for risk taking

2. Economic Rent: Classical concept of economic rent is the reward or payment to land service. According to Ricardo, the economic rent is the surplus on more fertile lands than on marginal or less fertile lands.

8.5.3 The Ricardian theory of Rent

David Ricardo, one of the most famous 19th century economists of the England who propounded the classical theory of rent.

According to Ricardo’s definition” The rent is the portion paid to the landlord for the use of the original and indestructible powers of the soil”

1. Explanation:

Ricardo explained as to how rent emerges by differences in the soil with the help of an example. On the basis of quality and fertility, land is of A, B, C grades. Suppose some people move to a new place for their food needs as the population increases. The first arrivals to the area cultivated highly fertile lands i.e. A grade lands. The cost of production in the form of labour and capital is Rs. 4500 and produce 250 bags of grain. There is no surplus as the revenue from selling the crop is equal to the cost of production. So A grade land has no rent. As the population increases over a period of time and some more people migrate to the area, the demand for food grains will increase. As a result, the less fertile 'B' grade land is cultivated with the same investment of Rs. 4500 and the output produced from B grade land is 200 bags of grain only. So the productive surplus on 'A' grade land is 250-200=50 bags. Due to the increase in population, if some more people migrated to the area and the demand for land increases and they have to cultivate less fertile 'C' grade lands also. If they can grow only 150 bags of grain on C by investing Rs.4500 the total cost of production and the total revenue will become equal no rent arises on 'C' grade lands. 'C' grade land itself is called marginal land. It is explained in the form of a table.

Land Grades	Cost of Production (Rs)	Output in Bags	Rent in Physical form	Money value
A	4500	250	100	3000
B	4500	200	50	1500
C	4500	150	-	-

In the above table 'C' grade land is a marginal land or no rent land where the total cost of production is equal to total revenue. The cost of production of a bag of food grains of 'C' grade land is Rs 30. (4500/150=30) Hence 'A' grade land yields a surplus of 100 bags of food grains or Rs 3000(30X100=3000). Similarly, 'B'grade land yields a surplus of 50 bags of food grains, or Rs(30X50=1500).

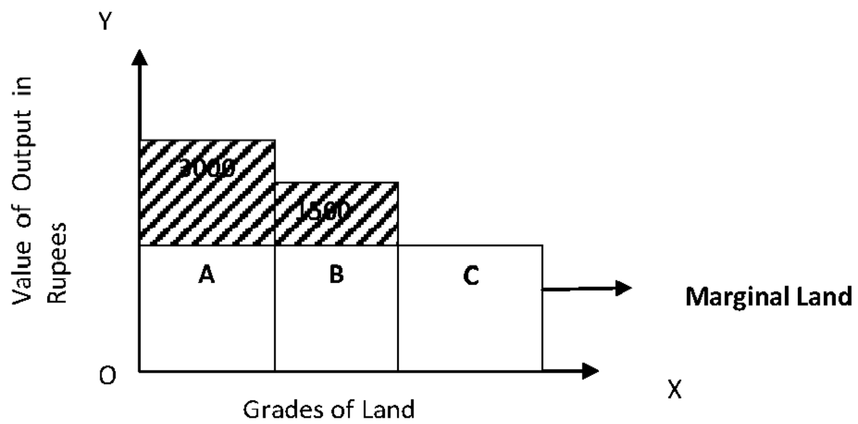

Fig 8.2 Rent determination

In above map Shaded area represents rent or differential surplus. Rent does not arise on 'C' Grade land as it is a marginal land.

2. Assumptions of the theory

1. There is perfect competition in the market.
2. Land is fixed in supply.
3. There are differences in soil fertility.
4. There are indestructible powers inherent in the land.
5. Land is subject to the law of diminishing returns
6. Rent accurse to land alone.
7. Rent arises In the long run

3. Criticism

1. There is no perfect competition in the market
2. There are no indestructible powers of the land
3. It assumes that first the best land will be cultivated but it is not true always.
4. It assumes that rent accrues to land alone. But economic rent is an element in the incomes of all the factors.

In above map Shaded area represents rent or differential surplus. Rent does not arise on 'C' Grade land as it is a marginal land.

8.6 Wages, concepts and types

8.6.1 Concept of Wages

Wages are a payment for the services of labour by the employer, A labourer's strain may be physical or mental strain. Workers can get reward of their service either in the form of wages or wages. The wages received by the labourers may be daily or weekly or monthly and yearly. These are called Time Wages. Wages are also paid in accordance with the amount of work done by a labourer it is called piece wage. For example, a tailor may be paid Rs.400 for sewing uniforms.

8.6.2 Types of Wages

Wages are of two types. 1. Money wages, 2. Real wages

i. Money Wages: Money wages refer to the amount of money income received by the labourers as reward for the services rendered by them they are called money wages.

ii. Real wages: Real wages refer to the purchasing power of money wages received by the workers.

8.6.3 Determinants of Real Wages

1. Price Level: The purchasing power of money depends on the price level. If price level is high, the purchasing power of money will be low. The lower the price level, the greater the purchasing power of money.

2. Cash Wages: other things remaining unchanged. There is a direct relationship between Cash Wages and real Wages. If the cash wage increases, the real wage increases. A decrease in cash wages will decrease real wages.

3. Job Stability: If the job is permanent, his real wage will be high even though his money wage is low. In case of temporary employment his real wage is low though his money wage is high.

4. Nature of work: if the Work is high risk real wages of labourer will be low though money wages are high.

5. Future Prospects: Real wages are higher if the labourer does the job and has the possibility of future promotions. Real wages is low if there are no promotions and higher wages.

6. Additional Income: In some professions, there is a chance to employees to earn additional income even if the monetary salary is low. For example engineers. This will increase the real wage.

7. Social prestige: Some jobs bring prestige in the community. As a result, their monetary wages are low but real wages are high. Although the monetary wages of a bank employee and a judge are equal, the real wage of a judge is higher due to social status.

8. Method of payment: Workers generally get wages in cash. But sometimes they are provided with free accommodation, medical and transport facilities along with monetary wages Due to this, their real wage increases.

8.7 Interest : Meaning and Concepts

8.7.1 Interest

Interest is a payment made by a borrower to a lender for the loan taken. It is usually expressed as a rate per hundred rupees borrowed per year. But from the economics, point of view interest is as the payment of the payment for using of the services of capital. According to ***Mill*** interest is the remuneration for mere abstinence. ***Marshall*** regarded interest as the reward for waiting. ***Keynes*** said, interest is the reward parting with the liquidity of money.

8.7.2 Concepts of interest

Concepts of interest are of two types. They are 1.Gross Interest 2.Net Interest

1. Gross Interest: the payment which the borrower makes to the lender excluding the principal is called gross interest. It includes the following payments.

i. Net interest: it is the payment for the use of capital or money only.

ii. Reward for Risk Taking: Lender faces the risk when he lends money. The given loan may not be returned. So the lender wants to get extra returns. The greater the risk element the higher is the gross interest rate. Unsecured loans are more risky than secured ones and they carry a high premium rate.

iii. Reward for Inconvenience: when a Lender lends money he forgoes its use for the duration of the loan. He will feel some discomfort. The money may not come back when he needs it. He may have to borrow elsewhere. In fixing the rate of interest the lender includes in it the reward for such inconveniences.

iv. Reward for Management: The lender may incur some expenses towards maintenance of the borrowed accounts such as salaries of the staff. Sometimes he has to file a suit for the recovery of loans. The lender charges some amount to meet the expenses for management. This is also included in the gross interest rate.

2. Net interest: net interest is what remains with the lender After deducting the reward for risk taking, inconvenience, Management from gross interest

8.8 Profits: Meaning and Concepts

An entrepreneur produces goods using various inputs. When these goods are sold in the market, they can earn income. The amount left with him after made payments for other factors of production for their services is called profit. The entrepreneur's revenue is more than the cost of production he gets profit.

8.8.1 Nature of Profits

Profits have been explained in various ways by economists. ***Taussig*** referred to it is "that mixed and vexed income." ***Weblin and Hobson*** regard that "profits are unearned income and attribute it to the existence of institutional monopolies established by a few capitalists". ***Clark, Knight and Schumpeter*** said that it is an income which arises out of change, uncertainty and innovations in a dynamic world.

8.8.2 Concepts of profit

There are different concepts of profit. They are Gross Profits, Net Profits, Normal Profits, Normal Profits,

1. Gross Profit: The total income earned by the entrepreneur is called gross profit. The difference between total revenue and total cost is considered as gross profit. Gross profit includes the following aspects- a) if the producer uses his own land or buildings in his business the payments of these are included in gross profit, b) depreciation charges and implicit wages are included in gross profits and c) Interest payable to his own capital in his business.

2. Net Profit: it is the reward earned by entrepreneur exclusively for his entrepreneurial functions. Net profit is also known as pure profit. Net profit includes the following items.

i. Net profit is the reward for bearing uninsurable risks and uncertainties.

ii. A reward given to the ability of the entrepreneur.

iii. The reward for coordinating the factors of production in proper proportion.

iv. It is the reward for Introduce innovations like new products and new techniques of production.

v. These gains arise as result of inflation, closing down of other firms and natural calamities etc; these are part of net profits.

3. Normal Profits: The profits are paid to the entrepreneur as a reward for running the business. Normal profits are included in the cost of production or in the price of goods. When normal profits occur, no new firms enter into the industry or no existing firms leaves to the industry.

4. Abnormal Profits: If the total revenue of the firm is more than the total cost of production, then the company gets abnormal profits.

8.9 Summary

The theory of distribution describes the various factors of production and their rewards. Generally, the price of any factor of production is determined by its supply and demand. The marginal productivity theory of distribution can be applied to price determination of all factors of production. This theory states that the price of any factor of production should be equal to its marginal revenue production. According to David Ricardo rent arises due to differences in soil. Wages are the reward for a labourer's services. Real wages are more important than monetary wages. Interest is the income received by the owner of the capital. Profit is the remuneration paid for the services of the entrepreneurs in the production process.

8.10 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What is Economic Rent?
2. What are time wages?
3. What is net interest?
4. What is net profit?

II. Answer the following questions in about 8-10 lines each.

1. Classify the types of income distribution?
2. Write the differences between money wages and real wages?
3. Explain gross profit?

III. Answer the following questions in about 16-20 lines each.

1. Describe critically the Ricardian theory of rent?
2. What are real wages? What are the factors that determine real wages?
3. What is profit? Explain various profit concepts?

8.11 Glossary

Macro Distribution: The macro distribution means the relative shares of various factors in national income. That is, it shows how the share of rent and wages in the national income.

Contract Rent: Amount paid to the owner under a pre-arranged contract for the use of services such as land, buildings and machinery for a fixed period. It is called a contract rent.

Net interest: Net interest is what remains with the lender after deducting the reward for risk taking, inconvenience, Management from gross interest.

Abnormal Profits: If the total revenue of the firm is more than the total cost of production, then the company gets abnormal profits.

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CHAPTER 9

NATIONAL INCOME ANALYSIS

28.0. Objectives

- Understand the meaning of National Income.
- Distinguish gross income and net income.
- Understand the factors that determining the National Income.
- Distinguish between intermediatary goods and final goods.
- Understand the different concepts of National Income.
- Explain different components of National Income.
- Distinguish between market prices and factor prices.
- Know the different sectors of the economy.
- Know the importance of National Income.

9.1. Introduction

One of the most significant concepts in macro-economic analysis is National Income.It is an important yardstick of overall performance of the whole economy.Its analysis illustrates as how one country's aggregate income is calculated.It helps us to examine the various definitions, concepts, components, calculating methods difficulties and importance of calculating National Income.

9.2. Definitions of National Income

National Income has been defined in many ways.National Income is the final value of goods and services produced in a country during in a financial year.In other way, the total monetary value of all goods and services that are produced by a nation during a period of time.In other words, it is the sum of all the factors income that is generated during a production year i.e. the total income earned by the factors of production in the form of rent, wage, interest and profits.

Different economists have given different definition to National Income, the most modern definition is Simon Kuznets definition.

According to Simon Kuznet, National Income as "the net output of commodities and services following during the year from the country's productive system in the hands of the ultimate consumers."

9.3. Determining factors of National Income

There are number of influenceswhich determine the size of the National Income in a country. It is an account of these influences that one country may have a larger income than another.

A) Natural and human resources

The quantity and quality of country's resources exert perhaps the most important influence on its National Income.Example fertile soil, ready sources of power, favourable climate, navigable rivers etc. will have the beneficial effect on a country's produce capacity.

Enterprises ability: The quality of labour force is also important in National Income. Example, intelligence, entrepreneural skills, ability to make decision etc.

Capital formation: The quantity and the quality of capital is one of the greatest influence on total output.

B)The state of technology

This is an another important influential factor on National Income. A country with a poor technical knowledge cannot have a large sized National Income, because it will not be in a position to make the best possible use of its resources.

C) Political stability

This is an essential pre-requisite for maintaining production at the highest level, when there exists political stability in a country National Income increases.

9.4. Concepts of national income

Now we will discuss the various concepts of National Income. To understand the different concepts, we should know two important concepts and they are

a) Market prices = Factors cost + Indirect taxes – Subsidies

b) Factor price = Factor cost + Subsidies – Indirect taxes

9.4.1. Gross National Product at Market Prices (GNP_{MP})

Gross National Product at Market Prices is the aggregate market value of all final goods and services produced in a country during a year including net foreign income minus income remitted by foreigners.

$GNP_{MP} = C + I + G + (X – M) + (R – P)$

Where C=Total consumption, I=Gross investment, G=Government expenditure, X=Exports, M=Imports, R=Income receipts from abroad, P=Income remitted by foreigners.

9.4.2. Gross National Product at Factor Cost

GNP at Factor Cost means the sum of all incomes earned by all factors of production (land, labour, capital and organization) during a year in a country.

GNP at Factor Cost = GNP at MP –Indirect taxes + Subsidies

9.4.3. Gross Domestic Product (GDP)

Gross Domestic Product is the total monetary value of all final goods and services produced within the boundary of a country during a financial year is known as GDP. It does not include income from abroad.

GDP = GNP – Net income from abroad

or

GDP = C + I + G + Z

where C=Investment, G=government expenditure, Z=Net exports

If net exports are positive, then GDP increases and if net exports are negative, then GDP decreases.

$$Z\uparrow - GDP\uparrow$$

$$Z\downarrow - GDP\downarrow$$

9.4.4. Net National Product at Market Price (NNP_{MP})

When goods and services are produced in a country during in a financial year, there is some wear and tear of fixed capital.This wear and tear of fixed capital is called consumption are depreciation. If we deduct the value of desperation from the value of GDP, we get NNP.

NNP at MP = GNP at Market Prices – Depreciation (consumption of fixed capital)

9.4.5. Net National Product at Factor Cost (NNP_{FC})

Net National Income at Factor Cost is also known as National Income.It is the sum of all incomes earned by resource suppliers for their contribution of land, labour, capital and entrepreneurial ability which go into the year's net production.

NNP at Factor Cost = GNP(FC) Factor Cost – Depreciation

NNP at Factory Cost = NNP at Market Price – Indirect taxes + Subsidies

9.4.6. Personal Income (P.I.)

Personal income is the sum of all income actually received by all individuals or households during a given year.

P.I = National Income (NNP FC) – Social Security Contribution –

Corporate Income Tax – Undistributed corporate profits + Transfer payments

9.4.7. Disposable Income (D.I)

After a good part of personal income is paid to government in the form of personal taxes like Income Tax, Personal Property Tax etc. What remains of Personal Income is called Disposable Income.

Disposable Income = Personal Income – Personal Taxes

Disposable Income can either consumed or saved, therefore

Disposable Income = Consumption + Savings.

9.4.8. Nominal Income

Nominal Income is also called National Income at current prices. National Income is calculated with current prices, then it is said as Nominal Income.

9.4.9. Real National Income

Real National Income is also called National Income at constant prices. To measure the real income of a country, a particular year is taken as base year in which the general prices level is neither too high nor too low. The price level for the base year is assumed to be 100.

The present base year is 2011-12.

9.4.10. Gross Value Added (GVA)

The value added is obtained by deducting the value of material inputs or intermediate products from the corresponding value of output.

Value Added = Value of Output – Intermediatory Products

9.4.11. Per Capita Income

Per Capita Income is the average income of the people in a country in a particular year. Per Capita Income is calculated by dividing National Income with population of a county.

Per Capita Income = National Income / Population

If Per Capita Income is measured with current prices then it is called as Nominal Per Capita Income. If it is measured with constant prices, then it is called as Real Per Capita Income.

9.5. Components of National Income

The actual level of National Income (Y) in a country is made of the five following components:

1. Consumption (C) 2. Investment (I) 3.Government expenditure 4.Exports (X) 5.Imports (M). The first four of these create income within the country, while imports create income in other countries. Thus the

Actual level of National Income in an economy can be expressed as

$Y = C + S + G + (X – M)$

Consumption: Consumption is the total expenditure made by the household on goods and services.Thelevel of consumption depends on the level of income. When people receive income they spend most of it and save part of it. So we can say that Income (Y) equalsto Consumption (C)plusSavings (S).

Y =C + S

Investment: Investment is the purchase of goods that are not consumed at present but are used in the future to generate wealth.Example: Expenditure on infrastructure facilities etc.

Government expenditure: Expenditure made by the government on public facilities for the use of society.Example:Expenditure on police, military, roads,railway etc.

Exports: The value of goods and services produced by a country's firms in a given period of time and which are sold in abroad.

Imports: The goods and services that are brought by residents of a country. But that are made outside of the country.

Net Foreign Income (X-M): The difference between the value of exports and imports has been taken into account to estimate the National Income of a country.

Injections to National Income are investment (I), Exports (E) and Government Expenditure (G) and the leakages to National Income are Saving (S), Import (I) and Taxes (T).

9.6. Measurement of National Income

To measure the National Income there are three methods and they are

a) Product method or output method

b) Income method or factor cost method

c) Expenditure method or outlay method

9.6.1. Output method or product method

This method also known as value added method, inventory method, commodity service method. In this method, the final value of goods and services produced in different sectors of the economy in a year is multiplied with market prices to find out Gross National Product (GNP).

$GNP = (Q_1P_1 + Q_2P_2 + \ldots\ldots\ldots.. + Q_nP_n)$ + Net Income from abroad.

Where GNP = Gross National Product

'Q' is the quantity of goods and services

'P' is the price of goods and services

1, 2, 3 ………. n are different sectors of the economy.

The value of the intermediary goods and services should not be included. Only final value of goods and services should be taken into account.

9.6.2. Income method

This method is also known as factor cost method, divided method.In this method,National Income is estimated by aggregating all factors incomes (in the form of wages, rent, interest, and profit) paid to the owners of these factors of production (land, labour, capital and organizer) within the domestic territory in accounting year.Thus National Income is obtained by summing up of the incomes of all individuals in the country.

National Income= R + W + I + P

Where R= Rent,W= Wages, I = Interest, P = Profit.

Income in the form of transfer payment is not included in it. This method explains us National Income according to distributive shares.

9.6.3. Expenditure method

This method is also known as outlay method, disposable method, modern method.In this method, the total expenditure incurred by the society, personal consumption, expenditure of households, expenditure of firms, Government purchasing of goods and services and net exports are there.

N.I = EH + EF + EG + Net Exports.

Where NI=National Income, EH=Expenditure of households, EF=Expenditure of firms, EG=Expenditure of governments.

This method is based on the assumption that National Income equals National expenditure.

We have explained above the three alternative methods of estimating National Income.The best way to arrive at National Income will be to employee all these three methods so as to permit their cross checking ensuing greater accuracy and throwing more light on details.

9.7. Difficulties in measurement of National Income

There are some conceptual problems that crop up when we start measuring the National Income of a country.Some of the problems are enumerated below:

a) It is very difficult to measure the agriculture output because half of the output only comes to the market remaining they use for self consumption.

b) Most of the rural farmers are illiterate, they wouldn't give proper information about output.

c) Services of housewives to the members of theirfamily and form output consumed at home is difficult to measure.

d) There is a possibility of double counting of the goods as they pass through many shapes.

e) Income earned through illegal activities is not included in National Income.

f) Services rendered for free of charge are not included in GNP, but they exchange welfare.

g) It is very difficult to measure the value of durable commodity.

9.7.1. Significance of National Income statistics

There are several important uses of National Income statistics.There is a great need for their regular operation.National Income estimates provide not only a single figure showing the National Income but also supply the detailed figures in regard to the various components to the National Income.

The following are some of the important uses of National Income estimates:

a) National Income estimates reveals the overall production performance of the different sectors of the economy.

b) Per capita income gives us an idea about the average standard of living of the people.

c) Economic welfare depends to a considerable degree on the level of National Income and the average standard of living of the people

d) By comparing National Income estimates over a period of the time.We can know whether the economy is growing, stagnant or declining.

e) National Income estimates are more useful in budgetary allocations.

f) National Income estimates throw light on distribution of National Income among different categories of income such as wages, profit, rents and interests.

g) Role of public and private sector can be estimated in the economy.

9.8. National Income Estimation in India

In India before independence “Dadabhai Nouroji” is the first person to calculate National Income in 1867-68.After that many economics like William Digbey, Fidly Shirras, KT Sha, Kambatta, and RC Desai, like many calculated National Income.In the year 1931-32 V.K.R.V.Rao for the first time scientifically calculated National Income.

After independence in August 1949, the Government of India appointed the National IncomeEstimation Committee (NIC) under the chairmanship of Prof. P.C. Mahalanobis to make the recommendationsregarding the estimation of National Income. Other members in this committee are D.R. Gadgil and Dr. V.K.R.V. Rao. At present, the ‘National Statistical Office’ (NSO) has been entrusted with the responsibility of preparing National Income Estimation.

In India National Income is calculated by two methods, they are 1) output method and 2) income method.For the purpose of estimating National Income in India, the various economic activities are classified into 13 sectors and they are

1) Agriculture including animal husbandry 2) Fishing 3) Forestry and logging 4) Mining and quarrying 5) Manufacturing [registered and unregistered] 6) Construction 7) Electricity, gas and water supply 8) Transport, storage and communication 9) Hotels and restaurants 10) Banking and Insurance 11) Real estate, ownership of dwellings and business services 12) Public administration and defense 13) Other services.

9.9. Summary

National Income is the most significant concept in the macroeconomic analysis.It represents the most comprehensive measure of the level of aggregate economic activity in the economy.It is therefore regarded as an important yardstick of the overall performance of the economy.It is a value concept and flow concept.There are three methods of measuring National Income, the modern method in the best one.By measuring the National Income, we can understand the peoples'standard of living in the country.

9.10. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What is GNP?
2. Explain per capita income
3. NNP at Factor Cost?
4. Personal income
5. Expenditure method
6. Subsidies
7. Intermediate goods
8. Nominal National Income

II. Answer the following questions in about 8-10 lines each.

1. What are the factors that determine National Income?
2. Distinguish between personal income and disposal income.
3. Write the components of National Income
4. Explain the difference between GNP Market Price and GNP Factor Price.
5. Write the difference between nominal National Income and real National Income.
6. Write the importance of calculating National Income.

III. Answer the following questions in about 16-20 lines each.

1. Define National Income. Explain the various concepts of National Income.
2. Explain the various methods of calculating National Income
3. Explain the difficulties in calculating National Income in India.
4. How National Income estimated in India?

9.11. Glossary

1. National Income: The total monetary value of all goods and services produced in a country during in a financial year.
2. Intermediatory goods: The goods which is in the process of production.
3. Depreciation:Wear and Tear of fixed capital
4. Factor Cost: It is the price of the commodity form produced side.
5. Net National Product: Gross National Product –Depreciation.
6. Gross Domestic Product: It is the total monitory value of all final goods and services produced within a country's border in a financial year. It does not include foreign income.
7. Per capita income: It is average income of the people.National Income is divided with the population of the country.

   Per capita income = National Income/ Population.
8. Gross Value Added: Value of output – Intermediatory Goods

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CHAPTER 10

THEORY OF EMPLOYMENT

10.0. Objectives

- Explains the classical theory of employment.
- Describes the meaning of aggregate demand, aggregate supply and effective demand.
- Explains the keynesian theory of income and employment.

10.1 Introduction

The classical school of economics was the first modern School of Economic thought. The main objective of the classical economists was that free markets could regulate themselves. i.e. laissez-faire. The basis of the classical theory is Say's Law of Markets which was carried forward by classical economists like Marshall and Pigou. They explained the determination of output and employment divided into individual markets for labour, goods and money. In this chapter, we will discuss Goods and money market equilibrium. Say's the law of markets Labour Market and Equilibrium: Pigou's Wage Cut Policy Keynesian Theory of Income and Employment.

10.2 Classical theory of Income and employment

According to classical economists, the country's economy has full Employment at equilibrium level. They strongly believe that laissez-faire leads to full employment in the economy. It means that there will be no unemployment in the economy in the long run. To them, full employment was a normal situation, and any deviation from this was regarded as something abnormal. The basis of the classical theory is Say's Law of Markets which was carried forward by classical economists like Marshall and Pigou. It is explained that the determination of output and employment is divided into individual markets for labour, goods, and money.

10.2.1 Assumptions

- There are free market price systems.
- There is full employment in the economy even without inflation.

- There is perfect competition in the labour and Product markets.
- The labour force is homogeneous.
- The total output of the economy is to be divided into two parts, i.e., consumption and investment.
- In the long run, equilibrium will continue.
- The extent of the market is not limited. It Expands.

10.2.2 Goods and money Market Equilibrium: Say's Law of markets

Jean Baptiste Say, a French economist of the early 19th century, developed the famous law of markets. i.e., "Supply creates its own demand". According to J.B. Say's law, supply creates its own demand; supply always equals demand (S = D) under perfect completion for goods Produced in the Economy. Production creates markets for goods; selling is at the same time buying, which leads to more production. In the process of production, income is created in the form of rent, wages, interest, and Profit. That income leads to demand. There is no unemployment. It's full employment in the economy. Therefore, there cannot be general overproduction and the problem of unemployment in the economy. If there is general overproduction in the economy, then some labourers may be asked to leave their jobs. The problem of unemployment arises in the economy in the short run. In the long run, the economy will automatically tend towards full employment when the demand and supply of goods become equal.

10.2.3 Money Market Equilibrium

Goods Market Equilibrium leads to money market equilibrium and labour market equilibrium. It's explained that most of the income comes from factors of production that reward income. Income is utilised through consumption and savings. If the savings income is spent on the purchase of capital goods, then it is called an investment. The relationship between savings and investment is positive and equal (S=I). Flexible Rate of Interest plays a prominent role in money market equilibrium.

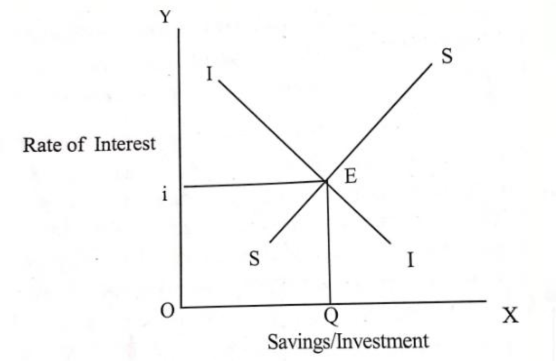


Fig. 10.1 Money Market Equilibrium

The above diagram explained that money market equilibrium with Savings and investments is equal. (S=I). OX-axis savings/investments and OY- axis shows rate of interest. Savings and Investments are equal at the rate of interest O. E is the equilibrium point. The rate of intent changes automatically, and saving and investment also change depending on this equilibrium point.

10.2.4 Labour Market Equilibrium

In the labour market, the demand for labour and the supply of labour determine the level of output and employment. The classical economists regard the demand for labour as the function of the real wage rate.

DN =f (W/P) Where DN = demand for labour, W = wage rate and P = price level. Dividing wage rate (W) by price level (P), we get the real wage rate (W/P).

10.2.5 Wage cut policy

The classical economists believed that there was always full employment in the economy. The classical economist strongly opined that high wage rates are one of the main causes of unemployment. In the case of unemployment, a general cut in wages would take the economy to full employment levels. This argument is based on the assumption that there is a direct and proportional relationship between money and wages and real wages.

The Pigou wage cut theory of employment, named after the economist Arthur C. Pigou, is an economic theory that suggests that reducing wages during times of economic downturns can help to reduce unemployment and stimulate employment. The theory is based on the idea that the primary cause of unemployment is the disparity between wages and prices. In Pigou's theory, if wages were more flexible and allowed to decrease, the adjustment process would be smoother. Lower wages would reduce firms' costs, which could lead to lower prices and increased demand for goods and services. This increase in demand would create an incentive for firms to hire more workers, thereby reducing unemployment.

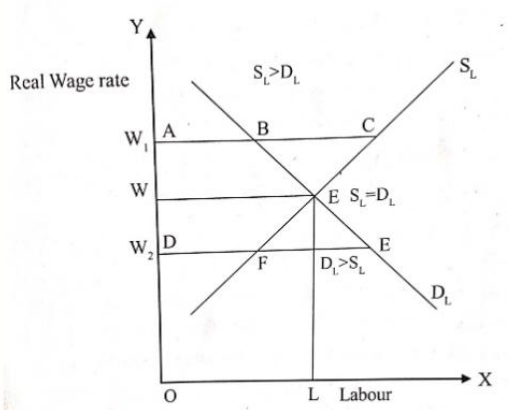


Fig-10.2: Labour Market Equilibrium wage cut Policy

The above diagram 10.2 explained that in labour market equilibrium, the OX-axis is taken on labour and the OY-axis taken on the real wage rate. If the wage rates are OW2, labour demand is greater and supply is less (DL > SL). Hence, the wage rate rises. The wage rate is OW_1, Labour supply is more and Labour demand is less (SL > DL). Hence, the wage rate falls. At OW wage rate, supply of Labour and demand for labour are equal (SL = DL). It is 'E' equal to supply and demand for labour which leads to equilibrium with full employment.

10.2.6 Major aspects of classical theory of employment

Aspects:

- Importance to full employment
- Involuntary unemployment is absent
- Under perfect competition general unemployment is not possible.
- Decrease in Money wages tends to decrease the real wages also.
- Wage and price flexibility occurs according to the Say's law of Market.

- Due to say's law of market, there is no overproduction and general unemployment issue.
- People spend their entire income on consumption and investment
- Savings are equal to investment
- Rate of interest can be changed as accordance to equalize the savings and investments

10.2.7 Limitations and criticism of the theory

- The assumption of classical theory is not applicable in the real world.
- Full employment is unrealistic.
- Supply creates its own demand, which is not always possible.
- A wage cut policy cannot be raised in general employment; it is not possible.
- The classical economist's argument that unemployment is due to wage rigidities is not at all true.
- In an economy, money plays a crucial role in determining output and employment. In a modern economy, it's not possible to achieve equilibrium between money supply and demand.
- Classical economists argue that savings lead to investment and capital accumulation, driving economic growth. However, there can be a paradoxical situation where increased savings may not necessarily translate into increased investment and aggregate demand. This is because saving may result in a decrease in consumption spending, leading to a decline in overall economic activity.
- Classical economics advocates for minimal government intervention in the economy, relying on the self-adjusting mechanisms of free markets. However, it is not possible to present welfare governments.

10.3 Keynesian theory of Income and employment

The Keynesian theory of income and employment, developed by the British economist John Maynard Keynes in the 1930s, provides an alternative perspective to the classical theory of employment. It was at that time when J. M. Keynes wrote his famous book 'General

Theory'. In it he presented an explanation of the Great Depression of 1930's and suggested measures for the solution. He also presented his own theory of income and employment. It focuses on the role of aggregate demand and the potential for market failures that can lead to involuntary unemployment.

10.3.1 Aggregate Supply

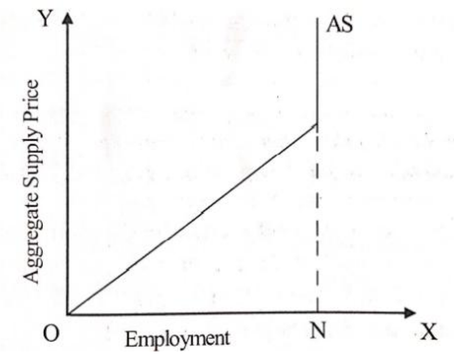
Aggregate supply is the total supply of all goods Produced by all the producers or entrepreneurs together at a particular level of employment in an economy. As employment increases, output also increases. As total production increases, aggregate supply increases. Hence, aggregate supply depends on the level of employment. For the producer to continue production they should recover at least the cost of production; this is called the supply price. So the aggregate supply price is the minimum amount (which is equal to cost) that the producer in an economy should receive if they sell the output produced at a particular level of employment.

The aggregate supply price is the total amount of money that the entrepreneurs must receive from the sale of output produced by the number of workers employed by them. Aggregate Supply Price: Define as "At any given level of employment of labour, the aggregate supply Price is the total amount of money that all the entrepreneurs in the economy, taken together, must expect to receive from the sale of the output produced by that given number of men if it is to be just worth employing them.

Table-1 : Aggregate Supply Price schedule

Level of Employment (N) in lakhs	**Aggregate supply price (Rs. In Crores)**
10	250
12	300
14	350
16	400
18	450
20	500

In the above table, it is observed that aggregate Supply prices increase with level of employment. With a level of employment of 10 lakhs, the amount that the producer must relieve is Rs. 250 crores by selling the output Produced by 10 lakhs employees. When 12 lakh workers are employed, the entrepreneurs must receive 300 crore. In the same way, when producers expect to receive the minimum amounts of proceeds, namely Rs. 350 crores, Rs. 400 crores, Rs. 450 crores, and Rs. 500 crores, they will employ 14 lakhs, 16 lakhs, 18 lakhs, and 20 lakhs workers. When Rs. 500 crore is the aggregate Supply price, the employment level is 20 lakh. It is assumed that the employment of 20 lakh workers represents full employment. It means the output cannot be increased.



The above diagram explained that the aggregate supply price is taken on the OY-axis and the level of employment, or number of workers, on the OX-axis. As the level of employment increases from O to N, the aggregate supply price also increases, meaning that as the number of workers increases, the Amount of aggregate supply Price also increases.

10.3.2 Aggregate Demand

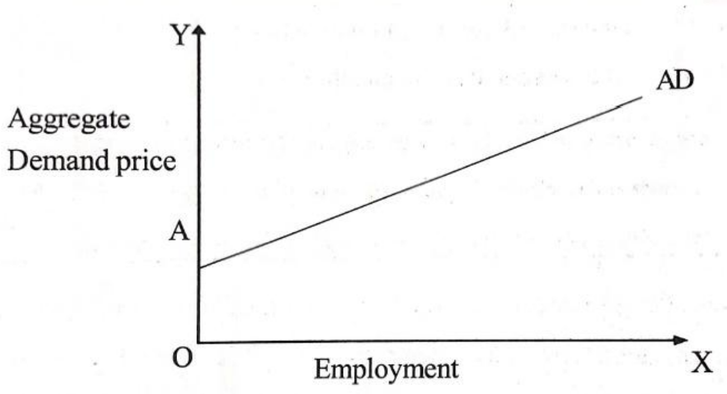
Aggregate Demand Determines Output and Employment: Keynes argued that aggregate demand, consisting of consumption (C), investment (I), government spending, and net exports, plays a crucial role in determining the level of output and employment in an economy. Fluctuations in aggregate demand can result in changes in economic activity, leading to periods of high unemployment or inflation.

AD= C+I

Table-2: Aggregate demand price schedule

Level of Employment (N) in lakhs	Aggregate Demand price (Rs. In Crores)
10	325
12	350
14	375
16	400
18	425
20	**450**

The above table explains the relationship between the level of employment and aggregate demand. The level of employment increases the proceeds expected by the entrepreneurs, and the Aggregate Demand Price rises. The entrepreneurs' level of employment is 10 lakh workers, and they expect to relieve an amount of Rs. 325 crore from the sale of output produced by the 10 lakh workers. They will be willing to Employ 16 lakh workers if their expectation is that they receive Rs. 400 crore.



In the above graph, the aggregate demand price is taken on the OY-axis, and the level of Employment is taken on the OX-axis. The aggregate demand price is a function of the level of employment. At ON, the aggregate demand price, i.e., the amount the entrepreneurs expect to receive, is OD, and at the employment level of oN1, the expected receipts are OD1. Thus, the aggregate demand price increases as the level of employment increases.

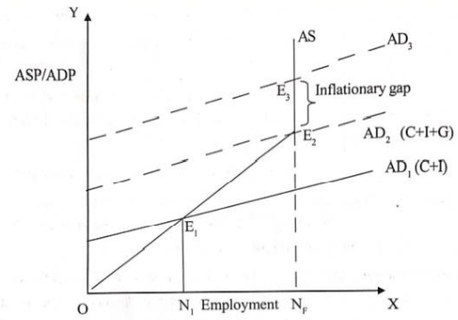
10.3.3 Effective Demand

The concept of effective demand is closely associated with the work of economist John Maynard Keynes. Keynes argued that effective demand is crucial for determining the level of output and employment in an economy. Effective demand is distinct from notional or potential demand, which refers to the desires or wants of individuals for goods and services, regardless of their ability to purchase them.

Effective demand is determined by aggregate demand and aggregate supply, where aggregate demand and aggregate supply equal at a point that is called effective demand. The effective demand will determine the level of employment. At this point, the amount expected to be received and the amounts that must be received by the entrepreneurs are equal. The entrepreneurs earn normal Profits at this point.

Level of Employment (N) in lakhs	Aggregate supply price (Rs. In Crores)	Aggregate Demand price (Rs. In Crores)
10	250	325
12	300	350
14	350	375
16	400	400
18	450	425
20	500	450

The above table shows different levels of employment in lakhs of workers, aggregate supply prices, and aggregate demand prices. When the expected amount (the aggregate demand price) and the amount that must be received (the aggregate supply price) are equal at Rs. 400 crore, the level of employment is 16 lakh workers. This point indicates effective demand.



In the above figure, the aggregate demand price curve (ADP) and the aggregate supply price curve (ASP) intersect each other at point E,. It shows the equilibrium point. The equilibrium has been attained at the ON, level of employment. It is assumed that ON, in the above diagram does not indicate full employment as the economy has inactive factors of production. In Keynesian analysis, it is considered underemployment equilibrium.

Keynes theory of employment states that to achieve full employment, an upward shift in the aggregate demand curve is required. It can be done with government expenditure on goods and services supplied in the economy whenever private entrepreneurs do not show interest in investing. With this, the AD curve (C+I) shifts as AD (C+I+G) at the new point of effective demand E, where the economy reaches full employment level, i.e., ON. Beyond E., a further rise in AD leads to inflation (a rise in the general price level), as there is no scope for an increase in AS because all resources are potentially utilised. Hence, the gap between E, and E, is called the inflationary gap.

10.3.4 Major aspects of the Keynesian theory of income and employment:

1. Output employment and income are interchangeable terms.
2. Employment and income depend on effective demand.
3. Effective demand is governed by aggregate demand and aggregate supply.
4. Since aggregate supply remains constant in the short-run, Keynes concentric on the aggregate demand.
5. Aggregate demand in a two sector economy (i.e., households and firms) is determined by consumption expenditure and investment expenditure.

10.4. Summary

Old classical economists like Adam Smith, Ricardo, J. B. Say, J. S. Mill, and N. Senior believe in laissez faire policy (no government intervention in any economic activities) developed the classical theory of employment. This theory states that full employment is a normal feature of a capitalist economy. The classical theory of employment rules out the possibility of unemployment in a free market economy. The economy would always be in full employment equilibrium. John Maynard Keynes in his masterpiece ‘The General Theory of Employment Interest and Money’ published in 1936 put forth a comprehensive theory to explain the determination of equilibrium aggregate income and output in an economy.

10.5 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Classical economics means?
2. What is Goods market equilibrium?
3. What is money market equilibrium?
4. What is labour market equilibrium?
5. What do you mean by wage cut policy?
6. What do you mean by full employment?
7. What is aggregate supply?
8. What is aggregate demand?
9. What is effective demand?

II. Answer the following questions in about 8-10 lines each.

1. Explain the J.B. Say’s law “Supply creates its own demand”
2. Explain the assumptions of classical theory of employment.
3. Explain the concept of effective demand.

III. Answer the following questions in about 16-20 lines each.

1. Critically analyze the classical theory of employment.
2. Briefly explain the Keynesian theory of employment.

10.6. Glossary

1. Wage cut policy: AC Pigou the lower wage rate would bring down the cost of productions, leading to lower Prices resulting in more demand for the goods.
2. Full Employment: A situation where all those workers who are able and willing to work get employment.
3. Aggregate supply Price: Aggregate supply Price is the total amount of money which all the entrepreneurs in the economy taken together, must expect to receive from the sale of the output produced by that given number of men, if it is to be just worth employing them.
4. Aggregate demand Price: The aggregate demand price for the output of any given amount of employment is the total sum of money of proceeds, which is expected from the sale of the output produced when that amount of labour is employed.
5. Effective demand: Effective demand is determined by aggregate demand and aggregate supply where the aggregate demand and aggregate supply Equal at a point that is called effective demand.

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CHAPTER 11

PUBLIC FINANCE AND BUDGET

11.0. Objectives

- Define public finance
- List the branches of public finance
- Public revenue
- Public expenditure
- Public debt
- Centre – State financial relations
- Federal finance – Finance Commission
- Budget

11.1. Introduction

Public finance is one of the branches of economics. To understand the meaning of public finance the pre-requisite is to have some knowledge of the words “Public and Finance.” The word public is a collective term which stands for the collection of individuals and also it refers to all members of community and finance is money resources or revenues. Public finance stands for the resources of public authority. Public finance word is used in first time in England country.

11.1.1. Concept of Public Finance

Public finance deals with the income and expenditure of public authorities. The word public is used to denote state government or central and local bodies. Public finance studies the objectives methods and effects of raising and spending money by the government in order to fulfil its obligations towards society in transforming a society from police state to welfare state.

According to Hugh Dalton “It is concerned with the income and expenditure of public authorities and with the adjustment it one to another.

According to Adam Smith “Public finance is an investigation into nature and principles of the state revenue and expenditure”.

Modern governments play a major role in creating economic and social infrastructure. They spend lot of money on infrastructure facilities. Of late governments have been spending huge amounts on various welfare measures to ameliorate the difficulties of poor and downtrodden sections of their population.

The activities undertaken by the government will have impact on the income, output, employment and the general price level of the economy. Government needs revenue to perform its duties. It imposes various taxes. If necessary it borrows money, sometimes it resorts to deficit financing. It spends money on various economic and social activities. It is therefore, necessary to know about public revenue, public expenditure and public debt which together constitute public finance which is one of the major aspects of macro economics.

11.1.2. Components of Public Finance

a) Public revenue

Public revenue means collection of revenue by imposing taxes and also receive money from the people in many other forms. Revenue received by the government from different sources is called public revenue. Pubic revenue is broadly classified into two kinds 1) Tax revenue 2) Non-tax revenue

1. Tax revenue

The revenue obtained in the form of taxes from public is known as tax revenue. The taxes collected by State and Central Governments from public are of two types, viz, Direct Tax and Indirect Tax.

- **Direct Tax:** Taxes imposed on individuals and companies based on income and expenditure. Ex: personal income tax, interest tax and expenditure tax
    - Taxes imposed on property and capital assets of individuals and companies. Ex: wealth tax, gift tax, estate duty.

- **Indirect Taxes:** Those taxes the burden of which can be transferred to ultimate tax payer are called as indirect taxes i.e.,taxes levied on goods and services. Ex: excise duty, custom duty, service tax, sales tax.

- **Goods and Services Tax (GST):** Goods and Services Tax (GST) is an indirect tax which has replaced many individual taxes in India. France was the first country to introduce GST in 1954. The **Goods and Services Tax (GST) Act** was passed in the Parliament (122nd Amendment Act) on 29th March, 2017. The Act came into effect on 1st July, 2017. GST is a comprehensive, multi stage, destination based tax that is levied on every value addition. In simple words GST is an indirect tax levied on the supply of goods and services under this system. Four (4) slabs are fixed for GST rates i.e. 5%, 12%, 18% and 28%.

There are 3 taxes applicable under this system.

1) CGST (Central GST): GST to be levied by the Central Government.

2) SGST (State GST): GST to be levied by the State Government.

3) IGST (Integrated GST): Integrated GST will be levied by the Centre and the States concurrently.)

In the earlier indirect tax regime, there were many indirect taxes levied by both State and Centre. States mainly collected taxes on the form of Value Added Tax (VAT). Every State had a different set of rules and regulations. Inter-State sale of goods was taxed by the Centre.

2. Non-tax revenue

Government also receives revenue from sources other than taxes and such revenue is called the non-tax revenue. The sources of non-tax revenue are as follows:

a) **Administrative revenue:** Government receives money for certain administrative services. Ex: License fee, tuition fee penalty, special assessments etc.

b) **Commercial revenue:** Modern governments establish public sector units to manufacture certain goods and offer certain services. They exchanged for the prices. So such units earn revenue by way of selling their products. Ex: IOL, BSNL, BHEL, TSRTC, Indian Railways, Air India etc.

c) **Loans and advances:** When the revenue received by the government from taxes and non-tax sources is not sufficient to meet the heads of government expenditure it may receive loans from the financial institutions operating within the country and also from the public. The modern government can also obtain loans from foreign governments and international financial institutions. Ex: IBRD, IMF, ADB, etc.

d) **Grants-in-Aid:** Grants-in-Aid means to receive without any conditions of repayment. They are not repaid. State Governments receive such grants from the Central Government. The Central Government may receive such grants from foreign governments or any international funding agency. Grants are two types.

i) General grants: When a grant is given to meet shortage of funds in general without specifying a purpose, it is called general grant.

ii) Specific grants: When a grant is given for a specific purpose, it is called general grant. It cannot be spent on any other purpose. Ex: Education grant, health grant, floods grant.

b) Public expenditure

Public expenditure is the expenditure incurred by public authorities- Central, State and collective needs of the citizens or for promoting their economic and social welfare. The role of public expenditure is important in the accumulation of capital that governs the rate of growth in productive capacity.

Public expenditure is an expenditure that the government incurs in performing various economic activities. Public expenditure transfers money to the society. If there is an increase in public expenditure, the income of community will also increase. Therefore, the development takes place in the country. If the public expenditure decreases, then the income level will also decrease as a result of which there will be no development in the country.

c) Public debt

The government may opt for public debt when its expenditure exceeds its revenue. In this situation, the government borrows funds from various sources within the country or from abroad. This creates public debt.

Types of public debt: on the basis of sources, public debt is classified into two categories:

i) Internal debt: Internal public debt refers to the fund borrowed by the government from its citizens, financial institutions and other agencies within the country.

ii) External debt: External loans refer to the funds borrowed by the government from foreign investors, agencies, financial institutions, multi nationals, outside the geographical area under its control, loans borrowed by the government from foreign banks, foreign government international financial institutions like IMF, IBRD, IFC etc.

Redemption of public debt: Redemption means repayment of a debt. Just as the private individual or organization his to repay the loan, he or it has borrowed and so also the government has to pay not only interest on the public debt but also repay the principal on the due date.

Repayment has the following advantages

i) First of all it saves the government from bankruptcy.

ii) Secondly it discourages extravagant expenditure of government.

iii) Thirdly it maintains the confidence of the lenders.

iv) It saves the future generation from the burden of debt.

11.1.3. Methods repayment

1. Repudiation: It refers to the refusal to pay a debt by the government. Only the Soviet Russia followed this method in 1917. But in modern democratic daysthis method is not possible because of contracts have to be accepted and respected.

2. Refunding: Refunding is the process by which the maturing bonds are replaced by new bonds.

3. Conversion: Conversion of public debt means exchange of new debt for the old ones. The process of conversion consists in consisting or altering a public debt from a higher to a lower rate of interest.

4. Actual repayment: The following methods are followed for the actual repayment of public debt.

a) **Sinking fund:** In this method, a fund is created into which a certain amount of revenue is deposited every year for the repayment of outstanding debt. According to Dalton a sinking fund should be made out of the current revenue of the treasury and not out of the loans.

b) **Surplus revenue:** A policy of surplus budget may be followed annually for cleaning of public debt gradually instead of creating a fund for it repayment on maturity. But in recent years, due to increase public expenditure surplus budget is a rare phenomenon.

c) **Terminal annuities:** A government may issue terminal annuity, a part of matures, every year according to a serial order divided every year. In this method, the loan is repaid annually and hence the burden of the State is also very much reduced.

d) **Capital levy:** Capital levy refers to a very heavy tax on property and wealth. It is a once for all tax imposed on the capital assets above the certain value. In fact capital levy is changed immediately after the war due to unproductive war debt.

11.2. Centre State Financial Relations

India is a country with federal structure. Centre-state fiscal relations are recognized as very important in almost all the federations. Article 263 to 281 of the modern constitution has made elaborate provisions that provide directions to the centre relating to the distribution of financial resources amongst the states.

It may be noted that the Central Government plays an important and key role in achieving economic development in countries with federal structure in modern times. India was formed into a federation after independence, provisions. Thus necessary provisions were incorporated in the Indian constitution. The centre-state financial relations which are necessary for the existence of a federation are governed by federal fiscal relations. Therefore, it is necessary to know elaborately the financial transfers which make fiscal adjustment between the centre and state. While the union parliament imposes tax on specific items as per union list, the State legislature impose tax on specific items as per the state list.

i) Exclusive power of union government: The union government has the exclusive powers to impose taxes on

1) Corporation tax
2) Customs tax
3) Capital gains tax
4) Surcharge on income tax
5) Railways fares
6) Excise duties on tobacco
7) Terminal taxes on goods etc.

Exclusive powers of State Governments: The State Government has exclusive powers to impose tax on

1) Land revenue
2) Stamp duty
3) Estate duty
4) Entry tax
5) Sales tax
6) Taxes on vehicles and luxuries etc.
7) Taxes on property and buildings
8) Estate duty on agricultural lands

The central government is financially independent because, it has more money than it requires. In contrast state government are financially dependent as they do not have more money than they require. The state governments are directly responsible for the maintenance of law and order, education, health etc.

In India Constitution provides grants-in-aid to state government to make them financially independent Article 275 provides grants-in-aid for the development of tribal welfare in some states. If any natural climate like floods or droughts occur, in that case also states are provided with grants-in-aid.

Miscellaneous powers: The miscellaneous powers include the following

1) After 73rd and 74th amendment of constitution a provision is made for the constitution of the consolidate fund from which the resources are supplied to the municipalities and village panchayats.

2) As per Article 360, the President can give financial powers to the state at the time of declaration of financial emergency. In addition to distribution of tax revenues, the union government follows two-other means to add the States' financial resources.

   i) Advancement of central loans and

   ii) Grants-in-aid given to the states

11.3. Federal Finance

Federal Financerepresents the finance of both central and state governments and their relationship. Under this finance system all items of revenue and expenditure are divided among the central. State and local governments.

"Federal finance refers to the finance of the federal as well as of the state governments and the relationship between the two." - R.N. Bhargava

Characteristics of Federal Finance:

1) Based on the constitution, the sources of income and heads of expenditure are given to the central and state governments.

2) The States are financially assisted by Central Government in the federal system.

3) Even though State have self-governments. They remain subordinate for Central Government.

4) If there is any dispute between Central and State Government, they are resolved as per the constitutional provisions.

Condition for successful operation of federal government:

1) Allthe governments must have independent sources of revenue and generated income and mobilization of resources.

2) All the governments possess complete power over its resources to fulfil its requirements.

Evolutions and provisions of Federal Financial System:

Based on Indian Act 1935, the Federal Finance System was developed in India by the British Government. The act provides the basic principles of financial independence for the Provinces.

1) To achieve financially strong centre:

i) The Centre has been more elastic and higher yielding sources of revenue.

ii) The Centre has been given importance subjects of currency printing and banking and the power to resort to deficit financing.

iii) The Central Government has been provided with certain exclusive sources of revenue.

iv) The residuary powers are with the centre.

2) To allocate efficient functions and financial power: Constitution has categorised the function into three types of lists namely Union List, State List and Concurrent List.

3) To provide resource transfer: To transfer the resources, the constitution has provided three types of means, they are tax sharing, grants and loans.

4) To provide flexibility in resource transfer: Finance Commission every year recommends the transformation of resources from Centre to State.

11.4. Finance Commission

The Finance Commission is a quasi-judicial body. It is established in 1951. It is established under Article 280 of the Indian Constitution by the President of India. The Commission is appointed for every 5 years and consists of a Chairman, Secretary and 4 members. So far 15 Finance Commissions have been appointed. The Chairman of 15th Finance Commission is Dr. NK Singh.

Functions of Finance Commission:

i) The percentage of the net proceeds of the taxes which may be divided between the Union and the States.

ii) The allocation of the share of the proceeds of such taxes between the States.

iii) The principles which shall be given the distribution of grants-in-aid out of the consolidate fund of the Government of India between the States.

iv) Grant-in-aid for tribal areas and allocated.

v) Special grants for any particular State.

15th Finance Commission

The Government of India appointed 15th Finance Commission on 27 November, 2017 with NK Singh as a Chairman. It has been instructed to use the population data of 2011 census as base for calculations. This is the first commission which has submitted recommendations after the introduction of GST.

11.5. Budget

Concept of budget: The word 'budget' is derived from the French word 'baguette' which means a small leather bag. Budget is an annual statement showing the revenue and expenditure of a government for a financial year (April 1 – March 31). It is prepared by the Budget Division, Dept. of Economic Affairs. Though the word budget does not finda mention in the constitution, but it is mandated in Article 112. That the union government shall present before the Parliament an "Annual Financial Statement" of estimated receipts and expenses of the Government. The budget is presented by Finance Minister of India in Parliament. The budget preparation is done in the month of September every year.

Budget contains -

1. Actual figures for preceding year
2. Budget and revised figures for the current year
3. Budget estimates for the following year.

The government presents to the legislature an annual budget every year for its approval. Sometimes a Voice on Account Budget is presented by the government when it is not possible to present the full budget. According to the Article 266 of the constitution, it is mandatory for the government to seek approved from the Parliament before raising any funds from the consolidate funds of India. A Vote on Account budget stays for 2 months however, it can be extended. In case of an election year it can be extended to 6 months.

Objectives:

The main purpose of budget is to obtain approval of the legislature for the tax proposals and allocation of resources to various government activities.

i. Allocation of resources
ii. Distribution of resources
iii. Stabilization of domestic economy
iv. Redistribution of income and wealth
v. Reallocation of resources
vi. Economic growth with stability
vii. Managing public enterprises

11.5.1. Components of Budget

There are three important components of budgets i) Receipts ii) Expenditure and iii) Deficits.

i) **Receipts:** Receipts refer to revenue collected by the government through various means. There aretwo kinds of receipts i.e. revenue receipts and capital receipts.

Revenue receipts: Revenue receipts are revenue of government. Ex: income tax, corporation tax, custom duty etc.

Capital receipts: Capital receipts are those receipts which create a liability or cause reduction in government assets. Ex: Recovery of loans, borrowings and disinvestment receipts.

ii) **Budget expenditure:** Budget expenditure refers to estimated expenditures incurred by the government under different capital expenditure and revenue expenditure.

Capital expenditure: This expenditure includes expenses on creation of roads, bridges, buildings etc.

Revenue expenditure: This expenditure includes salaries, interest, payments, pensions, subsidies etc.

iii) **Deficits:** Budget deficit is the difference between all receipts and expenses in both revenue and capital account of the government.

11.5.2. Types of budget

There are 3 types of budgets depending upon the difference between the revenue and expenditure.

1) Balanced budget: In this type,the estimated revenue and estimated expenditure is equal (R = E).

2) Surplus budget: In this type, the estimated government revenue will be more than the estimated expenditure (R>E).

3) Deficit budget: This refers to the budget in which the total expenditure exceeds the total revenue (R<E).

11.5.3. Budget Deficits

Budget deficit refers to a situation where the budget expenditure of Government exceeds its budget receipts. There are four types of budget deficits. They are:

1. Revenue Deficit: When revenue expenditure is more than revenue income. Then revenue deficit arises.

   Revenue Deficit = Revenue Income – Revenue Expenditure

2) Budget Deficit: The difference between total receipts and total expenditure is referred as budget deficit.

3) Fiscal Deficit: The sum of budget deficit and market borrowings is referred as Fiscal Deficit.

4) Primary Deficit: The difference between Fiscal Deficit and Interest payment is referred as Primary Deficit.

11.6. Summary

In democratic government public finance is the revenue and expenditure by government. Every year government presents budget in Parliament/Assembly to reach goals of revenue and expenditure. Budget is an important component for revenue and expenditure.

11.7. Model Examination Questions

I. Answer the following questions in about 4-5 lines.

1. Define public finance.
2. What is meant by public expenditure?
3. What is a public debt?
4. What is capital levy?
5. What is federal finance?
6. What is budget?
7. What is fiscal deficit?
8. What is GST?

II. Answer the following questions in about 8-10 lines.

1. What are the sources of public finance?
2. Explain the redemption methods of public debt.
3. Explain the Finance Commission.
4. Explain the Budget Deficits.

III. Answer the following questions about 16-20 lines.

1. Analyse the Central-State financial relations in India.
2. Write an essay on Federal Finance.
3. Describe the concept and components of budget.
4. Explain the types of Public Debt.

11.8. Glossary

1. Public finance: It deals with the income and expenditure of public authorities (Central, State and local government)
2. Capital levy: It is a once for all tax imposed on the capital assets and estates.
3. Public expenditure: Expenditure incurred by public authorities.
4. Public debt: The total borrowings of the government from internal and external source.
5. Debt redemption: Payment of interest and repayment of Principal amount by the government.
6. Fiscal policy: It refers to a government's decisions, surrounding, spending and taxing.
7. Budget: An estimate of income and expenditure for a set period of time.
8. Budget deficit: A budget deficit occurs when a government's expenditure is greater than its revenue.

9. Federal finance: It means divisions and coordination's of different heads of income and expenditure between Central, State and Local governments.

10. Balanced budget: Balanced budget is that budget in which the total receipts and total expenditure are equal.

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CHAPTER 12

MONEY

12.0. Objectives

- Explain the evolution of Money
- Analyse the inconveniences of the Barter system.
- Define the concept of Money
- Classify the types of Money
- Explain the functions of Money
- State the important components' of money.

12.1. Introduction

Money is generally accepted as medium of exchange. Money has a special place in economic life. Man has learned through experiences that he earns money for his survival and spends the earned money on goods and services. A person's standard of living depends on the purchasing power of money. Purchasing power refers to the number of goods or services that a certain amount of money can buy at a given time. The changes in the prices bring about changes in the purchasing power of money. As the purchasing power of money changes, some sections gain and others lose. Money provides an opportunity for goods and services to be exchanged between people with less effort and without delay.

In this unit, you will learn about the concept and functions of money.

12.2. Concept of Money

Today we cannot think of life without money. When we say that a person has a lot of money, we usually mean that he or she is a wealthy. By contrast economists use the term money in a more specialized way. To an economist money does not refer to all wealth but only to one type of it. In modern communities, money is the stock of assets that can be readily used to make day to day transactions.

12.3. Evolution of Money

The term ‘money’ was derived from the name of Goddess Juno Moneta of Rome. In a primitive society, people used to exchange goods for other goods. This direct exchange system is known as barter system. As barter system was extremely inconvenient in operation, a common measure of value, namely money, was introduced for mutual exchange. Before the introduction of coins, a variety of objects was used as money. For example, since the very early ages, grains, ’cowries shells’ and cattle were used as money. Thereafter came the use of metallic coins – gold, silver, copper coins. In the Roman period ‘Besant’ a gold coin, in the Mauryan period ‘Pana’ a silver coin were used as standard money. Now-a-days we have paper currency. In the modern economy recent developments are credit money in the form of drafts, cheques, Plastic Money – Credit and Debit Cards and Digital Money – Online Transactions etc.,

12.4. Barter System

In the absence of money, exchange should not be considered impossible. Barter system was practiced before money came into being. In our country this system of barter is still practiced to some extent in the villages. The direct exchange of goods for goods is called Barter system. This method has not worked properly in these days of massive production. It may take many days to find such persons. This method not only wastes time but also leads to several difficulties.

Inconveniences of the Barter System

The following are the inconveniences of the Barter system.

(i) Lack of Double Coincidence of wants: When goods have to be directly exchanged for goods, it is essential that the wants of both the buyer and the seller must coincide. For instance a person having goats and wishing to exchange of potatoes has to find some other person having potatoes and needs goats in exchange.

(ii) Lack of store of value: Goods cannot be stored for a long time. They lose in value. Some of them wholly perish after some time. As people trade in cattle, grain and other, it is very difficult to store the value of such perishable commodities over long period.

(iii) Lack of divisibility of commodities: Another difficulty is that some commodities cannot be divided into small parts. Commodities like grain can be divided into many parts and exchanged for the commodity we want. But all commodities are not divisible. Suppose if the animals like cow, goat and goods house, coat etc., are divided into small units their value will be lost.

(iv) Absence of common measure of value: There is no common measure value in the barter system. All commodities do not possess equal values. It is difficult to settle the terms of exchange. Suppose a goat is to be exchanged for rice, it is difficult to decide the amount of rice worth a goat.

(v) Difficulty in making differed payments: Under barter system, goods must be borrowed and repayment must be done in goods. If the value of goods changes between the time the loan is taken and the time the loan is repaid, either a lender or a borrower may suffer a loss. If the value of a commodity decreases the lender will suffer a loss, if it increases the borrower will suffer a loss.

Thus various difficulties faced under the barter system gave rise to money.

12.5. Definitions of Money

Money is a concept defined by several economists. Some important views about money are as follows.

(i) Robertson defined money as ‘anything which is widely accepted in payment for goods or in discharge of other kinds of business obligations’.

(ii) Crowther defined money as ‘anything that is generally acceptable as a medium of exchange and which at the same time acts as a measure and store of value’.

(iii) According to Walker ‘ money is what money does’.

(iv) Seligman defines money as “one thing that possesses general acceptability.”

The most important feature of money is that it must be generally acceptable to all members in the society which uses it. Money is expressed in terms of a unit of account. Every country has its own monetary unit of account and currency. For instance Rupee in India, Dollar in USA etc. The value of all assets is expressed in terms of rupees in our country.

12.6. Related Concepts of Money

There are various concepts related to money. They are Currency, Liquidity and Near Money.

(i) Currency: Currency is a medium of exchange for goods and services. In short it is money, in the form of coins and paper notes, usually issued by a government and the central bank. Money comprises of not only currency but also demand and time deposits of the banks.

(ii) Liquidity: It refers to the efficiency with which an asset can be converted into money. The most liquid asset of all is money itself.

(iii) Near Money: The term near money consists of highly liquid assets which are not money but can easily be converted into money. The following assets are close substitutes of money. Hence they are called near or quasi money. Examples of near money includes (a) Saving and time deposits in the commercial banks (b) Saving deposits in the post offices and post office bonds (c) Money market funds (d) Government treasury bills (e) Units of UTI (f) Government securities (g) Shares of joint stock companies.

12.7. Types of Money

Broadly speaking there are two main kinds of money (a) Metallic money or coins and (b) Paper money. These are further classified into different types.

(i) Commodity Money and Representative Money: It is that form of money in which face value is equal to intrinsic value of money. It is also known as full bodied money. Ex: Coins. The money which has higher face value than its intrinsic value is known as representative money. Ex: paper money.

(ii) Legal Tender Money and Optional Money: Legal tender money which has legal sanction i.e. no one can refuse to accept it as a medium of payment. Everyone within a country must accept it. Ex: Money issued by Reserve Bank of India. Optional money has no legal sanction behind it. But it will be accepted on faith and trust. All forms of cheques, drafts, debentures, shares, credit cards and such others are optional money.

(iii) Metallic Money and Paper Money: Metallic money refers to the money which is made up of metals like gold, silver, copper etc. Paper money refers to that money which is in the form of paper currency notes. Ex: Rs.10, Rs.20, Rs.50, Rs.100 notes.

(iv) Standard Money and Token Money: Standard money is the money whose intrinsic value is equal to its face value. Token money is the money whose intrinsic value is less than its face value. Ex: 1, 2 and 5 rupees coins.

(v) Credit Money: Credit money is also known as bank money refers to bank deposits kept by people with banks which are payable on demand and can transferred from one party to another via the use of cheque. The cheque is an in instrument used to transfer bank deposits and it offers the some conveniences as money.

12.8. Functions of Money

Money in a modern economy performs important functions which have been classified by David Kinley as follows:

These functions are classified as (i) Primary functions (ii) Secondary functions (iii) Contingent functions and (iv) Static and dynamic functions.

12.8.1. Primary Functions of Money

The primary functions of money are of two types:

(i) Medium of Exchange: Money as a medium of exchange is used in the sale and purchase of goods and services. Anyone can get goods and services in exchange of money available with us. In this way, money removed the problem of double coincidence of wants , faced in the Barter System and reduced time and energy in the transactions.

(ii) Measure of Value: Money measures value of goods and services to facilitate sales and purchases of goods and services. Money has also removed the difficulty of barter system by serving as a common measure of value. The values of various commodities are expressed in terms of money. It is called price. Rs. 40 per kg, Rs. 20 a dozen etc., represent measure of value. Money as a measure of value has made transactions simple and easy.

12.8.2. Secondary Functions of Money

Apart from primary functions of money, there are some other functions of money, which are called secondary functions. These secondary functions are expressed as given below:

(iii) Store of Value: Money serves as a store of value. As money posses value people save the part of their earnings in the form of money to use it anytime for the purchase of anything.

(iv) Standard of Deferred Payments: A differed payment means future payment. Money is also helpful in payment for goods and services after a lapse of time. It means that with the help of money people can purchase and sell goods and services only on commitment, Payment can be made in the form of installments in future. Payments of salaries, installments, loans etc., are the examples of differed payments.

(v) Transfer of Value: The value of money can be transferred from one person to another person and from one place to another place at any time. Sale and purchase of movable and immovable property can also be made with the help of money.

12.8.3. Contingent Functions of Money

In addition to primary and secondary functions of money there are some contingent functions which are related to generally modern economies. These functions are:

(i) Distribution of National Income: Money is helpful in measuring the contribution of national income of various parts of the country. Money facilitates the distribution of national income among the various factors of production Land, labour, capital and organization all co-operate in an act of production.

(ii) Equalisation of Marginal Utility/Productivity: Concepts like utility or productivity are measured in terms of money. A consumer as well as a producer measures the utilities of different goods and factors of production with the help of money and try to get maximum satisfaction or maximum returns.

(iii) Basis of Credit: The progress of business activity is linked with the credit system of the country. The entire strength of the credit system is based upon money. Banks create credit money. Money supply affects the credit system of the country.

(iv) Liquidity: The ability of any asset to serve as a medium of exchange is called liquidity. Money is the most liquid of all assets i.e., money can be readily exchanged for goods and services without any difficulty.

12.8.4. Static and Dynamic Functions of Money

Paul Einzig classified the functions of money into two broad categories namely static and dynamic functions:

(i) Static Functions: The primary and secondary functions of money namely medium of exchange, measure of value, store of value and standard of deferred payments are called the static functions. The economic development of a country is not affected by the static functions.

(ii) Dynamic Functions: Dynamic functions are those which bring about changes in the economic conditions such as price level, level of production, consumption, distribution, general price level and employment etc.

12.9. Components of Money Supply

Money supply refers to the total money held by public at a particular point of time in an economy. It is a stock concept. The components of money supply may be different among various countries. Money supply consists of the following:

1. Currency Issued by the Central Bank: Currency consists of coins and paper money. Generally the central bank issues currency in any country. In India, The Reserve Bank of India is the central bank. It issues all notes worth of 2000,500,200,100 50, 20 and 10 rupees. The Finance Ministry of the Central government issues one rupee note and coins.

2. Demand Deposits created by Commercial Banks: Bank deposits are an important component of money supply. Commercial banks create credit out of deposits accepted from the public. The deposits created by banks with the help of primary deposits are called derived deposits.

Money Aggregates: RBI publishes figures for four alternative measures of money supply, viz, M_0, M_1, M_2 and M_3. They are defined as follows.

M_0 = Currency in circulation + Banker's deposits with the RBI + Other deposits with the R.B.I.

M_1 = Currency with the public + Demand deposits with the banking system + Other deposits with the R.B.I.

M_2 = M_1 + time liability portion of saving deposits with banking system + Certificates of deposits issued by banks + term deposits maturing within one year. (Excludes CDs)

M_3 = M_2 + term deposits over one year maturity + call/term borrowings of banks.

Source: RBI reports - www.rbi.org.in/scripts

12.10. Summary

- Money is defined as a thing that is generally accepted as a medium of exchange.
- Money is an important aspect of macro economics.
- The standard of living of a person depends on the purchasing power of money.
- Purchasing power refers to the number of goods or services that a certain amount of money can buy at a given time.
- Before the introduction of currency and coins, a variety of objects was used as money. For example grain, cattle etc.,
- Exchange of goods for goods is called Barter System.
- The inconveniences faced under the barter system gave rise to money.
- The concepts related to money are Currency, Liquidity and Near Money.
- Broadly speaking there are two main kinds of money Namely Metallic money or coins and Paper money.
- These are further classified into different types such as Commodity money, legal tender, optional, token money and credit money etc.,
- The functions of money are classified as Primary functions, Secondary functions, Contingent functions, Static and dynamic functions.

- Medium of exchange, Measure of value, Store of value, Standard of deferred payments and Transfer of value are the important functions of Money.
- Money supply consists of Currency issued by the Central Bank and Demand Deposits created by the commercial Banks.

12.11. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What is Barter System?
2. What is meant by token money?
3. What do you know about the standard of deferred payments of money?
4. Distinguish between static and dynamic functions of money.
5. What are the components of money?

II. Answer the following questions in about 8-10 lines each.

1. What are the inconveniences caused by barter system?
2. Briefly explain the definitions of money.
3. Explain the related concepts of money.

III. Answer the following questions in about 16-20 lines each.

1. Distinguish between different types of money.
2. Explain the important functions of money.

12.12. Glossary

- Money: Money is anything that is generally accepted as a means of payment.
- Barter System: The direct exchange of goods for goods is known as Barter System.
- Currency: Currency is a medium of exchange for goods and services. In short it is money, in the form of coins and paper notes.

- Liquidity: The ability of any asset to serve as a medium of exchange is called liquidity.
- Legal Tender Money: Legal tender money which has legal sanction to accept it as a medium of payment.
- Credit Money: Credit money refers to bank deposits which are payable on demand and can transferred from one party to another at any time.

12.13. References

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CHAPTER 13

BANKING

13.0. Objectives

- Explain the concept of banking.
- Classify the functions of commercial banks
- Explain the advantages of net banking.
- Distinguish between saving and time deposits.
- Explain the Functions of Reserve Bank of India.

13.1. Introduction

Banking is a business activity. Banks receive deposits from the public and lend them to the needy people. In modern days, Banking plays an important role in the development of an economy. It is an important constituent of a country's financial system.

13.2. Concept of Banking

The word 'banking' is derived from the Greek word 'banque' meaning bench. In ancient Greek, famous temples of Ephesus, Delphi and Olympis were used as depositories. These temples are the sits of money lending transactions. In India, paper money called hundis issued by jagtseths of Bengal, Shahs of Patna, Chettiars of Madras were accepted throughout the country and outside too. In 1606 the merchants of Amsterdam created a bank owned by the city. This bank operated banking transactions successfully for two centuries. During 17^{th} century, Goldsmiths in London became the bankers. It was only the 19th century that the modern commercial banking system developed in the world.

13.3. Definitions of Commercial Banks

A bank is a financial institution that accepts deposits of money from the public and advances loans to the borrowers. Banks utilise money collected for lending to the households, the firms and the government. People deposit their surplus money in the banks for two reasons – safety of money and earning some interest amount.

According to R.S. Sayers, “Banks are institutions whose debts are commonly accepted in settlement of other peoples’ debts.

Crowther says “A commercial bank collects money from those who have it to spare or who are saving it out of their income and lends the money to those who require it”.

Herbard L.Hurt defnes the banker as one who is in the ordinary course of business honours cheques drawn upon him by persons from and for whom he receives money on current account.”

According to Banking Regulation Act 1949 “ A bank is a financial institution which accepts for the purpose of lending or investing of deposits of money from the public repayable on demand or otherwise and withdrawable by cheque, draft, pay order or otherwise comes under purview of a bank”.

13.4. Functions of Commercial Banks

A commercial Bank is an organised financial institution which accepts deposits from the public and lends money to industry, trade, agriculture and consumers etc., and provides a number of services useful to its customers. Banks have a unique role in the financial sector. Banks have the power to determine the nature and quantity of production of the country due to the fact that a large part of the money in circulation is under control of the banks. The main objectives of a commercial bank are (a) mobilisation of deposits from people and institutions and (b) extension of credit i.e. advancing loans for the needy with a view to earn the profit. To achieve its objectives the commercial banks mainly accept deposits and advance loans. Hence the two important functions of a commercial bank are (1) acceptance of deposits (2) Payment of Loans and Advances.

13.4.1. Accepting Deposits

Deposits refer to the money that people keep in the banks. The bank accepts four types of deposits from the public and maintains the following accounts.

i) Current / Demand deposits: These deposits are particularly meant for business people who transact huge amounts frequently. These are repayable on demand without any notice.

Generally no interest is paid on them. But charge a maintenance fee from the customers for providing various services. Overdraft facility is available.

ii) Saving deposits: These deposits are convenient to general public such as small business people, employees and the low and middle income people. People can deposit and withdraw money at any time. Banks impose a limit on the amount and number of withdrawals during a particular period of time. The rate of interest will be low compared to fixed deposits.

iii) Fixed deposits: These deposits are accepted for a fixed period says 7days, 46 days, 90 days, 1 year, 2 years and so on. The rate of interest varies with the length of the period and the amount of deposit. These deposits can be withdrawn only after the expiry of the period. However one can take loan against such deposits or cancel them and get money foregoing the interest fully or partly.

iv) Recurring deposits: These deposits are the variants of fixed deposits. The people deposit a fixed amount periodically up to a certain period. The amount keeps on getting accumulated. The interest paid on these deposits is comparatively more than saving deposits and less than that of fixed deposits.

13.4.2. Payment of Loans and Advances

A bank utilises the deposits carefully. As not all depositors withdraw their amounts at a time, the bank ventures to do business with the deposits. It plans and always keeps some cash balances to meet the demands from the depositors as per the guidelines of the central bank.

a) **Demand Loans:** A loan which can be recalled on demand is called demand loan. There is no stated maturity. The entire loan amount is credited in the loan amount of the borrower. Those like security brokers whose credit needs fluctuate generally, take such loans on personal security and financial assets.

b) **Short -term Loans:** Short term loans are given against some security as personal loans to finance working capital. The entire amount is repaid in one installment or in a number of installments over the period of loan.

c) **Cash Credits:** It is another way to provide loans to businessmen. Under this system the sanctioned amount is not given at a time, but an account is opened and the borrower is allowed to withdraw amount as and when he requires. Bank charges interest only for the amount the borrower utilises but not for the entire loan sanctioned.

d) **Overdraft:** Banks provide overdraft facility to the selected customers. The customers can get more than they have deposited, but they have to pay interest on the extra amount which has to be repaid within a short period. The amount of permissible over draft varies with the financial position of the borrower. Overdraft can be made only in respect of current accounts.

e) **Discounting of Bills of Exchange:** Banks permits the holder of an exchange bill to withdraw some money keeping the exchange bill as security. It will not give the entire amount but discount it i.e. pays less than the face value. When the bill matures, it sends it for payment to the party and pays the depositor the remaining balance after deducting its commission. Bills of exchange are issued for a period of 90 days.

f) **Credit Cards:** A credit card is basically a payment mechanism which allows the holder to make purchases. Banks issue credit cards to customers. With this card, the card holder can purchase goods on credit at any shop. The credit card is used to purchase goods from shops subject to certain regulations. The amount of the bill is collected from the banks which issued the credit card. Ex: SBI, Card Elite, HDFC Regalia Credit Card etc.,

13.4.3. Creation of Credit

Banks create credit by advancing loans to its customers out of what they have received in the form of deposits from the public. All commercial banks are required to keep a certain percentage of their cash reserves with the central bank. Banks give loans and advances from the part of the total amount of the primary deposits. When a bank grants a loan to a customer, it deposits the loan in the deposit account instead of paying cash. Thus derived deposits are created.

13.4.4. Agency Functions

Commercial banks act as an agent of its customers and gets commission for performing agency functions as under.

a) A commercial bank undertakes the payment of subscriptions, premia, rent etc., as per the directions of its customers.

b) It collects funds through cheques, bills of exchange, demand drafts, promissory notes etc., of their customers from other banks.

c) Acts as 'Trustee' and 'Executive' of property of its customers on advice of its customers.

d) It sells and purchases gold, silver , securities and shares on behalf of its customers.

e) Collection of dividends, interest on shares and debentures is made on behalf of its customers.

13.4.5. General Utility Services

a) Transfer of Funds: It provides facility for cheap and easy remittance of funds from place to place through Demand Drafts, Mail transfers, telegraphic transfers etc.,

b) The banks issue letter of credit, traveller's cheques and gift cheques.

c) It gives information about economic position of its customers to traders and provides similar information about other traders to its customers.

d) Banks provide locker facility to their customers for keeping their valuable ornaments and important documents for safe custody. Service rent is collected for this purpose.

e) Underwriting securities issued by the government, public and private bodies.

f) Dealing in foreign exchange.

g) Establishing ATMs (Automatic teller Machines) to enable the customers to deposit and withdraw cash subject to certain limits. The customers can use ATM facility by using Credit and Debit cards.

Commercial banks play an important role in a developing country. They mobilise savings for capital formation. The banks by opening branches in rural and backward areas can promote the process of monetization in the economy. They not only provide finance for industries but also help in developing capital market. They help the economic development of a country by following the monetary policy of the Central Bank.

13.5. Net Banking

Now-a-days in most banks, human and manual teller counters are being replaced by the Automated Teller Machine (ATM). Banking activity is being done with computers, internet and other electronic means of communication which is known as Net banking. Net banking is also known as internet banking or online banking or web banking.

Internet banking offers customers almost every service traditionally available through a local branch including deposits, transfers, and online bill payments. Virtually every banking institution has some form of online banking, available both on desktop versions and through mobile apps. With online banking, consumers aren't required to visit a bank branch to complete most of their basic banking transactions. They can do all of this at their own convenience, wherever they want i.e. at home, at work, or on the way to our work, however the customs need a computer with internet access to use this facility. Examples of Net Banking are National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS), Electronic Clearing System (ECS) etc., In order to access the service, clients need to register for their bank's online banking service.

Mobile banking (M-Banking) is a latest banking service that offers banking services through a mobile communication device such as Mobile Phone. In Mobile banking a customer can avail services of a bank while he/she is roaming i.e. not positioned at a single location. It was started in India in the year 2002. Many banks such as SBI, HDFC, AXIS and ICICI banks etc., are performing financial transactions over the internet.

Advantages of Internet Banking

The customer using this facility can conduct transactional and non-transactional tasks including:

a) An online account is simple to open and easy to operate.

b) The customer can view account statements.

c) It is 24 x 7 services.

d) The customer can check the history of the transactions for a given period by the concerned bank.

e) Bank, statements, various types of forms, applications can be downloaded.

f) The customer can transfer funds, pay any kind of bill, recharge mobiles, DTH connections etc. It saves both time and money on postage.

g) The customer can buy and sell on e-commerce platforms.

h) The customer can invest and conduct trade.

i) The customer can book, transport, travel packages, and medical packages.

j) It is a safe and secure way to conduct transactions.

k) With internet banking, customer is saved from hassles of travelling, paper work.

l) Now-a-days, internet banking plays a vital role in the banking system. The customers can use this facility on their mobile phones using a Wi-fi or 3G, or 4G connections.

13.6. Central Bank or Reserve Bank of India

A central bank is the apex institution in the banking and financial institution of the country. It plays a leading role in organizing, regulating, supervising and developing the banking system of a country. Every country has a central bank known by different names. For example, Reserve Bank of India is our central bank. Reserve Bank of India was established on 1st April 1935 with a share capital of 5 crores. Initially it was owned by private shareholders but was nationalised by the government of India in 1949. It is owned by the Government of India. As per RBI act 1934, it performs all the functions of the central bank.

13.6.1. Objectives of Reserve Bank of India

a) Securing monetary stability in India.

b) Regulating the issue of Bank notes.

c) Operating the currency and credit system.

d) Having a modern monetary policy framework to meet the challenge of an increasing complex economy.

e) Maintaining price stability while keeping in mind the objective of growth.

f) Undertaking consolidated supervision of the financial sector to support national objectives.

13.6.2. Functions of Reserve Bank of India

Reserve Bank of India performs a number of important functions which are discussed as under.

a) General Functions

1. Issue of Currency: Reserve Bank of India has been empowered to issue currency notes in the country. Currency notes issued by the Reserve bank of India are legal tender. The issue department of Reserve Bank of India issues currency and coins. Only one rupee coins, notes less than that denomination are issued by the Ministry of Finance, Government of India. The Reserve Bank of India is required to keep a minimum reserve of Rs.200 crores, of which not less than Rs.115 cores must be in gold.

2. Banker to the Government: Reserve Bank of India acts as an agent, adviser and a banker to the government. As a banker, The Reserve Bank of India receives the deposits of cash, cheques and drafts, etc., on behalf of the government. It provides short term loans to the government and sells and buys foreign currencies on behalf of the government. It also manages public debt, issues new loans, receives subscriptions to these loans, pays interest on them and finally repays these loans. The central bank acts as the financial adviser to the government. As an adviser, it advises the government from time to time on all banking transactions.

3. Bankers' Bank: The Reserve Bank of India lays down the rules and regulations for commercial banks such as the amount of money that they must always keep them. This ratio is called the Cash Reserve Ratio. It also discounts bills of commercial banks. It provides guidance to all banks and regulates their activities. Sometimes Reserve Bank of India inspects the commercial banks and suggests ways and means for improvement.

4. Lender of the last Resort: The Reserve Bank of India acts as the lender of the last resort. It provides ultimate need of finance to all banks by discounting approved securities and collateral loans and advances.

5. Clearing House: The Reserve Bank of India acts as a clearing house for transfer and settlement of mutual claims of the commercial banks. Since commercial banks keep their cash reserves with the Reserve bank, it is easier and convenient to clear and settle claims between them by making transfer entries in their accounts maintained with the Reserve bank of India.

6. Custodian of Foreign Exchange Reserves: The reserve Bank of India acts as a Custodian of our foreign exchange reserves. It maintains the external value of the rupee. It controls both the receipts and payments of foreign exchange. It helps in maintaining stability of the exchange rate by purchasing and selling foreign currencies in the market.

7. Controller of Credit: The most important functions of the Reserve Bank of India is to control credit made available by the commercial banks. It determines the interest rates, volume of credit and flow of credit to various sectors. The Reserve Bank of India adopts quantitative and qualitative methods to control credit in the economy. Quantitative methods aim at controlling the cost and availability of credit, while qualitative methods influence the use and direction of credit.

b) Supervisory Functions

The Reserve Bank of India has powers to regulate and administer the banking and financial systems in our country.

1. The Reserve Bank of India grants license to banks.
2. Inspects the banks by asking for periodical information on various components of assets and liabilities.
3. Issues directives and has the power to control Non-Bank Financial Institutions.

c) Promotional and Developmental Functions

The Reserve Bank of India performs a wide range of promotional and developmental functions to support national objectives. It helps in the development of money and capital market.

1. It plans for expansion of commercial branch banking facilities in rural and urban areas.
2. It creates special agencies to meet the requirements of specific groups. The important agencies are (i) National Bank for Agriculture and Rural Development (NABARD) to cater to the needs of agricultural sector. (ii) Industrial Development Bank of India (IDBI) to meet the needs of industries and (iii) Central and state sponsored Financial Corporation (IFCI, SFC) to provide long term credit to industries.

13.7. Summary

Banking is an important aspect of macro economics. Banking is a business activity where money deposits are collected from the public, and these deposits can be transferred from one person to another. A commercial bank is a financial institution. The main functions of commercial banks are acceptance of deposits and advancing loans. Commercial banks accept four types of deposits namely current, saving, fixed and recurring deposits. Commercial banks advance different kinds of loans namely demand loans, short term loans, cash credits, overdrafts, discounting bills of exchange etc., to different sections of the public. Banks create credit out of primary deposits. Under Net banking, all banking transactions are conducted over the internet. The central bank of India is the Reserve Bank of India. It is the apex bank of all financial institutions. The main objective of the Reserve Bank of India is to achieve monetary stability in a country. Reserve Bank of India has monopoly power to issue currency notes in our country. Reserve Bank of India provides guidance to the commercial banks and monitor them to support the national objectives.

13.8. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What are the advantages of overdrafts?

2. How do credit cards help the customers?

3. What are the objectives of Reserve Bank of India?

4. What do you know about clearing house?

5. Explain the promotional functional of the Reserve Bank of India.

II. Answer the following questions in about 8-10 lines each.

1. Write different kinds of deposits accepted by the commercial banks?

2. What are the agency functions of commercial banks?

3. Distinguish between Cash Credits and Over Drafts.

4. Point out the advantages of Net Banking.

III. Answer the following questions in about 16-20 lines each.

1. Explain the main functions of the Commercial Banks.

2. Explain the functions of the Reserve Bank of India.

13.9. Glossary

- Banking: Banking is a business activity where money deposits are collected from the public and in turn loans are provided to the needy people such as businessmen, farmers, industrialists etc.

- Deposits: Deposits refer to the money that people keep in the banks.

- Recurring Deposit: A variant of fixed deposit accounts is recurring deposit account. A person makes payment for a regular period at equal time intervals. For example, a person can choose five year term as maturity period and make a certain sum of money every month for five years. These deposits carry a high rate of interest.

- Cheque: A cheque is a paper instructing the bank to pay a specific amount from the person's account to the person in whose name the cheque has been made.

- Over Draft: To selected customers, banks grant overdraft facilities. Bank allows such customers to draw from their account and above their deposits. However the customers have to pay interest for the amount overdrawn.

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CHAPTER 14

INFLATION AND TRADE CYCLES

14.0. Objectives

- Define inflation and its types
- Identify the causes of inflation
- Explain the effects of inflation
- Suggest the remedial measures to control inflation
- Understand the need of price stabilization
- Understand the phases of trade cycles
- Analyze the impact of trade cycles

14.1. Introduction

In Economics, inflation is a continuous rise in the general prices of goods and services in an economy over a period of time.

Ex: The price of a commodity in a season keeps on increasing however the quantity remains the same.

Table-1

Name of the commodity	Variation in price over a period of 6 months					
	January	February	March	April	May	June
Petrol (per 1 Litre)	90	95	98	100	102	105

As a result of increase in the price of the commodity the purchasing capacity of common man decreases. It affects the economic lives and welfare of the people in many ways.

To check the inflation the prices of commodities should be stabilized for a long time to empower the growth and development of an economy.

Higher inflation causes adverse impact on the economic performance of countries in many aspects. Hence, the identification of determinants of inflation is very important.

Inflation interrupts price mechanism, discourages investment and savings, adversely affect fixed income groups and creditors and ultimately leads to the breakdown of morals.

14.2 Definitions of inflation

The term "Inflation" refers to persistent rise in general price level over a period of time.

According to Pigou 'Inflation exists when money income is expanding more than in proportion to increases in earning activity".

According to Samuelson, 'inflation denotes a rise in the general level of prices'.

14.3 Types of Inflation

Based on the value of inflation types:

1. Creeping inflation: When rise in the price is very slow and small, it is called creeping inflation. It does not exceed 3% per annum.

2. Walking inflation: This is the second stage of inflation. When the rise in the price level is between 3% and 10% per annum is called walking inflation.

3. Running inflation: When the rise in the price level is between 10 % to 20% per annum is called running inflation. This is harmful to the economy.

4. Galloping inflation: If the inflation rate exceeds 20% per annum is called galloping inflation. This is highly dangerous.

5. Hyper inflation: It occurs when prices rise very fast at double or triple digit rates. WPI (whole Sale Price Index) is used to measure inflation in India.

Demand pull inflation and Cost Push Inflation

Demand pull inflation refers to inflation caused by the increase in the aggregate demand for commodities over aggregate supply, it is Demand pull inflation. Cost push inflation caused by rise in cost of production.

14.4 Causes of Inflation

The following are the main causes of inflation:

- Increase in plan and non-plan expenditure of the government.
- Deficit financing by the government.
- Heavy investment of development projects with long gestation period.
- Liberal availability of credit for unproductive economic activities.
- High rate of population growth.
- Reduction in direct taxes, increase in the money supply of an economy.

14.5 Effects of Inflation

a) **On production**: There may be positive and negative impact of inflation on production. It depends on types of inflation.

- Mild inflation increases the profit margin of entrepreneurs. So, it increases output.
- High or hyperinflation hinders production.

b) **On distribution**:

- The effect of inflation is not uniform on all sections of people. It effects certain sections of the people adversely
- During inflation creditors lose. Debtors as a group will gain.
- Producers gain because they get higher prices from their sale of their products. But workers lose as their purchasing power decreases during inflationary period.
- Creditors, employees, pensioners, consumers and government are losers by high inflation. The debtors, investors, traders and agriculturists are gainers through inflation.

14.6 Measures to control Inflation

- **Monetary measures**: The central bank of a country can check inflation by restricting the supply of money and credit.
- **Fiscal measures**: Fiscal measures refer to taxation, government spending and public borrowings. So that inflation can be brought down.
- **Direct measures**: These include price control and rationing of essential commodities.

14.7 Trade Cycles

Fluctuations in aggregate economic activity that an economy experiences over a period of time, i.e., periods of prosperity alternating with periods of economic down turns, are called "**trade cycles"**. Trade cycles are cycles of economic activity that rotate one behind the other, with growths and declines. The trade cycle period is usually from 5 to 8 years. They are cyclical in the phases of expansion and contraction and recur frequently and in a fairly similar pattern. At good trade, a trade cycle comprises of rising prices and low unemployment levels. In contrast, at trade, a trade cycle consists of falling prices and high unemployment levels. Trade cycles are fluctuations in output, employment and price levels that occur simultaneously. In addition to them rates of wages, interest rates, taxes, exports, imports, savings, bank deposits and the speed of money transmission all change.

14.8 Features of Trade cycles

a) Trade cycles occur periodically although they do not exhibit the same regularity.

b) The duration of these cycles vary.

c) Trade cycles have distinct phases of expansion, peak, contraction and trough.

d) Trade cycles generally originate in free market economies.

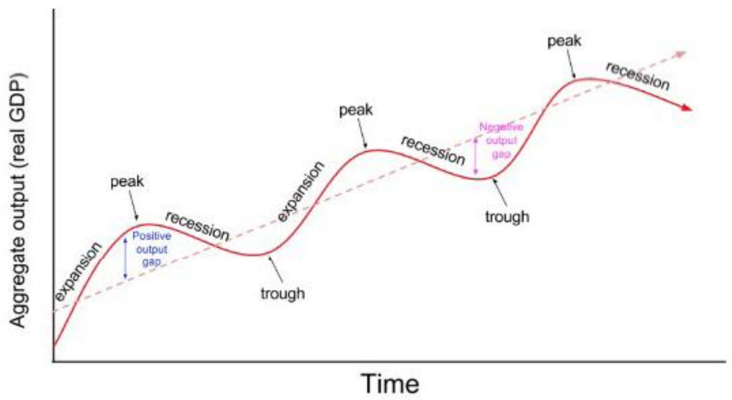
e) They are pervasive as well. Disturbances in one or more sectors get easily transmitted to all other sectors.

f) Compared to agricultural sector, the industrial sector is more prone to the adverse effects of trade cycles.

g) It is difficult to make an accurate prediction of trade cycles before their occurrence.

h) Trade cycles have serious consequences on the well-being of the society.

14.9 Phases of Trade cycles



a) Expansion: The expansion phase is characterized by increase in national output, employment, aggregate demand, capital and consumer expenditure, sales, profits, rising stock prices and bank credit. In this phase, Prices and costs also tend to rise faster. Demand for all types of goods and services rises. There is altogether increasing prosperity and people enjoy high standard of living.

After some time the business activity eventually reaches to its peak.

b) Peak: The term peak refers to the top or the highest point of the business cycle. Output prices also rise rapidly leading to increased cost of living and greater strain on fixed income earners. Actual demand stagnates.

c) Contraction: The economy cannot continue to grow endlessly. During contraction, there is fall in the levels of investment and employment. Producers lower their prices in order to dispose off their inventories and for meeting their financial obligations. Consumers postpone their purchases. Investments start declining.

d) Depression: Depression is the severe form of recession and is characterized by extremely sluggish economic activities. During this phase of the business cycle, growth rate becomes negative and the level of national income and expenditure declines rapidly. Demand for products and services decreases, prices are at their lowest and decline rapidly. There will be the fall in the interest rates. Industries suffer from excess capacity. At the depth of depression, all economic activities touch the bottom and the phase of trough is reached.

e) Recovery: The economy cannot continue to contract endlessly. It reaches the lowest level of economic activity called Trough and then starts recovering. Pervasive unemployment forces the workers to accept wages lower than the prevailing rates. Producers anticipating lower costs and better business environments.

Business confidence slowly increases. Technological advancements require fresh investments into new types of machines and capital goods. Banking system now slowly starts expanding credit, matching with the business confidence. As investment rises, there is an increase in production, employment, factor payments, disposable incomes, consumer spending, aggregate demand etc., to meet the aggregate demand, more goods and services are produced.

14.10 Summary

Many countries in the world are facing the problem inflation today. Inflation not only affects the economic life and welfare of the people but some cases challenges the stability of the government. Modern governments are taking policy measures to control inflationary situations. An economy with a moderate rate of inflation is desirable. Any rise in Prices due to the qualitative change in the production is not inflation. Constant increase in general price level of economy and a fall in the value of money continuously denotes inflation. WPI (Whole Sale Price Index) is used to measure inflation in India. Demand pull inflation occurs when prices increase due to increase in demand in the economy. When prices increase due to the increase of production costs due to the increase in prices of raw materials is known as the cost-push inflation. Deflation is opposite to inflation, where prices of consumer goods go on decreases. Increase or steady growth in national income and production is called as Reflation. Stagflation is the condition where both inflation and unemployment go on increasing in the economy.

14.11 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Creeping inflation
2. Walking inflation
3. Running/Galloping inflation
4. Hyper Inflation

II. Answer the following questions in about 8-10 lines each.

1. What do you mean by inflation?
2. What are the types of inflation?
3. What are the main causes of inflation?
4. Who benefits from inflation?
5. How do we prevent inflation?
6. What are the features of trade cycles?
7. What is depression?
8. How does recovery lead to next phase expansion?

III. Answer the following questions in about 16-20 lines each.

1. Define trade cycles. Explain the phases of trade cycles with the help of a diagram.
2. Analyze the effects of inflation on the cost of living of the people and suggest redial measure to control inflation.

14.12 Glossary

- **Inflation:** Too much money chasing too few goods.
- **Cost push inflation:** It is due to increase in cost of production.
- **Stagflation:** The condition where both inflation and unemployment go on increase in the economy.

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CHAPTER 15

ECONOMIC DEVELOPMENT IN INDIA

15.0. Objectives

- Familiar with the characteristics features of developed/ developing countries.
- Analyses the factors that lead to the underdevelopment and stagnation of Indian economy
- Classify the countries based on per capita income
- Explains the problems of Indian economy
- Explain the reasons for backwardness of Developing Nations.

15.1. Introduction

This chapter is designed to introduce the characteristics and features of developing and developed economies with the basic features of the Indian economy. In the earlier chapters, we have studied economic growth and economic development. We will discuss changes in the Indian economy in recent years. The economic policies followed by the British government in India were concerned more with the protection and promotion of the economic interests of their country. Such policies damage the Indian economy. India had an independent economy prior to the British rule. Though agriculture was the main occupation for most of the people, the country's economy was characterised by various kinds of manufacturing activities. India has recorded a step up in its growth rates over the past few decades through its reform efforts.

15.2. Economic Development in India

Under British rule, India had a backward agricultural sector as well as an underdeveloped industrial sector. In 1950–51, the per capita income was very low, and there was mass illiteracy. Both the death rate and the birth rate were very high. This was due to a lack of medical facilities and a low level of nutritious food due to poverty. Indian economy at the time of independence was a poor agriculture- based economy. The level of industrial activity was very low and uneven industrial development had taken place. The economic development of a country requires strong infrastructure like banking, insurance, transport, communications, power, etc.

There has been a tremendous change in the structure of the Indian economy during fifty years of planning. The structural change in the composition of the national income is the consequence of the process of economic growth. However, structural changes are taking place at a slow pace. There are some deep changes that have taken place in India, which suggest that the economy's fundamentals are strong. The current rate of savings and investments has reached levels that even ten years ago would have been dismissed as a false hope for India. On this important dimension, India is now completely a part of the world's fast-growing economies. India is seen as a big market for various products. All these are possible due to planning in India. For the first Eight Plans, the emphasis was on a growing public sector with massive investments in basic and heavy industries, but since the launch of the ninth plan in 1997, the emphasis on the public sector has become less pronounced and the current thinking on planning in the country is India had emerged as one of the fastest growing economies by the end of the Tenth Plan.

The New Economic Policy of India was launched in the year 1991 under the leadership of P.V.Narasimha Rao. The new economic reforms gave a new direction and dimension to the Indian economy. This policy opened the door of the Indian economy to global exposure for the first time. In this New Economic Policy, P.V.Narasimha Rao's government reduced the import duties, opened the reserved sector for the private players, and devalued the Indian currency to increase exports. This is also known as the LPG Model of Growth. New Economic Policy refers to economic liberalisation or the relaxation of import tariffs; market deregulation or the opening of markets to private and foreign players; and tax cuts to expand the country's economic wings.

The Planning Commission of India supervised the five-year plan for the economic development of the country. However, in 2014, the 65-year-old Planning Commission was dissolved and a think tank – NITI Aayog (National Institution for Transforming India) – took its place. It works under the chairmanship of the Prime Minister. Since it serves as a think tank of the government or as a directional and policy dynamo, it provides advice on strategic policy matters to the governments at the centre and the states. Furthermore, it includes economic issues of both domestic and international importance.

15.3. Understanding the developed/ developing countries classification

A developing country is generally defined to a certain degree by its economic output. There has been much debate around where to draw the line between a developed and developing country, which has no universal acceptance for any definition. Hence, there are no general accepted criteria that explain the rationale for classifying them according to their level of development.

The United Nations development programme's (UNDP) countries classification system is based on the Human Development Index (HDI) Report, which aims to take into account the multiple factors of development. The World Bank's classification of the world's economies is based on the estimation of gross national income (GNI) per capita. In the world development report, brought out by the World Bank, the following criterion is used in classifying countries:

15.3.1 The classification as per World Bank Report-2019

i. **High Income Group:** per capita income (PCI) of US $12695 per annum and above. Example: USA, UK, France, Singapore etc.

ii. **Upper Middle Income Group:** per capita income of between US $ 4096 and $12694. Example: Argentina, Cuba, South Africa Maldives etc.

iii. **Low Middle Income Group:** per capita income of between US $1046 and $4095. Example: India, Philippines, Angola, Pakistan, Bhutan etc.

iv. **Low Income Group:** per capita income of US dollars $1045 or less than it. Example: Afghanistan, Sudan, Niger, Uganda, Ethiopia etc.

Developed countries are those economies that are developed in terms of their economies and industrialisation. The developed countries are also known as advanced countries as they are self-sufficient nations. Developing countries depend upon developed countries to support them in establishing industries across the country.

15.4. Characteristics of Developed Economics

A country with an abundance of wealth and available of resources to its citizens is termed as a developed country. Developed economy tends to show better results of economic and non-economic factors of that country.

The following are the Characteristics of Developed Economies:

- Higher Gross Domestic Product and Per Capita Income (PCI)
- Significance of Industrial and Service Sectors.
- High levels of Standard of Living.
- Technology Advancement and Modernization
- Low Growth Rate of Population
- Dualistic Economy

15.4.1. Higher Gross Domestic Product and Per Capita Income (PCI)

The Gross Domestic Product (GDP) per capita is a measure of a country's economic output that accounts for its number of people. It divides the country's GDP by its population. Developed countries have a high GDP. As the GDP increases, the available goods and services also increase. Therefore, higher output is associated with higher household incomes. Each year, developed countries have a high per capita income. This means people are earning enough income so that they can spend as well as invest in business or save for the future. These savings or investments support countries' economies. Developed countries are often associated with positive outcomes in a wide range of areas, such as better health facilities, more education facilities, infrastructure, etc.

Table-1: GNI per capita based on purchasing power parity (PPP) (2020)

Country	Per Capita GNI purchasing power parity in US$
USA	70480
UK	49420
Switzerland	75860
Germany	59680
India	7270
China	19170

Source: ttps://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD

15.4.2. Human Development Index - HDI

The Human Development Index is based on education, life expectancy, and real GDP per capita income. In a developed country, education is important. Literacy is high, education is accessible, and people spend several years in schools. Access to good health care is also provided, and infant mortality is low. GDP per capita income is also high. All these factors are useful in determining the Human Development Index. Hence, these countries have good HDI scores. Developed countries have the highest scores in HDI, generally above 0.8.

Table-2: Ranking of countries by HDI score and year 2020

Country	HDI value	Rank
Norway	0.957	1
UK	0.932	13
USA	0.926	17
South Africa	0.709	114
Brazil	0.765	84
India	0.645	131
Pakistan	0.557	154

Source: https://hdr.undp.org/data-center/country-insights#/ranks

From the above table data it is clear that the developed countries are with high scores of HDI value and a good rank. Norway is in the top position with 0.957, India a developing nation is with 0.645 HD value and in the rank of 131.

15.4.3. Significance of Industrial and service sectors

The share of the service sector in the GDP of developed nations is high. We can notice a very small share of the primary sector in GDP in these economies. Importance is given to the service and industrial sectors for their economic growth. The expansion and growth of these sectors is providing employment to the jobless. Hence, people's incomes also increased.

For example, in 2020, France received 71.16% of GDP from industry and 16.45% from services. Only 1.6 % of the share is from the agriculture sector. In the case of employment, 2.53 per cent in the agriculture sector, 20.43 in industry, and 77.04 in the service sector are recorded.

In India, the service sector accounts for 53.89 % and industry for 25.92 % of GDP, while agriculture's share is 20.19%. The employment share in the sectors of the economy in India is as follows: services 32.28%, industries 25.12% and agricultural 42.6%. From the above example, we can understand that the developed nation's income and employment in the primary sector is very low. As the economy achieves development status, the service sector will become the major part of production and employment.

15.4.4. Better Standard of living

A standard of living is a term used to describe the level of income, necessities, luxuries, and other goods and services that are generally readily available to people. The standard of living is higher in developed countries. A country's standard of living generally refers to the wealth, comfort, material goods, and necessity of its people. These countries provide modern amenities to their people. A good quality of life is closely associated with a standard of life that enhances life expectancy. People's purchasing power is greater in these economies.

The countries with the highest standard of living provide a decent life to most of its citizens. These countries have better health care infrastructure, free education and well developed amenities that can be used by all of its citizens.

15.4.5. Technological Advancement and Modernisation

Technology is the application of scientific knowledge such as technique skills methods and process to practical aims such as a reproduction of goods and services.

Developed countries are advanced in the usage of modern technology in every field. They use technology in manufacturing, education, health services, transport, etc. With the help of new technology, an improvement in the quality of production in industries has taken place. Technological progress improves the ability to make the maximum use of natural resources. These countries are able to spend on research and development for more technological advancement. By using modern technology with limited natural resources, Germany and Japan developed rapidly. These two countries were destroyed in the Second

World War. The USA, UK, France, Japan, and other advanced industrial nations have all acquired their industrial strength from the use of advanced technology. In fact, economic development is facilitated with the adoption of new techniques of production.

Developed economies focus on innovation and development futuristic value added products. The people in these countries involved in discovering advanced technology in various fields.

15.4.6. Low Growth of Population

The concept of nuclear family encouragement in developed nations is leading to low growth rates of the population. Developed economies can spend their resources very well due to the small size of the population. The scarcity of resources is not seen. Good health facilities, a high level of education, and a higher level of quality of life led to maintaining a low growth rate of the population. These countries' high per capita income and prosperity are due to low population growth rates and higher rates of savings or capital formation. Average life expectancy is high in these countries due to the low growth of the population.

15.5. Characteristic features of developing countries

15.5.1. Low per capita income:

Low per capita real income is one of the most defining characteristics of developing economies. The average income person doesn't have enough money to invest or save. They spend whole earned amount on consumption. Hence, they don't save or invest. Thus, it creates a cycle of poverty. The percentage of people in absolute poverty (people with low income) is high in developing countries.

In India according to 2017-18 GDP is Rs115224 and per capita income is Rs87586. The same in 2018-19 is Rs134186 and Rs94566. When compared to developed economy these values are very low.

15.5.2. High population growth rate

In most developing countries, the population has been rising at rates varying between 2% and 4 % per annum. Due to increased medical facilities, there has been a sudden decline in mortality rates, but there has been no corresponding decline in birth rates. So, the population is growing rapidly. More population means lower GNP per capita income, higher levels of poverty, unemployment, and so on.

After independence, the Indian population growth rate was very high. From 1951 to 1981, the population of India grew from 361 million in 1951 to 683 million in 1981, with an annual growth rate of 2.14%. From 1981 to 2011, this growth rate declined to 1.8%. Even though the growth rate of the population is lower, with the higher population, India is still a developing country.

15.5.3. Low level of capital formation

In developing economies, due to low levels of income and a high rate of consumption, levels of capital formation or savings are low. These countries are often called "capital-poor" economies. In these countries, not only is the capital stock extensively small, but the current rate of capital formation is also very low. When capital formation is low, there is no scope for the expansion of industries and services. This situation leads to a low level of production and employment. Hence, it's a vicious circle.

As per the report of RBI 2021, the gross domestic saving GDS rate is 29.4% and the gross domestic investment GDI rate is 32.5% at current prices. This is very little compared to developed economies.

15.5.4. High level of Unemployment

In developing countries, unemployment problems are high and common. Both urban and rural areas face the problem of unemployment. Due to the increase in the population, if new industries or services are not established, then that situation leads to a rise in unemployment. In rural areas, the number of people dependent on agriculture increases, so most of these people migrate to urban areas in search of employment, where not many employment opportunities exist for them.

In India, unemployment is spreading with urbanisation and the spread of education. The industrial sector has failed to expand along with the growth of the labour force. In India, unemployment is structural and is the result of a deficiency in capital.

15.5.5. Low levels of productivity

Low levels of technology, an abundant labour force, a lack of infrastructure, and primitive manufacturing methods all contribute to low levels of production in developing countries. Due to a lack of investment in education and training, old methods are still being adopted in manufacturing. This resulted in low production and misuse of natural resources.

In India, the small size of the market, lack of capital, lack of infrastructural facilities and technological backwardness are the factors for the low level of productivity.

15.5.6. Inadequate infrastructure facilities

Infrastructure includes buildings, roads, bridges, transport facilities, power supply, telecommunications, etc. These facilities are essential for the development of industry and services. In developing countries, all these facilities are inadequate.

In India, lack of capital and technological backwardness lead to inadequate infrastructure facilities.

15.5.7. Illiteracy

Developing countries have a great number of illiterates. Illiteracy causes many social and economic problems. To acquire technology and non-technological skills, a minimum level of education is necessary. Education is one of the important features of HDI.

The illiteracy rate has declined in India since independence. As per the 2011 census, the literacy rate in India is 74 %. In India, poor quality of education and training is observed in India. Literacy has a direct impact on the high unemployment rate in India. Most unemployed youth are unable to find jobs due to illiteracy.

15.5.8. Low levels of standard of living

In developing countries, the standard of living is low. This low level of living is manifested qualitatively and quantitatively in the form of low incomes, poor medical facilities, limited education facilities, and inadequate housing facilities, and in many more cases, a general fear of depression and hopelessness.

In India, there is a high variation between rural and urban standards of living. Even in urban areas, the mushroom growth of slums indicates a low standard of living.

15.5.9. Dualistic Economy

A dualistic economy refers to the existence of advanced and modern sectors alongside traditional and backward sectors. The co-existence of both modern and traditional methods of production in urban and rural areas is the goal. The co-existence of a wealthy, highly educated with a large number of illiteratesand the co-existence of very high living standards and with a very low living standards.

The Indian economy is considered to have a dualistic feature because it comprises the features of both types of economies—underdeveloped as well as progressive. A very large portion of the economy consists of people who are underdeveloped and belong to the backward class. This includes people from the rural and agricultural sectors of the economy. On the other hand, very small portions of the people in the economy are rich and developed. This includes people belonging to the urban industrial sector. One part of the Indian economy is ready to adopt the new international economic order while the other part is lagging far behind.

15.6. Summary

The economies of the world are classified into developed and developing economies. India is a developing country. The Indian economy was a stagnant and dependent economy at the time of its independence. Per-capita income was low. Foreign trade was motivated to fulfill the needs of the industries of England. There was a high dependency of people on agriculture and many were unemployed. The literacy rate was low, there was a high birth rate and a high death rate, health parameters were severally low and epidemics were frequent. The progress of the Indian economy during the planned period was impressive indeed. Our industries have become far more diversified compared to the independence situation.

15.7. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What are the important components of the Human Development Index (HDI)?
2. List the characteristics of the developed countries.

3. Define high income group countries.

4. What is Dualistic Economy?

5. What is Infrastructure?

6. What are the reasons for low levels of productivity in India?

7. Explain ‘capital poor’ economies.

II. Answer the following questions in about 8-10 lines each.

1. Explain significance of service sector in developed economies.

2. Write short notes on technological advancement and modernisation in advanced countries.

3. Explain the population growth in India.

4. Explain NITI Aayog.

5. Explain Unemployment problem.

III. Answer the following questions in about 16-20 lines each.

1. Explain characteristics of the Indian Economy as a developing economy

2. Explain the classification of countries based on GNI per capita Income.

3. Describe the characteristic features of developed countries.

15.8. Glossary

1. PCI: Per capita income (PCI) or total income measures the average income earned per person in a given area (city, region, country, etc.) in a specified year. It is calculated by dividing the area’s total income by its total population.

2. Human Development Index: The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living.

3. Standard of living: The standard of living is a term used to describe the level of income, necessities, luxury, and other goods and services that are generally readily available to a designated population.

4. Capital formation: Capital formation is the net accumulation of capital goods, such as equipment, tools, transportation assets, and electricity, during an accounting period for a particular country.

5. Unemployment: The condition of one who is capable of working, actively seeking work, but unable to find any work.

6. Infrastructure: The fundamental facilities and systems serving a country, city, or area, as transportation and communication systems, power plants, and schools etc.

7. Illiteracy: Illiteracy is the quality or condition of being unable to read or write.

15.9. References

1. Text book for Intermediate Second Year Economics. TSBIE Telangana.
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8. https://hdr.undp.org/data-center/country-insights#/ranks
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CHAPTER 16

DEMOGRAPHY

16.0. Objectives

- Describe different aspects of demography,
- Understand the consequences of current population trends for future wellbeing,
- Explain the size of India's population and its growth in last few decades,
- Compare the data of birth and death rates,
- Explain 'Population Explosion', causes, remedies,
- Describes the occupational and sectorial distribution of population in India
- State the Population Policy of India and
- State the importance of family planning in birth controlling.

16.1. Introduction

Demography is the composition of two Greek words 'Demos' (People) and 'Graphy' (Study) means, the description of people. Demography is the systematic study of population. It includes study of changes in population size, composition, distribution etc. It investigates changes in population size, composition and distribution resulting from fertility, mortality and migration. All demographic studies are based on the process of counting enumeration which is also known as census. It involves systematic collection of data after people residing in a country. Demographic data is vital for planning and implementation of policies for economic development and welfare of people of any country. In this lesson, we will discuss the pattern of growth, structure characteristics and distribution of India's population.

16.2. Demographic Features of Indian Population

16.2.1. Size and Growth Rate of Population in India

The size and growth of population are two important components of demographic phenomena in a developing country. The features that determine the change in the size of the population of any country are birth, death and migration. Population means the number of people living in that country or in particular area at a particular point of time. To count the population, 'census' is conducted in India for every 10 years of the period.

India is the second most populous country in the world with a total population of 1210 million according to 2011 census, after China. As per 2011 census, India possesses 2.4% of the total land area of the world and a share of 17.7% of population. According to United Nations Population Fund the total world population is 7874million in November 2021. 11th Julyis treated as 'world population day' because on this day the last child of the 5th billion was born in 1987.

Table-1: Population growth in India since 1901

Year	Total Population (In millions)	Average Annual Growth Rate (%)	Decadal Growth Rate (%)
1901	238	-	-
1911	252	0.56	5.8
1921	251	-0.03	-0.3
1931	279	1.04	11.0
1941	319	1.33	14.2
1951	361	1.25	13.3
1961	439	1.96	21.6
1971	548	2.22	24.8
1981	683	2.20	24.7
1991	846	2.14	23.9
2001	1028	1.95	21.5
2011	1210	1.63	17.7

As can be seen from the table-1, the rate of growth of population in India was slow between 1881 and 1921. There was an increase of 15 million of population. High mortality and birth rates were observed in this stage. Famines and epidemics during this period was the main reason for high death rate. Year 1921 is regarded as a dividing year in the Indian demography as the growth of the population up to this year was not constant.

We can observe steady growth in population period during 1921-1951 periods. An increase of 110 million of population recorded in this period. The decadal growth ratein 1951 was 13.3 %. The rate of decline in death rates has been more than the rate of decline in birth rates. The main reason for the decline in death rate after 1921 was increased levels of control over famines and epidemic diseases.

India experienced 'population explosion' during 1951- 1981 period. A population growth of 322 million has been recorded during these 30 years of period. 24.7 % of decadal population growth rate is observed in 1981.During this period there was a huge difference between birth rates and death rates, due to acceleration in economic developments activities, further improvement in medical and living conditions of the people.

During 1981 to 2011 India's total population increased from 683 million to 1210 million. 17.7 % of decadal growth rate wasrecorded during 2001 to 2011 period. Economic development, proper improvement of family planning was responsible for the slow growth rate of population during these 30 years.

16.2.2. Birth, Death and Infant Mortality Rates

Population growth rate of a country depends on its birth rate, death rate and migrations. In India, migrations are very less. Hence, it is not a significant factor in determining population growth

As studied above the population growth rate was not high till 1921, due to high mortality rate and high birth rate. As we see in the given table-2, a high mortality rate was the recorded due to influenza and other infections. In 1918 alone 15 million people died with influenza. During this period birth rate was between 46 and 49 per thousand, and death rate was between 44 and 49. So, the growth rate of population was very little.

Table-2 Birth and Death Rates in India

Decade	Births (per 1000)	Deaths (per 1000)
1891-1900	45.8	44.4
1901-1911	48.1	42.6
1911-1920	49.2	48.6
1921-1930	46.4	36.3
1931-1940	45.2	31.6
1941-1950	39.9	27.4
1951-1960	40.0	18.0
1961-1970	41.2	19.2
1971-1980	37.2	15.0
1981-1990	29.5	9.3
1991-2000	25.4	8.4
2001-2011	21.8	7.1

If we analyse the table-2, the percentage of deaths recorded during 1911-20 decreased from 48.6 per thousand to 7.1 into 2010-11. We can observe rapid decline in death rates after 1920, this is due to the reduction of drought effects and control of various infections. Improved medical facilities and availability of sufficient food grains were also responsible for decline in death rate. On the other hand the birth rate was 49.2 per 1000 during 1911-20. This growth rate came down to 21.8 per thousand in 2001-11.

During 2001-11, there are lot of variations in both birth and death rates in different states of India. Kerala, Tamil Nadu, erstwhile Andhra Pradesh, West Bengal, Karnataka, Maharashtra and Punjab recorded low growth in birth rates. On the other hand Uttar Pradesh, Rajasthan, Bihar and Madhya Pradesh have very high birth rates. To achieve a substantial decline in the birth rates, people's attitude towards marriage, joint family, family planning must change.

Infant Mortality Rate (IMR): It also affects the population growth rate. Infant Mortality Rate (IMR) is the number of deaths of children under one year of age per 1000 live births. In the second half of 20th century, infant mortality rate was 218, and it dropped down to 47 by 2010-11. The infant mortality rate has come down significantly due to improvement in medical and health facilities, implementation of nutrition schemes and so on. The economic development of a country depends on the rate of infant mortality. A high infant mortality rate results in decline in working population of the country.

16.2.3 The Sex Ratio

The main indicator that determines the quality of a nation's population as human resources is sex ratio. This sex ratio is defined as the number of females per thousand males. In our country this ratio was always being negative for female and gradually declining. It is a disturbing feature. Sex ratio is a major indicator that measures the equality of men and women. As per the census in 1901 there were 972 female for every thousand males. This number dropped from 946 in 1951 to 933 in 2001 and increased to 940 in 2011.

We see there are variations in sex ratio of different states in India. Sex ratio in Kerala is 1084 and Puducherry 1038 are in better position. Haryana and Punjab are at 877 and 893 respectively. Low level of literacy rates, poverty and social attitude are responsible for gender discrimination. Sex ratio is negative because discrimination against women starts from birth. Female infant mortality is high due to want of a male child. Female children are less important in providing nutritious food and paying attention towards health. Feticide of female infants is still in practice. Many families consider girls a burden. Hence the literacy rate is also low among female children. If gender discrimination continues, it will be difficult to achieve economic growth. Discrimination against female children in society definitely needs a change.

16.2.4. Age Composition

The age structure of a population is the distribution of people of various ages. It is a useful tool to provide health facilities, welfare schemes and employment generation (workforce).The working age of population is considered as 15 – 60 age group year, 0 - 14 year age group is considered as child population, 60 years and above as old age group.

Population under the age of 15 has decreased from 42 % in 1971 to 31 % in 2011. Decrease in below 15 years of age group reveals that National population policy is being properly implemented. During the same period the age group of 15 - 60 has gone up from 53 % to 63.7 %. Growth in this group led to increase in working population which in turn leads to positive economic growth. Rise in the rate of economic growth due to a rising share of working age people in the population is called the demographic dividend it depends on improving healthcare levels as well as increasing human resources. Due to advancement in medical facilities, public health measures and nutrition the life expectancy is increasing in India.

16.3. Concept and Causes of Population Explosion

16.3.1. Concept of Population Explosion in India

According to Malthus population theory population grows at a geometric rate i.e. 1, 2, 4, 8, 16, 32 etc., and food crop production increases at an arithmetic rate i.e. 1, 2, 3, 4 etc. Population, when unchecked, grows in geometric mean. Populations, if unchecked, will double every 25 years. Therefore, controlling the growth of the population is the only remedy to eradicate poverty. Due to substantial education in the death rate and no corresponding decline in the birth rate will lead to overpopulation. India experienced this situation between 1951 and 1991. If the population growth is not checked it may lead sever problems like food shortage, poverty, unemployment, depletion of resources, degradation of Environment, water shortage, high cost of living etc.

16.3.2. Causes of Population Explosion in India

There are three main reasons for the population explosion in India. They are: 1) low mortality rate 2) high birth rate and 3) migration. The impact of migration is minimal; let us now analyze the reasons for the population explosion in India.

I. Causes of low Mortality Rate

1. Improvement in medical and health facilities: Due to advanced medical and health facilities epidemics like the plague, cholera, malaria, smallpox, measles, TB, etc. have been controlled or eradicated. Number of hospitals, health staff has increased. This has reduced the mortality rate.

2. Drought control: Changes in cropping patterns in India after British rule increased crop irrigation features, effective reduction of drought conditions reduced mortality rate. Surplus production of food crops eradicated shortage of food. Due to this mortality rate has been reduced.

3. Others: Education, implementation of poverty alleviation schemes, rapid urbanisation, Improvement of medical facilities etc. have significantly reduced the mortality rate.

II. Causes of High Birth Rate

A) Economics factors

1. Dependence on Agriculture: Agriculture requires a large number of laborers so they do not think about population control. Over dependence on agriculture is also seen in India. Children in a farming family are not seen as an economic burden. Hence farmer families were larger as joint families.

2. Urbanization: Urbanization did not happen fast due to sluggish industrialization. The birth rate was high due to the lack of major changes in occupations.

3. Poverty: Poverty is a major cause of population growth. Poor people prefer large families. Poor people treated their children as economic resource not as burden. Hence the growth is high.

B) Social factors

1. Early and Universal Marriage: In India, marriage is a social compulsion. It is not only universal but takes place at an early age. About 80 percent girls are married during the most fertile period of 15 to 20 years of age. For this reason population growth is natural.

2. Joint Family System: India is mainly an agricultural country. The social structure is dominated by the joint family system. An additional child born causes no immediate hardships to the parents. This factor is also responsible for high birth rate. At present the joint family system is disappearing rapidly.

3. Religious causes: Factors such as religion, superstition and backwardness also contribute to the high birth rate.

4. Lack of social awareness: Non-compliance with family planning methods does not slow down the population growth rate. The family planning campaign is not successful because of religion and customs.

5. Preference for male child: Many parents don't accept family planning till they have a son or desired number of sons. Hence, birth rate is high.

16.3.3. Remedies for Population Explosion in India

The rapid population growth rate caused great difficulties for India's national economy. It caused employment problems, badly effected living standards and educational levels. The best way to control population growth is to take up a combination of effective social and economic measures.

A) Social Measures

1. Spreading of education: Literacy changes human behavior. It makes a better understanding of life. So educated young men and women are aware of the well-being of the family and leavethe superstitions and have a small family or fewer children. The age of marriage may be postponed due to education and employment. Through this the control of population grow this seen.

2. Minimum age of Marriage: Fertility depends on the age of marriage. The minimum age of marriage should be strictly enforced. In India minimum age for marriage is 21 years for men and 18 years for women have been fixed by law and the present government has decided to raise the minimum legal age for women to increase from 18 to 21 years. Higher the age of marriage, the lower the fertility rate and population control.

3. Raising the Status of Women: There is still a discrimination against women. They are often confined to the kitchen. So women should be given opportunities to develop socially and economically. Free education should be given to them.

B) Economic Measures

1. Development of Agriculture and Industry: If agriculture and industry are properly developed, large number of people will get employment. When their income is increased they would improve their standard of living. So they prefer fewer children to stay safe. This will reduce the growth of over population.

2. More Employment Opportunities and Urbanization: Industrialization can promote urbanization and create more job opportunities. Due to urbanization and job creation, people tend to have a financially savvy and small family. This is how population growth is controlled.

3. Poverty Alleviation: Those in poverty consider their children as an economic resource. So population control can be achieved to some extent if poverty is eradicated.

C. Family Planning

The Government of India initiated the comprehensive Family Planning Programme in1952. The Family Welfare Programme has sought to promote responsible and Planned Parenthood on a voluntary basis. This method implies family by choice and not by chance. By applying preventive measures, people can regulate birth rate. This method is being used extensively; success of this method depends on the availability of cheap contraceptive devices for birth control.

16.4. Occupational and Sectorial Distribution of Population in India

16.4.1. Occupational Structure

The percentage of population that is economically active is an important index of development. The distribution of the population according to different types of occupations is referred to as the occupational structure. An enormous variety of occupations are found in any country. Occupations are generally classified as primary, secondary, and tertiary. i) Primary activities: include agriculture, animal husbandry, forestry, fishing, mining and quarrying etc. ii) Secondary activities: include manufacturing industry, building and construction work etc. and iii) Tertiary activities: include transport, communications, commerce, administration and other services.

16.4.2. Occupational Distribution of Working Population in India

The proportion of people working indifferent activities varies in developed and developing countries. Developed nations have a high proportion of people in secondary and tertiary activities. Developing countries tend to have a higher proportion of their work force engaged in primary activities.

According to the 2011 census, out of a population of 1210 million, 400million are working people i.e. people who are involved in productive activities. It can be said that not much has changed in the Indian employment sector. Agriculture is still the main employment sector. More and more people are continuing in the agricultural sector due to the inability to create more employment in the industrial and service sectors.

Although about half of the country's labour force is in agriculture, it has a very small share of Gross Domestic Product (GDP). In the agricultural sector, about50 % of the workforce accounts for only 19 %of GDP. The share of the agricultural sector in the GDP has declined significantly. But the percentage of workers in the agricultural sector is not declining much. This means that there are more workers in the agricultural sector than are needed. The removal of some people from agriculture will have no effect on agricultural production. This is called 'disguised unemployment' and naturally we see this situation in a rural farming family. The whole family depends on the small farmland they own. If employment opportunities increase in other sectors there is no need for so many people to work in agriculture.

16.4.3. Sector-wise Employment and Production Division

Table-3: Shares of Primary, Secondary and Tertiary Sectors in GDP and Employment.

Sector of economy	Share in Employment in percentage		Share in GDP in percentage	
	1951	2015	1951	2015
Primary Sector	72	47	59	19
Secondary Sector	11	22	13	28
Tertiary Sector	17	31	28	53

If we analyze the given table-3, sector-wise employment share in India was 47 % in agriculture, 22 % in industry and 31 %in the service sector in 2015. Similarly, if we look at the GDP in three sectors, the share of agriculture was 19 %, the share of industry was 28 % and the share of services was 53 %.Share in employment of primary sector reduced from 72% in 1950 to 47% by 2015, while the shares of secondary and tertiary sectors increased during this period from 11 to 22% and 17 to 31% respectively. Increase of share in GDP the percentage share of primary sector decreased from 59% in 1951 to 19% by 1915, whereas percentage shares of secondary and tertiary sectors increased significantly during this period. Table-3; clearly show the difference between the employment sector and the manufacturing sector. Production from the agricultural sector, which employs 47 %, accounts for only 19 % of output, while the service sector, which employs 31 %, accounts for53 % of total output. This means that the agricultural sector has a large labour force and needs to be shifted to the industrial and service sectors.

16.5. Population Policy in India

Growth of population is an important aspect and it crucially affects the developmental prospects of a nation as well as the health and wellbeing of its people. This is particularly true of developing countries that have to face special challenges in this regard. Experts feel that if population continues to grow unchecked, India will soon be facing many socio – economic problems. Unemployment will rise to staggering heights. Every breath of air will be badly polluted and every drop of water will be contaminated with poisonous matter. It would become almost impossible to provide even basic amenities of life to the people.

It is hardly surprising therefore that India has had an official population policy for more than a half century. In fact, India was perhaps the first country to explicitly announce such a policy in 1952.After 1952, sharp declines in death rates were, however, not accompanied by a similar drop in birth rates. For the first time, National Population Policy was announced in 1976. The Family Planning Programme suffered a setback during the years of the National Emergency (1975-76). The National Family Planning Programme was renamed as the National Family Welfare Programme after the Emergency. A new set of guidelines were formulated as part of the National Population Policy of the year 2000.

The National Population Policy, 2000 (NPP 2000) affirms the commitment of government towards voluntary and informed choice and consent of citizens while availing of reproductive health care services, and continuation of the target free approach in administering family planning services. The NPP 2000 provides a policy framework for advancing goals and prioritizing strategies during the next decade, to meet the reproductive and child health needs of the people of India, and to achieve net replacement levels Total Fertility Rate (TFR) by 2010. It is based upon the need to simultaneously address issues of child survival, maternal health, and contraception, while increasing outreach and coverage of a comprehensive package of reproductive and child health services by government, industry and the voluntary non-government sector, working in partnership.

16.5.1. Objectives of National Population Policy 2000

1. To make school education up to age 14 free and compulsory and reduce dropouts at primary and secondary school levels to below 20 per cent for both boys and girls.
2. To reduce infant mortality rate to below 30 per 1,000 live births.
3. To reduce maternal mortality rate to below 100 per 100,000 live births.
4. To achieve universal immunization of children against all vaccine preventable diseases.
5. To promote delayed marriages for girls, not earlier than age 18 and preferably after 20 years of age.
6. To achieve universal access to information/counseling, and services for fertility regulation and contraception with a wide basket of choices.
7. To achieve 80 per cent institutional deliveries and 100 per cent deliveries by trained persons.
8. Incentive to adopt two child small family norms.
9. Containing the spread of AIDS, boosting better coordination between the management of reproductive tract infections (RTI) and sexually transmitted infections (STI) and the National AIDS Control Organisation (NACO).
10. It aims to reach a stable population by the year 2045.

16.6. Summary

Demography, a systematic study of population, the demographic data collected is essential for the planning and implementation of state policies, for economic development and public welfare. India is one of the youngest countries in the world with majority of Indians tend to be young. It is very important for the economic growth of the country in future years. Understanding the 'population explosion' is very important for the younger generation. Generation of employment in the different sectors is an important economic factor. Shifting of employment from one sector to other is essential for economic development in India. Birth control is very essential to protect our natural resources. Proper Implementation of family planning indirectly encourages economic growth.

16.7. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What is demography?
2. Explain population explosion.
3. What is demographic dividend?
4. Explain Infant Mortality.
5. Explain Malthus Population Theory
6. What is family planning?
7. Explain occupation structure in India.

II. Answer the following questions in about 8-10 lines each.

1. What is "sex ratio"? Why is it so unfavourable in India?
2. Explain remedies for population explosion in India.
3. Explain Occupational Distribution of Working Population in India.
4. What are the causes for decline in death rate in India?
5. Indicate the age composition of population in India.

III. Answer the following questions in about 16-20 lines each.

1. Explain briefly about demographic features of Indian population.
2. Examine the trends of population growth in India.

3. What are the causes of population explosion in India?
4. Analyze the changes in birth and death rates in India over the past decade.
5. What are the objectives of National Population Policy, 2000?

16.8. Glossary

1. Birth rate: number of live births in a given area during a given time per 1000 population.
2. Death rate: number of deaths in a given area during a given time per 1000 population.
3. Fertility rate: number of live birth per 1000 women in the child bearing age group of 15-49 years.
4. Infant mortality rate: number of death of babies before the age of one year per 1000 live births.
5. Maternal mortality: number of women dying in child birth per 1000 live birth.
6. Sex ratio: number of females per 1000 males in a given area at a specified time period.
7. Age structure of population - proportions of persons in different age groups relative to total population.
8. Dependency ratio: proportion of dependents (elderly and people children) with working age group (i.e. 15 - 64 years)
9. Life expectancy: it refers to the estimated number of year that an average person is expected to survive.

16.9. References

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CHAPTER 17

HUMAN RESOURCE DEVELOPMENT

17.0. Objectives

- Understand the concept of the human development
- Explain the concepts of human capital and human development
- Describe the importance of education in human development in India
- Analyse the role of health in human development in India
- Understand the importance of human development and economic development
- Explain the methodology of HDI
- Discuss the relationship between computation and economic development of a country.

17.1. Introduction

Economic development of country is a complex and long-term process. It is influenced by different factors namely, natural resources, size of the population, capital formulation, human resources, social environment, foreign trade etc. Human resources are one of the factors to determine economic development of a country. It plays an important role in economic development. One major concern about considering people as assets or resources is that they will be commoditized, objectified, and abused. Human beings are not "commodities" or "resources", but are creative and social beings in a productive enterprise.

Economists often see population as an obstacle to growth rather than as a factor which will assist the developmental activity. However, man provides labour power for production and if in a country labour is efficient, worthful and skilled, its capacity to contribute to growth will decidedly be high.

17.2. Human Capital and Human Development

In general, human capital and human development are used to describe human resources but there is a slight difference between them. Human capital is a relatively narrow concept which refers to the skills, education, knowledge, training, experience and competencies that humans bring to a company, whereas human development in an economy is a relatively broad concept which is determined by a composite statistic that includes life expectancy, education, and per- capita income.

India recognised the importance of human capital in economic growth long ago. The Seventh Five Year Plan says, “human resources development (read human capital) has necessarily to be assigned a key role in any development strategy, particularly in a country with a large population. Trained and educated on sound lines, a large population can itself become an asset in accelerating economic growth and in ensuring social change in desired directions.”

17.3. Concept of Human Resource Development (HRD)

According to UNDP’s Human Development Report 1995, human development is thus a process of widening people’s choices as well as raising the level of wellbeing achieved. It is a process for developing and unleashing human expertise through organization development and personnel training and development for the purpose of improving performance.

It is the process characterized by the variation of material conditions. These conditions influence the possibilities of satisfying needs and desires. They also explore and realize the physical and psychic, biological and cultural, individual and social potentials of each person. The human development approach is about expanding the richness of human life, rather than simply the richness of the economy in which human beings live. It is an approach that is focused on people and their opportunities and choices.

According to Mahabub-ul-Haq, “the defining difference between the economic growth and the human development schools is that the first focuses exclusively on the expansion of only one choice-income-while the second embraces the enlargement of all human choices – whether economic, social, cultural or political.”

17.4. Importance of Human Resource Development

Human development focuses on improving the lives of people lead rather than assuming that economic growth will lead, automatically, to greater wellbeing for all. Income growth is seen as a means to development, rather than an end in itself. Human development is about giving people more freedom to live lives they value. In effect this means developing people's abilities and giving them a chance to use them. For example, educating a girl would build her skills, but it is of little use if she is denied access to jobs, or does not have the right skills for the local labour market.

Human development is the end while economic growth is only a means to this end. The ultimate purpose of the entire exercise of development is to treat men, women, and children and present and future generations, as ends, to improve the human condition, to enlarge people's choices. A well-nourished, healthy, educated, skilled, alert labour force is the most important productive asset. Thus, investments in nutrition, health services and education are justified on grounds of productivity. Human development helps in reducing civil disturbances in a society and in increasing political social stability.

17.5. Role of Education and Health in Development of a Nation

Role of education and health is considered as an important input for the development of a nation as much as it is important for the development of an individual. Economic growth means the increase in real national income of a country; naturally, the contribution of the educated person to economic growth is more than that of an illiterate person. If a healthy person could provide uninterrupted labour supply for a longer period of time, then health is also an important factor for economic growth. In a developing country like India, with a large section of the population living below the poverty line, many people cannot afford to access basic education and health care facilities. Moreover, a substantial section of India's population cannot afford to reach super specialty healthcare and higher education. Furthermore, when basic education and health care is considered as a right of the citizens, then it is essential that the government should provide education and health services free of cost for the deserving citizens and those from the socially oppressed classes.

17.5.1. Education in India and Human Development

Education plays an important role in economic growth and development of a country. Investments in education promote economic growth. It helps in creating a more productive labour force and endowing it with increased knowledge and skills and providing widespread employment and income earning opportunities for teachers, school, and construction workers, textbook and paper printers, school uniform manufacturers etc. It provides basic skills and encourages modern attitudes in the diverse segments of the population. Education is seen as a great egalitarian measure which would help in improving the human resources in general on the one hand and on the other hand would enable the less privileged and poor classes of people to improve their economic lot.

Education helps in modernizing and revolutionizing the ways of thinking of the people. It enlightens them of the need to improve their standards of living and, for this purpose, to restrict the size of their families. And therefore, it serves as the best method of family planning in the long term. Most of the developing countries have launched different programmes of universal education in the hope that they will improve the human capabilities of the poor people and enable them to increase their family earnings.

According to 2011 census, India's average literacy rate is 73.04 % as against 18.33% in 1951. Literacy rate among the males is 82.14% and among females is 65.46%. Kerala had the highest literacy rate of 93.91% and closely followed by Lakshadweep (92.28 per cent) and Mizoram (91.58 per cent). Bihar with a literacy rate of 63.82 per cent ranks last in the country preceded by Arunachal Pradesh (66.95 per cent) and Rajasthan (67.06 per cent).

17.5.2. Some Important Educational Initiatives and Policies launched by GoI for the promotion of HRD

1. On the basis of the recommendations of Kothari Commission, government of India announced first **National Education Policy in 1968**. It proposed equal educational opportunities in order to achieve national integration and greater cultural and economic development and to fulfill compulsory education for all children up to the age of 14.

2. The government of India introduced a **New Policy on Education** in 1986. It envisaged universalisation of primary education and adult education. It had given a high priority to the qualitative improvement of education. Later, this policy was modified in 1992. The modified policy envisaged that to bring about uniformity in education, making adult education programmes a mass movement, providing universal access, retention and quality in elementary education etc. Later, Ministry of Education has announced the **National Education Policy 2020 (NEP 2020)** on 29.07.2020, This is the first education policy of the 21st century and aims to address the many growing developmental imperatives of our country. This Policy proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st century education.

3. **The Right of Children to Free and Compulsory Education - 2009** act was passed by the parliament on 4th August 2009. According to this act, every child of age 6-14 years shall have a right to free and compulsory education in a neighbourhood school till completion of elementary education etc.

4. The government of India also launched many schemes and initiatives such as elementary, secondary, higher and technical education schemes, namely, National Programme of Mid-day Meals in schools in 1995; Sarva Shiksha Abhiyan (SSA) in 2001; Kasturba Gandhi Balika Vidyalaya Scheme in 2004; Padhe Bharat – Badhe Bharat programme in 2014; Beti Bachao, Beti Padhao (BBBP) scheme in 2015, etc.

17.5.3. Health in India and Human Development

Role of health in improving the quality of human capital is also more and it increases labour productive capacity. A healthy person is able to do his work in a proper and efficient way. A healthy person makes greater contribution to society as compared to an unhealthy person. Improvement in the health of workers automatically raises the national output. Therefore, expenditures on health are important in building and maintaining a productive labour force as well as in improving the lives of the people and the quality of society.

The general health standard in India is very low. This is clearly reflected in the high incidence of morbidity in the country. The main reasons for this are lack of nutritious diet, inadequate medical care and living under unhygienic conditions. People, who don't even get two square meals a day cannot dream of a balanced and nutritious diet.

The government of India prepared its programme for raising the health standard in the country. Many programmes were initiated by the government to provide better health care and medical care services to the poor people, including those living in the rural areas.

17.5.4. Some Important Health Schemes and Policies initiated by GoI

1. **The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)** was announced in 2003 with the objectives of correcting regional imbalances in the availability of affordable/ reliable tertiary healthcare services and also to augment facilities for quality medical education in the country.

2. **Janani Suraksha Yojana (JSY)** was launched on 12 April 2005 in all states and union territories. It is being implemented with the objective of reducing maternal and neonatal mortality by promoting institutional delivery among poor pregnant women.

3. **National Health Mission** was launched in 2013 to enable universal access to equitable, affordable, and quality health care facilities especially to the poor and vulnerable sections of the population.

4. **Swachh Bharat Mission – Grameen:** It was launched by the Prime Minister of India on 2nd October 2014 to accelerate the efforts to achieve universal sanitation coverage and to put the focus on sanitation. Under the mission, all villages, Gram Panchayats, Districts, States and Union Territories in India declared themselves "open-defecation free" (ODF) by 2 October 2019, the 150th birth anniversary of Mahatma Gandhi, by constructing over 100 million toilets in rural India.

5. **National Health Policy 2017**: It was approved by the government on 15th March, 2017. The policy envisages as its goal the attainment of the highest possible level of health and wellbeing for all at all ages, through a preventive and promotive healthcare orientation in all developmental policies, and universal access to good quality health- care services without anyone having to face financial hardship as a consequence.

6. **Ayushman Bharat - National Health Protection Mission**: It was launched by the Prime Minister of India on 23 September 2018. It will cover over 10 crore poor and vulnerable families (approximately 50 crore beneficiaries) providing coverage up to 5 lakh rupees per family per year for secondary and tertiary care hospitalization. Ayushman Bharat - National Health Protection Mission will subsume the on-going centrally sponsored schemes - Rashtriya Swasthya Bima Yojana (RSBY) and the Senior Citizen Health Insurance Scheme (SCHIS).

17.6. Human Development Index (HDI)

The concept of Human Development Index (HDI) was introduced in 1990 as part of the United Nations Development Programme (UNDP) to provide a means of measuring economic development in three broad areas - per capita income, health and education. HDI was devised and launched by Pakistani economist Muhabul-ul-Haq, followed by Indian economist Amarthya Kumar Sen in 1990. The HDI tracks changes in the level of development of countries over time. Each year, the UNDP produces a development report, which provides an update of changes during the year, along with a report on a special theme, such as global warming and development, and migration and development.

HDI does not replace GNP but adds considerably an understanding of the real position of a society in many respects. The introduction of the index was an explicit acceptance that development is a considerably broader concept than growth, and should include a range of social and economic factors. The HDI has two main features: A scale from 0 to 1 (0 means no development or worst performance and 1means complete development or best performance).

17.6.1. Components of HDI

The human development index, which is based on three equally weighted components, these are

(a) A long and healthy life is measured by life expectancy at birth;

(b) Education is measured by a weighted average of

i) adult literacy rates (2/3 weight is given to this criteria) and,

ii) mean years of schooling (1/3 weight is given to this criteria)

(c) Decent standard of living is measured by the GDP per capita income (in PPP US $)

Table-1: Dimensions for calculating Human Development Index

Dimensions	Indicators	Dimension Index	Minimum value	Maximum value
Long and healthy life	Life expectancy at birth	Life expectancy at birth	20	85
Knowledge	a) Expected years of schooling b) Mean years of schooling	Education index	0 0	18 15
A decent standard of living	GNI Per capita (PPP US$)	GNI index	100 US $	75,000 US $

Source: UNDP's Human Development Report 2020

Note: PPP means Purchasing Power Parity, it is a measurement of prices in different countries that uses the prices of specific goods to compare the absolute purchasing power of the countries' currencies.

17.6.2. Construction of HDI

HDI is a summary measure of human development, it measures the average achievements in a country in three basic dimensions of human development. The table 17.1 reveals that the health dimension is assessed by life expectancy at birth; the education dimension is measured by mean of years of schooling for adults aged 25 years and more and expected years of schooling for children of school entering age. The standard of living dimension is measured by gross national income per capita.

The first step is to create sub-indices for each dimension. Minimum and maximum values need to be set in order to transform the indicators into indices between 0 to 1 (zero to one). Each dimension index is calculated as following.

$$\text{Dimension index} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$$

17.6.3. HDI and classification of countries

HDI is used to distinguish whether the country is developed, developing and under developed. On the basis of HDI values, countries are classified into three groups, namely,

a) High human development countries with HDI 0.80 and above,

b) Medium human development countries with HDI 0.50 to 0.79, and

c) Low human development countries with HDI value below 0.50.

17.7. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Define Human Development.
2. What are the components of HDI?
3. Expand PPP.
4. What is JSY?

II. Answer the following questions in about 8-10 lines each.

1. Explain the role of education in human development.
2. Explain the role of health in human development.
3. Write about the importance of the human development.

III. Answer the following questions in about 16-20 lines each.

1. What is the role of education and health in economic development in India?
2. Define Human Development Index? And how to calculate HDI?

17.8. Glossary

1. **Human capital:** It is a relatively narrow concept which refers to the skills, education, knowledge, training, experience and competencies that humans bring to a company.

2. **Human development:** It is relatively broad concept which is determined by a composite statistic that includes life expectancy, education, and per capita income.

3. **Purchasing Power Parity (PPP):** It means Purchasing Power Parity, it is a measurement of prices in different countries that uses the prices of specific goods to compare the absolute purchasing power of the countries' currencies.

4. **Human Resource Development (HRD):** Human resource development include training a person after he or she is first hired, providing opportunities to learn new skills, distributing resources that are beneficial for the employee's tasks, and any other developmental activities. HRD (Human Resource Development) makes people more competent.

17.9. References

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2. Andhra Pradesh Economy and Development of Telugu Academy
3. Telangana Socio-Economic Outlook 2022
4. Human development report 2020 by UNDP

NATIONAL INCOME TRENDS AND SECTORAL CONTRIBUTION

CHAPTER 18

18.0. Objectives

- Understand the meaning of national income.
- Understand the trends in national income.
- Explain the national income estimations in India.
- Understand the growth rates of GDP and per capita income.
- Understand the sectoral contribution to national income.
- Explain the role of different sectors to Indian economy.

18.1. Introduction

National Income is an important concept in macro economic analysis. The final value of goods and services produced in a country during in a financial year is known as national income. This unit deals with history of national income estimations in India, trends in national income and per capita income in the country. Growth rates of Gross Domestic Product (GDP) and per capita in different years. Apart from trends in national income sectoral contribution to national income also discussed in this unit.

National income trends reflect the development of the economy in different time, the structural change in the composition of national income. At present service sector is the predominant sources of the national income in India. Public and private sectors both contributes to national income. Before five year plans the share of public sector was very small. Since the inception of planning the public sector share increased gradually.

18.2. History of National Income accounting in India

Before independence, Dadabhai Nauroji is considered as the first person who calculated the national income of India in 1867-68 in his famous book 'The Poverty in British Rule in India', who estimated per capita income to be rupees 20. There are other notable also estimated national income among the estimates were, William Digby in 1899, finally Shirras in 1911, 1922, Shah and Khambatta in 1921 and R.C. Desai in 1931-40 in his famous book 'Consumer Expenditure in India. The first scientific method was made by Professor V.K.R.V. Rao in 1931-32, he divided the economy into sectors like agriculture sector and corporate sector. According to him, national income is 1689 crores and per capita income is 62 rupees in 1932.

Soon after independence, the Government of India appointed the National Income Committee (NIC) in August 1949 to compile statistics and estimate national income. The committee was headed by Prof. P.C. Mahalanobis and included Prof. D.R.Gadgil and Prof. V.K.R.V. Rao. The first report of the National Income Committee appeared in 1954. At that time, national income of India was 8710 crores and per capita income was 225 rupees in 1948-49. National income is estimated by adopting the normal year as base year. The base year had been changing over the decades and recently. CSO introduced a new series on national income with 2011-12 as base year.

18.3. Trends in national income and per capita income

Study of trends of the national income in India over the last 70 years is very much essential for attaining a clear understanding about the impact of planning on the Indian Economy. Both national income and per capita income are first collected at current prices and then constant prices for eliminating the effect of any change of price level during that period. The growth of per capita income at constant prices is an indicator of the change in the standard of living of the people. However assessment of the performance of an economy can more accurately be made by examining the trends in per capita income which is the same thing as per capita net national product at factor cost.

Table-1: Net National Income and Per Capita Income

Year	National income (crores)		Per capita income (Rupees)	
	Current prices	Constant prices	Current prices	Constant prices
2011-12 series				
1950-51	9531	448483	265	12493
1980-81	135470	1352931	1995	19925
1999-2000	1779304	3800560	17775	37968
2010-11	6756720	7373384	56971	62170
2015-16	12162398	9963681	94797	77659
2016-17	13623936	10782092	104880	83003
2017-18	15140418	11508774	115224	87586
2018-19[3rd RE]	16713054	12226019	125946	92133
2019-20[2nd RE]	17716597	12641633	132115	94270
2020-21 [1st RE]	17194158	11536004	126855	85110
2021-22 [PE]	20529727	12519976	150007	91481
2022-23 [AE]	23594934	13347932	170620	96522

RE: Revised Estimates; PE: Provisional Estimates; AE: Advanced Estimates

Source: i) National Statistical Office 2022

ii) Economic Survey 2022-23 Statistical Appendix

The data given in above table shows that during the 71 years (1950-51 to 2021-22) net national income and per capita income both increased. Net national income increased from Rs.4,48,483/- crores in 1950-51 to Rs.1,25,19,976/- crores in 1950-51 to Rs.1,25,19,976/- crores in 2021-22 at constant prices, whereas at current prices the net national income increased from Rs.9531/- crores in 1950-51 to Rs.2,05,29,727/- crores in 2021-22. The per capita income also increased from Rs.12,493/- in 1950-51 to Rs.91,481 in 2021-22 at constant prices even at current prices it increased from Rs.265/- to Rs.1,50,007/- in the same period. Thus the data presented in the table-1, it can be said that there is an increasing trend in net national income and per capita income since the inception of planning.

Table-2: Net National Income and Per Capita Income

Year	National income (crores)		Per capita income (Rupees)	
	Current prices	Constant prices	Current prices	Constant prices
2011-12 series				
1951-52	6.3	3.8	4.6	2.1
1961-62	5.6	3.6	3.2	1.3
1971-72	6.9	4.8	3.7	2.5
1981-82	16.8	6.0	14.6	4.0
1991-92	13.8	0.5	11.6	-1.5
2001-02	8.1	4.8	6.0	2.7
2011-12	14.6	5.0	11.4	2.1
2017-18	11.6	6.7	9.9	5.5
2011-22 (PE)	19.4	8.5	18.3	7.5

PE: Provisional Estimates

Source: i) National Statistical Office 2022

ii) Economic Survey 2022-23 Statistical Appendix

The growth rates of net national income and per capita income are presented in table-2. Since last 20 years (2001-02 to 2021-22) the annual growth rate of net national income is steadily increasing in 2021-22 provisional estimates are showing that the growth rate of net national income is 8.5% in constant prices. Whereas in current prices it is 19.4% at the same time per capita income growth rate is also 7.5% in constant prices and 18.3% in current prices.

18.4. Sectoral Contribution to National Income

The final value of goods and services produced a country during in a financial year is known as national income. The study of national income by the sectoral contribution explains the anatomy of the economic structure. The different sectors like primary, secondary and territory contributes to national income. The label 10.3 presents detailed information regarding contribution of different sectors.

Table-3: Share of different sectors to national income (in percent)

Year	Primary sector	Secondary sector	Tertiary sector
1950-51	57.2	14.8	25.0
2000-01	25.1	22.1	52.4
2010-11	17.7	27.0	55.3
2018-19	16.1	29.6	54.3
2020-21	20.19	25.92	53.89

Source: i) Ministry of Statistics
ii) Economic Survey 2021-22

From Table-3, it can be observed that initially the primary sector contributed a large portion to national income. But at present service sector is the predominant sources to national income in India. In 2020-21 service sector alone contributed 53.89% to national income, the share of primary sector has declined enormously. The broad trends in the changing composition of the domestic product are the following.

18.5. Contribution of the primary sector

The primary sector consists of agriculture, fishing, forestry and logging, mining and quarrying. In the initial days of planning period, the share of primary sector in the Gross Domestic Product is predominant one. It is contributed 57.2% in 1950-51 and in the recent years in 2020-21. In contributed 20.19%. Thus over the years the share of primary sector in GDP is declined. The main cause of the fall in the share of agriculture is the structural transformation that had been taking place. In the recent years Indian Economy has undergone some structural changes. Information Technology (IT), communication, transport, trade, banking, insurance and other service sector have grown faster than agriculture. That is the reasons to decline the primary sector share in GDP.

18.5.1. Contribution of secondary sector

The secondary sector comprises manufacturing, construction, electricity, gas and water supply has shown a steady growth from 14.8% in 1950-51 to 25.92% in 2020-21.

18.5.2. Contribution of territory sector

Territory sector is also known as service sector which includes IT, trade, transport, shortage, communication, banking, insurance, real estate, community and personal services. Service sector contributed 25% in 1950-51 and it is increased to 53.89% in 2020-21. Huge contribution is increased from service sector in these years, especially Information Technology, banking, insurance, trade, transportation, and communication sectors shown huge growth in the recent years.

18.6. Summary

With the above analysis, it can be surmised that there is a sudden jump of the Indian economy to pass on to the stage of a post-industrial service economy without completing the phase of industrialization. Industrial sector need to improve its share in GDP.

18.7. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Who estimated national income before independence for the first time in India?
2. Who are the members in National Income Estimation Committee?
3. What are the lessons for rapid growth of service sector?

II. Answer the following questions in about 8-10 lines each.

1. Explain the trends in per capita income?
2. What is the role of primary and secondary sectors to national income?
3. What is sectoral composition of an economy?

III. Answer the following questions in about 16-20 lines each.

1. Explain the trends in national income in India.

2. Construct a pie chart for the following table on sectoral contribution to GDP. Discuss the contribution of sectors.

Sector	2000-01	2018-19
Primary	25.1%	16.1%
Secondary	22.1%	29.6%
Territory	52.4%	54.3%

18.8. Glossary

1. National income: The total monetary value of all goods and services produced in a country during in a financial year.

2. Growth rate = $\frac{\text{Current value} - \text{Previous value}}{\text{Previous value}}$ x 100

3. Per capita income: It is average income of the people. National income is divided with the population of the country.

   Per capita income = $\frac{\text{National Income}}{\text{Population}}$

4. Primary sector: It consists agriculture, fishing, forestry and logging, mining and quarrying.

5. Secondary sector: It consists manufacturing, construction, electricity, gas and water supply.

6. Territory sector: It consists Information Technology, trade, transport, storage, communication, banking, insurance, real estate, community and personal services.

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CHAPTER 19

POVERTY AND UNEMPLOYMENT

19.0. Objectives

- Understand different concepts of poverty
- Explain the causes of poverty and its consequences
- Analyze different types of unemployment
- Explain the relationship between poverty and unemployment
- Analyze the causes of unemployment
- State measures taken by the government to eradicate poverty and unemployment.

19.1. Introduction

Poverty is one of the major problems plaguing many countries in the world. This is a serious financial problem. Although poverty also exists in developed countries, developing countries with weak economies (Third World countries) have mass poverty. Poverty can be defined as a socio-economic phenomenon, if a country has low per capita income and high income inequality then it can be said that there is poverty in that country. Poverty is one of the major problems in India.

19.2. Definition

A state of scarcity or lack of money and basic necessities of human life like food and clothing denotes existence of poverty. Definitions of poverty change frequently. Lack of minimum standard of living, malnutrition, illiteracy, backwardness in child development etc. is the symptoms of poverty. Therefore, poverty is a multifaceted concept with social, economic and political aspects.

19.3. Types of Poverty

Poverty in India is defined in two ways i.e., absolute poverty and relative poverty.

1. Absolute poverty: Complete lack of means to meet basic personal needs such as food, clothing and shelter. Absolute poverty is the condition of not being able to meet even the minimum subsistence expenditure. The quantity of minimum requirements is calculated on the basis of market prices to determine the minimum cost of living. Poverty can also be defined based on the calories people consume. According to the Indian Council of Medical Research, these physical quantities are 2,400 calories per capita in rural areas and 2,100 calories per capita in urban areas. Those who take less than these amounts can be considered poor. Poverty found in developing countries like India is absolute poverty.

2. Relative poverty: Relative poverty refers to economic inequality. According to this concept, the 5 to 10 percent of people in the economy with the lowest income level and standard of living are considered relatively poor compared to the 5 to 10 percent of the population with the highest income level and standard of living. This concept is mostly used in rich countries.

Poverty line is used to measure poverty in India. A 'poverty line' is a method of finding a person's poverty level based on his income and consumption level.

19.4. Poverty Line

In simple terms, the poverty line is the monetary income that one must have to afford the basic amenities of life. Globally, the poverty line is set at $2.15 per day. This amount was recently updated by the World Bank in 2022.

A common method used to estimate poverty in India is based on the consumption levels and if the consumption falls below a given minimum level, then the household (family of 5) is said to be Below the Poverty Line (BPL). In consumption based poverty line, sample based surveys use a reference period (say 30 days) in which households i.e. family of 5 are asked about their consumption of last 30 days and is taken as the representative of general consumption.

The government set up a committee headed by former RBI governor C Rangarajan for estimating poverty and the number of poor in the country. The committee said that the number of poor in India was much higher in 2011-12 at 29.5% of the population. That means 3 out of 10 persons are poor. As per the report submitted by C Rangarajan Committee:

A person spending less than Rs. 1,407 a month (Rs. 47/day) should be considered poor in urban and a person spending less than Rs. 972 a month (Rs. 32/day) should be considered poor in rural areas.

As per Tendulkar committee for 2011 the poverty line was considered as a person spending less than Rs. 1,000 a month (Rs. 33/day) should be considered poor in cities and a person spending less than Rs. 816 a month (Rs. 27/day) should be considered poor in villages.

Poverty Line Calculation: Poverty estimation in India is now carried out by NITI Aayog's task force through the calculation of poverty line based on the data captured by the National Sample Survey Office under the Ministry of Statistics and Programme Implementation (MOSPD). National Sample Survey (NSSO) conducts a sample survey every 5 years to estimate the poverty line in India.

Poverty estimates by different committees

Year	Lakdavala Committee estimates			Tendulkar Committee estimates			Rangarajan Committee estimates		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
1993-94	37.3	32.4	36.0	50.1	31.8	45.3	-	-	-
2004-05	28.3	25.7	27.5	41.8	25.7	37.2	-	-	-
2009-10	-	-	-	33.8	20.9	29.8	39.6	35.1	38.2
2011-12	-	-	-	25.7	13.7	21.9	30.9	26.4	29.5

19.5. Causes of Poverty

There are several causes of poverty in India, among them the most important are:

19.5.1. Colonial rule

The root cause of poverty in India is British colonial rule. In the process of colonizing India, the British plundered India's wealth, taking raw materials at low prices and selling them back to India at much higher prices. This led to the closing down of indigenous factories and mills in India and India became more economically dependent on the British. Gradually people are pushed into poverty without employment.

19.5.2. Population growth – Over population pressure

In India the birth rate is higher than the death rate which has led to rapid population growth. This causes the fragmentation of high land plots. As a result, the land available to each person is greatly reduced, leaving families without enough land to generate income and produce. High population growth leads to decline in per capita income. Increasingly dependent on earners, members have low consumption levels and are unable to meet their basic needs.

19.5.3. Low economic growth and development

Poverty also results from stagnant or slow-moving economic progress. A problem is that the rate of economic growth does not keep pace with the rate of population growth. In India, the rate of economic growth required for the desired level is very low. Hence, the gap between the level of availability of goods and services and the requirement persists. The result is poverty.

19.5.4. Unemployment and underemployment

Unemployment is high among casual workers who form the bulk of the labor force. In their case unemployment and poverty are intertwined. Unemployment has resulted from rapid growth of population and labor force on the one hand and relatively low capital formation and economic growth rate on the other. Moreover, the creation of employment opportunities by the organized sector is very low, leading to increased unemployment and poverty.

19.5.5. Inflation and rise in food prices

The rate of inflation and the level of food prices is an important factor that causes poverty. Inflation, especially food price increases, increases the minimum consumption expenditure required to meet basic needs. Therefore, rising inflation, especially in food prices, pushes many families below the poverty line.

19.5.6. Unequal distribution of wealth and resources

Unequal distribution of wealth and resources causes income inequality in a country. Due to this imbalance, the entire economy and development of the country is affected. Poverty increases exponentially

19.5.7. Unbalanced Industrialization

Industries provide jobs to the people living in the area. Concentration of industry in a single state or place increases employment in that region, but employment opportunities in a deindustrialized area are limited. These areas suffer from severe poverty.

19.5.8. Misuse of Resources

In order to increase the living standards of the people in the country, there is a need to increase the national income growth rate. In order to increase the national income, proper utilization of the country's natural resources should be high. But non-utilization of natural resources such as rivers, forests and mineral wealth in our country has become the cause of poverty.

19.5.9. Low level technology

Low technology also causes poverty. In comparison to other developed countries, not only in manufacturing sector and agricultural production processes, but also in marketing skills, financing and setting up of production units, the use of technology in our country is very low. Due to this the average production is low. It depresses investments and earnings. It drives the economy into poverty.

19.5.10. Low level of education

Education plays a vital role in an individual's economic survival. There is a direct relationship between education and income. But the poor, due to lack of resources, cannot send their children to schools. They prefer to send their children to work and contribute to the family income rather than going to schools. But lack of education or low education keeps the poor from growing economically.

19.5.11. Liberalization, Privatization and Globalization Model (LPG)

This model bypasses agriculture and agro-based industries, which are the main sources of employment for most people. LPG emphasizes capital-based development. It created fear about the employment opportunities for the workers. It is expected to increase unemployment and cause poverty.

19.4.12. Social Factors

Poverty in India is hampered not only by economic and commercial factors but also by social factors. Inheritance laws, caste system, religious practices and some traditions drag people further into poverty.

19.6. Consequences of Poverty

Poverty has a serious impact on the social, economic and political aspects of a country. About 800 million people in our country are identified as poor; most of them live in rural areas and live without proper jobs. Cities are expanding due to the lack of living wage employment in many rural areas and migration to metropolitan areas. Even there, many live a life of poverty and desperation in slums, without adequate drinking water supply, garbage disposal, electricity and many other necessities. Poverty divides the entire society into two classes, the haves and the have-nots. While the haves live a life of luxury, the have-nots are unable to afford even the minimum facilities. Some of the consequences of poverty problem are given below.

1. Low standard of living and housing problem:

Poor people do not have proper living conditions. They fight for food, clothing and shelter. Most of the poor lived in just one room.

2. Cleanliness and Sanitation:

These people have less awareness about cleanliness and proper sanitation system. They suffer from harmful diseases due to lack of proper hygiene.

3. Malnutrition:

Due to the low income level of the poor, the purchasing power is low. They cannot afford to spend on good food and thus become malnourished and suffer from diseases.

4. High infant mortality:

According to Ministry of Health and Family Welfare 2019 figures of infant mortality in India, 30 out of every 1000 live births die within one year. 1.4 million children die before their fifth birthday every year. Pneumonia, malaria, diarrheal diseases and chronic malnutrition are the main causes of death.

5. Lack of education:

According to UNICEF more than 25% children in India are not getting education. Girls drop out of school more than boys. This situation is especially seen in the poor people. Although Indian laws seek to treat men and women equally, women, especially those from lower social castes, are unable to get education. Due to their lack of education, their chances of getting proper employment and wages in India are very low.

6. Child labor system:

Children who should be in school are working because poor parents send their children to work to earn income to support their families. They do not realize that this will push them further into poverty in the future.

7. Child marriages:

Although child marriage is illegal, it still occurs in many Indian societies. Girls become mothers when they are children. Many die before reaching adulthood. Due to their poverty, many parents marry their children at an early age.

8. Unemployment:

Poverty leads to unemployment problem. Unemployment prevents a country from developing into a strong economy. High unemployment rate prevents the country from progressing in all aspects.

9. Social tensions:

Poverty increases income inequality in society. National wealth is unevenly distributed between rich and poor people. Wealth is concentrated in the hands of a few. This creates unrest and insecurity in the society.

10. Addiction and criminal activity:

Poor people resort to socially unacceptable activities like crime, violence and terrorism to feed themselves. They are addicted to bad things like drugs.

19.7. Unemployment

Unemployment is one of the major problems plaguing people in every country in the present times. Providing employment to all people is a very difficult task even for governments. The amount of employment in a country largely depends on the level of development. Therefore, when a country makes progress and its productivity expands employment opportunities increase.

Actually the condition where a person has the ability, interest and qualification to work and does not find work is called 'unemployment'. In other words - the condition of not finding work even though he is willing to work near the wages prevailing in the market/ economy is called 'unemployment'. India's unemployment is completely different from developed countries. According to Lord J.M. Keynes the effect of unemployment in developed economies is the result of a deficiency in aggregate demand.

19.8. Types of Unemployment

The different types of unemployment are as follows:

19.8.1. Structural unemployment

This type of unemployment is linked to the economic structure of the country. Due to drastic structural changes in the country's economy, there may be a demand-supply disruption. Structural unemployment occurs when there are jobs that workers lack skills for, or when workers are available but there are no jobs to fill, due to an imbalance in the population of workers and the types of jobs available. Structural unemployment is most evident in technologically advanced industries. It is a natural result of development and technological progress. This may occur due to a mismatch between the available jobs and the skills of the workforce. Labor mobility is likely to increase structural unemployment.

19.8.2. Under Employment

'Underemployment' is the condition where the available productive resources are not utilized to the maximum or having waged work that does not meet even the minimum requirements or where one is unable to utilize one's potential to the maximum extent or is employed less than a person deserves. A country with this type of unemployment exploits the potential of their workforce.

19.8.3. Disguised Employment

If there are more workers than are actually needed in any production process, it is called disguised unemployment. Continuing these additional workers will not increase production. Removal does not reduce production. Ragnar Narck states that their marginal productivity is zero (0) and Jon Robinson states that it is negative. This unemployment is high in developing countries especially in the agricultural sector.

19.8.4. Voluntary unemployment

Those who find work at the prevailing wage but do not go to work expecting higher wages are called 'voluntary unemployed'. Being unemployed when earning less than expected wages, or not going to work expecting rest. Voluntary unemployment is also a person who leaves and becomes unemployed when he gets a job that is less than his ability.

19.8.5. In voluntary unemployment

Unemployment due to lack of effective demand in an economy or a commodity-producing organization is called involuntary unemployment.

19.8.6. Seasonal unemployment

There is work only for a certain period of the year and short periods of unemployment in some seasons and no work in other seasons is called 'seasonal unemployment' or seasonal unemployment. Generally, in the agricultural sector, the laborers have work only during the cultivation and harvesting period. Rest of the time there is no work. That means there is work only for 7-8 months in a year. There will be no work for the remaining months.

19.8.7. Technical Unemployment

Unemployment caused by the introduction of new technologies into the economy is called 'technological unemployment'.

19.8.8. Cyclical Unemployment

In developed countries 'cyclical unemployment' occurs due to business cycles or shortfall in aggregate demand i.e. lack of adequate demand for the product. During periods of economic depression, 'cyclical unemployment' occurs. This unemployment is temporary.

19.8.9. Educated Unemployment

People who are educated, trained and skilled in some field are called 'educated unemployed' if they do not find work. In India, especially in towns and cities, unemployment is high among educated people.

19.8.10. Frictional unemployment

The temporary unemployment that occurs when workers change from one occupation to another, from one sector to another, from one industry to another, from one region to another is called as frictional unemployment.

19.9. How is unemployment calculated?

A person who works for 8 hours a day in 273 days on a standardyear basis is considered as an employeeBased on the recommendations of the Expert Committee on Unemployment estimates set up by the Planning Commission, three estimates of unemployment have been prepared in the 27th round of NSSO (National Sample Survey Organisation).

I. Long-term unemployment or regular principal status employment' is measured by the number of people who are unemployed seeking regular employment for most of the year. This measure is more appropriate for those looking for regular employment or work. E.g. Well- educated and skilled people do not accept ordinary jobs This is also known as 'Open Employment'.

II. Weekly status Unemployment it is Measured in number of peoplei.e. absence of work for at least one hour during the survey week.

III. Daily status Unemployment- Measured in person days or person years. i.e. people who did not find work on one day or few days during the survey week. 19.9 Causes of Unemployment.

19.10. Causes of Unemployment

1. Unemployment Growth: In India, since independence, the employment growth rate has been much lower than the economic growth rate. Moreover, the rate of economic growth has not been sufficient to keep pace with India's growing workforce. As a result, unemployment is widespread.

2. Increase in labor force: In India, the death rate has decreased rapidly without a decrease in the birth rate. Due to its effect the population of India is increasing day by day. This led to unemployment and a large expansion in the labor force.

3. Overuse of machinery: In India, manpower is available in large quantities. Under these conditions, the country has a labor-intensive production technology. However, in India, the use of capital-intensive technology not only in industry but also in agriculture leads to large-scale unemployment.

4. Lack of Skill Development Programmes: In India, professional skill development courses suitable for Indian industry are very few in number. Therefore, there is a shortage of manpower with the required skills in the industries.

5. Employment Expectations: Educated youth of India aspires for white collar job. They do not have the innovative and entrepreneurial spirit to carry out economic activities capable of being self-employed. In India, many graduates prefer to remain unemployed until they get a job that matches their expectations.

6. Slow economic growth: India's overall economic growth has been very slow. Inadequate growth in irrigation facilities, infrastructure and inadequate industrial expansion has resulted in inadequate employment opportunities for the growing labor force in the rural sector.

7. Lack of workers' attention: Workers' attention is low. Due to attachment to family, there is no going to far places for jobs. Factors such as language, religion and climate also contribute to this.

8. Flaws in the Education System: Jobs in the capitalist world are highly specialized but the Indian education system does not provide the proper training and specialization required for these jobs. Many people willing to work like this end up unemployed due to lack of skills.

19.11. Consequences of Unemployment

1. Poverty - Unemployment leads to poverty. After a long period of unemployment the youths are resorting to illegal and wrongful activities to earn money. Due to this crime has also increased in the country.

2. Social problems - Unemployed people are easily tempted by anti-social forces. This will make them lose faith in the democratic values of the country.

3. Addiction to drugs - It is often seen that unemployed people become addicted to drugs and alcohol or attempt suicide, causing loss to the country's human resources.

4. Loss of human resources – Unemployment problem causes loss of human resources. As workers devote their maximum time for better employment the loss of work leads to the loss of valuable man-hours.

5. Low standard of living – During periods of unemployment, people compete for employment, lack of bargaining power, low wages and incomes, which reduces their standard of living.

6. Impact on the Economy - It also impacts the economy of the country, because if the labor force needed to produce the resources is water workers, they are actually dependent on the rest of the working population. Thus the socio-economic costs of the state will increase. For example, a 1 percent increase in unemployment reduces GDP by 2 percent

7. Exploitation of labor - In the state of unemployment, workers are exploited to the maximum. The laborers have to work under various conditions for low wages. It shows the efficiency of the workers

8. Loss of utilization of skills - Unemployed people cannot utilize their skills. If this continues for a long time, people may even lose their skills.

19.12. Government - Poverty and Unemployment Alleviation Measures

All measures to prevent unemployment reduce poverty. If the economy grows, poverty will gradually decrease. So economists focus on increase in the rate of economic growth. Development plans have been implemented with the aim of creating jobs. As a part of this, it is thought to achieve rapid growth with a special focus on employment in small scale industries. The programs adopted in stages for poverty alleviation are divided into four broad categories. Let's take a look at these.

1. Income Sources and Development Programs for the Rural Poor: These programs mainly aim to increase the income of the rural poor and improve their economic status. Major programs under this category are – Small Farmers Development Agency (SFDA), Marginal Farmers and Agricultural Laborers Agency (MFAL), Integrated Rural Development. Program (IRDP), etc. were launched to increase the income of the rural poor.

2. Special Area Development Programmes: Drought Prone Area Program (DPAP), Desert Development Program (DDP), Hill Area Development Program etc. are meant for some special purposes. Forests and dairy development are some of the programs that increase the income of the weaker sections of the region.

3. Work programs for creation of subsidized employment opportunities: National Rural Employment Programme (NREP), Employment Guarantee Programme for Rural Landless and Food for Work Scheme (FWP), Prime Minister's Integrated Urban Poverty Eradication Programme (PMIUPEP) for the poor come under this category. National Rural Employment Programme has now become Mahatma Gandhi National Rural Employment Generation Programme (MGNREGP).

4. Programme of Minimum Requirements: In this fourth type, minimum needs program and 20 points program were introduced with the objective of increasing the productive capacity of the poor people by increasing their consumption level. It includes basic education, health, drinking water supply, roads, electrification, housing and nutrition.

In recent years, the government has introduced a two-pronged strategy to address the problem of poverty in India.

1. Expansion of sectors that warrant high labor intensity; and
2. By empowering the poor with education, skills and health, they can enter higher skilled and better paying sectors that enable them to cross the poverty line.

Since independence, governments have introduced many programs and schemes to reduce poverty and unemployment. Some of the poverty and unemployment schemes implemented by governments over the last 2 decades are given below.

1. Janashree Bhima Yojana 2000 to provide coverage to the below poverty line
2. Pradhan Mantri Gramodaya Yojana 2000 to provide minimum facilities in villages
3. Antyodaya Anna Yojana 2000 Food security for the poor
4. Asyhra Bhima Yojana2000 Compensation for unemployed workers
5. Pradhan Mantri Gram Sadak Yojana (PMGSY) 2001 All villages should have paved roads
6. Ketihar Mazdoor Bima Yojana (KMBJ) 2001Ketihar Mazdoor Bima Yojana (KMBJ)
7. Shiksha Sayog Yojana (SSY 2001) education of children below poverty line
8. Sampurna Grameen Rozgar Yojana (SGRY) 2001 Employment and Food Security
9. Employment Jaya Prakash Narayan Rojgar Guarantee Yojana (JPNRGY) 2001 Employment generation in poverty-stricken districts
10. Valmiki Ambedkar Awas Yojana (VAMBAY) 2001 Construction of houses in urban slum areas
11. National Work Food Scheme (NFFWP 2004 Supplementary Wage Employment Integration
12. Janani Suraksha Yojana 2005 To provide care to expectant mothers
13. Bharat Nirman Program (BNP) 2005 Provision of rural infrastructure (irrigation, water supply, road, telephone and electricity
14. Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA):

To increase livelihood security in rural areas by providing at least 100 days of wage employment in the year 2006.

15. National Rural Livelihood Mission: 2011 access to self-employment and skilled wage employment opportunities

16. National Urban Livelihood Mission: 2013 Formation of urban poor into self help groups, creating opportunities for skill development

17. Pradhan Mantri Ujjwala Yojana (PMAY): 2016 to distribute 50 million LPG connections to women from Below Poverty Line (BPL) families.

18. Prime Minister Shrama Yogi Man-dhan (PM-SYM): 2019 Old Age Protection and Social Security of Unorganized Workers (UW)

19. Pradhan Mantri Street Vendors' Soul Nirbhara Fund: 2020 Micro-credit facilities for street vendors affected by COVID-1

19.13. Summary

In India, the chronic problems of poverty and unemployment have become major challenges. Both absolute poverty and relative poverty exist in our country. Those who spend less than the poverty line are considered poor. There are many causes of poverty. People living in poverty have a low standard of living. Children suffer from malnutrition in India. Unemployment is the main problem of poverty. Central and state governments have been introducing many schemes and programs to eradicate poverty and unemployment, one of which is the Mahatma Gandhi National Rural Employment Guarantee Programme.

19.14. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Define absolute poverty
2. Who are called poor?
3. What is low employment?
4. When does technical unemployment occur?

II. Answer the following questions in about 8-10 lines each.

1. Explain any two consequences of poverty.
2. Write about structural unemployment.
3. Analyze the main causes of poverty.

III. Answer the following questions in about 16-20 lines each.

1. How can you say that unemployment is related to poverty?
2. Tell about any of the programs taken by the governments to eradicate poverty and unemployment.

19.15. Glossary

- Poverty Line – An estimate of the income required to meet the minimum necessities of life
- Liberalization – Removal of barriers and restrictions imposed by the government on foreign trade and investments.
- Privatization – transfer of government-owned enterprises to private enterprises
- Globalization – The interconnectedness of different countries due to foreign investment and foreign trade

19.16. References

1. Telugu Academy Intermediate Second Year
2. Economic Survey Government of India

CHAPTER

20

PLANNING AND NITI AAYOG

20.0 Objectives

20.1 Introduction

20.2 Concept of Plans

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20.0. Objectives

- Recognize the importance of planning
- Explain the main objectives of five year Plans
- Evaluate the progress made by the plans
- Analyze the need to replace the plans with NITI Aayog
- Explain the formation of NITI Aayog and its role in development of the country.

20.1 Introduction

Planning means action with a purpose. Planned preparation at the individual or national level is a key milestone. A person's social life is always dependent on various planning schemes. In the same way Social and economic planning provides a way for policy makers to improve the conditions prevailing in the society. This process is incomplete if there are no positive results. As a post-independence developing country, India needs to improve employment opportunities and incomes of its people. Investments and growth should be revived. Support should be provided to the financial sector. Our leaders of that time thought that implementing plans to provide education and health to all and to achieve rapid development of the country is the right approach. Five year plans have played a major role in the development of our country.

20.2 Concept of Plans

If there is a small amount of resources and a large amount of welfare is to be provided, implementation of the plan becomes imperative. According to the eminent economist 'Todaro' "Development planning is an attempt by a central institution to directly and in some cases control, effect changes in the main economic variables (GDP, consumption, investment, savings, etc.) of a particular country or region". The success of economic planning depends on the influence, support and regulation of the government. First time the concept of financial planning used by Gunnar Mirdal (Sweden -Economist).

Planning process is the effort of the government to enhance the economic development of the country through pre-determined goals and their means of achievement in a fixed period. Planning and implementation of planning are two different things. A plan is a printed document, a blueprint, a worksheet model. Implementation of the plan is a blueprint as well as the effort required to achieve the goals.

20.3 Importance of Plans

Planning is a panacea for all kinds of financial ills. Advantages of planning are…

- Planning plays always a vital role in the economic development of a country.
- Economic planning is a strategy for achieving economic development by following the policy of a planned economy.
- The country's resources and wealth are utilized according to the socio-economic needs of the country.
- The plan will facilitate the development of the people with new job and employment opportunities and increase living standards.
- Plans provide financial security to large number of people.
- It helps the country to achieve self-sufficiency.
- Balanced regional development is achieved through proper allocation of resources.
- The growth rate will be high in various sectors.
- A planned economy adjusts itself according to the unpredictable changing conditions in the economy. It protects the economy from fluctuations in the business sector by maintaining a balance between savings and investment.
- Social equality, social security and social justice shall be ensured to all people by providing equal opportunities to the people.
- Wastage of resources is prevented in a planned economy. Used sparingly
- Economic activities are better managed by avoiding over-production or under-production.

20.4 Types of Plans

Different types of plans are being implemented in the financial system, let us briefly know about some of the important ones.

1. Democratic Planning – Autocratic Planning: In democratic planning there is no intervention of the state on the factors of production. It values public opinion and contributes to the masses. The aims and objectives of the plans are all determined according to public opinion. In a democratic plan there is freedom of economic activities. Autocratic or authoritarian planning involves central control and direction of all economic activity in accordance with a plan. Consumption, production and distribution are all controlled by the planning machinery.

2. Centralized and Decentralized Planning: Formulation, adoption, implementation of the plan, supervision and control are done by the central planning authority. The planning authority determines the objectives and priorities. This type of planning extends from the top level to the bottom level. Decentralized planning is bottom-up. It is prepared by the Central Planning Authority in consultation with the various administrative units of the country. In other words, this type of planning is bottom-up, starting from the bottom up. Under this plan, responsibility rests with local and regional authorities who make financial decisions about the plan. It is a multi-level plan in which more than one organization works for the implementation of the plan.

3. Perspective planning (Perspective planning), Annual planning: It refers to long term planning of 15-20-25 years. Under 5 years plans short-term plans are implemented to achieve broad objectives within a fixed period of time. This continues as a long-term plan. Each short-term plan is further divided into annual plans for effective implementation. Annual budgets are implemented according to their objectives and allocations. In truth annual plans are the true work sheets of financial planning

20.5 Five Years Plans in India

After independence, the Planning Commission was constituted in March 1950 as an advisory and specialized body by a resolution of the Government of India as per the declared objectives of the Government to rapidly raise the standard of living of the people by efficient utilization of the country's resources, increase in production, employment opportunities for all. The Planning Commission suggested five year plans for India.

A total of 12 FYP were implemented from 1951 to 2017. The First Plan started for the period 1951-56 followed by the Second Plan 1956-61 and the Third Plan 1961-67 respectively. But due to various reasons like Pakistan war and drought situation, planning hiatus was announced in 1966-67. Back in the years 1966-67, 1967-68, 1968-69 the annual plans were implemented. Fourth Plan The plan was renewed for the period 1969-74. Then the Fifth Plan (1974-79), which did not complete its full term due to changes in the party in power. The Janata government came to power and launched the Sixth Plan for the period 1978-83. Again with the change of government in 1980, the new Sixth Plan for the period 1980-85 and the Seventh Plan for the period 1985-90 began. Even though the 8th plan started in 1990, due to exigencies, only 2 annual plans were implemented again and the 8th plan started again for the period 1992-97. Then the 9th Plan was implemented between 1997-2002, 10th plan between 2002-2007, 11th between 2007-2012 and 12th plan was implemented between 2012-17.

20.5.1 Main Objectives of five years plans

Every plan is organized with some main objectives in mind. Although there are differences in goals and ambitions from one plan to another, they all have some long-term goals. They are

1) Economic growth
2) Self-reliance
3) Balanced regional development
4) Generation of employment opportunities
5). Reduction of income inequalities
6) Eradication of poverty
7) Modernization
8) Inclusive comprehensive growth and sustainability

Table-1: The main objective of various plans (1951-2017)

Sl. No.	Plan period	Objective
I	1951-56	Development of agriculture and irrigation facilities
II	1956-61	Development of heavy industries
III	1961-66	Self-sufficiency in production of food grains
IV	1969-74	Sustainable growth, self-reliance and eradication of poverty
V	1974-79	Poverty alleviation, self reliance
VI	1980-85	Alleviation of poverty by providing gainful employment,
VII	1985-90	Production of food grains, increasing productivity
VIII	1992-97	Human Resource Development
IX	1997-2002	Economic growth with equity and social justice
X	2002-07	Equality, social justice, enhancing the quality of human resources
XI	2007-12	Comprehensive growth,
XII	2012-17	Inclusive growth with sustainability

20.6 Five years Plans – Achievements and Failures

India has completed 12 five years plans. Mixed results were achieved during the planning period. It has achieved remarkable success in some fields. In some others, it did not achieve as much success as expected.

20.6.1 Achievements

I. Increase in national income, per capita income: One of the primary objectives of economic planning in India is to increase national, per capita income. As a direct consequence of economic planning, India's national, per capita income rose, although not as fast as the plans predicted. National Income was raised from 2,24,786 crores in 1950-51 to 139.52 crores in 2017-18 at 2011-12 prices. Per Capita Income was increased from Rs.5,752 to Rs.1,12,835 in the same period.

II. Progress in the Agricultural Sector: The government spent an average of 23 to 24 percent of the plan expenditure in each Five Year Plan for the development of agriculture, allied activities and irrigation. As a direct result of this plan expenditure, agricultural production increased steadily. To increase agricultural productivity, efforts have been made to expand the supply of water, fertilizers, pesticides, hybrid variety (HYV) seeds etc. in selected areas. This new agricultural strategy led to the Green Revolution. It is really excellent in rice, wheat and potato production.

III. Industrial Progress: Progress in some infrastructure industries like coal, iron ore, cement, fertilizers, steel, aluminum, petroleum (crude) and power has been really impressive. Progress was also seen in metallurgical industries, chemical and allied industries. Industrial Production Index was increased from 12.3 in 1950-51 to 221.5 in 2005-06 at 1950-51 prices. It shows 4.6% annual growth rate.

IV. Self-sufficiency in capital goods: India can now continue most of its industrial growth i.e. domestic production of capital goods for industries like textiles, food processing, cement, chemicals, metallurgical power and transport. Imports in this sector are negligible.

V. Per Capita Availability of Consumables: Consequent to the planned increase in production in all three sectors of the economy, the per capita availability and consumption of essential consumables has steadily increased. This increase would have been much higher if the population had not increased at the rate of 2.1% per annum or if population growth had been effectively controlled.

VI. Growth in Savings and Investments: Despite the increase in per capita consumption of consumer goods during this period, gross domestic savings as a proportion of GDP increased from 8.9% in 1950-51 to 32.4% in 2005-06. Gross domestic capital formation increased from 8.7% to 33.8%.

VII. Development of Economic Infrastructure: Another achievement of great importance is the creation of economic infrastructure which lays the foundation for industrialization. Expansion of road transport led to market expansion. Irrigation and rural electrification gave a boost to agriculture. Hydropower projects have provided an opportunity for industrial expansion.

VIII. Import Substitution, Export Diversification: Following a policy of achieving rapid industrialization, India's dependence on foreign countries for capital goods has decreased. Similarly, a large number of previously imported consumer goods are now produced domestically. This led to import substitution. Consequently, the commodity composition of India's exports has shifted in favour of manufactures, mineral oils, and engineering goods.

IX. Development of Science and Technology Sectors: Development of science and technology sectors to drive a modern industrial economy is another achievement of the Managerial Cadre Development Plan. This has significantly reduced India's dependence on foreign experts.

X. Availability of Wider Educational Opportunities: One of the greatest achievements of Indian planning is the development of a massive education system—our country has the third largest education system in the world. Enrollment in primary and secondary schools increased from 223 lakh in 1950-51 to 1283 in 2005-06. By 2011, literacy had increased to 74.04%.

Table-2: Growth Rate Achieved in Five Year Plans (at 1993-94 Prices)
Net domestic product at factor prices

Sl. No.	Plan	Expected growth rate	Achieved
1	First five year plan	2.1	3.6
2	Second five year plan	4.5	4.1
3	Third five year plan	5.6	2.8
4	fourth five year plan	5.7	3.3
5	Fifth five year plan	4.4	4.8
6	Sixth five year plan	5.2	5.7
7	seventh five year plan	5.0	6.0
8	Eighth five year plan	5.6	6.8
9	Ninth five year plan	6.5	5.4
10	Tenth five year plan	8.0	7.5
11	Eleventh five year plan	9.0	8.3
12	Twelfth five year plan	8.0	---

20.6.2 Failures

It is no exaggeration to say that the Five Year Plans have led our country on the path of development but there have been some setbacks as well. The target rate decided is not achieved in all the plans. Some notable pitfalls.

1. Poverty remains relatively high in rural areas
2. Unemployment increased. Unemployment is the main cause of urban and rural poverty
3. Income inequality has not decreased.
4. Due to land reforms not being properly implemented, land distribution is unequal.
5. There are also disparities in regional development.

20.7. NITI Aayog

NITI Aayog (National Institution for Transforming India) was formed as an alternative to the Planning Commission which was in service for 64 years. NITI Aayog is the main policy think tank of the Government of India. After extensive consultations with the State Governments, concerned organizations, experts and public, the Union Cabinet meeting decided on its establishment. It was established on January 1, 2015. In Sanskrit language, the word 'NITI' shows morality behaviour and guidance. NITI Aayog was established to provide critical, directional and strategic ideas to the development process. NITI Aayog is oriented towards a cooperative federal system. Playing a vital role in the country's progress, it carefully considers every policy with national interests, especially security concerns. Besides formulating strategic and long-term policies and programs for the Government of India, NITI Aayog also provides relevant technical advice to the Centre, States and Union Territories. Their implementation rests with the governments. NITI Aayog no longer has the power to allocate funds to states like the Planning Commission. It is now done by the Ministry of Finance.

It is the main policy making body which is expected to give impetus to the economic growth of the country. It aims to build active, strong states that help to create a strong nation.

India will become a major economy in the world. NITI Aayog mainly created two Centers called "Team India Hub" and "Knowledge and Innovation Hub".

1. **Team India:** This leads to the partnership of Indian states with the central government.
2. **Knowledge and Innovation Hub:** It builds think tank capabilities of the organization.

20.8 Founding Structure of NITI Aayog

The structure of NITI Aayog consists of various persons

a. Prime Minister as Chairperson.

b. Vice-Chairperson - Appointed by the Prime Minister

c. Members; Four full-time members, two part-time members (from leading universities, research institutions)

d. Ex-Officio Members: Four ex-officio members of the Union Council of Ministers,

e. Chief Executive Officer (rank of Secretary to the Government of India)

f. Governing Council: A council consisting of the Chief Ministers of all the States and the Lieutenant Governors of the Union Territories

g. Regional Council; Regional councils consisting of state chief ministers and lieutenant governors try to resolve specific problems and contingencies affecting more than one state or region. One of the chief ministers of this council acts as the president.

h. Secretariat: Union Ministers, experts in various fields and eminent academics are members. NITI Aayog is supported by the Chief Executive Officer.

20.9 Objectives of NITI Aayog

I. To foster cooperative federalism with the states for the attainment of national objectives.

II. It advises on economic as well as national and international matters of priority

III. Develop a mechanism for formulating credible strategies at the village level, monitoring their implementation and gradually integrating these at various levels of government.

IV. Focusing on various sections of the society who do not benefit financially from economic success

V. Formulating plans for strategic and long-term policy, evaluating their development and effectiveness.

VI. Giving importance to national security interests in economic strategies and policies.

VII. Linking agricultural production with food security to benefit farmers

VIII. Converging opportunity for inter-sectoral and inter-departmental problem solving to accelerate progressive agenda.

IX. Effectively testing and evaluating the implementation of programs that have the necessary resources to increase the chances of success.

X. Participation of diaspora Indian citizens in the development process

XI. Improving technology in implementing various programs. Providing good governance using technology.

XII. Increasing citizen participation in the development process and providing opportunities for all.

20.10 Functions of NITI Aayog

I. Niti Aayog's main function is to promote the spirit of cooperative federation.

II. Making States partners in the formulation of national policies. To prepare strategies to achieve the quantitative and qualitative objectives within a specified period of time and to establish a suitable mechanism for their implementation.

III. It gives adequate support to the formulation of the 'National Agenda' to formulate national development priorities and strategies and implement them by the Prime Minister and Chief Ministers.

IV. Helping States to meet the challenges. Policy planning is designed in a bottom-up model.

V. To strengthen local institutions and enable better planning at village level. It prepares long and medium term strategies for various schemes and sectors keeping in view the future interests of the country.

VI. Performs internal consultancy functions for Central and State Governments in the matter of designing policies and programmes.

VII. It prepares domain strategies with experts to help Central and State Ministries to adapt to current conditions. Enhancement of proprietary and technical knowledge in various fields. It reviews the implementation of government policies and programs and evaluates the effectiveness of those policies.

VIII. It acts as a nodal agency for harnessing global expertise and resources.

IX. NITI Aayog will enhance capacity and technology.

X. It prepares strategies with experts to assist Central and State Ministries.

20.11 Summary

Social and economic planning provides a way for policy makers to improve the conditions prevailing in the society. Planning process is the effort of the government to enhance the economic development of the country through pre-determined goals and their means of achievement in a fixed period. There are different types of plans. A total of 12 plans were implemented in our country from 1951 to 2017.

Our country has achieved mixed results during the planning period. It has achieved remarkable success in some fields. In some others, it did not achieve as much success as expected.

NITI Aayog (National Institution for Transforming India) was formed to replace the Planning Commission which was in service for 64 years. It is chaired by the Prime Minister and has a Regional Council comprising the Chief Ministers of the State. The main function of NITI Aayog is to promote the spirit of cooperative federation. Making States partners in the formulation of national policies. Prepares strategies to achieve quantitative and qualitative objectives within a specified period of time and establishes appropriate mechanism for their implementation.

20.12 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What is planning?
2. Which sector was given priority in the first plan?
3. Which Five Year Plan was introduced twice?
4. What is the main objective of NITI Aayog?

II. Answer the following questions in about 8-10 lines each.

1. Explain the importance of plans
2. Explain the organizational structure of NITI Aayog.
3. Write down the long-term goals of the plans.
4. Why was NITI Aayog introduced in place of Planning Commission?

III. Answer the following questions in about 16-20 lines each.

1. Which of the different types of plans do you support?
2. Write the main objectives of NITI Ayog.
3. Briefly explain the achievements and failures of the plans.

20.13 Glossary

- NITI – National Institution for Transforming India Aayog.
- Plan – Planning is the process of government’s efforts to develop the country through pre-determined objectives and their means of achievement in a given period.

20.14 References

1. Indian Economy 2022, Misra & Puri
2. Telugu Academy, Intermediate 2nd Year

CHAPTER 21

AGRICULTURE SECTOR

21.0. Objectives

- Understand the importance of the agriculture
- Explain reasons for low productivity in agriculture
- Discuss the land reforms
- Discuss the impact of green revolution
- Analyse the problems facing by Indian farmers

21.1 Introduction

Agriculture is the backbone of the Indian economy. It is a part of the people's way of life and plays a vital role in India by influencing culture and traditions. It provides direct and indirect employment to many people and provides food and fodder. The Indian economy is mainly divided into three sectors viz., 1. Agriculture Sector 2. Industrial sector 3. Service sector.

In this unit, let us learn about the various sectors related to agriculture sector i.e., priority of agriculture sector, growth of agriculture sector in Indian economy, causes of low productivity, measures to increase agricultural productivity, land reforms, green revolution, its impact, agricultural credit, rural indebtedness, agricultural marketing, pricing policy, Food Security of India etc.

21.1.1. Importance and growth of agriculture in the Indian economy

The agriculture sector in developed and developing countries provides basic necessities such as food and non-food products such as raw materials for industrial development. Agricultural products are supplied to the industrial sector and contributes to sustainable development. India accounts for 3% of the total cultivable land in the world and is the second largest producer of wheat, fruits and vegetables and the third largest producer of fish in the world. India's agriculture sector supports 17% of the world's population. All the above figures illustrate the importance of the agricultural sector in the Indian economy. The importance of agriculture in the national economy can be explained by the following factors.

1. Share of agriculture sector in the national income

At the time of the First World War, two third of the national income came from the agriculture sector. With the development of secondary and tertiary sectors after the commencement of plans in India, the share of the agriculture sector in the national income decreased. In 1950-51, the share of agriculture sector in national income was 56.5%, decreased to 19% in 2015-16 and 17.4% in 2017-18. Colin Clarke, an economist, believes that as a country develops the decline in the share of the primary sector in the national income is an indicator of structural changes. In developed countries such as the United States and England, only 2% of the gross domestic product (GDP) comes from the agriculture sector.

2. Share of agriculture in employment generation

As Gandhiji said, India is a complex of villages. In 1951, 83% of the population lived in the villages, while 17% lived in the towns. According to the 2011 census, 68% of the population lived in villages and 32% in towns. The agriculture sector provides employment to the population in the rural areas. In 1951, the dependence on agriculture sector was 72% and it was 52% and 42% in 2010 and 2020 respectively. However, the agriculture sector provides employment to more people even today. The secondary and tertiary sectors are not able to generate much employment due to the lack of sustained growth. Hence, the population pressure on agriculture and allied sectors is high, resulting in low employment and poor unemployment.

3. Providing raw materials to industries

Agriculture provides raw materials required for industries. Sugar, jute, textile industry, cigarette industry, flour mills, orchards and food manufacturing industries depend on agriculture. Small scale industries and cottage industries depend on the agriculture sector for raw materials required for them.

4. Contribution to international trade

Agriculture has an important role to play in India's foreign trade. It has been exporting agricultural products of India since ancient times. Spices, tea, coffee, sugar, coke, tobacco, cotton textiles, textiles, raw wool, goods like mineral oils etc. are being exported to foreign countries. India provides a large amount of foreign exchange through agricultural exports.

5. Expansion of markets for industrial goods

People use their income for food while the surplus income is spent on purchasing various industrial products such as clothing, furniture, sewing machines, gas stoves, TVs, fridges, etc. thereby creating markets for industrial goods.

6. Supply of food and fodder

The basic needs of human beings are food, clothing, shelter, etc. Food is the most important of all. It is available from the agriculture sector. If we do not take food, it becomes impossible for us to live. It also provides fodder for animals. That is why agriculture is considered as subsistence sector.

7. Economic planning and role of agriculture sector in economic development

The agriculture sector supports of banking system in India. Internal trade is mainly due to agricultural products. The 10th Five Year Plan has clearly said about the role played by the agriculture sector in the promotion of economic interests that “agriculture is a source of rapid economic development in the country”.

21.2 Low productivity in agriculture

During the period from 1950-51 to 2012-13, the yield of many crops has increased slowly and gradually. The actual productivity levels in the agricultural sector are much lower compared to other countries or compared to the potential yield. Wheat productivity in India is 48% of that in the U.K., and 64% of that in China. Rice productivity in India is 53% of China’s and 43% of America’s production. As a result of this, India’s productivity is very low.

Reasons for low productivity in agriculture

There are several reasons for low productivity in the agriculture sector in India.

They are 1. Common causes 2. Organizational causes 3. Technical causes.

1.Common causes

i) Social environment: The social environment in the rural area is an impediment to the development of agriculture. Indian farmers are illiterates. They follow superstitions and old traditions. They do not quickly observe and follow new agricultural practices.

ii) Population pressure on land: Heavy pressure of population is the main cause of low productivity of Indian agriculture. The division and decomposition of landholdings can be attributed to some extent by the increasing pressure of the population on the ground. It is small profitable but the productivity of the land holdings is low.

iii) Degradation of soil fertility: Out of 329 million hectares of land in the country, half of the soil fertility was declined, thereby productivity was reduced in agriculture.

2. Organizational reasons

i) Land tenure system: The system of exploiting the capacity and willingness of the peasants to increase production and productivity has been reduced by the system of exploitation. The tenancy law, the protection of tenancy, and the rights to the land to the tenants have not brought about any improvement in the conditions of the tenants, and in such a situation productivity cannot be increased.

ii) Size of land holdings: The average size of land holdings in India is very small. In 2010-11, 85% of the land holdings were less than 2 acres. Scientific method of cultivation in terms of improved tools, seeds, etc. is not possible in these holdings. Agricultural yield is also low due to non-profitable land holdings.

iii) Lack of capital: This is another problem in agriculture sector. The lack of adequate credit facilities for the peasants also causes low productivity. The tenants do not have any land to borrow and mortgage and therefore the tenant cannot avail credit.

3. Technical reasons

i) Traditional agriculture tools: Farmers in India are using traditional methods and tools in the cultivation and no awareness in using high yielding varieties of seeds. The availability of modern produce is not only limited but also the cost of them is high. Farmers do not have the power to buy them and hence the productivity is low.

ii) Scarcity of irrigation facilities: The most important of the production is irrigation facility. In 2010-11, the total cropped area in India was 199 million hectares and only 89 million hectares of land was irrigated. That is, 45% of the area under crops has irrigation facility. Therefore, productivity is low in all areas that are completely dependent on rainfall or irrigation facility.

iii) Environmental problems: Floods, depletion of forests, depletion of groundwater, drought, global warming, use of fertilizers beyond dose, land, water and air pollution are also contributing to low productivity in agriculture.

21.2.1 Measures to increase agricultural productivity in India

The problem of low productivity has to be tackled institutionally, technically, socially and economically.

i) Institutional measures: Implementation of land reforms, providing limited facilities, agricultural infrastructure, marketing, storage warehouses, communications, etc. should be undertaken.

ii) Better tools: Providing facilities such as seeds, fertilizers, pest control medicines, irrigation, continuous supply of electrical energy, etc., will contribute to productivity.

iii) Improving returns for farmers: Increasing support prices, providing necessary subsidies, providing insurance facilities for crops, reducing population pressure on land by increasing non-farm economic activities. Measures such as introducing ownership concepts in agriculture are also needed to increase yields.

iv) Efficient management: Comprehensive and efficient management of land and water resources is required to stop the degradation of soil fertility and minimize the damage to the land. Farmers should be provided required education to use their resources efficiently. Better agricultural research is required for soil testing, soil conservation, and removal of agricultural waste. Region-wise agro-climatic plans should be in an appropriate manner.

21.3 Land Reforms in India

At the time of India's independence, the land was concentrated in the hands of a few people. The landlords were not interested in increasing the productivity of the land. Agricultural productivity was lower than the capacity to grow the products and did not even allow for social justice. "Land reforms" are the process by which the government directly intervenes in the agricultural sector and brings about changes in the agricultural structure. According to the UNO definition, "Land reform is a land redistribution program with the intention of protecting the interests of small, marginal farmers and agricultural labourers.

Objectives of Land Reforms: The Planning Commission in 1951outlined the targets of land reforms as follows.

1. Protecting tenants from the exploitation of landlords.
3. To remove all kinds of obstacles hinder the development of agriculture.
4. Providing land rights to the tiller.
5. To increase agricultural productivity by undertaking land reclamation programmes.
6. The rational use of limited land resources.
7. To establish direct links between the government and the farmers who actually cultivate the land.
8. To rebuild the rural economy by removing all forms of exploitation and social injustices in the agricultural sector.

21.3.1 Government measures for the implementation of land reforms

The Government of India has taken several steps after independence for the establishment of a new society and the growth of agricultural produce. The major components of land reforms are 1. Removal of intermediaries 2. Tenancy reforms 3. Ceiling on land holdings.

1. Removal of intermediaries: During the British period, there was a large amount of land holdings under the control of intermediaries such as zamindars, Jagirdars, Inamdars, etc., who used to collect rent from the cultivators. After independence, the intermediaries were removed by law and the land was handed over to the cultivators. Thus, the cultivators were protected from exploitation. Inamdar system was also abolished. The removal of middlemen helped in transferring the land in their possession to the cultivators.

2. Tenancy Reforms: The land is taken on rent from the landowner for a specified period of time on the condition that the tenant pays the rent. The Government has taken the following steps to protect the tenants from the landlords.

a) Regulating the quantity of rent: In order to reduce the financial burden on the tenants, the government has regulated the quantity of tenancy. In the first five-year plan, the maximum limit of rent was only 1/4th or 1/5th of the total production. The "Tenant Protection Act" in force in the State of Hyderabad abolished the possibility of eviction of tenants and gave them the rights to purchase land from the owner.

b) Providing security to tenants: Various state governments have provided protection by law without frequent termination of tenants.

i) The landlords cannot remove the tenants of their own.

ii) Landlords can take land from the tenant only for the purpose of self-cultivation.

iii) The landlord has to keep a portion of the land in the possession of the tenant at the time of taking the land for his own agriculture.

c) Ownership rights: Some state governments have enacted laws to grant rights to the tenants. This measure is commendable but the results achieved are not very satisfactory.

3. Maximum limit on land holdings

The "maximum limit of land" is the process by which a family decides according to the law how much land may be owned or owned by a family in its ownership or possession. The government acquires land beyond the limit and distributes it to landless farming families and marginal farmers. Since the 1960s, land ceiling laws have been implemented in various states. The government failed in control of the transfer of land in the name of relatives (benami) and others.

4. Consolidation of holdings: The fragmentation of small holdings in India is the most common. These unprofitable holdings did not favour for better agricultural practices. In order to solve the problem of fragmentation of small holdings, the governments of Punjab, Haryana and Maharashtra gave some relief to the consolidation of holdings. In many states, the mobilization was slow because the peasants did not cooperate with the programme.

5. Co-operative agriculture: The farmers in an area unite their small holdings to form a co-operative farm. The savings of large-scale field management are available with the support of the government. The role of the big farmers is largely unsuccessful due to the lack of an ineffective administrative machinery and lack of balanced manner of distribution of production, because "the work of all is not the work of anyone".

Land reform programmes in India have been launched very promisingly. However, the progress made due to the prevailing desperation has not been satisfactory. The following are the main reasons for failures in implementation.

1. Lack of political will.
2. Interference of the courts
3. Lack of accurate, revised land records.
4. Lack of administrative machinery and apathy in the implementation of land reforms.
5. Alienation of land distributed to the marginalised sections.
6. Landlords protecting their lands in benami names due to opposition from landlords and delay in implementation of laws.
7. In the implementation of land reforms, there is a lack of financial assistance in the distribution of lands.
8. Lack of pressure from lower-level (grassroots) sections.

Thus, due to the above reasons, land reforms have not been successful as expected in India.

21.4 Green Revolution in India

In the mid-1960s, the global agriculture sector had made a great impression. High yields were made possible by the worldwide use of high-yielding varieties of rice and wheat crops developed by Prof. Norman Borlaug of Mexico and his followers. Norman Borlaug was described as the father of the world Green Revolution. From the kharif season of 1966, the green revolution was implemented for the first time in our country. The process of achieving higher yields in food grains by using chemical fertilizers, pesticides, High Yielding Varieties (HYVs) and providing water irrigation facilities is known as the "Green Revolution". The term green revolution was first used by William S. Gand. M.S. Swaminathan is referred as the father of India's Green Revolution.

Impact of Green Revolution on Indian Economy: The Green Revolution has significantly affected India's agriculture sector. The size of land under cultivation of food grains has increased. The impact of green revolution on our country's agriculture sector can be stated as follows.

1. Increase in food grain products: Significant growth has been achieved in rice, wheat, maize and sorghum products by adopting HYV technology. Rice production reached 106.29 million tons in 2013-14from 35million tons in 1960-61. Wheat production also reached to 95.85 million tons in 2013-14 from11.1 milliontons in 1960-61.

2. Employment: The Green Revolution has expanded employment opportunities by promoting multiple crops in the agriculture sector. Employment opportunities have increased due to food processing, HYV seeds, chemical packages.

3. Increase in income: The impact of the Green Revolution has increased the income of farmers significantly in the states of Punjab, Haryana, Tamil Nadu, Gujarat and Himachal Pradesh. The expansion of agro-allied and agro-based industries has increased employment opportunities and as well as the income of the people.

4. Increase in exports: Agriculture and its allied products were exported to the tune of Rs 284 crore in 1960-61. By 2013-14, the value of these exports had reached Rs 2,57,590 crore, thereby generating foreign exchange. The changes in the Export and Import Policy (EXIM POLICY) in accordance with the WTO regulations have contributed to a significant increase in the exports of our country's agricultural sector products.

5. Growth in commercial crops: Along with the production of food crops, the impact of the Green Revolution increased the yield of crops like sugarcane and cotton, thereby changing the pattern of crops.

21.4.1 Impact of Green Revolution on the Economy

1. Income inequalities have increased.
2. Regional differences have increased.
3. The Green Revolution was confined to food crops. There has been no change in the production of oilseeds.
4. It was confined to a few areas.
5. The use of modern methods increased and workers lost their jobs.
6. The increase in the use of chemical and pesticides has not only affected human health but also the environment.
7. Small and marginal farmers have suffered severely due to the Green Revolution.
8. Agriculture has caught up with corporate companies.

21.5 Agricultural credit and Rural indebtedness

Farmers take loans for agricultural purposes, fertilizers, pesticides, labourers, land development works, seeds, fodder and purchase of cattle. Agricultural credit is mainly of three types.

Short term loans: These loans are made to buy seeds, cattle and fodder and their tenure is less than 15 months.

Mid term loans: Loans for levelling agricultural land, purchase of cattle, purchase of agricultural implements. Their tenure is up to 5 years.

Long term loans: Additional purchase of agricultural land, purchase of expensive machinery, loans made for repayment of old dues. The tenure is from 5 years to 20 years.

Sources of Agricultural Credit: The agricultural credit sources available to farmers in India can be divided into two types. 1. Institutional credit Sources 2. Non-institutional credit Sources.

1. Institutional credit Sources

a. Government: In the event of droughts and floods, the government gives loans at a nominal rate of interest. These are called “takkavi” loans.

b. **Co-operative Credit Societies**: This system was established in 1904 in our country to provide essential loans to farmers in a timely manner at a low rate of interest. Primary Agricultural Credit Societies at the village level, District Central Co-operative Banks (DCEB) at the district level and State Co-operative Banks (SCB) at the state level were established. They provide the short-term, medium-term and long-term loans.

c. Commercial banks: These are at the peak of providing loans to farmers. Government and private banks together provided 71.2% of institutional loans by 2013.

d. Regional Rural Banks: As per the recommendations of Sri M.Narasimha Committee, 05 Regional Rural Banks were established on October 2, 1975, which provided 10.5% of the total loans by the year 2012-13.

e. National Bank for Agriculture and Rural Development (NABARD): It was established in July, 1982 as a special status peak bank to provide loans to state governments, institutions and Panchayati Raj Institutions for development of rural infrastructure facilities.

2. Non-institutional Credit

Farmers are quickly and relying on nearby sources of credit for loans without guarantee documents. 1. Moneylenders 2. Businessmen and commission agents 3. Landlords 4. Relatives and friends play an important role. The rate of interest on these loans is high. The peasants suffer due to frauds, exploitation in this credit system.

Causes of Rural Indebtedness: The following factors are responsible for the increase in credit in rural areas. They are

1. The cost of cultivation has increased greatly.
2. The support prices for the crops are inadequate.
3. Inheriting debts from parents.
4. Spending on unproductive works.
5. The quest to take loans and do land development work.
6. Poverty, low levels of savings, crop loss.

Steps to reduce rural indebtedness: It can be prevented to some extent by relying heavily on unorganized loans, increasing support prices for crops, expanding institutional credit, curbing the menace of moneylenders, improving employment opportunities in rural areas, and promoting cottage and small-scale industry.

21.6 Agriculture Marketing in India

Agricultural marketing is a process that involves the assembling, storage, processing, transportation, packaging, grading and distribution of different agricultural commodities across the country.

Defects ofagricultureMarketing in India: Due to lack of warehouse facilities, 10% to 20% of agricultural production is consumed by produced rodents and insects. Due to lack of adequate transport facilities, farmers are not getting remunerative price as they sell their produce to local markets, commission agents and moneylenders. Farmers are getting very low income due to the middlemen and not getting the supporting price for the crops. The farmers are being cheated by the lack of proper measurements and weights. The weighing charges, charges for unloading of goods, charges for refining the produce, deductions in the amount due to the farmers, etc., are being cheated by deducting the amount due to the farmers. The reform, they are not able to sell their produce at Minimu Support Prices as there is no price information available to all the farmers in the market.

2.1.6.1 Remedial measures to prevent defects in agriculture marketing in India

Regulated Markets: Regulated markets have been established to benefit the farmers by removing the unhealthy conditions in agricultural marketing. The functions of these are ensuring remunerative prices for farmers' produce, reducing the difference in prices of goods from producer to consumer, to curb fraudulent activities of businessmen and middlemen.

Classification and Standardization: The Government has taken several steps for the grading and standardization of agricultural produce. It has established several grading stations as per the Agricultural Produce Grading Marketing Act, 1937. AGMARK is being printed on goods graded by the Agricultural Marketing Department to further expand the market for goods.

Warehousing facilities: Warehouse facilities have been expanded in villages and towns so that farmers can store their produce and get a supporting price. As part of this, the Central Warehousing Corporation was established in 1957. The Food Corporation of India (FCI) at the national level was established in the year 1965. Warehouse corporations were also established in various states.

Market Information: The government has taken several steps to pass on the information on the prices of agricultural commodities in various markets to the farmers. The information related to these prices is passed on to the farmers every day through Akasha Vani campaigns. Akasha Vani and Doordarshan are conducting weekly reviews on the market prices. The Central Government launched kisan channel on 26.05.2015.

Support prices: The government announces "minimum support price" for various commodities so that farmers can get remunerative prices in agricultural marketing. These prices are announced by the government as per the recommendations of the Costs and Prices Commission of Agricultural Commodities.

Other actions: Linking with banks and seed companies, promoting Rythu Bazaars, to take steps in such a way that the weights and measures are used in the markets regulated, to increase the facilities of warehousing in rural and urban areas.

21.7. Agriculture price policy in India

Prices are determined by the work of the forces of demand on the one hand and the supply forces on the other. Even before independence, agricultural pricing policies and allied policies were formulated in India and the distribution and procurement of major food grains was initiated and statutory maximum prices were also fixed. In the mid-1960s, the agrarian pricing policy was introduced in India in view of the scarcity of food due to the scarcity of prices due to the drought and the agrarian pricing policy was formulated in view of three factors.

i. Providing food grains to the people through public distribution system.

ii. To stimulate the implementation of new technologies.

iii. Giving acceptable prices for agricultural produce.

Keeping the above factors in mind, the Agricultural Prices Commission was established in the year 1965 and the Association has been known as the "Agricultural Costs and Prices Committee" since March 1985. The government has set up two institutions to implement the pricing policies.

1. Agricultural Price Association (1965), 2. Food Corporation of India (1965) (FCI).

Minimum Support Prices: The government decides the minimum support prices of major agricultural products such as wheat, rice and maize on the basis of agricultural expenses and suggestions made by the Price Committee every year, thereby ensuring that the farmers are assured by the government.

Procurement price: The government fixes great prices for certain agricultural commodities. Under the public distribution system, various agricultural products such as grains, sugar, rice, etc., have been taken up by the governments at reasonable prices. The public distribution system is another important objective of the pricing system.

Buffer stocks: Buffer stock is a reserve that is used to offset price fluctuations and unanticipated emergencies. Some of the food grains stored by the Food Corporation of India by the Government of India are called "buffer stocks".

Suggestions for improving the agricultural price policy:

1. The agricultural pricing policy should be beneficial to the farmers.
2. By controlling the activities of middlemen and middlemen, improvement in agricultural marketing practices can be achieved.
3. There should be high efficiency and transparency in the public distribution system.
4. Higher agencies such as cotton corporation, jute corporation, etc. should be set up.
5. The pricing policy should be extended to all agricultural products.

Food Security: Many people died of starvation due to the famines caused during British period. After independence, the Government of India established the FCI in 1965 with the objective of providing food grains to the poor through ration shops. This would provide food security to the people. Overcome droughts with buffer stocks and prevented starvation deaths.

21.8. Model Examination Questions

III. Answer the following questions in about 4-5 lines each.

1. Green Revolution
2. Share of agriculture in total exports
3. Minimum Support Price
4. Food Security

III. Answer the following questions in about 8-10 lines each.

1. Write about agriculture credit sources in India.
2. Write about agriculture price policy.
3. Explain the causes of low productivity in agriculture.

III. Answer the following questions in about 16-20 lines each.

1. Explain the importance of agriculture sector in Indian economy.
2. What are the causes of low productivity in agriculture and measures to increase productivity?
3. Explain the green revolution and its impact on Indian economy.
4. What are the defects in agriculture marketing and remedial measures to reduce the defects?

21.9. Glossary

Land Reforms: Land reforms are the process by which the government directly intervenes in the agricultural sectors and brings about changes in the agricultural structure.

Green Revolution: The process of achieving higher yields in food grains by using chemical fertilizers, pesticides, high yielding varieties and providing water conservation facilities is known as the "Green Revolution".

Regulated Markets: Regulated markets have been established to benefit the farmers by removing the unhealthy conditions in agricultural marketing.

Minimum Support Price: It is the minimum price set by the government for certain agricultural products, at which the products would directly be bought from the farmers if the open market prices are less than the cost incurred. The farmers are paid a pre-announced price for their crops.

Buffer Stocks: Buffer stocks refer to stocks, sales and purchases for purpose of eliminating price fluctuations. Some of the food grains stored by the Food Corporation of India are called "buffer stocks".

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CHAPTER 22

INDUSTRIAL SECTOR

22.0 Introduction

India's industrial sector played a crucial role in the country's economy and contributed significantly to its overall growth and development. The industrial sector in India is diverse and encompasses various industries, including manufacturing, mining, construction, energy, and infrastructure. In this chapter, we will discuss in detail Indian industrial sector characteristics, growth, and development.

22.1 Industrial Sector

Industrial sector is also known as secondary sector. The Industrials sector comprises firms and companies operating in manufacturing capital goods and machinery that are used for producing other goods. Industry refers to economic activities concerned with the production of goods. India is an agriculture oriented country. Therefore, agro based industries play a vital role in our economy.

22.2 Structure of Industries or Types of Industries

1) Large Industries: The investment in between Rs.10 crore to Rs.100 crore in these industries.

2) Mega Industries: The investment limit is more than Rs.100 crore.

3) Cottage Industries: These are unorganized home-based industries which fall under the category of small scale industry.

4) Ancillary Industries: These industries manufacture inputs used by large industries. Their investment does not exceed Rs.1 crore.

5) Tiny Industries: Investment limit in plant and machinery is Rs.25 lakhs.

6) Household industries: These industries run by artisans, skilled craftsmen and technicians require space less than 3000 sq. ft, power less than 1 KW and workers not more than 5. These Industries do not cause any pollution.

The government of India in June, 2020 revised the definitions of micro, small and medium enterprises (MSME) on the basis of investment and turnover.

1) Micro Enterprises: The investment in these industries does not exceed Rs.1 crore and turnover does not exceed Rs.5 crore.
2) Small Enterprises: Investment in plant and machinery or equipment of small enterprises does not exceed Rs.10 crore and turnover does not exceed Rs.50 crore.
3) Medium Enterprises: Investment in plant and machinery or equipment does not exceed Rs.50 crore and turnover does not exceed Rs.250 crore.

Industries may be classified on the basis of source of raw materials used:

- Agro based: cotton, woolen, jute, silk textile, rubber and sugar, tea, coffee, edible oil etc.
- Mineral based: iron and steel, cement, aluminum, machine tools, petrochemicals.

According to their main role industries are classified as follows:

- Basic or key industries are those which supply their products as raw materials to manufacture other goods e.g. iron and steel, copper, aluminum smelting, etc.
- Consumer industries that produce goods for direct use by consumers – sugar, toothpaste, paper, cosmetics etc.
- Intermediate Goods: Intermediate goods are products that are used as inputs in the production process of other goods or services. They are not the final consumer products but rather go through further processing e.g. Chemicals, petroleum products, plastic etc.

22.3 Industrial Growth in India

The first modern industries in India were cotton, jute, coal mines and railways. Since gaining independence from British colonial rule in 1947, India has experienced significant industrial growth. While India's economy was primarily agrarian at the time of independence, the government adopted policies aimed at promoting industrialization and economic development**.** This involved defence, transport and communication, power, mining and other projects which only government had the power to do, and which was also necessary for private industry to flourish. In India's mixed economy policy, some sectors were reserved for government, while others were open to the private sector. But within that, the government tried to ensure, through its licensing policy, that industries were spread over different regions.

India had been experiencing significant industrial growth over the years, despite some economic challenges and fluctuations. Industrial growth is a critical component of India's economic development and has contributed to the country's transformation into one of the world's fastest-growing major economies.

Since the 1990s, however, the government has followed a policy of liberalisation. Private companies, especially foreign firms, are encouraged to invest in sectors earlier reserved for the government, including telecom, civil aviation, power etc. Licenses are no longer required to open industries.

India's manufacturing sector is one of the most prominent in the world. It includes a wide range of industries such as textiles, pharmaceuticals, automotive, electronics, information technology, steel, chemicals, and machinery. The government has implemented several reforms to ease the process of doing business and increase foreign investment in various sectors.

The Indian government has been investing heavily in infrastructure development, including roads, railways, ports, airports, and power generation. This has facilitated industrial growth by improving connectivity and logistics across the country. India has established SEZs to promote industrial growth by providing tax incentives, better infrastructure, and simplified regulations for businesses operating within these zones.These resolutions frequently function as a strategic roadmap, guiding industrial growth, investments, and regulatory actions.

Make in India Initiative is launched in 2014, this campaign aimed to transform India into a global manufacturing hub by encouraging both domestic and foreign companies to invest in manufacturing operations within the country.Start-up India Initiative 2016, initiative focused on promoting entrepreneurship and supporting start-ups with various incentives, simplifying regulations, and providing access to funding and mentorship.

22.4 Challenges in Industrial Sector

- Infrastructure Deficit: India's industrial growth is hindered by inadequate infrastructure.
- Skilled Labor Shortage: Despite having a large population, there is a significant skill gap in India's labor force. Many industries struggling to find skilled workers.
- Access to Finance: Small and medium-sized enterprises (SMEs) in the industrial sector often face difficulties in accessing adequate and affordable financing options.
- Inefficient Taxation System: India's tax structure can be complex, and frequent changes in tax policies can create uncertainty for businesses.
- Competition from Global Markets: With increasing globalization, Indian industries face competition not only from domestic players but also from international markets.
- Digital Transformation: Many Indian industries still lag in embracing digital technologies fully.

22.5 Industrial policy resolutions in India:

Industry policy resolutions are official documents or declarations issued by governments or relevant authorities that outline the framework and objectives for the development of specific industries within a country or region.

22.5.1 Industrial Policy Resolution 1948

This was India's first comprehensive industrial policy after independence. It emphasized the importance of the public sector in industrial development and laid the foundation for the planned development of the economy.

Key features of the Industrial Policy of 1948:

- The policy laid the foundation for a mixed economy, which combined elements of both public and private sectors.
- The policy emphasized the development of the public sector to promote industrialization and economic self-reliance. Key industries, such as iron and steel, heavy machinery, power generation, and transportation, were reserved for state ownership.

- The government introduced a licensing system to regulate private industries.
- The policy recognized the importance of cottage and small-scale industries for rural employment and economic development.
- This policy included provisions for labor welfare and protection of worker rights.

22.5.2 Industrial Policy Resolution 1956

This resolution aimed to promote socialism and reduce economic disparities by focusing on the development of public sector enterprises. The government identified key industries that would be exclusively reserved for the public sector.

The Resolution put emphasis on:

- Development of heavy and machine-building industries;
- Expansion of the public sector;
- Establishment of a large and growing co-operative sector; and
- Encouragement of the diffusion of ownership and management in the private sector.

22.5.3 Industrial Policy Resolution 1977

This policy marked a shift towards a more mixed economy approach, reducing the number of industries reserved for the public sector and encouraging private sector participation.

22.5.4 Industrial Policy Resolution 1980

The 1980 resolution focused on the development of small-scale industries, especially in rural and backward areas, to create more employment opportunities and reduce regional imbalances.

22.5.5 Industrial Policy Statement 1991

This policy is one of the most significant milestones in India's economic history. The LPG reforms in India refer to the economic liberalization, globalization, and privatization measures implemented in 1991. These reforms were undertaken by the Indian government led by then-Prime Minister P.V. NarasimhaRao and Finance Minister Dr. Manmohan Singh, to address a severe balance of payments crisis and to revitalize the Indian economy, which was facing stagnation and high fiscal deficits. It introduced a series of reforms to liberalize the economy, remove trade barriers, attract foreign investment, and open up various sectors to private players.

Key features of the New Industrial Policy of 1991:

- Liberalization: The policy aimed to reduce government control and intervention in the industrial sector to promote a more market-oriented economy.
- De-licensing: The industrial licensing system was significantly relaxed to remove the need for industrial licenses for most industries, except for a few sectors related to security and strategic concerns.
- Abolition of the MRTP Act: The Monopolies and Restrictive Trade Practices (MRTP) Act, which had imposed restrictions on large businesses, was repealed.
- Encouragement of Foreign Technology: The policy aimed to attract advanced technology and promote technological upgradation in domestic industries by allowing foreign technology agreements.
- Focus on Small Scale Industries: The policy recognized the significance of small-scale industries in generating employment and balanced regional development.
- FDI: The policy encouraged foreign direct investment (FDI) and allowed multinational corporations to invest in various sectors, subject to specific regulations and restrictions in some areas.

The New Industrial Policy of 1991 or "New Economic Policy" or "Liberalization, Privatization, and Globalization" (LPG) reforms, had a profound impact on India's economy and led to significant changes in the industrial landscape.

Some of the positive impacts of New Economic Policy:

- It set the stage for accelerated economic growth.
- Increased foreign investment.
- Emergence of new industries and the expansion of existing ones, creating job opportunities and reducing unemployment rates.
- Export-oriented industries witnessed tremendous growth
- The increased economic growth and job opportunities helped in reducing poverty rates.
- The standard of living is increased

Some of the negative impacts:

- Unemployment and Job Losses in sectors that couldn't adapt to the changing economic landscape.
- Increased Income Inequality
- Regional Disparities widened.
- Increased Environmental degradation

22.6 Small Scale Industry

Characteristics of Small Scale Industries in India

- Ownership: Generally, such businesses are sole proprietorships or, in some cases, partnerships.
- Management: Generally, both the management and the control is with the owner/ owners. Hence the owner is actively involved in the day-to-day activities of the business.
- Labor Intensive: Dependence on technology is limited. Hence they tend to use more labour and manpower for their production activities.
- Flexibility and adaptability: Compared to large-scale industries, small scale industries are generally more flexible and can quickly adapt to changing market conditions and customer demands.
- Localized operations: These industries are typically localized and operate in a specific region or community.
- Low capital investment: They are typically having lower capital requirements compared to large industries.

22.6.1 Role and importance of Small Scale Industries in India

India is home to a vibrant and diverse small-scale industries sector. These industries play a crucial role in the country's economy by contributing to employment generation, regional development, and export earnings. Here are some key roles of small-scale industries in India:

- **Employment Generation**: Small-scale industries are labor-intensive and provide employment opportunities, especially in rural and semi-urban areas.
- **Regional Development**: Small-scale industries are often located in rural and backward regions, promoting balanced regional development.
- **Contribution to GDP**: Small-scale industries make a substantial contribution to India's gross domestic product (GDP).
- **Innovation and Entrepreneurship**: Small-scale industries foster innovation and entrepreneurial spirit.
- **Poverty Alleviation**: Small-scale industries play a vital role in poverty alleviation by creating income-generating activities for people at the grassroots level.
- **Export Promotion**: Certain small-scale industries in India, especially those engaged in handicrafts, textiles, and other traditional crafts, have export potential.
- **Utilization of Local Resources**: Small-scale industries tend to use locally available resources and raw materials, which can contribute to the sustainable development.
- **Support to large industries**: Small-scale industries often act as ancillary units, supplying raw materials, components, and services to larger industries.

22.6.2 Problems Faced by Small Scale Industries

- **Lack of access to finance:** Small-scale industries often struggle to secure adequate funding and credit facilities from banks and financial institutions.
- **Infrastructural obstructions:** Inadequate infrastructure, such as poor transportation, unreliable power supply, and limited access to technology, can hinder the growth and productivity of small-scale industries.
- **Market competition:** Competing with larger companies can make it difficult for small-scale industries to gain market share.
- **Raw Material:** These units have to face numerous problems like availability of inadequate quantity, poor quality and even supply of raw material is not on regular basis.
- **Overall management:** Inadequate management skills hamper business expansion and often cause non-competitiveness of small scale industries.

22.6.3 Measures to solve the Problems of small-scale industries

- **Financial assistance:** Government has made a provision of many financial institutions to give loan to the small scale and cottage industries at the reasonable rate of interest.
- **Access to Raw Materials:** Ensure a steady supply of raw materials at reasonable prices.
- **Skill Development and Training:** Provide skill development programs and vocational training to improve the technical expertise of the workforce.
- **Equal allocation of raw materials:** Small, basic industrial units should have a sufficient degree of priority in the method of allocation of required, but rare, raw materials, imported components and equipment.
- **Infrastructure Facilities:** The government should develop Industrial estates to encourage the growth of small-scale industries with proper Infrastructure facilities, i.e., transport, power, water supply, finance, etc.
- **Export Promotion:** Encourage small-scale industries to participate in export activities by providing export incentives, training on international trade, and facilitating access to global markets.

By implementing these measures, the Indian government and various stakeholders can help alleviate the challenges faced by small-scale industries, promoting their growth and contributing to the overall economic development of the country.

22.7 Industrial finance

Industrial finance in India refers to the financial services and mechanisms provided to support the growth and development of the industrial sector in the country. It plays a crucial role in promoting investments, fostering entrepreneurship, and boosting industrial production.

Here are some key aspects of industrial finance in India:

- **Bank Financing:** Banks are the primary source of industrial finance in India. They provide loans, working capital, and term finance to industries. Industrial borrowers can avail loans from various public sector banks, private banks, and foreign banks operating in India.

- **Informal loans:** One source, quantitatively of big importance, is the saving of the unit itself. It may be the household, the business or the government.
- **Stock Markets:** The equity capital market also plays a crucial role in financing industries in India.
- **Micro, Small, and Medium Enterprises (MSME) Financing:** The MSME sector is a significant contributor to India's industrial landscape. The government and financial institutions provide special financing schemes and credit facilities to support MSME growth and development.
- **Foreign Direct Investment (FDI):** India actively encourages foreign direct investment to boost its industrial sector. Foreign companies can invest in India through automatic or government route, subject to sector-specific regulations.
- **Public Deposits:** Under this system, people keep their money as deposit with these companies or managing authorities for a period of six months, a year, two years, three years or so.

22.7.1 Important industrial finance institutions in India

- Industrial Development Bank of India (IDBI)
- Industrial Finance Corporation of India (IFCI)
- Small Industries Development Bank of India (SIDBI)
- Export-Import Bank of India (EXIM Bank)
- National Bank for Agriculture and Rural Development (NABARD)

22.8 Summary

The secondary sector in India refers to the industrial and manufacturing activities of the country's economy. It plays a crucial role in the overall economic development and contributes significantly to GDP, employment generation, and export earnings.The secondary sector faces challenges like outdated technology, infrastructure bottlenecks, bureaucratic hurdles, and labor-related issues.

22.9 Model Examination Questions

I. Answer the following questions in about 4-5 sentences.

1) Classify industries on the basis of raw material used
2) Industrial Policy Resolution 1948:
3) Define LPG model
4) Explain MRTP Act.
5) Foreign Direct Investment (FDI)

II. Answer the following questions in about 8-10 sentences.

1) What is meant by Industrial Finance?
2) Explain MSME.
3) What are the major challenges currently faced by the industrial sector?
4) Describe the impact of New Economic Policy 1991on Indian economy.
5) Explain the characteristics of Small Scale Industries in India
6) Suggest measures to solve problems of small-scale industries

III. Answer the following questions in about 16-20 sentences.

1) Explain the structure of Indian Industries
2) Critically examine the New Industrial Policy Resolution, 1991.
3) Describe the role of small scale industries in Indian economy.
4) Explain Industrial finance in India.

22.10 Glossary

- Industrial Sector: Industries are part of the secondary activity.
- MSME: Micro, small and medium enterprises
- Liberalization: Liberalization is a process whereby a state lifts restrictions on some private individual activities

- Privatization: The transfer of ownership, property or business from the government to the private sector is termed privatization
- Globalization: Globalization focused on integrating the Indian economy with the global economy.
- MRTP Act: The Monopolies and Restrictive Trade Practices (MRTP) Act, which had imposed restrictions on large businesses, was repealed

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CHAPTER 23

TERTIARY SECTOR (SERVICE SECTOR)

23.0 Objectives

23.1 Introduction

23.2 Role of the tertiary sector in the Indian economy

23.3 Priority of tertiary sector in our country

23.4 Development of infrastructure sector in India

23.5 Transportation sector in India

23.6 Energy sector

23.7 Information sector

23.8 Information Technology

23.9 Science and Technology

23.10 Banking Sector

23.11 Tourism

23.12 Summary

23.13 Model Examination Questions

23.14 Glossary

23.15 References

23.0 Objectives

- Know the importance of service sector in economic development.
- Analyse the share of service sector in Gross Domestic Product.
- Know the various means of transport in India.
- Know the role of information technology in economic development.
- Assess the various sub sectors of service sector in economic development.

23.1 Introduction

The third most important sector in economies is the third sector or service sector. The sector is growing rapidly and employs a large percentage of the workforce with a maximum share of gross domestic product (GDP). The tertiary sector provides the necessary infrastructure and services for the production of primary and secondary sectors. Agriculture, allied sectors, industries, mining, transport, information and warehousing marketing, credit, banking and insurance facilities are required. All these facilities and services are provided by the tertiary sector. Hence the tertiary sector is also known as the "service sector".

The development of primary and secondary sectors depends on the development of the services sector. The service sector provides many facilities and services for the development of agriculture and industrial sectors such as: 1. Business 2. Hospitality services 3. Transport (rail, road, air, water transport) 4. Information, warehousing, real estate business 5. Banking, and Insurance services 6. Commercial services, IT services, consultancy services 7. Public administration, Police, defence and judiciary 8. Health, education and hygiene 9. The NSSO 63rd Round 2006-07 survey mentioned the use of individual, household services, financial institutions, Self Help Groups (SHGs), microfinance institutions and commercial vehicles as items in the service sector.

23.2 Role of the tertiary sector in the Indian economy

The developed tertiary sector contributes to rapid economic growth. The supply of infrastructure to meet the growing demand will accelerate the development process by increasing the rate of capital generation. If per capita production in economies increases, the share of the services sector in GDP employment will increase. The share of the services sector in the US is 53.89% by 2020-21, 72% in the UK, 71% in Germany and 72% in Japan. The share of the services sector in GDP in India is 80.1% in 2020-21. In 2020-21, the service sector in India is more than the developed countries. However, the services sector accounts for the lion's share of the gross domestic product of our country. The development of the tertiary sector in our country has contributed to the green revolution, industrialization and urbanization.

23.3 Priority of tertiary sector in India

The following economic data illustrate the importance of the services sector, which provides the necessary infrastructure for our economic development. They are: 1. The percentage of workers working in the services sector, and 2. The share of the services sector in the national income, 3. Investments in the services sector, 4. Services sector exports.

1. Percentage of workers working in the services sector: The number of workers employed in the services sector has increased from 179 lakhs in 1991 to 193 lakhs in 2020. The share of services sector workers in the total workforce has increased from 17.3% in 1950-51 to 32.3% in 2020.

2. Share of services sector in national income: The share of service sector in national income increased from 29% in 1950-51 to 61% in 2020-21. The average growth rate of the services sector increased from 4.9% in the four decades from 1950-51 to 1990-91 to 10.6% from 2004-05 to 2020-21.

3. Services Sector Investments: The Five-Year Plans gave maximum priority to the development of the services sector. Energy, transport and information sectors were allocated 55% to 65% of the total plan allocation. The services sector increased public, private and investment by 9% over the Tenth Five Year Plan.

4. Services Sector Exports: Structural changes caused by our exports in economic development. The share of agricultural products and minerals in exports has decreased and the importance of the services sector has increased. Exports of technical consultancy services, engineering design, project evaluation (observation) and science research are increasing. The sector has developed from the level of importing these services to exporting them to developed countries. The country gets foreign exchange. Third sector export earnings increased from US$40 billion in 2004-05 to US$ 497.9 billion in 2020-2021.

21.4 Development of infrastructure sector in India

The development of the primary and secondary sectors depends on the availability of infrastructure facilities. The connectivity and expansion of the infrastructure sectors will enable a maximum economic growth rate and contribute to rapid economic growth.

There are two types of infrastructure: 1. Financial infrastructure 2. Social Infrastructure.

1. Economic infrastructure includes (a) irrigation and flood prevention, (b) energy sector, coal, oil, electricity, (c) transport sector - road, rail, air, water transport, (d) communications - phones, telegrams, telecommunications, (e) financial services- banking, insurance, (f) science and technology sectors.

2. Social Infrastructure includes education, health, sanitation, etc. are the backbone of infrastructure for the economy. Infrastructure development is a continuous process involving huge investments and labour. The availability and expansion of infrastructure facilities in our country is limited to urban areas. Infrastructure facilities in rural areas are not developing. Due to this, the development of rural areas is very slow. Opportunities for employment generation in these areas are very slow and fewer.

Table: Availability of infrastructure facilities (in million tons)

Infrastructure	**1950-51**	**1999-2000**	**2020-21**
1. Coal	32	322	598
2. Electricity	5	481	886
3. Petrol and oil	0.4	32	20
4. Steel	1.0	27	78
5. Cement	3	100	235
6. Cargo of railways	73	456	1021
7. Sea shore transportation	19	272	576
8. Telephone Connections	NA	5	1036

Source: Economic Survey of India: 2021; # denotes billion tons

As per table, coal production increased from 32 million tons in 1950-51 to 598 million tons. Cement production increased from 100 million tons in 1999-2000 to 235 million tons in 2020-21. Similarly, the cargo of railways increased from 73 million tons in 1950-51 to 1021 million tons in 2020-21. With the availability of infrastructure facilities in India, the country will move towards the path of progress.

23.5 Transport sector in India

The transport sector is an infrastructural facility that facilitates the use of economic activities and distribution of production. Transport facilities move people and goods from one place to another. The transport system Agricultural fields and industries provide input and transport the products manufactured to the markets. The transport sector is the hilly areas, forests and backward regions of the country. It facilitates movement of people between regions, river banks and remote areas. The water and air transports between all the countries of the world promote migration of people, export and import of goods, trade, exchange of knowledge, good relations and cooperation.

Various means of transport

There are four types of transportation facilities, namely 1. Road transport 2. Rail transport 3. Air transport 4. water transport.

1. Road transport: It is the most commonly used mode of transport in our country. Roads connect even remote areas and hamlets. Roads are developed today with public-private partnerships. National highways and state highways are developed as golden corridors and tolls are being collected from their users. The amount collected as duty is being used for the repair of roads. National Highway Development Programme (NHDP) and Pradhan Mantri Gram Sadak Yojana (PMJSY) schemes have been introduced to develop national and state roads.

2. Rail transport: In the year 1853 during the British period, Lord Dalhousie introduced railways in India. Railways were nationalized in the country in 1950. The Indian Railways is the largest transport system in the world that connects remote areas of the country. India is made up of 19 railway divisions. The introduction of new ones in place of railway engines, coaches and wagons, the five-year plans gave priority to the regularization and modernization of the railways. Discussions were held such as the introduction of modern tools such as phone and Wi-Fi in trains. Chennai, Mumbai, Delhi, Metro trains were introduced in Bengaluru and Hyderabad.

3. Water transport: There are two types of water transport namely: 1. Inland water transport 2. Sea water transport. Sources of inland water transport: Rivers, reservoirs, canals, seas, back waters) small boats, motorboats - transport people and goods.

Sea water transport consists of small vessels, heavy vessels and heavy goods (coal, oil) transported to domestic ports and foreign ports. It is a low cost of transportation and a non-stationary mode of transport. The development of this transport system provides employment opportunities for the people of coastal areas and increases income and trade. Our country's coastline 7,156 Km. There are 12 large and 187 small ports in our country. Water transport accounts for 29% of the total transport sector.

4. Air transport: In India, in the year1950, the aviation sector was nationalized and Indian Airlines and Air India were established. Indian Airlines provides domestic flight services and Air India provides international flight services. As part of economic reforms, the private sector has been given entry into the aviation sector. Private airlines have been given entry into the aviation sector. At present, India has 103 domestic and 24 international airports. Air transport operates under the control of the Airports Authority of India (AAI).

The problems faced by the transport sector in our country are:

1. Increasing the cost of maintenance.
2. Lack of proper plans
3. Passenger traffic and population growth
4. Outdated engines, wagons, signaling
5. Lack of technology and investment
6. Lack of coordination between center and states
7. Lack of political will

23.6 Energy sector

The rate of economic growth depends on the availability of energy resources. The higher the per capita income, the lower the fuel consumption. The per capita income and per capita energy consumption of developed countries such as the United States, England, Germany and Japan are very high. China, our competitor, has more than double the per capita energy consumption of our per capita energy consumption.

Types of energy sources:

There are mainly two types of energy sources. 1. Conventional sources of energy 2. Non-conventional energy sources.

1. Conventional sources of energy: Traditional sources of energy include coal, oil, natural gas, thorium, uranium, etc., which, once consumed, cannot be reproduced again.

i) Coal- Coal and lignite are perishable minerals. India accounts for 7% of the world's coal reserves and 50% of the energy requirements are met by coal. Coal and lignite production in 2018-19 was 583 mt. If used at the same level, these minerals will be completely wiped out in the next 13 years. Lignite is available only in the mining Neyveli and Arcot areas of Tamil Nadu state.

ii) Oil and Natural Gas- The quantity of oil available in our country is 550 billion tonnes. Natural gas is 550 billion meters. If the production takes place at the same level, these minerals will be extinct in a period of 20 to 25 years.

iii) Nuclear power: The basis of nuclear electricity is uranium, thorium and ores, which account for 4% of the total electricity generation.

2. Non-conventional sources of energy: Traditional sources of energy include solar energy, sea wave energy, wind energy, biogas, etc., which can be reproduced. They do not cause pollution. These consumption is high in developed countries. Apart from these, ethanol is produced from sugarcane and Jatropha plant etc. It can be understood from the following table.

Table: Electricity production in India, in percentages of sectoral electricity consumption (1950-2019)

Year	Power Generation (Giga watts)	Domestic sector	Commerce	Industries	Agriculture	Other uses
1950	510	9	6	72	10	3
1979	84005	9	5	65	14	4
1997	315294	18	6	44	27	4
2007	525672	21	18	46	19	4
2013	85292	22	8	45	18	4
2019	87145	21	9	47	17	6

Source: Ministry of Commercial Energy, Government of India-2019

If we look at the above table, the consumption of industries and commercial sectors is increasing, while the household sector is also at the forefront of the consumption rate. From 1950 to 2019 almost consumption of all sectors has increased.

23.7 Information sector

The information sector provides individuals and regions with the information required for the development of markets. Effective communication helps in the growth of trade and economic growth rate. The information sector i) postal (post) ii) telegraph (telegraph) provides telecommunication services.

i) Postal Services: Postal services have been available in our country since 1776. At present there are 1.5 lakh post offices in our country. Each post office provides services from an average of 7000. Every village with a population of more than 500 people have a post office. Our postal department is number one in the world. Apart from the traditional services such as the sale of postcards, covers, stamps, letters and parcels, new services are also being offered. In addition to the ‘speed age’ of the 21st century, Speed post, Metro post, Rajdhani services, international parcel hubs, India Post global portal, ease of receiving quick money orders, western money transfer have been introduced.

The postal department faces problems such as shortage of employees, huge fiscal deficit, private courier competition, etc.

ii) Indian Telegraph Services: The world’s first telegraph services started in our country. Telegrams, Fax messages, etc., have been facilitated by quick delivery. With the expansion of telephone lines, telegraph services have expanded to rural areas.

iii) Telecommunications: The telecommunication sector contributes to the development of all sectors of the economy. It enhances competitiveness in the international market. Our public sector companies Bharat Sanchar Nigam Limited (BSNL) and Mahanagar Telephones Limited (MTNL) are the largest telecommunication services providers in Asia. There are issues like shortage of employees, shortage of towers, etc. In the year 1999, the aim of telecom policy was to expand telephone connections to rural areas and set up the Telephone Regulatory Authority of India (TRAI) to fix and regulate telephone tariffs (charges). Foreign Direct Investment (FDI) in the telecom sector has been increased from 74% to 100%.

With the National Telecom Policy of 2010, the aim was to regulate tariffs and provide efficient services to make telecom services accessible to all sections of the people. The goal was also to improve job opportunities by creating a friendly environment to attract additional investments in the telecom sector.

23.8 Information Technology

Information Technology (IT) is revolutionizing the innovation and knowledge-driven society of the 21st century. Information technology is revolutionizing all the countries of the world using modern devices. The concept of global village came with the development of IT. It uses IT based services in all sectors around the world. The IT sector provides software, hardware, engineering design, research, development zoom services. Information Technology Enabled Services information based service, banks, insurance companies, financial institutions, telecom sector use these services. 5 large companies providing IT services in our country, Tata Consultancy Service (TCS), Cognizant Technologies, Infosys, Wipro, HCL.

The development of the IT sector has brought our country recognition from a "sluggish country" to a "country of innovation". India is the largest country in the world in providing IT services. Government of India clouding is another emerging service in the IT sector where this technology is used by central and state governments and regional governments. This software is used for public administration, functions and services performed by the governments. After computerizing all government services, e-service, mee-seva, municipalities, online payments, tax payments, receipts, certificates are used by all. Computerization of government services. It makes possible transparency, efficiency and community ownership in the system of governance, and reduces delays and corruption in the discharge of duties.

IT is recognized as an export-oriented industry. IT Exports in services are 77%. The IT sector is providing direct employment to 4.4% of the million population and indirect employment to 12 million population in the year 2020-21. The development with our exports has made our country the top of the knowledge economies.

Social media networking (Google, Facebook, Twitter) is contributing to the development of online shopping, public sector financial services, computer curative IT sector. Common services have increased the use of internet and state-of-the-art telecom devices.

23.9 Science and Technology

India is at the forefront of the world in the development of science and technology sectors. The development of these sectors has increased our competitiveness in the international markets. All the developed countries are using our science and technology in large scales. The country is recognized as a country with plenty of research and development opportunities. The development of science and technology is essential for economic progress. These sectors have the power to take the economic growth rate from the lowest to the top. New research and innovations contribute to the development of science and technology. Scientific and technological progress will contribute to industrialization, urbanization and expansion of employment opportunities.

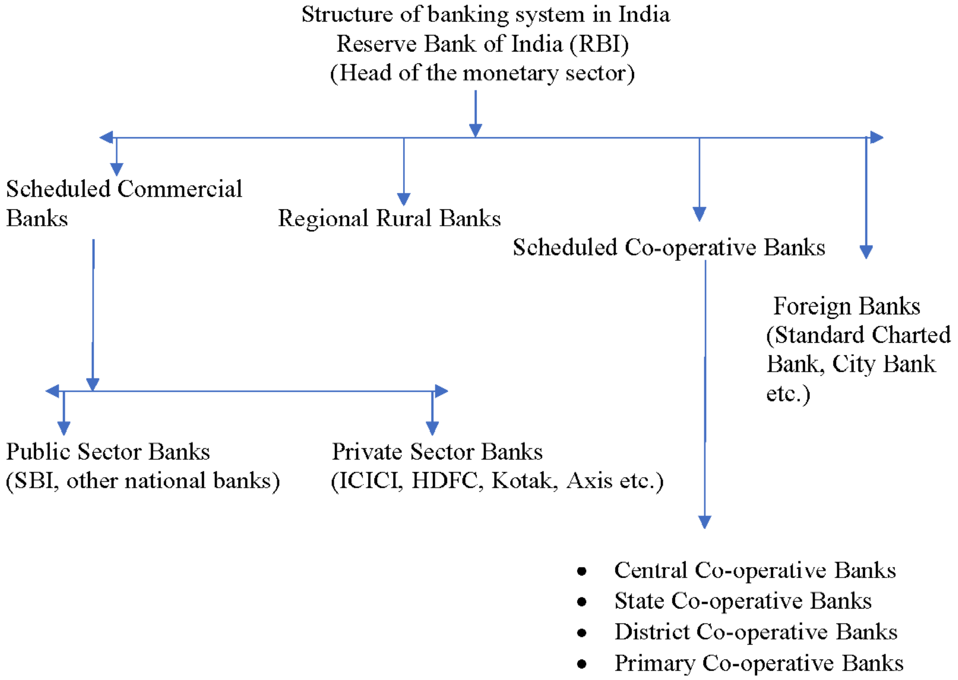
Benefits of science and technology development

1. Increases the productivity of the factors of production.
2. Efficient use of capital goods is possible.
3. The use of new machines and improved equipment will increase the efficiency of the workforce.
4. Reduces wastage and costs of production.
5. Accelerates production and distribution processes.
6. It will strengthen the connectivity between agriculture and industrial sectors.
7. Internal and external savings will increase large-scale production and increase the profits of industries.
8. Development of science and technology sectors will make possible the use of desirable resources and provide maximum production. India has been ranked at the top of the world's scientific and scientific fields. However, the fact that only 6% of our country's population is in the field of research is India's main weakness to develop. Similarly, 32% of the population in the United States is working in the research field. Considering the number of engineers per 10,000 population, there are only 22 in India. There are 456 people in the United States. However, structural changes in the field of science and technology have increased employment opportunities in the service sector and the share of national income has been increasing.

23.10 Banking Sector

The banking system is an integral part of the financial market. Integral parts of India's entrepreneurial banking system. i) Reserve Bank ii) Scheduled Commercial Banks iii) Scheduled Co-operative Banks. The head of banking system or apex bank is Reserve Bank of India or Central Bank. Scheduled Banks are scheduled banks The scheduled commercial banks are those banks which are included in the second schedule of RBI Act 1934 and which carry out the normal business of banking such as accepting deposits, giving out loans and other banking services. Commercial banks do business with the aim of making a profit. Investments will be made without disturbing the well-being of the deposits. Co-operative banks serve non-profit with the help of members. The savings of the people and institutions are collected as commercial bank deposits and the collected money is sanctioned by short-term loans. In 1969, the first time India, 14 private banks were nationalized and 6 more banks also were nationalized in the year1980 for social welfare.

Structure of banking system in India



Reserve Bank (RBI): It was established in 1935 and nationalized in 1949 and it is located at Mumbai. The Reserve Bank of India is our central bank. It is known as apex bank monetary system. The functions of the Reserve Banks are issuance of currency notes, acting as a banker, agent and advisor to the government, protection of foreign exchange funds and gold reserves, looking at the cash storage activities of banks as a banker to banks, providing cheque clearing services, credit control, control of the exchange rate etc. The central bank also carries out many other functions that promote economic development and social welfare. The Reserve Bank takes steps to control inflation.

Commercial Banks

The basic functions of commercial banks are to accept such savings from the public and institutions as deposits and sanction a large portion of the received deposits as loans. The process of sanctioning bank loans is known as 'credit creation'. There are only 12 banks in the public sector as against 27 banks in the public sector at present. State Bank of India (SBI), a public sector bank in the banking system. can be considered as the largest banking system.

Regional Rural Banks

The Regional Rural Banks were established in the year 2nd October 1975. These banks perform all the functions performed by the commercial banks. But the scope of operation of these banks is confined to the rural areas only. These banks raise savings in the rural areas and provide loans to different and marginal farmers, agricultural labourers and rural cottage industries.

Cooperative banks

The structure of co-operative banks will be at three levels as follows.

1) State Co-operative Banks (SCOB) which are regulated by RBI and respective state governments. These banks provide financial assistance to rural and low-income populations across the country. They are often the primary source of credit for agricultural and allied activities, small-scale industries, and other small businesses. This is an apex bank at the state level for the cooperative credit system.

2) Central Co-operative Banks (CCB), these are at district level in the state. The CCBs are supervised by the state cooperative department and are regulated by the Reserve Bank of India. The CCBs are providing loans, and other banking services to their members and taking deposits from the general public also like commercial banks.

3) Primary Agriculture Credit Societies (PACS), there are the third layer of the cooperative system. Generally, PACS are operated in village level and they are owned and managed by their members, who contribute both capital and labour for the benefit of the cooperative. Banking services are evolving to meet the needs of the 21st century. The new services offered by banks are: i) Merchant banking, shares, debentures for commercial development

ii) Mutual Funds iii) Retail banking for the convenience of consumers iv) Automatic Teller Mission (ATM) v) Banking facility from any branch, vi) Internet banking, vii) Instant cash transfer facility viii) Yono, Phone Pe, Google Pay, Paytm, etc.

23.11 Tourism

For the last two centuries, the tourism sector has been developing into the largest industry in the services sector. The Planning Commission of India has identified tourism as the second major sector with the highest growth rate in our country. This sector, which has the highest growth, revenue and employment opportunities, is considered to be the fourth sector of the economy. According to the World Tourism Organization "*Tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes*". These people are called visitors. Visiting our country for less than a year for more than a day is termed as a "tour". Agra, Delhi, Jaipur, Kashmir, Hyderabad, Goa, Bangalore, Chennai, Mumbai etc., are some of the important tourist destinations in our country.

Importance of tourism in India: The importance of tourism in economic development will increase. Tourism contributes to international cooperation, goodwill, exchange of science and technology. The rate of growth of tourism promotes trade. It will strengthen connectivity across a wide range of allied sectors. The demand for horticulture, landscaping, handicrafts, handloom products will increase along with infrastructure facilities such as transport, information, banking, insurance, hotels, restaurants, etc. It will increase the incomes of the facilities sectors. If the consumption of tourists increases, the revenue of the tourism sector will increase.

Benefits to the economy from the development of tourism:

1. It increases revenue and employment to the economy and provides foreign exchange.
2. The coefficient of investment in the tourism sector contributes to the expansion of employment to the cyclic income flow.
3. Hotels that offer horticulture, landscaping, handicrafts industries, fast food, specialized indigenous dishes that attract tourists will flourish.
4. New services such as ticket booking, monetary exchange, tourist amenities, dining facilities and amenities, parking, excursions will be developed.

5. The revenue of central, state and regional governments will increase.
6. Measures such as cleanliness, protected drinking water and pollution control, environmental protection, balance and sustainable economic development will be possible.
7. The tourism sector provides employment to different levels of skilled labour as well as unskilled workers. For the development of the tourism sector, the government established the 1966 India Tourism Development Corporation (STDC). The functions of the organization are: i) it has built convention canters for conducting transportation, recreation, shopping, seminars, conferences and conferences ii) providing consultancy and management services iii) providing new services that are satisfactory to the tourists for the money they spend iv) undertaking new services in a public-private partnership. A total of foreign tourists visited places in India with a population of 2.74 million for the year 2020. These resulted in foreign exchange of US$ 6.958 billion in revenue provided employment to 80 million people.

23.12 Summary

The developed tertiary sector contributes to rapid economic growth. The supply of infrastructure to meet the growing demand will accelerate the development process by increasing the rate of capital generation. The transport sector is an infrastructural facility that facilities the use of economic activities and distribution of production and Information Technology (IT) is revolutionizing the innovation and knowledge-driven society of the 21st century. Information Technology is revolutionizing all the countries of the world using modern devices. It is recognized as an export-oriented industry. It exports in services are 77%. The IT sector is providing direct employment to 4.4% of the million population and indirect employment to 12 million population in the year 2020-21. The banking system is an integral part of the finance market. Integral parts of India's entrepreneurial banking system. The RBI is our central bank. Tourism contributes to international cooperation, good will, exchange of science and technology. The rate of growth of tourism promotes trade. It will strengthen connectivity across a wide range of allied sectors.

23.13 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Define Tertiary sector
2. Types of infrastructures
3. Aviation sector

II. Answer the following questions in about 8-10 lines each.

1. State the banking structure in our country.
2. Write the importance of cooperative banks.
3. What is the difference between conventional and non-conventional sources of energy?
4. State the benefits of science and technology development.

II. Answer the following questions in about 16-20 lines each.

1. Explain the functions of the Reserve Bank.
2. State the importance of service sector.
3. Let us know the problems faced by the transport sector in our country.
4. Explain the importance of information sector in the development of our country.
5. Mention the benefits of the development of tourism to the economy.

23.14 Glossary

Reserve Bank of India: It is an apex bank in India; it is also called as Central Bank of India. It has monopoly power to regulate banking and financial institutions, controlling inflation, assisting to the government and banks. It was established in 1935 but government of India nationalized it in 1969.

Scheduled Commercial Banks: Scheduled banks are banks that are listed in the 2nd schedule of the Reserve Bank of India (RBI) Act, 1934. Commercial bank is a financial institution that performs the functions of accepting deposits from the general public and giving advance and loans for investment with the aim of earning profit. These banks offer other financial services like ATM, Demand Draft, Certificate of Deposits, etc as well.

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CHAPTER

24

FOREIGN SECTOR

24.0 Objectives

24.1 Introduction

24.2 Balance of Trade

24.3 Balance of Payments

24.4 International Trade

24.5 Foreign Direct Investment

24.6 GATT

24.7 WTO

24.8 Summary

24.9 Model Examination Questions

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24.11 References

24.0. Objectives

- Explain the concepts of Balance of Trade (BOT) and Balance of Payment (BOP)
- Analyse the trends in India's Balance of payments
- Explain the concept of International trade
- Describe the merits and demerits of Foreign Direct Investment
- Differentiate GATT and WTO.

24.1 Introduction

Each country specialises in the production of some commodities which it can produce at a lower cost. Each country imports those goods which it can produce only at a higher cost. Each country has an advantage in the production of some commodities. This may be due to specialisation or factor endowment. International trade is the exchange of goods and services among countries across national boundaries. Countries need to trade to obtain commodities that they cannot produce themselves or that they can purchase elsewhere at a lower price.

Undertaking International trade is mutually beneficial to nations if it leads to regional specialization, higher levels of production, a better standard of living, worldwide availability of goods and services, equalisation of prices and wages, and the diffusion of knowledge and culture.

The foreign sector is that part of the economy concerned with transactions with overseas countries. The foreign sector includes imports and exports of goods and services as well as capital movements in connection with investment and banking transactions, and influences the level and composition of domestic economic activity and the state of the country s balance of trade and balance of payments.

24.2 Balance Of Trade (BOT)

Balance of trade records the volume of goods and services imported as well as exported by a country to other countries. Balance of Trade (BoT) refers to the total value of a country's exports of commodities and total value of imports of commodities. Only export and import of commodities are included in the statement of Balance of Trade of a country. Movements of goods (export and imports of commodities) are also known as visible trade, because the movement of commodities between countries can be seen by eyes and felt by hands and can be verified physically by custom authorities of a country.

Favourable BoT: When the total value of commodity exports of a country exceeds the total value of commodity imports of that country, it is said that the country has a favourable balance of trade.

Unfavourable BoT: If total value of commodity exports of a country is less than the total value of commodity imports of that country, that country is said to have an unfavourable balance of trade.

Equilibrium of Balance of Trade: A country may have equilibrium in balance of trade when the total value of goods exported by it is equal to the total value of the goods imported by it.

24.3 Balance Of Payments (BOP)

The balance of payments (BOP) is a systematic record of the receipts and payments from and to other countries arising out of all economic transactions during the course of a year.

According to Reserve Bank of India "The balance of payments of a country is a systematic record of all economic transactions between the residents of a country and the rest of the world. It presents a classified record of all receipts on account of goods exported, services rendered and capital received by residents and payments made by them on account of goods imported and services received from the capital transferred to non-residents or foreigners."

Balance of payment is a record pertaining to a period of time; usually it is all annual statement. All the transactions entering the balance of payments can be grouped under three broad accounts are (1) Current Account; (2) Capital Account; and (3) Official Reserve Assets Account (4) Errors & Omissions.

24.3.1 Importance of Balance of Payments

- BOP records all the transactions that create demand and supply of a currency.
- Judges economic and financial status of a country in the short-term.
- BOP may confirm trends in economy's international trade and exchange rate of the currency. This may also indicate change or reversal in the trend.
- This may indicate policy shift of the monetary authority (RBI) of the country.
- BOP may confirm trend in economy's international trade and exchange rate of the currency. This may also indicate change or reversal in the trend

24.3.2 The difference between Balance of Trade and Balance of Payments

Balance of Trade	Balance of Payments
1. It is a narrow term	1. It is a broad term
2. It includes only visible items and capital transfers	2. It includes all transactions related
3. It can favourable or un favourable	3. It always balances itself
4. BoT = Net earnings on Export – Net payment for imports	4. BOP = Current account + Capital Account + or – Balancing item - (errors and omissions)
5. Following are the main factors affects BoT a) Cost of production b) availability of raw materials c) exchange rate d) Prices of goods manufactured at home	5. Following are the main factors affects BoP a) Conditions of foreign lenders b) Economic policy of Government c) All the factors of BoT

24.3.3 India's balance of payments

Balance of Payment (BoP) of a country can be defined as a systematic statement of all economic transactions of a country with the rest of the world during a specific period usually one year. It indicates whether the country has a surplus or a deficit on trade. When exports exceed imports, there is a trade surplus and when imports exceed exports there is a trade deficit.

Purposes of calculation of BoP

- Reveals the financial and economic status of a country.
- Can be used as an indicator to determine whether the country's currency value is appreciating or depreciating.
- Helps the Government to decide on fiscal and trade policies.
- Provides important information to analyze and understand the economic dealings of a country with other countries.

Components of BoP

For preparing BoP accounts, economic transactions between a country and rest of the world are grouped under – Current account, Capital account and Errors and Omissions. It also shows changes in Foreign Exchange Reserves.

Current Account: It shows export and import of visible (merchandise or goods) and invisibles (non - merchandise).Invisibles include services, transfers and income.

Capital Account: It shows a capital expenditure and income for a country. It gives a summary of the net flow of both private and public investment into an economy.

External Commercial Borrowing (ECB), FDI, FPI, etc. form a part of capital account.

24.4 International Trade

International trade is referred to as the exchange or trade of goods and services between different nations.

Role of International trade in Economic Development

International trade is mutually beneficial to nations if it leads to regional specialization, higher levels of production, a better standard of living, worldwide availability of goods and services, equalisation of prices and wages, and the diffusion of knowledge and culture.

1. Division of Labour and Specialisation: Foreign trade leads to division of labour and specialisation at the world level. Some countries have plentiful natural wealth. They should distribute raw materials and import finished goods from republics which are progressive in skilled manpower. This gives profits to all the states and thus leading to separation of labour and specialisation.

2. Optimum Allocation and Utilisation of Resources: Due to specialisation, uncreative lines can be removed and waste of resources sidestepped. In other words, resources are channelized for the construction of only those properties which would give maximum Notes returns. Thus there is balanced distribution and utilisation of resources at the international level due to foreign trade.

3. Equality of Prices: Prices can be stabilised by foreign trade: It supports to keep the request and supply location stable, which in turn stabilises the prices, making payments for transport and other marketing expenses.

4. Availability of Multiple Choices: Foreign trade benefits in providing a better choice to the consumers. It supports in making obtainable new changes to consumers all over the world.

5. Ensures Quality and Standard Goods: Foreign trade is highly modest. To preserve and raise the request for goods, the exporting states have to retain the quality of goods. Thus, quality and standardised goods are produced.

6. Raises Standard of Living of the People: Imports can enable standard of living of the people. As people can have a choice of new and better changes of goods and services. By overriding new and better diversities of goods, people can increase their standard of living.

7. Generates Employment Opportunities: Foreign trade supports employment opportunities by increasing the mobility of labour and resources. It makes direct service in import sector and indirect employment in other sector of the economy. Such as Industry, Service Sector (insurance, banking, transport, communication), etc.

8. Facilitate Economic Development: Imports assist in economic development of a nation. This is because with the import of capital goods and knowledge, a country can make growth in all sectors of the economy, i.e. agriculture, industry and service sector.

9. Assistance during Natural Calamities: During natural disasters for instance earthquakes, floods, famines, etc., the exaggerated countries face the problem of scarcity of essential goods. Foreign trade allows a country to import food grains and medicines from other countries to support the affected people.

10. Maintains Balance of Payment Position: Every country has to continue its balance of payment position. Ever since, every country has to import, which marks in discharge of foreign exchange, it also deals in trade for the inflow of foreign exchange.

11. Brings Reputation and Helps Earn Goodwill: A country which is complicated in spreads earns kindness in the global market. Example: Japan has received a lot of goodwill in global markets due to its exports of feature electronic goods.

12. Promotes World Peace: Foreign trade takes countries closer. It enables handover of technology and other assistance from established countries to emerging countries. It brings various countries faster due to economic relationships arising out of trade agreements. Thus, foreign trade generates a friendly atmosphere for sidestepping wars and conflicts. It endorses world peace as such countries attempt to preserve friendly relationships among themselves.

24.5 Foreign Direct Investment (FDI)

Foreign direct investment is direct investment into production in a country by a company located in another country, either by buying a company in the target country or by expanding operations of an existing business in that country. Foreign direct investment is done for many reasons including to take advantage of cheaper wages in the country, special investment privileges such as tax exemptions offered by the country as an incentive to gain tariff-free access to the markets of the country or the region. Foreign direct investment is in contrast to portfolio investment which is a passive investment in the securities of another country such as stocks and bonds.

24.5.1 Benefits of Foreign direct investments

1. Competitive environment in the country: Entry of foreign enterprises usually fosters competition and generates a competitive environment in the host country. The domestic enterprises are compelled to compete with the foreign enterprises opening in domestic market. The domestic enterprises have to be efficient so as to be able to service. (Ex: Automobiles industry in India developed drastically after opening up of foreign direct investments in Automobiles).

2. Increase in production: FDI brings huge capital. This increased capital can be used to employ labour and other resources so as to enhance production

3. Economic growth and development: Since FDI contributes towards increased production, FDI can accelerate growth and economic development by providing the much needed capital, technology, know-how skills etc.

4. Employment: Since FDI involves investment in real assets such as factories, buildings plants etc. it generates direct employment. Once there is an FDI in a particular sector, it increases domestic investments in sectors which are connected with investment sector

5. Improvement in Foreign relations: FDI involves people to people relations and is usually considered as promoter of bilateral and international relations. Greater openness to foreign capital leads to higher national dependence on international investor. Dependency between countries always generates friendship and goodwill

6. Reduction of domestic monopolies: FDI increases competition in domestic market and weakens the power of domestic monopolies.

7. Increase in standards of living: FDI leads to availability of goods of international standards in domestic market which are made in host country. This leads to more choice to consumers and higher standard of living for people of the country

8. Balance of payments: Since FDI leads to inflow of foreign exchange it leads to have a favourable impact on balance of payment of host country. Inflow through FDI is much more advantageous than external borrowings.

24.5.2 Problems of foreign direct investment

1. More focus on capital intensive industries: FDI are more likely to be in capital intensive industries which lead to employment of relatively less number of workers. Such technology is in appropriate for labour abundant country as it does not support generation of jobs which is a crucial requirement to address poverty and unemployment.

2. Regional disparity: FDI is likely to flow towards regions or states which are well endowed in terms of natural resources and availability of infrastructure and has the potential to increase regional disparity.

3. Outflow of foreign exchange: FDI brings in more foreign exchange, improves the balance of payments in the initial stages. However once the investment is made, the technology brought in with FDI requires imported raw material also a lot of money is to be paid in foreign exchange on account of Interest and dividend payments. Such outflows of foreign exchange put a strain on the balance of payments.

4. Undercutting domestic producers: FDI firms have huge money power; they adopt anti-competitive practices to wipe out domestic suppliers. In some sectors domestic producers may not be able to compete with foreign producers.

5. Exploitation of natural resources: FDI is hugely responsible for ruthless exploitation of natural resources and the possible environmental damage.

6. Dual economy: FDI has certain favourite sectors; With FDI in some sectors there is strong possibility of emergence of a dual economy with a developed foreign sector and an underdeveloped domestic sector.

7. Dilution of environmental standards: The continuance of lower labour or environmental standards in host countries is highly appreciated by profit seeking foreign enterprises. This is of great concern because efforts to conserve such standards often fail to receive support from interested parties.

24.6 General Agreement on Tariff And Trade (GATT)

General Agreement on Tariff and Trade (GATT) is a treaty formed subsequent the conclusion of World War II. The General Agreement on Tariffs and Trade (GATT) was executed to control world trade to aide in the economic retrieval following the war. GATT s chief purpose was to decrease the obstacles of global trade over the decrease of tariffs, quotas and subsidies.

Objectives of GATT

By decreasing tariff blockades and removing discrimination in global trade, the GATT aims at:

1. Spreading out of international trade;
2. Intensification of world production by certifying full employment in the contributing nations;
3. Development and full exploitation of world resources; and
4. Rising normal of living of the world communal as a whole. On the other hand, the articles of the GATT do not offer directions for accomplishing these purposes. These are to be indirectly realized by the GATT through the advancement of free (unhampered) and multidimensional global trade.

As such, the rules accepted by GATT are created on the subsequent fundamental principles:

1. Trade should be directed in a non-discriminatory way;
2. The use of quantitative limitations should be predestined
3. Disagreements should be determined through discussions

In short, it is important to note that members of GATT agree to decrease trade blocks and to Notes eradicate discrimination in global trade so that, multidimensional and free trade may be encouraged, leading to wider extents of world trade and prosperity.

24.7 World Trade Organisation

The WTO started functioning on 1 January 1995, but its trading system is half a century older. Since 1948, the General Agreement on Tariffs and Trade (GATT) had given the rules for the system. The second WTO ministerial meeting, held in Geneva in May

1998, included a celebration of the 50th anniversary of the system. This was known as the Uruguay Round and it led to the formulation of the World Trade Organization (WTO).While GATT mostly dealt with trade in goods, the WTO and its agreements could not only cover goods but also trade in services and other intellectual properties like trade creations, designs, and inventions.

The WTO has 164 members and 23 observer governments. Afghanistan became the 164th member in July 2016. In addition to states, the European Union, and each EU country in its own right is a member.

The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to ensure that trade flows as smoothly, predictably and freely as possible. WTO operates a global system of trade rules, it acts as a forum for negotiating trade agreements, it settles trade disputes between its members and it supports the needs of developing countries.

All major decisions are made by the WTO's member governments: either by ministers (who usually meet at least every two years) or by their ambassadors or delegates (who meet regularly in Geneva). A number of simple, fundamental principles form the foundation of the multilateral trading system. The primary purpose of the WTO is to open trade for the benefit of all. The WTO's top decision-making body is the Ministerial Conference. Below this is the General Council and various other councils and committees.

- Ministerial conferences usually take place every two years.
- The General Council is the top day-to-day decision-making body. It meets a number of times a year in Geneva.
- To join the WTO, a government has to bring its economic and trade policies in line with WTO rules and negotiate its terms of entry with the WTO membership.
- The WTO derives most of the income for its annual budget from contributions by its members. These contributions are based on a formula that takes into account each member's share of international trade.

- Ngozi Okonjo-Iweala is the seventh Director-General of the WTO. She took office on 1 March 2021, becoming the first woman and the first African to serve as Director-General. Her term of office will expire on 31 August 2025.

Objectives of WTO

- To implement the new world trade system as visualised in the Agreement;
- To promote World Trade in a manner that benefits every country;
- To ensure that developing countries secure a better balance in the sharing of the advantages resulting from the expansion of international trade corresponding to their developmental needs;
- To demolish all hurdles to an open world trading system and usher in international economic renaissance because the world trade is an effective instrument to foster economic growth;
- To enhance competitiveness among all trading partners so as to benefit consumers and help in global integration;
- To increase the level of production and productivity with a view to ensuring level of employment in the world;
- To expand and utilize world resources to the best;
- To improve the level of living for the global population and speed up economic development of the member nations.

Functions of WTO

1. Administration of agreement: It looks after the administration of the 29 agreements (signed at the conclusion of Uruguay round in 1994), plus a number of other agreements, entered into after the Uruguay round.

2. Implementation of reduction of trade barriers: It checks the implementation of the tariff cuts and reduction of non-tariff measures agreed upon by the member nations at the conclusion of the Uruguay round.

3. Examination of Members' Trade Policies: It regularly examines the foreign trade policies of the member nations, to see that such policies are in line with WTO guidelines.

4. Collection of foreign trade information: It collects information in respect of export-import trade, various trade measures and other trade statistics of member nations.

5. Settlement of disputes: It provides conciliation mechanism for arriving at an amicable solution to trade conflicts among member nations. The WTO dispute settlement body adjudicates the trade disputes that cannot be solved through bilateral talks between member nations.

6. Consultancy services: It keeps a watch on the development in the world economy and it provides consultancy services to its member nations.

7. Forum for negotiation: WTO is a forum where member nations continuously negotiate the exchange of trade concessions. The member nations also discuss trade restrictions in areas of goods, services, intellectual property etc.

8. Assistance of IMF and IBRD: It assists IMF and IBRD for establishing coherence in universal economic policy administration.

India and WTO

India has been a member of the WTO since January 1995 and also had been a member of the WTO's forerunner General Agreement on Tariffs and Trade (GATT) since July 1948. As a developing country, India has played a significant role in the proceedings of the WTO, especially in voicing its own concerns and also of the entire developing world.

In the Doha WTO conference that took place in 2001, India emerged as the most outspoken of advocates for the developing bloc. The meeting was declared a success since the delegates of 142 countries agreed to a new round of trade talks, including topics such as environment, competition and investment.

There are many implications for the Indian economy as a result of the many agreements signed as part of the WTO.

Dispute Resolution for Harmful Fisheries Subsidies

India has sought a clear dispute settlement mechanism in the global agreement to end harmful fisheries subsidies.

WTO members are negotiating to finalise disciplines to eliminate subsidies for illegal, unreported and unregulated (IUU) fishing, and to prohibit certain forms of fisheries subsidies that contribute to overcapacity and overfishing.

India wants to avoid undue haste and conclude the negotiations by next ministerial conference in June 2021.

Difference between GATT and WTO

Sl. No.	GATT	WTO
1	GATT was ad-hoc & Provisional	WTO and its agreements are permanent
2	GATT had contracting parties	WTO members
3	GATT allowed existing domestic legislation to continue even if it violated a GATT agreement	WTO does not permit it.
4	GATT was less powerful, dispute settlement system was slow and less efficient, Its ruling could be easily blocked.	WTO is more powerful than GATT, dispute settlement mechanism is faster and more efficient, very difficult to block the ruling.

24.8 Summary

The Foreign Sector is that part of the economy concerned with transactions with overseas countries. The foreign sector includes imports and exports of goods and services as well as capital movements in connection with investment and banking transactions, and influences the level and composition of domestic economic activity and the state of the country's balance of trade and balance of payments. The Balance of Trade (BOT) refers to the total value of a country's exports of commodities and the total value of its imports of commodities.

The balance of payments (BOP) is a systematic record of the receipts and payments from and to other countries arising out of all economic transactions during the course of a year. Foreign direct investment is direct investment into production in a country by a company located in another country, either by buying a company in the target country or by expanding the operations of an existing business in that country. The World Trade Organization (WTO) is the only global international organisation dealing with the rules of trade between nations.. The WTO operates a global system of trade rules, acts as a forum for negotiating trade agreements, settles trade disputes between its members, and supports the needs of developing countries.

24.9 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Write a note on GATT.
2. Define Balance of Trade.
3. What are the objectives of WTO?

II. Answer the following questions in about 8-10 lines each.

1. Differentiate between the balance of payments and the balance of trade.
2. Discuss the benefits of foreign direct investment.
3. Describe the functions of the WTO.

III. Answer the following questions in about 16-20 lines each.

1. Explain the role of international trade in economic development.
2. Differentiate between GATT and WTO.
3. Describe the latest developments in India and the World Trade Organization.

24.10 Glossary

- **BoT:** Balance of Trade (BoT) refers to the total value of a country's exports of commodities and total value of imports of commodities

- **BoP:** The Balance of Payments (BoP) is a systematic record of the receipts and payments from and to other countries
- **FDI:** Foreign Direct Investment (FDI) Foreign direct investment is direct investment into production in a country by a company located in another country,
- **International trade:** International trade is referred to as the exchange or trade of goods and services between different nations.
- **Foreign reserves:** It is generally held in reserve currencies usually the US Dollar and to a lesser degree the Euro, Japanese Yen, and Pound Sterling. It is used to back its liabilities – like the native currency issued and also reserves deposited by RBI.
- **WTO:** The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations.

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CHAPTER 25

ENVIRONMENT - ECONOMIC DEVELOPMENT

25.0. Objectives

- Explain the relationship between environment and economy.
- Classify the types of ecosystems.
- Analyse the adverse effects of pollution.
- Describe solutions for prevention of pollution will be given.
- Explain how to avoid environmental crisis.
- Explain the need for sustainable development.

25.1. Introduction

The English word environment is derived from the French word Environer. Environer means to surround. Everything around us is called environment.

(What do we have around us? Any guess.)

We are surrounded by animate as well as inanimate things. Living things are called animate things and non-living things are called inanimate environment things. Based on this, the description is divided into two parts - animate and inanimate environment.

"Environment is the combination of living and physical elements affecting a living organism"

25.2. Animate and Inanimate Environment

All animate things together are called living things. Plants, trees, animals and human beings together are called biological elements. Rocks, hills, mounds, mountains, deserts, grasslands, water, gases, dust particles etc. are all called inanimate matter.

All these inanimate and animate structures depend on each other. They affect each other in the environment. So there are two types of relationship between these elements.

They are...

1. No energy or matter can be created and cannot be destroyed.
2. Matter and energy flow from one object to another.

Inanimate and living things are interrelated and inseparable. Changes in one factor will affect the other factor. In this way, the human being is living as a nucleus between the animate and inanimate elements and the encompassing structure. Dependent upon, influencing and being influenced by these factors man strives for his progress.

25.3. Environment – Important concepts

What surrounds us is usually referred to as environment. Environment in modern times can be defined as follows:

- Environment is the totality of conditions surrounding human beings at a given place, at a given time.
- Water, air, land, human beings, other living organisms, plants, microorganisms.
- The relationship between each of these two can be defined as environment.
- Surrounding conditions, objects, rules together can be called environment.
- Environment can be defined as all the rules and influences that affect the development of human beings as well as all kinds of living things. It also includes all the good and bad effects arising from human intervention and creation of assets.

Considering the above definitions, environment can be collectively defined as all the activities and things that change a living organism or organisms during its life cycle. Broadly speaking, the above as well as the human-made social, economic, cultural, political and intellectual activities of man can be termed as environment. Due to these human activities, the physical environment changes.

Looking at these definitions we understand another thing. It is understood that man is the only one among the animals (living things) who is not able to change his surroundings to suit him. It is also known that man is changing the environment according to his needs.

Factors that affect the environment can be mainly classified as follows.

1. Biological factors: Animals, Plants, Plants
2. Physical factors: Water, forests, mountains, land, air.
3. Energy factors: Wind energy, solar energy, electromagnetic energy

4. Social Factors: urbanisation, human relations, customs
5. Mental factors: mental maturity, knowledge, intelligence
6. Cultural Factors: political, economic, moral, religious factors.

These factors are interdependent and influence each other. All these are different.

25.4. Environment Sections

Environment can be mainly divided into four categories.

1. Lithosphere: Lithosphere is a thick frozen layer on the earth's surface. It consists of plains, plateaus, hills, valleys and watery areas. The rocks, soil and other materials in this layer are useful for living organisms.

2. Hydrosphere: The entire body of water on earth is called hydrosphere. Ponds, lakes, rivers, and oceans are all parts of hydrosphere. Ground water is also a part of it.

3. Atmosphere: The layer of gases surrounding the earth is called atmosphere. Gases like nitrogen, oxygen and carbon dioxide are present in this atmosphere along with dust.

4. Biosphere: All living things on earth are collectively called biosphere. Along with microorganisms, animals, birds, plants and sea water that live on earth are included in this ecosystem. The biosphere continues as long as there is lithosphere, atmosphere and hydrosphere. Environment is the combination of all these spheres. All animate and animate things depend on it. That is, the environment is related to the whole of the universe. It has no boundaries. Man is the center of this environment, changing and influencing those structures and co-existing with animate and inanimate elements.

25.5. Environmental Duties

The environment performs four types of functions. They are:

1. Supplies reproductive resources and non-reproductive resources.
2. The environment incorporates solid, liquid and gaseous wastes. That means the environment acts as an absorber.

3. The environment provides vital services such as biodiversity, genetic diversity and ecological balance. These vital services help in harnessing and converting hitherto unused materials and energy into use.

4. The environment provides natural services to induce mental ecstasy, to experience the beauty of nature.

The above four types of functions performed by the environment are complementary. They are dependent on one another. Each function influences the other function. If one function fails in its work, the other function also does not work properly. These functions dictate the course of the economy.

25.6. Environment-Economy Relationship

The environment supplies the raw materials needed by the economy. It also absorbs the waste from the economy. In economic terms, all the resources supplied by the environment are environmental resources. All living things use environmental materials. Inanimate beings are affected by these.

Human economic activities, exploitation and neglect impose limits on the supply of environmental resources. Due to this, the cleaning capacity is also decreasing in the environment. British economist Kenneth Bowlding warned in 1966 of the consequences of wasteful use of the environment. Mankind is advised to reduce its consumption as much as possible. He said that the environment is in equilibrium when there is a balance between products.

25.7. Concepts of Environment

Environment surrounds us. Air, water, earth, we experience the interrelationship between us. Even non-living things are on top of each other. They influence each other and regulate their stability. Ecology studies such things. It describes the relationship between living and non-living things. To fully understand the environment one must know about ecology.

25.7.1. Eco System

Enclosure System contains living and non-living things. They are subject to conditions like temperature, sunlight, wind and rainfall. Animals and plants are also influenced by their environment. The combination of all these Complex system is Enclosure System. An ecosystem consists of water cycles, carbon cycles, oxygen cycles, nitrogen cycles, energy flows, and food chains. Through these the enclosure system performs its functions. In this system one affects the other. Any changes in this ecosystem will make human survival on earth difficult.

25.7.2. Types of Eco System

There are two types of ecosystem natural and artificial ecosystem.

1. Natural ecosystem: A natural ecosystem is natural. It performs its own functions. It does not require human intervention. It works under natural conditions without human intervention. There are two types of Natural ecosystem. They are terrestrial ecosystem and aquatic ecosystem. Examples: forests, grasslands, lakes, rivers.

2. Artificial enclosure system: This system involves human intervention. Humans make non-interfering changes in the natural ecosystem. Humans try to control and modify the characteristics of living organisms. Changes take place based on technology and human perspective. Building of cities, underground or underwater structures, cloning of seeds, crops, genetic modification in humans, animals are examples of artificial environment. Moreover, they give practical form and results to human thoughts. Hence these systems are highly sensitive. They often fail because of lack of diversity. They do not have self regulating mechanisms like natural ecosystems. They are subject to limitations. E.g. Houdro Ponics. Cultivating plants without the need for soil or sunlight is called hydroponics to solve food shortages. It includes the characteristics of a man-made ecosystem.

25.8. Environmental Pollution

Pollution

Pollution occurs when a substance is more or less than it should be in the environment. For example, if there is not enough oxygen or carbon dioxide in the atmosphere, it is pollution. For good crop yield, we use phosphate and nitrate to make the soil fertile. Exceeding these amounts is pollution. The environment is affected by this pollution. The ecological balance is disturbed by these harmful factors.

Pollution is sometimes caused by nature. And sometimes it is also caused by human. Soil erosion and volcanic eruptions are naturally occurring pollutants. But nature will correct this. Air pollution occurs due to setting up of many industries, deforestation to meet their needs due to increase in population and pollution due to concrete constructions. Human caused pollution is a huge threat to the world today.

25.8.1. Pollutants - Types

Pollution can be mainly divided into three types. They are…

a) Non-degradable pollutants: Pollutants that do not break down after entering the environment are called non-degradable pollutants. These cannot be eradicated. E.g. nuclear waste.

b) Degradable pollutants: Those which easily dissolve in the environment are called degradable pollutants. E.g. Household waste and vegetables are easily absorbed into the environment.

c) Pollutants that break down slowly…: These remain unchanged in their condition for several years and then dissolve in the environment. E.g. DDT & plastic items. But if it exceeds the amount of purification, the environment becomes polluted.

25.8.2. Types of pollution

Pollution occurs when solid, liquid and gaseous substances in the environment lose their purity.

1. Water Pollution

Water is essential to the living things of the world. If some substances are added in excess in the water, it loses its purity.

Causes of water pollution:

- Due to waste materials from industries
- Waste materials released from mining
- Pesticides, chemical fertilizers
- Garbage
- Household waste products
- Human waste

Consequences of water pollution:

1. Clean water is not available.
2. Many diseases are spread by drinking contaminated water.
3. Fishes are getting poisoned due to pollution of reservoirs.
4. Water becomes foul smelling.

Prevention of water pollution:

1. Only organic fertilizers should be used for agriculture.
2. Modern methods should be used to re-use water.
3. Pesticides and chemical fertilizers should be reduced as much as possible.
4. Rainwater should be retained and used.

2. Air Pollution

There are many gases in the atmosphere like oxygen, nitrogen and carbon dioxide which are essential for living things. The mixture of these gases is called air. Without air, human beings as well as other creatures cannot survive even for a short time. Air pollution occurs when there is an excess of other substances in the air.

Air Pollution – Causes:

Waste from industries, burning of cooking cane, bad gases from vehicles, deforestation, use of fossil fuels, nuclear tests, electricity generation and use of refrigerators are the main causes of air pollution.

Consequences of Air Pollution:

1. It spoils the health of man and animals.
2. Inhibits photosynthesis of plants.
3. Destroys the natural beauty of nature.
4. Affects the climate causing extreme temperatures, acid rains and droughts.

Methods to control of air pollution:

1. Identify the causes of air pollution.
2. Finding alternative fuel sources
3. Equipment to reduce pollution should be installed in industries.
4. Effective enforcement of air laws.
5. Repetitive resources should be used.

3. Noise Pollution

Noise pollution is caused by various types of vehicles, industries and loudspeakers. Due to improper use of soil and use of pesticides, soils are becoming polluted.

25.9. Environmental Degradation

Environment is subject to degradation due to pollutions and human activities. All natural resources like soil, water, air, forests are under crisis.

25.9.1. Degradation of Land

The most important resource is land. We depend on the land for shelter, food and every need. Due to human selfishness, deforestation, industrialization and use of chemicals, the earth is losing its natural energy.

25.9.2. Forests

Forests are useful to humans in many ways. Forests have many benefits like oxygen, timber, habitat for wild animals and medicines. The role of forests in bio-diversity and ecological balance is immeasurable. But man is cutting down lakhs of square kilometers of forests every year for agriculture, industries, timber, cooking sugar cane.

Reasons for Deforestation:

1. Dependence on forests for cooking sugarcane and charcoal
2. Using wood for paper
3. Provision of residential facilities to accommodate increased population
4. Establishment of industries and transport routes according to the population
5. Conversion of agricultural lands for food production
6. Regular grazing of cattle

Forest conservation measures:

1. Do not reserve forest lands for industries.
2. Only waste lands should be converted into agricultural lands.
3. Forest lands should not be allotted for construction of houses for growing population.
4. Business and industries dependent on forest products should be encouraged.
5. Strict action should be taken against illegal cutting of forests and cattle grazing.

25.9.3. Soil Erosion

Soil is made up of pebbles, sand and clay mineral particles. Such soil is being degraded due to human activities.

Soil erosion- causes:

Excessive use of pesticides and chemical fertilizers, customary cattle grazing, flood water and wind during storms cause soil erosion and cultivation of crops, mining, construction activities are the main causes of soil erosion.

Prevention of soil erosion:

1. Afforestation
2. Construction of check dams
3. Reduce the use of pesticides and chemical fertilizers and use organic fertilizers
4. Care should be taken in grazing cattle.
5. Dams and ditches should be built on the ground to reduce the speed of water flow.

25.10. Protection of the Environment

The environment is made up of all living things on this earth. It does not belong to anyone. It is useful for all aquatic animals, birds, animals, human beings etc. But man alone is overusing and abusing the environment with his greed. As a result, the environment is not able to perform its functions to the full extent.

Economists like Malthus warned about the environmental crisis, but man ignored it. 'The Cost of Economic Growth' by Mishan, 'The Silent Spring' by Rachel Carsell and 'Limits to Growth' by Meadows warned the world about the environmental crisis.

Three reasons have been identified for this crisis. They are:

1. Population
2. Per Capita Production (Consumption)
3. Average pollution produced by an economic commodity

Due to these reasons, soil fertility is decreasing and agricultural production is decreasing on this planet. Food security is under threat. Global warming is increasing and the effect of green house gases is occurring. Ice melts in continental areas and sea levels rise. In this way the plants, animals, birds, aquatic animals and plants are affected.

Internationally, countries are working through organizations, councils and laws to prevent pollution. Expected results are not coming. The cause of all this is man. It is human who has to face future consequences.

25.11. Sustainable Development

Sustainable development is about meeting the needs of the present without compromising the interests of future generations. The Dharitri Conference held in 1992 defined sustainability as the condition in which human welfare will not run out in the future.

Rich countries think that development means economic growth. Growth is considered to be quantitative and qualitative changes in human beings. But the environment, which is responsible for human welfare, its purity is forgotten. Sustainable development can only be achieved if there is a balance between the use of resources and their reproduction. The term sustainable development has also gained importance.

25.11.1 Sustainable Development - Concepts

Sustainability includes three important concepts. They are environmental, social and economic concepts. Sustainable development is possible only when a balance is achieved between these three.

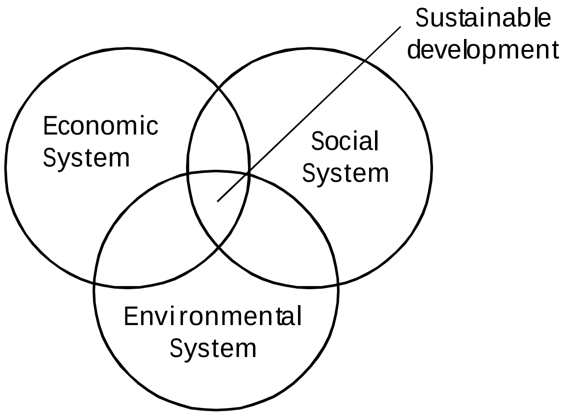

Fig-1: Sustainable development

In order for the above three concepts to be in balance.. the resources of future generations should not be less than the resources we are getting. Environmental and man-made assets should also be inherited by future generations. Social, economic and environmental resources should be utilized in such a way that human welfare is sustainable for future generations as well.

25.11.2. For sustainable development

1. We must feel that we belong to the earth. And this earth does not belong to us.
2. No single species should be destroyed by human actions.

3. Nature should be loved, worshiped and preserved.
4. It should be recognized that every organism has the same right to live on this earth as human beings.
5. Physical, chemical. Biological resources are not depleted.

25.12. Summary

The environment is very important for the survival of living things. It is everyone's responsibility to value the environment and ensure that it is not misused. Priority should be given to sustainable development that meets the needs of the present and leaves no deficit for future generations.

25.13. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Write down the losses due to air pollution
2. What steps should be taken to conserve forests?
3. Describe the elements of environment.
4. What is an artificial ecosystem?
5. How can water pollution be prevented?

II. Answer the following questions in about 8-10 lines each.

1. Explain the problems of environment pollution.
2. Explain the functions of the environment.

III. Answer the following questions in about 16-20 lines each.

1. Write about the causes of deforestation.
2. Define pollution
3. What is an ecosystem? Mention its parts.
4. Explain air pollution.
5. What is sustainable development?

25.14. Glossary

Environment: Environment is the totality of conditions surrounding human beings at a given place of a given time.

Pollution: Pollution is when a substance is more or less than it should be in the environment.

Sustainable development: Sustainable development is about meeting the needs of the present without compromising the interests of future generations.

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CHAPTER 26

STRUCTURE AND GROWTH OF TELANGANA ECONOMY AFTER FORMATION

26.0. Objectives

26.1. Introduction

26.2. Six-decade struggle for separate Telangana State

26.3. Growth of Telangana State

26.4. Estimation of GSDP, GSVA, Per Capita Income

26.5. Telangana grows journey from the year of State formation

26.6. Per Capita Income

26.7. Sectoral composition

26.8. Summary

26.9. Glossary

26.10. References

26.0. Objectives

The basic objective of this lesson is to provide conceptual knowledge on structure, growth, and trends of Telangana economy and it also focuses on Gross State Domestic Product (GSDP), Gross State Value Added (GSVA), Per Capita Income (PCI) and sectorial composition of primary, secondary and tertiary sectors in Telangana economy.

- Structure and growth of Telangana economy after formation.
- The estimation of GSDP, GSVA and Per Capita Income in current and constant prices.
- Sectorial composition of GSDP and GSVA in Telangana.
- Trends in Gross District Domestic Product and district-wise Per Capita Income in Telangana.

26.1. Introduction

Andhra State came into existence on 1st October 1953, being a part of the erstwhile composite state of Madras for a long time, who are speaking Telugu people fought for a decade to have a separate state as they felt that they were discriminated in the state dominated by Tamilians and the struggle continued, it took a violent turn when Potti Sri Ramulu a Gandhian follower died in December 1952. Then the Government of India decided to form the Andhra Pradesh state in 1953.

26.2. Six-decade struggle for separate Telangana State

- Gentleman's Agreement of 1956.
- Jai Telangana Movement started in 1969.
- The Eight Point Formula 1969 of Five Point Formula 1970.
- The judgment of the Supreme Court of India in 1972.
- The Six Point Formula 1973.
- G.O. No. 610 of 1985 and Girglaani Commission Report

The birth of Telangana as the 29th state of the Indian Republic marks both a beginning and an end. The state of Telangana was formed on the second of June 2014 and it is a landlocked state located in the Southern India Peninsula and the Deccan Plateau with Hyderabad as its capital. The region lies between 15"50^0N to 19"51^0N latitude and 77"15^0E to 89"16^0E longitude. It is bordered by Maharashtra on the North and North West Karnataka on the West and Andhra Pradesh on the South and South East. Telangana is ranked 12th in the country in terms of population and ranked 11th in terms of geographical area. The region is majorly drained by the Godavari and Krishna rivers with 79% and 69% catchment areas respectively. The most commonly spoken language in the state is Telugu. The other languages used are Urdu, Hindi and English, Tamil, Marathi, Bengali, Kannada, etc.

The total geographical area of the state is 1,12,077 square kilometers. There are 33 districts in Telangana. There are 74 Revenue Divisions, 612 Revenue Mandals and 10909 Revenue Villages in the state. Local bodies, the state has 12769 Gram Panchayats, 129 Municipalities and 13 Municipal Corporations. Legislative divisions are 119 Assembly Constituencies and 17 Parliamentary Constituencies in the Telangana state in 2022.

26.3. Historical background of Telangana State

The historical background as a backdrop for the birth of Telangana is discussed here under. It was on 1st November 1956 the former AP State (the existed upto1stJune 2014) was formed by merging Hyderabad State with the former Andhra State.

Former Hyderabad State

Hyderabad state ruled by the Nizams (Asa-jahi dynasty) for 224 years may be divided into two phases, (a) Phase-I: 1724-1857 and (b) Phase-II: 1857-1948. The first phase may be treated as a mostly agriculturally dependent period. The second phase may be treated as a period in which the foundations of industrial development were laid down.

It had its own currency and administrative system. Urdu was the official language of the kingdom. The medium of instruction at all levels of education was also in Urdu only.

When India became Independent on 15th August 1947, the then-ruler of Hyderabad State, Mir Osman Ali Khan (7th Nizam) preferred to retain the State as an independent entity. The Government of India compelled the Nizam for the merger of the Hyderabad State with the Indian Union through an armed intervention which was recorded in history as Police Action. This merger took place on 17th September 1948. In the year 1952, the general elections were held to the State Assembly and a popular government assumed power with Dr. Burgula Rama Krishna Rao as the Chief Minister of Andhra State.

26.4. Estimation of GSDP, GSVA and Per Capita Income

Gross State Domestic Product (GSDP) represents the value of the final goods and services produced within the geographical boundaries of the State. GSDP is the most important indicator for measuring the economic growth of a state. GSDP is measured both at current and constant prices.

The estimates at the prevailing prices of the current year are termed as "at current prices" while those prepared at base year prices are termed as "at constant prices" the comparison of the estimates at constant prices, which means in real terms over the years gives the measure of real growth. The constant prices make the adjustment for inflation on the basis of base year price level which is called as a "deflator".

Growth and trends in Gross State Domestic Product (GSDP) in Telangana

In 2021-22 Telangana's Gross State Domestic Product (GSDP) at current prices (AE) is Rs.11.55 lakh crore. Telangana's GSDP at current prices increased to 19.1% in 2021-22.

While Telangana's economy was not completely immune to the turmoil caused by the COVID-19 pandemic, the state still managed to achieve an increase in the GDSP at current prices in 2020-21.

26.5. Telangana growth journey from the year of State formation

Telangana's nominal growth rate exceeded that of India's by 1% points in 2014-15. The goal had increased to 3.6% points by 2020-21, declining thereafter as the Pan-Indian economy recovered from the pandemic in 2021-22 Telangana's nominal GSDP in 21.8% higher in 2021-22, while Indian nominal GDP has only increased by 17.8% in the two years. Telangana contributed roughly 4.1% to the national GDP in 2020-21. The state became the 6th highest contributor to the national nominal GDP amongst the 14 General Category states with data availability. Between 2014-15 and 2021-22, the state's contribution to India's nominal GDP increased from 4.1% to 4.9%.

GSDP at constant (2011-22) Prices

Based on the Advance Estimates (AE) figures for the year 2021-22, Telangana's GSDP at constant (2011-12) prices increased by 11.2% over the previous year. The state performance was significantly better than that of India's which experienced an increase of 8.9% in the real GDP in 2021-22.

Contribution of Telangana's GSDP to India's GDP at current prices (2014-15 to 2021-22)

Table: Telangana (GSDP) and India (GDP) at constant prices

(Rs.lakh crore and GDP growth %)

Year	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Telangana	4.2 6.8%	4.711.6%	5.19.3%	5.69.7%	6.19.1%	6.45.0%	6.2-3.5%	6.911.2%
India	10.53 7.4%	113.78.0%	123.18.3%	131.56.8%	139.96.5%	145.23.7%	135.6-6.6%	1478.9%

26.6. Per Capita Income

While the Gross State Domestic Product reflects the size of an economy as a whole, a better measure of economic growth accrued by an individual is the Per Capita Income (PCI) in the year 2020-21.

In the year 2021-22, Telangana's nominal PCI (AE) had increased to Rs.2.7 lakh. Telangana's PCI has consistently been higher than the average national PCI since the year of state formation. In 2014-15, the PCI of Telangana was 1.43 times the national PCI (Telangana's PCI was Rs.37,457 higher than the national PCI). As of 2021-22, the multiplier had increased to 1.86 (Telangana's PCI was Rs.1,28,985 higher than the national PCI).

$$\textbf{Per Capita Income} = \frac{\textbf{Total National Income}}{\textbf{Total National Population}}$$

Not only has Telangana's PCI been higher than India's for each year post States formation, but also it has grown at a higher rate than India's for each of those years.

A comparison of the growth rates of PCI for Telangana and India in 2020-21, while India experienced a drastic fall in its nominal PCI on account of the COVID-19 pandemic (-4.0%), Telangana PCI increased even in that year (1.6%) in 2021-22. The state witnessed the highest rise in nominal PCI at 18.8% around 0.7% points higher than the national nominal PCI growth rates.

26.7. Sectoral composition

The GSDP of any state is measured in terms of the economic contributors made by three key sectors.They are agriculture and allied sectors, industries including mining and quarrying, and services. Based on the Advance Estimates (AE) of GSVA for Telangana in 2201-22, the service sector accounted for 61.3% of Telangana GSVA at current prices followed by the industrial sector (20.4%) and the agricultural and allied sector (18.3%).

The share of agriculture and allied sectors in the total GSVA of the state increased from 16.3% in 2014-15 to 18.3% in 2021-22. While its share in the national GVA remained largely (constant close to 18.5% in both years), the increase in the contribution of this sector in Telangana was driven by the significant increase in its nominal growth rate from negative 0.6% in 2014-15 to 9.09% in 2021-22.

As industrial development is crucial to job creation and increased productivity in other sectors, the Government of Telangana has taken up several measures to ensure sustained growth of the industrial sector. These include business reforms like TS-IPASS, T-IDEAand T-PRIDE and multiple initiatives for the MSME sector.

The service sector accounted for 61.3% of the state's value-added in 2021-22, and therefore it is one of the most important sectors in Telangana's economy. Its share in the state's nominal GSVA (61.3%) is larger than the share of this sector in India's nominal GVA (52.8%).

Sectoral growth rates

Telangana's agricultural and allied sector has been on an upward growth path for the past 7 years with its current price growth rate increasing by 9.75% points between 2014-15 and 2021-22. The growth rate of the sector was higher than that of India, even during the peak of the pandemic in 2020-21. While the country's agriculture and allied sector grew by 7.48% in 2020-21, Telangana's agriculture and allied sector experience a 12.24% growth at the current prices during that year. This has been achieved through a multitude of factors including new irrigation schemes such as the Kaleshwaram Lift Irrigation Project and Mission Kakatiya and innovative agriculture support policies like Rythu Bandhu scheme and Rythu Bhima and 24x7 free power supply to the agricultural sector and also minimum support price implemented in same crops.

The industrial sector in Telangana saw a robust recovery from the pandemic in 2020-21 growing at a notable 20.23% over the previous year.Industry and manufacturing sub-sector which is critical to job creation in any economy, saw the steepest recovery in Telangana. Telangana Witnessed an annual growth rate of 28.59% in 2021-22. In comparison, the growth rate of this sub-sector in India was 22.78% 5.81% points lower than Telangana. The mining and quarrying sub-sector witnessed a growth of 13.24% followed by the construction, sub-sector which grew by 10.38% and the electricity and utilities sub-sector, which grew by 7.38%.

26.8. Summary

The Gross State Domestic Product (GSDP) represents the value of all final goods and services produced within the geographical boundaries of the state, counted without duplication during a specified period of time, usually a year. On the whole, the growth rate of GSDPin Telangana was higher than that of India's GDP growth rates. During 2011-12 to 2018-19, the share of Telangana in all India's GDP both at current and constant prices ranged between 4.11% and 4.5%. As regards the sectoral distribution of GSDP and annual average growth rates, overall there is a mixed trend in Telangana was during 2012-13 to 2018-19 both in current and constant prices.

In the case of sectoral contribution of secondary and tertiary sectors in Telangana economy, there is instability in the growth pattern of shares of both agriculture and industry.In contrast to this, there is a gradual and stable increase in the share of the services sector during 2011-12 to 2021-22. During 2011-12 to 2021-22, the Per Capita Income (PCI) of the state of Telangana increased much faster than the all-India PCI at current prices.

26.9. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. TS I-PASS
2. Per capita income
3. Growth rate

II. Answer the following questions in about 8-10 lines each.

1. Write briefly about the growth pattern of SGDP of Telangana.
2. Explain about sectoral growth rate trends of Telangana economy.

III. Answer the following questions in about 16-20 lines each.

1. What is GSDP? Explain the trends in GSDPand Per Capita Income in Telangana.
2. Write an essay on sectoral contribution of Gross State Value Added of Telangana economy.

26.9. Glossary

1. GSDP: The State Gross Domestic Product (GSDP) represents the value of all final goods and services produced within the geographical boundaries of the state, counted without duplication during a special period of time, usually a year.

2. Annual growth rate AGR = $\frac{\text{current year value - previous year value}}{\text{previous year value}} \times 100$

3. Current and constant prices: The estimates at the prevailing price of current year are termed as at current prices, while those prepared at base year prices are termed as constant prices.

4. Sectoral contribution: it shows the share of primary, secondary and tertiary in the total Gross State Value Added (GSVA).

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Appendix-I

Annexure 9

Gross Domestic Product and Per Capita Income of All India at Current Prices from 2014-15 to 2020-21

(Rs. in crore)

Sl. No.	Sector	2014-15	2015-16	2016-17	2017-18	2018-19 (TRE)	2019-20 (SRE)	2020-21 (FRE)	2021-22 (SAE)
1	2	3	4	5	6	7	8	9	10
1	Agriculture, Livestock, Forestry and Fishing	20,93,612	22,27,533	25,18,662	28,29,826	30,29,925	33,58,364	36,09,494	
1.1	Crops	12,92,874	13,27,992	14,86,044	16,33,264	16,80,777	18,91,966	19,97,147	
1.2	Livestock	5,10,411	5,82,410	6,72,611	7,85,683	8,82,009	9,77,730	11,14,249	
1.3	Forestry and Logging	1,73,760	1,84,411	2,05,364	2,17,603	2,55,053	2,60,603	2,65,479	
1.4	Fishing and Aquaculture	1,16,567	1,32,720	1,54,643	1,93,275	2,12,087	2,28,065	2,32,620	39,64,312
2	Mining and Quarrying	3,08,476	2,94,011	3,26,808	3,36,109	3,77,661	3,58,517	3,24,980	5,18,170
	Primary	**24,02,088**	**25,21,544**	**28,45,470**	**31,65,935**	**34,07,586**	**37,16,881**	**39,34,474**	**44,82,482**
3	Manufacturing	18,78,369	21,46,189	23,33,721	25,66,623	28,12,560	27,04,809	27,09,435	33,26,746
4	Electricity, Gas, Water supply and Other Utility Services	2,82,258	3,34,965	3,55,709	4,25,718	4,49,459	5,01,618	5,07,352	5,70,125
5	Construction	9,79,086	9,91,084	10,80,870	12,00,414	13,52,118	13,72,759	13,15,608	17,02,055
	Secondary	**31,39,713**	**34,72,238**	**37,70,300**	**41,92,755**	**46,14,137**	**45,79,186**	**45,32,395**	**55,98,926**
6	Trade, Repair, Hotels and Restaurants	13,20,833	14,33,969	16,09,001	18,81,395	21,36,707	23,25,812	18,18,981	
6.1	Trade and Repair Services	12,06,474	13,07,323	14,68,583	17,22,671	19,55,798	21,29,686	17,32,821	
6.2	Hotels and Restaurants	1,14,359	1,26,646	1,40,418	1,58,723	1,80,909	1,96,127	86,160	
7	Transport, Storage, Communication & Services related to Broadcasting	7,86,763	8,60,544	9,30,155	9,97,528	10,66,055	11,52,680	10,47,412	35,43,624
7.1	Railways	92,459	1,00,451	1,06,786	1,16,584	1,23,596	1,35,477	1,36,807	
7.2	Road Transport	3,70,364	3,99,902	4,34,947	4,84,134	5,36,552	5,65,438	4,47,164	
7.3	Water Transport	7,590	7,298	9,206	13,021	13,059	13,350	13,418	
7.4	Air Transport	11,820	20,344	21,496	22,444	12,730	22,508	10,323	
7.5	Services incidental to Transport	91,681	88,246	1,02,468	97,602	1,03,341	1,03,301	98,170	
7.6	Storage	6,407	7,021	7,442	16,194	18,597	19,513	19,628	
7.7	Communication & Services related to Broadcasting	2,06,442	2,37,282	2,47,809	2,47,549	2,58,179	2,93,094	3,21,902	
8	Financial Services	6,61,411	7,26,286	7,50,201	8,46,194	9,41,778	10,27,359	10,88,222	45,67,241
9	Real Estate, Ownership of Dwellings and Professional Services	17,01,935	18,99,852	21,61,236	22,81,018	25,87,720	28,51,979	29,57,538	
10	Public Administration and Defence	6,76,818	7,31,578	8,27,438	9,45,082	10,45,488	11,47,741	12,38,383	
11	Other Services	8,14,718	9,28,489	10,71,399	11,95,759	13,75,658	15,53,471	14,40,404	31,65,000
	Tertiary	**59,62,478**	**65,80,718**	**73,49,430**	**81,46,976**	**91,53,406**	**1,00,59,042**	**95,90,940**	**1,12,75,865**
12	**Total GSVA at Basic Prices**	**1,15,04,279**	**1,25,74,499**	**1,39,65,200**	**1,55,05,665**	**1,71,75,128**	**1,83,55,109**	**1,80,57,810**	**2,13,57,273**
13	Taxes on Products	12,91,662	15,18,496	17,46,288	18,98,896	20,43,568	20,76,662	22,55,495	
14	Subsidies on Products	3,27,982	3,21,121	3,19,819	3,14,518	3,19,028	3,56,916	5,12,391	22,86,602
15	**Gross Domestic Product**	**1,24,67,959**	**1,37,71,874**	**1,53,91,669**	**1,70,90,042**	**1,88,99,668**	**2,00,74,856**	**1,98,00,914**	**2,36,43,875**
16	**Per Capita Income (Rs.)**	**86,647**	**94,797**	**1,04,880**	**1,15,224**	**1,25,946**	**1,32,115**	**1,26,855**	**1,49,848**

SAE-Second Advance Estimates, FRE- First Revised Estimates, SRE- Second Revised Estimates, TRE- Third Revised Estimates

Source: Ministry of Statistics and Programme Implementation, Government of India

Appendix-II

Annexure 10

Sectoral Growth Rates (%) of Gross Domestic Product and Per Capita Income of all India at Current Prices

(Percent)

Sl. No.	Sector	2015-16	2016-17	2017-18	2018-19 (TRE)	2019-20 (SRE)	2020-21 (FRE)	2021-22 (SAE)
1	2	3	4	5	6	7	8	9
1	Agriculture, Livestock, Forestry and Fishing	6.4	13.1	12.4	7.1	10.8	7.5	
1.1	Crops	2.7	11.9	9.9	2.9	12.6	5.6	
1.2	Livestock	14.1	15.5	16.8	12.3	10.9	14.0	
1.3	Forestry and Logging	6.1	11.4	6.0	17.2	2.2	1.9	
1.4	Fishing and Aquaculture	13.9	16.5	25.0	9.7	7.5	2.0	9.8
2	Mining and Quarrying	-4.7	11.2	2.8	12.4	-5.1	-9.4	59.4
	Primary	**5.0**	**12.8**	**11.3**	**7.6**	**9.1**	**5.9**	
3	Manufacturing	14.3	8.7	10.0	9.6	-3.8	0.2	22.8
4	Electricity, Gas, Water supply and Other Utility Services	18.7	6.2	19.7	5.6	11.6	1.1	12.4
5	Construction	1.2	9.1	11.1	12.6	1.5	-4.2	29.4
	Secondary	**10.6**	**8.6**	**11.2**	**10.1**	**-0.8**	**-1.0**	
6	Trade, Repair, Hotels and Restaurants	8.6	12.2	16.9	13.6	8.9	-21.8	
6.1	Trade and Repair Services	8.4	12.3	17.3	13.5	8.9	-18.6	
6.2	Hotels and Restaurants	10.7	10.9	13.0	14.0	8.4	-56.1	
7	Transport, Storage, Communication & Services related to Broadcasting	9.4	8.1	7.2	6.9	8.1	-9.1	
7.1	Railways	8.6	6.3	9.2	6.0	9.6	1.0	
7.2	Road Transport	8.0	8.8	11.3	10.8	5.4	-20.9	
7.3	Water Transport	-3.8	26.1	41.4	0.3	2.2	0.5	
7.4	Air Transport	72.1	5.7	4.4	-43.3	76.8	-54.1	
7.5	Services incidental to Transport	-3.7	16.1	-4.7	5.9	0.0	-5.0	
7.6	Storage	9.6	6.0	117.6	14.8	4.9	0.6	
7.7	Communication & Services related to Broadcasting	14.9	4.4	-0.1	4.3	13.5	9.8	23.6
8	Financial Services	9.8	3.3	12.8	11.3	9.1	5.9	
9	Real Estate, Ownership of Dwellings and Professional Services	11.6	13.8	5.5	13.4	10.2	3.7	12.9
10	Public Administration and Defence	8.1	13.1	14.2	10.6	9.8	7.9	
11	Other Services	14.0	15.4	11.6	15.0	12.9	-7.3	18.2
	Tertiary	**10.4**	**11.7**	**10.9**	**12.4**	**9.9**	**-4.7**	
12	**Total GSVA at Basic Prices**	**9.3**	**11.1**	**11.0**	**10.8**	**6.9**	**-1.6**	**18.3**
13	Taxes on Products	17.6	15.0	8.7	7.6	1.6	8.6	
14	Subsidies on Products	-2.1	-0.4	-1.7	1.4	11.9	43.6	
15	**Gross Domestic Product**	**10.5**	**11.8**	**11.0**	**10.6**	**6.2**	**-1.4**	**19.4**
16	**Per Capita Income (Rs.)**	**9.4**	**10.6**	**9.9**	**9.3**	**4.9**	**-4.0**	**18.1**

SAE-Second Advance Estimates, FRE- First Revised Estimates, SRE- Second Revised Estimates, TRE- Third Revised Estimates
Source: Ministry of Statistics and Programme Implementation, Government of India

CHAPTER 27

HUMAN RESOURCES

27.0. Objectives

27.1. Introduction

27.2. Demographic features of Telangana

27.2.1. Population size in Telangana

27.2.2. Density of population in Telangana

27.2.3. Literacy rate of population

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27.5.5. Improving the enrolment in government schools

27.5.6. Expanding the learning opportunities:

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27.6. Role of government in health sector

27.7. Summary

27.8. Model Examination Questions

27.9. Glossary

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27.0. Objectives

- Describe the demographic features of Telangana.
- Explain the occupational distribution of population.
- Analyses the human resource development in Telangana.
- Explain the role of health and education in Telangana.

27.1 Introduction

Telangana is situated the southern part of India. It was a part of Andhra Pradesh till June 2014. After decades of movement for a separate State, Telangana was created by passing the AP State Reorganization Bill in both houses of Parliament. Telangana is surrounded by Maharashtra and Chhattisgarh in the North, Karnataka in the West and Andhra Pradesh in the South and East directions. The state of Telangana is divided into 33 districts. Covering an area of 112,077 km sq., Telangana is the twelfth largest state of India.

27.2. Demographic features of Telangana

The economic development of a state depends on the available resources in the state. Resources can be mainly classified into three types i.e., (1) Human resources (2) Physical natural resources and (3) Man-made resources. Physical natural resources are sunlight, land, wind, water, vegetation etc. Human resources are primarily population. If there are quality human resources, they can use the natural resources in a desirable and efficient manner. Man-made resources (machines, factories, ships, etc.) also depend on the efficiency of human resources. Factors such as population size, population composition, educational level, health, nutritional availability, income distribution system, environmental quality etc. in the economy determine the quality and efficiency of human resource.

27.2.1. Population size in Telangana

As per the 2011 census, Telangana state is the 12th most populous state in India, with a population of 35,003,674. That means it is 2.89 percent of the total population of our country. The Sex ratio is defined as the number of females per 1000 males in the population. As per 2011 Census, State's sex ratio is 988 per 1000 males and is higher than nation's sex ratio. In respect of districts concerned, Nirmal occupied first place and followed by it Nizamabad, Jagitial had second and third places respectively. In contrast, Jayashankar Bhupalapalli, Sangareddy districts have lowest sex ratio. The demographic details of Telangana are shown in Table 1.

During 2001-2021 decade, the population increased by 11.47% in our state, while the population growth in the decade 1991-2001 was recorded as 15.07%. At the same time, the population growth rate of the entire country is 21.34%. The above statistical details make two things clear, (1) The population growth of Telangana in the decade 1991-2001 is less than in the decade 1981-91 and (2) The population growth rate in our state is lower than the national population growth rate (17.71%) during the decade 1991-2001. However, from 1961 to 2011, within 50 years, size of the population in our state increased by 63.68% which was equal to country's growth rate i.e., 63.72%.

27.2.2. Density of population in Telangana

Population density is the number of people living per square kilometre in a state. The table.2 reveals that the density of population of the state in 1960 was 111 people per square kilometre, and it increased to 312 people per square km by 2011. This was lower than nation's population density according to 2011 census. Hyderabad is the most densely populated district with a population of 39,43,323 and Mulugu is the least populated one with 29,4671 in Telangana.

27.2.3. Literacy rate of population

The literacy rate is defined by the percentage of the population of a given age group that can read and write. Literacy rate in Telangana from 1961 to 2011 presented in Table:4 makes it clear that the literacy rate in Telangana has been increasing among both men and women over the last four decades. In the year 1961, the total literacy rate was 17.34% and 58 % in 2001, after that it further increased to 66.46 percent. However it is lower than nation's literacy rate 74.04. As per 2011 Census, Hyderabad has highest literacy rate in Telangana and followed by Medchal Malkajgiri, Hanumakonda respectively. However, gender gap is very high in literacy rate. Male literacy rate is 75.04 which is higher than female literacy rate i.e. 57.99.

Table-1: Population of Telangana State from 1961 to 2011

Year	1961	1981	1991	2001	2011
Telangana	1,27,11,785	2,01,81,085	2,60,89,074	3,09,87,271	3,50,03,674
India	43,92,34,771	68,33,29,097	84,64,21,039	1,02,86,10,328	1,21,08,54,977

Source: Telangana Socio Economic Outlook 2022

Table-2: Density of Population from 1961 to 2011

Year	1961	1971	1981	1991	2001	2011
Telangana	111	138	176	227	270	312
India	144	177	216	273	325	382

Source: Telangana Socio Economic Outlook

Table-3: Sex Ratio of Population from 1961 to 2011

Year	1961	1971	1981	1991	2001	2011
Telangana	975	969	971	967	971	988
India	941	930	934	927	933	943

Source: Telangana Socio Economic Outlook

27.3. Occupational distribution of population

The occupational distribution of population refers to the proportion of total working population engaged in different broad sectors of the economy. They are primary sector, secondary, and service sector or tertiary sector.

Primary Sector: It includes agriculture, animal husbandry, fish farming, forestry etc

Secondary Sector: It includes industries, gas, water supply, electricity, construction etc.

Tertiary Sector or Services Sector: It consists of services from all sectors of the economy. Transport, Information technology, Banking, Insurance, Social and Economical services, etc.

If workers are transferred from the agricultural sector to other sectors like industrial and service sector it results in changes economic progress. Technological advancement in agriculture sector leads to faster mobility of surplus workers from agriculture sector to sectors. This type of occupational shift indicates the progress of the economy.

27.4. Human Resource Development in Telangana

Human development, social development and economic development are inseparable and interlinked. Generally, education, health, nutritious food, protected fresh water, housing (habitat) are part of social sector. All these directly or indirectly refer to human development. That means the development of the social sector is human development. Let us now discuss education and health sectors of Telangana State in the following manner.

27.5. Role of the government in Education sector

Education plays an instrumental role in transforming the current generation into a skilled and able future workforce and in boosting their earning capacities. Investment in education can break intergenerational poverty and promote human development. The Telangana government has taken up the following initiatives to develop human resources.

27.5.1. Free and Compulsory Education (RTE) Act, 2009

The 86th amendment to the Indian Constitution inserted Article 21A which states "The State shall provide free and compulsory education to all children of 6 to 14 years in such manner as the State, may by law determine." The Right of Children to Free and Compulsory Education (RTE) Act, 2009, mandates free and compulsory education for the children till the completion of their elementary education. In order to ensure universal access to education, the Government focused on building Anganwadi Centres, schools and colleges across the state.

27.5.2. Research Educational Institutions

In addition to the above institutional facilities, Hyderabad alone boasts of 40 major research educational institutions along diverse fields like pharma, defence research, rural development etc. These institutions contribute not only to the research needs of various sectors, but also develop high impact professionals for the relevant sectors.

27.5.3. Providing quality infrastructures

Quality infrastructure contributes to the improvement in the overall learning environment and adds to the sense of safety, which has a positive impact on student retention and learning outcomes. Telangana is performing better than the all-India average on indicators such as schools with functional electricity connection, functional toilet facility, libraries and ramps for Children with Special Needs for the year 2019-20. In the state, during 2020-21, Schools with Functional Drinking Water Facility, Schools with Computer facilities, and Schools with Functional Toilets for Children with Special Needs (CwSN) improved to 95.6%, 34.3%, and 6.25% respectively, from 92.45%, 20.81%, and 2.44% respectively in 2019-20.

27.5.4. Mana Ooru - Mana Badi / Mana Basti-Mana Badi Scheme

The Government launched its flagship initiative "Mana Ooru - Mana Badi / Mana Basti-Mana Badi" in January 2022 to upgrade the infrastructure facilities in the government schools for a period of three years with an approved budget of Rs.7,289.54 crore. 26,067 government and local body schools and 19,84,167 students are covered under this programme.

27.5.5. Improving the enrolment in government schools

To improve the enrolment in government schools, the state has taken up several initiatives, which include the improvement of infrastructure, the introduction of English as a medium of instruction in Government schools, introduction of soft-skills such as communication etc.

With the government efforts, the total number of the schools in the state increased from 40,900 in 2019-20 to 41,220 in 2020-21. During 2021-22, a total number of 60.47 lakh children are enrolled in all types of schools in the state. Out of these, 53.71% are enrolled in private schools and 46.29% are enrolled in government schools.

27.5.6. Expanding the learning opportunities

To expand the learning opportunities for children beyond classrooms, during the academic year 2020-21, the State Institute of Educational Technology (SIET) had developed and transmitted 2180 digitals lessons through T-SAT and DD channels in Telugu, English and Urdu media covering students in Grade III to X. On an average of 85% students viewed these digital lessons.

27.5.7. Building industry-education partnerships

Along with establishing the educational institutions across the state, the Government is at the forefront of building industry-education partnerships to build skilled talent to create talented employable youth and entrepreneurs. Various skilling institutions like Telangana Skill and Knowledge Centres (TSKC), Telangana Academy for Skill and Knowledge (TASK) and Industrial Training Institutes have been established to develop industry relevant skills.

27.5.8. Telangana ICT policy of 2021- 26

It seeks to upskill, reskill and trains the citizens of Telangana with a target to achieve 80% of the workforce requirement being met through local talent. For this, the government seeks to train more than 5 lakh students every year. According to the India Skills Report of 2022, Telangana has the highest female employable talent. Telangana also scored 3rd position in the country with respect to Computer skills availability. This shows a positive hiring trend in the state which offers equal opportunity and representation in job opportunities. Major avenues for skill development in the state include undertaking vocational education, technical education in professional colleges and Industrial training.

27.6. Role of government in health sector

The World Health Organisation (WHO) defines ‘health’ as a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity. It emphasizes that enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being. The Government of Telangana has recognized the role of state intervention in keeping the population healthy right from the state’s formation in 2014.

1. In order to improve health outcomes in the state, specifically for persons belonging to marginalized communities, the Government has launched several schemes that focus on improving the availability, accessibility, and affordability of quality healthcare. Further, in alignment with the Government’s objective of “Aarogya Telangana”, and to install new confidence in the government healthcare system, the Government made a budgetary allocation of Rs.6,295 crores for health in 2021-22, of which Rs. 1,010 crore was allocated towards the National Health Mission for improving healthcare service delivery.

2. Since the formation of the state, the Government has been making concerted efforts towards improving the health status of Telangana. The result of its efforts is reflected in the noteworthy performance of the state in the recent NITI Aayog Annual Health Index, 2019-20. The Telangana state ranked 3rd among the 19 large states, whereas Kerala and Tamil Nadu are ranked first and second respectively.

3. Health infrastructure is often referred to as “the nerve centre of the health system”. Broadly, it comprises a capable and qualified workforce, up-to-date data and information systems, and agencies capable of assessing and responding to public health needs, and it provides the necessary foundation for undertaking the basic responsibilities of public health. The Government of Telangana has been making significant investments towards strengthening the Health Infrastructure in the state since 2014-15.

4. In 2021, the Government of Telangana announced plans to establish four Telangana Institute of Medical Sciences & Research (TIMS) hospitals with infrastructure at par with corporate hospitals at Gachibowli, Sanath Nagar, Alwal, and Dilsukhnagar. In 2021, the Government laid the foundation stone and sanctioned Rs 1,100 crore for the construction of a super specialty hospital in Warangal as part of its plan to develop Warangal into a health city and a medical tourism destination.

5. The Telangana Vaidya Vidhana Parishad (TVVP) was set up in 2014-15 to manage the secondary level hospitals (comprising select District Hospitals, Area Hospitals, Community Health Centres, Maternal and Child Health Hospitals, Urban Community Health Centres, and Civil Dispensaries) in the state. There are 122 TVVP hospitals at present, with bed strength of 9,320. These hospitals mostly provide maternity & child health services, besides general medicine, general surgery, paediatrics, orthopaedics, ENT, etc. services.

6. The Government of Telangana launched an innovative initiative scheme 'Basti Dawakhanas' in 2018 to bring healthcare services close to the urban poor. 256 Basti Dawakhanas have been established by the state in urban slums so far, with one Basti Dawakhana serving 5,000 to 10,000 persons. These centres provide different kinds of free health services including outpatient consultation, medicines, basic lab diagnosis, and screening for non-communicable diseases. Specialist consultation is also provided at Basti Dawakhanas through Telemedicine. Basti Dawakhanas reduce travel and waiting time for patients, reduce out-of-pocket-expenditure for patients.

7. Later, the government has started 'Palle Dawakhanas' to ensure that people residing in rural areas have access to the same quality healthcare services as their urban counterparts, including round-the-clock access to doctors. The Palle Dawakhanas will deliver comprehensive primary healthcare services to the local population.

8. Arogyasri Scheme (AS) is a unique State Government-sponsored health insurance scheme being implemented by the Arogyasri Health Care Trust in Telangana. The objective of the scheme is to help the 87.5 lakh Below Poverty Line (BPL) households in the state by reducing health expenditures through cashless and equitable access to quality healthcare.

The scheme provides the beneficiaries with coverage up to Rs. 5 lakh per family per year, and an additional financial coverage up to Rs. 10 lakhs for high-end procedures. In May 2021, the Government of Telangana linked this scheme with the Government of India's Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (ABPM-JAY).

27.7. Summary

Human resource development includes development at various levels, including community. Community development requires HRD efforts such as training and organization development. Community development is an alternative route to educating and training citizens of a community setting, especially in developing countries, require that HRD practitioners take into account many factors such as cultural variables, beliefs, traditions and gender roles before bringing about changes. By its nature community development is multidisciplinary and thus, using theories with a narrow focus to understand community development in appropriate.

27.8. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What is density of population?

2. What is primary sector?

3. What are Basti Dawakhanas?

II. Answer the following questions in about 8-10 lines each.

1. Explain the occupational distribution of population?

2. Explain the ICT Policy 2021-26 in Telangana State?

III. Answer the following questions in about 16-20 lines each.

1. What is the role of state government in education sector?

2. What is the role of state government in health sector?

27.9. Glossary

1. Literacy Rate: Literacy rate is the literate population of the age group 7 years and above divided by the total population of the same age group.

2. Population Density: the number of individuals divided by the size of the area. To calculate the population density, you will divide the population by the size of the area. Thus, Population Density = Number of People/Land Area.

3. TSKC: After the formation of new state of Telangana, the programme is being followed with a fresh vigour. Previous JKC Centres now being called Telangana Skills & Knowledge Centres have expanded their scope and competencies.

4. ABPM-JAY: In 2018, the Government of India launched the 'Ayushman Bharat' scheme to make healthcare services more accessible and affordable to citizens and aid the country in achieving its target of universal health coverage (UHC) by 2030. In May 2021, the Government of Telangana linked Arogyasri Scheme (AS) with the Government of India's Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (ABPM-JAY).

27.10. References

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2. Telangana Socio-Economic Outlook 2022
3. Telangana Economy from Telugu Academy

CHAPTER 28

SECTORS OF ECONOMY - TELANGANA

28.0. Objectives

- To describe the features of the sectors of Telangana economy.
- To identify the importance of different sectors in Telangana economy.
- To explain the programs initiated by the government to increase the agricultural product
- To explain the incentives of governments for industrial development
- To classify the sub sectors of service sectors

28.1 Introduction

State Income or state domestic product is the most important indicator for measuring the economic growth of a State. These estimates of economy, over a period of time, reveal the extent and direction of the changes in the levels of economic development. In this chapter we will discuss sectors of economy in Telangana State.

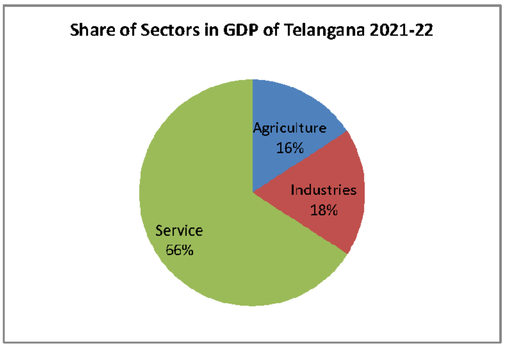
28.2 Sectors of Economy in Telangana

The State Domestic Product is generated by human activities which are known as economic activities. These economic activities are classified under three broad sectors which are called the sectors of economy.

These sectors are

1. Agriculture sector
2. Industrial sector
3. Tertiary sector (Service)

In Telangana, the following graph shows the share of each sector in State GDP.



28.3 Agriculture Sector

Agriculture plays a pivotal role in the economy of Telangana and the better performance of this sector is vital for inclusive growth. Telangana state is endowed with bountiful resources having good soils, diversified cropping pattern and major irrigation systems fed by rivers like Godavari and Krishna. Agriculture is a way of life, a tradition that has shaped the culture and economic life of the people of Telangana. The Agriculture and allied sectors in Telangana achieved a year-on-year growth in Gross State Value Added (GSVA).

28.3.1 Agriculture Potential of Telangana

Telangana State is the 11th largest state in India with a geographical area of over 276.96 lakh acres. Out of the total area, 49.07 percent of area comes under net sown area and around 24.07 percent is under forest coverage. Land put to non-agriculture uses is around 7.46 percent, fallow lands (9.02 percent), Barren and uncultivable land (5.42 percent) and the remaining are under permanent pastures and other grazing lands. The total numbers of operational holdings in the state are 59.48 lakhs covering an area of 59.72 lakh hectares.

The area brought under cultivation after the formation of the State has been tremendously increased. Gross Sown Area (GSA) has been increased from 131 lakh acres in 2014-15 to 198 lakh acres in 2021-22 (an increase of 51%). This increase in area is mainly due to the planned investments in new irrigation projects, revitalisation of existing irrigation systems and systematic procurement mechanisms implemented by the Government.

Soils of Telangana are well drained to moderately well drained and provide favorable environment for soil fertility management. Soils are suitable for wide range of crops including food grains, oil seeds, pulses, fruit crops, pastures, forestry etc.

28.3.2 Agriculture and Allied Activities

Agriculture and Allied Activities -Macro Trends Agriculture and its allied activities are integral to the lives and livelihoods of most of the people in the State. Besides the fact that the sector helps in ensuring food security, it also provides livelihoods to more than half of the state's workforce.

28.3.3 Government programs for the promotion of Agriculture

Telangana has quickly come out of the shadows of the past like suicides, heavy debt and lack of irrigation facilities and has implemented many new programs in the agricultural sector with the aim of becoming an ideal for the farmer. Following are some of government initiations.

a. Programme of Land Records Updating - Dharani

A programme initiated by the Government of Telangana to undertake the purification of land records across all villages in all Mandalas of the state.

b. Seed production

Seed is a critical determinant in increasing the agricultural productivity. Hence, production and supply of quality seed to the farmers is one of the most important interventions proposed under the plan budget for which an amount of Rs. 50.00 crores is allocated to strengthen the seed production. Telangana Government is developing a strategy to make the State, as the "Seed Bowl" of the country, endowed as it is with congenial climatic conditions and soils suitable for quality seed production of various crops.

c. Soil testing

The Soil Health Card Scheme is being implemented to create awareness among farmers regarding the importance of soil testing and judicious and integrated use of fertilizers based on soil test data, thereby reducing the cost of cultivation.

d. Agriculture Marketing

In undivided Andhra Pradesh, a comprehensive Andhra Pradesh (Agriculture Produce and Livestock) Markets Act has come into force from 18.11.1996., and the same is adopted for Telangana State. The objective of the Markets Act is to protect the interests of farmers in the sale of agricultural produce and to ensure remunerative price to them and to protect them from the clutches of unscrupulous traders.

e. Irrigation Projects

The major projects commissioned in Telangana state are as follows:

1) Kaleshwaram project (18.25 Lakh acres),
2) Sita Rama Lift Irrigation Scheme (3.87 Lakh acres),
3) J.Chokka Rao Devadula Lift Irrigation Scheme (5.58 Lakh acres),
4) Rajeev Bhima Lift Irrigation Scheme (2.03 Lakh acres),
5) Mahatma Gandhi Kalwakurthy lift irrigation scheme (4.24 Lakh acres),
6) Jawahar Nettempadu Lift Irrigation Scheme (2.00 Lakh acres).

f. Rythu Bandhu (Investment Support)

Recognizing the importance of financial support to farmers for basic input costs in cultivation, the government launched Rythu Bandhu Scheme in 2018. The scheme provides financial support of Rs. 10,000/- per acre per year to the land owning farmers in the State in two installments. The Government has extended the scheme to all land-owning farmers irrespective of the landholding.

g. Risk Mitigation-Rythu Bima: The Telangana government initiated a flagship group life insurance scheme- Rythu Bima from 2018 onwards to provide financial relief and social security to the family members/ dependents, in case of loss of farmer’s life due to any reason, In the event of the death of the enrolled farmer due to any cause including natural death, the insured amount of Rs 5.00 Lakhs will be deposited into the account of the designated nominee within 10 days.

h. Free power for agriculture

Since 1st January 2018, the Government is providing 24 hours free and quality power supply to the agricultural consumers in the State .The present power consumption has increased to 3,500 MW as against 1,500 MW before the formation of the State.

28.3.4 State's Agriculture Vision

A vision for Telangana is framed by government of Telangana. The main features of this vision are:

- Empowering the farmers in seed
- Making farming a commercially viable endeavor
- Providing easy access to inputs, finance, technology and IT
- Increasing irrigated area by utilizing the available surface and groundwater potential
- Providing means for land development for efficient soil and water management
- Providing trained extension staff for technology transfer at the doorstep of farmers

28.4. Industrial Sector

The state of Telangana is home to large manufacturing industries. The bulk drugs, pharmaceuticals, agro-processing, cement and mineral-based industries, textiles and apparels, horticulture, and poultry are the main industries existing at present in Telangana. The state is one among the major industrial states in the country and it is ranked 6th in terms of industries and ranked 8th in terms of gross value added from industries. In Telangana too, the Industry sector plays a pivotal role in strengthening the state economy and in creating significant livelihood opportunities.

28.4.1. Telangana Industrial Policy and vision

The Telangana State Industrial Policy is rooted in certain core values as follows:

1. The Government regulatory framework shall facilitate Industrial growth
2. Entrepreneurs will thrive in a peaceful secure and progressive business regulatory environment

3. Industrial development will lead to massive creation of jobs benefitting local youth
4. Industrialization shall be inclusive and will facilitate social equality
5. Benefits of industrialization should reach marginal and socially disadvantaged sections of the State
6. Environment will be protected and any potential impacts shall be mitigated Vision of industrial policy

28.4.2 Vision of industrial policy

The vision for industrialization of Telangana is "Research to Innovation; Innovation to Industry; Industry to Prosperity". The industrial policy framework will be driven by the slogan "In Telangana—Innovate, Incubate, Incorporate". The policy framework intends to provide a business regulatory environment where doing business would be as easy as shaking hands. Innovation and technology will drive the industries of the State.

28.4.3 Telangana State Industrial Project Approval and Self Certification System (TS-IPASS) Act 2014

The Telangana Government has enacted the "Telangana State Industrial Project Approval and Self-Certification System (TS-iPASS) Act, 2014" for speedy processing of applications for issue of various clearances required for setting up of industries at a single point based on the self-certificate provided by the entrepreneur and also to create investor friendly environment in the State of Telangana.

The main features of TS-iPASS:

- All departments connected for establishing and operation of an Enterprise brought under purview of TS-iPASS.
- Time Limits set for each approval varying from 1 day to a maximum of 30 days depending upon on the complexity of the approval.
- Pre-Scrutiny of the applications at State Level and District Level to assist the entrepreneurs in a proper submission of applications and to avoid delay in processing the files by the departments.

- Making mandatory for the Competent Authorities to seek shortfall/additional information required, if any, only once, within three days from receipt of the application.
- Empowering the Entrepreneurs with Right to clearances under TS-iPASS, to know the reasons for delay if any in getting the clearance within time limits and penalizing the officers responsible for the delay.

28.4.4 Telangana State Program for Rapid Incubation Dalit Entrepreneurs (T-PRIDE)

T-PRIDE is targeted specifically towards making the industrial sector more equitable by increasing the representation of entrepreneurs from the Scheduled Castes, Scheduled Tribes, Women and Specially-abled Persons (SAP).

28.4.5. Women Entrepreneurs Hub (We-Hub)

We-Hub is a state-led incubator established in 2017 to help foster women entrepreneurship in Telangana. It provides incubation facilities, access to the Government, and a global network of collaborators to new women entrepreneurs in the state.

28.4.6. Technology-Hub (T-Hub)

Innovation and technology are deemed to be the prime drivers of industrial growth in Telangana. Currently, the state has 78 incubators, accelerators, and co working spaces with a specific focus on various sectors such as Life sciences, FinTech, Agri Tech, Digital, etc. The Innovation policy of the state and the incentives provided to the start-ups has made the state a fertile ground for many emerging startups and some of them have gone on to gain national prominence.

28.4.7 Telangana State Industrial Development and Entrepreneur Advancement (T-IDEA)

Under T-IDEA, the state offers incentives to entrepreneurs for setting up industries by reimbursing stamp duty, power cost, offering interest and investment subsidies, capital assistance, and other support with Quality Control and Patent Registration.

28.5 Service sector

It is the largest sector of the global economy. The service sector remained a dominant sector in Telangana economy. The services sector includes trade, repair, hotels, and restaurants, transport, storage, communication, broadcasting, transport, financial services, real estate, and others. The services sector is also critical to the growth of the industrial and agriculture sectors through improvements in electrification, communication, transportation, banking, etc. services, for improvements in the overall quality of life through access to improved healthcare and education. Additionally, the sector provided employment to more than one-third of the total workforce. The services sector has been a vital source of output, growth, and jobs in the state, and has also brought in significant amounts of foreign capital into the state's economy. In the last seven years, investments in knowledge and data, and rapid technological advances have fueled the swift growth of the services sector as well as other related sectors in Telangana.

28.5.1. Key sub sectors of services

1. Information Technology (IT): Telangana State is famous for IT services. It is known as Cyberabad of India due to its strong pressure in IT sector. Major IT companies and IT parks are located in Hyderabad. IT sector include software development, IT consulting, outsourcing services and Business Process Outsourcing (BPO), Hyderabad is called as IT Hub.

2. Hospitality and Tourism: Telangana has rich cultural alteration and historical heritage. The State has good site seeing place like Charminar, Golkonda, Ramjori Film City and Ramappa temple which are identified by UNESCO. The State has been investing in promoting tourism and developing infrastructure to cater to the growing number of tourists. It includes hotels, resorts, travel agencies etc.

3. Health care: Telangana is well known for health care sector with numerous hospitals and medical institutions. The State government has invested in the development of health care, infrastructure including medical colleges and research institutions. This sub sector includes pharmaceutical companies and medical tourism, health care providers.

4. Transportation: Telangana has a well developed transportation network including road, rail and air connectivity. This sub sector includes public transportation, logistics services and courier services, ware housing and supporting a new good number of employment.

5. Financial services: Several banks, insurance companies and other financial institutions are located in Telangana. This sub sector includes stock broking, investment advisory services and financial consultancy.

28.5.2 Vision of the government on service sector

The Government is keen on integrating the innovations in the service sector with other sectors like agriculture, which are dominant in rural areas, and to benefit from the innovations in IT/ITeS currently focused in urban areas.

The service sector has the highest employment generation among all sectors. Recognizing the central role of technology in service-sector growth, the Government is trying to supplement the existing potential through institutional support to the firms, especially start-ups, via initiatives such as T-Hub, Y-Hub, WE-Hub, TSIC, and T-works. The Government is also actively promoting the use of Artificial Intelligence (AI), Block chain technology, and drone technologies. To foster greater cross-sectorial integration, the Government is providing enabling infrastructures such as T-Fiber and a high-quality road network. Taken together, these initiatives would help foster economic growth, enhance productivity across sectors, and generate robust employment.

28.6 Summary

Agriculture is a way of life, a tradition that has shaped the culture and economic life of the people of Telangana. Agriculture plays a pivotal role in the economy of Telangana and the better performance of this sector is vital for inclusive growth. The state of Telangana is home to large manufacturing industries. The state is one among the major industrial states in the country and it is ranked 6th in terms of industries and ranked 8th in terms of gross value added from industries. Telangana is the only state in the country that has made it a right to get industrial clearances. The state holds a leading position in IT and information technology enabled services (ITeS) in the country in terms of production and exports. Rapid changes in technology in the IT sector gave rise to new opportunities. Hyderabad, the capital of Telangana, is now recognized as one of the leading IT hubs globally.

28.7 Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. Mention the sectors of economy and give one example for each sector.

2. What is Dharani programme?

3. Write about T-PRIDE.

4. Write the sub sectors of service sector.

II. Answer the following questions in about 8-10 lines each.

1. Write any 2 government programs for promotion of agriculture.

2. Describe Telangana Industrial Policy and its vision

3. What are the main features of TS-iPASS?

III. Answer the following questions in about 16-20 lines each.

1. Describe Government programs for the promotion of Agriculture.

2. Explain important programs under Industrial policy of Telangana.

3. Explain the significance of service sector in Telangana.

28.8 Glossary

- Primary sector: It is called as agriculture sector which includes crops growing, fishing, forestry, and mining.
- Tertiary sector: The service sector, also known as the tertiary sector, is the third tier in the three-sector economy
- Rythu Bandhu: Financial support to farmers in Telangana for basic inputs in agriculture.
- TS-iPASS: Single window certification service.
- T-Hub: aims to be a catalyst in building Telangana as a startup destination of the world.

28.9 References

1. TSBIE, Economics textbook second year.

2. Telangana Socio Economic Outlook.

CHAPTER 29

TELANGANA BUDGET

29.0. Objectives

29.1. Introduction

29.2. Budget: Meaning and Definition

29.3. Classification of Budget

29.4. Telangana Budget at a glance 2023-24

29.5. Revenue Receipts and Expenditure

29.6. Revenue Receipts

29.7. Summary

29.8. Model Examination Questions

29.9. Glossary

29.10. References

29.0. Objectives

- Define budget and characteristics of budget
- Classify the budget
- Understand Telangana budget at glance in 2023-24
- Know Revenue accounts receipts of budget
- Distinguish Revenue, expenditure and debt of budget

29.1. Introduction

The budget is not just a technical financial document. It is an astonishingly powerful tool of empowerment for economists and ordinary citizens. The word ‘Budget’ is derived from the French word ‘Bougette’, which means a small leather bag or ‘pouch’. It was first used in England to describe the white leather bag that held the seal of the medieval court of the exchequer.

29.2. Budget : Meaning and Definition

A Government budget is a financial plan covering outlays and receipts, usually for a period of one year. It is also typically an occasion for spelling out the government’s economic and social aims, and ways to achieve these. A budget is a spending plan based on income and expenses of a year.

The chief characteristics of a budget are

- It is a plan or programmes for the future
- Items included in the budget are merely estimates.
- It is a comprehensive plan.
- It is generally an annual plan.
- It is always prepared and presented on behalf of the executive.
- It is put before the legislature to be voted for.

29.3. Classification of Budget

On the basis of nature of functions the public budgets are classified as

Balanced Budget: A budget is said to be balanced when both the proposed expenditure and anticipated revenue are equal. In a balanced budget there is neither any deficit nor any surplus. While framing the budget every possible effort should be made to have a balanced budget.

Unbalanced Budget: When a budget shows that the government proposed expenditure and anticipated revenue are not equal, it is said to be an unbalanced budget. The imbalance may be due to excess of expenditure over income or an excess of income over expenditure.

Revenue Budget: Revenue Budget consists of revenue receipt from Government, and the expenditure is met from these revenues. Tax revenue comprises of proceeds of taxes and other duties levied by the union government. Other receipts of government mainly consist of interest and dividends on investments made by the government, fee and other receipts for services rendered by the government.

Capital Budget: Capital Budget consists of capital receipts and payments. The main items of capital receipts are loans raised by the government from public. Capital expenditure is met out of capital receipts or receipts on acquisitions of assets. Besides, loans advances granted by Central Government to State Governments, Government Companies, Corporations and other parties are also included in the capital expenditure.

Surplus Budget: When the public revenue exceeds the public expenditure it is called surplus budget. A surplus budget decreases the liabilities of the government or increases its revenue

Interim Budget: It is one which is prepared for an interim period which means less than twelve months. In case there is a delay in preparing regular budget for full year then an interim budget is prepared so as to meet the expenditure in between.

Ordinary Budget: Ordinary Budget is that which is prepared in ordinary circumstances one year. It is prepared during the normal course of time.

Deficit Budget: When the proposed expenditure exceeds the anticipated income, it is called deficit budget. In a planned economy, the Government usually prepares deficit budget so as to meet development expenditure. A deficit budget increases the liability of the government or decreases its revenue.

Supplementary Budget: In case, during the course of regular budget the expenditure exceeds the revenue or the government is required to incur expenditure on some specific project for which no provision was made in the regular budget, supplementary budget is prepared so as to meet this extra expenditure. This budget is helpful for people.

Emergency Budget: Emergency budget is that which is prepared to meet emergency situations, such as war, heavy depression, and natural calamities and so on.

For more concepts on budget, read chapter 11.

29.4. Telangana Budget at a glance 2023-24

In Crores

Particulars	Accounts2021-22	BE 2022-23	RE 2022-23	BE 2023-24
(1)	*(2)*	*(3)*	*(4)*	*(5)*
I Opening Balance	**-5.67**	**-111.34**	**63.83**	**336.86**
II Revenue Receipts	**1,27,468.59**	**1,93,029.40**	**1,75,802.18**	**2,16,566.97**
1 State Share in Central Taxes	18,720.54	18,394.11	19,668.15	21,470.84
2 Tax Revenue	91,271.38	1,08,211.93	1,10,592.28	1,31,028.65
3 Non Tax Revenue	8,857.42	25,421.63	15,291.53	22,808.31
4 Grants-in-aid	8,619.26	41,001.73	30,250.22	41,259.17
III Capital Receipts	**55,598.70**	**63,832.37**	**54,582.37**	**55,277.68**
5 Open Market Loans	45,716.00	53,970.00	44,970.00	40,615.68
6 Floating Debt(Net)	0.00	0.00	0.00	0.00
7 Loans from the GOI	214.14	4,102.00	3,852.00	4,102.00
8 Other Loans	1,278.53	1,500.00	1,500.00	1,500.00
9 Deposits Transactions etc. (Net)	3,772.89	4,200.37	4,200.37	4,000.00
10 Loans and Advances	47.70	60.00	60.00	5,060.00
11 Other Receipts (Loans showed in GOI Books GST Compensation)	4,569.49	0	0	0
12 Contingency Fund Net	-0.05	0.00	0.00	0.00
13 Interstate Settlement	0.00	0.00	7,500.00	17,828.00
IV Total Receipts(II+III+13)	**1,83,067.29**	**2,56,861.77**	**2,37,884.55**	**2,89,672.65**
V Revenue Expenditure	**1,36,803.43**	**1,89,274.82**	**1,72,822.25**	**2,11,685.23**
14 Of which Interest Payments	19,161.41	18,911.88	18,911.88	22,407.67
VI Capital Expenditure	**28,874.35**	**29,728.44**	**26,934.02**	**37,524.70**
VII Loans and Advances	**8,469.41**	**26,253.36**	**26,253.36**	**28,479.98**
VIII Capital Disbursements (15 to 18)	**8,850.60**	**11,601.90**	**11,601.90**	**12,606.09**
15 Public Debt Repayment	6,460.42	8,336.00	8,336.00	9,341.17
16 Loans Form GOI	509.92	367.94	367.94	427.16
17 Other Loans	1,872.09	2,897.96	2,897.96	2,837.76
18 Interstate Settlement	8.18	0.00	0.00	0.00
IX Total Expenditure	**1,82,997.80**	**2,56,858.51**	**2,37,611.52**	**2,90,296.00**
X Overall Transactions (IV–IX)	**69.50**	**3.26**	**273.03**	**-623.35**
XI Closing Balance (I+ X)	**63.83**	**-108.08**	**336.86**	**-286.49**
XII Revenue Surplus (II – V)	**-9,334.84**	**3,754.58**	**2,979.93**	**4,881.74**
XIII Fiscal Deficit (XII - VI - VII + 10 -13 -18)	**46,639.09**	**52,167.21**	**42,647.44**	**38,234.94**
XIV Primary Deficit (XIII - 14)	**27,477.67**	**33,255.33**	**23,735.56**	**15,827.27**

Source: 1. Telangana Budget 2023-24
2. Socio Economic Outlook of Telangana 2023

29.5. Revenue Receipts and Expenditure

The Receipts on revenue Account during the year 2023-24 are estimated at 2,16,566.97 Crores and the expenditure is estimated to be 2,11,685.23 Crores. The Estimate for 2023-24 revealsa Revenue Surplus (+) of 4,881.74 Crores

Table-2			In Crores
Particulars	**Accounts 2021-22**	**Revised Estimate2022-23**	**Budget Estimate 2023-24**
(1)	*(2)*	*(3)*	*(4)*
Revenue Receipts	**1,27,468.59**	**1,75,802.18**	**2,16,566.97**
Revenue Expenditure	**1,36,803.43**	**1,72,822.25**	**2,11,685.23**
Surplus(+)	-9,334.84	2,979.93	4,881.74

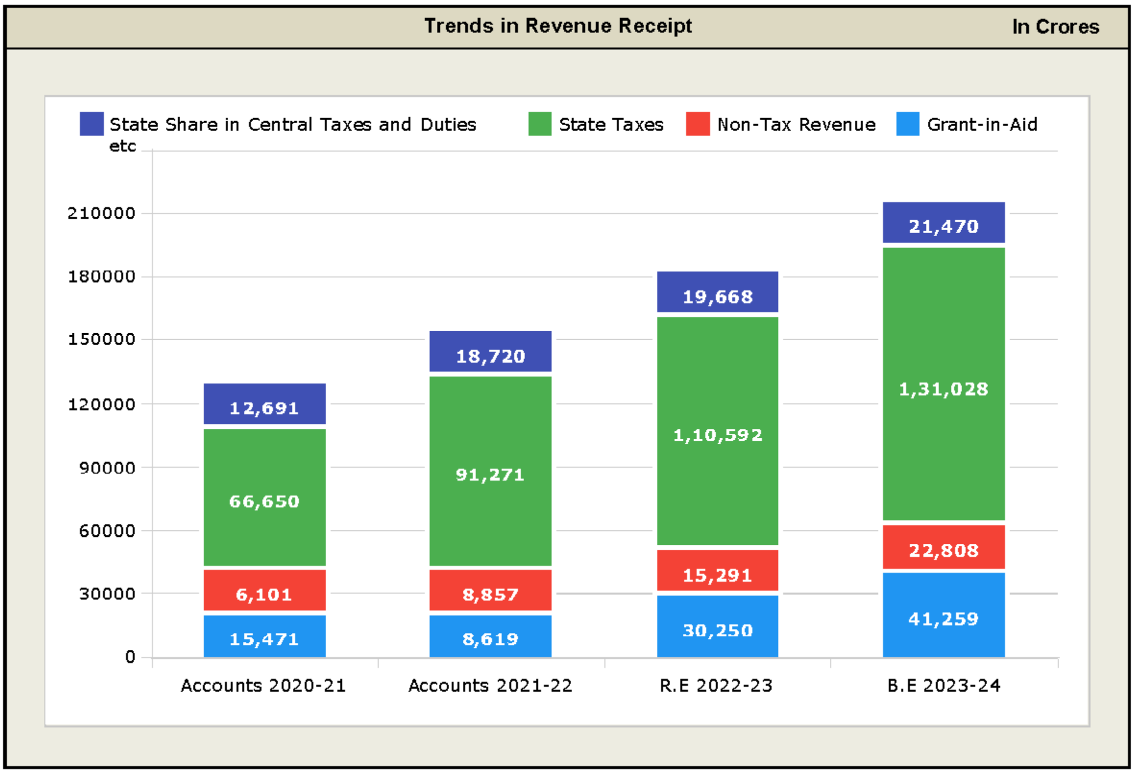
Revenue and Expenditure of the State

Table-3			In Crores
Receipts		**Expenditure**	
Taxes and Duties		**Development Expenditure**	**1,61,467.03**
State Share in Central Taxes	**21,470.84**	**Debt Services**	**22,412.67**
State Taxes and Duties	**1,31,028.65**	**Administrative Services**	**12,367.44**
Non-Tax Revenue		**Tax Collection Charges**	**1,282.17**
Interest Receipts	**162.79**	**Other Expenditure**	**14,155.92**
Other Non-Tax Revenuel (Including Grant-in-aid from Central)	**64,067.48**		
Total	**2,16,566.97**	**Total**	**2,11,685.23**
Deficit	**0.00**	**Surplus**	**4,881.74**
Grand Total	**2,16,566.97**	**Grand Total**	**2,16,566.97**

Source: Telangana Budget

29.6. Revenue Receipts

Table-4					In Crores
Particulars		**Accounts 2020-21**	**Accounts 2021-22**	**R.E 2022-23**	**B.E 2023-24**
1	Taxes & Duties	79,341.99	1,09,991.96	1,30,260.43	1,52,499.49
I	State Share in Central Taxes and Duties etc.	12,691.62	18,720.54	19,668.15	21,470.84
II	State Taxes	66,650.37	91,271.42	1,10,592.28	1,31,028.65
A	Land Revenue	0.50	0.26	6.71	12.05
B	Taxes on Sales, Trade	43,094.24	55,890.70	69,203.00	83,500.00
C	State Excise	14,369.84	17,482.19	17,500.00	19,884.90
D	Others	9,185.79	17,898.27	23,882.57	27,631.70
2	Non-Tax Revenue	6,101.24	8,857.42	15,291.53	22,808.31
3.	Grant-in-aid	15,471.13	8,619.26	30,250.22	41,259.17
Total		1,00,914.36	1,27,468.63	1,75,802.18	2,16,566.97



Source: Telangana Budget 2023-24

Above graph explains trends in revenue receipts State share in Central taxes. Increased from Rs.12691 crores in 2020-21 to Rs.21,470 crores in 2023-24 at the same time State tax revenue increased from Rs.66,650 crores to in 2020-21 to Rs.1,31,029 crores 2023-24. Non tax revenue also increased from Rs.6101 crores in 2020-21 to Rs.22,808 crores in 2023-24 along with all Grant-in-aid also increased considerably that is Revenue Receipts in Telangana since 2020-21 continuously increasing.

29.7. Summary

Telangana Finance Minister presented the State Budget for the financial year 2023-24 on 6th February 2023 with an estimated expenditure of Rs.2,90,396 crores. Out of this, revenue expenditure is Rs.2,11,685 crores; capital expenditure is Rs.37,525 crores and fiscal deficit is Rs.28,224 crores. The government has several policies as part of the performance of its duties to achieve the objectives of social and economic development. A huge amount has to be spent on defence, administration and development, welfare, projects and many other relief activities. Therefore, an effort should be made to generate sufficient revenue to meet the funding requirement.

29.8. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What is budget?
2. Explain surplus budget.

II. Answer the following questions in about 8-10 lines each.

1. Explain the types of budget.
2. Explain the budget meaning and definition

III. Answer the following questions in about 16-20 lines each.

1. Explain the classification of budget.
2. Explain the Telangana budget at a glance 2023-24

29.9. Glossary

Balance budget: A budget is said to be balanced when both the proposed expenditure and anticipated revenue.

Balanced budget = Revenue = Expenditure

Revenue budget: Revenue budget consist of revenue receipts from government and the expenditure is meet from these revenues.

Emergency budget: Emergency budget is that which is prepared to meet emergency situations such as war, heavy, depression and natural calamities etc.

29.10. References

1. Telangana budget at a glance 2023-24
2. Telangana Socio-Economic Outlook 2022-23
3. Telangana Budget 2023-24.

CHAPTER 30

POVERTY ERADICATION, EMPLOYMENT GENERATION AND WELFARE PROGRAMMES IN TELANGANA STATE

30.0. Objectives
30.1. Introduction
30.2. Poverty in Telangana – Awareness
30.2.1. Types of Poverty
30.2.2. Poverty Estimation in Telangana
30.3. Unemployment in Telangana State
30.4. Unemployment statistics in Telangana
30.5. Welfare and developmental Schemes in Telangana
30.5.1. Farmer Welfare Schemes
30.5.1.1. Farmers Investment Support Scheme (Rythu Bandhu)
30.5.1.2. Farmers Group Life Insurance Scheme (Rythu Bima)
30.5.1.3 Mission Kakatiya
30.5.2. Women Development and Child Welfare Schemes
30.5.2.1. Kalyana Lakshmi – Shaadi Mubarak
30.5.2.2. Self Help Groups (SHGs)
30.5.2.3. KCR Kit Scheme
30.5.2.4. Amma Odi
30.5.2.5. Aarogya Lakshmi
30.5.3. Schemes for weaker and vulnerable sections of society
30.5.3.1. Aasara Pensions
30.5.3.2. Aarogya Sri (Aayushman Bharath – Pradhan Mantri Jan Aarogya Yojana)
30.5.3.3. Public Distribution System
30.5.4. Other Welfare and Developmental Schemes
30.5.4.1. Dalita Bandhu
30.5.4.2. Mission Bhagiratha
30.5.4.3. Construction of Double Bedroom Houses
30.5.4.4. Scholarships
30.5.4.5. Telangana Sheep Distribution Scheme
30.5.4.6. Welfare Schemes for Education
30.6. Summary
30.7. Model Examination Questions
30.8. Glossary
30.9. References

30.0. Objectives

- Define poverty and its types
- Explain the estimations of poverty in Telangana
- Discuss the unemployment of Telangana State based on statistics
- Explain the implementation of various developmental and welfare schemes of Telangana State
- Understand and discuss how the programmes of Government of Telangana are eradicating the Poverty

30.1. Introduction

Power has only one duty to secure the social welfare of the people.

– Benjamin Disraeli

Poverty is a persistent social and economical problem. Poverty can be defined as the state or a condition where the people in the society are unable to meet their basic needs or essentials such as food, shelter and clothing. The people who suffer from poverty are called poor we will be able to eradicate the poverty by reaching them out to the actual beneficiaries. We will be able to eradicate the poverty by implementing the employment generation, poverty alleviation and welfare schemes. If only they are reaching out to the actual beneficiaries. One of the aims of United Nations sustainable development is to eradicate the poverty by the end of 2030. The main agenda of any government is to secure the social welfare of the people.

How a state is developing? This question can be easily answered by taking a look at the poverty statistics of that particular state. Poverty, economical inequality, unemployment are the major economical and social problems in a developing nation. All these are interrelated. These problems stand as major obstacles for the development of any country or a state. The state of Telangana which was formed after its decades of interminable struggle based on ***Neellu, Nidhulu, and Niyamakalu*** is also facing the poverty issue. The state has been preparing plans for welfare programs and implementing them. There is a need to identify the poor in the state where the welfare programs are implemented.

Even though Telangana is a newly formed state in India, when compared to the other parts of the country the state has a solid financial, execution especially the Telangana Government is making an effort to implement its prestigious welfare reforms and employment generation programs to every door step. Ever since the formation of the Telangana state many programs were launched for the welfare of poor and for the generation of employment.

30.2. Poverty in Telangana – Awareness

30.2.1. Types of Poverty

According to Economics, Poverty is of two types, they are 1. Absolute Poverty and 2. Relative Poverty.

Absolute Poverty can be defined as a condition where an individual or a family does not have minimum amount of income need to meet their most basic needs, such as food, shelter and clothing. This type of poverty can be seen mainly in the developing countries like India. While calculating the absolute poverty, the basic cost of living is taken into account by depending upon the market price.

Relative poverty refers to the inequalities in the society. According to this poverty the income level of the people with low standard of living are compared to the people with high standard of living and then the people whose income is low are termed as relatively poor. Relative poverty is mainly used in wealthy or rich countries

30.2.2. Poverty Estimation in Telangana

In 1950 National Sample Survey Organization was established to calculate the Poverty in India. This Organization calculates the Poverty once in every 5years.

Poverty Estimations – Suresh Tendulkar Committee

In 1993-94, to estimate the poverty in Telangana, the per capita income in rural and urban areas is taken as Rs.11,244/- and Rs.11,282/- respectively. In the same way the poverty per capita income in the year of 2011-12 in rural and urban areas is taken as Rs.860/- and Rs.1009/- respectively. According to the estimations of Suresh Tendulkar Committee, in 2011-12 the rural poverty level in Telangana was 11.5% where as the rural poverty level of India was 25.7%. In the same year in Telangana, the poverty level of rural and urban altogether was 8.77% meanwhile in India the rural and urban poverty level altogether was 21.9%. In Telangana from 1993-94 to 2011-12 the rural poverty level has come down from 49% to 11.5%. Meanwhile the urban poverty level has reduced from 30.5% to 5%. In Telangana from 1993-94 to 2011-12 the population of poor is reduced from 12 million to 3 million. This can be stated as a reason for the reduction in the poverty levels.

In the decade of 1990 the poverty level was high in the socially disadvantaged communities whereas in 2011-12 it was reduced. In 2011-12 in Telangana, rural and urban Poverty level of ST's is higher than that of SC's. In 1993-94 in Telangana, in erstwhile Hyderabad the poverty level was 16.5%, in erstwhile Mahabubnagar it was 50%. But in 2011-12 this situation has changed. In Hyderabad it was 2.4% and in Nizamabad it was 11.6%.

Poverty Estimations – Rangarajan Committee Report.

According to Rangarajan Committee report in 2011-12, the poverty level in Telangana is less than poverty level of India. In 2011-12, in Telangana, rural poverty level was 9.3% whereas in India it was 30.9%. In the same way the Urban Poverty level in Telangana was 11.1% meanwhile in India it was 26.4%. If we were to consider the poverty level of rural and urban areas altogether in Telangana it was 10% and India it was 29.5%. If we observe the population of poor in Telangana, in rural and urban areas it was 20.1lakhs and 15.2 lakhs respectively. According to the estimations of Rangarajan Committee the total poor in Telangana were 35.3 lakhs.

In order to eradicate the poverty, the Telangana Government has initiated various programs based on the Multidimensional Poverty Index (MPI). According to the 2021 baseline report of NITI Aayog's Multidimensional Poverty Index, based on the three major indicators viz., health, education and living standards in India one in every four is poor, but in Telangana the ratio is only one in every seven. Since the formation of the state, the

Government has framed numerous programs for poverty eradication in health (KCR Kits, ArogyaLaxmi, GiriPoshana, improvement in the basic infrastructure of public health), education (Mana Ooru – ManaBadi an Initiative for providing and restoring basic infrastructure in the school) and standard of living (Houses, Skill development, Free electricity, Asset creation) to achieve good results.

30.3. Unemployment in Telangana State

After the formation of the state, the agricultural sector is mostly depended upon occurrence of rain, favorable and unfavorable seasons. Yet the agricultural sector is continuing to be the primary sector in the state. The main reasons behind this are employment generation and food security, created by this sector. This is the sector which helps the poorest to play a part in the development of the state. Approximately, 55.7% of workers or employees are given employment under agricultural sector and its subsidiary sectors. A quick growth in this sector is crucial for the asset development, employment generation and eventually it ensures the food security of the state. So, it is crucial to improve agricultural income to reduce poverty and for the growth of national wealth. There is a prime focus on the skill development of this work force in order to divert them to non-agricultural sectors like rural industries. And hence in Telangana at most priority is given to the agricultural sector as it has the majority of the work force.

Abundant resources like fertile lands, diversified crops, huge irrigation systems for harvesting Krishna and Godavari waters etc., are a boon to Telangana. Agriculture which formed the cultural and economical life of Telangana people is a tradition and it is the life style of the people. So, the focal point for all the strategies of planned socio-economic development of the state is agriculture. In the same way the subsidiary sector to the agriculture sector such as fisheries, animal husbandry etc., are also capable of ensuring employment. But the industries are centralized in and around Hyderabad and Rangareddy alone. Even though there are meager numbers of industries in other districts, we see employees who are less qualified or who possess the skills that are not much of the required. Now the employment generation is rapidly growing in the service sector. But the employees who work in the sector must be skilled. Most of the people who are migrating from rural to urban areas in search of employment are majorly unskilled.

30.4. Statistics of Unemployment in Telangana State

Employment can be defined as an income source for any individual to the basic needs of himself and his family members. Lack of employment is termed as unemployment. A condition or a situation when a person is capable of working and is actively searching for a work but unable to find a suitable job is called unemployment. This can also be defined as when a person is physically and mentally ready to work at the given wage but is unable to find the work.

Unemployment can be broadly divided into two types- a) Rural Unemployment and b) Urban Unemployment.

Due to a rise in population the number of people depending upon agricultural activities for employment has increased than the number of people required. The unemployment where in any sector the number of working employees is greater than the required is called as **Latent unemployment or Disguised unemployment.** The laborers who work in the agricultural sector are having work for only seven to eight months in a year and in the remaining months they are idle. Such unemployment is called as seasonal unemployment. **Underemployment** is another type where a highly skilled individual unwillingly working in low skill low paying jobs.

During the year in 2004-05, in Telangana the rural unemployment rate was 11.3% where as in India it was 8.2%. During 2011-12, in Telangana the rural unemployment rate 4% where as in India it was 5.7%. This statistics gives as a clear idea about how the rural unemployment rate has gone down in these years. If we consider the urban unemployment rate of Telangana and India during 2004-05 respectively, they were 7.5% and 8.3%. Meanwhile during 2011-12 the urban unemployment rate in Telangana was 6% and in India it was 5.5%. The unemployment rate in females is much more less when compared to male unemployment rate.

Industrial decentralization can be implemented to reduce poverty in Telangana. If the decentralization happens, it helps in reducing regional inequalities as well as income differences. This leads to utilization of regional human resources which in turn results in the reduction of unemployment. With the usage of labour intensive methods in the agricultural sector, there will be enormous development and employment generation in this sector as a consequence unemployment will be reduced. We prevent unemployment by supplying required infrastructural facilities to the agricultural sector and its dependent sectors, by offering income leverage to small and marginal farmers for intensive and extensive agriculture. Giving vocational training to the rural literates along with funding will also be help full in preventing unemployment. Mere employment is not enough for poverty eradication, but providing employment according to their skills and capabilities is essential.

30.5. Developmental and Welfare schemes in Telangana State

Since the formation of the state, the Government of Telangana is implementing implementing numerous developmental programs and schemes for poor, providing health and educational facilities to everyone regardless of rich and poor, creating equal opportunities and self-sufficiency for women in every aspects. Along with these a significant importance must be given to the agricultural sector as our state is depended on it. Economists estimate that if Telangana focuses on the development of agricultural sector, it will be able to eradicate poverty by two folds. This is because the agricultural sector will also lead to the development of its subsidiary sectors. Establishing industries will reduce unemployment. The Government of Telangana has launched new industrial policy and various schemes for skill development to reduce unemployment. These initiatives can be termed as war of the Government against poverty.

The Government of Telangana is introducing numerous welfare programs for improving the standard of living of the poor, for the welfare of weaker and minority, for the financial self-sufficiency of women and for the welfare of the farmers. These are divided into four types.

1. Farmer welfare schemes
2. Women and Child welfare schemes
3. Schemes for weaker and vulnerable sections of society
4. Other welfare and developmental schemes

30.5.1. Farmer Welfare Schemes

30.5.1.1. Rythu Bandhu (FISS)

In order to enhance agricultural productivity water facility, electricity, seeds, fertilizers, labour, and machinery are essential inputs for farmers. These ensure the yield and productivity. A rural farmer generally depends upon debt for those inputs. In order to ensure that the farmers do not fall again into the vicious cycle of rural debt trap and indebtedness, a new scheme called Rythu Bandhu (Farmer's Investment Support Scheme) is proposed by the Government of Telangana and is implemented from the year 2018-19's khariff season onwards. Rythu Bandhu scheme is providing investment support of Rs.5000/- per acre per farmer each season for purchase of inputs like seeds, Fertilizers, pesticides, labour and other investments in the field operations of farmer's choice for the crop season. This amount is directly credited into the farmers account.

30.5.1.2. Rythu Bima (FGLIS)

Rythu Bima is a prestigious scheme conceptualized and implemented by the Government of Telangana. The main objective of this scheme is to provide financial and social security to the family members/dependents of the farmer. The majority of the farmers are small, marginal and resource poor, dependent solely on farming for their livelihood. In the event of the loss of the farmer's life, their families are facing severe financial problems even for their day-to-day needs. Keeping this in view, the Government of Telangana has come up with Rythu Bima scheme in 2018. Farmers between the age group of 18 to 59 years are eligible for enrollment under the scheme. In the event of the death of the enrolled farmer due to any cause including natural death, the insured amount of Rs.5 lakhs is deposited into the designated nominee account within (10) days. The Government pays the monthly premium to LIC on behalf of the farmers. This scheme has a tremendous impact on the lives of the bereaved families and helping their livelihood, since most of them are resource poor small farmers and belong to weaker sections of the society. This scheme has been implemented through the development of Online Portals. The uniqueness of this scheme is that, the nominee is not required to approach any office for the settlement of the claim amount.

30.5.1.3. Mission Kakatiya

The objective of Mission Kakatiya is to enhance the development of agriculture based income for small and marginal farmers, by accelerating the development of minor irrigation infrastructure, strengthening community based irrigation management and adopting a comprehensive program for restoration of tanks. Mission Kakatiya was the first program to be initiated by newly formed Telangana Government in 2014. This program was inaugurated on 12 March 2015 in Sadasivanagar village's Paatha cheruvu of Kamareddy district. This program is aimed at restoring around 46,000 tanks (cheruvulu). The project is undertaken in five phases. The following steps are followed for the restoration.

1. By de-silting the tank beds to restore original water storage capacity of tanks.
2. By repairing dilapidated sluices, weirs etc.,
3. By strengthening the tank bunds to its original standards.
4. By repairing the feeder channels to standards for getting water freely into tanks. (Part of chain of tanks).
5. By taking up necessary works to supplement/filling Minor irrigation tanks through canal networks of Major, medium and lift irrigation projects taken up on both Krishna and Godavari Rivers.
6. By re-sectioning of irrigation channels to standards & Repairs to CM & CD works for smooth distribution of water to fields according to their requirement.

Mission Kakatiya has received Best Irrigation practice award from central board of Irrigation and Power in 2018. This project also bagged the SKOCH in 2021 award for gold category in Irrigation.

30.5.2. Women Development and child Welfare scheme

According to 2011 census the male and female population of Telangana is 1.76 crore and 1.74 crore respectively. The male, female population is 50.31% and 49.6% respectively.

The Government is implementing a slew of welfare schemes and development programs aiming to uplift women, empower them and enhance their dignity. Towards this end Telangana introduced several schemes such as Kalayana Lakshmi and Shaadi Mubarak, KCR Kits, Amma Odi, Aarogya Lakhmi etc. Let us now discuss these schemes.

30.5.2.1. Kalyana Lakshmi – Shaadi Mubarak

The Government of Telangana introduced a welfare scheme called Kalyana Lakshmi/ Shaadi Mubarak providing financial assistance for marriage of unmarried girls over 18 years of age belonging to BC, SC, ST, OBC and minority. This scheme came into force from 2nd October, 2014. A Telangana resident girl, over 18 years of age whose annual income in rural and urban areas is 1.5lakhs and 2lakhs respectively are eligible for the scheme. A financial assistance of Rs.1,00,166/- is given to the bride's family at the time of marriage to meet the marriage expenses. This is credited into the account of the bride.

30.5.2.2. Self Help Groups

Self Help Group is the mobilization of rural poor women into self- sustainable community based organizations for alleviation of rural poverty and overall development to lead a dignified life. Society for Elimination of Rural Poverty (SERP) was formed to make federations to strengthen the SHG's. Required training programs are conducted for the financial growth of women. Bank linkage program, under which SHG's are being provided with credit by banks has made Telangana a leading state in SHG's. In our state a total of 47.53lakh women and 4.39 SHG's are formed into 17,883 village organizations. To eradicate poverty in urban areas MEPMA is working as a nodal agency.

30.5.2.3. KCR Kit Scheme

The KCR Kit Scheme was launched 3rd of June 2017. The main objective of the scheme is to provide quality health care facilities during pregnancy period and post delivery. A financial assistance of Rs. 12,000/- is given under this scheme (and Rs. 13,000/- if the child born is a girl).This financial assistance is given for the care of mother and the child. A KCR Kit contains 15 items for the use of mother and child. This kit will be useful to keep the child warm and hygienic for up to 3 months. In 2020-21, nearly 2.1lakh kits and in 2021-22 (between 2021 April to November) nearly 1.5lakhs kits were distributed. This scheme lead to a significant reduction in maternal and infant mortality rates and lesser number of cesareans were conducted. This resulted in low post-natal expenses and women were having lesser health issues. One more achievement of this scheme in 2015-16 is that the number of deliveries in the government hospitals has increased from 30.5% to 49.7%. We can term it as two folds improvement.

30.5.2.4. Amma Odi

Amma Odi scheme was launched on 18 January 2018 for pregnant women across the state. This scheme provides free transport facilities in an ambulance to diagnostic services for regular check-ups, test and for neo-natal vaccination. The vehicle will pick a pregnant woman for delivery and drop her back to her home after delivery. Approximately 300 vehicles are operating in33 districts of Telangana. In 2020-21, nearly 10.85lakhs beneficiaries and until November 2021, nearly 7.95lakhs beneficiaries were benefitted.

30.5.2.5. Aarogya Lakshmi

Aarogya Lakshmi scheme provides nutritious meals to pregnant women and lactating mothers and children below the age of 6 through Anganwadi centers. Funding for this scheme is gathered by both state and central governments in a 50-50 ratio. Telangana government is giving an extra Rs. 14/- for the health and welfare of the women. The beneficiaries of the scheme receive 200ml of milk for 25 days a month and one egg each day with a meal. Along with these, folic acid and iron tablets are given to pregnant women.

30.5.3. Schemes for Weaker and Vulnerable Sections of the Society

30.5.3.1. Aasara Pension Scheme

As a part of its welfare measures, the government of Telangana has introduced the Aasara Pensions Scheme with a view to ensure secure life with dignity for all the poor. Aasara pension scheme is meant to protect the most vulnerable sections of the society particularly the old and infirm, people with HIV-AIDS, widows, incapacitated weavers and toddy tappers, who have lost their means of livelihood with growing age, people with Filaria, beedi workers. From the day of implementation to till date, 39lakhs people were benefitted under this scheme. From 2019 there was a rise in pension of PH category from Rs.1500 to Rs.3016. In the same way the pension for the remaining sections is increased from Rs.1000 to Rs. 016. Nearly Rs.45,882 crores was disbursed from November 2014 to January 2022.

30.5.3.2. Aarogya Sri (Aayushman Bharath- Pradhan Mantri Jan Aarogya Yojana (AB PM-JAY)

Aarogya Sri is a unique community health scheme being implemented in the state. This scheme provides financial protection to families living below poverty line for the treatment of serious ailments requiring hospitalization and surgery. In order to facilitate the effective implementation of Arogya Sri Scheme, the government has set up Aarogya Sri Health Care Trust. The objective of the scheme is to provide quality medical services to the families below poverty line. All the transactions are cashless for covered procedures. This scheme provides financial protection up to Rs. 5lakhs in a year and up to Rs. 10.lakhs for diseases. In May 2021, Telangana government linked Aarogya Sri Scheme with Aayushman Bharath – Pradhan Mantri Jan Aarogya Yojana (AB PM-JAY). At present Aarogya Sri Beneficiaries are also covered under AB PM-JAY. In addition to this, nearly 646 types of medical services are available in all the government hospitals under AB PM-JAY. Between 2014-15 and 2019-20 nearly 42.3% beneficiaries were increased. The cost for the scheme is also increased to 48.6%.

30.5.3.3. Public Distribution System

The government of Telangana distributes food grains to the poor throughout the state at subsidized rates through 17,013 Fair Price Shops(FPS). Telangana government has extended this scheme to 96lakhs more beneficiaries in addition to 1.96crore people who were to be covered under the National Food Security Act. Till December 2021, 2.87crore beneficiaries were benefitted by the scheme. In our state one person is given 6kgs of rice at Rs. 1\- per kg for everyone in the family.

30.5.4. Other Welfare and Developmental Schemes

The government has initiate many schemes to make the weaker and the vulnerable sections of the society self-sufficient. The main objectives are to improve assets by providing financial support, providing skill development programs in order to enable the people to be self-employed, providing financial support to reduce socio-economical inequalities in the society. Let's take a look some of those schemes.

30.5.4.1. Dalit Bandhu

This scheme was introduced in the year of 2021-22. The scheme was started in Vasala Marri village of Aleru assembly constituency in Yadadri Bhuvanagiri district on August 1, 2021. This initiative is introduced to intensify the financial assistance to SC households.

One time capital assistance of Rs. 1.lakhs per SC family is provided for all as 100% grant or subsidy to establish suitable income generating scheme as per their choice such as vehicles, shops, machinery etc., without bank loan linkage. Its objective is to provide a way for them to improve their standard of living.

30.5.4.2. Mission Bhagiratha

United Nations has declared protected drinking water and sanitation as fundamental or primary rights. In sustainable goals of UNO, these are 6thn the list. A slogan "Drinking water for all- Sanitation for all" was also given. Availability of water is crucial for human and economical development. Telangana government has initiated this project to provide piped protected, purified, sufficient water to all the people of Telangana state. This program was inaugurated by the Prime Minister on August 17, 2016 at 3 PM. It was inaugurated in Komati Banda of Gajwel Constituency. Through 26 segments of Mission Bhagiratha purified water is supplied to households by tap connections. A huge amount of water is supplied to urban locality. This project supplies purified water of 100 liters (LPCD) to rural areas, 135 LPCD to municipalities or nagar panchayaths and 150 LPCD to municipal corporations. For industrial purposes 10% of water from this project is sed. This project supplies water to 22.882 schools, 27,310 anganwadis and all the government organizations through tap connections. Through tap connections 100% water is supplied i.e., to24,028 rural settlements till 2021. According to Central Jal Shakti Ministry, Telangana stands first in providing 100% tap connections and water supply along with Haryana and Goa. Until December 2021, nearly Rs. 35,836crores was utilized for Mission Bhagiratha.

30.5.4.3. Construction of Double Bedroom Houses

House plays a major role in providing protection from various geographical threats and gives a socially dignified life to everyone. Every middle class and vulnerable sections of the society, have a dream of a house of their own. House plays a crucial role in the welfare of the family. An own house with proper water facility, sanitation and hygienic environment is necessary.

Telangana government has formulated the double bedroom housing scheme in the month of October, 2015 with a view to provide dignity to the poor by providing 100% subsidized housing. Under this scheme, 2,91,057 houses were sanctioned between 2016 and 2021. Until November 2021 from the sanctioned houses 1,07,612 houses were constructed. From the day of implementation to till date (November 2021) Rs. 10,455crore were invested in the scheme. Telangana State Housing Corporation (TSHC) is implementing this scheme all over the state except Hyderabad. Greater Hyderabad Municipal Corporation is taking up this scheme in Hyderabad. This 2BHK project received PMAY-U (Pradhan Mantri Awaas Yojana – Urban) Award for its best performance in the year 2018-19.

30.5.4.4. Telangana Scholarships Scheme

The government of Telangana is providing financial support to the education of SC, ST, BC and minority by giving scholarships and tuition fees reimbursement to the students. Every year the government is providing pre-matric scholarships and tuition fees reimbursement to SC, ST and BC students. The government of Telangana is providing Overseas Scholarships to economically and socially backward students to study abroad. The students whose family's annual income is below 5lakhs are eligible for this scholarship. The scholarships that are given to SC, ST are named as Dr.B.R.Ambedkar, the scholarships, BC and EBC are named as Mahatma Jyothiba Phule and the scholarships given to minorities are named as Chief Minister Overseas Scholarships. Under this scholarship every student receives up to 20lakhs.

30.5.4.5. Sheep Distribution

This scheme is designed for the upliftment of Yadava/Golla/Kuruma families. These families are supplied with sheep on 75% subsidy. This scheme was launched in 2017. Under this scheme nearly 3.81lakhs beneficiaries were given 79.38lakhs sheep.

30.5.4.6. Welfare Schemes for Education

Gurukula schools are established to provide quality education to the students from vulnerable sections of the society. The number of Gurukula Educational Institutions has been increased from 298 in 2014 to 978 in 2022. The government has started Mana Ooru-Mana Badi/ Mana Basti-Mana Badi program in 2022 with Rs.7,283.54 crore budget.

30.6. Summary

Till now we have discussed poverty, unemployment and various welfare schemes that are implemented by the government. The government of Telangana has taken up various programs for the social and economical development of vulnerable people in every caste, gender and every other sections of the society. The success of the schemes depends not only on the view of the government but also on the proper implementation of the schemes.

30.7. Model Examination Questions

I. Answer the following questions in about 4-5 lines each.

1. What is Poverty?
2. What are the types of Poverty?
3. Into how many types can we divide poverty eradication welfare schemes in Telangana? Explain.
4. What are the farmer welfare schemes that the Government to Telangana is implementing?

II. Answer the following questions in about 8-10 lines each.

1. Explain the implementation process of Rythu Bandhu Scheme.
2. How is the Rythu Bima Scheme beneficial to farmers?
3. How the Women and Child welfare schemes are useful for the development of Telangana? Explain.
4. What are the student welfare schemes of Telangana?
5. What is the policy of Telangana government on Public Distribution System?

III. Answer the following questions in about 16-20 lines each.

1. Comment your opinion on the farmer welfare schemes launched by the Telangana?
2. Write a critical essay on the objective of Telangana government's welfare schemes?

30.8. Glossary

- **Absolute Poverty.** Absolute Poverty can be defined as a condition where an individual or a family does not have minimum amount of income need to meet their most basic needs, such as food, shelter and clothing. This type of poverty can be seen mainly in the developing countries like India.
- **Relative Poverty.** Relative poverty refers to the inequalities in the society. According to this poverty the income level of the people with low standard of living are compared to the people with high standard of living and then the people whose income is low are termed as relatively poor.
- **Disguised Unemployment.** In any sector if the number of working employees is greater than the required is called as Latent unemployment or Disguised unemployment.

30.9. References

1. Telangana State Statistical Abstract, 2021.
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3. Telangana Socio Economic Outlook, 2022.